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JOINT APPENDIX, INDEX

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Supreme Court of the United States

OCTOBER TERM, 1951

No. 428

PENNSYLVANIA WATER AND POWER COMPANY AND SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND, PETITIONERS,

vs.

FEDERAL POWER COMMISSION ET AL.

No. 429

PENNSYLVANIA PUBLIC UTILITY COMMISSION, PETITIONER,

vs.

FEDERAL POWER COMMISSION

ON WRITS OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

PETITIONS FOR CERTIORARI FILED NOVEMBER 16, 1951

CERTIORARI GRANTED FEBRUARY 4, 1952

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Vol. I

TRANSCRIPT OF RECORD

(Pages 1 to 534)

Supreme Court of the United States

OCTOBER TERM, 1951

No. 428

PENNSYLVANIA WATER AND POWER COMPANY AND SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND, PETITIONERS,

vs.

FEDERAL POWER COMMISSION ET AL.

No. 429

PENNSYLVANIA PUBLIC UTILITY COMMISSION, PETITIONER,

vs.

FEDERAL POWER COMMISSION

ON WRITS OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

PETITIONS FOR CERTIORARI FILED NOVEMBER 16, 1951

CERTIORARI GRANTED FEBRUARY 4, 1952

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Joint Appendix.

[1] BEFORE THE
FEDERAL POWER COMMISSION

In the Matter of:
PENNSYLVANIA WATER & POWER COMPANY } Docket No. IT-5915

Hearing Room
Federal Power Commission
Hurley-Wright Building
1800 Pennsylvania Avenue, N. W.
Washington, D. C.
Monday, April 15, 1946.

The above-entitled matter came on for hearing pursuant to notice at 10:00 o'clock A. M.

Before: EWING G. SIMPSON, Trial Examiner.

Appearances:

F. G. AWALT,
RAYMOND SPARKS,
DARYAL A. MYSE and
P. C. KING, JR., of Hewes and Awalt, 822 Connecticut Avenue, N. W., Washington, D. C.; and
GEORGE T. HAMBRIGHT, Lancaster, Pennsylvania; and
GEORGE ROSS HULL, Harrisburg, Pennsylvania; and
JOHN C. KELLEY, Harrisburg, Pennsylvania,
appearing for Pennsylvania Water & Power Company and Susquehanna Transmission Company of Maryland.

E. M. STURTEVANT and
CLARENCE W. MILES, Baltimore, Md., appearing for Consolidated Gas, Electric Light and Power Company of Baltimore.
SAMUEL G. MILLER, Harrisburg, Pennsylvania, appearing for the Pennsylvania Public Utility Commission.

[2] ROBERT FRANCE, General Counsel, Public Utilities Commission of Maryland.
SIMON E. SOBELOFF, City Solicitor of Baltimore; and
THOMAS J. TINGLEY, Assistant City Solicitor of Baltimore.
HOWARD E. WAHRENBROCK, Assistant General Counsel; and
REUBEN GOLDBERG, appearing on behalf of the Staff of the Federal Power Commission.

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[3] PROCEEDINGS.

TRIAL EXAMINER: The hearing will be in order.

The hearing in Docket IT-5915 in the matter of Pennsylvania Water & Power Company set for this hour and date in this hearing room is called to order.

This is a hearing upon an Order of the Commission dated September 1, 1944 entitled "Order Instituting Investigation", and upon an Order of the Commission dated October 3, 1944, entitled "Supplemental Order Enlarging Investigation".

* * *

[12] TRIAL EXAMINER: On November 9, 1945, the Commission entered an order in the matter of Pennsylvania Water & Power Company in Docket IT-5915 entitled "Order Fixing Date of Hearing", a copy of which I hand the Reporter at this point for inclusion in the record as if read.

* * *

[16] TRIAL EXAMINER: Likewise, the Commission entered an Order in this matter and Docket dated December 11, 1945, entitled "Order Postponing Hearing". A copy of this Order is now handed to the Reporter for inclusion in the record as if read.

• • •

[18] TRIAL EXAMINER: On January 24, 1946, the Commission issued an Order entitled "Order Further Postponing Hearing", a copy of which I hand the Reporter at this point for inclusion in the record as if read.

• • •

[20] TRIAL EXAMINER: On March 19, 1946, the Commission entered a further Order entitled "Order Further Postponing Hearing" in which it was provided that the hearing in the above-entitled matter now set for March 25, 1946, and the same is hereby postponed to April 15, 1946, at 10:00 o'clock A. M. in the hearing room of the Federal Power Commission, Hurley-Wright Building, 1800 Pennsylvania Avenue, Northwest, Washington, D. C.

A copy of this Order is handed to the Reporter for inclusion in the record at this point as if read.

• • •

[22] TRIAL EXAMINER: I also hand the Reporter for inclusion in the transcript at this point a copy of designation of Trial Examiner signed by the Honorable Leland Olds, Chairman, under date of April 3rd, 1946, which designation is to be incorporated in the record at this point.

• • •

[24] TRIAL EXAMINER: In connection with the designation, it should be said that by virtue of the Commission's standing order of September 30, 1941, the Commission's Chief Trial Examiner is authorized to join the presiding Trial Examiner on the bench and preside jointly with him or in his stead in this proceeding whenever it may seem necessary or desirable to do so.

By Order dated January 9, 1946, entitled "Order Permitting Intervention" the Commission ordered that the Pennsylvania Public Utility Commission be and it was thereby permitted to become an intervenor in this proceeding.

A copy of this Order is handed the reporter for inclusion in the record at this point.

• • •

[26] TRIAL EXAMINER: On February 6, 1945, the Commission entered an Order entitled "Order Permitting Intervention" which ordered that the Public Service Commission of Maryland be and was thereby permitted to become an intervener in this proceeding.

A copy of this Order is handed to the Reporter for inclusion in the record at this point.

• • •

[28] TRIAL EXAMINER: On March 27, 1945, the Commission entered an Order in this matter and Docket entitled "Order Permitting Intervention" whereby it permitted the Consolidated Gas Electric Light and Power Company of Baltimore to become an intervenor in this proceeding, subject to the rules and regulations of the Commission, provided, however, that the admission of such intervenor shall not be construed as recognition by the Commission that Petitioner might be aggrieved by any Order or Orders of the Commission entered in this proceeding.

A copy of this Order is handed to the Reporter for inclusion in the record at this point.

• • •

[30] TRIAL EXAMINER: I will ask counsel to state at this time what notice has been given of this proceeding.

MR. GOLDBERG: Mr. Examiner, I have examined the formal files of the Commission and I am able to state that all interested parties, including the Mayor and City Council of Baltimore, the County Commissioners of Baltimore County, the Bethlehem Fairfield Shipyard, Incorporated,

the Public Service Commission of Maryland, Rustless Iron & Steel Corporation, Susquehanna Tranmission Company of Maryland, Consolidated Gas Electric Light and Power Company of Baltimore, the Governors of the States of Maryland and Pennsylvania, the Pennsylvania Public Utility Commission and Safe Harbor Water Power Corporation, among others, have been served with copies of all of the Orders the Trial Examiner has had incorporated in the record as though read preceding my statement.

I ask at this time that those notices be incorporated in the record by reference. I believe all of them appear in Part I of the Commission's Formal Files of the Pennsylvania Water & Power Company, Docket IT-5915.

TRIAL EXAMINER: Without objection, that will be done.

* * *

[33] TRIAL EXAMINER: Pursuant to the letter addressed to the Pennsylvania Water & Power Company by the Acting Secretary of the Commission under date of November 16, 1945, the Order of Procedure at this hearing will be for the Pennsylvania Water & Power Company to proceed first with the presentation of its evidence; for the Susquehanna Transmission Company of Maryland, the Consolidated Gas Electric Light & Power Company of Baltimore, Pennsylvania Public Utility Commission, Public Service Commission of Maryland and the Staff of the Federal Power Commission to follow with the presentation of their evidence in the order named.

I will now call upon counsel for the Pennsylvania Water & Power Company to briefly state his position with reference to the issues involved in this proceeding, and the evidence which he proposes to present.

MR. SPARKS: May it please Your Honor, we first take an exception to Your Honor's ruling that we be required to proceed first, and will state, also, that in proceeding in accordance with Your Honor's ruling we do not waive the right to make any point, or to raise any question which we deem appropriate in the proceeding.

Furthermore, may I say that while we do have a conception of certain of the issues in this case, it must be recognized that we have not been advised of the positions or the contentions of any of the other parties.

[34] So, as a result, we are more or less stabbing in the dark on the issues. There are or may be issues of which we have no knowledge.

In accordance with Your Honor's ruling, however, we are prepared to state certain of the issues which we believe to be present in the case, and I shall proceed to do so.

First: This Commission has no jurisdiction over the rates, charges and classifications, of Pennsylvania Water & Power Company under Part II of the Act, for the reason that the Company is to be treated as a licensee and may be considered to be a purchaser of power from a licensee for use in public service, and is, therefore, subject to Part I of the Act only. Since the record does not show that the two states involved, namely, Maryland and Pennsylvania, are unable to agree, through their properly constituted authorities on the services to be rendered or on the rates or charges of payment therefor by Pennsylvania Water & Power Company, the Commission has no jurisdiction under Part I.

Second: If the Commission has any jurisdiction over any of the rates, charges, and classifications of the Respondents for the transmission or sale of electric energy at wholesale, it has jurisdiction only over the rates, charges, or classifications for such transmissions or sales which are in interstate commerce.

Third: The Commission has no jurisdiction, under Part II, [35] over any of the rates, charges, or classifications for the services rendered by Pennsylvania Water & Power Company and Safe Harbor Water Power Company [Corporation] to Consolidated Gas Electric Light & Power Company of Baltimore, since none of such rates, charges, or classifications, are for transmission of electric energy, or for the sale of electric energy.

Fourth: The Commission has no jurisdiction, under Part II, over any rates, charges, or classifications for any services rendered to Pennsylvania Railroad Company, since such services do not involve a sale of electric energy at wholesale.

Fifth: The Commission has no jurisdiction to determine and fix by Order any division of rates or charges to be received by Pennsylvania Water & Power Company for services rendered jointly with others.

Sixth—and may I say, Your Honor, as to the last point to which I have adverted, except for point number 6, which goes to the question of the hearing relating to jurisdiction, so far as any other issues may be present on the merits of such issues. We do not know what the contentions are or may be, so that I would ask Your Honor to consider that in considering the last point which I make.

Sixth: The requirement that Respondents proceed first in the presentation of evidence without being informed of the issues and contentions of the other participants and of the Staff of the Commission representing the Government, [36] deprives the Respondents of the fair hearing required by the Federal Power Act and by the due process clause of the Fifth Amendment to the Constitution of the United States.

Seventh: And lastly, the rates, charges and classifications made, demanded, received, observed, charged, and collected by Pennsylvania Water & Power Company by itself and jointly with others, and the rules, regulations, practices, and contracts affecting such rates, charges, and classifications are now lawfully in force under the laws of the United States and of the State of Pennsylvania, are not unjust, unreasonable, unduly discriminatory or preferential, and are, therefore, not unlawful.

Therefore, until the other participants, including the Staff of the Commission, make their position and conten-

tions clear on the record, we are unable to determine what other issues are involved.

• • •

[37] TRIAL EXAMINER: Just one moment. Does counsel at this time have any statement as to the evidence that he proposes to submit?

MR. SPARKS: I want to comply with Your Honor's ruling, and state that we do have evidence pertaining to the history, and general evidence which will be presented by Mr. Walls, the president of the company. We shall present evidence pertaining to the ntracts for consideration of the Commission; and, such other evidence as we feel should meet the contentions which may be made, and which will be made, that we think are consistent with the issues as we now see them.

TRIAL EXAMINER: The Examiner is correct in his interpretation of your opening statement as having been made also on behalf of the Susquehana Transmission Company of Maryland?

MR. SPARKS: Yes, sir, that is correct.

• • •

MR. GOLDBERG: I have noted here that one of the reasons assigned for the challenging of the Commission's jurisdiction [38] is that the Commission has, in brief, no jurisdiction to determine the fixing of the division of rates which are the result of services rendered jointly; is that correct?

MR. SPARKS: That is correct.

MR. GOLDBERG: I do not know of any reason in connection with that challenge to the Commission's jurisdiction having been stated. I am wondering if I had missed it, or whether counsel had stated one.

MR. SPARKS: I stated, if Your Honor please, that the Commission has no jurisdiction to determine the division of joint rates. The reason, briefly, for that contention is that, unlike the Interstate Commerce Act, and perhaps some

other acts, the Federal Power Act contains no language which may be conceived to give to the Federal Power Commission power over the divisions of revenues as between persons who render services jointly.

• • •

[39] TRIAL EXAMINER: The Pennsylvania Public Utility Commission?

MR. MILLER: We have no statement to make.

TRIAL EXAMINER: Public Service Commission of Maryland?

MR. FRANCE: Mr. Examiner, the Public Service Commission of Maryland is primarily concerned with the allocation to Maryland of its proper share of any rate reduction. At the proper time we wish to put on the stand as our witness, Mr. Paul L. Holland, the Chief Engineer for the Commission, who will testify as to what we believe the percentage allocation to Maryland should be.

TRIAL EXAMINER: Staff counsel for the Federal Power Commission?

MR. GOLDBERG: Mr. Examiner, at the outset I would like to say that I think I have listened very carefully to the statement made by counsel for the Respondents. I think it fair to state that the Respondents are, of course, aware of their position, as to rate base, depreciation, both annual and accrued, and other elements of this rate case.

I have concluded, however, and I think fairly so, that for [40] some reason they have seen fit not to divulge their position as to those matters at this time.

However, the Staff of the Commission does not take a position such as that, and will at this time divulge its position on the various elements of the rate case.

It is the intention of the Commission's Staff in this proceeding to present evidence on the components of a rate case, including rate base, depreciation, working capital, and rate of return, and the like.

[41] Before outlining the staff's present contentions in regard to the various elements of this rate case, I think it might be well to describe in brief and general terms, Pennsylvania Water and Power Company and its operations.

This also includes, of course, the Susquehanna Transmission Company of Maryland.

For the sake of brevity, I will refer to the Pennsylvania Water and Power Company as "Holtwood".

Holtwood owns and operates a steam electric and a hydroelectric plant located on the Susquehanna River at Holtwood, Pennsylvania. To fix the location more graphically, it is about eight miles below the Safe Harbor Water Power Corporation's project, and about eight miles above the Conowingo project on the same river. Holtwood also owns and operates a transmission system, directly and indirectly. That part of the transmission system which is located in Pennsylvania, it owns and operates directly. That part lying within the boundaries of the State of Maryland, it owns and operates indirectly, for legal reasons, through a wholly owned corporation, Susquehanna Transmission Company of Maryland, the other Respondent in this case. Susquehanna's transmission system is administered by Holtwood through operating agreements, and is coordinated with the properties directly owned and operated by Holtwood, and is operated as a unit by a common organization. [42] Holtwood sells electric energy at wholesale, in bulk, to public utility companies, leaving to its customer companies, by deliberate choice, the distribution of that electric energy at retail. Holtwood and its customer-public utilities companies operate in a thickly-populated, rich agricultural and highly developed industrial area which is second to none in the United States.

Holtwood, Mr. Examiner, unlike the majority of electric companies in this company [country], by reason of its contractual arrangement with its principal customer, Consolidated Gas and Electric and Power Company of Baltimore, (sic) is very fortunately situated. That contract, in

effect, insures to Holtwood net operating revenues, independent of the amount of output, and increasing as additional plant investment is made. Under that contractual arrangement a relatively fixed amount representing the return to Holtwood is determined. That return is computed upon two principal factors, first, the amount of earnings during the year 1930, and, second, a fixed percentage on the net additions to plant since 1930, less an adjustment for increases in the depreciation reserves since 1930.

To this return Holtwood adds all operating expenses, power purchases, depreciation expenses and deducts the revenues collected from its customer companies other than the Baltimore Company—and by "Baltimore Company", I mean, of [43] course, the Consolidated Gas Electric [Light] and Power Company of Baltimore. In short, this contractual arrangement constitutes virtually a guarantee of earnings on Holtwood's capital stock. Based upon its present capital structure and present agreement with Consolidated, the rate is about 20 per cent.

Briefly, taking up the various elements upon which the Commission's staff will offer evidence,—I think at the outset I might state that the staff's plans at present do not include the presentation of evidence on the form of the contract. This, of course, does not mean that the Commission may not change, or is not at liberty to make such changes as it may see fit, based upon the evidence of record; nor, does it mean that those who are proposing to offer testimony on that aspect of the case should not do so.

On the matter of rate base, it is the staff's position that actual legitimate investment is the appropriate rate base in this case, and that reproduction cost testimony, trended original cost testimony, or any such testimony, usually presented to show the alleged fair value of the properties devoted to public service, should be rejected and not received in evidence if offered here.

Now, with respect to this investment rate base, it is the position of the staff that the gross investment for the

rate base is, in round figures, $32,920,738. This is, in round numbers, $5,663,494 less than Holtwood's book figures, which the staff [44] contends contain write-ups. The staff proposes the elimination of the $5,663,494 because the staff contends that such amount does not represent actual cost, and should be disallowed. The staff's evidence will, of course, develop the details of the eliminations and the reasons therefor.

With regard, now, to the matter of depreciation, the staff will also show an analysis of the Holtwood's depreciation practices and methods which it has recorded on its books, used in its power bills, and reported in its tax returns to the Bureau of Internal Revenue.

The staff does not propose to recommend to the Commission that Holtwood be required to change from the straight line method of depreciation it has always been using.

The staff has made service life and depreciation studies to test to the reasonableness of the annual depreciation charge and the accrued depreciation. The staff contends that the annual depreciation expense is $465,000, and that the reserve requirement is about $8,204,770. Although this reserve requirement is somewhat less than the reserve per books, it is the position of the staff, for reasons that will be developed, that the present book reserve is not excessive, and should be used in reaching a net rate base in this case.

The staff will, also, present evidence on the appropriate amount of working capital that should be allowed in this case, and that amount is in the neighborhood of $600,000. There [45] will also be presented analyses of the company's operating expenses, balance sheets, income statements, and other pertinent financial data. In that connection, the staff proposes to take exception to certain operating expenses, and will also present analyses of the company's past earnings, which will show that the company has earned at least ten per cent rate of return on its net investment, including working capital during its entire period of operations.

On the subject of rate of return the staff will present data which will enable the Commission to reach a proper determination as to the fair rate of return.

The staff has made a study to determine the reasonableness of the cost of service to the customers served under demand and energy contracts. This study involves allocations of cost to each customer, including the allowance for return. It is expected that this cost allocation to the individual customers will serve as a guide to the Commission in arriving at the reasonable rates to be charged to those customers. Testing the staff's conclusions, it appears that at a rate of return of five per cent the indicated rate reduction is $2,450,000.

I might state here that the figures I have spoken of on the record are as of December 31, 1945.

One more thing and I am through. It will be recalled that at the outset I stated that I would sketch the staff's "present [46] position," on the various aspects of the case. I use the adjective "present" deliberately. The staff has made a comprehensive investigation of all the elements of this case. We believe that, as a result of that investigation, it has gathered and considered all of the material and relevant facts which are necessary to reach a proper and just result.

If, perchance, though I think it unlikely, the staff has not considered all of the material and relevant evidence which the company may have in its possession, and expects to present in these proceedings, the consideration of which evidence would alter the conclusions reached by the staff, the staff would want the opportunity to revise its position in the light of that evidence, to the extent required.

More than that, it would insist upon that opportunity, because it is not the purpose of the staff to adhere to a position, come what may. The staff has approached this investigation in that spirit. It is in that spirit that it enters this hearing and intends to continue throughout the proceedings.

TRIAL EXAMINER: The Examiner has before him two other orders which will be entered into the record at this time. One is the order of April 5, 1946, denying further postponement of the hearing, which was entered upon consideration of the application of the Public Service Commission of Maryland, filed April 4, 1946 for the postponement of the hearing in [47] the above-entitled matter for a period of sixty days. The Examiner will direct the Reporter to spread that out on the Record at this point.

* * * *

[48] TRIAL EXAMINER: Also, an order of April 5, 1946, entitled "Order Denying Petition". This is an order "Upon consideration of the 'Petition for specification of Issues and Reconsideration of Direction Fixing Order of Procedure' filed April 3, 1946, by Pennsylvania Water & Power Company and Susquehanna Transmission Company of Maryland."

The Examiner now directs the Reporter to incorporate this order in the Record at this point.

* * * *

---

[52] JOHN A. WALLS,

was called as a witness by and on behalf of the Respondents, and, being first duly sworn, testified as follows:

DIRECT EXAMINATION.

By MR. HAMBRIGHT:

Q. Will you please state your full name and your business address? [53] A. John A. Walls, 1611 Lexington Building, Baltimore, Maryland.

Q. Mr. Walls, will you please state what official employment or other connection you have had with the Pennsylvania Water and Power Company and the Safe Harbor Water Power Corporation, and what other experience you have had with similar hydroelectric developments? A.

Following graduation from the Massachusetts Institute of Technology in 1899 with the degree of Bachelor of Science in Electrical Engineering—* * * I was employed by Wallace C. Johnson, Consulting Engineer, at Niagara Falls, for a period of about two years on the engineering phases of hydroelectric development in the United States and Canada. In 1901 I went with the Shawinigan Water and Power Company, which had been organized about 1898, and became its chief engineer in 1905, which position I retained until I was called to Holtwood in 1909, continuing for a period as consulting engineer to Shawinigan Water and Power Company.

[54] I maintained for years first-hand acquaintance with the affairs of Shawinigan Water and Power Company, and have been at one time or another a director in that company and in companies in the fields of industry, street railway operation and electricity and gas distribution.

I have been a director in a corporation doing large scale financing of electric and gas utilities in foreign countries, and was a partner for a number of years in the firm of Aldred & Company, which did investment banking. In recent years, my directorships with all business corporations, other than the Pennsylvania Water & Power Company and certain subsidiaries, have been terminated. The Shawinigan development was a pioneering undertaking in Canada which began about 1902 or 1903, the delivery of bulk power to Montreal over a 90-mile long high tension transmission line.

I believe that the general range of experience in large scale hydroelectric engineering on this continent from the beginning of the century will be found to be represented in the several plants of the Shawinigan Water & Power Company, which company has contributed much to the development of the hydroelectric art.

November 1st, 1909 I came down to the Susquehanna River in the employ of Mr. J. E. Aldred, who had been made receiver of the McCall Ferry Power Company. The

McCall Ferry Power Company was reorganized as the Pennsylvania Water & Power [55] Company in January 1910, and I served as its chief engineer until 1914. The dam and plant at Holtwood were completed and have since been operated under my personal supervision. From 1914 until December 1933, I was vice-president and chief engineer of the Pennsylvania Water & Power Company, and since that date its president. I have been a director of this company from the early days of its organization.

I was vice-president of the Safe Harbor Water Power Corporation from its organization until 1933 when I became its president, and was a director from the early days of its organization. I resigned as president and director October 23, 1940 and have now no official connection with it.

Pennsylvania Water & Power Company owns one-half of the voting common stock, Class "B", of Safe Harbor Water Power Corportaion, for which it paid $3,000,000.

I had served years on the Hydraulic Power Committee of the National Electric Light Association, am a Fellow of the American Institute of Electrical Engineers and am a Member of the American Society of Civil Engineers.

I have done consulting work on hydroelectric developments in Canada and in the United States. On a number of occasions I have had the opportunity to make detailed studies of the hydroelectric industry in certain foreign countries, have visited and made engineering reports on many hydroelectric plants in France, Italy and elsewhere and became acquainted [56] there with the outstanding personnel of the industry. In addition, Aldred & Company, of which I had been a partner for some years, had European correspondents which kept the firm continuously advised of the progress of hydroelectric engineering in Europe.

Q. Will you please outline briefly the preliminary work and events leading up to and including the construction of the Holtwood Dam, the organization of the Pennsylvania

Water & Power Company, the beginning of its business, and the first two decades of its history.

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THE WITNESS: Investigation of the water power possibilities of the Susquehanna River in the reach of the lower 40 miles from tidewater to Columbia, began prior to 1905. Different promoters and engineers did a greater or less amount of preliminary work on projects along this reach. From the records in possession of the company, it was not until 1905 that major construction work on any of these schemes was actually initiated. In that year the McCall Ferry Power Company was [57] formed and work was started on the so-called McCall Ferry (now Holtwood) dam at Fry Island.

However, in 1907 following the failure of the Knickerbocker Trust Company of New York, the McCall Ferry Power Company found itself unable to procure the necessary funds for continuing construction as planned and had to curtail work with the dam and power house only partly finished.

The records of the company also disclose that efforts were made by interests representing the stocks and bonds to carry on the work thereafter. Little was accomplished, however, owing to the difficulty of raising money in this country for major construction projects during the months following the Knickerbocker Trust Company failure. That bank failure was followed by a so-called money panic, characterized by the partial suspension of specie payments by banks in this country and by the absence of a satisfactory market for new issues of securities. Funds became no longer available for interest on the outstanding bonds.

McCall Ferry Power Company had to struggle in this situation with a plant, interrupted in the construction stage, which had suffered a financial set-back, thereby being to a certain extent discredited for the future as respects ability to carry out power contract commitments. The unfinished plant represented a new departure in low head

hydroelectric plants because of its magnitude, its geographical setting close to the [58] coal fields and because of the then undeveloped state of the art of design and operation of low-head hydro plants for use on a river of highly fluctuating flow.

Certain interested security holders in 1908 approached Mr. J. E. Aldred, who had pioneered in the construction and operation, as well as in the financing and business conduct of a large hydroelectric development at Shawinigan Falls on the St. Maurice River in Canada, sending power over a long distance, high tension, transmission line to Montreal. After surmounting many difficulties, he had brought that undertaking to a position of technical and financial success and of promising growth. It is today a great and successful enterprise. He had learned first-hand of the many difficulties then surrounding the pioneering of a large scale hydroelectric development and had demonstrated ability to contend with those difficulties. He was invited to visit the site of the work and agreed to take charge of the project, to assume the burden of raising the money necessary to complete it, to head the company, to build up a company staff, to carry on the construction work, to make power contracts for its output, to get it into operation and to put it on its feet as a business enterprise. There followed a brief period of receivership under him, beginning in 1909 and terminating early in 1910.

At the end of 1909 the property of the McCall Ferry Power Company consisted of real estate and riparian rights, the [59] foundation and most of the superstructure of a dam, leaving to be built the abutments at each end of the dam and, to be filled in, the gaps in the dam superstructure through which the Susquehanna River was being diverted. The foundation and a portion of power house superstructure had been erected, and the tailrace was in usable condition. Engineering studies and plans, construction buildings and construction plant were also at hand. The status of the work at that time included the results

of expenditures made during the period of receivership. Some transmission line right-of-way had been acquired, but no transmission lines or substations had been built and practically no machinery had been installed.

* * *

[60] Q. The witness is shown photograph marked for identification as Exhibit 1 and I ask him to state what that exhibit shows. A. Exhibit 1 is a photograph of the exterior of the power house and dam showing the stage of construction at about the end of 1909.

Q. The witness is shown the photograph marked for identification as Exhibit 2 and asked to state what that exhibit shows. A. Exhibit 2 is a photograph of the exterior of the power house from upstream at about the same time.

Q. The witness is shown photograph marked for identification as Exhibit No. 3 and asked to state what that exhibit shows. [61] A. Exhibit 3 is a photograph of the inside of the power house also at about the same time.

[62] Q. Mr. Walls, will you continue with the discussion of the organization and early history of the Pennsylvania Water and Power Company? A. On January 13, 1910, the Pennsylvania Water and Power Company (hereafter called Penn Water), a Pennsylvania corporation, was formed as a reorganization of the McCall Ferry Power Company, succeeding to the property and rights of the former company. Somewhat prior to this time, the receiver of the McCall Ferry Power Company, Mr. J. E. Aldred, had engaged the services of the Empire Engineering Corporation to proceed with the construction work at Holtwood.

It was urgent to rush the work so that before the end of the year the project might be sufficiently near to a demonstration to potential power customers, of its technical and financial practicability. For negotiation of power contracts with the latter, this demonstration was considered highly desirable before they might make additions to their own

generating plants involving capital charges and stand-by operating costs which might make the value of hydro supply to them and the revenue therefor less than it would be otherwise. The work necessary included procurement of generating units and transformers, their installation and preliminary operation; sufficient additions to the power house structure and dam to permit this, together with the purchase and installation of auxiliary equipment. The [63] rights-of-way had to be acquired for a transmission line, a double circuit transmission line built thereon between Holtwood and Baltimore, and a terminal substation had to be built at Baltimore. All this was a major engineering task for that period.

The construction work was pushed ahead with speed and by the end of 1910 the reorganized Company had largely completed the 55 feet high, 2392 feet long, gravity concrete dam; the first of the generating units was tested out and trial operation was initiated; the balance for the forty-mile-long transmission line right-of-way from the power house to Baltimore had been obtained; and a substation had been partially finished in Baltimore.

* * *

[67] Because of doubt as to the right of Penn Water, as a Pennsylvania Corporation, to own and operate transmission lines and substations in Maryland, a Maryland Corporation, Susquehanna Transmission Company of Maryland, was organized for such purpose. It was formed in April, 1910, by the consolidation of Susquehanna Pole Line Company of Harford County and Susquehanna Pole Line Company of Baltimore County, both of which had been incorporated in 1907. All of its securities outstanding are owned by Penn Water. When Penn Water is referred to by me, it includes as part thereof the Susquehanna Transmission Company of Maryland.

While the construction work was being driven ahead, efforts were being made to find customers in Pennsylvania,

Maryland and Delaware, negotiations being had with power users in Philadelphia, York, Lancaster, Reading, Harrisburg, Wilmington and elsewhere. On August 29, 1910 a contract was entered into with the Consolidated Gas Electric Light and Power Company of Baltimore for a period of ten years. In February, 1911, a 15-year contract was obtained with the United Railways & Electric Company of Baltimore.

By 1914 eight units had been installed in the Holtwood hydroelectric plant and in 1924 the final two hydroelectric units had been put into service, occupying the last space available in the present power house and bringing the [68] effective capacity of the plant up to 104,000 kilowatts, approximately fifty per cent greater than previously contemplated, without any major additions to the hydraulic structures. A steam-electric generating plant was built at Holtwood in 1924 and 1925, to use river coal dredged from the pond above the dam. Transmission lines had been built from Holtwood to the cities of Baltimore, Lancaster, Coatesville and York, to deliver electric service to electric utilities distributing in the regions adjacent thereto.

Thus, prior to 1930 the Company found itself with a hydroelectric and a steam development, with transmission lines radiating to principal load centers and supplying power to other utilities whose requirements had been growing rapidly.

Q. Mr. Walls, will you please continue the discussion of the Penn Water's initial period and some of its then problems which gave rise to continuing policies of the company? A. Not only was speed of construction a requirement in the initial period of the reorganized Company, but there were two other important factors given attention, viz: that the construction work should be well done to assure permanency and that the work be carried out at the lowest possible cost consistent therewith, but avoiding frills and non-essentials. One of the settled policies of the Company

ever since has been [69] to endeavor to make major plant extensions at times of low construction cost indices and when labor is more efficient, for charges associated with plant cost, bulk large in hydro generating plants as compared with steam plants. Because of the early financial history of the project, it was desirable that operating and overhead costs be kept to the minimum to put Penn Water in financial position to obtain the additional amounts of money later to be required for extensions and to put it on a dividend paying basis with the least delay.

Hydro power had not at that time established itself in this territory as a desirable and dependable supply. The ability of the plant to withstand the floods and ice shoves of the river was questioned. The question of the reliability of long transmission lines and their terminal facilities, and the effect of low river flow added to the distrust of the undertaking.

The technical difficulties involved in the construction and operation in those early years of this large hydroelectric plant with its steel tower transmission lines, were great, and the service at the outset was not as good as desired. Such service if continued unduly would, it was felt, prejudice the marketing of the then novel hydroelectric supply. The problems which arose as a consequence of the lack of knowledge on the part of manufacturers as how to meet the growing and [70] stiffening requirements of Penn Water to secure the desired reliability of service and also the high quality of service as respects maintenance of system frequency, responsiveness of governing, etc., caused much worry to the technical force of Penn Water in the early days.

For a long period I was continually planning from year to year as to what possible improvements might subsequently be made in the service or value of the hydro supply to meet competition and to increase the earnings of the Company. It was essential that hydro service should gain a sufficiently high reputation for quality of service

promptly and maintain that reputation with the minimum of deviations therefrom.

* * *

[72] The type of power supply contract common with sustained high flow hydroelectric plants such as was used prior to 1910 in Canada and at Niagara Falls, where power was generally sold in blocks on practically a sustained horsepower-year basis, was totally unsuited to the Holtwood plant conditions, the latter involving the use of a river subject not only to seasonal but also to sudden and wide fluctuations in flow and lying in a territory adjacent to supplies of coal.

It came to be appreciated that base load energy of sustained or block form, obtainable by operating the most modern and efficient portion of a customer's steam generating equipment at high use factor, established a so-called "Operating Production Cost" per kilowatt-hour for such block which was exclusive of capital and other pertinent charges. This base load kilowatt-hour cost was quite different from and lower than the average cost of generating by steam the entire load of that customer which varies from hour to hour and from week to week. The average cost of the base load energy was in turn much lower than the cost of generating on the peaks of the load, the latter requiring the retention of and at times the use of relatively inefficient older steam [73] generating equipment of the customer.

The various power contracts of Penn Water show a development along the lines of coordinating the hydro supply with the steam generating potentialities of the Company's customers. This was accomplished by provisions for the inter-changing of steam and hydro energy and for increasing the carrying by hydro of the peak portions of the customers' loads which cost those customers most per kilowatt-hour to generate, as well as supplying base load energy during periods of ample flow.

It was also found that hydro supply gave opportunities for benefit to the customers by deferring their steam plant extensions, thus making a saving to the customers in capital and other pertinent charges and permitting the later purchases of more modern steam equipment.

To get adequate prices for its power, Penn Water must ever try to give service that is of the highest quality. The direct, as distinguished from the also important indirect, financial penalties for failure in supply were and still are important special elements of risk to Penn Water, as, for example, that risk appearing in Article VII, first paragraph of the Safe Harbor contract, whereby Penn Water is obligated to purchase and pay for Baltimore Company's entitlement of the Safe Harbor output in the event it should fail in its duty to transmit the same to the Baltimore Company. [74] There were several circumstances in 1910 which stood in the way of arranging power agreements with possible customers of Penn Water that would enable the best utilization of the hydro resources inherent in the Susquehanna River.

Chief of these was the lack of a fundamental understanding of the principles and methods of coordinating hydro power from a run of the river project with the steam resources of surrounding utilities, which utilities should form the logical outlet for the new development. Consideration of such problems by prospective customers was handicapped by the fact that the reliability of continuous operation of a large hydroelectric plant with a dam spanning a stream such as the Susquehanna, subject to floods and ice, had not yet been established. Neither had the reliability been proven in this locality of high-tension transmission of electricity by steel-tower lines over a distance of 40 miles, utilizing transformers at both ends of the line, and extending through a territory subject to frequent lightning storms during a part of the year and to sleet storms during another part of the year.

Up to 1910 few large hydroelectric developments existed in northeastern United States with long distance transmission of power in bulk. Though there were at Niagara Falls, large plants where the river flow was ample throughout the year, transmission was of limited scope, and the initial loads were largely furnished by nearby industrial plants. [75] Holtwood's supply was distant from its prospective markets, greatly fluctuating in amount, and requiring for full economic success of the enterprise, the eventual disposal of a greater amount of energy than could be then absorbed in any one practicable market. At that time, for electrochemical uses, a constant supply of very cheap hydro was a desideratum, not the varying supply available from Holtwood.

For industrial uses it had been the custom to look upon hydro as an individual or sole supply competitive with steam rather than to be coordinated with steam. Some hydro plants had been built adjacent to mill installations for the local sale or use of electrical or mechanical power in small quantities. It was against a background of such a limited conception of hydro service that Penn Water had to sell its particular character of bulk supply in the initial years of the reorganized company.

• • •

[77] The result was that the fullest coordination of the facilities of Penn Water and of its customers in the interest of the economical utilization of the power potentialities of the power pool to meet most adequately the integrated requirements of the pool for the final benefit of the ultimate consumer, was not effected until the present contractual arrangements were devised in 1931.

The first major step to that end was taken in 1921 when Penn Water and its two customers in Baltimore agreed to the coordinated use of hydro supply on the combined instead of the separate loads of the two Baltimore companies. The 1911 contract between Penn Water and the Railways Company was superseded by transferring to

the Consolidated Gas Electric Light and Power Company the responsibility for the furnishing of electric service to the Railways Company.

At that same time, Consolidated Gas was given a participating entitlement in the power and energy production of Penn Water. Hydro supply could, under that arrangement be used to better advantage than formerly, but subsequent experience [78] proved that there were still impediments to the most effective coordination for maximum system economy.

An effort was made in 1927 at the expiration of the 1921 agreement between Penn Water and Consolidated Gas to perfect the contractual arrangements for achieving the complete coordination of the hydro and steam resources of the two companies. The participating entitlement in the power and energy production of Penn Water which had been granted to the Consolidated Gas in the 1921 agreement, was readopted, and additional provisions were added for the purpose of facilitating the desired coordination of resources at that time and in future planning.

However, the practice of the classification of power and energy and the use of demand and energy charges with fixed unit rates, which had been earlier evolved in the utility field in connection with the sale of blocks of power, uncomplicated with the problem of coordination of resources of the buyer and seller of hydro-steam supply, was continued in the 1927 agreement and still militated against the correct principles of operating a combined hydro-steam generating and supply system.

It was not until further contractual arrangements had been made in 1931 by which Consolidated Gas' payments to Penn Water and Safe Harbor Company were placed on the basis of an annually computed lump sum, independent of the number of kilowatts and kilowatt hours, that the last contractual obstacle [79] disappeared and the most economical result obtainable from the combined power resources could be derived.

In 1913, the Edison Electric Company of Lancaster, Pennsylvania, which later on became the property of the Pennsylvania Power & Light Company, contracted for a supply from Holtwood, and in 1923 supply to the utilities in York and Coatesville, Pennsylvania, was initiated.

The latter are now parts of the systems of the Metropolitan Edison and the Philadelphia Electric Companies, respectively.

The size of the loads of these utilities was relatively small in comparison to that of the Baltimore utilities, but there were good reasons for thinking that their loads would develop in time. Such growth did occur with them as well as in the case of the Baltimore utilities, so that by 1929 it was realized that the potentialities of the Holtwood plants were almost fully realized.

* * *

[82] MR. GOLDBERG: In that connection, I would like to inquire of Respondents' counsel what is claimed with respect to the date of commercial operation of Holtwood project?

MR. SPARKS: I do not see that it is particularly relevant at this stage of the proceedings, Mr. Examiner. We will at the proper time put on evidence with respect to that matter.

* * *

[91] [THE WITNESS]: Another contribution of Penn Water is found in the intrinsic design of the Safe Harbor plant which permits its output to be integrated with that of Penn Water for overall benefit, and the hydro resources of the two companies to be combined using the transmission and interconnection facilities into which they flow, to best advantage of the region served by the companies.

* * *

[93] MR. GOLDBERG: Mr. Examiner, I hesitate to interrupt, but I just wonder if we are trying the Safe Harbor case all over again. I cannot fathom the material-

ity or relevancy of these contributions of Penn Water that it is alleged to have made to the Safe Harbor project.

* * *

[94] THE WITNESS: Coincident with the arrangements for the ownership of the Safe Harbor plant, Penn Water and Consolidated Gas supplemented and coordinated their existing power supply agreement with provisions that would permit the output of the Safe Harbor plant to be brought into the regional electric supply system in a way that would facilitate pooling it with the product of the hydro and steam plants at Holtwood, and with the output of other steam plants in the system, with the aim of producing the maximum overall economy of operation and reliability of service.

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[108] GEORGE WHITTIER SPAULDING,
a witness called on behalf of the Respondents, being first duly sworn, testified as follows:

[109] DIRECT EXAMINATION.

By MR. MYSE:

Q. Will you please state your full name? A. George Whittier Spaulding.

Q. You are a vice-president of the Pennsylvania Water & Power Company, are you not? A. Yes, sir.

Q. Do you hold a position with the Safe Harbor Water Power Corporation? A. Yes, as Advisory Engineer.

Q. Are you an officer of the Susquehanna Transmission Company of Maryland? A. No, I am not, but as vice-president of Pennsylvania Water and Power Company I also act as Advisory Engineer of the Susquehanna Transmission Company of Maryland, a wholly owned subsidiary of Pennsylvania Water & Power Company.

Q. What has been your professional training and experience? A. I graduated from the Massachusetts Institute of Technology with a degree of Bachelor of Science in Electrical Engineering in 1921.

Following short periods of employment with the Westinghouse Company of Boston, the Plymouth Electric Light and Power Company of Plymouth, Massachusetts, and the Century Electric Company in St. Louis and Boston, I returned to the Massachusetts [110] Institute of Technology as instructor and laboratory assistant, pursuing at the same time several graduate courses in hydroelectric developments and power transmission.

In June 1923 I was employed by the Union Electric Light and Power Company in St. Louis, Missouri, as engineer in its transmission and distribution department, and in 1924 I entered the employ of the Pennsylvania Water and Power Company and have been with that company continuously to date, being employed successively as test engineer, assistant chief of tests, and assistant to the general superintendent, to January, 1938, when I became assistant chief engineer of both the Pennsylvania Water and Power Company and the Safe Harbor Water Power Corporation.

In August 1942 I was made superintendent of power of the Pennsylvania Water & Power Company, and advisory superintendent of power of the Safe Harbor Water Power Corporation, and in 1943 was promoted to vice-president of the Pennsylvania Water & Power Company.

I am a member of the American Institute of Electrical Engineers, the American Society of Civil Engineers, and a registered professional engineer in the State of Pennsylvania and Maryland.

Q. What have been your general duties and responsibilities with the company in recent years? A. Between 1931 and 1938 I was engaged in power market [111] studies and contract negotiations, under the direct supervision of the general superintendent and vice-president of Pennsylvania Water & Power Company.

Let me say that I shall hereafter refer to Pennsylvania Water & Power Company as Penn Water, and shall refer to the Susquehanna Transmission Company of Maryland as Stco [STCo], shall refer to the Safe Harbor Water

Power Corporation as Safe Harbor and shall refer to the Consolidated Gas Electric Light and Power Company of Baltimore as the Baltimore Company.

During this period from 1931 to 1938 I was actively working on power contracts which were negotiated with the Pennsylvania Railroad Company for the supply of power to the railroad's proposed electrification in Maryland, and in that portion of southeastern Pennsylvania in the general vicinity of Penn Water power development at Holtwood and the hydroelectric development of Safe Harbor at Safe Harbor, Pennsylvania.

Although Baltimore Company also became a party to this railroad contract, the principal negotiations and power supply arrangements were made by the two hydro companies, Penn Water and Safe Harbor.

Following the initial contract with the Pennsylvania Railroad Company in 1931, negotiations were opened with the Potomac Electric Power Company in Washington, D. C., in collaboration with the Baltimore Company, for the supply of [112] hydro peak service, the necessary transmission services being provided by Penn Water and its Maryland subsidiary, Stco [STCo].

Although the final contract was made between the Potomac Electric Power Company and the Baltimore Company, the latter Mr. F. A. Allner, then vice-president of Penn Water, initiated the negotiations and completed them as a special representative of the Baltimore Company.

I was closely associated with Mr. Allner in all of these negotiations.

Shortly after the service under this power supply contract with Potomac Electric Power Company had been inaugurated, a supplemental contract was negotiated with the Pennsylvania Railroad Company by Penn Water and Safe Harbor, providing among other things to supply power to the Maryland Division of the railroad at Washington, through facilities which were to be provided by the Potomac Electric Power Company.

With the extension of the transmission facilities of Penn Water and those of its Pennsylvania customers in the middle 30's, negotiations were carried out by Penn Water leading to closer coordination of the power resources of itself and these northern companies, resulting in a continued parallel operation and in interchange of power and energy.

In the system planning power market studies, Penn Water initiated and took the leading part in bringing together the [113] several independent interests as parties to resulting interconnection contracts.

Beginning about 1938, I took a more leading part in such negotiations, and since 1942 all power market studies and arrangements for the coordination of the operations of Penn Water with its customer companies have been made under my direction.

Through the recent war period, close coordination of operations and system planning were most essential in the war effort, both to obtain the fullest use of installed capacity capabilities of the interconnected system and to arrange for the interchange and diversion of hydro and steam energy on the interconnected systems to accomplish the conservation of oil in the early years of the war and of coal in the latter years as critical fuel shortages arose.

Q. Was it necessary for Penn Water to make new contracts to carry out such coordination and diversion of energy during the war years? A. No. The existing contracts of Penn Water had, through the years, been developed to recognize the advantages to be gained through such coordinated operations, and they contained sufficiently flexible provisions to permit the accomplishment of such coordination even under load conditions that could hardly have been foreseen at the time the contracts were entered into.

[114] It has been the continuing practice of the companies' management in contract negotiations to endeavor to provide through its power contract terms: first, for the proper

incentive to accomplish maximum over-all economies for all parties;

Second: To provide for an equitable division of the savings resulting from such an operation; and

Third: To interpose a minimum of artificial barriers to the most economical method of operation.

Q. Mr. Spaulding, does Penn Water dispose of all of its electric power and energy in bulk as distinguished from local distribution? A. Yes, ever since the incorporation of Penn Water in 1910 it has disposed of its power and energy in bulk to other utilities, and except for a limited amount sold to its wholly owned subsidiary during World War I. It has never attempted to develop local distribution systems nor to enter upon a retail distribution business, nor has it attempted to compete with its other utility customers for bulk power industrial customers.
[115] It has never sought nor does it have any substantial monopolized distribution territory.

Q. What has been the basis of its power contracts with its present customers? A. Penn Water, as a wholesaling company, has always had to compete with other sources of supply available to its customers, all of whom have had their own power generating resources or were able to obtain such supply from other adjacent utilities.

Its power contract charges have therefore been determined on a competitive basis, and it has had to meet existing or potential competition which has changed from time to time with new developments and improved methods of power generation.

The guiding principle of Penn Water's management has been to fully develop the natural resources of the Susquehanna River in its reaches occupied by the Holtwood and Safe Harbor power developments, to integrate its potentialities of hydro and steam electric power and energy, of equipment and of such special facilities and operations as Penn Water and later Safe Harbor could offer, so as to promote the most efficient and effective use

of their own facilities and operations with those of their respective customers, to mutual advantage.

Their customer requirements have not been uniform, either as between such customers, or from decade to decade, [116] and the contractual terms which have resulted are, therefore, found to differ widely.

However, they all reflect in one way or another the services which are inherent in the hydro resources of the Susquehanna River, the interconnection facilities which have been extended, and the results of coordinated operation which the company has fostered and developed.

Q. Mr. Spaulding, will you explain more fully how the hydro resources of the Susquehanna River have been developed by Penn Water? A. Penn Water is in the unique position of being the only non-captive wholesaling utility company in the United States.

Its power resources are largely hydro. The services which it was able to render to its utility customers in the first decade of its incorporation were not completely understood by, or acceptable to, these customers, in part because of the skepticism as to reliability of service from its run-of-river plant with the widely fluctuating flows experienced on the Susquehanna River, delivered over what was then considered to be a long distance transmission line, and in part because the advantages of coordinating hydro and steam resources were not fully appreciated.

Hydro power to that time had almost always been sold on the basis of a horsepower year, with industries purchasing [117] a specified amount of power—measured in terms of horsepower—to be used for as many hours a year as needed.

As a result, there was little, if any, opportunity or incentive to realize the full potentialities of a fluctuating stream flow at a run-of-river plant under such arrangements.

Where additional hydro capacity was installed, the additional energy available with higher flows had to be sold

on a "when, as and if" basis. The terms "primary" or "firm power" and "secondary" or "interruptible power" were evolved during these early stages of hydro development.

These terms have since largely lost their significance through the increased recognition of the advantages of coordinating "hydro" and "steam" resources of two or more independent companies through the vehicle of power contracts.

Penn Water's early experience indicated that the load requirements of two or more customers could and should be combined in operating practice for the purpose of utilizing the available hydro supply to the best advantage and later this principle was extended to include the utilization of the steam resources of several of its customers to the mutual advantage of the contracting parties.

Q. Mr. Spaulding, have you prepared an exhibit to indicate in a graphical manner the advantages of operating the hydro resources of the Susquehanna River on the interconnected system with which these hydro plants are presently operated? [118] A. Yes, I have.

MR. MYSE: Mr. Examiner, I ask to have identified as Exhibit No. 8, a document entitled "Coordinated Use of Hydro Resources on the Interconnected System."

TRIAL EXAMINER: The document may be marked for Identification as Exhibit No. 8.

(The document referred to was marked Exhibit No. 8 for Identification.)

By MR. MYSE:

Q. Will you please describe and explain this exhibit? A. This exhibit consists of three parts—two charts for each of three calendar days.

The horizontal scale on each of the six charts represents the time of the day, starting in each instance at midnight.

The vertical dimension on the three upper charts indicates the magnitude of the total interconnected system load at any time, or the amounts of generation by various component parts of the system, while the vertical dimension on the lower three charts indicates the amounts of installed hydro capacity or amounts of hydro capacity operating at various times of the day.

Referring first, to the three upper charts, the heavy black curve shows graphically the sum of the interconnected system load requirements of Baltimore Company, including the total load of the Bethlehem Steel Company, one of its major [119] industrial customers, the load requirements of Penn Water's other firm power customers, together with the load requirements of the Pennsylvania Railroad, supplied by the several sources in a manner to be described later.

The specific calendar days chosen for this Exhibit, and then shown thereon, are typical of current experience and are here used for illustrative purposes.

The two charts shown on the left of the exhibit, are for a March day in the current year; the two in the middle of the exhibit are for a heavy load day in December of last year; and the two charts on the right are for the peak load day of 1945.

Three days were selected for materially different amounts of usable stream flow in the Susquehanna River available to both the Holtwood and Safe Harbor plants.

The stream flow for the March day, shown at the left, was actually 125,000 cubic feet per second which was greater than the powerhouse draft of either the Safe Harbor or Holtwood hydroelectric plants.

The stream flow for the day shown in the middle of the exhibit was actually 19,200 cubic feet per second, approximating the average usable flow at these plants for all months of November and December, in which months the maximum system load requirements have occurred.

It was desired to illustrate the type of operation [120] required with very low stream flow by the two charts at the

right, but, because of high flow through 1945, no recent low flow experience was available under present load conditions.

Consequently, such operation has been illustrated by an estimated division of the generation for the actual peak load day of 1945, by using as the weekly average flow 5,800 c. f. s., which flow will be exceeded about 95 per cent of the time in the months of December.

Q. Will you explain generally how the operations of the individual hydro and steam plants are scheduled for these different river flow conditions? A. The objective of the Power Production Departments of the Hydro Companies may be said to be the generation of the power and energy necessary to supply the requirements of the combined system load in the most efficient and effective manner.

This end can only be accomplished through the collaboration of the system dispatchers of the several independent power system involved.

Careful advance estimating is required on an annual, weekly and daily basis, of the expected river flows, of the expected system load requirements and the need for capacity.

Estimates must also be made of the desired operating reserve capacity or spinning reserve which must be available [121] as protection against unpredictable load increases, including the short-time swings in such loads that develop suddenly, together with the availability of replacement capacity should any of the load carrying capacity fail.

From their knowledge of operating economies of the individual plants connected to this system, the system dispatchers schedule the amount of capacity that must be available and the energy to be generated at each of the respective plants. to the end that optimum utilization and greatest economy can be obtained.

It will be noted from this exhibit, that on the high flow day, shown by the left-hand charts, the Holtwood and Safe

Harbor hydro plants were operating in the base of the load curve with the various steam plants operating above the hydro, the more efficient plants being nearer the bottom and the less efficient plants at the top of the load curve where they are used to produce the minimum amount of energy in relation to the amount of capacity operated.

The other two daily charts show the hydro energy being used in the top of the load curve.

On the average flow day, shown by the two center charts, the flow of the river is sufficiently high so that there is some hydro generation during each of the twenty-four hours, but most of the hydro energy was generated during the peak load hours where it can be most effectively used to reduce [122] the use of steam capacity.

On the low flow day, shown by the two charts on the right of this exhibit, all of the hydro energy is in the top of the load curve, that is, the hydro generation is used during the hours of peak load requirements.

The three lower charts, one for each flow condition, show the amount of hydro capacity operated and the use of hydro generation on each day.

It will be noted that the hydro capacity has been effectively used on each of the three days, either for energy generation, as operating reserve capacity or spinning reserve; while at other times, such capacity is largely available as standby which will be referred to a little later.

Even with wide variations in river flow, the hydro capacity installed is fully utilized during the peak load hours of the system.

Q. What are the advantages to the customers of Penn Water and Safe Harbor of such coordinated use of the Hydro Companies resources? A. The advantages to Penn Water's customers are derived from (a) the installed capacity of the hydro plants; (b) the generation of hydro energy from the available river flow; and (c) the coordinated or joint use of the special facilities provided by these Hydro Companies.

With the maximum coordination of the hydro resources [123] with the steam resources of its customers, these customers derive several advantages.

First, such coordinated use reduces the amount of steam generating capacity required to be made available by the customers; who, thereby, have available for other uses, the money that would be required for such investment to carry their peak load requirements, including the necessary reserves.

Second, the transmission facilities of Penn Water and its Maryland subsidiary, S. T. Co. of Maryland, have reduced the investment requirements for transmission and distribution plant on the part of these customers.

Third, there is a resultant saving in the cost of fuel and other associated operating expenses.

Fourth, they obtain in general more economical operation of their own steam generating plant resources through the maximum use of their most economical plants and the minimum use of their less efficient generating equipment.

Fifth, a portion of the hydro capacity during low flow is available as reserve capacity to the customers' systems, without the latter having to incur the cost of keeping their boiler equipment banked and ready for service and the additional cost of running unneeded steam generating equipment.

Sixth, the ability of starting up hydro units from standstill to full load operation in a fraction of a minute [124] assures additional reserve capacity which, in connection with the use of the water stored behind the dam in the Safe Harbor pond for ready use, has been referred to as "A. C. storage battery service", and there are other advantages not specifically mentioned.

Q. Will you please describe more specifically the capacity service of these two hydro plants to the system? A. Considering the hydro plants themselves, the capacity

that can be effectively used on the system load is determined by the effectiveness with which such capacity is used as limited by the available river flow.

The flow of the Susquehanna River has varied from a minimum seven-day average flow of 2,100 c. f. s. to a maximum flow of about 860,000 c. f. s.

The minimum flow of the river, together with the desired use of the water withdrawn from the storage above the two dams, generally determines, as a lower limit, the amount of energy which can be generated in a given period.

By using the two ponds as equalizing reservoirs, this generation can be distributed as desired and used only to supply the peak portion of the system requirements.

As can be seen by the right-hand charts on Exhibit 8, the sharper the peak portion of the daily load curve, the greater will be the hydro peak service capacity which can be supplied with a given amount of energy.

[125] The capacity value of the Holtwood and Safe Harbor plants to the combined system can be determined by considering the amount of steam capacity which would have to be installed to provide the same capacity service in the absence of the hydro plants.

In evaluating hydro capacity, recognition must be given to the load shape, to the probability of river flows, to maintenance schedules of the system capacity, and to the capacity reductions experienced in the different seasons of the year.

While such a capacity determination cannot be readily made from a single daily load diagram, it can be approximated by fitting the hydro energy into the peak load hours of the system load requirements for a group of consecutive days or weeks.

Q. Mr. Spaulding, in describing the use of hydro resources on the Susquehanna River, are you making a distinction between the capacity and the energy resources of these hydro plants? A. Yes, I am.

Q. Will you now describe the method of using the hydro energy in the most economical manner by coordinat-

ing the hydro with the steam resources of Penn Water's and Safe Harbor's customers? A. The energy available from the Holtwood and Safe [126] Harbor plants will vary with the available river flow supplemented on a daily or weekly basis by the use of pondage; that is, by the withdrawal of water from above the dams at the Holtwood and Safe Harbor Plants.

The economic value of such energy is measured in part by the amount of fuel and other operating expenses which can be saved at the steam plants of the hydro customers.

It is the responsibility of the Hydro Load Dispatchers, in cooperation with the system dispatchers of its customer companies, to schedule the use of hydro energy at times when it will replace the highest cost energy which would otherwise be required on the interconnected system.

The maximum overall system economy and reliability is always the objective.

There is greater possibility of operating savings when the hydro capacity is coordinated with the effective use of the steam capacity of a group of generating stations, or when the load requirements of several utility systems are combined.

Such coordination permits a wide selection of equipment and generating efficiencies with the result that the most efficient equipment can be operated to the best advantage and the operation of the least efficient can be minimized.

This, in a general way, is shown on Exhibit 8 where three component sources of steam generation have been fitted [127] into the system load requirements as would be done in day to day or weekly scheduling of loads and capacity, to obtain the maximum overall economies.

Q. In scheduling the operating of the various generating plants of the system, are you referring only to the generating plants of the Baltimore Company, of Potomac Electric Power Company and of Penn Water and Safe Harbor? A. No. There has been for fifteen years an appreciable

amount of interchange energy bought and sold by Penn Water over its northern interconnections in Pennsylvania on an economy basis, that is, energy is bought when the cost of such generation on another system is less than the cost of generation on our own system, and, similarly, our own energy is sold as interchange when there is an economic justification for so doing.

The contractual arrangements for such interchange provide for an equitable division of the savings in operation expense between the buying and selling companies in such transactions.

The effect of such interchange transactions is shown on the diagrams of Exhibit 8.

As stated previously, the heavy curved line graphically shows the system load requirements.

The dotted curve, which on certain occasions is above and sometimes below the solid line, graphically shows the actual system generation.

[128] Where the dotted curve of system generation is above the load requirements our system was generating power in excess of system requirements and was selling such energy as interchange to others.

The area shown below the solid line of system load requirements and above the dotted line of system generation represents energy purchased as interchange by Penn Water over its northern interconnections.

Q. In referring to available hydro energy for the combined system, you spoke of the use of pondage.

Will you explain this use further? A. The hydro peak service to this system, as illustrated on the right-hand diagram of Exhibit 8, depends on the use by these hydro plants of a quantity of water in excess of the actual flow of the river at the particular time the hydro energy is used in the system load.

Such operation is possible because the ponds above the Holtwood and Safe Harbor dams can be used as storage reservoirs to regulate the actual river flow over a

period of a week or even longer, although the weekly use of pondage is the more general practice.

Such use of pondage results in a greater hydro capacity to this system than could be obtained from the river flow alone.

Furthermore, the capacity requirements of the system [129] vary from day to day and are usually greatly reduced on Saturdays and Sundays so that the river flow for a seven-day period of low flow can all be used in a period of sixty or seventy hours during the week when the system loads are heaviest.

There is a further use of pondage which has a very real capacity value to the coordinated system in those low flow periods of the year, when all the hydro capacity is not required for hydro generation.

During such low flow periods, a portion of the reserve hydro capacity is always available to carry system load swings which require very little energy; while the idle hydro capacity can be started up from standstill, and fully loaded within a fraction of a minute, well before the steam plants in operation would get into trouble in the event of a major emergency, and long before it would be possible to steam up idle boilers or to load up steam turbines.

To provide such reserve capacity service by steam capacity would involve expensive standby losses and the operation of turbo-generators below their most efficient loadings.

Referring further to the use of pondage. The scheduling of water to be withdrawn can be done on a daily or weekly or longer cycle.

The amount of usable energy stored in the ponds over such cycle of use is actually greater than the total energy [130] available from the minimum experienced flow itself during a seven-day period.

This pondage can be used in emergencies to replace energy that had been counted on from steam capacity that may fail.

Experience has shown that the forced outage of several large steam units on a system of our size is an infrequent occurrence and of short duration.

Consequently, the pondage of the Holtwood and Safe Harbor plants can be relied upon for a large portion of the required system reserves.

Q. Mr. Spaulding, you have emphasized both the capacity and the energy values obtainable from resources of the Susquehanna River. Are there any other general services that have entered into your contractual relations? A. Yes, there are. Penn Water and Safe Harbor have in several instances provided certain special facilities; in part for joint use with our customers and in part for the specific use of these customers.

Q. Do your contracts provide for specified payments in connection with such special facilities? A. Not always. However, within the last decade, there has been more general recognition in our own contracts, and in the contracts of utilities generally, of specified charges which are related to the special facilities provided.

[131] This is because it has been generally recognized that it is more equitable to consider the availability of these special facilities as a separate component of any contractual arrangement of rates or payments rather than to include the costs of special facilities as a part of one or more of the variable component rates or charges for capacity or for energy.

I should like to mention a few examples of special facilities provided by Penn Water and Safe Harbor for its customers.

The Pennsylvania Railroad desired to receive its power supply in the form of 25 cycle single phase power.

To provide this service required special facilities not readily usable for others. Consequently, the contract with the Pennsylvania Railroad provides for special charges which are based on the cost to the company making such

facilities available. Another example is the local facilities which are part of the S. T. Co. of Maryland's Highlandtown Terminal Substation in Baltimore.

Local distribution facilities were also provided until recently at Penn Water's Violet Hill Terminal Substation in York, Pennsylvania.

It was more practicable in these latter two instances for Penn Water to provide a portion of the local distribution facilities in its terminal substations than for the receiving companies to provide the equivalent facilities. [132] Such arrangements simplified the installation as well as their operation and maintenance.

In the case of Highlandtown distribution facilities, there was, prior to 1931, a specified charge as a component part of the bill rendered, covering the annual costs, including operation and the maintenance of these facilities.

In the case of York terminal facilities, the annual charge for the local distribution facilities provided, was not separately billed, but the costs were incorporated in the component charges for demand and energy.

Q. Mr. Spaulding, do all of your present power contracts now have separate charges or rates for capacity, energy and special facilities? A. No; not in all of them, but each of these three separate services—capacity, energy and special facilities, was separately recognized when the contracts were negotiated and the rates or payments were established.

Q. Are there any other comments you would like to make regarding the segregation of these three services under your various power contracts? A. Yes; I should like to point out an economic fact in connection with these three services which is very often misunderstood.

Financial and statistical services, and many others, attempt to express the value or cost of a service in terms of [133] a simple rate, as so many mills per kilowatt hour of energy supplied. This is not a correct measure of the cost or value of electric service for most practicable pur-

poses, and certainly not for comparative purposes, unless the services rendered and the conditions of supply which are to be compared are very much the same in all their characteristics.

Such a method of comparison is most misleading when comparing our hydro contracts and the services rendered thereunder, inasmuch as these services to the several customers are quite dissimilar.

In fact, the attempt to compare even the trend of cost of service to the same customer over a period of years by the use of a simple rate, such as mills per kilowatt hour, may be equally misleading if there were changes in the conditions of supply, the load shape, the amount of service rendered, or the amount of special facilities used.

This conclusion, I believe, can be shown by referring again to Exhibit 8. The lower three charts on this diagram indicate the hydro capacity operated on each of the three days shown, such capacity being necessary or desirable for system purposes.

With reference to the middle and right-hand lower charts, the hydro capacity operated could have been reduced, had it not been needed, approximately to the line enclosing the green area representing actual hydro generation capacity.

[134] The energy actually generated by hydro in these three days varied greatly; the hydro energy available to the system for a low flow day, shown in the right-hand diagram, was only 25 per cent of the energy available on the high flow day, shown at the left.

On Saturdays and Sundays in low flow, it frequently happens that no hydro energy is used on the system although hydro spinning reserve may be furnished continually.

The hydro plant would be used to render a capacity service which would otherwise have to be supplied by a steam plant with appreciable standby losses.

Obviously, a mill rate based upon this capacity service in relation to zero generation would produce a rate of infinity mills per kilowatt hour.

The fallacy of the evaluation of hydro service in terms of a rate per kilowatt hour can also be explained in another way.

It frequently happens that during median or low flows, hydro energy is generated during the daylight hours, in part by use of pondage, and delivered to a customer at the time of its peak requirements, thereby replacing on that company's system the maximum amount of high cost steam energy.

Yet, during the balance of the same day, that same customer may return to Penn Water the same quantity of energy measured in kilowatt hours, for use by Penn Water in [135] supplying its other firm power obligations.

Such backfeed energy would come from relatively efficient steam equipment at low cost to the customer.

In this situation the customer benefits directly by the difference between the cost of generating at the time of system peak with inefficient equipment, and the cost of generation off-peak on his most efficient equipment, yet without receiving from the hydro companies any net energy for that day. Any rate charged to that customer for this service would again be infinite if based upon mills per kilowatt hour of net delivery and would not be a satisfactory or proper approach to this.

* * *

[142] By Mr. Myse:

Q. Mr. Spaulding, with reference to the special facilities provided by Safe Harbor and Penn Water for their customers, you stated that certain of these facilities were owned by Stco [STCo.] of Maryland, did you not? A. Yes, all such transmission facilities in the State of Maryland are owned by Stco [STCo.] of Maryland, which is a wholly owned subsidiary of Penn Water.

Q. Will you please explain the contractual relations between Penn Water and Stco [STCo.] of Maryland? A. Stco [STCo.] of Maryland was organized in 1910 as a wholly owned subsidiary of Penn Water, because of doubt as to the right of Penn Water as a Pennsylvania Corporation to own and operate transmission lines and substations in the State of Maryland. There are four separate agreements between Stco [STCo.] of Maryland and Penn Water.

* * *

[144] Q. Mr. Spaulding, will you state generally what these four agreements provide? A. The first, designated Item A is an agreement dated April 12, 1910, between Penn Water and Stco [STCo.] wherein Penn Water agreed to furnish the necessary funds for the work to be [145] undertaken by Stco [STCo.], including the construction of that portion of the transmission line between Holtwood, Pennsylvania, and Baltimore, Maryland, to be built in the State of Maryland, together with the Highlandtown Terminal Substation in Baltimore.

Stco [STCo.] of Maryland agreed to mortgage its property and to deliver to Penn Water its bonds to be taken at 90 per cent of their face value in an amount equal to the funds to be advanced by Penn Water.

The second contract identified as Item B is an agreement dated April 3rd, 1911, between Penn Water and Stco of Maryland, under which the latter agreed to transmit and deliver power and energy of Penn Water and to operate and maintain its own transmission lines and substations, Penn Water agreeing to pay all expenses of Stco of Maryland and to waive the payment of interest by Stco of Maryland on its bonds.

Q. Have these two contracts been filed with the Federal Power Commission? A. Yes. The contract identified as Item B dated April 3rd, 1911, was filed with the Federal Power Commission on January 13, 1936 and designated as Stco rate schedule No. 1.

MR. GOLDBERG: Mr. Spaulding, if I may interject at this point? Who filed it?

THE WITNESS: Stco of Maryland.

[146] By MR. MYSE:

Q. Now, will you continue? A. The contract identified as Item A dated April 12, 1910 was similarly filed with the Commission and designated as Exhibit No. 1 to Rate Schedule No. 1.

Q. Will you please describe the other two agreements?

TRIAL EXAMINER: Before proceeding to do that,—who filed Item A? Stco?

THE WITNESS: Yes, sir.

MR. GOLDBERG: When you say "Exhibit 1 to Rate Schedule No. 1", do you mean Rate Schedule No. 1 in this proceeding as Item B?

THE WITNESS: Yes, sir.

By MR. MYSE:

Q. Now, will you continue to describe the other two agreements? A. The agreement dated March 19, 1931 identified as Item C is a contract between Penn Water, Stco and Baltimore Company.

Under this contract Penn Water agreed to advance to Stco of Maryland the money required to construct those sections in Maryland of the two transmission lines between Safe Harbor, Pennsylvania, and Baltimore, Maryland, and received therefor the stock of the transmission company. Stco of Maryland further agreed to operate and maintain these lines [147] and to transmit and deliver power and electric energy of Penn Water.

The agreement dated August 1st, 1932, identified as Item D, is a contract between Penn Water, Stco and Baltimore Company.

Stco of Maryland agreed to construct, operate and maintain a switching station at Ellicott City, together with

extensions to its transmission lines from Ellicott City, Maryland, to Takoma Park, Maryland, and to transmit such power and energy as may be delivered to it. Penn Water agreed under both contracts to pay all expenses of Stco of Maryland.

Q. Have these latter two agreements been filed with the Federal Power Commission? A. Yes, the agreement dated March 19, 1931, was filed with the Commission on January 13, 1936, and designated as Stco of Maryland Rate Schedule No. 2, while the agreement dated August 1, 1932, was likewise filed and designated Supplement No. 1 to Rate Schedule No. 2.

Q. Are these two latter contracts, identified as Items C and D filed with the Federal Power Commission? A. Yes. The agreement dated March 19, 1931 identified as Item C was filed with the Federal Power Commission by Stco on January 13, 1936 and designated by the Commission as Stco Rate [148] Schedule No. 2, while the agreement dated August 1, 1932 and identified as Item D was likewise filed by Stco and designated by the Commission as Supplement No. 1 to Rate Schedule No. 2.

Q. Are all the present securities and open accounts of Stco of Maryland owned or held by Penn Water? A. Yes. However, Penn Water has waived all bond interest, dividends and other interests by the terms of the agreements above mentioned.

TRIAL EXAMINER: At this point, we had better clear the record on your motion and incorporate by reference, and let the Examiner state at this point in the record that the Susquehanna Transmission Company's rate schedule designated FPC No. 1 is incorporated in evidence as Item B by reference; Susquehanna Transmission Company Rate Schedule FPC No. 2 is incorporated as Item C by reference, and Exhibit 1 to Susquehanna Transmission Company's rate schedule FPC No. 1 is incorporated as Item A by reference, and Sup-

plemental No. 1 to Susquehanna Transmission Company's Rate Schedule FPC No. 2 as Item B by reference.

By Mr. Myse:

Q. Are all of the expenses of Stco of Maryland paid by Penn Water? A. Yes, they are.

Q. Does Stco have any power contracts other than those [149] just described and put in the record by reference? A. No. Stco of Maryland has no other power contracts, nor does it at present deliver any energy directly to the public. It only transmits power and energy delivered to it by Penn Water or by Penn Water's customers under arrangements made by Penn Water to which Stco of Maryland is not a party.

Q. You have referred to the construction of Stco of Maryland of the lines between Holtwood and Safe Harbor on the one hand, and Baltimore and Washington on the other. Does Stco of Maryland own any other transmission facilities? A. Yes. Stco of Maryland constructed at the request of Penn Water the Maryland portion of a transmission line, extending from Safe Harbor, Pennsylvania, to Perryville, Maryland, for the supply of power to The Pennsylvania Railroad at Perryville and Conowingo, Maryland.

Stco of Maryland also has constructed at the request of Penn Water, a steel tower transmission line from Baltimore Company's Philadelphia Road Substation in Baltimore to the Gunpowder Switching Station in Baltimore County, and operates and maintains this line. This line is used exclusively by Baltimore Company and is a part of that Company's local transmission system. Penn Water is reimbursed for its cost and expenses for this line under its contract with Baltimore Company to be referred to later.

Q. Mr. Spaulding, you have referred to interchange sales [150] by Penn Water. Are such sales distinguishable from firm power sales? A. Yes, they are.

Q. With whom does Penn Water now have power contracts for firm power sales in Pennsylvania? A. Penn Water, jointly with Safe Harbor, has firm power contracts (1) with the Pennsylvania Power & Light Company for the supply of firm power to its Lancaster Division; (2) with the Philadelphia Electric Company for the supply of firm power to its Coatesville Division.

Penn Water, alone, has a contract with Metropolitan Edison Company for the supply of firm power at York. This latter contract with Metropolitan Edison Company superseded, as of January 1, 1946, a joint service contract under which Penn Water, Safe Harbor and Metropolitan Edison Company supplied firm power to the Edison Light and Power Company of York.

Q. Are the three existing contracts just referred to of the same general type? A. No, they are not. The first is a contract with a single component rate in which the charges for capacity, energy and special facilities are all lumped into a two step energy rate. The second contract has a three component rate with separate rates or charges for capacity, energy and special facilities, while the third contract is of a new type, particularly applicable to the type of service that can be [151] rendered advantageously by a hydro company such as Penn Water.

Under this latter contract, Penn Water obligates itself to provide a specified amount of peak service capacity and with energy commitments generally related to the actual stream flow. The special facilities component of this contract is included at present in part as a component of the capacity charges and in part as a special facilities charge.

Q. Why are these three contracts of such different types? A. These contracts were originally designed over a period of years, to meet the special requirements of the respective customers, and, as is frequently found in wholesale bulk power contracts, the purchasing companies desired forms of contracts with varying provisions as to fuel rate adjustment, the inclusion and determination of

billing demands, et cetera, that more nearly conformed to the practices and rate structures within the territories being served by the purchasing utility. Such different requirements are one element of the competitive situation that Penn Water had and must face in negotiating future contracts with its customers.

Q. Mr. Spaulding, have you prepared a tabulation showing the kilowatthour sales to these Pennsylvania customers under your firm power contracts with them, together with the revenues received by Penn Water for all firm power services [152] rendered to each of such customers? A. Yes, I have.

MR. MYSE: I would like to have marked for identification as Exhibit 9 a document entitled "Pennsylvania Water & Power Company Kilowatthour Sales to and Revenue Received from Pennsylvania Firm Customers".

TRIAL EXAMINER: That document may be marked as Exhibit 9 for identification.

(The document above referred to was marked Exhibit No. 9 for identification.)

By MR. MYSE:

Q. Mr. Spaulding, will you please describe this exhibit which has just been marked for identification as Exhibit 9? A. Exhibit 9 shows the total firm power sales in kilowatthours and the total revenues received for all firm power services rendered to these Pennsylvania customers for the years 1944 and 1945, together with the estimated kilowatthours sales and estimated revenues from our firm power customers for the year 1946.

To the extent that such sales in 1946 would vary with fluctuations in river flow, it has been assumed that average river flow would be experienced for each of the twelve calendar months.

Q. Mr. Spaulding, when you have referred to your firm power customers in Pennsylvania, have you included any portion [153] of the supply by Penn Water or Safe Harbor to the Pennsylvania Railroad for the latter's use either in Pennsylvania or Maryland? A. No, I have not.

Q. Do you consider the power supplied by Penn Water and Safe Harbor to The Pennsylvania Railroad in the State of Pennsylvania as a firm power commitment of the Penn Water and Safe Harbor Companies? A. Yes, I do. The contract obligation for the total supply of capacity, energy and special facilities to The Pennsylvania Railroad is a joint obligation of Penn Water, Safe Harbor and Baltimore Company.

For the purposes of inter-company accounting and for reports to regulatory authorities, the supply of capacity and energy to the railroad in the State of Pennsylvania is considered as being supplied by Penn Water, while the supply of capacity and energy in the State of Maryland is considered as being supplied by Baltimore Company, but such intercompany accounting and reporting does not affect the joint nature of the obligations under the terms of the contract. The Potomac Electric [Power] Company is also a party to this contract but by specific provision of the contract is not obligated to provide generating capacity on its own system for such purpose.

MR. MYSE: I ask to have identified for the record as [154] Exhibit No. 10 a composite form of contract between Pennsylvania Railroad Company and the Consolidated Gas Electric Light and Power Company of Baltimore, Pennsylvania Water & Power Company, Safe Harbor Water Power Commission [Corporation] and Potomac Electric Power Company.

TRIAL EXAMINER: The document may be marked Exhibit 10 for identification.

(The document referred to was marked Exhibit No. 10 for identification.)

By Mr. Myse:

Q. Mr. Spaulding, do you have before you a copy of the composite form of Pennsylvania Railroad contract just identified as Exhibit 10? A. Yes, sir.

Q. I ask you if this is the power contract that you just referred to? A. Yes, it is.

Q. Will you please state the date of the original contract and the dates of the supplemental agreements incorporated in this composite form? A. This composite form of the Pennsylvania Railroad contract has been prepared for general corporate and operating use, and includes all of the present terms of the original contract of September 2nd, 1931, between the Pennsylvania Railroad Company, Penn Water Company, Safe Harbor and Baltimore [155] Company, together with all of the terms and conditions of the supplemental agreement thereto of August 15, 1934 by which Potomac Electric Power Company was added as a party, and also includes all of the terms and conditions of the second supplement to this contract dated June 22nd, 1938.

[156] Q. Will you please describe the operations under this contract? A. By reason of the provisions of this agreement, the services to the Railroad are rendered jointly by Penn Water and others.

The contracts provide for supply of power and energy to The Pennsylvania Railroad electrification, including the main line of its Philadelphia, Baltimore and Washington Railroad from Perryville, Maryland, to Washington, D. C., on the passenger and freight lines of the present Philadelphia Division between Thorndale, Pennsylvania, and Harrisburg and Enola, Pennsylvania, on the Columbia and Port Deposit Railroad from Columbia, Pennsylvania, to Perryville, Maryland, and yards adjacent thereto and supporting these services.

Power is supplied to the Railroad at Benning, D. C., adjacent to a power plant of Potomac Electric Power Company, at the end of a transmission line and taps therefrom

owned and operated by Penn Water and S. T. Company of Maryland, at Perryville and Conowingo, Maryland, and at Fishing Creek, Pennsylvania; and at Safe Harbor, Pennsylvania, at a substation of Penn Water located adjacent to the Safe Harbor hydroelectric development.

Power supply to the Railroad is in the form of 25 cycle, single phase, power at these several points.

To supply such special services, Safe Harbor obligated [157] itself to provide special generating and frequency changer facilities, Penn Water obligated itself to provide substation and transmission facilities and Potomac Electric Power Company obligated itself to provide frequency changer facilities.

The contract provisions include as separate components of the payments to be made for services thereunder (1) a fixed demand charge, (2) a two step energy rate and (3) specified payments for special facilities, generally based on the cost to the Company providing such facilities.

Q. Mr. Spaulding, what is the character of the rates charged for services rendered under this contract? A. The demand charge component is a single rate applying to the total demands of the Railroad supply at the several supply points refered to above, including those in the States of Pennsylvania, Maryland and the District of Columbia.

The energy charge component is a two step energy rate applying to the total energy delivered to the Railroad under this contract, and for such purpose the total energy is computed as though it were all delivered at a single supply point.

Q. Mr. Spaulding, how are the revenues divided between the several parties serving the Railroad under this contract? A. The Railroad contract itself makes no provision for any such division. On the contrary, it provides that a [158] single bill shall be rendered by and payments made to Baltimore Company, acting for itself and the other supplying companies to this contract.

Q. Mr. Spaulding, are any of the Pennsylvania Railroad revenues received by Baltimore Company divided with Penn Water? A. Yes; they are divided in accord with intercompany contracts.

MR. MYSE: I would like to have identified as Exhibit No. 11, a document entitled "Memorandum to Mr. H. A. Wagner, Mr. J. A. Walls—re: Allocation of PRR load between Maryland and Pennsylvania:" together with two letters dated September 9, 1937 and between the two gentlemen just mentioned. So the Record will be clear, both letters are dated the same date.

TRIAL EXAMINER: All these documents are stapled together?

MR. MYSE: They are.

TRIAL EXAMINER: The documents, so stapled, will be marked Exhibit No. 11 for Identification.

(The documents referred to were marked Exhibit No. 11 for Identification.)

By MR. MYSE:

Q. Mr. Spaulding, you have before you the document which has been identified in the Record as Exhibit No. 11? [159] A. Yes.

Q. And that is the intercompany arrangement, or the memorandum to which you have just referred? A. It is.

Q. Will you please explain how this arrangement is carried out? A. An Operating Committee made up of a representative each from Penn Water and Baltimore Company, recommended in this memorandum a method of division of the Pennsylvania Railroad revenues as between Baltimore Company and Penn Water.

The accompanying letters which have been identified as a portion of the Exhibit approved this recommendation of the Operating Committee.

The memorandum recommends that the total revenues from the Pennsylvania Railroad, including charges for

special facilities, be divided between Baltimore Company and Penn Water in proportion to the kilowatt-hours delivered to the Railroad in Maryland (including the District of Columbia) and Pennsylvania, respectively.

This memorandum has been the basis of division of Railroad revenues between Penn Water and Baltimore Company to date. The division so recommended was proposed because the records required were readily available, the method a simple one, and because any inaccuracy in the division so made would [160] affect only the gross revenues and not the operating income of the companies.

The division of revenues is not in proportion to the specific services rendered by each of the parties, nor to the cost or value of such services.

Q. How does Safe Harbor share in the division of such revenues? A. Safe Harbor does not share in the above-mentioned division of Railroad revenues directly, but through other contracts is assured the earnings on its investment made for services under the Railroad contract.

MR. MYSE: Mr. Examiner, I have a copy of an agreement dated June 1, 1931, between Safe Harbor Water Power Corporation, Consolidated Gas Electric Light and Power Company of Baltimore and Pennsylvania Water and Power Company, together with supplemental agreements dated August 1, 1932 and November 22, 1939. I understand that all these agreements are likewise on file with the Commission, the designations of which will be identified by the witness in the Record.

I would ask that these agreements be incorporated into the Record by reference as Item No. E.

TRIAL EXAMINER: It is going to be necessary to give a separate letter item designation to each one of these as long as they stand in the file of the Commission as separate filings.

MR. MYSE: Then may we separate them, Mr. Examiner, as [161] E, F and G?

TRIAL EXAMINER: The witness is prepared to give the corresponding Federal Power Commission rate schedule file numbers, is he?

MR. MYSE: He is.

TRIAL EXAMINER: He can do that at the beginning of his testimony to avoid the handling which we had with the other items?

MR. MYSE: Yes, sir.

TRIAL EXAMINER: Very well, Item E, the agreement of June 1, 1931.

Item F is the supplemental agreement of August 1, 1932.

Item G will be the supplementary agreement of November 22, 1939. All of this is conditioned upon the numbers being given when ruled upon.

Proceed.

By MR. MYSE:

Q. Mr. Spaulding, you have before you the agreement dated June 1, 1931, between Safe Harbor Water Power Corporation, Consolidated Gas Electric Light and Power Company of Baltimore and Pennsylvania Water and Power Company? A. Yes, sir.

Q. That being the agreement to which you have just referred? A. Yes, sir.

[162] Q. Have those agreements and the two supplements been filed with the Federal Power Commission by Penn Water? A. Yes, they have. The original contract of June 1, 1931, identified as Item E, providing for the sale of power and energy, transmission service and payments therefor, was filed with the Federal Power Commission by Penn Water on January 13, 1936, and designated as Federal Power Commission Rate Schedule No. 8.

The supplement to this agreement, dated August 1, 1932, and designated Item F, covering an agreement by Penn Water to directly or indirectly through S. T. Company extend its transmission system to interconnect with Potomac Electric Power Company was similarly filed with the Federal Power Commission as supplement No. 1 to Rate Schedule No. 8.

The second supplement to the agreement, dated November 22, 1939, identified as Item G, covering authorization for installation of Unit No. 1 in the Safe Harbor project, was filed with the Federal Power Commission on December 7, 1939, designated Exhibit A to Federal Power Commission Rate Schedule No. 8.

MR. MYSE: I ask that the contracts just identified be incorporated into the Record by reference.

TRIAL EXAMINER: Any objection?

MR. GOLDBERG: No objection.

TRIAL EXAMINER: Items designated E, F and G are [163] incorporated in the Record by reference.

(Items designated E, F and G were thereupon incorporated in the Record by reference.)

By MR. MYSE:

Q. Mr. Spaulding, have you prepared a tabulation showing the volume of services to The Pennsylvania Railroad under the Railroad contract, heretofore identified as Exhibit 10, indicating thereon the division of these services to the Railroad in the States of Pennsylvania and Maryland, including the District of Columbia, for the years 1944 and 1945? A. Yes, I have.

MR. MYSE: I ask that the document entitled "Services to Pennsylvania Railroad, Under Railroad Contract, and Division Between Maryland and Pennsylvania" be marked for Identification as Exhibit No. 12.

TRIAL EXAMINER: The document you want will be marked as Exhibit No. 12 for Identification.

(The document referred to was marked Exhibit No. 12 for Identification.)

[164] By MR. MYSE:

Q. Mr. Spaulding, you have before you the document which has been identified as Exhibit No. 12. A. Yes.

Q. Will you please state what this exhibit shows? A. This exhibit, No. 12, shows the total kilowatt-hours of energy delivered to The Pennsylvania Railroad in the States of Pennsylvania and Maryland (including the District of Columbia), respectively, for the years 1944 and 1945, based on the operating and billing records of the Company, and for the year 1946 based on the present estimates of load requirements of the railroad.

There is also shown on this exhibit, the installed single phase capacity, as water-wheel generators or frequency changers and their location. Such special facilities in Pennsylvania are owned and operated by the Safe Harbor Company, while the special facilities in the District of Columbia are owned and operated by the Potomac Electric Power Company.

In addition to the single phase generating equipment shown, Penn Water has installed as special facilities for service to the Railroad, (1) a transformer substation adjacent to the Safe Harbor hydroelectric development with transformer capacities totalling 80,000 kva., (2) a 13 kv. single phase bus with transformer and machine oil circuit breakers, including [165] provisions for additional transformer capacity in this substation, owned and operated by The Pennsylvania Railroad, and (3) a 32 mile steel tower line with four 132 kv. single phase circuits, owned and operated by Penn Water and its subsidiary, Stco of Maryland, extending from Safe Harbor, Pennsylvania, to Perryville, Maryland, with short connecting lines to substations

of the Railroad at Fishing Creek, Pennsylvania, and Conowingo, Maryland.

Q. Mr. Spaulding, have you prepared a tabulation showing the total revenues received from The Pennsylvania Railroad for services under the Pennsylvania Railroad contract, for the joint services in the States of Pennsylvania and Maryland? A. I have.

By Mr. Myse:

Q. Mr. Spaulding, have you also shown on this tabulation the division of the total net revenues received by Penn Water from Baltimore Company for services rendered by the Railroad Company in the State of Pennsylvania? A. I have.

Mr. Myse: I ask to have identified as Exhibit No. 13 [166] the document entitled "Total Revenues Received from Pennsylvania Railroad for Joint Services in Pennsylvania and Maryland and Division of Revenues Received by Penn Water."

Trial Examiner: The tabulation will be marked Exhibit No. 13 for Identification.

(The document above referred to was marked Exhibit No. 13 for Identification.)

* * *

[170] Q. Mr. Spaulding, looking over the record of yesterday, I find that you used the term "Penn Water was the only non-captive wholesale utility company in the United States," will you define with a little more particularity the use of that term? A. As I have used the term "non-captive company", I have referred to a company whose stock is owned by the public and whose stock is neither controlled by nor owned by another public utility company.

Q. Do you have a copy of Exhibit 13 for Identification before you? A. Yes, sir.

Q. Will you please state the source shown on Exhibit 13 for Identification? A. The total revenues for joint

services to The Pennsylvania Railroad for the years 1944 and 1945 are from [171] the actual billing records prepared by Penn Water and submitted to the Railroad by Baltimore Company.

The revenues for 1946 are based on the estimated requirements of the Railroad for the current year. The division of the total revenues paid by Baltimore Company to Penn Water is taken from the intercompany billing records prepared in accord with the Operating Committee memorandum offered for identification as Exhibit 11.

Q. Mr. Spaulding, have you prepared a tabulation showing the special facilities provided for the supply of power to the Railroad under the Railroad Contract offered as and identified as Exhibit 10 indicating the specific payments made by the Railroad under the terms of that agreement for such facilities? A. I have.

MR. MYSE: I ask to have marked for Identification a document entitled "Specified Facilities and other special Facilities provided under terms of Railroad Contract" as Exhibit 14.

TRIAL EXAMINER: It may be marked for Identification as Exhibit 14.

(The document above referred to was marked Exhibit No. 14 for Identification.)

TRIAL EXAMINER: You may proceed.

[172] By MR. MYSE:

Q. Mr. Spaulding, you have before you the document which has been marked as Exhibit 14 for Identification. I ask you to please state what this Exhibit shows? A. There is shown on this exhibit each of the specified facilities provided under the Railroad contract, the payments made by the Railroad under the terms of the Contract, together with the ownership and location of such facility.

Q. Mr. Spauling (sic), you have stated, have you not, that all revenues paid by the Railroad are paid to Baltimore Company? A. Yes, I have.

Q. Are any of the contract charges for special facilities paid directly to the owning companies? A. No, they are not.

Q. With reference to Exhibit 14 for Identification, will you please indicate how the owning companies are compensated for their investment and operation of these special facilities? A. The investments made by Safe Harbor for the facilities owned by it, and the operating expenses in connection therewith, are included together with all of its other facilities as the basis for the bills rendered by Safe Harbor to Baltimore Company and Penn Water Company under the Safe Harbor Contract, identified in this record as Item E.

[173] MR. GOLDBERG: That is E, F and G, isn't it?

MR. MYSE: I think that is correct.

THE WITNESS: That is correct; E, F, and G.

By MR. MYSE:

Q. Will you continue, please? A. In connection with such billing, Baltimore then pays Safe Harbor two-thirds of the cost of such special facilities provided by Safe Harbor for the Railroad, and Penn Water one-third.

Penn Water's one-third must in turn come in part from the allocated division of Railroad's revenues, as shown in Exhibit 13, and any remainder must come from Baltimore Company through the power agreement between Baltimore and Penn Water.

The investment made by Potomac Electric Power Company for special Railroad facilities and their operating costs are paid by Baltimore Company to Potomac Electric Power Company under the terms of the power contract between those parties.

Q. Are any of these special facilities for the Railroad owned or operated directly by Baltimore Company? A. No, they are not.

Q. Referring to Exhibit 14 for Identification, there appears near the bottom, a credit to the revenues received for special facilities for the rental and maintenance of the [174] 110 Kv. circuit between Patapsco Crossing and Benning, D. C.

Will you please explain this item? A. The Railroad Contract, Exhibit 10 in this proceeding, provides that the Railroad will make available to the supplying parties the transmission line built by the Railroad on its electrification structures between the Patapsco Crossing, a point on the outskirts of Baltimore, and the Benning plant of the Potomac Electric Power Company in Washington, for the use of the supplying companies in assuring ample transmission capacity between Baltimore Company and the Hydro Companies, on the one hand, and the Railroad frequency changer installed by Potomac Electric Power Company in its Benning plant, on the other hand.

The use of this latter facility was in recognition of the fact that Potomac Electric Power Company provided the Railroad frequency changer; but did not obligate itself to otherwise install generating capacity for the supply of power to the Railroad.

The negative payment of $6,000 shown at the bottom of Exhibit 14, is a credit allowed under the terms of the Railroad contract for the use of this circuit.

Q. Mr. Spaulding, you have previously referred to interchange agreements, or arrangements, with your Pennsylvania customers, and you stated, did you not, that these interchange agreements are separable from the contractual arrangements for [175] the supply of firm power. A. That is correct.

Q. Are the contractual provisions for interchange and for firm power services incorporated in the same contracts?

[176] A. Not in every case, but as previously stated, the billing for interchange sales and purchases is separate and distinct from the billing for firm power and other services.

Q. What is the usual basis for accounting and billing for interchange transactions? A. Interchange sales and purchases are usually accounted for and billed on the basis of a division of the savings resulting from such transactions when the generation of energy at a lower cost plant on one system can be used to replace generation at a higher cost plant on another system.

The difference in cost of the actual generation and what it would have cost for the replaced generation, which is the resulting savings, is divided between the parties.

When energy is generated at a steam plant, the resultant savings on such transactions are usually divided between the generating and receiving companies on a 50-50 basis.

When energy is generated at a hydro plant that would not be needed by the hydro company in the supply of its firm power customers, it is the general practice for the hydro company to sell such energy at 70 per cent of the cost which the receiving company would have incurred in generating such energy itself.

Q. Now, are all interchange transactions made on such a replacement basis? [177] A. No, Penn Water's interchange contracts, in addition to providing for economy interchange transactions, also provide that the two parties shall assist each other under emergency conditions, to the extent possible without affecting other services or obligations of the assisting parties. Such provisions were particularly valuable during the recent war period when assistance was rendered on a daily and, frequently, on a weekly basis, by making energy and capacity available to a company that needed to maintain its limited generating resources, or by providing through such arrangements the necessary reserve capacity.

The interconnected companies very generally assisted each other in such a cooperative manner during the past five years.

The charges made for such services were as provided for under the interconnection agreements, and are usually based on the generating company's cost plus ten per cent.

Q. Mr. Spaulding, have you prepared a tabulation showing the volume of interchange transactions in 1944 and 1945? A. Yes, I have.

MR. MYSE: I ask to have identified as Exhibit No. 15 a document entitled "Pennsylvania Water & Power Company—Total Interchange Sales to and Interchange Purchases from Pennsylvania customers."

TRIAL EXAMINER: The document may be marked for [178] identification as Exhibit No. 15.

(The document above referred to was marked Exhibit No. 15 for Identification.)

By MR. MYSE:

Q. Mr. Spaulding, do you have before you the document which has been marked for identification as Exhibit No. 15? A. Yes.

Q. Will you please state what this exhibit shows? A. Exhibit No. 15 shows the total volume of interchange transactions with other Pennsylvania Utilities for the years 1944 and 1945, and as estimated for the year 1946, on the assumption that the river flow of the Susquehanna River would be normal for the year.

The kilowatt hour transactions are shown, together with the revenues received therefrom, and Penn Water's share of the savings on such transactions which were accounted for as described above.

MR. GOLDBERG: Are you about to pass Exhibit 15 for identification?

MR. MYSE: Yes.

MR. GOLDBERG: I wonder if I might inquire of the witness something about this exhibit so we will know how to read the exhibit correctly?

TRIAL EXAMINER: You may.

[179] MR. GOLDBERG: Mr. Spaulding, under the third column for the year 1944 you show that Penn Water's share of savings was $150,164, whereas under the interchange sales you show $21,162 with reference to the purchases.

Do we add those two figures together in reading the exhibit to give us a total saving of $171,000, in round figures?

THE WITNESS: That is correct.

MR. GOLDBERG: Thank you very much.

[180] MR. MYSE: Mr. Examiner, I ask that the agreement between Consolidated Gas Electric Light and Power Company of Baltimore and Pennsylvania Water & Power Company dated December 31, 1927, together with supplemental agreement dated December 27, 1928, and June 1, 1931, be designated as Item H, to be incorporated by reference.

That another supplemental agreement between the same parties, namely, Consolidated Gas Electric Light and Power Company of Baltimore and Pennsylvania Water & Power Company, dated September 29, 1939, be designated as Item I, to be incorporated in the record by reference.

I propose to identify the filing numbers under which they were filed with the Federal Power Commission.

TRIAL EXAMINER: You will incorporate these by reference to the documents in the official files of the Commission?

MR. MYSE: That is correct.

MR. GOLDBERG: That is by reference, Mr. Examiner, not to the formal files of the Commission, because it is my impression that the rate contract filings are not a part of the formal files of the Commission.

TRIAL EXAMINER: No, as I indicated, this is by reference to the official files of the Commission.

MR. MYSE: I might say that in the printed copy of the agreement we have handed to the Examiner, the supplemental agreement of September 29, 1939, which I have asked to be [181] incorporated by reference as Item I, appears beginning at page 41.

TRIAL EXAMINER: Of this document you have handed the Examiner for his convenience?

MR. MYSE: That is right.

By MR. MYSE:

Q. Mr. Spaulding, will you please indicate for the record the power agreements between Penn Water and Baltimore Company, and state whether these contracts are on file with the Federal Power Commission? A. The agreement of December 31, 1927, between Baltimore Company and Penn Water, and the two supplements thereto of December 27, 1928, and June 1, 1931, identified as Item H, were filed by Penn Water with Federal Power Commission January 13, 1936, and designated by the Commission as Federal Power Commission Rate Schedule No. 1.

The supplement to these exhibits dated September 29, 1939——

Q. (Interposing) You mean the agreements? A. Yes. The supplement to these agreements dated September 29, 1939, and identified as Item I were filed by Penn Water with the Federal Power Commission on October 2nd, 1939, and designated by the Commission as Supplement No. 1 to Rate Schedule No. 1.

Baltimore Company and Penn Water are the only parties to [182] these agreements.

Q. Are there any other agreements of Penn Water involving services to Baltimore Company? A. Yes. There are two main agreements now in effect which are interdependent and which set forth the contractual relations of Penn Water and Safe Harbor with Baltimore Company.

Both were the outgrowth of twenty years of experience by the two company in determining the best methods of promoting the coordination of the hydro and transmission facilities of Penn Water with the steam generating plants of Baltimore Company, to the end of maximum utilization of natural resources, minimumization of investment and the utmost in service availability to the ultimate customer.

Q. You have referred to two agreements with Baltimore Company? A. Yes.

Q. Are you referring to the three-party contract between Penn Water, Safe Harbor, and Baltimore, identified as Items E, F and G, as one of them? A. Yes. Under this agreement Penn Water and Baltimore Company became entitled to the entire output of the Safe Harbor plant and undertook to provide to Safe Harbor Company contractual return in addition to all of the expenses, the agreement identified as Item E and supplement thereto, identified [183] as Items F and G, also provided for the construction of transmission lines by Penn Water, in part for the delivery of Baltimore Company's share of the output of the Safe Harbor plant.

Q. What other agreement did you refer to? A. The other agreement, identified as Item H, and the supplement included as Item I, is the controlling instrument between Penn Water and Baltimore Company, expresses the basic policy governing the rendering of services by Penn Water and the payment of compensation therefor by Baltimore Company.

Q. What services are furnished under this agreement? A. This agreement as presently amended does not provide for the furnishing or delivery of any specified amount of capacity and energy. This agreement does provide on the

one hand that the Baltimore Company is entitled to all of the power and energy available to Penn Water from its own plants and from Safe Harbor and not disposed of to other customers of Penn Water, together with all savings that can be secured through coordinated system planning and through interchange transactions with adjoining systems by means of the transmission facilities of Penn Water.

On the other hand, it provides that Penn Water in return for allowing such participation by Baltimore Company in the most effective utilization of the power and transmission resources of Penn Water and Safe Harbor, is to receive compensation [184] from Baltimore Company predicated on the earnings theretofore established competitively by Penn Water in the field of wholesale power supply both to Baltimore Company and to the other customers of Penn Water.

[185] Q. How is the compensation under this contract related to the services furnished? A. The agreement with Baltimore Company established an initial level of compensation to Penn Water based on the revenues then being received by Penn Water from all of its customers, including Baltimore Company and related to the amount of energy available in an average river flow year, to be adjusted with variations in investment devoted by Penn Water for power production and transmission services.

This method of compensation to Penn Water provided for payments by Baltimore Company to be in the form of an annually determined payment independent of the number of kilowatts and kilowatt hours actually furnished in any particular year.

A similar plan of compensation was also adopted in the case of the payments which Penn Water and Baltimore Company make to Safe Harbor under the contract designated as Items E, F and G, each paying to Safe Harbor its contract proportion of its total specified amount consisting of the contract return plus expenses, such payments being in the same proportion as the contract entitlement of each

company and without regard to the actual amount or division of any capacity and energy actually furnished to each in any year.

The greatest advantage derived from this arrangement was the removal of all artificial barriers which would interfere with the hour-to-hour, day-to-day, and the long range [186] coordination of the power resources of the companies involved.

Such a goal had not been as fully achieved by Penn Water and the Baltimore Company in two decades of preceding power relations.

Q. Why was it not possible to obtain the full advantages of coordinated operation under the early contracts with Baltimore? A. The evolution of Penn Water's power agreements with its customers in Baltimore included the early extreme of a stipulated capacity service always available and price on a kilowatt-year basis, combined with additional energy sales at a stated mill rate during specified hours of the day.

Another form of sale was a stipulated capacity service combined with a limited amount of yearly energy at a stated mill rate to be taken at the customer's desires.

Neither form of contractual arrangement recognized the possibility of energy purchases in large volume during the periods of ample flow, nor the coordinated scheduling of the available steam resources in the interest of operating economy.

The first development in the improvement of hydro utilization was an arrangement whereby the customers began to purchase supplementary energy to replace their normal steam generation. This involved the demonstration that the customers could reduce their steam generation without impairment of the [187] reliability of their distribution service.

Because such hydro energy was viewed at first only as a substitute for steam energy, customers were not disposed to pay more for it than the mere incremental cost of

steam generation. Within a few years, however, the volume of supplementary energy being absorbed was greater than the amount of the so-called firm energy for which the customers had contracted, and the recognition began to develop that customers were able to derive a capacity value from such hydro supply in addition to its value as replacement energy.

Q. When did Penn Water's contracts first provide the necessary contractual incentive for coordinated operation? A. Penn Water's power agreements with its customers in Baltimore and Pennsylvania, in the years up to 1931, had not yet developed a contractual incentive which would encourage the fullest coordinated utilization of the facilities and power resources of the several customers.

[188] Penn Water was always under the difficulty of establishing a contractual operating procedure with its customers which would permits its hydro resources to be used to the best advantage of the customers, and the steam plants of the customers to be used in the most economical fashion with regard to their own loads and the loads of other customers.

Necessarily, Penn Water had to deal individually with its separate customers, all of whom were inclined to view their own power requirements as matters distinct from the requirements of other customers.

Q. What recognition was given to the opportunities for coordinated operation under the 1927 contract identified as part of Item H? A. By 1927, the contractual and operating arrangement with Baltimore Company had demonstrated the desirability of coordinated operation of the facilities of the two companies and the 1927 agreement, recognized and expressed this intent, but the past practice of stipulating capacity and energy services and the conditions under which they were to be available, was continued.

Detailed contractual provisions were utilized regarding hydro pondage regulation and the amount of permissible

steam generation by Baltimore Company in relation to load changes, capacity margins and minimum loads.

There were arrangements for the purchase by Penn Water [189] of steam energy from Baltimore Company and a credit by Baltimore Company to Penn Water in case of hydro losses occasioned by unnecessary steam generation.

Such provisions were intended to assure to Baltimore Company that the expected services would be received, and to assure to Penn Water that the maximum use would be made of its facilities and that the expected revenues would materialize.

Q. What were the character of the rates and charges under this 1927 agreement that you have referred to? A. Specified payments for special facilities were provided for in connection with certain distribution facilities installed by Penn Water at its Highlandtown terminal substation, and a transmission line built by S. T. Co. of Maryland on its right-of-way, for the exclusive use of Baltimore Company.

The rate provisions included an adjustable specific capacity charge per kilowatt of one hour integrated peak service and a similar charge per kilowatt of swing and reserve capacity service in excess of the integrated peak supply.

These peak services were to be redetermined from time to time giving consideration to the actual and predictable changes in the amount and character of the loads of Baltimore Company and of Penn Water's other customers, installed generating capacities and availability, and in methods of operation.

[190] The separate energy rate was graded in three volume steps on an annual basis.

Q. Did this 1927 agreement accomplish the desired degree of coordination? A. No, it did not. Although this contractual arrangement, made for a long term undertook to broaden the scope of the cooperative utilization of the power resources of the two companies, and to avoid all unnecessary duplication of investment and operating cost,

it nevertheless still failed to promote the maximum coordinated use of the power resources of the respective parties.

Even before the problem of bringing the Safe Harbor project into the picture as a new generating source on the basis of cooperative ownership had been comprehended, the intricacies of the arrangements and the operating impediments arising from the accounting for energy of different classifications and rates and with varying capacity possibilities, had been recognized.

Q. Could Safe Harbor have been developed and operated under the 1927 form of contract? A. No, it could not. When an attempt was made to work out a contractual arrangement concerning the Safe Harbor project, it was believed that the previous thinking regarding appropriate mechanisms of power contracts would have to be materially modified if any workable procedure was to be [191] accomplished. The services rendered by Penn Water's and Safe Harbor's generating plants would in certain respects be similar although differing in volume; yet, for the reasons stated by Mr. Walls in his testimony, Penn Water had prior claim on the market, with the right to have its own plant loaded and its capacity service recognized, before Safe Harbor was entitled to derive revenue from the same market sources.

If the two hydro plants were to be considered as separate identities, each should want to operate its own pondage to its own advantage, and these interests could not be expected to harmonize.

It would not be good operating practice to segregate the loads which the two hydro developments would serve, as they necessarily had to serve the same load markets and utilize the same primary transmission system.

It became obvious that if the payments for the outputs of the two plants were to be made in accordance with past practice on the basis of separate unit rates for capacity and energy, all of the disadvantages of the existing two-

party contractual arrangement between Penn Water and Baltimore would be greatly aggravated.

Not only would the problem of segregation and classification of capacity and energy services be difficult, if not impossible, on the basis of metered quantities, but arbitrary [192] assumptions in that respect would not always conform either with facts or the equities of the situation.

But the greatest harm in such a course would be caused by the artificial barriers that would be created to the proper dispatching of the available water power at the two plants and the coordination of their operation with the steam plants of the customers that ultimately receive the outputs of the plants.

Q. Has the change in contract form accomplished by the 1931 amendment removed these artificial barriers to coordinated operation? A. Yes. Almost 15 years of experience have now been had with the contractual arrangements that were developed and initiated in 1931.

All of the objectives desired in 1931 have been attained. The Safe Harbor project was successfully constructed, financed and brought to a proper earning level. The most effective utilization of the system steam capacity and energy and that of our hydro plants has been fully achieved, with the resulting conservation of fuel, particularly during the critical days of fuel shortage in the recent national emergency, of benefit to the public.

The ability to supply the Pennsylvania Railroad Company at several widely separated points, to the convenience and advantage of the customer, would not have been possible [193] had it been sought separately by Penn Water or by Baltimore Company, operating under a contractual arrangement that was complicated with artificial barriers.

And finally, Baltimore Company has the assurance for a long period, extending to 1980, of the advantages and certainty of a large source of hydro service which is closely coordinated with its own steam resources, and offering the opportunity to achieve the maximum economy of system operation.

Q. Could the benefits of coordinated operation to the interconnected system be accomplished through any other contractual arrangement than that resulting from the two contracts negotiated in 1931, identified in this record as Items E, F and G and Items H and I, respectively? A. It might be possible to negotiate with Safe Harbor's and Penn Water's existing customers, power contracts that would accomplish this end, but such contracts would have to be predicated on; first, that the Holtwood hydroelectric development and the Safe Harbor hydroelectric development, together with the transmission system of Penn Water be completely under one ownership to eliminate possible adverse interest in earnings; and, second, that such contracts would provide for the proper incentive to the several customers of the hydro companies to assure the accomplishment of maximum overall economies, to provide for an equitable division with its customers of the savings resulting from such operations, [194] and would not introduce any artificial barriers to hinder the most economical method of operation.

[195] Q. Are the present services rendered by Penn Water and Safe Harbor to Baltimore Company independent of one another? A. No, they are not.

Q. Will you please explain in what respect they are joint services? A. The agreements between Penn Water and Safe Harbor and Baltimore Company, identified as Item E, f [F] and G and H and I are premised on the recognition that the services derived from hydro generation and rendered to Baltimore Company by the two hydro companies are physically inseparable.

Baltimore Company is entitled to its share of the Safe Harbor output, and to all of the power and energy of Penn Water from its own plants, and from [Penn] Water's share of the Safe Harbor output which is not used by other customers of Penn Water. A kilowatt hour of energy and a kilowatt of available capacity of Safe Harbor

has the same potentialities as a kilowatt hour and kilowatt from the Holtwood plants.

The Safe Harbor and Holtwood plants are operated as a unit with respect to their use of the available water, and the important aspect of this joint service by the hydro companies lies in the utilization made of the total hydro capacity and energy on the system load.

I have shown by reference to the load charts in Exhibit 8 that in periods when the river flow is less than full draft, the available hydro energy is operated in the peak portion of [196] the load requirements for the purpose of reducing the steam generating capacity that has to be operated by its customers.

A point to be noted is that no distinction is made in this regard between the hydro energy generated at Holtwood and that at Safe Harbor. Both contribute jointly to the capacity savings of steam generation and to the fuel replacement benefit, as well. The values that would attach on a competitive basis as to the outputs of the two plants would be different if this were not so, because a greater value would be assigned to the energy allocated to or operated in the top of the system load requirements.

The joint nature of the services of the two hydro companies is seen also in the co-mingling of the outputs of their plants in the dispatching of economy flow hydro energy in interchange transactions with adjacent utility systems. In fact, all of such business is transacted by Penn Water regardless of whether the energy concerned is derived from the Holtwood or Safe Harbor plants. This is immaterial under the existing contractual arrangements, since Baltimore Company is entitled to receive the benefits of reductions in the expenses of both Penn Water and Safe Harbor that are made possible by disposing of hydro energy where it can be absorbed most economically.

Another phase of the joint services of Penn Water and Safe Harbor is found in the utilization which both make of the transmission system of Penn Water. Penn

Water developed [197] its transmission lines and those of its wholly owned subsidiary, the Stco [STCo.] of Maryland, for the purpose of rendering services to and delivering and interchanging energy to and with its customers in Pennsylvania, Baltimore and in Washington.

When the Safe Harbor project was brought into operation, it was necessary to increase the transmission capacity to Baltimore, and, at the same time, this new plant was electrically connected to the plants at Holtwood. Both plants deliver their outputs jointly in the Penn Water transmission network. Energy from both Penn Water and Safe Harbor is free to flow to all customers of Penn Water, and this is as it should be.

Q. Do the contractual relations with Baltimore Company recognize the joint nature of these services? A. Yes. The contractual arrangements with the Baltimore Bompany [sic] were purposely designed in 1931 to permit the joint services of Penn Water and Safe Harbor to be utilized in a natural physical manner with a minimum of inter-company accounting and nonproductive effort that would only impede the economical operation of the power system. This could not be done were artificial barriers in effect, or the true natures of the joint services of Penn Water and Safe Harbor not fully understood.

* * *

[198] Q. Mr. Spaulding, have you prepared a tabulation showing the payments by Penn Water to Safe Harbor for the years 1944 and 1945 for actual conditions and as estimated for the year 1946? A. Yes, I have.

MR. MYSE: I ask to have identified as Exhibit 16 the document entitled "Payments made by Penn Water and Baltimore Company to Safe Harbor Water Power Corporation".

TRIAL EXAMINER: The tabulation will be marked Exhibit 16 for Identification.

[199] (The document above referred to was marked Exhibit No. 16 for Identification.)

By Mr. Myse:

Q. Mr. Spaulding, will you please state what Exhibit 16 for Identification shows? A. This exhibit shows the actual payments by Penn Water to Safe Harbor for the years 1944 and 1945, and the estimated payments for the year 1946. It also shows the actual payments by Baltimore Company to Safe Harbor for the years 1944 and 1945 and is estimated for the year 1946.

Mr. Myse: I ask to have identified as Exhibit 17 a document dated January 8, 1945 and entitled "Safe Harbor Company's bill to Baltimore Company and Holtwood Company for the year 1944", and attached thereto are similar bills for the year 1945 and as estimated for the year 1946.

Trial Examiner: The document referred to will be marked Exhibit 17 for Identification.

(The document above referred to was marked Exhibit No. 17 for Identification.)

Mr. Myse: I also ask to have identified as Exhibit 18 the document entitled "Holtwood Company's bill to Baltimore Company for December, 1944", and attached thereto like bills for December 1945 and as estimated for the year 1946.

Trial Examiner: The document will be marked Exhibit 18 for Identification.

[200] (The document above referred to was marked Exhibit No. 18 for Identification.)

By Mr. Myse:

Q. Mr. Spaulding, will you please identify and state what is shown on Exhibits 17 and 18 for Identification? A. Exhibit 17 are Safe Harbor's actual bills to Penn Water and Baltimore Company as prepared and agreed upon by

the Operating Committee for the companies for the years 1944 and 1945, dated January 8, 1945, and January 8, 1946, respectively, together with Safe Harbor's estimated bill to Penn Water and Baltimore Company for the year 1946, dated April 11, 1946.

[201] Although these bills are headed "Bills for December, 1945 and December, 1944", they are the final adjusted bills as computed by the Operating Committee at the close of the year.

Q. Will you state what is shown on Exhibit 18 for Identification? A. Exhibit 18 for Identification is Penn Water's actual bills to Baltimore Company as prepared and agreed upon by their Operating Committee for 1944, 1945, dated January 8, 1945 and January 8, 1946, respectively, together with Penn Water's estimated bill to Baltimore Company for the year 1946, dated April 11, 1946.

Q. Likewise, the bills shown on Exhibit 18 state that it is for December, 1944. Will you explain the meaning of that designation? A. The bills between Safe Harbor on the one hand, and Penn Water and Baltimore on the other, as well as the bills rendered by Penn Water to Baltimore Company are redetermined quarterly, until the last quarter, when a final adjustment is made at the end of November and at the end of the year respectively. These bills are the final bills prepared after the close of the year, but are further subject to adjustment later in the year, if final adjustments are found necessary.

Q. Do you know whether or not there were any adjustments to the bills for the year 1944? [202] A. There were no adjustments after the close of the year 1944 and 1945, for either companies.

Q. Mr. Spaulding, you stated previously, in your testimony with respect to your Pennsylvania customers, that these customers are billed separately for firm power services and for interchange transactions, did you not? A. Yes, I did.

Q. Do you show on such interchange bills to Pennsylvania customers the sales to and purchases from each

customer as separate items? A. Yes; they are shown as separate items.

Q. Referring to Exhibit 18 for Identification, will you indicate how these several separate items are shown thereon for at least one of your Pennsylvania customers? A. Referring to Penn Water's bill to Baltimore for the year 1944, being a part of Exhibit 18, Item (e) 1, shows the revenues received by Penn Water from Pennsylvania Power & Light Company for firm power services as $2,166,823.11. The amount received as revenue from that company for interchange which it purchased from Penn Water is shown in Item (e) 7, as $290,314.56, while the amount paid to the Pennsylvania Power & Light Company by Penn Water for interchange purchased is shown in Item (d) 3 as $50,179.73.

Q. Does this same annual bill of Penn Water to Baltimore Company for the year 1944 show similar segregated items [203] with respect to Baltimore Company for firm power services and for interchange services? A. No; it does not.

Q. Will you please explain? A. Referring to the annual bills for 1944 and 1945 included as parts of Exhibit 18 for Identification, it will be noted on each bill that Item (i) on the annual bills for 1944 and 1945 is termed "net bill". All firm power services and interchange services have been netted in this one item. As explained previously, the payments made by Baltimore Company to Penn Water on the basis of this bill are independent of the amount of firm power services or the amounts of interchange.

It is unnecessary, therefore, in the preparation of the annual bill to state the actual amount of energy delivered to, or the amount of backfeed energy received from, Baltimore Company.

Q. Is it possible for you to restate Penn Water's bill to Baltimore Company so that it would show the payment by Baltimore Company to Penn Water for firm power services, exclusive of interchange transactions? A. Yes; it is. The operating records of the company permit the de-

termination of the amount of interchange services to Baltimore Company and the amount of backfeed purchased from Baltimore Company and the amount of energy diverted from [204] Baltimore Company to which the latter is entitled.

Q. Have you made such a determination? A. Yes; I have.

* * *

Q. Mr. Spaulding, I will ask you to state what Exhibit 19 for Identification shows. A. This Exhibit is a restatement of Penn Water's annual bills to Baltimore Company, identified as Exhibit 18. This restatement segregates the effect of interchange transactions between Penn Water and Baltimore Company and shows the gross amount of the charges for firm power services, for the years 1944 and 1945, and as currently estimated for the year 1946.

* * *

[205] This Item (d) 5 is made up of two components of energy purchased from Baltimore Company and used in connection with sales by Penn Water in Pennsylvania.

The first, shown as Item (d) 5a, is the backfeed used in connection with sales by Penn Water to its firm power customers in Pennsylvania, and, second, Item (d) 5b, is the sum of the backfeed energy and of diverted energy used in connection with sales as interchange by Penn Water in Pennsylvania.

It should be noted in connection with this latter Item (d) 5b, that the revenues received for such interchange sales, together with the revenues received on sales of Safe Harbor's and Penn Water's excess hydro and Penn Water's own economy [206] steam, are the same revenues shown by the sum of Items (e) 5, 6 and 7 taken together.

Q. Will you please explain what you mean by the term "diverted energy used in connection with sales as interchange"? A. Energy and capacity provided by Penn Water and Safe Harbor, to which Baltimore Company is entitled and which it could utilize, are at times diverted and

sold to others as interchange energy and capacity, with Baltimore Company's cooperation.

This diversion of energy and capacity, so necessary to the coordinated operation of the interconnected system, is made when it is more economical for the Baltimore or Washington Company to increase its own steam generation, thereby permitting Penn Water to sell its own energy or capacity as interchange to its Pennsylvania customers at a price greater than the cost of such generation in Baltimore or Washington.

Q. Referring now to Item (e) on the adjusted bill to Baltimore Company for 1944, Exhibit 19, please explain Item (e) 11. A. Item (e) 11 "Baltimore Company Interchange" is Penn Water's compensation from Baltimore Company for interchange purchased by Penn Water from its Pennsylvania customers and used in connection with the services by Penn Water to Baltimore Company. Such transactions take place when it is [207] more economical for the Baltimore and Washington Companies to decrease their own generation and increase their receipts of energy from Penn Water, with a resultant saving in Baltimore Company's operating expenses.

The amount shown in (e) 11 compensates Penn Water for the latter's expense incurred in purchasing interchange from its Pennsylvania customers to replace generation in Baltimore and Washington.

[208] Q. What is the relation between the interchange purchases for the Pennsylvania customers shown in Item (d) 1, 2, 3, of the interchange services to Baltimore Company as shown in Item (e) 11? A. Penn Water's purchase of interchange from its Pennsylvania customers are greater than the amount of such interchange services to Baltimore Company, as Penn Water frequently purchased a considerable amount of energy in Pennsylvania for use of supply of its firm power customer's requirements in Pennsylvania, when it is economical to do so to the end of the maximum system coordination.

These purchases from the Pennsylvania customers for firm supply in Pennsylvania are similar in nature to the backfeed purchased from Baltimore for use in connection with Penn Water's firm supply in Pennsylvania, which is shown in Item (d) 5a. Under several of its contracts Penn Water may obtain such energy from the most economical source of supply.

Q. Can you indicate from Exhibit 19 what would be Penn Water's revenues from and payment to Baltimore Company with respect to interchange transactions between them? A. Yes, I can. Item (d) 5 would be Penn Water's payments to Baltimore Company for interchange purchases by Penn Water from Baltimore Company and Item (e) 11 would be Penn Water's revenue from Baltimore Company for interchange services rendered by Penn Water to Baltimore Company.

[209] It should also be stated that through these transactions all of Penn Water's share of the savings on its interchange with Pennsylvania customers is credited to the Baltimore Company.

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[221] GEORGE WHITTIER SPAULDING,

CROSS-EXAMINATION.

By MR. GOLDBERG:

* * *

[233] Q. My question is: Does Safe Harbor sell interchange energy under the contracts identified as H and I?

* * *

MR. MYSE: Just a moment. I would like to interject and point out that Items H and I are contracts to which Safe Harbor is not even a party.

MR. GOLDBERG: I am perfectly aware of that.

* * *

[235] Q. Does Safe Harbor sell interchange energy at all? First, let me ask you that. Without reference to any con-

tract, does it sell interchange energy? A. Yes, jointly with Penn Water.

Q. Does it sell that interchange energy which you say it sells jointly with Penn Water, under the contracts identified as Items H, and I, or under the contracts identified as Items E, F and G, or both? A. You have to take them together.

Q. The sales of interchange energy does not take place under one group or the other, but takes place under both? A. Correct. But the accounting for it is in accord with the accounting and billing carried out in connection with the contracts submitted and identified as Items H and I.

Q. Is it not a fact, Mr. Spaulding, that under the contracts identified as E, F and G, which is the contract between Safe Harbor, Consolidated of Baltimore, and Penn Water, that Safe Harbor under that contract sells all of its capacity and energy to Consolidated and Penn Water?

MR. SPARKS: That is subject to the same objection that was made a while ago that that involves a consideration of the contract by Mr. Spaulding.

TRIAL EXAMINER: If the Witness can answer that question, [236] on the basis of what the practice and understanding of the Company is, then that is another matter.

THE WITNESS: Yes.

TRIAL EXAMINER: The Witness is not being asked to construe a contract.

THE WITNESS: Yes. All of Safe Harbor's capacity and energy are under the contracts offered as Items E, F and G and the entitlements of Baltimore and Penn Water.

Q. And those entitlements take care of all of Safe Harbor's capacity and energy, isn't that so? A. It takes care of the entitlements, but not what happens to it.

By Mr. Goldberg:

Q. You mean by that, that although the contract provisions are to the effect that two-thirds of the capacity and energy is provided for as going to Baltimore and one-third to Holtwood, that as a matter of fact all of the capacity and energy may go to Baltimore at given times? A. Or it may all go to Penn Water's customers in Pennsylvania at given times.

Q. But the fact of the matter is that wherever it may go,—Baltimore, Washington or Pennsylvania—the contracts identified as E, F and G provides for the sale of all of Safe Harbor's energy and capacity, isn't that so? A. That is correct.

[237] Q. Now, can you tell my why if Safe Harbor is a participating party in the contracts identified as Items H and I, it is not a party to that contract? A. It is not necessary to be. The contracts identified as H and I, and the contracts identified as Items E, F and G have to be taken together in considering the services to the Baltimore Company.

Q. Well, now, let us refer to Items E, F and G, and taking your premise that Items E, F and G and H and I must be taken together, and that is why it is not necessary to include Safe Harbor in the contracts as identified as H and I, why were all three parties included in Items E, F and G? It was not any more necessary there, was it, according to you. A. May I answer your first question?

Q. Yes, go ahead. A. Because Penn Water and Baltimore Company jointly owned Safe Harbor and wished to be assured of the total capacity and energy of Safe Harbor in connection with its respective uses and sales.

Q. Isn't it a fact that Consolidated of Baltimore and Pennsylvania Water and Power are parties to the agreement identified as Items E, F and G because sales of capacity and energy are being made to them under that contract by Safe Harbor? A. Only the entitlements.

[238] Q. Well, we have been over that. Isn't that so? Let us go back to my question before Mr. Spaulding interposed as to the entitlements.

* * *

THE WITNESS: The answer is, yes.

By MR. GOLDBERG:

Q. I think you testified that Safe Harbor was a party to the original agreement between Pennsylvania Water and Power Company and Metropolitan Edison Company, is that correct? A. That is correct.

Q. And recently, you testified, that that agreement was cancelled, and a new one consummated, is that correct? A. Correct.

Q. And in the new contract, Safe Harbor is not a party; is that right? A. That is right.

[239] Q. Only Pennsylvania Water and Power Company and Metropolitan Edison Company? A. That is right.

Q. Why was Safe Harbor omitted? A. The original reason for Safe Harbor being made a party to the Edison Light and Power contract of York was to provide that the capacity and energy of Safe Harbor to which the Holtwood Company was entitled on the one hand, and received and used on the other hand, would be available in that contract to York.

There were also two other reasons for Safe Harbor being made a party. One was a legal reason having to do with the right of Safe Harbor to sell and distribute energy at wholesale in York County; and the second was to protect against double taxation on the sales made to Edison Light and Power.

When the new contract was made between Penn Water and Metropolitan Edison Company effective January 1, 1946 to supersede the old contract, it was the opinion of counsel that it was no longer necessary to make Safe Harbor a party to protect its position in the first two instances, and the third reason no longer appeared to exist.

Q. And for the same reasons you have outlined for the inclusion of Safe Harbor in the original Metropolitan Edison contract now superseded Safe Harbor was included as a party in the agreements whereby service is [240] provided to the Philadelphia Electric and Pennsylvania Power and Light Company? A. The same reasons existed at the times those early contracts were made.

• • •

[242] Q. Without asking you to give any legal opinion, but based entirely on the reasons you have outlined why they were included in the first instance, and not included in the second instance, is it reasonable to conclude that since Safe Harbor was included in the present contract between Pennsylvania Water and Philadelphia Electric and Pennsylvania Power and Light Company, for the same reasons then Safe Harbor could be excluded from those contracts?

• • •

THE WITNESS: From a practical point of view of operation and irrespective of the terms of the contracts or the legal interpretations, thereupon, it could be.

• • •

[251] Q. Do you recall, Mr. Spaulding, that in your testimony yesterday you spoke about capacity available from drawdown of the pond? A. I do.

Q. At that time were you referring to the Safe Harbor pond, or to the Holtwood pond, or both? A. I think I stated in the record that both ponds were usable as draw-down, although the major amount of the storage water is behind the Safe Harbor Dam.

Q. Is the capacity available from draw-down of the pond as valuable as the dependable capacity of the stream? A. It is.

Q. To the purchaser? A. Yes, to the purchaser.

Q. With respect to this new contract just between Penn [252] Water and Metropolitan Edison, does the Safe Har-

bor render any service under this contract? A. Not directly.

Q. Will you please explain your answer—"not directly"? A. The contract is drawn between Metropolitan Edison Company and Penn Water.

Penn Water assumes all the obligations thereunder.

However, Penn Water makes the fullest use of its own resources and those of Safe Harbor in so doing.

Q. And this was true even before the new contract was entered into? A. That is correct.

Q. But under the new contract Safe Harbor is not a party? A. That is right.

Q. Of the revenue Penn Water receives under the new contract with the Metropolitan Edison does Safe Harbor receive any portion of those revenues from Penn Water? A. Not directly.

Q. When you say "not directly" what do you mean? A. All of the payments made by Metropolitan Edison under that contract with Penn Water goes directly to Penn Water.

Those revenues are available, in part, for the payments on which Penn Water is obligated to Safe Harbor for the [253] services obtained from Safe Harbor by Penn Water.

Q. That is what you meant when you said "not directly"? A. That is correct.

Q. In other words, by reason of Penn Water's arrangement with Metropolitan Edison whereby it receives for sale of power and energy to Metropolitan Edison revenues, it has income available to it to enable it to meet its obligations in part or in whole to Safe Harbor for the energy it receives from Safe Harbor under the agreement identified in this proceeding as Items E, F and G for the energy, capacity, and the services? A. Yes.

* * *

[258] THE WITNESS: Safe Harbor receives no revenues from the Metropolitan Edison Company.

By Mr. Goldberg:

Q. Directly or indirectly? A. Directly or indirectly.

Q. Prior to the consummation of the new agreement between Penn Water and Metropolitan Edison, did Safe Harbor receive any revenues directly or indirectly from Metropolitan Edison? A. You mean Edison Light and Power Company, do you not?

Q. All right. I will accept that amendment. There is some relationship there that enables you to refer to it as Edison Light and Power, as I understand it? A. Edison Light and Power made payments to Metropolitan Edison and Penn Water.

Q. All right, let us talk in terms of Edison Light and Power when we talk about the old contract? A. All revenues for services under the prior contracts by Edison Light and Power were made directly to Penn Water.

Mr. Goldberg: I won't move to strike that answer because it is not responsive, Mr. Examiner, but I think I am entitled to a direct answer to the question. May I have the question read?

Trial Examiner: Read the question.

* * *

[259] The Witness: No; Safe Harbor did not receive any revenues from Edison Light and Power Company directly, but it received reveneues [sic] indirectly through Penn Water.

By Mr. Goldberg:

Q. How did it receive revenues indirectly through Penn Water? A. Penn Water used Safe Harbor's services to which it was entitled, together with its own resources in supplying this power and other services to Edison Light and Power of York.

Q. And Penn Water used the revenues it received from Edison Light and Power to pay Safe Harbor for the serv-

ices of Safe Harbor that Penn Water used to serve Edison Light and Power? A. I think that is correct.

Q. Were the revenues received from the Edison Light and Power Company contracts segregated so that you were able [260] to trace those revenues to Safe Harbor? A. No.

Q. You reached the conclusion that Safe Harbor received revenues indirectly from Penn Water as a result of Penn Water's services to Edison this way,—now, let me state it and you tell me whether I am right or wrong:

Penn Water received income from its contract with Edison Light and Power as well as income from its contracts with other customers and it used that income received from Edison Light and Power and its other customers to meet its obligations to Safe Harbor under Items E, F and G in this proceeding, is that right? A. That is correct. May I qualify that answer?

Q. Yes. A. The distinctions that I do not find in your question, which I have tried to explain, is that both Penn Water and Safe Harbor obligated themselves for services under the contract with Edison, and it thereby was a joint service, although the revenues were actually paid by Edison to Penn Water.

* * *

[261] Q. You have told us that under the old agreement between Penn Water and Edison Light and Power, Safe Harbor received revenues indirectly from Penn Water. Is it your testimony that under the agreements between Safe Harbor, Penn Water and Philadelphia Electric and Safe Harbor, Penn Water and Pennsylvania Power and Light Company, Safe Harbor also receives revenues from Penn Water indirectly?

MR. SPARKS: Excuse me, you did not mean Penn Water [262] indirectly, did you, Mr. Goldberg?

MR. GOLDBERG: Yes, I did.

THE WITNESS: Will you please read the last part of that question?

(The preceding question is read.)

MR. GOLDBERG: In both instances it should be through Penn Water indirectly. Mr. Sparks is right.

THE WITNESS: From whom? From the customer?

By MR. GOLDBERG:

Q. From the customer companies? A. Yes. In both of these instances, the P. P. and L. contract with Penn Water and Safe Harbor, and the contracts between Penn Water, Safe Harbor and the Philadelphia Electric Company for services at Coatesville, Penn Water and Safe Harbor undertook to provide firm power services jointly, but in each instance the revenues were all received from the purchasing company by Penn Water, who, in turn, reimbursed Safe Harbor for the use of the facilities and services rendered by Safe Harbor with Penn Water.

• • •

Q. Do you say that, even though it is a fact, that all [263] of the services rendered by Safe Harbor to Penn Water and Baltimore Company are rendered under the agreements identified as Items E, F and G in this proceeding, is that right? A. May I have that question read?

TRIAL EXAMINER: Yes, read the question.

(The preceding question was read.)

THE WITNESS: No, all the services rendered by Safe Harbor are not rendered under the contracts offered as Items E, F and G.

• • •

Q. And the two customer companies may use those services in any way they see fit to meet the requirements on their own systems, isn't that so?

• • •

Q. By "they see fit", I mean in accordance with the [264] requirements on their system; in other words, there are no strings attached by Safe Harbor to their use of the

services sold under Items E, F and G to Consolidated and Penn Water.

* * *

[265] THE WITNESS: Safe Harbor entered into other contracts other than those offered as E, F and G for the supply of services, with the knowledge and consent of Baltimore and Penn Water, which is required under the terms of the three-party contract offered and identified as E, F and G.

* * *

[269] Q. You told us, now, that under the agreements that Penn Water has with Pennsylvania Power and Light Company and Philadelphia Electric Company, Safe Harbor receives revenues indirectly through Penn Water; right? A. I did.

Q. I show you Exhibit 18 in this proceeding? A. Yes.

(Witness examines Exhibit 18.)

By MR. GOLDBERG:

Q. Does it not appear from Item (e) of this power bill that the revenues received by Holtwood from this agreement, rather than going to Safe Harbor, are credited to the Baltimore Company? [270] A. No, it does not.

* * *

[276] Q. Relating ourselves to the contracts which produce the revenues shown as (e) 1 to (e) 3, and let us say which are shown on Exhibit 18, it is a fact, is it not, that the power bill marked as Exhibit No. 18 shows revenues received by the Holtwood Company from its customer companies; from those customer companies, that is? A. Yes, under contracts to which Safe Harbor was a party.

Q. And under those contracts, you stated Safe Harbor indirectly received revenues through Penn Water; right? A. That is correct.

Q. And the revenues received under those contracts are shown in (e) 1, (e) 2 and (e) 3 of Exhibit No. 18, page 1, right? A. They are.

Q. They are a part of the make-up of the total figure of $5,930,957.24, right? [277] A. Sure, they are.

Q. Each figure contributes—or at least this figure contributes to the Baltimore net bill—— A. (Interposing) I do not hear you.

Q. Which figure, of which I have spoken, contributes to the ultimate net bill of $2,027,848.76 to the Baltimore Company; right?

* * *

THE WITNESS: It does not contribute to it, it is used here in this Exhibit as a means of arriving at a contract figure.

By MR. GOLDBERG:

Q. In Exhibit 18, in arriving at the amount Baltimore Company owes Holtwood, all of the revenues received from the contracts we have just discussed were credited to Baltimore Company, right? A. No.

Q. No? A. No, they were not credited to the Baltimore Company,—as I understand your question—but they were merely used as an amount to determine the revenues that the Baltimore Company owed Penn Water.

[278] Q. As a result of which computations the amount of money owed by Baltimore Company to Holtwood was correspondingly reduced; right?

THE WITNESS: May I have the question read?

TRIAL EXAMINER: Read the question.

(The preceding question was read.)

THE WITNESS: No. That is not correct.

By MR. GOLDBERG:

Q. Did not the Baltimore Company receive the benefit of all of those revenues? A. They did not.

Q. If you eliminate (e) 1 on Exhibit 18, what would the situation be? A. If you eliminate (e) 1 from Exhibit 18, and you eliminate the services rendered thereunder, then Baltimore Company would have paid more money and got greater services.

Q. Suppose we reduce the amount of revenue received from Pennsylvania Power and Light Company for firm power to $1,000,000, in round figures, instead of $2,166,823.11, shown on Exhibit 18, what would the power bill have been, Mr. Spaulding? A. I will have to have more information, because I could not answer the question otherwise.

Q. There is no change in the services. A. That bill to the Baltimore Company would have [279] increased.

Q. And solely, as a result of the difference in the amount of revenues received from Pennsylvania Power and Light Company, right? A. That is correct.

* * *

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[281] DONALD GUNN,
a witness on behalf of the Respondent, being first duly sworn, testified as follows:

DIRECT EXAMINATION.

By MR. HULL:

Q. Your name is Donald Gunn? A. It is.

Q. What is your present position with the Respondent company and your occupation? A. I am an engineer, and I am Chief Engineer of Pennsylvania Water & Power Company and Assistant Advisory Engineer of the Safe Harbor Water Power Corporation. I am also a Director of Susquehanna Transmission Company of Maryland.

Q. How much experience have you had in the electric light and power industry? A. Approximately twenty years, altogether, principally with the Duquesne Light Company of Pittsburgh, the Georgia Power Company, and the Holtwood and Safe Harbor companies.

[282] Of these companies, the Georgia Power Company and the Holtwood and Safe Harbor companies operate extensive hydroelectric plants.

I graduated from the Darlington Military Academy in 1919, after completing the scientific course, and from the

Georgia School of Technology in 1925, receiving the degree of Bachelor of Science in Electrical Engineering.

In 1926, while taking a course of apprentice engineering training offered by the Duquesne Light Company of Pittsburgh, I did post-graduate work on high-voltage transformers at the Carnegie Institute of Technology.

Prior to graduation from the Georgia School of Technology, I had about two-and-a-half years' experience successively as an electrician for the Walker Electric Company on cotton mill electrification, as apprentice lineman for Georgia Power Company on 4,000-volt line construction and repair, as station operator for Georgia Power Company, and as draftsman for the same company.

During that period, I was also employed for about seven months by the Glover Machine Works on the design of industrial locomotives and locomotive cranes.

After graduation from the Georgia School of Technology, I took a course of apprentice engineer's training offered by the Duquesne Light Company of Pittsburgh. This course of training was for one year and included proportionate [283] experience in each functional department of that company's business. The Duquesne Light Company serves electricity and commercial heat in the City of Pittsburgh and the surrounding industrial area.

Upon completion of the apprentice engineer's training course, and for a period of about one year, I was employed as junior engineer in the system's development department. I prepared economic and special engineering studies of the Duquesne Light Company system; made studies to determine system additions; made analytical studies of operation; and assisted in development testing on power system equipment.

On April 1, 1927, I became field supervisor in the system operating department of Duquesne Light Company. My responsibilities in this position included studies to determine the proper operating voltage schedule for electric generating stations, supervision over and placing in serv-

ice of all additions to the company's system, supervision over general changes in system voltage, together with special investigation of power interchange capacity between interconnected operating companies in Western Pennsylvania and Ohio.

From April 23, 1928, until February 1, 1929, I was connected with the American Rolling Mill Company. During this period I became familiar with all phases of steel manufacture, particularly in promotion of the use of that [284] company's products by electric utility companies.

On February 1, 1929, I accepted a position with the Pittsburgh branch of the Byllesby Engineering and Management Corporation as Assistant to the General Superintendent of Construction. During the course of about one-and-a-half years' employment by this company, my duties were of a general nature on a construction program which employed in excess of 5,000 men.

Special investigation undertaken by the construction department of this company during that period was under my supervision.

From October 1930 until August 1942, I was employed by Penn Water and Safe Harbor Company, and my duties were those of Assistant to the Chief Engineer.

I should like to say here that throughout my testimony in referring to Pennsylvania Water and Power Company and its wholly owned subsidiary, Susquehanna Transmission Company of Maryland jointly, I will refer to the combination as Penn Water. When referring to those companies separately, I will use their full corporate names.

I was employed by these companies for work on the Safe Harbor project shortly after the Safe Harbor Company undertook development of that project. In addition to my general duties in connection with the development of the Safe Harbor project, I was delegated responsibility for estimating and [285] cost studies and the preparation of labor wage schedules for both Penn Water and Safe Harbor.

After the first four units were installed at Safe Harbor, I undertook a detailed study of depreciation of important medium and low-head hydroelectric developments of early origin in the eastern part of the United States and Canada.

This study covered developments representing more than 2,000,000 installed horsepower and included detailed physical examinations, specific determination of physical property history, a study of the history of the development of the various elements of property, past maintenance experience, operating conditions and other factors necessary to a determination of actual depreciation.

Q. You spoke of 2,000,000 installed capacity. Do you mean 2,000,000 horsepower or 2,000,000 kilowatts? A. 2,000,000 installed horsepower capacity.

Q. Will you proceed. A. My duties have been such that I have been intimately familiar with the design and construction features of Penn Water's and Safe Harbor's property and its operation and maintenance during the past 15 years.

Since my employment with these companies, I have been familiar with material and supplies purchases of the companies for both operation and construction. In my present [286] position, I am responsible for major maintenance and construction projects for both Penn Water and Safe Harbor Water Power Corporation.

Since my employment by these companies, I have been responsible for the classification of all construction costs as well as the division of costs between construction and operation and maintenance. During the years 1936 to 1940, the preparation of original cost studies of Penn Water, pursuant to orders of the Federal Power Commission was made under my supervision.

In 1942 I became Chief Engineer of Pennsylvania Water and Power Company; Assistant Advisory Engineer of Safe Harbor Water Power Corporation; and Director of Susquehanna Transmission Company of Maryland.

In 1939 and again in 1944, I made studies of actual existing depreciation in the property of Safe Harbor Water Power Corporation and testified to the results of those studies in two rate proceedings before the Federal Power Commission, which proceedings are designated IT-5494 and IT-5914.

I am a professional engineer, registered in the States of Maryland and Pennsylvania, and I am a member of the American Institute of Electrical Engineers and the American Society of Civil Engineers.

I am also a member of the Special Depreciation Committee [287] of the Pennsylvania Electric Association, and have been an alternate member of the American Society of Civil Engineers' Subcommittee on Depreciation.

* * *

[402] DONALD GUNN,

DIRECT EXAMINATION (Resumed).

By MR. STARKS:

Q. Your name is Donald Gunn? A. Yes.

Q. And you have previously testified as to your qualifications and experiences? A. I have.

Q. Has there been prepared under your supervision a consolidated statement showing Original Cost of Electric Plant of the Pennsylvania Water & Power Company and Susquehanna Transmission Company of Maryland as of December 31, 1945? A. There has been.

* * *

Q. Mr. Gunn, I hand you a copy of a document which has [403] been marked for identification as Exhibit No. 25 and ask you if this document, consisting of three sheets, is a copy of the statement to which you have referred? A. It is.

Q. Will you describe this exhibit and state how it was prepared? A. Pursuant to Instruction 2-D, Electric Plant Accounts of the Uniform System of Accounts Pre-

scribed for Public Utilities and Licensees by the Federal Power Commission, which became effective January 1, 1937, and an order of that Commission adopted May 11, 1937, Pennsylvania Water & Power Company and its wholly owned subsidiaries, Susquehanna Transmission Company of Maryland, Susquehanna Transmission Company of Pennsylvania and Pennsylvania Transmission Company proceeded to make original cost studies covering the period from the formation of the Companies to December 31, 1936.

These were filed with this Commission on May 15, 1940.

* * *

[404] TRIAL EXAMINER: The various documents described by counsel which bear the designations Items K to N, inclusive, are received in evidence by incorporation and reference to the official files of the Commission.

* * *

[406] Q. You may proceed. A. It should be noted that in December, 1939, the Susquehanna Transmission Company of Pennsylvania, and the Pennsylvania Transmission Company were merged with the Pennsylvania Water & Power Company.

Consequently, the original cost studies of these three companies have been combined into one, and are shown as one figure designated as "Pennsylvania Water & Power Company," on the statement marked for identification as Exhibit 25.

The Susquehanna Transmission Company of Maryland is shown separately.

One of the first steps in the original cost determination was the taking of an inventory of all plant and equipment in service on December 31, 1936.

Concurrently with the taking of the inventory, analyses were made of all of the cost records of the Pennsylvania Water & Power Company, McCall Ferry Power Company—including Susquehanna Contracting Company—the committee acting for the bondholders of McCall Ferry Power

Company, and the receiver for McCall Ferry Power Company.

Similar inventories and cost studies were made for the three subsidiary transmission companies. Then followed the process of matching the inventories against the cost analyses.

Responsibility for the original cost study of Pennsylvania [407] Water & Power Company and all of its subsidiary companies was assigned to me. I received my general instructions from Mr. Walls, President of Pennsylvania Water & Power Company. On accounting matters, my instruction and guidance came from Mr. J. E. O'Connor, who was vice-president and secretary of that company.

Mr. W. H. Eichhorn, Jr., who is secretary and assistant treasurer of Pennsylvania Water & Power Company, assisted me with the accounting problems involved in the study.

Mr. R. L. Bortner, who is right-of-way engineer and assistant secretary of Pennsylvania Water & Power Company, assisted me on matters relating to real property.

Mr. R. W. Chase, who is civil engineer assigned to special studies, assisted in the determination of the date of the beginning of commercial operation and on other problems involving engineering and technical decisions.

Mr. D. L. Wetzel, who is budget engineer, was responsible for inventorying the property, compiling analyses of costs, reconciling the cost analyses with the inventory, and similar matters.

The statement marked for identification as Exhibit 25 shows in column (b) the amount of the original cost as of December 31, 1936.

To the original cost as of December 31, 1936, there has been added the net additions to the property of the company [408] and its wholly owned subsidiary, Susquehanna Transmission Company of Maryland, for the period January 1, 1937 to December 31, 1945.

By adding these two amounts together, we have arrived at the total original cost of Pennsylvania Water & Power Company and Susquehanna Transmission Company of Maryland as of December 31, 1945.

The statement shows combined electric plants in service as of December 31, 1945 amounting to $36,389,381.93.

In addition to electric plant in service, the following items are included:

Account 103, construction work in progress.

Account 104, electric plant held for future use.

Q. Mr. Gunn, will you read those account numbers again, please? A. I beg your pardon. They should read as follow:

Account 100.3—construction work in progress.

Account 100.4—electric plant held for future use.

Q. Proceed. A. Construction work in progress represents the cost of property additions which are not yet completed, but which, when completed, will be charged to appropriate plant accounts.

Electric plant held for future use represents property which is neither construction work in progress or plant in service, but the need for which in the future can be foreseen.

[409] Q. Is the amount, which was recommended in the original cost filing, to be held in Account 107, included in this exhibit? A. No. For the purpose of this proceeding, we are not claiming the amount recommended to be held in Account 107 as part of original cost.

Q. What does the exhibit show to be the total original cost as of December 31, 1945? A. The total original cost, as of December 31, 1945, is $36,704,706.47.

Q. $36,704,706.47. Has there been prepared under your supervision the "History of the Holtwood Development to the Beginning of Commercial Operation—October 1, 1911"? A. Yes.

Q. Is this document, containing some 120 pages, the history to which you refer? A. It is.

• • •

[410] Q. Mr. Gunn, I hand you a document which has been marked Exhibit No. 26 for identification. I ask you if this is a document containing about 126 pages which is the history to which you refer? A. It is.

Q. Is there accompanying this history supporting documentary proof? A. There is.

* * *

[412] Q. Mr. Gunn, I hand you a document consisting of 68 parts, which has been marked for identification as Exhibit 27, and ask you if this is the bound volume to which you have referred? A. Yes.

Q. That is the volume you have made reference to heretofore? A. It is.

MR. SPARKS: If Your Honor please, in order that we may facilitate reference to the exhibit, I want to ask Mr. Gunn this question.

By MR. SPARKS:

Q. Mr. Gunn, are there references in Exhibit 26 to certain exhibit numbers, references which refer to Parts 1 to 68 in Exhibit marked for identification No. 27? A. That is correct.

[413] Q. Mr. Gunn, what was the occasion for the preparation of these historical data? A. In connection with the companies' compliance with the Commission's 1937 system of accounts and in anticipation of the possibility of a proceeding to determine the net investment in the project after a license would be issued by the Commission, we proceeded to gather all of the information that we could concerning the early history of the development.

Exhibit No. 27 for identification contains the significant documentary evidence concerning the early history of the development. These documents were procured from the files of the companies, and from offices of other concerns which were interested in and connected with this development.

Exhibit 26 is a chronological summation of the documents, showing their interrelation in connection with each other.

Copies of these exhibits, No. 26 for Identification and No. 27 for Identification, were furnished to the Commission's Staff during the latter part of 1940.

Q. 1940? A. 1944.

Q. 1944? A. 1944.

Q. These two exhibits here? A. Yes.

* * * *

[414] TRIAL EXAMINER: Exhibit 25 for Identification is received in evidence.

* * *

CROSS-EXAMINATION.

By MR. GOLDBERG:

[417] Q. Mr. Gunn, I direct your attention to Exhibit 27 Part 1, that appears to be the affidavit of a Dr. Franz Hahr Stewart, Mr. Hollis Rinehart, Jr., and Cary T. Hutchinson.

Is Mr. Hutchinson alive today? A. No, he is dead.

Q. When did he die? A. A few days after this affidavit was obtained.

Q. Is Dr. Stewart alive? A. So far as I know. I am not personally acquainted [418] with Dr. Stewart.

Q. How about Mr. Rinehart? A. So far as I know he is also alive.

Q. And as far as you know are both Dr. Stewart and Mr. Rinehart still living in Florida? A. So far as I know, yes.

Q. I notice in the paragraph numbered 1 of Mr. Hutchinson's affidavit that he states that he held numerous conferences in Miami, New York and Baltimore with representatives of Pennsylvania Water & Power Company.

When were those conferences held? A. Those conferences were held over a period of about six or eight months preceding January, 1939.

Q. Were they all in 1938, all of the conferences? A. Yes, they were all in 1938. There may have been one in 1937, but the principal of them were in 1938.

Q. Did you keep any notes on those conferences? A. Well, I would't say——

Q. (Interrupting) I have assumed in my question that you were present. A. I was present.

Q. At all the conferences? A. Yes.

Q. And you don't recall whether you kept notes on the conferences? [419] A. I may have made some notes of some sort. I did not make any particular report on the conferences.

Q. Do you have any material prepared by you that would enable you to refresh your recollection about when those conferences took place and what transpired? A. I think I could refer to my file and find letters written to Dr. Hutchinson making arrangements for the conferences, and I think in other letters I might find references to the discussions I had with Hutchinson. Just how much of the substance of the conferences that I had with Hutchinson would be revealed by that, I don't know.

Q. Were you the only representative of the Pennsylvania Water & Power Company present at those conferences with Mr. Hutchinson? A. I was the only one that was present at all of them, but at various times various other people were present.

Q. Who were the others? A. Mr. Chase, I believe, and Mr. Eichhorn. I believe at one of the conferences Mr. Higgins was present.

Q. Was Mr. Hutchinson ill at the time you conferred with him in 1938? A. No, not at all.

Q. How old was Mr. Hutchinson when he died, do you know? A. He was in his 70's and I believe he was near 75. I am not certain of that.

[420] Q. Your conferences with Mr. Hutchinson were in connection with preparing the original cost studies which have been introduced into this case, is that right? A. That is correct. The conferences were part of my efforts

to find out what had happened in the creation of the enterprise, and I also sought to obtain records that Hutchinson had, if any.

Q. Was it your expectation that the information you would secure would be used in supporting the company's original cost claims before the Federal Power Commission? A. Yes, that was the reason.

Q. When you undertook to confer with Mr. Hutchinson, were you instructed to seek him out and confer with him? A. Well, no, I cannot say that I was instructed to. I had worked for some time studying the documents that were in the company's files and had quite a number of documents, but up to that time and until after that time I had been unable to fit the documents together so as to make a complete story, so as a recall I requested permission to go to see all of the principals then living with respect to the McCall Ferry development and to find out from them what they knew about what transpired in the formation and development of the company, and as I recall Hutchinson was was the first one that I went to see because he was one of the men closest to the project.

Q. Of whom did you request this permission? [421] A. Mr. Walls. Perhaps it may have been Mr. O'Connor. I don't recall which.

Q. Were counsel for the company consulted at the time you undertook these investigations? A. No, I don't believe they were. Well, they knew we were going ahead with that—just a moment. Do you mean were counsel consulted when I undertook these conferences or when I undertook the preparation of the data?

Q. When you undertook to seek out and interview these persons who were at one time connected with the McCall Ferry project. A. No, they were not consulted.

Q. Then as far as you know, no one considered the question of taking the depositions of the persons you were going to seek out and to preserve their testimony for the purpose of any proceeding you might have before the Fed-

eral Power Commission, is that right? A. I don't recall that that was discussed.

Q. Were you scheduled to see Mr. Hutchinson at the time you went down to Florida? I assume you did go down to Florida because your name appears as having been in Florida. A. That is correct. It had been two or three months since I had seen Mr. Hutchinson and I had expected about a month before the time I went to see him that he would be in New York, and we had definite plans made to meet at that time [422] for further discussion of the development of McCall Ferry. However, he did not show up, and early in January, 1939, Mr. Rinehart, who was his personal lawyer, got in touch with me and told me of Hutchinson's serious condition and that if we wanted any further help from Dr. Hutchinson, that we should come to Florida. [423] Q. At the time Mr. Rinehart contacted you, did he advise you that Mr. Hutchinson's illness was of such a nature that Mr. Hutchinson might not survive it? A. I don't think he just put it that way. I think he told me he was in very bad health, with some sort of an illness, and I don't recall that he said what.

Q. And, fearing that he might die before you secured the information, you went down to Florida to get a statement from him? A. That is correct.

Q. And, at that time, as far as you know, the question of securing Dr. Hutchinson's testimony by deposition to preserve it for the proceedings that might take place before the Federal Power Commission in connection with the company's original cost studies was not taken up? A. Was not taken up, at that time it would have been quite impossible to have done it.

Q. It was not impossible for you to get the affidavit, was it? A. No, the affidavit was drawn by Hutchinson's lawyer.

Q. It might have been possible to have gotten a deposition as well, isn't that so? A. If you had gotten it soon enough, yes.

Q. Tell me a little bit about how this statement, [424] signed by Mr. Hutchinson, was prepared. Did you prepare it? A. No, I did not.

Q. Did Mr. Rinehart prepare it? A. Mr. Rinehart prepared it.

Q. After consultation with you? A. After consultation with me and after I submitted to Mr. Rinehart a compilation of all of the facts that we had in our records, and those things which I had discussed with Hutchinson in previous conferences. All of those facts were submitted to Rinehart and I told Rinehart what the nature of the affidavit was we wanted, what we wanted it for, and the scope that I should like for him to cover in it.

Q. By "scope", you mean what you would have liked to have incorporated in the statement by Dr. Hutchinson from this memorandum you had, is that right? A. That is right.

Q. Did you leave the memorandum with Mr. Rinehart? A. I don't recall whether I did or not. It is not quite proper to call it a memorandum. What it in fact was——

Q. (Interrupting) Do you have it here? A. Not in Washington.

Q. Do you have it in Baltimore? A. Yes, I think I have it in Baltimore.

It was a description similar to parts of Exhibit 26, to [425] which was attached documentary evidence from our files, similar to the documents in Exhibit 27. It was a running description of what Hutchinson's connection with the project has been as revealed by our files, supported by such documents as were in our files, to establish what was the fact. It was in the nature of a factual statement.

Q. Did Mr. Rinehart show it to you before it was signed? A. I believe so; I believe I saw it.

Q. And were you satisfied with it or did you make any further suggestions? A. It seems to me that I made several suggestions as to the scope of it. He had not

covered enough points in it, or all the points, that I thought were necessary.

Q. Part 8 of Exhibit 27 is a statement of George C. Lee, a partner of Lee, Higginson and Company. Is Mr. Lee alive? A. Yes.

Q. Where does he live? A. In Boston, or rather in a suburb of Boston. He usually goes out of Boston for the summer. I don't know whether he has left yet, or not.

[426] Q. Part No. 9 contains a question and answer statement interposed by Mr. Fiske [Fisk]. Is Mr. Fiske alive? A. No, Mr. Fiske is dead.

Q. I notice the statement was taken in the Memorial Hospital in New York. A. Yes.

Q. Did he die soon after the affidavit was prepared? A. I believe it was a matter of months, something less than a year, but still a matter of months.

Q. What was the nature of his illness, if you know? A. I believe he died of a throat infection, however, I am—if I am not mistaken—although I am not sure of that. I think it was a throat infection.

Q. Were you there at the time this statement was taken before the notary public, Wilton D. Cole? A. Wilton D. Cole was counsel. I was not present when his statement was taken. He was his counsel.

Q. Had you seen Mr. Fiske at any time or times before December 29, 1938? A. Yes.

Q. When? A. I discussed the early history of McCalls Ferry with him two or three times, I believe.

Q. That was two or three times in 1938? A. I believe they were.

[427] Q. Was Mr. Fiske well up in years when you first saw him? A. Yes. He was near 80, I would say.

* * *

Q. Were any discussions had looking toward the preservation of Mr. Fiske's testimony by way of deposition? [428] A. I do not recall that there was, although at the time the statement was taken from Mr. Fiske we

did not expect that he would die immediately, as was the case of Mr. Hutchinson.

* * *

TRIAL EXAMINER: Of that answer I will strike all of the answer except the first part of the statement reading "I do not recall that there was."

* * *

[429] Q. Will you tell me how the arrangements were made to take Mr. Fiske's testimony in the Memorial Hospital on December 29, 1938? A. I simply told Mr. Fiske's counsel, Mr. Cole, that we would like to have such a statement, and he made the arrangements. I do not know what arrangements were made.

Q. Let me see if I can follow through with the sequence of events. A. Yes.

[430] Q. Some time in 1938, prior to December 29, you saw Mr. Fiske two or three times to discuss the early history of McCalls Ferry Power Company.

Is that right? A. That is correct.

Q. After that conference, or at that last conference with him, did you secure a statement from him? A. From Mr. Fiske?

Q. Yes. A. Did I secure the statement?

Q. Yes. A. I did not.

Q. Were you scheduled to see Mr. Fiske prior to December 29, and subsequent to the last conference you had with him in 1938? A. No, I did not, because Mr. Fiske suggested at the last time I discussed the McCalls Ferry matter with him that I should in the future, take that matter up with his counsel, and he gave me the name of Mr. Cole.

Q. Subsequently, you did take it up with his counsel? A. Yes, sir.

Q. Do you recall when you took it up with Mr. Fiske's counsel? A. Oh, I would say it was within a few days, or perhaps a week or two within the last time that I talked to Mr. Fiske.

[431] Q. How long was that before December 29, can you tell me that? A. Several months.

Q. Is it your understanding that though you made a request of Mr. Fiske's counsel, Mr. Cole, for the statement several months before December 29, 1938, Mr. Cole waited until Mr. Fiske was in Memorial Hospital, to take a statement? A. No. I do not understand that to be the manner in which it took place. I did not understand your question. I understood you to ask me when did I take up the subject of McCalls Ferry with Mr. Cole in response to Mr. Fiske's request. I said a few weeks afterwards. I think it was several months before that, I had spoken to Mr. Fiske. When I spoke to Mr. Cole, and when Mr. Cole was requested to obtain this statement, some two or three months had elapsed, I believe after I had first taken up the Fiske matter with him, and he promptly secured the information.

Q. Did he tell you at that time that Mr. Fiske was ill? A. Yes.

[432] Q. You told him to go ahead and get the statement, anyway? A. Yes. I told him to go ahead and get the statement anyway.

Q. Did you go to New York, on that date, December 29, 1938? A. I do not recall. I doubt whether I did or not. If I did, it was not on Mr. Fiske's business, but some other matter.

Q. Did you prepare the questions which appear in Exhibit 27, Part 9? A. No, I did not.

Q. Did you prepare the compilation or memorandum for Mr. Cole's use in securing the answers which appear in Part 9 of Exhibit 27 for Identification? A. Yes, I did. I prepared a description of Mr. Fiske's connection with the enterprise, and supplied Mr. Cole with the documents from our records, supporting it.

Q. I think you did not see the document until it was signed, or rather until after it was signed and sworn to by Mr. Fiske? A. Yes.

Q. Mr. Cole mailed it to you? A. I believe it was mailed to me, as I recall.

Q. No. 21 of Exhibit 27 for Identification; that is, [433] that would be Part 21 of Exhibit 27 for Identification, appears to be the testimony of James H. Harlow regarding the value of McCall Ferry stocks and bonds.

Am I to understand that that testimony was given in 1907 in the Circuit Court of Cecil County, Maryland in a case entitled, "Susquehanna Power versus the Proprietors of Susquehanna Canal"? A. That is correct.

Q. Is this all of Mr. Harlow's testimony in that case? A. No. He gave a very great volume of that testimony, but that is all of the testimony relating to the value of those securities.

Q. Who made the selection from his testimony? A. I made it.

Q. Did you read all of his testimony in that case? A. I did not personally read it all. I instructed another person to read it and mark the references in the testimony to the McCall Ferry Power Company stocks and bonds, and the value thereof.

Q. I am advised that Cecil County, is Cecil County, Maryland? A. Yes, that is in the northern part of it, I do not think I identified this.

Q. Well,—I think the record is a little unclear [434] now, because you are pointing to something, and it will not show in the record. Do you mean that you examined only those parts of this witness's testimony which someone else in your Company has interpreted as relating to the cash value of the common stock at the time of its issuance; is that right? A. That is substantially correct; of course, I did read a certain portion of it.

Q. But you read, presumably, all of the testimony that was marked? A. I believe I did.

Q. Who read, presumably, all of the testimony that was marked for you to note? A. I do not recall. I think it was either Mr. Chase, or Mr. Bortner.

Q. I presume Mr. Harlow is dead? A. Yes, I believe he is dead.

Q. When did he die? A. Oh, he died several years ago. I never knew him.

Q. He was alive at the time you made your investigation? A. No. I do not think that he was. I think he died considerably before that.

Q. Just when did he die, before 1938? A. Yes, I think he probably died; well, I just do not know, but before 1938, yes.

[435] Q. Did you make any investigation to ascertain whether he was living at the time you were collecting all of these statements from those who had been associated with him during the early history of the Penn Water and Power Company? A. Yes, I ascertained that he was then dead.

Q. Turning to Part 24 of Exhibit 27 for Identification, that appears to be an affidavit of Mr. James G. Hopkins? A. Yes.

Q. Is Mr. Hopkins alive? A. I do not know. I have not inquired since this affidavit was taken.

Q. Who was he? A. Mr. Hopkins was a lawyer and a member of the firm of Coudert Brothers. At the time the affidavit was taken in December, 1939, he was quite an old man, and he would only come to his office on more or less of a part-time basis.

Q. Mr. Aldred, whose statement is Part 46 of Exhibit 27 for Identification, died in 1946? A. No, I think it was 1945.

Q. 1945? A. 1945, if I recall correctly.

Q. Was it a year ago? [436] A. No, the latter part of last year.

Q. Again, in connection with Mr. Aldred's knowledge of the early history of the McCall Ferry Power Company, in [sic] [and] Penn Water Power Company, no effort was made, and no discussions were had, looking towards the

preservation of his testimony by way of deposition; is that right? A. I do not recall any.

* * *

MR. GOLDBERG: * * * I have scanned very casually these documents and apparently they are all intended to support the cash value of common stock issued by McCall Ferry Power Company.

Let me ask the Witness if I am right about that.

* * *

A. Yes. They are not all limited to that, but that is one of the purposes of it.

* * *

[440] Q. Am I to understand that the amounts included in Accounts 100.3 and 100.4 in Exhibit 25 means that the company is claiming their inclusion in the rate base? A. Yes.

Q. Will you describe this electric plant for future use? A. The greater portion of this amount shown in this account consists of transmission line rights-of-way between Safe Harbor Electric Plant station and Lancaster, Pennsylvania, the remainder consisting of other sections of Rights-of-way to parallel the present existing Penn Water & Power transmission lines.

Q. When were these rights-of-way purchased? A. At various times.

Q. When was the first purchase made? A. Purchase of rights-of-way for the line between Safe Harbor and Lancaster, Pennsylvania, I believe was first begun about 1924, as I recall it.

[441] The other portions of the rights-of-way, that parallel the present lines, so shown by the map, were bought at the same time the original transmission line was put up.

Q. That was 1909? A. No, there are not very many of them on the Baltimore line. A considerable part of these extra rights-of-way are on the 230,000 volt transmission line from Ellicott City to Takoma Park substation, Washington.

Similarly, some more parts of the transmission line rights-of-way parallel the Safe Harbor-Perryville 132,000 volt single phase railroad circuits.

Q. Do you have the details of Account 100.4 here with you? A. 100.4. I do not believe I have it here with me.

(The witness examines his papers.)

A. I do not find it.

Q. You say you do not have it here with you? A. I do not find it.

Q. I think you told me that the earlier purchases that you recall of rights-of-way between Safe Harbor and Lancaster, Pennsylvania were made in 1924? A. Yes.

Q. When were the last purchases made? A. We are still making them.

[442] Q. When was the most recent one? A. Within the last few months.

Q. A very large purchase? A. I do not recall the size of it, Mr. Goldberg.

Q. Does the Company have any plans for the utilization of that right-of-way between Safe Harbor and Lancaster, Pennsylvania? A. Yes.

Q. What do those plans contemplate in the way of putting the line into operation? A. They contemplate building the line out of Safe Harbor to the north and northeast as the development may proceed.

Q. When? A. You mean what date?

Q. Yes. A. They do not contemplate the precise and specific date.

Q. It may be ten years hence or longer? A. I do not think it will be quite that long. However, I do not have any definite date in mind, and we do not have any definite date in mind.

Q. How about these rights-of-way paralleling existing lines of the Penn Water & Power Company? Are there any definite plans for the utilization of these rights-of-way? A. There are plans for the utilization of them, but [443] definite is quite a quantitative term.

Q. Is there any definite date set for the construction to begin? A. No.

Q. No cost estimates have been made for constructing such a line? A. I think there may have been, although I am not sure.

Q. As a rule you would probably begin making estimates when it was anticipated construction was imminent? Is that not so, in view of the rapidly changing prices? A. You might make them much before that, even.

Q. Does the Account 100.4 include property owned by Pennsylvania Water & Power Company above the Safe Harbor project? A. No.

Q. Does Account 100.3 include any property owned by Pennsylvania Water & Power Company above Safe Harbor? A. No, not that I know of. The property owned by Pennsylvania Water & Power Company being constructed from Safe Harbor, as I recall it, is in Account 110.

* * *

[448] Q. Does the Company make it a practice to capitalize interest during construction on construction work in progress? [449] A. Yes, the Company does.

* * *

[450] Q. On those items that you are charging interest during construction, do I still understand it is your intention to include the item itself in the rate base? A. Certainly. It will be in the rate base when we put it in 100.1, won't it?

Q. That will be Electric Plant in Service? A. Yes, sir.

Q. What does interest during construction represent? A. Income foregone.

Q. During the time it is not earning revenue, is that [451] right? A. Yes, and prior to the time it goes into commercial operation.

Q. So that you want to charge interest during construction during the time that it is not in service, and at the same time secure a rate of return or additional income by

reason of its inclusion in the rate base, is that right? A. Certainly.

Q. Even though interest during construction is to compensate the company for revenue foregone during the time that it is not electric plant in service, is that right? A. Yes, quite so.

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[471] WILLIAM F. UHL,

was called as a witness by and on behalf of the Respondents, being first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION.

By MR. HOLL:

Q. Your name is William F. Uhl? A. Yes, sir.

Q. Where do you reside? A. Wellesley Hills, Massachusetts.

Q. And what is your profession? A. I am an engineer.

Q. Will you please state your educational qualifications and the experience you have had in your profession since graduation? A. I am a graduate of the Michigan State College, [472] 1902, with the degrees of Bachelor of Science and (sic) [in] Mechanical Engineer, and a degree of Civil Engineering. I am president of the firm of Charles T. Main, Inc., architects-engineers, at 201 Devonshire Street, Boston, Massachusetts.

Charles T. Main, Inc., carries on a general architectural and engineering business, consisting of consultation, investigations, reports, appraisals, designs, specifications for equipment and construction, and supervision of construction for industries, public utilities, municipalities and for state and federal government divisions.

I, personally, have specialized in hydraulic engineering and probably 50 per cent of my work in the past 43 years has been along lines of work where hydraulic engineering predominated.

I have been associated with Chas. T. Main and Chas. T. Main, Inc., for 36 years. Before joining Chas. T. Main I was connected with several machinery manufacturing concerns.

From June, 1902, to October, 1904, with the Stillwell-Bierce and Smith-Vaile Company of Dayton, Ohio, and their successor, the Platt Iron Works Company, as designer of steam and hydraulic machinery.

From October, 1904, to September, 1909, with the Allis-Chalmers Manufacturing Company of Milwaukee, Wisconsin, as designing and estimating engineer in the power department, engineer in charge, and acting manager of the hydraulic [473] department.

Since 1935, I have been a member of the TVA consulting board and have acted as a member of a number of special consulting boards studying and reporting to the TVA on special problems. I was also retained as consultant on the 240,000 kw. Watts Bar steam plant constructed by the TVA and acted as expert on water rights values for the TVA in several cases.

I am personally under contract with the U. S. Army Engineers as consultant in connection with the development of hydroelectric and flood control projects.

For a number of years I have acted as consulting engineer for the Flood Commission of the City of Hartford, Connecticut.

During the past four years my firm designed four large hydroelectric plants for the U. S. Engineers in Kentucky, Tennessee and Missouri. On this work I acted in an advisory capacity. At the present time my firm is designing two large hydroelectric and flood control projects for the same client on the Savannah River in Georgia and the Roanoke River in Virginia. I am acting as consulting engineer to the U. S. Engineers on these projects and in an advisory capacity to my associates who are preparing the plans and specifications.

From 1909 to 1930 I was connected with the design and construction of six hydroelectric plants for the Montana

Power Company, aggregating about 300,000 horsepower.

Since 1912 I have acted in a consulting or advisory [474] capacity for the Georgia Railway and Power Company on five hydroelectric plants, aggregating 180,000 horsepower.

I have also acted as consulting engineer on large hydroelectric developments in Maryland, Georgia, Alabama, Missouri, Washington and California.

During the past 36 years my firm has designed over 50 hydroelectric plants ranging from small plants of a few hundred horsepower to large plants up to 375,000 horsepower capacity. I have personally been connected with every one of these plants, either as consultant to one of my associates or in direct charge.

I have made valuations and appraisals for a variety of purposes, such as financing, accounting, condemnation, damages, taxation and rate cases, purchase and sale of properties. Example of such work carried out by me or under my direct supervision are:

Southern Kraft Corporation—valuation for financing of paper mills in Florida, Alabama, Mississippi, Louisiana, and Arkansas.

Commonwealth of Massachusetts—valuation for condemnation of portions of all industries located on the Ware, Swift and Chicopee Rivers in connection with the diversion of water for water supply purposes.

Tennessee Valley Authority—valuation for condemnation of water rights on the Hiwassee River in North Carolina and [475] Tennessee.

Parsons Paper Company—valuation for taxation of paper mill property in Holyoke, Massachusetts.

Tennessee Eastern Electric Company—valuation for rate base on public utility property in Johnson City and other points in northeastern Tennessee.

Union Water Power Company—valuation for purchase of water rights on Androscoggin River, Maine; again for taxation on the same property; and again at a later date for sale of the same property.

Public Electric Light Company—valuation for purchase of water rights on the Lamoille River in Vermont.

American Woolen Company—valuation for sale of water rights on the Winoski River in Vermont.

Amoskeag Manufacturing Company—valuation for sale of developed water power property on the Merrimack River, Manchester, New Hampshire.

International Hydro-Electric Company—valuation for purchase of 33 water power properties in New York, New Hampshire and Maine.

City of Providence, Rhode Island—valuation for purchase of seven water power plants and privileges in connection with the development of the Scituate Reservoir on the Pawtuxet River, Rhode Island, for water supply purposes.

[476] Q. Mr. Uhl, you spoke of your being president of Chas. T. Main, Inc., and, therefore, will you give us some idea of the size of that organization? A. At the present time it is about 300 people we have on the payroll.

Q. 300? A. Yes. At the present time we have about 300 people on the payroll.

Q. Is your work principally design and construction supervision? A. Our work is principally making working plans and specifications for construction of industries and power plants.

Q. Can you give us some idea of the volume of business now under construction? A. Yes. We have about $75,000,000 worth of business on our books and in our office at the present time.

Q. During the war what was your organization? A. At one time we had 1,250 on our payroll, mostly on war work.

* * *

[484] CROSS-EXAMINATION.

By MR. GOLDBERG:

Q. In testifying as to your qualifications, Mr. Uhl, you mentioned a number of companies. You stated that you

made valuation studies with reference to the property of those companies? A. Yes.

Q. Did you also make depreciation studies in connection with the valuation studies? A. In all cases that was done.

Q. And you also stated that Charles T. Main is engaged in construction work primarily; is that right? A. No, sir. I said design work primarily, and supervision of construction.

Q. I see. A. Yes.

Q. I assume that you have working papers that support [485] your Exhibit 28? A. I have a great many of them.

Q. Are they available, or will they be available to staff for the Commission? A. I will be very glad to give you copies if my client says it is the proper thing to do.

Q. Are they in Baltimore? A. No, sir.

Q. Are they in Boston? A. They are in Boston, principally; some of them are here.

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[486] J. RHOADS FOSTER,

a witness called on behalf of the Respondents, and having been first duly sworn, testified as follows:

DIRECT EXAMINATION.

By MR. SPARKS:

Q. Please give your name and residence. A. My name is J. Rhoads Foster. My place of residence is East Allendale Avenue, Allendale, New Jersey.

Q. What is your occupation? A. I teach public utility economics and regulation in the Graduate School of Business Administration of New York University, and do consultative work for public utilities and government agencies.

Q. What has been your academic training, Dr. Foster? A. One year in James Millikin University, located in De-

catur, Illinois, and a total of six years at the University of Missouri—from 1925 to 1929, inclusive, and again from 1931 to 1933. I studied also at Columbia University and at New York University.

My courses of specialization at the universities were public administration, government, public utility regulation and economics. Public administration was my major field of interest.

At the University of Missouri I was graduate assistant [487] in Public Utility Law for a period of two years; graduate assistant in economics for one year, and Gregory Scholar in Political Science for one year.

At that institution I received the degrees of Bachelor of Arts, Master of Science and Doctor of Philosophy, the latter in 1933.

Q. What has been your teaching experience? A. I taught Government and Economics for two years at Wentworth Military Academy, a junior college in Lexington, Missouri. I was instructor in economics at the University of Missouri for one summer session in 1933. I was instructor in economics at New York University, School of Commerce, Accounts and Finance, for a period of three years—1935 to 1938—on a part-time basis.

Since 1938, I have been a lecturer in the Department of Public Utilities, School of Commerce, and the Graduate School of Business Administration of New York University.

The courses which I have taught in New York University include Public Utility Economics, Commission Policy and Administrative Procedure, Public Utility Law, Public Utility Price Policies and Practices, and Sales Policies and Practices.

Q. What has been your employment? A. During the period from 1929 to 1931, I spent considerable time in the preparation of text-book material [488] in the social sciences, being employed by Stephens College in Columbia, Missouri, for that purpose.

For a very brief time, I was associate director of employment for the State of Missouri.

Thereafter, beginning in October of 1933, I was supervisor of a research bureau in the rate engineer's department, New York Edison Company.

I later was made assistant to the rate engineer and continued in that employment until May of 1937. My work in that connection was rate studies, rate schedule design and studies of special pricing problems.

On May 1st, 1937, I resigned to become Economist to the New Jersey Board of Public Utility Commissioners. I also served as Director of Special Investigations, for that Commission, and continued in the employment of the New Jersey Commission until my resignation in July, 1942.

Q. Dr. Foster, what were your duties as a member of the Staff of the New Jersey Commission? A. My duties were generally in connection with rate, accounting and financial proceedings in which unusual or significant issues were presented for the Board's consideration. Upon request I advised the Board with respect to other questions of regulatory policy or practice.

The largest proportion of my time was spent in consideration of problems of rate regulation.

[489] I mean by "rate regulation" questions concerning reasonableness of the returns to particular utilities as well as questions involving discrimination and form of rate schedules.

I was concerned, generally, with accounting regulation, and was at time in close touch with the work of the accounting division of the Board's staff.

Q. Did you prepare studies of the fair rate of return to public utilities in New Jersey? A. I prepared such studies for nearly all the electric utilities in New Jersey, for several gas, telephone, and water utilities, and for one sewerage company. I prepared such studies periodically for the larger public utilities.

Q. Did you serve as consultant to the Federal Communications Commission in 1938? A. Yes, in 1938 I was, for some months, on leave of absence from the Board as

consultant with the Federal Communications Commission in connection with rate of return studies.

I prepared a draft of the 1938 report of the telephone rate and research department of that Commission which report is entitled, "The Problem of the Rate of Return in Public Utility Regulation with Special Reference to the Long-Lines Department of the American Telephone and Telegraph Company."

I was primarily concerned in this connection with standards of fair return determination and with methods of estimating the replacement cost of capital to public utilities.

[490] Q. Have you been a member of the committee on Corporate Finance of the National Association of Railroad and Utility Commissioners? A. While a member of the staff of the New Jersey Board, I was for several years a member of the Committee on Corporate Finance of the National Association of Railroad and Utility Commissioners. I was chairman of that committee during 1941, and during 1942 prior to my registration from the Board's staff.

In 1940, in connection with that activity, I prepared a study of the relationship between security structure and cost of utility capital.

In 1941 I prepared, with the assistance of others, a general review of regulatory standards for security regulation. Those studies are published in the NARUC proceedings.

Q. As a consultant to the New Jersey Commission, after your resignation as economist, did you develop the provisions with respect to basic rate of return which are a part of the rate adjustment plan applied to New Jersey Power & Light Company by that commission? A. I did. So far as I know this is the only sliding scale agreement in which the basic rate of return is adjusted annually by a formula devised to reflect changes in capitalization rates.

Q. Were you retained during 1944 by the New Jersey

[491] Commission to supervise the preparation of evidence and as its principal witness in a proceeding as to the reasonableness of return to the Electric Department of Jersey Central Power & Light Company? A. I was.

Q. Before what state regulatory commissions have you testified in proceedings with respect to security structures, capitalization rates or the fair return to public utilities? A. The commissions of Arkansas, New York, and Ohio, and the Securities and Exchange Commission.

Q. Please identify the proceedings in which you were a witness before these regulatory agencies. A. Before the Arkansas Commission the testimony was on behalf of the Arkansas Power & Light Company in 1944. During 1945 I testified on behalf of the Chillicothe Telephone Company before the Ohio Commission, and on behalf of Kings County Lighting Company before the New York Commission. * * * A. My appearances before the Securities and Exchange [492] Commission were for Utah Power and Light Company in 1943 and the Long Island and Kings County Lighting Companies in 1945.

Q. What studies or articles have you published? A. The first was a study of public utility franchises in Missouri and the relationship of the short-term franchise to the question of centralization in regulation. That was a study of regulatory method and administrative organization.

I published a pamphlet entitled "The Federal Power Commission and State Jurisdiction," which was an analysis of the appropriate limits of the regulatory jurisdictions of the Federal Power Commission and state commissions.

In 1940 I wrote two articles which were published in a special supplement to the Journal of Commerce, which supplement was concerned with public utility integration under the Holding Company Act.

Also for the Journal of Commerce, I prepared a study of public utility taxation during the war period and a study of public utility valuation and state regulatory policies with respect to fair value determination.

In July, 1944, I wrote an explanation of the New Jersey Rate Adjustment Plan which was published in Public Utilities Fortnightly.

Since 1942 I have written the chapter on public utility law in the Annual Survey of American Law, published by the New York University School of Law.

[493] Q. Of what professional societies are you a member? A. I am a member of the American Political Science Association, the American Economic Association, the Technical Valuation Society, and the New York Society of Security Analysts.

Q. Are you familiar, generally, with the organization, operations and financial structure of the Pennsylvania Water & Power Company? A. I am.

Q. Have you made a study to determine what in your opinion is the fair rate of return to Pennsylvania Water & Power Company and the Susquehanna Transmission Company of Maryland? A. I have.

Q. What is the meaning of the term "return"? A. The return of a public utility consists of the net operating revenue, or utility operating income, remaining after payment or deduction of reasonable operating expenses, depreciation and taxes, and before deductions which reflect the periodic return on capital. It is the amount available to meet contractual and other costs of capital.

The "actual return" is the return experienced during an accounting period, as recorded on the basis of acceptable standards of income determination.

The "fair return" is the return established as fair and [494] reasonable by the process of rate regulations; it may be the same as, or either more or less than the actual return which the enterprise has earned.

The fair return to a public utility is a legal or regulatory concept but the establishment of the annual amount which is fair and reasonable in a particular situation depends upon application of economic criteria.

Q. What is the meaning of the term "rate of return"? A. The rate of return is the percentage ratio of the return, a number of dollars, to some base or principal amount. Under the formula of rate regulation this base is the rate base. The rate of return, therefore, may be understood either as the actual rate of return experienced during an accounting period or as the rate of return allowed or allowable as fair and reasonable.

Q. What is the economic criterion of the fair return to investors? A. The economic criterion is the price of capital or the prospective return which will induce an adequate supply of capital to enter the business upon the most advantageous cost basis.

The price of capital in the case of a given utility is a return adequate to maintain and support its credit and enable it to raise the capital funds necessary for the proper discharge of its public duties.

[495] Investors in a public utility enterprise are entitled to a rate of return equal to that generally being received at the same time on investments in other business undertakings which are attended by corresponding risks and uncertainties.

Q. Do competitive forces determine the price of capital to public utilities? A. Yes, like every other type of business enterprise, public utilities must secure their capital in an intensely competitive capital market. It is for this reason that regulation must provide a return comparable with that being realized generally from investments in other business undertakings attended by corresponding risks and uncertainties.

The measure of the fair return to a regulated utility is the return available to investors from alternative, comparable opportunities for investment.

The price of capital is the result of the choices of investors among all the alternative opportunities for the investment of available capital funds.

Q. Is the return expected by investors a cost of utility capital? A. The prospective return which will induce

investors to make available an adequate supply of capital is an economic cost. Like every other business the public utilities must secure their capital funds in a competitive capital market.

It is proper, therefore, to identify the aims of [496] regulation with the conditions of free workable competition. It is obvious that under regulation a return should be provided comparable with that realized generally in unregulated businesses of similar risk characteristics and that unless such return is made available, capital funds will not be forthcoming.

Therefore, the measure of the fair rate of return to a regulated utility is the return available to investors from alternative opportunities for investment. The cost of capital is the result of the choices of investors among all the alternative opportunities for the commitment of available funds.

* * *

[497] Q. How is the price determined? A. The price of capital to a given utility enterprise can only be imputed, on the basis of the best available evidence of invester appraisals. It must be established by a valuation process.

Q. What are the components of the price? A. In an economic sense the components of the price of capital are pure interest, compensation for risk, and compensation for investment management.

Q. What do you mean by pure interest? A. Pure interest is the hypothetical return which would be expected by lenders if the use of capital funds were free of risk. The hypothetical risk-free rate of interest is never separately expressed by marked or contractual rates [498] of interest. Long term investments in United States Government bonds may be as nearly risk free as any available investment, but the yield on government bonds undoubtedly includes some element of compensation for risk, such as the changing purchasing power of the dollar.

Q. What is meant by "compensation for risk"?

A. The second, and commonly the largest, component of the price of capital is compensation for risk.

Risk is a general term used to mean any conditions beyond control of the investor which may tend to reduce the annual compensation to be received by the investor for the use of his funds or may interfere with eventual recovery in a liquid or alternatively useful form.

It is apparent that there are three general classes of risk. Some hazards, such as the probability of loss by fire, may be foreseen; their distribution may be estimated and they may be provided for by insurance.

The probability of other losses, although not insurable, is estimated on the basis of past experience and informed judgment, and are provided for by charges to operating expenses.

The risks which are recurrent, subject to estimate and provided for in operating expenses, need not be provided for in the fair return to the extent that the investor believes that they are fully provided for in expense.

[499] The third class of risk arises from events which are only possible or which may occur at an unpredictable time, with unpredictable effects, or which may never occur. This third type of risk includes those which arise from all the unpredictable improvements in the arts or the technology of providing service.

Examples of the loss of part or all of the invested capital because of changes in the market served, with disappearance of the opportunity to earn a return, are easily found among public utilities.

The risk of loss from possible competition is not appropriately provided for by charges to depreciation expense or insurance.

The supply price includes a premium for the assumption of risk and uncertainty, not to compensate for future losses, which are unknown and unpredictable, but to compensate investors for taking the chances of such loss.

Q. What is the third component of price to which you referred? A. A third component of the price of capital is the compensation required by investors, first, for appraisal of the factors which furnish the basis for choosing between one investment opportunity and another, and second, for the continuing attention and management activity required of owners and investors.

[500] No economic burden is willingly borne without compensation. The burden of making investment choices is substantial; once investments are made there remains the burden of continuing analysis and comparison between the securities held and other investments which might be substituted.

The cost of investment management is least for the relatively risk-free investments and increases with the degree of risk in the investment.

Q. Do all investors in a given company assume the same risks and expect the same rate of return on their invested capital? A. No. The risk present in investment in a particular business enterprise commonly is distributed among the different classes of investors by means of the security structure, in accordance with the varying preferences of investors for security and for income.

The bond holder sacrifices a larger return in exchange for the greater security of his investment provided by the mortgage, and the assurance of income provided by the mortgage and the prior claim on the income which may be available from the business.

The common stockholder is in a residual position with respect to income and the distribution of assets in the event of liquidation. Therefore, he assumes a larger share of the risks inherent in the operation of the business and expects [501] a larger return per dollar of investment as compensation for the chance of loss.

Some investors are precluded by inclination, duty or statute from investing their funds in a risky situation;

others are willing to take the chance of loss for the sake of the chance of a larger gain.

Q. Are market appraisals made by investors in terms of three economic components of the supply price? A. No. Market appraisals of investments are not commonly made separately for riskless interest, compensation for risk and compensation for investment management; instead, they are made primarily by reference to factors which as a matter of business judgment determine the risk present in the investment.

Q. What are the bases of business judgment as to the value of alternative investment opportunities? A. The value of an investment is necessarily the value of the prospective returns, income and principal. All knowledge of a particular investment situation must be derived from past experience, and investment analysis is a process of using past experience as a basis for forecasting the future.

The prime basis of business judgment as to annual income expected from a commitment of capital is the prospective stability or certainty of the income and the security of the principal. The characteristics of the utility and of the [502] market which it serves are pertinent to the question of comparative income stability and security of principal.

Various tests and criteria are applied as an aid to the exercise of business judgment.

Times interest earned and times preferred stock requirements earned are the convenient and most widely used measures of protection of the return on bond and preferred stock investments. It is generally recognized that the stability of return to common stock investments varies, among others, with the proportion of gross income normally available for common dividends, since the impact of fluctuations in gross income is diffused as the proportion normally available for dividends increases.

It is obvious that these measures are not independent of the capital structure. Neither are they independent of

the market characteristics and other characteristics of the enterprise which determine its income producing capacity.

Q. Are there other factors which influence investor appraisals? A. Yes. For instance, dividend policy and practice also influences the rate at which income available for common stocks is capitalized in the market.

A company policy of maintaining, or ability to maintain, a regular dividend rate influences directly investor appraisal of prospective stability of annual income from the investment. [503] Company policy with respect to the division of available income between income paid out as dividends and income retained in the business also is an important factor.

Income prospectively to be received as dividends is capitalized by investors at a lower rate than the same amount of income expected to be retained in the business for the purpose of increasing its productive capacity.

It is obvious that this factor is not wholly independent of the ratio of equity income to gross income.

Q. What is the significance of this factor in relation to the fair return determination? A. There is need for allowance, in the fair return, of a margain to be retained in earned surplus. As a matter of business management and policy a practice of paying out as common dividends all available earnings is imprudent.

Financial stability, the ability to avoid wide fluctuations of dividend rates as a result of changing business conditions, the ability to finance improvements without resorting to the capital markets under unfavorable conditions, all suggest the desirability of a reasonably conservative dividend policy.

Q. Are there still other factors which influence judgment as to the value of investment opportunities? A. Yes, there may be many such factors. The general reputation and investor appeal of the class of industry to [504] which the enterprise belongs is an important consideration. The distinction between businesses with prospects of

growth and expansion and businesses with restricted growth prospects is significant.

The margin of revenue available for return to investors is a factor. The return from investments in enterprises with relatively high operating ratios is relatively vulnerable to the effect of cyclical fluctuations of demands.

Since income and excess profits taxes are based upon income, excess profits and income taxes payable at high rates provide a cushion which is a favorable factor.

Size of the enterprise is another factor, not so much for its own sake, but because of the relationship between size and such characteristics as diversity of demand for service, the prospective stability of income, the marketability of outstanding securities and their legality as investments for fiduciaries and institutions.

The valuation of marketability is in large part independent of the valuation of risk inherent in the enterprise. The existence of an organized market, in which the investment is continually traded and subjected to appraisal provides an advantage which is independent of relative freedom from risk.

Q. How are investors' appraisals expressed or measured? A. The appraisals of opportunites for investment are expressed in the market place by the prices of securities. [505] The market price, however, is determined by both the amount of yield or return expected from the investment and the capitalization rate. The capitalization rate is the ratio of prospective income to the investment upon the basis of which investors are willing to purchase the prospect of income.

Thus, where the prospective income is relatively assured, investors may be willing to purchase a bond at a market price of $100 in order to be entitled to receive $2.50 per year.

The capitalization rate of 2.5 per cent exists in view of the security market conditions and the risk present in the particular and alternative investments. Where the em-

ployment of the capital is relatively risky, the return which must be in prospect per dollar of investment is much higher.

Therefore, the measure of investor appraisals is the capitalization rate, or the rate at which investors capitalize the prospective income.

Q. What are the evidences of the capitalization rates existing at any one time in the case of a particular company? A. Yield to maturity at the price at which new or refunding bonds are sold to the public by underwriters is evidence of the capitalization rate which exists in the case of debt capital.

Similarly, the yields to maturity at the prices at which the bonds of an outstanding issue are currently traded in the market are evidence of the capitalization rate.

[506] In the case of preferred stock capital, yield at market price, either the issue price or a subsequent market price, is evidence of the rate at which income prospectively available upon the basis of the particular contract is capitalized. Yield at bid or asked quotation similarly may be evidence of the capitalization rate.

Q. What is the evidence of the equity capitalization rate? A. The percentage ratio of earnings per share to market price per share of common stock, known as the earnings price ratio, is evidence of the rate at which prospective income from a given equity investment is capitalized. The reciprocal price earnings ratio is commonly used by security analysts. It has the disadvantage of a form which does not correspond to the capitalization rate.

Although the earnings price ratio is evidence of the capitalization rate or price of equity capital, its significance and meaning as evidence must be considered in the light of the circumstances.

Q. Why do you say that the earnings price ratio may not be accepted as either the same as, or as a reliable measure of, the equity capitalization rate?

A. Because either the price or the earnings used to establish the earnings price relationship may not be representative of typical investor expectations.

[507] Q. Why do you say that the price component may not be representative? A. When an earnings price ratio is stated as of any given time, it is necessary to use such price as may have been reported for the particular common stock in the recent past. The particular security may be widely distributed, actively traded and exposed to continuous investor appraisal, or it may be closely held, seldom traded and only occasionally a subject of active interest on the part of security analysts. A large block of shares may not be marketable at the price at which small lots are traded. If no sales are reported the earnings price ratio may be stated by bid or asked quotations. If so, the bid or asked quotations may not represent the price at which either a small or a large number of shares could actually be sold.

The market price of a common stock may not be significant for another general reason. The capitalization rate is the ratio of prospective income to the investment which investors are willing to make in order to be entitled to receive the prospective income.

Common stock, however, is continually bought and sold for speculative as well as investment purposes. The prices of securities purchased in anticipation of a short run profit from price appreciation may not reflect in significant degree appraisals of prospective income. It is the essential [508] character of the speculator that he buys because he thinks stocks are going up, not because he thinks they are cheap. Conversely, he sells when he thinks the tide will turn.

When the speculative motive is dominant, either in the market for a particular stock or in the stock market generally, the prices may be unrepresentative of investor appraisals of prospective income.

Q. Why do you say that the earnings component of the earnings price ratio may not be representative? A. The earnings component is commonly stated as the earnings per share during a past accounting period. Income to be received by an investor, and upon the basis of which the opportunity is purchased, is always future income. Past

income per share is no more than an indication of the income which may be expected in the future.

Therefore, it necessarily follows that the income reported for a past accounting period may be either more or less than the income which in the opinion of investors is to be expected in the future. Reported earnings per share may not represent normal operating and other conditions even for the given past accounting period.

Investors give consideration to the changing conditions which determine the prospects of future income.

Q. Why do you say that reported earnings per share may not represent normal operating and other conditions for the [509] given past accounting period? A. Results of operations are reported to stockholders on the basis of diverse standards of reporting. Significant non-recurring items of revenue, of expense or of charges against income may affect the actual earnings for the year.

For instance, assume that a company refinances its outstanding debt in the amount of $10,000,000, effective as of July first, substituting 3 per cent for 5 per cent bonds. Unamortized debt discount and expense is applied as a reduction of net taxable income. Interest charges in the amount of $100,000 during the first half of the year would be a non-recurring burden on income. On the other hand, assuming an income tax rate of 40 per cent, the income tax reduction of $40,000 also would be non-recurring.

The income statement may or may not include an item in lieu of the tax reduction. Adjustment for non-recurring items is required if the statement of past earnings is to be a significant guide to future prospects and such adjustments are made by security analysts as a matter of course.

Q. When adjustments have been made for non-recurring items, do the earnings experienced during a past accounting period then become a measure of prospective earnings? A. No. They become merely a more useful guide. An informed forecast of future earnings is made with consideration of all the known factors which influence

the trends of [510] revenues and expenses. Market demands may be either expanding or contracting.

General business trends are considered in relation to the prospective cost levels. As an obvious illustration, substantially higher federal income tax rates were expected during 1941. The prospective income upon the basis of which utility common stocks were bought during 1941 did not correspond to the income reported for earlier accounting periods.

Similarly, substantially lower federal income taxes were reasonably expected during the latter part of 1945. The additional earnings afforded by this prospective tax relief tended to be capitalized at that time.

Q. Does this discussion of the earnings price ratio mean that in your opinion the ratio should not be used in connection with fair rate of return determination? A. By no means. I have recognized earnings price ratios as evidence of market appraisals of prospective income. No other type of evidence is available. When used for this purpose earnings price ratios should be expressed in the most significant manner possible; they should be treated as evidence and not as measures of capitalization rates; their meaning and limitations should be understood.

[511] Q. What is the distinction between the capitalization rate and the cost rate to the public utility? A. The price is only a part, although the largest component, of the total cost of capital to the business. The price of capital is established by the general market price of capital and investors' appraisal of the comparative quality and desirability of the alternative investment opportunities.

It is really expressed as the capitalization rate, or the prospective yield rate upon the basis of which the required capital is obtainable in the market.

A margin of cost exists between the yield at the price to the investor and the actual cost rate to the utility. This cost margin consists of the underwriting and selling commissions and the incidental expenses of flotation; it in-

cludes costs necessarily incurred by the utility in placing itself in a position of ability to enter into an advantageous arrangement for capital supply.

Q. Is there a cost of equity capital? A. The assertion is sometimes made that there is no cost of equity capital, but that assertion rests upon a confusion between "cost" and cash disbursement. The contracts with bondholders and with preferred stockholders provide specific yield rates and determine the cost of debt and preferred stock capital. A purpose of these security [512] contracts, the preferences and the protective features which are provided, is to distribute a relatively large share of the risks to the equity investors. The lack of a contractual yield rate does not serve to provide capital at no cost; the residual right to income is accompanied by greater risks and a higher cost rate to the enterprise. If it were otherwise the economic cost of capital could be avoided by the simple expedient of not paying dividends.

All capital could be obtained from equity investors; in the absence of cash disbursements there would be no "cost" and no return allowance would be required.

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Q. Is the cost of capital to a utility enterprise evidence of the fair rate of return, Dr. Foster? A. It is.

Q. What kind of capital cost rate do you include, current or experienced? [513] A. Different kinds of capital cost rates may be recognized as evidence of the rate of return, including original cost, historical cost, experienced cost, and replacement cost.

These different kinds of costs are each evidence of the fair rate of return, although the significance and value of each different kind of evidence depends upon all the facts and circumstances, including the method of rate regulation being followed and the kind of rate base which is fixed for the purpose of the proceeding.

Q. What do you mean by original cost of capital? A. One kind of capital cost is expressed by the cost rates

experienced by the enterprise at the time when commitments of capital were made by the original investors.

In the case of utilities which have grown in size over a long period of years, the existing supply of capital typically was obtained at different times and at different cost levels, as needed to finance new construction. The cost of capital represented by debt obligations is expressed by the ratio of annual interest and amortization requirements —to maturity—to the net proceeds realized by the utility.

The original cost of preferred stock capital also is calculable from accounting records and is the ratio of annual dividends to the net proceeds from original issues of preferred stock capital.

[514] With respect to common stock capital the original cost rate is not calculable from accounting records and may be established only with reference to the income prospects and the alternative investment opportunities existing—and the financing costs experienced—at the time the capital was committed to the business..

Q. What do you mean by historical cost of capital? A. A second kind of capital cost is expressed by the cost rates actually experienced as at the present date under the contracts for supply of debt and preferred stock capital and the cost determined by the income prospects and the alternative opportunities available to equity investors at the time of the commitment of equity capital.

The historical cost of debt and preferred stock capital is determined from accounting records. Expressed as a rate the historical cost of debt or preferred stock capital is the ratio between the annual requirements and the net proceeds to the enterprise from the issuance of such securities.

The annual requirements are defined to include all the costs of redeeming outstanding securities or eliminating, revising, or consolidating existing contracts in order to give the company access to lower capital costs or more favorable terms.

Therefore, although the historical cost of debt and preferred stock capital is determined from accounting records, [515] the treatment and disposition given to such costs for accounting purposes does not affect their nature or propriety of their recognition and treatment in determining the cost of capital.

Q. What do you mean by experienced cost of capital? A. This third kind of capital cost is the same as the historical cost of capital with respect to the cost of debt and preferred stock capital, but includes the cost of equity capital at the rate determined by the income prospects and the alternative opportunities currently available to equity investors.

Q. What do you mean by replacement cost of capital? A. The replacement cost of capital is expressed by the cost rate which would be experienced under current market conditions, reflecting the advantages and disadvantages available to a utility free to replace its capital on the basis of a hypothetical capitalization and financing, without the inclusion of any cost of retiring outstanding securities or eliminating the existing capitalization.

It is obvious that the replacement cost of capital must be imputed or estimated and that the accounting records of the company are not the source of information with respect to this kind of capital cost.

For instance, a continuing provision for amortization of unamortized debt discount and expense experienced in connection [516] with previous financing is not a part of the hypothetical replacement cost of capital.

Q. Do any of these concepts which you have just defined imply the existence of a going concern? A. They all do with a qualification as to original and historical costs of capital.

It is obvious that it is one thing to begin a new enterprise; another to recapitalize an existing one. The new enterprise must organize as a corporation; it must assemble the nucleus of a working organization; provide itself with

production and distribution facilities; design business routines and by degrees train a staff of employees to carry them out.

All of these activities involve costs which do not necessarily reflect themselves in the appraisals of investors.

These different kinds of evidence of the fair rate of return do not include any allowance to cover the costs of establishing a going concern beyond those which are reflected in investor appraisals.

The replacement cost concept is defined here to include the assumption that the enterprise is a going concern but necessary and unavoidable costs are associated with achieving the status of a going concern in a position to obtain capital on the basis of a hypothetical capitalization.

Q. How may going-concern costs become reflected in [517] investors' appraisals? A. Investors will characteristically accept a lower prospective return upon the securities of a going business having a record of successful operation behind it, than upon those of a new establishment which has yet to prove its ability to provide the promised or hoped for compensation for the use of capital supplied to it.

Since original and historical costs of capital reflect investor appraisals at the time of original commitment of capital to the enterprise, they tend to reflect the higher risks of the new enterprise and may, therefore, include some allowance for costs associated with the establishment of the enterprise as a going concern.

Q. You testified that the significance and value of each different kind of evidence depends upon the circumstances, including the method of rate regulation being followed and the kind of rate which is fixed for the purpose of the proceeding.

Why are you of this opinion? A. The amount allowed as a reasonable annual return is the product of both the rate base and the rate of return which is applied to the rate base. Therefore, the reasonable rate of return

cannot be determined independently of the rate-making method and the rate base determination.

If, as a matter of administrative policy, original cost or prudent investment is adopted as the rate base, the rate of [518] return becomes the means by which the desirable flexibility can be maintained and reasonable end results reached.

Regardless of the method of rate regulation adopted by the commission or required by the statute from which its authority is derived, the objective is the determination of a fair rate of return as the number of dollars.

It is the impact of a rate order, the fair return allowance, which is subject to the most searching tests of reasonableness.

Q. As I understand it, you are saying that if a rate of return of, say, six per cent applied to a rate base of $100 million yields a fair return, the same rate of return applied to a rate base of $60 million, established by a different method of rate regulation would not yield a reasonable result? A. That is correct. If a return allowance of $6 million is reasonable, adequate, and not excessive, a return allowance of $3.6 million cannot be reasonable.

Similarly, if the rate base were fixed at $150 million by the application of some other regulatory formula, a return allowance of $9 million would not be reasonable.

The credit position of a company and its ability to attract additional capital depends primarily upon the return allowed, rather than upon either the rate base or the rate of return viewed independently of each other, although the regulatory process may have its own influence upon the cost [519] of capital to the regulated enterprise.

Although the process of rate regulation may not be bound by formulae, the fair return, as the end result, should be reached by a rational process and the result should be subjected to criteria of reasonableness which are based upon a recognition of the purposes of regulation.

Q. In general, what do you believe to be the applicable criteria? A. In my opinion, the general criteria are:

First, upon what basis does the rate making process undertake to encourage and induce the investment of capital in the regulated enterprise, and second, how significantly do the results of the rate making process depart from the alternative opportunities available to investors.

Q. What are the bases upon which the rate making process may seek to induce the investment of capital? A. One such basis is the allowance of a return equivalent to the hypothetical replacement cost of capital. It may be called the competitive replacement basis.

It would seek to provide the return which is available to invested capital from alternative opportunities having comparable qualities of risk and uncertainty and responsibility for the management of investment.

Prudent investment is the second basis upon which the regulatory process may undertake to induce the investment of [520] capital in public utility enterprises. The theory of this basis is that investors contribute a specific amount of capital—dollars—not any specific property, and that additional capital will be forthcoming if they are permitted to earn a return, on the amount actually contributed, at the rate of return expected when the funds were commited to the enterprise, and that on this social contract additional capital will always be available at currently compensatory rates of return expectation.

Q. Please define the competitive basis more fully. A. The competitive standard involves the proposition that capital committed to a public utility enterprise is subject to the impact of all the changes which may take place in a dynamic and competitive economic society.

Among these changes are fluctuations in the general level of prices and in the cost of constructing particular production facilities, inflationary or deflationary movement of prices, improvements in technology and changes in the demands for utility service.

Therefore, the competitive return to investors is the product of the rate of return currently expected by in-

vestors, applied to the current costs of replacing the plant facilities.

The rate of return currently expected per dollar of investment is measured by the returns currently available from alternative investments of corresponding risk.

[521] The required capital is the amount necessary to construct a utility plant of "up to date" technological design, capable of supplying the service which is being supplied by the existing plant.

According to the competitive standard, the consumers should pay a return of no more than the cost of replacing the plant with one capable of supplying the same service.

The rate of return which corresponds to the competitive standard is the cost rate which would be experienced if the enterprise were free to replace its capital, on the basis of a new capitalization, without incurring costs to retire outstanding securities or eliminate an existing capitalization.

Past costs associated with a capitalization are "sunk" for the same reason that the past costs of existing plant do not determine prices in a fully competitive society.

A new enterprise would incur the cost of capital which would be determined by the returns expected by investors and the kind of capitalization which prudent management would be free to establish.

Q. Does the competitive basis require consistent determination of the rate base and rate of return? A. Yes, if the return is to correspond to the alternatives currently available to investors, both the capital replacement cost rate and the amount of investment required [522] at current prices to provide the same service must be recognized.

Except by accident, the competitive return would not be fixed by applying a replacement cost rate of return to a prudent investment rate base.

Similarly, a competitive return would not be found by applying a historical cost rate of return to a replacement cost rate base, except by accident.

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Q. Dr. Foster, does the investment basis require a consistent determination of the rate base and rate of return? A. Yes, if the return is to correspond to the returns expected at the time of the commitment of capital and upon the basis of which the investment was made, it must reflect [523] both the historical cost of capital rate and the amount of the historical investment prudently made.

If the return to investors is to be upon the basis of their past sacrifices, it must be fixed at the rate which corresponds to their expectations when the sacrifice was made.

Therefore, unless by accident, a return fixed by applying a replacement cost rate of return to a prudent investment rate base would not be consistent with the investment cost method of rate making.

Similarly, a return fixed by applying a historical cost rate of return to a replacement cost rate base would not be consistent with the investment cost method.

Q. In your opinion, does the investment cost method of rate regulation have administrative advantages? A. Yes, I believe that the prudent investment method of rate regulation has some administrative advantages.

The needs for information can be supplied in large part by accounting records, assuming they accurately reflect economic facts; an attempt to conform to the competitive standard requires that both the rate base and the rate of return be imputed.

Also, adoption of the investment basis tends to relieve investors of certain risks associated with the capitalization if it is consistently employed as explained above; if not, the [524] administrative advantages may be unfairly gained at the expense of the investor.

Q. You testified that the return allowance is an end result of regulation and that this end result should be subjected to applicable criteria of reasonableness.

You have discussed one such criterion—the basis upon which the rate making process undertakes to induce the investment of capital.

What do you mean by the second criterion, which was "How significantly do the results depart from the alternative opportunities available to investors"? A. Consistent recognition of either the competitive or the investment basis does not necessarily mean that the regulatory purpose of inducing the continued investment of utility capital will be accomplished.

Either method must be adapted to particular circumstances if unreasonable end results are to be avoided.

Either the competitive or the investment standard, however, provides a "conscious design for decision" instead of resting the end result upon "intuition".

A consistent recognition of the investment cost basis might in some circumstances yield results wholly inadequate to attract new capital.

If the cost of constructing capital goods and the price of capital were each to trend sharply upward the return [525] provided by the investment cost method of rate regulation might vary widely from the returns alternatively available to investors.

If construction costs increase at the same time that the price of capital declines, it is obvious that the effect of these movements is counteracting.

Therefore, the result of applying the prudent investment method should be tested against the competitive standard.

Q. Might a consistent recognition of the competitive basis yield unreasonable results in some circumstances? A. Yes. The competitive standard rigidly applied may yield unreasonable results.

For instance, the most economical capital structure at a given time may conflict with a standard of "conservatism" in security regulation; it may include a proportion of debt in excess of what would be approved either by regulatory authority or by prudent management.

The question may be presented in some instances as to whether or not in view of existing contractual obligations

a return based on the competitive standard will maintain solvency. The regulatory authority cannot lose sight of the public need for continued service but must determine whether solvency is worth maintaining.

The practical necessity of giving consideration to contractual costs, in order to maintain ability to attract [526] required capital, may be even more urgent where a competitive return would not result in bankruptcy but might prevent the payment of preferred dividends.

Q. May the end result of the rate making process be subjected to these criteria regardless of the method employed? A. Yes. Assuming that the process of rate regulation is pragmatic, in the sense that it does not proceed consistently by any method, its results may and should be subjected to the tests presented by the competitive and investment standards.

[527] Q. Have you made a study and reached a conclusion as to the experienced cost of capital to Pennsylvania Water & Power Company as at the present date? A. I have.

Q. In general, how have you proceeded? A. I have made a study of the capitalization rate upon the basis of which Pennsylvania Water might obtain equity capital as at the present time. In doing so I have given primary consideration to the evidence of investors' appraisals of the prospective income from their investments in the Pennsylvania Water common stock. In this connection I have given consideration to the significance and meaning of the earnings price ratios. I have added to the imputed equity capitalization rate a margin for cost of financing in order to state the cost of equity capital to Pennsylvania Water.

I have determined the experienced cost of debt and preferred stock capital by use of data supplied to me by the company from their accounting records. Experienced cost of debt capital is defined for this purpose as the percentage ratio on a sinking fund basis between the annual requirements and the net proceeds to the enterprise.

The annual requirements include all the costs of redeeming outstanding securities or eliminating revising or consolidating existing contracts in order to give the company access to lower capital costs or more favorable terms. Similarly, [528] the experienced cost of preferred stock capital is defined as the ratio between the annual requirements and the net proceeds to the company.

Finally, I have combined these cost rates in order to state the total or overall experienced cost of capital.

Q. In determining the equity capitalization rate, why have you given primary consideration to the evidence of investor's appraisals of the prospective income from their investments in the Pennsylvania Water common stock? A. Because in my opinion these data provide the most significant evidence. The market prices of the Pennsylvania Water common stock express the composite market judgment of what is necessary and adequate compensation for the risks inherent in this investment.

I believe that, properly interpreted, the results of the collective appraisals are a better guide to administrative action than the opinion or appraisal of any one individual. If an individual should reach a different conclusion, the composite market appraisals would, nevertheless, remain the best evidence of the price at which the particular enterprise could obtain additional supplies of equity capital.

Earnings price ratios are available for other utility common stocks and for industrial and railroad stocks. Some of these may be enterprises of corresponding risks and uncertainties. Some may not. Identification of those which are [529] comparable is necessarily dependent upon analyses and subjective judgment. Therefore, the relationships between the earnings and the prices of other common stocks are considered only for the purpose of aiding in the interpretation of the Pennsylvania Water earnings price ratios.

Mr. Sparks: Mr. Examiner, I have at this time a document entitled "Pennsylvania Water & Power

Company, Experienced Cost of Capital", containing a chart and six schedules. May this document be marked Exhibit 29 for Identification?

TRIAL EXAMINER: The document may be so marked.

(The document referred to was marked Exhibit No. 29 for Identification.)

By MR. SPARKS:

Q. Doctor, you have before you a folder containing a chart and six schedules, together with notes, which has the general title "Pennsylvania Water & Power Company, Experienced Cost of Capital", and which has been marked for identification as Exhibit 29. I ask you whether this was prepared by you or under your direction? A. It was.

Q. Will you please describe generally the chart with the title "Electric and Electric Combination Utility Earnings-Price Ratios, Mean of Medial Four of Six Ratios and Pennsylvania Water & Power Company"? A. The chart shows two lines which I will call curves. [530] One represents the Pennsylvania Water earnings price ratios monthly from January, 1912, to December, 1945.

The second curve represents a monthly average of the earnings price ratios of six electric and electric combination companies. These six companies are Boston Edison, Commonwealth Edison, Consolidated Edison of New York, Consolidated of Baltimore, Detroit Edison and Pacific Gas and Electric Company. The purpose of the second curve is to provide a standard or background which will aid in analysis of the Pennsylvania Water earnings price ratios.

The panel in the upper half of the chart contains a series of notes with respect to events and circumstances of general and particular interest in connection with the consideration of the earnings price ratio curves.

Q. What are the data shown by the schedule bearing the title "Schedule 1, Pennsylvania Water & Power Company, Monthly Earnings-Price Ratios, January, 1912, to De-

cember, 1945"? A. Schedule 1 is a tabulation of the earnings price ratios which are shown graphically by the solid line on the chart.

Q. Please describe the schedule with the title "Schedule 2, Pennsylvania Water & Power Company, Gross Income, Its Disposition and Income per Share of Common Stock, 1911-1945"? A. Schedule 2 consists of a sheet with 13 columns of [531] data and 13 attached pages of notes. I believe that the titles of the various columns on the tabular sheet are reasonably descriptive.

The principal purpose of the schedule is to show the adjustments made to eliminate from income the effect of non-recurring items and to state, in Column 10, the earnings per share of common stock outstanding at the end of each year. Reported income is adjusted for the effect of non-recurring or extraordinary items of revenue or expense. Adjusted earnings per share, Column 10, are calculated by dividing the equity income, Column 8, by the number of common shares outstanding at the end of each year. Column 9, per cent of gross income available for the common stock, and Column 13, the percentage ratio between common dividends and equity income, are statistical expressions of the comparative position of the Pennsylvania Water common stock.

Q. What was the number of common shares outstanding at the end of each year? A. From 1911 to 1922 inclusive, 84,950 $100 par common shares were outstanding at the end of each year. At December 31, 1923, the number had been increased to 97,693 and at the end of 1924 to 107,462. This number remained unchanged until 1927 when the $100 par shares were exchanged for no par shares on the basis of four no par shares for each outstanding $100 par share. Therefore, 429,848 shares were outstanding at [532] December 31, 1927, and the number has remained unchanged to the present time.

Q. What is the purpose of the adjustments of reported income shown by Schedule 2? A. In buying common

stocks as investments, prospective income and not past income is being purchased. Reported income is useful to the security analyst as an indication of what may be expected in the future. Prospective annual income is not measured by the earnings reported for the latest 12-month period. Prospective income obviously does not include extraordinary items of revenue, expenses or taxes which are not expected to recur or which are expected to recur only during a short future period.

In recent years, reductions of Federal income taxes because of deduction from net taxable income available in connection with refinancing of securities and sales of property have been among the most frequently non-recurring items. The unusual circumstances which bring about a significant reduction of taxes in the particular year are, in general, based upon differences in the accounting treatment of certain items for income tax purposes and for general financial purposes. The adjustments are limited to those typically made by security analysts to state the year's earnings on a so-called normal basis. The work was done by progressing from earlier to later years, on the basis of information currently available [533] from the annual reports of the company to its stockholders and care was taken to avoid the use of information available only at a later date. The adjustments are not forecasts; no attempt is made to anticipate the trend of demand, of prices or other factors from conditions which existed during the year for which income is reported.

The earnings price ratio is the ratio between the current earnings and the current market price of the stock. The capitalization rate represents the relationship between the current market price of the stock and the earnings which investors believe to be in prospect and upon the basis of which they are willing to pay the given price for the opportunity of receiving the hoped for income.

Therefore, the earnings price ratio is evidence of the capitalization rate but may not coincide with the latter.

The adjustment of reported earnings for the effect of nonrecurring items, which serves to normalize the earnings for the accounting period, is a step toward improvement in the quality of the earnings price ratios as evidence of the capitalization rate.

Q. Why do you show earnings available per share, as reported, Column 11, for only the years 1931 to 1945, inclusive? A. Beginning with the year 1931, the income statement in the annual report to stockholders included a net income item which, after deduction of preferred dividend requirements, [534] may be considered as reported equity income. Prior to that year, the income statement does not attach a positive label to the amount of net income.

Q. How have you derived Column 13? A. Column 13 is the dividend earnings ratio or the percentage ratio of annual dividends to the earnings available during the year for dividends. For the period from 1914 to 1930 the ratio is derived by dividing Column 10, the adjusted earnings per share, into Column 12, the annual dividend rate as at the end of the year. For the period from 1931 to 1945, inclusive, it is derived by dividing Column 11, the reported earnings per share, into Column 12, the annual dividend rate.

Q. Why do you use reported earnings for this purpose to the extent available? A. Because the reported or actual equity earnings are more pertinent with respect to the ability of the company to pay dividends; an extraordinary operating loss or windfall in a given year affects earned surplus available for dividends.

Q. With earnings per share, shown by Column 10 of Schedule 2, available, what are the further steps which you have taken in calculating the earnings price ratios shown by Schedule 1? A. I recorded the monthly market prices of Pennsylvania Water common stock for the period from August, 1911, to December, 1945, and determined the monthly averages of these [535] prices. Then I stated the earnings per share on a monthly basis by a method which

gives a smooth or gradual transition from the earnings of one year to those of the next. Finally, I divided the earnings per share for each month by the average market price for that month in order to obtain the earnings price ratio for the month.

Q. From what sources did you obtain the market prices of the Pennsylvania Water common stock? A. From the Bank and Quotation Record section of the Commercial and Financial Chronicle for the entire period from 1911 to 1945 and from 1913 to 1927, inclusive, from The Annalist, published by the New York Times. Bid and asked quotations were available from the General Quotation Section of the Bank and Quotations Record from 1911 to and including January, 1928. Thereafter, monthly high and low price and volume of sales on the New York Curb Exchange are reported by the Chronicle. In order to supplement the bid and asked quotations, I recorded the prices on the Baltimore Exchange as reported weekly by The Annalist from 1913 to 1927 inclusive and the prices on the New York Curb Exchange as reported weekly by The Annalist from 1924 to 1927, inclusive.

Q. What prices did you use in computing the earnings price ratios? A. I used sale prices in preference to bid or asked quotations, and where prices were available from more than [536] one securities exchange I used the price from the exchange on which there was currently the larger volume of trading in the particular stock. Prices are not available for the period from August to December, 1914, inclusive, when the stock exchanges were closed. I filled in this gap by interpolating from the July, 1914, and January, 1915, prices. Otherwise the prices used are the average of monthly high and low or bid and asked quotations.

Q. By what method do you state the earnings per share on a monthly basis? A. I assigned the earnings per share for each calendar year to the month of September within that year, thus recognizing the availability of information during the year with respect to the trend of

earnings and investors' anticipation of the results for the year. Then I stated the earnings per share for the intervening eleven months in such manner as to provide a regular progression from September of one year to September of the next year. That is, in stating the earning per share for the month of October, I gave a weight of 11/12th to the current year's earnings per share and a weight of 1/12th to the earnings of the following year. The weights for November were 10/12th and 2/12th, and so on until the earnings per share for August were stated by giving a weight of 11/12th to the earnings of the current year and 1/12th to the earnings of the past year.

[537] Q. You then divided the earnings per share as stated for each month by the average of the market prices for the given month to obtain the earnings price ratios which are shown by Schedule 1 and which are represented by one of the two curves on the chart? A. That is correct.

Q. Referring now to the broken curve shown by the chart in Exhibit marked for identification 29, how did you select the six common stocks represented in this average? A. It is not a selected group. I desired to use a group of dividend paying common stocks for which monthly sale prices are available and the composition of which did not change during the long period from 1910 to date. The six are substantially all which are available. Addition of the common stock of Southern California Edison was considered, but the outstanding preferred stock with participating rights makes computation of the equity income relatively difficult and the stock was excluded for that reason. A larger group might have been obtained by making substitutions from time to time or varying the number of stocks in the group but chaining of the earnings price ratio averages probably would have been necessary. The six are the most homogeneous group which could have been used for the purpose subject to the conditions stated.

Q. Are the earnings price ratios tabulated on Schedule [538] 3 the values which are represented by the broken curve on the chart? A. That is correct.

Q. Please describe the method by which you arrived at monthly earnings price ratios for the six common stocks shown on Schedule 3. A. I used the same method and followed the same steps as in connection with the Pennsylvania Water earnings price ratios. I read the annual reports of these six companies for nearly the entire term of years. In the case of certain years, particularly prior to 1911, I did not have the annual reports available and obtained the information from Moody's Manual. In instances where information, such as the dividend rate, was not given in the annual report, it was obtained from Moody's. I worked forward from earlier to later years. I prepared for each company an annual statement of gross income, fixed requirements, equity income and earnings per share, which reflected adjustments made for significant non-recurring items of revenue, expense and taxes. I then stated monthly earnings per share by weighting in the same manner as I did for the purpose of stating monthly the Pennsylvania Water earnings price ratios. The monthly prices of the common stock were obtained from the same sources and treated in the same manner as in the case of the Pennsylvania Water common stock.

Q. Why have you used the mean of a medial group instead [539] of some other kind of average? A. Exclusion of the extremes in computing the average tends to eliminate the effect of extraordinary factors which have an impact on a particular company and which otherwise would distort the average. The average is more nearly representative of the typical level and trend than it would be if the extremes were included.

Q. Have you made any check as to the stability of the companies represented in the average earnings price ratios, and their comparability with Pennsylvania Water, with respect to the proportion of gross income becoming available to the common stock? A. Yes, I have determined the proportion of gross income available as equity income for the four companies represented directly in the average

either during all or during the greater part of each of the five years ended with 1922, and similarly, with respect to the five-year period ended in 1940. During the earlier period of five years, the average proportion of gross income available to the equity was 54.6 per cent for the four companies and 54.7 per cent for Pennsylvania Water.

During the five years ended with 1940, the average for the four companies was 58.3 per cent and the average for Pennsylvania Water was 67.8 per cent.

Thus, there is reason to believe that the level of the [540] average is not affected by any long-run change in capital structures or proportion of total income typically available for the equity. The distribution of the Pennsylvania Water gross income did change, with a smaller proportion being required in the later years to meet prior charges so that, in this respect, the Pennsylvania Water stock is less comparable during the later period with the stocks represented in the average than it is during the earlier years.

Q. Does the increase in the proportion of gross income available for the equity mean that the earnings price ratio is higher or lower than would otherwise be the case? A. So far as the influence of this factor is concerned, the earnings price ratio is lower than would otherwise be the case.

Q. What do you conclude from the fact that Pennsylvania Water common stock has sold during recent years on a higher earnings price ratio basis than the average of the other four? A. It does so for reasons other than the broader participation in income.

Q. Why did you make the comparison for the five years ended with 1922 and the five years ended with 1940? A. A comparison of income distribution, between Pennsylvania Water and the other companies, would be meaningless for almost any year prior to 1918. The proportion of gross income available to the Pennsylvania Water stockholders increased from [541] 8.7 per cent in 1911 to 51.4 per cent

in 1917. It required several years for Pennsylvania Water to reach full utilization of the capacity initially planned. As for the five years ended with 1940, I merely took a period prior to the war.

Q. Have you made any check as to the stability of the companies represented in the average earnings price ratios, and their comparability with Pennsylvania Water, with respect to the proportion of equity income paid out as dividends? A. Yes, I have made a determination of the proportion of equity income paid out as dividends by Pennsylvania Water and by the four companies represented in the average, either during all or during the greater part of each of the five years ended with 1922; and similarly with respect to the five-year period ended with 1940.

During the earlier period of five years, the average proportion of equity income paid out as common dividends was 86.6 per cent for the four companies and 85.1 per cent for Pennsylvania Water. During the five years ended with 1940, the average for the four companies was 81.8 per cent and the average for Pennsylvania Water was 84.6 per cent.

Thus, there is reason to believe that the average is not affected by any long run change in the dividend policy or practice of the companies represented in the average. Also, in this respect, Pennsylvania Water is generally comparable with the companies represented in the average.

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[543] Q. Dr. Foster, where you have used the term "Penn Water" throughout your testimony does that term include the Susquehanna Transmission Company of Maryland? A. It does.

Q. Have you given consideration to factors which, in your opinion, influence or determine the fluctuations and movements of the earnings-price ratios shown by the chart in the exhibit? A. I have.

Q. What are some of those factors? A. For the purpose of analysis, they may be classified generally as:

(1) Those which are related to experienced secular growth or expansion in scale of operations.

(2) Those which are related to the cycle of business [544] prosperity and depression.

(3) Those which arise out of speculative trading in the securities markets.

(4) Those which are related to other events which have a general impact on all enterprises or on all of a class of enterprises.

(5) Those which are related to events which have a special impact on the particular utility.

I attach no significance to the sequence in which these categories have been stated.

Q. What do you mean by the factors which are related to expected secular growth or expansion in scale of operations? A. Commitments of capital are made in the expectation and hope of realization of income and the amount of capital committed by investors represents a capitalization of the income which they estimate to be in prospect. It is generally understood that either a sustained secular growth or a planned major expansion in scale of operations typically results in fuller utilization of the existing productive capacity of electric utilities. As the result of such growth, the returns on the previously existing investment tend to be higher than the past returns.

Q. What do you believe to be the effect of these factors on the behavior of the earnings price ratio curves? A. It is rational to conclude that when such growth or [545] expansion is in prospect, the earnings price ratios, either for a particular common stock or for a class of common stocks, will be at a lower level than otherwise would be the case. The true capitalization rate is the ratio between the prospective income, which may or may not be estimated by investors with precision, and the price which the investors are paying in the market for that prospective income. The earnings price ratio, as commonly stated and as stated for

the purpose of the chart, is the ratio between the past, lower earnings per share and the market price established in anticipation of higher earnings.

Q. Have there been times within the total period shown by the chart when there was the prospect of significant growth or expansion in the operations of the companies represented on this chart? A. Undoubtedly. The businesses of producing and distributing electric power were businesses of almost continuous and of rapid growth, at least prior to 1930. A note on the chart within the space representing the year 1912 indicates that the gross revenue of the six companies represented in the average, but omitting Consolidated Gas of New York because its gross revenue figures are not available for this period, doubled in the five-year interval from 1907 to 1912. Somewhat similar rates of growth were sustained for the five-year period ended with 1917, 1922 and 1927. The rate of [546] increase during the later years is indicated by the fact that the gross revenues of the six companies for 1937 was 29 per cent in excess of their gross revenues for 1932.

In the case of Penn Water, the eighth generating unit was not installed and in operation until late in 1914. The earnings per share were only $0.43 in 1911, $2.19 in 1912, and increased both steadily and rapidly to $5.53 for 1916 and $6.45 for 1917. The earnings price ratio of 1.61 per cent shown by Schedule 1 for January, 1912, is obviously meaningless as a measure of the ratio at which Penn Water equity investors, as at that date, were capitalizing the income which was in prospect. The average market price of the common stock in January, 1912, was $63.25. If, for the purpose of illustration, an earnings price ratio is expressed by relating the 1916 earnings per share to the January, 1912, market price of the common stock, the arithmetic result is an earnings price ratio of slightly more than 10 per cent. Of course, as evidence of the capitalization rate, an earnings price ratio derived in this manner should be discounted for the cost of waiting.

Q. What are the characteristics of the factors which you have described as being related to the general business cycle? A. The general business cycle involves a significant, relatively short run change in the volume of industrial [547] production and in the degree of business and financial confidence as to the future. During periods of declining business activity, and of uncertain business confidence, the forecasts of future income are relatively unfavorable. During the opposite stage of the business cycle, when confidence has revived and the volume of production has begun to increase, the forecasts of corporate income tend to become relatively more favorable.

Q. What is the effect of these factors on the behavior of the earnings price ratios? A. It is rational to conclude that in so far as the influence of these factors is concerned, the earnings price ratios will tend to be higher than the true capitalization rate during periods of declining business activity and a low level of productivity. Correspondingly, the earnings price ratios will tend to be below the true capitalization rate during periods of expanding business activity.

At the time when business activity loses momentum and a loss of business confidence is experienced, estimates of future earnings are revised downward. As this phase of the business cycle progresses, the prospect of recession or depression becomes more definite. The prices of common stocks tend to decline in adjustment to the loss of confidence and the prospective lower income, but only the results of past operations are reflected in the available annual income statements. [548] The earnings price ratio expresses the relationship between the past per share earnings and the market prices which reflect investors' pessimistic appraisals of future income.

[549] When the business cycle progresses to the stage of revival and renewed business confidence, the contrary set of relationships is presented. The market prices of common stocks respond to the more optimistic forecasts of business activity and income. The earnings-price ratios,

as commonly expressed and as expressed on the chart, are the ratios between past earnings and the current market prices.

Therefore, the earnings-price ratios tend to be depressed temporarily to a level below the rate at which prospective income is, in fact, being capitalized in the market.

Q. Have there been times within the total period shown by the Chart when a coincidence existed between business cycle changes and the earnings-price ratio behavior which you have described? A. Yes. For instance, the volume of industrial production increased throughout the year 1936. Earnings forecast undoubtedly were more optimistic than the actual experience for the year 1935.

The earnings-price ratios shown for the various months of 1936 expressed the relationships between past earnings and current market prices, but these market prices were the result of investors' appraisals of prospective income which differed from those reported for prior accounting periods.

Q. Please discuss the significance of the third class of factors which you mentioned as influencing the behavior [550] of earnings-price ratios, that is, speculative trading in the securities markets? A. For the purpose of analysis of capitalization rates, I defined investment as the purchase of an asset on the basis of an appraisal of the value of the hoped-for income from the asset.

Securities are also traded on the basis of expected short run profit from appreciation or decline of market value.

For the purpose of the analysis I have characterized this market motivation as speculative. It is present in its fullest manifestation in the so-called bull markets.

In 1929 when so many persons attempted to take advantage of the opportunities for quick profits, the market prices were quite unrelated to valuations of prospective annual income from the investment.

The call money rate of 15 per cent and outstanding eight billion dollars in brokerage loans, noted by the chart, are indications of the speculative fervor. This 1929 behavior of stock market prices was without inspiration from a rise in industrial production or commodity prices.

With reference to the more recent period, a significant element of speculative motivation has been present in the stock market during the past year. The price increases have been general, in some part without concern for prospective [551] income, and without a high degree of selectivity among opportunities.

Q. To the extent that speculative trading provides opportunity for an enterprise to obtain equity capital at lower cost rates than would otherwise be possible during the bull market, are these lower cost rates an appropriate basis for fixing the fair rate of return to a public utility?

A. I believe not. It undoubtedly is true that during the existence of a bull market, as in 1929 and to some extent today, equity capital is temporarily available at a lower price because of the extreme optimism of investors and the trading without regard to valuation of prospective income.

However, periods of undue optimism and periods of undue pessimism are each relatively short-lived. If service changes were established on the basis of bull market prices, they would be inadequate when market prices of securities are again based primarily upon appraisals of their intrinsic value.

Similarly, if charges for service were established on the basis of bear market prices, they would be excessive, so far as this factor is concerned, when the period of undue pessimism has passed.

Determination of the fair rate of return on the basis of earnings-price ratios, reflecting either extremely pessimistic [552] or extremely optimistic reactions of investors, would introduce an undesirable element of instability into the process of rate regulation. Rates would tend to be reduced because of the temporary availability of capital at

speculative prices in periods of general business prosperity. It would follow, as a matter of consistency, that in the contrary situation, as in 1932 or 1933, charges for service would be increased.

Periods of deep gloom in the stock market do not coincide with periods of productivity and high national income. Therefore, if for the purpose of rate of return determination, the cost of capital is established on the basis of short run evidence, service charges will tend to be high at the very time when the effect on demand and consumer interests would be most unfavorable, and low when national income and consumer demands would support relatively higher charges.

Q. Please illustrate the fourth class of factors described as related to other events which have a general impact on all enterprises or on all of a class of enterprises. A. Perhaps the most significant such event is a change or prospective change in corporate income tax rates.

Corporate income tax rates have been at a high level and these rates are especially significant for electric utilities because of the proportionally large capital investments required. Any substantial change in the tax rate [553] has a substantial effect on equity income.

Q. What, in your opinion, is the effect of this factor on the behavior of earnings-price ratios? A. Again attention must be recalled to the fact that the market prices of common stocks reflect investors' appraisals of prospective income. If, because of events which necessitate increased public revenues, it is generally believed that corporate income tax rates will be raised or if a new tax measure has been enacted by Congress, consideration is given by security analysts to the effect on corporate earnings.

As a consequence of these appraisals, the market prices of stocks will tend to be adjusted to the changed prospects of income. The earnings-price ratios, however, expressed as the relationship between past earnings and the market

prices, do not reflect the reappraisals of anticipated income and tend to deviate from the rate at which that income actually is being capitalized.

Q. Within the period shown by the chart, has a coincidence existed between anticipated tax changes and the earnings-price ratio behavior which you would expect in view of the circumstances? A. Yes. For instance, the notes in the space representing the year 1941 indicate that higher income taxes were urged early in 1941 and that the Revenue Act of 1941 was [554] enacted in October of that year.

The chart also shows that the Penn Water earnings-price ratio moved from about 9 per cent for January to about 12.5 per cent for December, and the average of earnings-price ratios of the six companies moved upward during 1941 from 7.7 per cent to 10.6 per cent.

It would be irrational to assert on the basis of this evidence that there was a corresponding movement in the rate at which prospective income was being capitalized by investors.

So far as the evidence demonstrates to the contrary, the income which was considered to be in prospect after the higher taxes may have been capitalized at the same rate as had been applied in valuing earlier estimates of equity income.

The average market price of the six common stocks fell from 141 in January to 97 in December, but the anticipated effect of the higher taxes was not yet reflected in reported earnings.

[555] It is true, of course, that the contract of Penn Water with Consolidated of Baltimore provides, in conjunction with the company's other operating revenues, for payments to Penn Water which produce a fixed return after taxes.

It appears, however, either (1) that this contractual provision has not been fully understood by investors, (2) that its significance has been discounted, or (3) that its influence on investors' appraisals of prospective stability

and assurance of return has been fully offset by other factors.

Q. Is there reason to believe that behavior of the earnings-price ratios is affected in a contrary manner when there is a general expectation of tax reductions? A. Yes. An anticipated tax reduction of importance, such as removal of the war-time excess profit taxes, results in reappraisals of the values of the shares being traded. Market prices tend to increase because of the anticipated increased earnings per share. The earnings-price ratios, expressed as the relationship between past earnings and the current market prices, tend to decline to a level below the rate at which prospective income actually is being capitalized in the market. The chart calls attention to the fact that the favorable progress of the war provided reason for the hope and expectation that the burden of the war-time taxes would be lifted in whole or in part. During the last half of 1945, attention was turned to specific proposals for tax [556] revision. The general rise in the market prices of common stocks, which carried the average for the group of six from 113 in January, 1943, to 179 in December, 1945, undoubtedly was related in a special and significant manner to the anticipated effects of tax changes thought to be in prospect. Earnings-price ratios shown by the chart are expressed as the relationship between the market prices and past earnings. Without adjustment, earnings-price ratios for recent months are misleading and invalid as evidence of the equity capitalization rate.

Q. The fifth and last category of factors which you identified included those related to events which have a special impact on the particular company. Please define this category more explicitly. A. I referred to events which influence the behavior of the earnings-price ratios as distinguished from the capitalization rates. I did not refer to events or changes which influence investors' appraisals of the risk present in a particular investment, such as changes in markets, competition, or other characteristics

which determine the return hoped for to compensate for the risk of loss. A considerable number of the unique events, which affect the validity of the earnings-price ratios as a measure of the capitalization rate, may be adjusted for in stating the earnings per share and have been adjusted for in the preparation of these data. The nonrecurring transactions within the past accounting period may [557] be given either exact or approximate quantitative expression. Adjustments are not readily made for other events which have a special impact on the earnings of a company. They result in deviations of the earnings price ratios from the true capitalization rate.

Q. Can you illustrate by reference to the Penn Water curve on the chart? A. An obvious illustration is found in the upward bulge of the Penn Water earnings-price ratios, beginning with September, 1944, the date of the initiation of the rate proceeding by the Federal Power Commission. That is, the decline in the price of the Penn Water common stock and the corresponding rise in the earnings-price ratios coincides with the initiation of the rate proceeding.

Schedule 1 shows that the earnings-price ratio moved from 7.71 per cent in June to 9.28 per cent in October, 1944, a difference of 1.57 per cent. The market price reflected the valuation of future income, whatever the assumption as to the amount of that income.

To the extent of the revision of investors' expectations, the earnings-price ratios immediately following the date of initiation of a rate proceeding are invalid as measures of the capitalization rate.

Earnings-price ratios, established in contemplation of a possible rate schedule revision, are not proper measures of [558] the appropriate changes in the price of service.

Q. Do the several factors, which influence the behavior of earnings-price ratios and cause deviations from the true capitalization rates, each exert their influence in the same direction in any one time? A. No. They may exert their

influence in opposite directions. The earnings-price ratio behavior is the product of a complex composite of influences, although a particular factor or event may exert a dominating influence within some time intervals.

Q. Have you, as the result of your analysis, reached a conclusion with respect to the equity capitalization rate which, as a component of the equity cost rate, is a component of the experienced cost of capital to Pennsylvania Water & Power Company? A. I have.

Q. What, in your opinion, is this equity capitalization rate? A. 8.5 per cent.

Q. In addition to the general considerations to which you have testified, are there more specific tests which you have applied in reaching this conclusion? A. I have given consideration to the average level of the Penn Water earnings-price ratios and those representing the six other common stocks during the period since August, 1939. [559] I also gave consideration to evidence of the extent to which the adjustment of 1945 reported earnings on the basis of the 1946 tax rates would affect the evidence of capitalization rates.

Q. Why did you determine the average for the period from August, 1939, to the end of 1945? A. Within the general cyclical movement of the earnings-price ratios, August, 1939, was the last preceding low for the average of six.

Q. How did you determine the average of the Penn Water monthly earnings-price ratios over this period? A. I first determined the average deviation of the Penn Water earnings-price ratios from the average of the six for the period August, 1939, to August, 1944, inclusive. I then assumed that in September, 1944, and subsequently, the Penn Water earnings-price ratios maintained the same position in relation to the average for the group of six, as had been typical of the preceding 61 months. After this adjustment to eliminate the effect of the upward bulge of the Penn Water earnings-price ratios subsequent to Au-

gust, 1944, the average for the entire period from August, 1939, to December, 1945, inclusive, was 8.51 per cent.

Q. What was the proportion of gross income available to the Penn Water equity during recent years? A. Schedule 2 shows that the percentage of gross [560] income available to the common stock for the period from 1939 to 1945, inclusive, varied from 70.7 per cent to 72.8 per cent.

Q. Among the electric utilities generally, what is the typical relationship between equity capitalization rates and proportions of gross income available to the common stock? A. The rate at which prospective income is capitalized tends to be lower when the common equity in gross income is large and tends to be higher when the common equity in gross income is relatively small. Expressed by reference to the coverage of preferred stock and senior requirements, the equity capitalization rates vary little through the range where prior requirements are earned more than three or four times, and tend to increase sharply as the coverage of prior requirements declines to the point where the prior requirements are just earned.

Q. Do investors' appraisals, which are the available evidence of capitalization rates, reflect the experienced division of gross income between prior requirements and income available for the common stock? A. Yes.

Q. What would be the effect on the capitalization rate if the gross income of the company were to be reduced? A. The effect would depend, of course, upon the amount of reduction in proportion of gross income available as equity [561] income. According to the typical relationship, the capitalization rates would tend to increase with a decline in the equity income.

Q. Did you give consideration to this factor in arriving at the capitalization rate of 8.5 per cent? A. I recognized the existence of the factor but did not attempt to give it quantitative expression and have not adjusted the 8.5 per cent because of this factor.

Q. What has been the proportion of reported available earnings paid out as common dividends during recent years? A. Schedule 2 shows that the dividends earnings ratios for the period from 1939 to 1945, inclusive, varied from 78.9 per cent to 85.8 per cent. The average during this period of seven years was 83.4 per cent.

Q. What is the typical relationship between equity capitalization rate and the proportion of available income paid out as dividends? A. The typical relationship among electric utilities is that the capitalization rates are relatively lower where a large proportion of available income is paid as dividends and are relatively higher where a smaller proportion of available income is paid out. In general, income received as dividends is capitalized by investors at one rate and income withheld from distribution is capitalized at a different and much higher rate.

[562] Q. Do investors' appraisals of the Penn Water common stock, which are the available evidence of the capitalization rate, reflect the experienced practice with respect to proportion of equity income retained in the business? A. Yes.

Q. Should the fair rate of return allowance be sufficient to permit some part of income to be passed to the surplus account? A. I believe so.

Q. Is there a typical relationship between the pay-out ratio and the per cent of gross income available for the common stock? A. Yes. Among public utilities the proportion of equity income retained tends to increase as the proportion of gross income available for the equity narrows. That is, as a matter of managerial judgment, or regulatory requirement, the proportion of available income passed to the surplus account and retained in the business tends to increase as the common stock participation in gross income narrows.

Q. Have you given consideration to this factor in arriving at the 8.5 per cent? A. I recognized the existence of the factor but did not attempt to give it quantitative

expression and have not adjusted the 8.5 per cent accordingly.

Q. Have you given consideration to the cost of equity [563] financing? A. Yes. I have prepared analyses of the financing cost experienced by public utilities and by other types of enterprises over a substantial period of time.

Q. What margin have you added to the capitalization rate of 8.5 per cent to represent cost of financing? A. .75 percent. This margin is equivalent to a little less than 9 per cent of the net proceeds of the equity financing. It is equivalent to a discount of 8.1 per cent from the market price to cover underwriters' discounts and commissions, expenses and a small cost margin between the price at which a small number of shares is sold in the market and the price at which a large amount of stock could be sold.

Q. What is your conclusion as to the equity capital cost rate for the purpose of a determination of the experienced cost of capital to Penn Water? A. 9.25 per cent.

Q. Have you made a calculation to establish the experienced cost of debt capital to Penn Water? A. I have.

Q. Does Schedule 4 show this calculation? A. Yes. It shows computations establishing the annual cost of the capital obtained by Penn Water from sale of the mortgage bonds now outstanding. The annual costs are expressed as percentages of the net amount of capital so [564] obtained.

Q. What is the effective average cost rate? A. The effective average cost rate to maturity on the debt capital as at December 31, 1945, is 3.505 per cent.

Q. From what source did you obtain the information with respect to debt discount and expense, premiums received and the other information required for the purpose of this computation? A. It was supplied by Pennsyl-

vania Water & Power Company and, I understand, was obtained from the accounting records of the company.

Q. What is the identity of the bonds whose costs are reflected in the cost rate of about 3.5 per cent? A. The bonds outstanding at December 31, 1945, are the 3¼ per cent series, due 1964, and the 3¼ per cent series, due 1970.

The 3¼ per cent series, due 1964, was issued in 1939 to provide for redemption at maturity of the 5 per cent series due 1940. No costs related to the 5 per cent series of 1940 are included for the purpose of determining the annual cost of debt capital as at December 31, 1945.

The 3¼ per cent series, due 1970, was issued in 1940 for the purpose of refunding 4½ per cent series, due 1968, which had been issued in March, 1928, March, 1930 and March, 1931. The issue of March, 1928, in the principal amount of [565] $6,000,000 was for the purpose of refunding the Holtwood Power Company Series A 6 per cent bonds which had been issued in October, 1924, and the 5½ per cent series A bonds which had been issued in November, 1923, and July, 1924.

Therefore, the costs related to the bonds of the 5½ per cent series A, due 1953, and the Holtwood Power Company series A 6 per cent bonds, due 1954, are stated in the first part of Schedule 4.

This computation is followed by a statement of the costs related to the 4½ per cent series, due 1968, with totals provided in the final column for the three issues of this series. The costs related to the 5½ per cent series A bonds and the Holtwood Power Company series A 6 per cent bonds, which were unamortized at the time of refunding, are shown as Item 19, and included as Item 24 in the computation of the net proceeds from the March, 1928, issue of the refunding 4½ per cent series.

Finally, Item 50 of the computation shows the net proceeds from the 3¼ per cent series, due 1964, and the 3¼ per cent series, due 1970. Item 49 is the unamortized costs in the amount of $1,375,600, which is carried forward in

the computation of the net proceeds from the refunding issue.

Q. What method of computation did you use in arriving at the effective cost rate of approximately 3.5 per cent? A. I computed the cost rate to maturity by using a [566] standard bond table. The borrower has at the maturity of the debt liability equal to its principal amount. It must provide out of income any deficiency of the capital supplied, as measured by the net proceeds, from the liability at maturity. A bond table is designed so that the amortization of any difference between principal amount and price, or, as used here, net proceeds, takes place according to a mathematical relationship which makes the yield, or cost rate, constant throughout the life of the bonds.

Q. Has this computation been consistent with your definition of experienced cost of debt capital as including all the costs of redeeming outstanding securities or eliminating excess contracts, in order to give the company access to lower capital costs or more favorable terms? A. I believe so. In order to determine the effective cost rate of the capital obtained by means of refunding bonds, it is necessary to take into account the costs of getting rid of the less favorable issues previously outstanding, and also that portion of the discounts and other costs of the issue of the outstanding bonds which, at the date of issue of the refunding bonds, would not have been recovered from income.

Q. Have all the costs of calling old bonds and all the unamortized debt discount and expense related to the refunded bonds been included among the costs of debt capital as at December, 31, 1945? [567] A. No. Since the refunding 4½ per cent bonds, issued in March 1928, provided funds equivalent to only 94.3 per cent of the cash costs of the redemption of the old bonds, other sources of cash were utilized, presumably general treasury cash. Therefore, I assigned to the cost of the debt capital repre-

sented by the 4½ per cent series, due in 1968, 94.3 per cent of the costs of calling the refunded bonds and a like proportion of the unamortized debt discount and expense at the time of the sale of the refunding bonds. On this basis $638,800 of the amortizable burden was transferred to the refunding issue and the balance of the cash requirements of refunding $345,800, is assumed to have been met by equity funds.

Q. Have you made a calculation to establish the experienced cost of preferred stock capital to Penn Water? A. I have.

Q. Does Schedule 5 show this calculation? A. It does. It shows the percentage relationship between the annual dividend requirements of the outstanding preferred stock and the net proceeds to the company.

Q. What is the effective cost rate? A. 5.21 per cent.

Q. From what source did you obtain the information with respect to experienced cost of financing and net proceeds? A. It was supplied by Penn Water and, I understand, was obtained from the accounting records of the company.

[568] Q. Have you combined the experienced cost rates for the debt and preferred stock capital and the equity capital cost rate to determine the overall experienced cost of capital to Penn Water? A. I have.

Q. Is this computation shown by Schedule 6? A. It is.

Q. What is the overall experienced cost rate as thus determined? A. The computation shows 6.04 per cent or about 6 per cent.

Q. How have you stated the amount of debt capital for the purpose of this computation? A. The amount of debt capital, as at December 31, 1945, is the net proceeds as at that date from issuance of the original principal amount of the bonds now outstanding, as shown by Schedule 4, less the proportional part related to bonds redeemed by operation of the sinking funds.

Q. You have stated the amount of preferred stock capital for this purpose as the net proceeds shown by Schedule 5? A. That is correct.

Q. How have you stated the amount of equity capital for the purpose of this computation of the overall experienced cost rate? [569] A. I have eliminated from the book statement of total capital the consolidated net amount proposed to be transferred to surplus and to be retained in Account 107 as at January 1, 1937 by the companies' original cost reports to the Federal Power Commission, filed in accordance with Instruction 2-D of the Uniform System of Accounts.

The net proceeds from debt and preferred stock capital as at December 31, 1945 is then deducted from this adjusted total capital to obtain the statement of equity capital in the amount of $16,349,900.

Q. How then have you combined the cost rates applicable to debt preferred stock and common stock capital? A. I have combined these rates in proportion to the amounts of capital supplied by investors of the three classes.

Q. In your opinion is the experienced cost of capital, the rate of about 6 per cent, a measure of the rate of return which is fair and reasonable for Penn Water?

A. Not necessarily. I can have an opinion as to whether or not it is a reasonable rate of return only as the result of considering the return which would be provided by its application to a rate base and by considering the annual return which would be provided by application of the investment cost and competitive cost bases of rate regulation.

Q. Have you made a study of the replacement cost of [570] capital rate and of the return which would be available on the replacement or competitive cost bases? A. Yes. I have made a study of the replacement cost of capital to Penn Water, and, assuming an original cost rate base, have used the replacement cost rate in relation to an estimate of the cost of constructing a plant of up-to-date tech-

nological design capable of supplying the service which is being supplied by the existing plant, and other evidence of the effect of price level changes, as tests of the reasonableness and adequacy of the return allowance.

Q. In preparing this estimate of the replacement cost rate, have you assumed for the purpose the existence of a going concern? A. I have. The hypothetical costs are assumed to be those which would be incurred by a going enterprise with established credit, which has access to supplies of equity capital and which, therefore, is able to obtain debt capital in the proportions assumed.

The estimate of replacement cost, made here only for the purpose of providing criteria of the range within which the reasonable return is to be found, gives no consideration to the cost of achieving the status of a going concern.

It neglects the advantages available in the competitive economic system to the established enterprise as against the [571] new competitor, who, having the advantage of freedom from past contractual arrangements for capital, must assume the developmental and related costs of becoming a going concern.

MR. SPARKS: Mr. Examiner, I have a document entitled "Pennsylvania Water and Power Company, Replacement Cost of Capital, Evidence of the Fair Rate of Return in Relation to an Original Cost Rate Base", and ask that this document be marked for identification as Exhibit 30.

TRIAL EXAMINER: The document may be so marked.

(The document above referred to was marked Exhibit 30 for Identification.)

By MR. SPARKS:

Q. Dr. Foster, you have before you a document which has been marked for identification as Exhibit 30, and entitled "Pennsylvania Water and Power Company, Replacement Cost of Capital, Evidence of the Fair Rate of Return

in Relation to an Original Cost Rate Base", and I ask you whether this document was prepared by you or under your direction? A. It was.

* * * *

[574] Q. Dr. Foster, what is the purpose of the first schedule which is called "Schedule 7, Yields on Pennsylvania Water and Power Company 3¼ per cent Bonds and Moody's Index of Yields on 'AA' Public Utility Bonds"? A. The purpose of Schedule 7 is to provide a basis for estimating the rate at which the interest return on the Penn Water bonds is capitalized.

Q. What have been the yields on the Penn Water bonds? A. The Penn Water 3¼ per cent bonds, Series of 1964 and 1970, are widely distributed in ownership and are admitted to unlisted trading on the New York Curb Exchange.

The Series of 1964 was offered at about December 22, 1939, on a yield basis of 3.02 per cent and on the basis of a cost rate to the company of 3.20 per cent.

The Series of 1970 was offered at about January 24, 1940, on a yield basis of 3.00 per cent and on the basis of a cost rate to the company of 3.14 per cent. The cost of financing margins thus were .18 and .14 per cent.

These bonds were rated "A" by Moody's, but for a period of several years subsequent to their issue the yields of these bonds at their market prices fluctuated closer to Moody's index of yields on "AA" bonds.

The Penn Water Series of 1964 is now callable at 105.5 per cent of its principal amount and the Series of 1970 is [575] now callable at 106.5 per cent of its principal amount.

The yields on bonds comparable in quality have declined appreciably below the yields at prices equivalent to these call prices.

Although there are few, if any, instances of 3¼ per cent bonds of electric utilities having been refinanced, it is, nevertheless, reasonable to assume that the possibility of redemption is a reason why the yields on the Penn Water

bonds have not followed the downward movement of yields on other public utility bonds of high quality.

It is possible that other factors have had an influence, but I have neglected them.

Q. What do you conclude from this analysis? A. I conclude that the average yield on Moody's "AA" bonds during the year 1945, or 2.67 per cent is better evidence of the capitalization rate than the yields on the Penn Water bonds.

As shown by Schedule 7, the average yields on the "AA" bonds for the years 1940, 1941, and 1942 were between the yields on the Penn Water Series of 1964 and Series of 1970.

The average for 1945 was .07 per cent below the average for the Series of 1964 and .13 per cent below the average for the Series of 1970.

Q. Have you neglected the yields which have been experienced in the market during the first three months of [576] 1946? A. Yes. After remaining relatively stable for a period of about five years, interest rates declined sharply during the first months of 1946. Several electric and gas utilities have refinanced at these lower rates.

It is too early, however, to know whether or not the lower rates are more than temporary. The prices experienced during so short a period, whether at low or high levels, are objectionable for the purpose of utility rate regulation unless they clearly represent a trend which may be expected to continue during a significant future period.

Q. What is the purpose of Schedule 8? A. Schedule 8 provides a list of what I believe to be all bond issues by electric and electric combination utilities which were offered publicly during the year ended March 31, 1946. It shows the yields at the offering prices of these bonds and shows the cost rates experienced on the basis of net proceeds to the company.

These and the related data are identified by the titles of the numbered columns 1 to 12, inclusive. The purpose

of the compilation is to provide information which is significant in relation to an estimate of the cost of replacing the debt capital of Penn Water.

Q. What are the sources of these data? A. The bond issues were identified by review of the periodic [577] reports by Moody's. Excepting a few instances, which are identified by the footnote "g", the information with respect to proceeds and prospectively available income was obtained from the offering prospectuses.

In the several instances for which the prospectus was not readily available, these data were obtained from Moody's Public Utility supplements.

The income statements provided by Moody's reports at about the time of an issue of securities, are obtained generally by that organization from the registration statement or from the prospectus.

Q. What is the purpose of the tax adjustment described by the footnote which is related to Column 10? A. The significant coverage of interest requirements is that provided by prospective income and not the coverage actually experienced during a past accounting period. The income statements prepared at the time of a security offering for the use of prospective investors recognizes this consideration by pro forma adjustments for the effect of the change in coupon rate or in principal amount of bonds.

In view of the significant effect of repeal of the excess profits tax law on the prospective coverage of interest requirements, I have adjusted the reported gross income for the approximate effect of assuming that the 1946 income tax rates were effective during the twelve-months' period [578] for which income was reported in the prospectus.

Q. Have you analyzed the data for the purpose of arriving at an estimate of the yield rate upon the basis of which Penn Water might obtain an amount of debt capital generally equivalent to the amount provided by the existing capitalization? A. I have.

Q. What is your conclusion? A. 2.72 per cent.

Q. What are the characteristics of the data shown by Schedule 8 which you have considered in reaching this conclusion? A. I have considered primarily the yield rates shown by Column 8 and the relationship between these experienced yield rates and the prospective coverage of the interest rquirements.

The analysis shows that for bonds of different quality, some relationship with times requirements earned is evident, although the protective margins are generally so large that the effect of the variation in proportion of gross income required for bond interest is not as significant as would otherwise be the case.

Column 11 shows that only one among the thirty-one issues was offered during 1946.

This is the Madison Gas and Electric Company, 2½ per [57⁄] cent bond, which sold in February on a yield basis of 2.39 per cent.

In reaching the conclusion that 2.72 per cent is the reasonable capitalization rate for the purpose of rate of return determination, I have not, for the reasons which I have stated, given consideration to this recent issue by the Madison Gas and Electric Company.

I have, instead, given particular recognition to the yield rates experienced during August, September, and October of 1945.

Q. Have you given consideration to the provisional ratings assigned by Moody's and shown by Column 12 of Schedule 8? A. The ratings provide a guide which is of some significance, particularly in view of the relationships shown by Schedule 7.

Again omitting the Madison Gas and Electric bonds for the reasons previously stated, Schedule 8 lists eleven bonds which were rated "A" and eleven which were rated "AA". The average yield to maturity at the market price was 2.84 per cent for the "A" bonds and 2.70 per cent for the "AA" bonds.

Therefore, an imputed rate of 2.72 per cent is consistent with the behavior as shown by Schedule 7.

Q. Does Schedule 8 also provide information with respect to cost of debt financing experienced during the recent [580] period? A. Yes. The difference between yield to maturity shown by Column 8 and the cost rate to maturity, Column 9, is the cost of financing spread or margin.

It represents the difference between the selling price to the public and the net proceeds to the company after absorption of the underwriting commission and the expenses incident to the issue.

Q. Have you analyzed these data for the purpose of arriving at the margin appropriately included in the replacement cost of debt capital to recognize costs of financing? A. I have.

Q. What is your conclusion? A. I have added a margin of .06 per cent to the capitalization rate of 2.72, fixing 2.78 per cent as the replacement cost rate of debt capital.

Q. What are the characteristics of the data shown by Schedule 8 which you have considered in reaching this conclusion? A. The cost of financing margin, the difference between the yield and cost rate shown by Columns 8 and 9, varies generally with the size of the issue, the coverage prospectively available for equal and prior requirements and with other evidences of the quality of the bond.

Since the proportion of gross income required for equal [581] and senior issues varies only within the limited range of from 11.8 to 28.4 per cent, it is not to be expected that among these instances the cost of financing would vary significantly with coverage of requirement.

There is, however, a significant relationship with the size of the issue. The financing costs are in some part constant, or fixed without regard to the principal amount of the bonds being issued.

The analysis in relation to principal amount of the several issues shows that a cost of financing margin of .07 per cent is typical for issues in the amount of about twenty million dollars.

In some instances, the rate has been .06 per cent and I have used the lower rate, although it is less conservative.

Q. What is the purpose of Schedule 9 which shows data on preferred stock issues of electric and electric combination utilities during the twelve month's ended with March, 1946? A. Its purpose is to provide information which may be used in estimating the replacement cost of preferred stock capital.

Q. What are the sources of the data shown by this schedule? A. The sources are the same as in the case of Schedule 8.

Q. With respect to the determination of proportion of [582] gross income required for equal and senior issues, did you use the same methods as were used in determining the corresponding information shown by Schedule 8? A. I did.

Q. Have you analyzed these data for the purpose of arriving at an estimate of the yield rate on the basis of which Penn Water might obtain an amount of preferred stock capital generally equivalent to that available under the existing capitalization? A. I have.

Q. What is your conclusion? A. 3.60 per cent.

Q. What are the characteristics of the data shown by Schedule 9 which you have considered in reaching this conclusion? A. I have considered the capitalization rates indicated by the percentages shown by Column 9, the relationship between the yield rates experienced and the prospective coverage of equal and prior requirements and the trends indicated by Schedule 9.

Although the refinancing of senior issues and the refinancing of preferred stock at dividend rates below 4 per cent in the majority of instances has generally improved the coverages available, there is an observable relationship between yield rates and the proportions of gross income [583] required for equal and senior issues. For the reasons previously stated, I have not given any particular recognition to the yield rates of 3.25 per cent and 3.35 per cent

experienced by Iowa Power and Light Company and Central New York Power Corporation in February and March of 1946.

Excluding these two issues, the arithmetic average of the thirteen remaining yield rates is 3.93 per cent. The proportion of gross income required for equal and senior issues, however, is typically larger than would be required on the basis of the existing Penn Water capitalization.

Q. In reaching the estimate of 3.60 per cent, have you given consideration to yield at current market prices of the outstanding preferred stock of Penn Water? A. I have given no consideration to the current yield on the outstanding Penn Water preferred stock. The issue is relatively small in amount and I have been unable to find sale prices or even bid and asked quotations on a basis sufficiently continuous and representative that they afford a measure of investor appraisals of this security.

Of course, even if such market prices were available, the possibility of the stock being called would make the yields at market prices of doubtful validity for the present purpose.

Q. Have you also used the data shown by Schedule 9 for the purpose of an estimate of the cost of preferred stock [584] financing? A. Yes. I have estimated .12 per cent as a reasonable margin, assuming that the amount of preferred stock is limited to the proportion represented in the existing capitalization.

In reaching this estimate, I have considered the cost of financing margins experienced in the instances represented on Schedule 9, expressed as the differences between the percentages in Columns 9 and 10 and the typical relationship between these margins and the size of the preferred stock issue.

Q. What does Schedule 10 show? A. The first section of this schedule shows the replacement cost rates which I have estimated for debt, preferred stock and common stock capital on the basis of the existing capitalization of

Penn Water and the composite rate determined by combining the separate rates in proportion to the dollars of capital supplied under the existing capitalization.

Q. What is the source of the cost rate of 9.25 per cent for equity capital? A. The source is the study represented by the chart and the Schedules 1 to 3, inclusive, of Exhibit 29. It is transferred here from Schedule 6.

[585] Q. What do you mean by "Proportional Division of Income (%)", the title of Column 5? A. The 25.9 per cent is the proportion of gross income absorbed by debt requirements on the basis of the debt capital in the amount of 52 per cent and the related cost rate of 2.78 per cent. This is equivalent to a gross income of a little less than four times debt requirements. After preferred stock and prior requirements are met, the proportion of gross income available as equity income is 70.5 per cent.

Q. On the basis of a capitalization corresponding with the existing capitalization of Penn Water, the estimated overall replacement cost of capital is 5.6 per cent? A. That is correct.

Q. What is the purpose of the second part of Schedule 10? A. Its purpose is to present an estimate of the overall total cost rate on the basis of the capital structure which is most economical under recent market conditions and, at the same time, available to a regulated enterprise of this type as a matter of regulatory and managerial policies.

Q. Why have you assumed 25 per cent equity capital? A. I assumed 25 per cent as the minimum ratio of equity to total capitalization which is generally considered acceptable and appropriate in the light of regulatory and financial [586] standards.

Q. The result of this analysis is an overall replacement cost rate of 4.9 per cent? A. That is correct.

Q. How have you determined the cost rates which in your opinion would be applicable if the hypothetical capitalization were in the proportion indicated? A. I have used the capitalization rates of 2.78 per cent, 3.72 per cent

and 9.25 per cent shown by the first part of Schedule 10 and have adjusted these rates for the effect of the increase in proportion of debt and preferred stock capital and the decrease in proportion of equity capital.

Q. How have you determined the amounts of these adjustments? A. The differences between the cost rates used in the first and second parts of Schedule 10 represent my judgment as to the adjustments required to reflect the change in capital structure. I have given consideration to the relationships between capitalization rates and proportional division of income indicated by the data on Schedules 8 and 9 and also to the relationships indicated by analyses of other similar data.

Q. What are the amounts of these adjustments? A. For the cost of debt capital the adjustment is an increase of 0.5 per cent in the yield rate and no change in the margin for cost of financing. For the cost of preferred [587] stock capital it is an increase of .3 per cent in the yield rate and a decrease from .12 to .08 per cent in the cost of financing spread. For the cost of equity capital the adjustment is an increase of 1.0 per cent in the capitalization rate and no change in the cost of financing margin.

MR. SPARKS: Mr. Examiner, I suggest this as being a good break, if the Examiner should desire to take a recess at this time.

TRIAL EXAMINER: Just before we do that, what is the significance of the term "replacement cost of capital" as you have used it in Schedule 10?

MR. SPARKS: I think the witness explained that, and he can explain it better than I can, your Honor. I should be glad to have him do so off the record, if that would be helpful.

TRIAL EXAMINER: No, it will be on the record. The Examiner had a little difficulty in grasping what the witness was implying, or what he meant to imply by that term. If he would state that.

MR. SPARKS: I will be glad to have the witness restate it.

THE WITNESS: I mean by replacement cost of capital that cost which is currently available on the basis of a hypothetical capitalization and without including any cost related to past financing or cost otherwise experienced by [588] the company.

MR. GOLDBERG: May I ask a question at this point?

TRIAL EXAMINER: Yes.

MR. GOLDBERG: I notice in your answer, Dr. Foster, you related it to a hypothetical situation. I had understood by "replacement cost of money" you had used the coupon rate of bonds which would be issued by Penn Water to refund the presently existing bonds.

THE WITNESS: No, the cost rate is never measured by the coupon rate alone.

MR. GOLDBERG: That is true.

THE WITNESS: Because discount and premium and rate adjustment on coupons subject to that adjustment, and subject to the further adjustment of the underwriting commissions and incidental expenses, I believe you stated the definition correctly.

MR. GOLDBERG: I related my question to bonds and to the same thing—that is, the same thing would apply to the preferred stock and equity capital as you use it in your exhibit?

THE WITNESS: Yes, as a matter of general experience, yes.

* * *

[594] By MR. SPARKS:

Q. What is the purpose of Schedule 11? A. Its purpose is to make available estimates of the "Competitive Return" as tests of the reasonableness and adequacy of the

return which would be provided by application of the experienced cost of capital rate to the original cost rate base.

An application of the experienced cost of capital rate to a given rate base, representing either original cost or [595] replacement cost, gives an arithmetic result which should be tested by reference to alternative results determined by rational methods which are consistent with economic behavior. The rational criteria are the costs established by alternative opportunities available to investors at the time the investments were made or the cost established by the alternative opportunities existing at the time the charges for service are being fixed.

[596] TRIAL EXAMINER: You state that the purpose of the exhibit is to make available estimates of the "Competitive Return" as tests of the reasonableness and adequacy of the return which would be provided by application of the experienced cost of capital rate to the original cost rate base.

Where on Schedule 11 do you show your estimate of the competitive return?

* * *

[597] THE WITNESS: Several estimates or evidences of the competitive return are shown by Schedule 11 in the several paragraphs numbered Roman II, III, and IV. It is obvious, I think, that the rate of return corresponding to the current competitive return on the cost of constructing the substitute plant capable of providing the same service has a greater economic significance and meaning, and that estimate is treated in the paragraph Roman II-B.

TRIAL EXAMINER: You are referring to the return, not as a percentage? I did not understand part of your answer.

THE WITNESS: No, I am not now referring to the return as an annual return expressed as an amount of money. I now refer to the return in the latter sense.

TRIAL EXAMINER: What element of that is competitive?

THE WITNESS: Both elements—meaning by "elements" the amount of investment required to provide the service to the yield basis upon which that investment would be supplied by investors.

TRIAL EXAMINER: The competitive feature is shown in the per cent, is it not?

THE WITNESS: No. The procedure is one which estimates return by reference to the percentage rate being experienced competitively and currently in the market, and by [598] reference to the amounts required to be invested in order to supply the service. In other words, annual cost of capital is dependent not only upon the cost rate, but upon the amount of investment required. The effort here is to express the annual cost of capital on a competitive basis which is equivalent, of course, to the alternative opportunities currently available to the investor.

TRIAL EXAMINER: But the competitive part of the amount is obtained by applying that percentage figure to the assumed rate base? Is that correct?

THE WITNESS: The amount estimated and reflected in competitive cost is obtained by applying the rate representing the competitive cost of capital currently to a base or amount which also represents the competitive or current costs.

TRIAL EXAMINER: Cost arrived in that manner, because of the introduction of the percentage figure?

THE WITNESS: I do not quite follow you?

TRIAL EXAMINER: Is that because of the introduction of the percentage figure?

THE WITNESS: No; because of the fact that we resort to the competitive basis in order to provide a criterion or test requires that not only the rate be fixed on a current

or competitive basis, but that the principal amount be constant or fixed.

[599] TRIAL EXAMINER: That is, consistent with the percentage?

THE WITNESS: Consistent with the basis upon which the percentage is fixed, or consistent with the theory. If your Honor please, I might attempt to illustrate further by making the assumption that the annual rate which represents the replacement cost of capital, in view of the investors' expectations in the current market is applied not to the cost of replacing the plant but to the original cost, or the amounts actually expended in past years in constructing the plant. That would do violence to the replacement cost concept because it would represent application of the competitive rates and dollars of investment varying from the dollars of investment required to provide a substitute plant both because of the general change in price levels and technological improvements which have taken place.

TRIAL EXAMINER: Very well.

With respect to Schedule 11, and the portions that are now subject to the objection made by Staff counsel, counsel for the company has introduced some element other than the actual legitimate cost of the property in determining the test of reasonableness on the regular return shown on Schedule 11?

MR. SPARKS: Just as the witness has testified.

TRIAL EXAMINER: Yes. The Examiner is going to sustain the objection of Staff counsel.

MR. SPARKS: We take exception to that ruling, of [600] course, if your Honor please, and I now proffer all of Schedule 11 by the following questions and answers——

* * * *

[602] MR. SPARKS: I might say that the first two questions have to do with first:

Question: Where did you obtain the amount of $36,704,706 purporting to represent the consolidated original plant as at December 31, 1945?

To which the reply is:

Answer: That figure was supplied to me by the company; and the next question is:

Question: Where did you obtain the working capital estimate of $977,160 appearing in the same paragraph of Schedule 11?

To which the answer is:

Answer: It was supplied to me by the company.

Question: Where did you obtain the estimated cost of constructing, as of December 31, 1945, a substitute new plant capable of providing the same service, shown by paragraph II (a) of Schedule 11?

Answer: It also was supplied to me by the company.

Question: Where did you obtain the trended cost of construction on physical properties, as of December 31, [603] 1945, appearing in paragraph III (a) of Schedule 11?

Answer: This figure was also supplied to me by the company.

Question: Where did you obtain the statement of nominal dollar investment adjusted for changes in purchasing power of the dollar to 1945 appearing as the first item in paragraph IV (a) of Schedule 11?

Answer: It was supplied to me by Professor H. B. Dorau. I understand that the adjustment has been based upon the Bureau of Labor Statistics Index of Changes in Wholesale Commodity Prices.

Question: What application have you made of the estimate of $55,394,792 for the purpose of providing a criterion of the reasonableness and adequacy of the experienced cost rate of 6.0 per cent assuming that this cost rate is applied as a rate of return to an original cost rate base?

Answer: Paragraph II (a) of Schedule 11 shows that if the overall replacement cost rate of 4.9 per cent were applied to the estimated cost of a substitute plant, plus the working capital estimate, an annual return of $2,762,000 would be provided. The paragraph II (a) shows also that a rate of return allowance of 7.3 per cent would be required to provide an equivalent annual return if the rate base were fixed at $37,680,000.

The $2,762,000 is an estimate of the return which would [604] be available if full competition is assumed. It represents the cost of capital established by consideration of the alternative opportunities available to investors during the recent past.

Question: What consideration have you given in this connection to depreciation as a negative component of the return or rate base?

Answer: None. I understand that the $36,704,706 is total original cost, undepreciated.

I do not know whether there is any objection to those questions or not.

MR. GOLDBERG: There is no objection to those questions.

MR. SPARKS: I did not think there would be, Mr. Goldberg.

TRIAL EXAMINER: Proceed.

MR. SPARKS: May that statement be made by the witness?

TRIAL EXAMINER: Yes.

By MR. SPARKS:

Q. Where did you obtain the amount of $36,704,706 purporting to represent the consolidated original cost of plant as at December 31, 1945? A. The figure was supplied to me by the company.

Q. Where did you obtain the working capital estimated at $977,160 appearing in the same paragraph of Schedule 11? A. It was supplied to me by the company.

* * * *

[607] MR. SPARKS: This question has to do with what consideration Dr. Foster has given to depreciation in connection with his use of Schedule 11.

* * *

* * * I shall continue. To complete the answer to the last question.

A rate of return, otherwise reasonable, applied to this sum as a rate base provides a return which is subject to whatever is the appropriate deduction, or credit to consumers, for employment by the company of the assets reflected in the depreciation reserve balance.

Similarly since the purpose is to test the reasonableness and adequacy of the return which would be provided by such an application, I have given no consideration to depreciation as a negative component in the application of other methods. The results of these other applications are similarly subject [608] to the appropriate deduction, or credit to consumers, on account of the employment by the company of the assets reflected in the depreciation reserve balance.

Question: What is the significance of the computation shown by paragraph II (b)?

Answer: Alternative cost, competitively and currently available, involves replacement of existing capitalization with a hypothetical, available capitalization as well as replacement of existing plant with facilities of modern design capable of providing the same service.

However, for what significance it may have as secondary evidence, I have recognized here the replacement cost of capital rate which corresponds to the existing capital structure of the company. Since the use of this rate is a compromise with the com-

petitive cost concept, I have made in this connection a second and off-setting compromise.

I have added to the original cost figure 42.6 per cent instead of 100 per cent of the difference between original cost and the estimated cost of constructing a substitute plant. The 42.6 per cent is, of course, the ratio of equity capital to total capital represented by the existing capitalization.

The common stockholders, under the competitive cost theory, are not entitled to protection against risk of loss from changing circumstances which affect either the [609] alternatively available capitalization, the investment required to supply service, or the demands for service.

Since the common stockholders assume these risks subject to the contracts with bondholders and preferred stockholders, the statement of competitive costs should consistently recognize the cost established by competitive alternatives.

For this reason, the cost rate of 5.6 per cent applied to the estimated replacement cost of plant may give an unreasonable result. Therefore, I have adjusted the estimated replacement cost of plant by including only the proportion of the difference between original cost and replacement cost which corresponds to the proportion of equity in the existing capitalization.

Question: What application have you made of the trended cost of construction of physical properties for the purpose of making available a criterion of the reasonableness and adequacy of the return which would be provided by applying 6.0 per cent to an original cost rate base?

Answer: Paragraph III (a) of Schedule 11 shows that I have applied the replacement cost of capital rate of 4.9 per cent to the trended cost of construction of physical properties as at December 31, 1945, plus estimated working capital.

The amount of annual return which would be provided on this basis is $3,106,000, and this annual return would [610] correspond to a rate of return of 8.2 per cent on a rate base of about $37,680,000.

The result of this application is a test of the reasonableness and adequacy of the return provided by applying a rate of return to the original cost rate base.

Question: Have you in this connection given consideration to depreciation as a negative component of the return or rate base?

Answer: I have not, for the same reason which was stated in discussing the analysis presented by paragraph II (a).

Question: Does the computation shown by paragraph III (b) correspond to that shown by paragraph II (b)?

Answer: It does. It is made in a similar manner and for a similar reason.

Question: What application have you made of the nominal dollar investment adjusted for changes in purchasing power of the dollar to 1945, for the purpose of making available a test of the reasonableness and adequacy of the return which would be provided by applying 6 per cent to an original cost rate base?

Answer: Paragraph IV (a) shows that I have applied the replacement cost estimate of 4.9 per cent to the dollars of investment adjusted for changes in purchasing power of the dollar to 1945 and plus the working capital estimate for the purpose of determining the annual return which would be [611] available on this basis. The result is an annual return of about $2,500,000 which is equivalent to a rate of return of 6.6 per cent on the original cost rate base.

Question: Does the computation shown by paragraph IV (b) correspond to those shown by paragraphs II (b) and III (b)?

Answer: It does. It has been made in a similar manner and for a similar reason.

Question: In view of the tests which are thus available, in your opinion, are the replacement cost rates of 4.9 or 5.6 per cent measures of the rate of return reasonably applicable to a rate base representing original cost of property?

Answer: No. The replacement cost rate represents the cost of obtaining currently dollars of capital which have a purchasing power much less per dollar than the purchasing power which existed when the original cost in dollars were invested.

Application of the replacement cost of capital rate to the original cost rate base, where the price level has risen significantly and the cost of capital rate has at the same time declined, does not conform to any consistent basis of return determination. It would provide a return less than would be provided by either the basis upon which the investment was originally committed to the enterprise or the return available now to investors from other investments [612] in enterprises of corresponding risks and uncertainties.

It would expose investors in regulated enterprises to the hazard of whichever is the lesser, not only with respect to the different kinds of evidence of the rate base, but also to the greater hazard of whichever is lesser with respect to rate base and rate of return in combination with each other.

Question: You distinguished two bases upon which the rate making process may seek to induce the investment of capital in regulated enterprise. One was defined as the competitive replacement basis. The other was the investment cost basis.

You said that application of methods of return determination which correspond to these two regulatory concepts provide test of the reasonableness of the return otherwise arrived at. You have now applied a method consistent with the competitive replacement basis of regulation.

Have you given consideration to original cost of capital or historical cost of capital as criteria of the reasonable and adequate return.

Answer: Yes. I have given careful consideration to these criteria but have not attempted to give them quantitative expression. It has been unnecessary to do so in view of the results of the test by reference to competitive cost.

Penn Water was established and developed during the [613] period from 1905 to 1912 and later. Compared with the present, that was a period of relative scarcity of capital, relatively higher interest rates, and relatively higher costs of equity capital. The capital costs initially incurred included those necessary to attract capital to a competitively new type of enterprise.

The undertaking was exposed to the hazards of a business engaged in the utilization of a water power resource and to the hazards of construction in a river whose behavior characteristics were in part unknown and in part unpredictable.

The cost of capital included the cost of waiting for the prospective return during a significant period required to achieve full utilization of the capacity.

In view of the effect of these factors upon the cost rates at which the initial portion of the invested capital was obtained, it has appeared unnecessary to attempt a precise statement of those rates.

[614] Mr. Sparks: If your Honor please, I believe the next question is admissible, and a proper question. I would like to put that to the witness.

Trial Examiner: Please do so.

By Mr. Sparks:

Q. What is your conclusion as to the return which is reasonable and adequate for Pennsylvania Water & Power Company?

THE WITNESS: Does my undertaking to answer that question imply that I could have done so without reference to the facts that have been excluded? If that is so, I cannot answer it.

TRIAL EXAMINER: You may answer the question simply as put, on any basis that you now have, and the effect of that basis will come out on further examination.

THE WITNESS: Very well, sir.

A. It is my opinion that the test by reference to competitive costs provides the most significant evidence of the fair return. For this reason, I conclude that the fair return is not less than $2,450,000. Expressed in relation to an original cost rate base of $37,680,000 the conclusion is that the fair rate of return is not less than 6.5 per cent.

Q. If the conclusion were expressed in relation to an original cost rate base of about $33,500,000, what would be the fair return and what would be the effect on the rate of return of not less than 6.5 per cent? [615] A. There would be no significant effect on my conclusion as to a fair return of not less than $2,450,000, but the 6.5 per cent would be increased approximately in proportion to the decrease in the original cost rate base. The effect of such an assumption as to original cost would be limited to the results of the tests provided by Paragraph II (b) and Paragraphs III and IV of Schedule 11.

MR. GOLDBERG: Now, Mr. Examiner, the witness is answering now with respect to portions of the schedule which have been excluded.

MR. SPARKS: May he finish the answer, if your Honor please?

TRIAL EXAMINER: Yes.

THE WITNESS: I used the results of the tests provided by Paragraph IV as a matter of convenience only to state the extreme lower limit of the range of reasonableness.

TRIAL EXAMINER: With respect to the answer that you gave immediately after the proffer of evidence, do you wish to add any qualification, or have you just added that qualification?

MR. SPARKS: Would you like to have the question reread to you, Doctor?

THE WITNESS: I would like to inquire as to what the Examiner means by "qualification"?

TRIAL EXAMINER: In response to your inquiry the [616] Examiner stated that you could answer the question put to you by counsel, and anything that was necessary to clarify that answer, or to qualify it, as the case may be, could be elicited at another time. The Examiner does not want the witness to understand that he is not permitted to qualify his answer now if he wishes to do so.

THE WITNESS: I have no reason to qualify the answer if it is considered that the answer I made is in the light of the general study which I undertook and carried to a conclusion.

* * *

[617] Q. I understand that this conclusion as to the fair return is before whatever may be the appropriate credit to consumers for the earning capacity of depreciation funds in view of the risks present in their utilization by the company?

* * *

[618] A. That is correct.

* * *

[630] TRIAL EXAMINER: * * * In connection with the existing offer of proof the Examiner denies the offer beginning with line 19 of page 602 of the record transcript, and ending with line 6, page 612 thereof.

With respect to that part of the offer which lies beyond that point in the transcript the Examiner will strike the remaining portion of the offer of proof and

direct counsel to put the witness on the stand and address questions to him for specific ruling, on a question and answer basis.

Now then with respect to the statement of Trial Examiner made at page 604, line 16, to simplify the record the Examiner changes from "yes" to "no" with this understanding that there [631] is no objection to a witness stating what is consolidated original cost, what is working capital, or what is total original cost, now the effect of the ruling now being made is to make it consistent with the first ruling in connection with the offer of proof, page 602 to page 612.

MR. GOLDBERG: Mr. Examiner, with respect to transcript 604, it appears from the record that I stated there was no objection to the questions that had begun on page 602 down to my statement on 604. I did make the statement at the time, but I made it because I had missed the objectionable portions of the questions and answers that had preceded my statement. I now want the record to show that I object to those questions and answers that relate to the objectionable portions of Schedule 11.

* * *

[634] MR. SPARKS: Do I understand that all of the questions and answers which appear in the transcript beginning on [635] page 602, line 19 and ending on Page 612, line 6, have been excluded as evidence?

TRIAL EXAMINER: Insofar as all of the offer is directed to the purpose of qualifying the parts of Schedule 11 which will be excluded.

MR. SPARKS: If Your Honor please, that seems to me to leave us in the air where we have no definite ruling on which portions actually are excluded.

TRIAL EXAMINER: The Examiner has been definite and will be and states that the testimony offered at that place in the record just designated by counsel is

excluded and states as his reason for excluding it that it is directed to the qualification of the objectionable portions of Schedule 11.

MR. SPARKS: Very well, sir.

MR. GOLDBERG: And I think the Examiner has made it clear that if any portion of the exhibit would not be objectionable, since it is offered in bulk, the Examiner has no recourse but to exclude all of it.

[636] TRIAL EXAMINER: With that idea in mind, I stated that the evidence on consolidated original plant, working capital and total original cost as it appears in the witness' testimony if separated therefrom and put in as separate testimony, would be received.

• • •

[638] DIRECT EXAMINATION (Resumed).

By MR. SPARKS:

• • •

[639] Q. Doctor, you distinguished in your testimony, two bases upon which the rate making process may seek to induce the investment of capital in regulated enterprise. One was defined as the competitive replacement basis. The other was the investment cost basis. You said that application of methods of return determination which correspond to those two regulatory concepts provide tests of the reasonableness of the return otherwise arrived at. You have now applied a method consistent with the competitive replacement basis of regulation. Have you given consideration to original cost of capital or historical cost of capital as criteria of the reasonable and adequate return?

MR. GOLDBERG: Before the witness answers that question, I would like to have counsel for the Respondent state what he means by "you have now applied a method consistent with the competitive replacement basis of regulation". Does he by that statement refer

to any portions of Schedule 11 to which counsel for the Staff has objected?

MR. SPARKS: I will be glad to ask the witness that question.

MR. GOLDBERG: It is not the witness' statement; it is your statement.

MR. SPARKS: I am asking the witness if that is correct.

[640] TRIAL EXAMINER: Just a minute. He may ask the witness that question.

By MR. SPARKS:

Q. Is it correct, Doctor, that you have applied a method consistent with the competitive replacement basis of regulation?

MR. GOLDBERG: That is not my inquiry. My inquiry is, did you by that statement—and the witness is going to answer for you, Mr. Sparks—refer and intend to refer to those portions of Schedule 11 of Exhibit 30 to which Staff counsel has objected?

THE WITNESS: The answer is that the results of the competitive method here referred to are expressed in Schedule 11.

MR. GOLDBERG: Where in Schedule 11?

THE WITNESS: Throughout Schedule 11.

MR. GOLDBERG: Is it expressed in Roman numeral No. I?

THE WITNESS: Roman numeral No. I is an amount shown on Schedule 11 for the purpose of making possible the tests by reference to the competitive cost method.

[641] MR. GOLDBERG: So that if I understood your statement, it is not shown in I? That is merely basic data?

THE WITNESS: It is an essential part of the method employed in Schedule 11.

MR. GOLDBERG: But the methods you employed in Schedule 11 are not reflected in I, isn't that so?

THE WITNESS: That is so.

MR. GOLDBERG: And the methods you employed are reflected however, in Roman II-A through IV-B of Schedule 11, is that right?

THE WITNESS: No more than reflected in I as isolated separate amounts.

MR. GOLDBERG: Do you show any rate of return in I?

THE WITNESS: No rate of return is recorded under that part of that paragraph, no.

MR. GOLDBERG: And it is the rate of return and dollars of return that reflect the results of your application of the method in Schedule 11, isn't that so?

THE WITNESS: In the following paragraphs of Schedule 11, amounts of return are recorded which reflect the testing. In each of those paragraphs, rates of return are stated which represent the amount of return in relation to the figures shown in I.

MR. GOLDBERG: So then, Mr. Examiner, it is now obvious that by the statement Mr. Sparks made in introducing the question, "You have now applied a method consistent with [642] the competitive replacement basis of regulation," he had reference to the results of Roman II-A through IV-B of Schedule 11 and therefore, I object to the question.

TRIAL EXAMINER: When you say that you have applied a method, Mr. Witness, is that method reflected in Schedule 10?

THE WITNESS: Schedule 10 represents a study which is an essential part of the method to which I have referred.

TRIAL EXAMINER: Does this testimony that counsel now proposes to have the witness give relate to Schedule 10?

MR. SPARKS: It relates generally to all of Dr. Foster's bases, if Your Honor please. The real question is, "Have you given consideration to original cost of capital or historical cost of capital as criteria of reasonable and adequate return?"

MR. GOLDBERG: Then why don't you merely ask that question without introductions?

MR. SPARKS: I will let my question stand as I have put it.

MR. GOLDBERG: If you leave it in the way that you have stated it, then I object to it.

TRIAL EXAMINER: Will counsel address the bench and not one another?

MR. GOLDBERG: I intended to address the bench, Mr. Examiner, and state that the question as stated with that introduction clearly relates to the objectionable portions of Schedule 11, and therefore I object to it. There is a [643] purpose for that introduction.

TRIAL EXAMINER: Just a minute. Where have you given consideration to original cost of capital or historical cost of capital as criteria of a reasonable and adequate return?

THE WITNESS: Do you mean by the question "where", in which schedule or exhibit?

TRIAL EXAMINER: Yes.

THE WITNESS: The answer is at no point in a schedule or exhibit.

TRIAL EXAMINER: In connection with your testimony, where have you?

THE WITNESS: I have done so in consideration of the general principles that there was rate-of-return determina-

tion, in consideration of the bases of return determination, and in reaching the final conclusion as to the return required for this company, I gave consideration to the original and historical cost of capital to this company.

TRIAL EXAMINER: I will sustain the objection to counsel's question, and he may put to the witness the question, "Have you given consideration to original cost of capital or historical cost of capital as criteria of the reasonable and adequate return?"

MR. SPARKS: Do I understand, if Your Honor please, that Your Honor has ruled that my question is not admissible?

TRIAL EXAMINER: That is correct.

[644] MR. SPARKS: Now I offer the answer which the witness would have given if he had been permitted to answer, if your Honor please. I offer this as one of the factors which the witness has taken into consideration in arriving at his conclusion as to the fair rate of return, and the fair return to the Respondent, if he had been permitted to answer, he would have stated as follows:

"Answer: Yes. I have given careful consideration to these criteria but have not attempted to give them quantitative expression. It has been unnecessary to do in view of the results of the test by reference to competitive cost.

"Penn Water was established and developed during the period from 1905 to 1912 and later. Compared with the present, that was a period of relative scarcity of capital, relatively higher interest rates, and relatively higher costs of equity capital. The capital costs initially incurred included those necessary to attract capital to a competitively new type of enterprise. The undertaking was exposed to the hazards of a business

engaged in the utilization of a water power resource and to the hazards of construction in a river whose behavior characteristics were in part unknown and in part unpredictable. The cost of capital included the cost of waiting for the prospective return during a significant [645] period required to achieve full utilization of the capacity. In view of the effect of these factors upon the cost rates at which the initial portion of the invested capital was obtained, it has appeared unnecessary to attempt a precise statement of those rates."

* * *

[649] Q. What is your conclusion as to the return which is reasonable and adequate for Pennsylvania Water & Power Company? A. It is my opinion that the test by reference to competitive costs provides the most significant evidence of the fair return. For this reason, I conclude that the fair return is not less than $2,450,000. Expressed in relation to an original cost rate base of $37,680,000 the conclusion is that the fair rate of return is not less than 6.5 per cent.

[650] Q. If the conclusion were expressed in relation to an original cost rate base of about $33,500,000, what would be the fair return and what would be the effect of the rate of return of not less than 6.5 per cent? A. There would be no significant effect on my conclusion as to a fair return of not less than $2,450,000, but the 6.5 per cent would be increased approximately in proportion to the decrease in the original cost rate base. The effect of such an assumption as to original cost would be limited to the results of the tests provided by Paragraph II (b) and Paragraphs III and IV of Schedule 11. I——

* * *

Q. Please continue your answer. A. I used the results of the tests provided by Paragraph IV as a matter of convenience, only to state the extreme lower limit of the range of reasonableness.

MR. GOLDBERG: I now move to strike out that portion of the last answer beginning with the words, "the effect of such an assumption as to original cost would be limited to the results of the tests provided by—".

TRIAL EXAMINER: The motion to strike is sustained.

MR. SPARKS: To which I except.

[651] By MR. SPARKS:

Q. I understand that this conclusion as to the fair return is before whatever may be the appropriate credit to consumers for the earning capacity of depreciation funds in view of the risks present in their utilization by the company? A. That is correct.

* * *

CROSS-EXAMINATION.

By MR. GOLDBERG:

* * *

[656] Q. Did I understand your testimony to be with respect to the subject of rate of return, Dr. Foster, that if the investment base is employed in fixing the fair return or fair rate of return, then, the experienced cost of money, rather than the current cost of money should be employed in determining the fair rate of return?

* * *

A. I did say that in my opinion the experienced or past cost of capital rate is consistently and constantly applied in relation to the investment cost rate base. It is [657] consistently applied because it is consistent with the logical basis of regulation. I said also that in my opinion a competitive cost rate is consistently applied in relation to a rate basis reflecting the cost of constructing a substitute plant capable of supplying the same service.

I did say, however, that either method followed rigidly as a matter of formulae might, under conceivable circumstances, give unreasonable results.

Q. Well, then, if I understand it, to put it in my terms; if they are acceptable to you; you stated that if the invest-

ment rate base is used in order to be consistent in determining the fair return or fair rate of return, the experienced or past rate cost of capital should be employed in relation to your rate base; is that right? A. I said that employment is consistent. I avoided making necessarily a virtue of that consistency.

Q. You are saying that that is what should be done? A. No.

Q. That is, that the rate consistently should apply to the investment rate base, experienced or past cost of capital; is that right? A. If I understand your question, if you are talking now about the end result the answer is "no."

Q. I am talking about establishing a fair return or fair rate of return, which I understand to be the subject of [658] your testimony. That was the subject of your testimony, was it not? A. It was.

Q. And relating it to the subject of your testimony, I thought I understood you to state that it would be inconsistent—state, in effect that it would be inconsistent in fixing the fair return or fair rate of return to employ the investment rate base and relate it to current cost of money. Was I correct in my understanding? A. As a matter of method of regulation, consistency, I believe, requires the relation of one kind of past cost to the other, as you just stated.

It does not follow, however, that the result of that method is either reasonable or adequate or consistent with other tests of the appropriate, reasonable rate of return.

Q. In other words, you are saying that relating like things—assuming that they are like—does not necessarily mean that the resulting return will be a fair return. Is that right? A. Yes, recalling my expression of a moment ago, there is not necessarily merit in consistency.

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[659] Q. I am interested in finding out under what circumstances and in what instances you would be of the

opinion that the consistent application would not result in a fair return.

Am I to understand from your testimony that the application of past cost of money to the investment rate base would be inappropriate where there has been, since the investment of the dollars in that investment rate base, an increase in the price levels? A. I am or might refer to that circumstance, to answer your question, by making reference now to an extreme [660] situation. Assume, for instance, that at the time of the investment of $10,000,000, then the cost of capital rate is 7 per cent. Assume that during the subsequent 20 years there has been inflation of serious magnitude and proportions so that at the time of the rate proceeding 20 years hence the cost of constructing the plant capable of supplying the same service is $50,000,000, and not $10,000,000; and that there has been no significant change in the rate reflecting the cost per dollar of capital investment.

In that hypothetical situation I would conclude that the consistent application of the rate of 7 per cent to the original dollars of investment would provide an annual return neither adequate nor reasonable.

Q. You say there would have to be a significant change in price level; is that right? A. The question of whether or not the given change is significant depends upon other considerations and circumstances which may be present.

Q. What are the other considerations and circumstances? A. There are many such. For instance, the closeness with which the capitalization reflects original investment is one.

Q. Any others? A. They do not occur to me at the moment. There are others.

Q. That is the only one that occurs to you. I want [661] you to take your time and think about it.

(After a short pause.)

A. That is the only one that occurs to me at the moment.

Q. What in your opinion is a significant change in price levels that should be given consideration? A. You desire now that I express that in quantitative terms?

Q. However you feel that you ought to express it. A. I would have to ask you what you mean by "price level" in that case.

Q. How do you use the phrase? A. I use the phrase as a general one, referring to any and all kinds of prices.

Q. In other words, you do not relate it solely to prices which are involved in constructing a utility plant; is that right? A. As a general term it is not so related.

Q. In your testimony do you relate it solely to the construction of a utility plant? A. No. In my testimony I have referred to the changes in cost of constructing a utility plant, also to changes in the general level of wholesale commodity prices.

[662] Q. Well, let us first think in terms of relating it to utility plant, which is our immediate concern in this case. What would be a significant change in price levels, in your opinion? A. I would not undertake, Mr. Goldberg, to answer that question in the abstract and unrelated to a specific problem or set of circumstances.

Q. Well, you have unquestionably, I assume, considered that in relation to this case, haven't you? A. I have.

Q. And you must have, in that connection, come to at least a general conclusion as to what you would consider a significant change ir price levels, as related to the construction of utility plants, isn't that so? A. I did come to the conclusion that the changes which have taken place in the cost of constructing utility plant since the date when the property of this company was in fact constructed have been significant. I also was of the opinion that the changes which have taken place in the general level of wholesale commodity prices since the dates of the construction of the facilities of this company have, in fact, been significant.

Q. So that if I understand your last answer, you did not come to any general conclusion as to significant changes,

but merely a specific conclusion in this case, is that right? [663] A. That is all that I either could have done or had any occasion to do.

Q. On your Exhibit 30, Schedule 10, the Schedule is entitled, "Over-all Replacement Cost of Capital as at December 31, 1945." Did you mean to state by presenting that schedule that 9.25 per cent as shown in Roman No. I, the section for equity capital, is the replacement cost of equity capital? A. I mean to say that for the purposes for which used here, I concluded that 9.25 per cent is the rate which represents the replacement cost of equity capital.

Q. Well, did you mean that the company would retire its outstanding equity capital and issue new equity capital? Is that what you had in mind? A. I intended, Mr. Goldberg, to make it clear that any estimate of the replacement cost of capital, whether that capital is represented by debt, preferred stock or common stock, must be hypothetical and must be imputed.

Q. Well, we know that debt capital is replaced, do we not? That is common practice and goes on every day, isn't that so? A. Debt capital arrangement or contract is a limited term contract.

Q. At least we know that debt capital is replaced day in and day out? You have seen it happen in the newspapers [664] and have seen the announcements, isn't that so? A. Outstanding debt is refinanced; yes, if that is what you mean.

Q. And that is what you mean by replacement, is it not? A. No.

Q. You don't mean refinancing? A. No.

Q. What do you mean by replacement cost of capital when you show 2.78 for the debt capital on Schedule 10? A. I refer on Schedule 10 and in the definition of replacement cost of capital to the cost rate at which a utility—here the Pennsylvania Water & Power Company—might under current market conditions obtain the supplies of debt

capital, assuming a hypothetical capitalization and freedom from the heritage of past contractual arrangements for capital.

Q. Do you mean 2.78 per cent on schedule 10 to represent the cost of a refunding issue, or of a new issue in addition to the presently-existing issue of bonds? A. It may be neither, Mr. Goldberg.

Q. I want to know what it means in Schedule 10. I am a little puzzled. I thought I understood it. I thought I understood the 2.78 per cent to represent the cost of refunding the presently-outstanding debt capital of the [665] respondent company? A. The cost of refunding the presently outstanding debt capital necessarily includes the cost of calling that debt. No such costs are included here or could be on the basis of the definition of replacement cost of capital. As I stated, replacement cost represents that cost which would be incurred if the entire capital requirements of the utility were obtained under current market conditions in the proportions indicated by this exhibit and without consideration of any costs carried over from past arrangements with investors.

Q. Are you saying that the 2.78 per cent shown on Schedule 10 as debt capital is the cost of refunding under the present market the outstanding bonds of Penn Water with the exception that it does not include certain additional costs, such as you say the cost of calling. That, you say, should be included? A. It does not, as a matter of definition, include any costs carried over from prior issues such as the redemption premiums.

Q. But exclusive of that, you say it is the cost of refunding the presently-outstanding bonds, is that right? A. It is, of course, imputed or an estimate so that it may or may not correspond to the cost which would actually be experienced if today Penn Water were to issue refunding bonds in the amount indicated.

[666] Q. But it is the—— A. (interposing) Let me add one thing.

Q. Go ahead. A. I was careful in describing the cost rate to say that for the purposes for which used, it does not and should not reflect the rates temporarily available in a current market, and I indicated that it was based primarily upon the late 1945 experience, rather than the dip in interest rates which occurred during the first month of 1946.

Q. In other words, reflecting those, the 2.78 per cent might be even lower? A. If without regard to purpose it had been adjusted directly to the most favorable and perhaps accidental experience, it undoubtedly would have been lower.

Q. But this 2.78 is your estimate of the cost of replacing the presently outstanding bonds of Penn Water exclusive of such other costs which you state should be included but have not been included in the 2.78, isn't that so? A. Subject to the qualifications which I expressed a moment ago, that is correct.

Q. Haven't I stated all the qualifications in my question? Would you like to have the question read? A. If you expect a further answer, yes.

Q. I would like to have an answer that does not require me to relate it back to some earlier answer of yours.

[667] TRIAL EXAMINER: Read the question.

(The question was read.)

TRIAL EXAMINER: Can you answer the question without having to refer to the qualifications? Is the question itself complete?

THE WITNESS: No, the question is not complete.

TRIAL EXAMINER: Very well.

THE WITNESS: Because the 2.78 is not, in a strict sense, an estimate of the replacement cost rate which would be experienced by Penn Water today. It is subject to the qualifications which I expressed as to the lack of significance of spot prices for the purposes for which the estimate was made.

By Mr. Goldberg:

Q. And by "spot prices," you have reference to the particular occurrences of favorable refinancing in the early part of 1946? A. I had in my testimony particular reference to the experience of the Madison Gas and Electric Company in February, 1946.

Q. Getting back to this 9.25 per cent from which I was temporarily diverted, we were discussing the fact in that connection that debt capital is replaced. That is also the fact, is it not, with respect to preferred capital? That, we find, is frequently replaced by companies, isn't that so? A. Preferred stock capital or preferred stock capital [668] contracts, like debt contracts, are refinanced, yes.

Q. To secure the advantages of lower interest rate and the lower cost of money, is that not right? A. That is right, and possibly other advantages.

Q. But I have difficulty in understanding the concept of the replacement cost of capital in connection with common stock. Is it your statement that companies make a practice of retiring their outstanding common stock and replacing it with other common stock? A. I made no such statement.

Q. Well, what do you mean by "replacement cost of capital" when you refer to the 9.25 per cent? Isn't that the cost, as you see it, of retiring the outstanding common stock of Penn Water and replacing it with another issue of common stock? A. No, I have excluded from the definition of the replacement cost of debt and preferred stock capital, the costs which would be incurred in retiring the outstanding debt and preferred stock.

Q. With that qualification, is that what you intended the 9.25 per cent to represent? A. With that qualification, the definition of the replacement cost of equity capital is consistent with and in fact, is the same definition as the terms "replacement cost of debt capital" and "replacement cost of preferred stock [669] capital."

Q. Then you have assumed in Schedule 10 in reflecting the 9.25 and the 10.25 per cent as the replacement cost of

equity capital, that Penn Water will retire its outstanding common and issue a new common, is that right? A. No, I did not say that. Perhaps I may attempt a direct statement having direct definition of the replacement cost of equity capital. Replacement cost of equity means the estimated cost rate which would be incurred if the enterprise as a going concern were to obtain currently the required amounts of equity capital in given proportion in a capitalization. I said, "as a going concern" because, for the purpose of the use here, I made that assumption.

Q. That brings me to one point that I would like to clear up. Schedule 10 reflects the replacement cost of capital of a going concern—right? A. That is right.

Q. Not a hypothetical new company just starting out in business? A. That is right.

Q. Have you assumed that this going concern would not have any equity capital outstanding before it went out into the current market? A. What do you mean by "outstanding"? The corporation necessarily has shares of stock.

[670] Q. If it is a going concern, it necessarily must have had an outstanding capital structure, is that right? A. That is right.

Q. Did this going concern shown on Schedule 10 have any equity capital? A. It is a hypothetical situation, of course.

Q. I don't know that that answers the question, Dr. Foster. I am sure you intended to answer it. A. Any corporation existing as a going concern has a capitalization. It is, I think, appropriate, however, to attempt an estimate of the capital cost rates which would be incurred if such corporation were to obtain the capital in the current market, and to exclude from that estimate the amount of cost which exists because of past contractual arrangements.

Q. Would this going concern shown on Schedule 10, Roman Numeral I, have debt, preferred and equity capital

at the time it looked to the current market? A. The purpose of——

Q. (Interposing) Please, Dr. Foster, will you try to answer the question?

TRIAL EXAMINER: Read the question.

(The question is read.)

TRIAL EXAMINER: Answer the question.

THE WITNESS: For the purpose of an estimate of the [671] replacement cost of capital, I have assumed the corporation to have outstanding debt, preferred stock and equity capital in the proportions corresponding to those which represent Penn Water's actual present capitalization.

By MR. GOLDBERG:

Q. It is almost actual rather than hypothetical? A. It is actual in that sense, yes.

Q. And you have assumed, in Schedule 10, further that the outstanding equity capital will be replaced, haven't you? A. I don't think, Mr. Goldberg, that it is a question of replacement. I think that it is a question of an estimate of the cost rate at which a hypothetical corporation having given characteristics would be able to obtain equity capital in the current market.

Q. And that necessarily involved an assumption of going out into the current market and replacing outstanding capital, replacing the outstanding capital structure, is not that so? A. Well, if you were attempting an estimate of the cost rate at which a specific corporation could replace its existing capital, that would be true. That is not what I have done here.

Q. You have assumed a company without any capitalization of debt, preferred and equity—right? A. That is right.

Q. And you have assumed, subject to the qualifications [672] you have already stated in the record, that the debt

capital could be replaced at 2.78, is that right? A. Well——

Q. (Interposing) I said "subject to the qualifications you have already stated."

MR. SPARKS: I do not think that is a complete question, if Your Honor please. I object to it.

TRIAL EXAMINER: Just a minute. Can you answer that question in that form?

THE WITNESS: I have not, Mr. Examiner, assumed replacement. The inquiry is directly as to the cost rates at which a hypothetical corporation would be able to obtain capital of these kinds in the current market.

By MR. GOLDBERG:

Q. For its presently outstanding capital, right? A. I don't know what that question means, Mr. Goldberg.

Q. You have got Penn Water in this case, haven't you? That is the company with which we are concerned—the principal company—right? A. Yes, sir.

Q. It has debt capital, preferred capital and equity capital, is that right? A. Yes, sir.

Q. And it has certain costs of money associated with that debt capital and preferred capital—right? [673] A. It has certain experienced costs of money, yes.

Q. And you have intended to reflect on Schedule 10, have you not, how that experienced cost of money is affected by current costs of money, subject to the qualifications you have already stated, isn't that so? A. If I understand your question, no; because a statement of how that experienced cost of money would be affected by refunding under current market conditions would be very different from the results that I have here.

Q. Because you would include these other costs involved in that refunding, such as call, that you consider applicable to a cost of refunding, is that right? A. Certainly, because the cost of that new capital would include these other costs.

Q. You told us that Schedule 10 reflects a going concern—right? A. I said the estimates are based upon the assumption of the existence of a going concern.

Q. And necessarily, having assumed a going concern, you have assumed that that going concern has a capital structure with related experienced cost of money to that capital structure—right? A. No, I do not assume that it has a capital structure. In Paragraph H of Schedule 10 I chose a different capital structure.

[674] Q. That just involves a different assumption? A. Right, but a capital structure implies given proportions, and for the purpose here I may assume any proportions which are appropriate.

Q. Having assumed a going concern in connection with Schedule 10, did you assume any proportions of the capitalization of that going concern? A. I assumed the proportions which I stated in Column 2 of Schedule 10, both for the first and the second parts of that schedule.

Q. In other words, with respect to the first part of Schedule 10, you assumed that the going concern had debt capital, preferred stock capital and equity capital—right? A. No, Mr. Goldberg; I assumed that the corporation as a going concern was to obtain in the current market, capital in these proportions from different classes of investors.

Q. Is the capitalization you reflected in Schedule 10 the first capitalization of that going concern? A. It is unnecessary, Mr. Goldberg, for my purpose, to make any such assumption.

Q. Now, Dr. Foster——

TRIAL EXAMINER (interposing): Read the question. And will you answer it, Mr. Witness, as directly as you can?

(The question was read.)

THE WITNESS: The only answer that I can give, Mr. Examiner, [675] is that I do not know.

By Mr. Goldberg:

Q. Can you have a going concern without an existing capitalization? A. No.

Q. Now, you assumed a going concern, did you not? A. For this purpose, yes.

[676] Q. And the going concern is Pennsylvania Water & Power Company—right? A. The going concern is a corporation having the characteristics of the Pennsylvania Water & Power Company other than the proportions of debt, preferred stock and equity capital in its capitalization.

Q. You intended Schedule 10 to have some significance in relation to your conclusions on fair rate of return, didn't you? A. I did and do.

Trial Examiner: Let me ask the witness a question. In your Column 2 you are assuming no fixed amount of capital that is to be obtained? It can be $35,000,000, $2,000,000, or any amount so long as the proportions are as stated there.

The Witness: Yes, with this one qualification, that if the amount were reduced to extremely small quantities, it would of course affect the cost rates.

Trial Examiner: Can you state simply without going into too much detail just how you obtained the figure 2.78?

The Witness: The figure 2.78 is my estimate of the cost rate at which a corporation similar to Penn Water with respect to all characteristics affecting the cost of capital could obtain in the current market amounts of capital corresponding to the amounts required for investment to supply service by Penn Water, assuming the capitalization corresponding [677] to Penn Water's capitalization.

Trial Examiner: How does the 2.78 result from your Schedule 8. What did you do?

The Witness: I examined the yield and costs rates indicated by Schedule 8 to have been experienced by other

companies in recent financing, both new and refunding. Those cost rates exclude, in the case of those other instances, all costs related to refunded issues. I examined those cost rates in relation to various factors, particularly the capital structures expressed as the proportion of gross income available to pay the interest on those bonds, and as a matter of judgment I reached the conclusion that the replacement cost rate appropriate for Penn Water is 2.78 per cent.

TRIAL EXAMINER: Is 2.78 per cent a simple arithmetic average of the cost rate column of Schedule 8—that is Column 9?

THE WITNESS: No, Mr. Examiner, it is not an average rate, it is not an average of any kind. Those cost rates vary with the quality of the bonds represented by them. The final column of Schedule 8 headed, "Moody's Rating" is some measure of that quality.

TRIAL EXAMINER: Actually what did you do to derive 2.78?

THE WITNESS: I did several things, and in what I say I am neglecting the distinction between yield rate and cost of [678] financing. I examined the cost rates in Column 9 in relation to the indication of quality shown by the ratings in Column 12; that is, I separated them out as between AA and the A rates. There is other evidence to the general effect of the quality of Penn bonds as being intermediate between the qualities typically represented by the ratings A and AA but closer to the AA.

TRIAL EXAMINER: Did you classify all the A bonds in Schedule 8 and then all of the AA?

THE WITNESS: I did that and separately averaged them.

TRIAL EXAMINER: You separately averaged them?

THE WITNESS: Yes.

TRIAL EXAMINER: What was it? Was it a weighted or an arithmetic average?

THE WITNESS: An arithmetic average. I think there are 11 of each rate.

TRIAL EXAMINER: What did you do with those arithmetic averages?

THE WITNESS: I laid them aside for a time—in fact I am stating the reverse of what I actually did. In fact what I previously did was this,—I had charted the yield rates for all of the bonds represented on Schedule 8 in relation to times interest requirements provided as indicated by the pro forma income statement contained in the prospectus. There is of course generally a relationship between the coverage of [679] interest requirements and the yield rate. As I said in the direct testimony, the coverages provided in all these instances are so broad that that general relationship is obscured.

TRIAL EXAMINER: I do not want to get into this in too much detail, but I just want to see what your studies were. You made this chart of times-interest coverage.

THE WITNESS: It provides a curve.

TRIAL EXAMINER: Yes.

THE WITNESS: So that one gets away from the invalidity of an averaging process.

TRIAL EXAMINER: What did you do next?

THE WITNESS: As a matter of judgment then, I estimated the yield rate which would be experienced on the basis of the coverage which would be provided in the Penn Water situation.

TRIAL EXAMINER: Under what conditions?

THE WITNESS: Assuming refinancing or assuming the issuance of those bonds at the rates indicated and on the basis of the assumption as to capital structure which is expressed in both Parts I and II of Schedule 10.

TRIAL EXAMINER: What times-interest factor did you use for Penn Water?

THE WITNESS: I have forgotten, Mr. Examiner. It is a large coverage.

TRIAL EXAMINER: Where did you get that figure?

[680] THE WITNESS: That represents the coverage which would be provided on the basis of the experienced gross income of Penn Water.

TRIAL EXAMINER: Then what did you do with your two averages that you obtained from Schedule 8? Merely check them?

THE WITNESS: I had one average, that being the average yield rate experienced in the issuance of the AA and A bonds during the past year. I had a further or different analysis which was that of a relationship which does not provide an average. On the basis of those two analyses of Schedule 8, I as a matter of judgment concluded that 2.72 is the replacement cost rate before the cost of financing margin which is appropriate for the purpose here. I then analyzed the behavior of the cost of financing margin which is represented by the differences between Columns 8 and 9, and again as a matter of judgment used .06 as a loading of the 2.72.

TRIAL EXAMINER: Your 2.72 comes from two separate determinations of yield that you obtained in three different processes—one from your chart, one from your averages, and one through this other process?

THE WITNESS: Yes. It is available as the result of several, or at least two approaches to the analysis of the data shown by Schedule 8.

TRIAL EXAMINER: Why do you limit Schedule 10 to [681] replacement cost? Would it not also be valid to state the replacement or additional cost—that is addition to capital?

THE WITNESS: It is perhaps only a matter of definition, Mr. Examiner. Schedule 10 represents the cost rate which would be experienced in obtaining debt and for other kinds of capital in approximately the amounts indicated and irrespective of the purpose, whether new capital or refunding.

TRIAL EXAMINER: The word "replacement" can come out of your title without in any way affecting the validity of the data, is that true?

THE WITNESS: The word "replacement" is in the title in order to afford a distinction in definition between different kinds of capital cost; that is, replacement cost, experienced cost, historical cost, and original cost.

TRIAL EXAMINER: Replacement cost then, according to your definition, can cover just simply additions to the capital?

THE WITNESS: The replacement cost is an estimate of the cost which would be incurred under the given circumstances for the purpose of obtaining additional capital to be used for construction purposes.

By MR. GOLDBERG:

Q. In connection with your last answer, do you mean that the 2.78 on Schedule 10 represents the cost of debt [682] capital in addition to outstanding debt capital which is not being refunded? A. Not necessarily, Mr. Goldberg, because it does not necessarily follow that the cost which would be experienced in obtaining relatively small increments of new debt capital is the same cost as would be experienced currently to replace the entire amount of debt capital.

Q. You mean the cost of securing additional debt capital may vary—it may differ—from the cost of refinancing existing debt capital, is that right? A. It may vary from the cost which would be experienced in obtaining currently the total amount required.

Q. Is this 2.78 replacement refunding cost subject to the qualifications you made earlier in your testimony? A. It certainly, Mr. Goldberg, is not the cost which would be experienced in refunding. It is the cost as estimated which would be experienced currently by a company having these risks in obtaining the amounts of debt capital in approximately these quantities indicated.

Q. Obtaining it for the first time, or obtaining it for the purposes of refunding existing debt capital? A. Either, Mr. Goldberg, subject to the qualifications with respect to the carry-over costs related to past contracts.

Q. Are you saying that your company on Schedule 10 [683] went into the market to secure 52 per cent of additional debt capital?

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A. I am sorry, but I do not understand the question.

By Mr. Goldberg:

Q. Did the going concern which you have assumed in Schedule 10 have any debt capital? A. No, I have assumed that this going concern went into the market to obtain debt capital in amounts constituting 52 per cent of the total proceeds from the issuance of securities.

Q. In other words, it had no debt capital before it went into the market, is that right? A. One may make any assumption that may be desired with respect to the capitalization before the financing of which we are speaking. I have made no assumption.

Q. When did this going concern that you assumed, go into business? A. I have not been concerned with when it went into business nor with the costs which it may unavoidably have experienced in reaching the status of a going concern and being able to go into the market on the bases indicated by Schedule 10. If I had been concerned with those costs, I would [684] necessarily have recognized costs of capital substantially in excess of those that are reflected in Schedule 10.

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[695] Q. Now, Dr. Foster, it is my recollection that at the conclusion of your direct testimony you stated that the 6.5 per cent rate of return, which you testified is, in your opinion, a fair and reasonable rate of return in this case, should be adjusted to the extent of the credit and the assets represented by the depreciation reserve balance. Is that right?

MR. SPARKS: Just to correct the record, Dr. Foster [696] testified to a rate of return of not less than 6.5.

MR. GOLDBERG: All right.

By MR. GOLDBERG:

Q. Dr. Foster, is my recollection correct about that? A. Yes, sir.

Q. Would the adjustment be a downward adjustment of 6.5 per cent? A. I testified that the conclusion as to fair return and as to rate of return is subject to whatever may be the appropriate treatment of depreciation for the purpose of return determination. As to whether or not rate of return would be adjusted downward, I think depends upon the form of that treatment.

Q. As I have your testimony, the question was:

> "Question: I understand that this conclusion as to the fair return is before whatever may be the appropriate credit to consumers for the earning capacity of depreciation funds in view of the risks present in their utilization by the company?
>
> "Answer: That is correct."

Now will the fair return be adjusted downward as the result of that appropriate credit? A. Your previous question concerned the rate of return; your present question concerns the fair return?

Q. That is right. [697] A. The answer need not necessarily be the same to both questions.

Q. A fair return is the result of the application of rate of return to the rate base; isn't that so? A. Assuming the procedure by using the rate base and rate of return, yes.

[698] Q. Did you assume a rate base? A. I assumed that the procedure would be by determination of a rate base.

Q. And that was basically your testimony in this case, is that right? A. It was basically the form of the testimony, yes.

Q. So that if there is an adjustment of the fair return downward as the result of the appropriate credit, then in turn there will be an adjustment downward of the fair rate of return, isn't that so? A. That does not necessarily follow.

Q. Well, then, getting back to the form in which you answered the question, what would be the effect on the fair return of the appropriate credit to consumers for the earning capacity of the depreciation funds generated by the charges to depreciation? A. The trend of the adjustment would be a downward adjustment.

Q. And assuming no change in the rate base, what would be the effect of the downward adjustment as a result of this credit to fair rate of return? A. The effect on what?

Q. On the fair rate of return? What is the effect on the fair rate of return of an adjustment downward of fair return resulting from the credit, assuming no change in the [699] rate base? A. There may be no effect on the rate of return. It depends upon the form of the treatment of depreciation for the purposes of the fair return determination.

Q. What did you have in mind when you were talking about appropriate credit to consumers? A. I had in mind any treatment of depreciation which is appropriate and reasonable for the purpose of recognizing depreciation for a fair return determination.

Q. Did you have any specific mode of procedure in mind? A. No, I had in mind any of the alternative modes of procedure which are available to regulatory commissions.

Q. Did you have in mind an undepreciated rate base when you made that statement? A. The use of an undepreciated rate base is among the modes of procedure which are available.

Q. Did you have in mind an appropriate credit to consumers in connection with an undepreciated rate base? A. An appropriate credit to consumers in connection with an undepreciated rate base is among the modes of procedure.

Q. That is not the question. Did you have in mind an undepreciated rate base in connection with an appropriate credit to consumers? [700] A. I have answered to the effect that I had in mind an undepreciated rate base as among the modes of treatment which are available.

Q. And did you also have in mind other modes of treatment of the undepreciated reserves? A. I answered that I had in mind the several modes of procedures.

Q. Name them; which ones did you have in mind? A. The use of the depreciated rate base is among those modes of procedure.

Q. Go ahead. A. The use of an undepreciated rate base with the rates of that credit varying from the minimum rate to a maximum rate.

Q. Did you have in mind the use of a credit to consumers in connection with the depreciated rate base? A. Yes.

Q. Do I understand that when you stated that your fair return is subject to the appropriate credit, you did not have in mind what the credit would be or the direction of the adjustment? A. I have indicated that a credit necessarily implies a direction of adjustment. To answer the first part of your question, I made no study of the appropriate credit.

Q. But you did not extend your thinking of the effects [701] of an adjustment for appropriate credits to the consumers for the earning capacity of the depreciation funds to its effect on the fair rate of return, is that right? A.

I have testified as to the direction of the effect on the return allowance, if that answers your question.

Q. No, it does not.

TRIAL EXAMINER: Read the question.

(The question is repeated.)

THE WITNESS: In that case I do not understand your question.

By MR. GOLDBERG:

Q. You told us that the effect of the credit on fair return would be downward—right? An adjustment downward? A. I have said that the recognition of the depreciation, whether by credit or otherwise, results in an adjustment of the fair return allowance downward from what it would be in the absence of such recognition.

Q. Yes. Now, you understand what rate of return is as distinguished from return, don't you? A. I believe so.

Q. I thought so.

MR. SPARKS: I object to that.

TRIAL EXAMINER: Just a moment. Objection sustained.

MR. GOLDBERG: To what? I have no question pending.

TRIAL EXAMINER: It is not necessary to make that kind [702] of a statement.

MR. GOLDBERG: I was just agreeing with the witness that I thought he understood it from his direct testimony. I think I am entitled to agree with the witness.

By MR. GOLDBERG:

Q. Now, Mr. Foster, since you understand the difference between rate of return and return, have you thought through what the effect on the rate of return would be of the appropriate credit to consumers for the earning capacity of depreciation funds? A. I have, I believe, testified

that there is not necessarily any effect on the rate of return depending upon the form or mode of treatment of depreciation in connection with fair return determination.

Q. You don't know what effect it would have on the rate of return in this case, isn't that so? A. I have attempted to answer your question, Mr. Goldberg.

TRIAL EXAMINER: Answer the question, Mr. Witness. Read the question.

(The question was read.)

MR. SPARKS: What do you mean by "it", Mr. Goldberg?

MR. GOLDBERG: We are talking about the effect of the appropriate credit that he mentioned, on the rate of return.

TRIAL EXAMINER: Let us not have any exchanges between [703] counsel. If you have an objection to the question, state it.

MR. SPARKS: I object to it. I think that Mr. Goldberg should make his question clear.

MR. GOLDBERG: Let us have the question read again.

TRIAL EXAMINER: Read the question.

(The question was repeated.)

MR. GOLDBERG: By "it", I will explain, Mr. Examiner, that I meant the appropriate credit to the consumer for the earning capacity of the depreciation funds as just testified to by the witness.

TRIAL EXAMINER: Answer the question.

THE WITNESS: The answer to the question is that I do. That effect on the rate of return depends upon the mode of treatment of depreciation.

By Mr. Goldberg:

Q. Assuming an undepreciated rate base what did you conclude? A. Assuming an undepreciated rate base, there is a fair return of not less than 6.5 per cent which remains unchanged.

Q. Assuming a depreciated rate base, what did you conclude? A. The fair rate of return at 6.5 per cent also remains unchanged.

Q. So the fair rate of return remains unchanged in your opinion, whether the appropriate credit is associated [704] with an undepreciated or depreciated rate base, is that right? A. The use of an undepreciated rate base provides indirectly the credit which is provided directly by the adjustment of the fair return where the mode of treatment is the use of an undepreciated rate base.

Mr. Goldberg: I submit to the Examiner that the witness is able to answer the questions directly and I would like such an answer.

Trial Examiner: The Examiner will strike the answer. Read the question.

(Question read.)

The Witness: The fair rate of return remains unchanged, yes.

By Mr. Goldberg:

Q. Doctor, referring you to the second page of Schedule 6 in Exhibit 29, will you tell us how you arrived at the 9.25 per cent there shown as the applicable cost rate to equity capital? A. The applicable cost rate of 9.25 per cent was arrived at as the result of the study of the several kinds of evidence of the cost of equity capital as the result of various studies to which I testified at some length.

Q. What are these several kinds of evidence that you mentioned? A. The first to which I referred includes the [705] evidence with respect to capitalization rates and the evidence with respect to cost of equity financing.

Q. What evidence did you consider in connection with the cost of equity financing? A. I considered the available evidence with respect to the rates at which investors had capitalized the prospective income from their investments in Pennsylvania Water and Power Company.

Q. Are these rates shown in the exhibits anywhere that you have presented—that is, the rates at which the investors have capitalized prospective income? A. No.

Q. Does it appear anywhere in the work papers? A. No.

Q. Where does it appear? A. The rates at which investors capitalized the present income, whether income available from Pennsylvania Water and Power Company or any other company are necessarily subjective.

Q. You mean they may vary with the individual who is applying the judgment? A. They vary with the individual who is applying the judgment.

Q. Do I understand from that, that you have not intended here to reflect the informed investors' rate [706] of capitalization? A. I have intended here to use the best available evidence of the investors' capitalization rates.

Q. I am trying to find out where that evidence is. I may like to examine it. A. Oh, I misunderstood you. That evidence is presented in Chart 1 of Exhibit 29 as evidence rather than as capitalization rates themselves. It is presented also in Schedule 1 and Schedule 3 as well as in the testimony generally.

[707] Q. You mean by "the rates at which investors have capitalized prospective income" the earnings price ratios? A. I tried to make it appear that I do not, Mr. Goldberg.

Q. I did not hear that answer. A. I do not.

Q. I notice Schedule 1 which you indicate represents part of the evidence of the rate at which investors have capitalized prospective income contains monthly earnings price ratios, and that is why I thought that your use of the phrase "the rate at which investors have capitalized pro-

spective income" was synonymous with earnings price ratios. Am I wrong about that? A. The title of Schedule 1 is merely "Monthly Earnings Price Ratios."

Q. Yes, and that was one of the evidences as I understood it that you used in arriving at the rate at which investors capitalized prospective income, is that right? A. I also characterized it as evidence and was careful to distinguish evidence from the fact of the capitalization rate.

Q. I am following your language. I am saying that Schedule 1 was evidence to you of the rate at which investors have capitalized prospective income—is that right? A. That is right.

[708] Q. And as far as Schedule 1 is concerned, that evidence of the rate is synonymous with earnings price ratios, is that right? A. No.

Q. Schedule 3 shows earnings price ratios for a selected group of companies, doesn't it? A. For a group of six companies, yes.

Q. A selected group? A. I said on direct testimony that it was not a group which resulted from a process of selection.

Q. Didn't you testify that you had available for use at least one other company that you did not use? I think it was the Southern California Edison? A. Well, available in the sense that it could have been utilized and included with additional effort, yes.

[709] Q. So at least to that extent selection had to be made, you had to determine that certain companies would be eliminated for various reasons? Right? A. I eliminated one company for the reason which I stated.

Q. Were there any other companies outside those in Schedule 3, that you considered and rejected? A. I know of no other companies.

Q. By that you mean that the only companies which you went to and examined the data were those listed at the bottom of Schedule 3, and Southern California Edison

Company? A. The only companies for which I examined the data over the period shown by Schedule 3 are those listed at the bottom of that schedule.

Q. How is it you happened to select the first companies you went to? Were you familiar with them? A. Well, I am generally familiar with the corporate organization of these companies from time to time, yes.

Q. So you had occasion when requested to make a study to automatically know what companies fit the respondent company; is that right; without having to consider a great group of companies? A. I do not know what you mean by "fit the respondent company."

Q. Comparable. [710] A. I have not testified that I considered these companies comparable.

Q. Do you? A. The earnings price ratios shown by Chart 1, I believe, demonstrate that they are not closely comparable.

Q. Is your subjective rate of capitalization and prospective income in any way influenced by these data that are shown on Schedule 3? A. The capitalization rate is the rate at which investors trading in the market capitalized what they believed to be the prospective income. The answer is that those rates could not have been influenced by these data shown on Schedule 3. They might have been influenced, of course, by similar information available to those who made the investment decision.

Q. I have not, apparently, made my question clear. I will restate it. A. Thank you.

Q. I want to know whether the subjective rate at which investors capitalized the prospective income arrived at by you in this case was influenced by the earnings price ratios reflected in Schedule 3 of Exhibit 29? A. Referring specifically to the rate of 8.5 per cent, the answer is that, yes, I considered the earnings price ratios shown by Schedules 1 and 3 in arriving at that [711] conclusion.

Q. And the 8.5 per cent rate is the one you considered applicable to the respondent company, Pennsylvania Water & Power Company, right? A. Yes.

Q. Dr. Foster, it was determined, you say, at least in part on evidence of earnings price ratios of companies that are not comparable to Pennsylvania Water & Power Company; is that not so, Doctor? A. I testified on direct that I used earnings price ratios shown by Schedule 3 merely for the purpose of background and to permit a more intelligent interpretation of the meaning and significance of the Penn Water earnings price ratios.

Q. When you say you used it merely for the purpose of background and for a more intelligent appraisal of the appropriate rate for Pennsylvania Water & Power Company, could you, perhaps, be more explicit about how Schedule 3 serves as a background to your conclusion? A. Perhaps I can do so by reference to the chart upon which these data shown by Schedule 3 are plotted.

Q. Yes? A. As soon as I saw that information, that the evidence of the rates at which Penn Water investors capitalized the prospective income, it has a more direct and useful application for the purpose. I desire to know whether or not the [712] variations in the earnings price ratios of the Penn Water common stock, as evidenced by the capitalization rate followed a course which was generally similar to the variations of fluctuations in the earnings price ratios of other electric and electric combination companies. The determination of those earnings price ratios and their analysis in relation to the Penn Water earnings price ratios tended to answer that question.

Secondly, since Penn Water is not a distributing company, and has characteristics which are different from those of electric companies which are both producing and distributing companies, I was interested to know whether typically, over a term of years, the earnings price ratios of Penn Water would be found at a higher or lower level than those of these other electric companies.

Thirdly, with reference to the meaning and significance of the earnings price ratios as evidence of the capitalization rates, I was interested to know whether or not the fluctuation of the earnings price ratios in relation to events

and circumstances which may be assumed to influence investor appraisals was generally the same for other earnings price ratios as it was found to be for the Penn Water earnings price ratios.

Q. So that you plotted on Chart 1 the earnings price ratios, for instance, for Penn Water, and for the group of companies, and compared the fluctuations and the evidences [713] you assumed brought them about. Is that right? A. I made those comparisons, and, also, I noted the comparative levels, from time to time.

Q. Did you conclude that the fluctuations on Penn Water's earnings price ratios followed the same trend as the fluctuation of the earnings price ratios of the group of companies? A. To some extent, yes.

Q. You mean by that that at some period they did and at others they did not? A. The earnings price ratios of Penn Water common stock, like the earnings price ratios of any other one company, are subject to influences which are unique and peculiar to that situation.

Q. All these companies that you selected for study and comparison with Penn Water, how many of them have contracts which virtually guarantee a return on their equity capital? A. None to my knowledge.

Q. Do you know whether Penn Water has a contract which virtually guarantees a return on its equity capital?

* * *

[714] By Mr. Goldberg:

Q. What is the answer? A. I have no knowledge that it has such a contract.

Q. Did you study the contracts that Penn Water has? A. I did.

Q. Did you study the contract that Penn Water has with Consolidated of Baltimore? A. I did.

Q. Is it your view that that contract does not virtually guarantee a return on Penn Water's equity capital? A. It is my view that, as a matter of fact, that contract gives to Penn Water an assurance of return which it otherwise would not have.

Q. Will you agree that that contractual arrangement with Consolidated constitutes virtually a guarantee of earnings on Penn Water's capital stock? A. The answer I think obviously depends upon the meaning of the expression "virtually guarantees."

Q. I will say that I am using it in its ordinary dictionary sense. A. The contract provides for Penn Water an assurance of stability of return substantially more than would otherwise be available.

Q. But you will not agree with me, will you, that the [715] contract constitutes virtually a guarantee of earnings to Penn Water's capital stock? A. I will not agree that any arrangement which can be made affords a guarantee or even virtually a guarantee of return to business operation.

Q. Did you examine the annual reports of Penn Water to its stockholders? A. I did.

Q. Did you, after an examination of those reports, reach the conclusion that if such a representation was made to the stockholders, it was erroneous? A. Mr. Goldberg, as to whether or not it was erroneous, it depends on the intent and meaning of the words used. I did not attempt to pass judgment upon the correctness of the representation or statement in the annual report.

[716] Q. I would like to show you the 1931 annual report of Pennsylvania Water and Power Company to its stockholders, and more particularly to the last paragraph on page 14 of that report, and ask you if you ever read that paragraph? A. I have done so.

Q. Does it not state there that:

> "The new contractual arrangement with the Consolidated Company covers a period of 48 years and constitutes virtually a guarantee of earnings for the company's capital stock, since all the payments which the Consolidated Company is obligated to make to your company are an operating expense of that company

and thus come ahead of dividends, ahead of the return on its preferred and common stock."

You can read anything else you like. A. It appears as you have read it, apparently.

Q. Am I to understand that you do not agree with that statement? A. I have had no occasion to agree or disagree with that statement.

Q. So that is something you had to consider in reaching the conclusion as to the fair rate of return on this company, is that not true? A. Would you mind asking that question again?

Q. I will put it this way: Is that not something you had to consider in reaching a conclusion as to the fair rate [717] of return for the Pennsylvania Water and Power Company, Dr. Foster? A. I did not have to consider whether or not, as a fact, any given degree of guarantee is provided by the contract.

Q. Would that not affect the rate at which investors would capitalize the prospective income of Penn Water? A. Undoubtedly, it had influence on the rate at which investors capitalized the prospective income from Penn Water.

Q. But although that is the case, and you are concerned with that, you did not consider whether or not the contract constitutes virtually a guarantee of earnings of Penn Water's equity? A. On the contrary, I have given full consideration to the degree to which that contract and the company's statement with regard to it influenced the investors' appraisal of the return from Penn Water.

Q. Would you not have to reach your own conclusion as to whether the statement which I have shown to you and which I have read into the record was a correct statement? A. No, I am not providing the capital funds for Penn Water. I am concerned only with the investors' appraisal of the funds, and I have not attempted to substitute my judgment as to the meaning of the facts for those expressed by investors in their market transactions.

[718] Q. Did you not have to decide whether an informed investor would view the contract as Penn Water viewed it? A. I did not find it necessary to ascertain the significance which the informed investor attached to the contract because the informed investor expressed that significance in what he bid for the stock.

Q. As reflected by the earnings price ratios? A. As reflected by the market price of the stock considered in relation to the prospective income.

Q. Did you ignore the factors you set out at the top of Chart I in reaching that conclusion? A. I am sorry, but I do not understand your question.

Q. You have in Chart I at the upper half a rather wide column with a series of one-line comments, right? A. Yes.

Q. You put them in there because you thought they had some effect on the earnings price ratio; is that so? A. I put them in there because they are statements of events and circumstances which may have had some effect or which it is rational to believe did have some effect on the earnings price ratios.

Q. But you do not think that the guarantee, the virtual guarantee of a return on equity capital until 1980 was a significant fact; is that right? A. I have not so testified. I have testified that I [719] assumed that it was considered by investors and appraised by them.

Q. Why did you not put that in the column on Chart 1? A. If you will look, Mr. Goldberg, at the space adjacent to the month of June, I believe, 1931, you will find the words, "Revised Contract with Consolidated".

Q. Now, what does that mean? Why didn't you say there instead of what you have there, "Revised Contract with Consolidated Guaranteeing until 1980 the Earnings" —(laughter).

It may be funny to others but to me it is a serious matter. We are concerned here with a chart which purports to reflect the significant facts of the life and history of this company up until the present time. I want to know from

this witness what does this revised contract with Consolidated mean, and what it meant to the informed investors? A. The informed investors, to them it was something which meant the contract together with its terms.

Q. Did you, when you said revised contract with Consolidated, mean, and is it your statement which you intend to make here to this Commission, that the revised contract with Consolidated was virtually a guarantee of earnings for the Penn Water common stock? A. The words which I read, together with others appearing in that chart No. 1 are concise or typical statements which I intend to represent whatever may be the facts in that [720] connection.

Q. What was the fact before you when you read that contract, and reached the conclusion that it was virtually a guarantee—— A. (Interposing) If I may interrupt, I have already answered that question by saying that I reached that conclusion that that contract afforded a high insurance or assurance of return irrespective of fluctuations which otherwise would have been experienced.

Q. But that statement where your only conclusion was, upon examination of that contract, that this is a revised—wherever that statement appears—the statement, "Revised Contract with Consolidated," that alone is of no significance; would you say that it taken alone constitutes virtually a guarantee to Penn Water's equity capital stockholders of a return on their stock; isn't that so? A. The words appearing in the margin there, as you see them on the chart, are to be taken to mean the fact of the revision of the contract and the fact of whatever the terms of the revised contract may have been.

[721] Q. Are we to take it to mean that you intended to say that the investor considered that that contract constituted virtually a guarantee of earnings on Penn Water's common? A. May I have that question repeated?

(The question was repeated.)

THE WITNESS: No.

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[732] THOMAS R. TATE,
was called as a witness by and on behalf of the Respondent, being first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION.

By MR. SPARKS:

Q. Mr. Tate, please state your full name, place of residence and occupation. A. Thomas R. Tate. I reside at 2126 Yorktown Road, Northwest, Washington, D. C. I am a professional engineer and the Washington representative of the firm of Chas. T. Main, Inc., architects-engineers of Boston, Massachusetts.

Q. What education have you had? A. Three years of high school, one year at William Jewell College, Liberty, Missouri, and I completed the four-year engineering course of the School of Engineering, University of Missouri, in three years and one summer graduating in 1912 with the degree of Bachelor of Science in Electrical Engineering. Since that time, I had a lecture course in public utility economics in the extension division of the University of Wisconsin at Milwaukee, Wisconsin, and have completed several of the Army's extension courses.

[733] Q. Are you a registered professional engineer? A. Yes, sir; in the State of New York.

Q. Are you a member of any engineering societies and organizations? A. Yes, sir, I am. I am a fellow in the American Institute of Electrical Engineers, a member of the American Society of Mechanical Engineers, a member of the American Society of Civil Engineers, a member of the Washington Society of Engineers and a military engineer member of the Society of American Military Engineers and a member of other scientific clubs and organizations.

Q. Mr. Tate, will you please summarize your engineering and construction experience? A. I have had several years of experience after high school and during and

between college and engineering school in the operation, design, and construction of operating electric utilities. I have had 34 years of experience since graduation of which four years were with operating electric utilities, 20 years with consulting and construction engineering organizations, and 10 years of government work including eight and one-half years with the Federal Power Commission, and one and one-half years with the Public Utilities Commission of the District of Columbia.

Q. Starting with your first connection with public utilities, will you please state in chronological order your [734] experience and the nature of your duties? A. To begin with, I should like to mention that whereas most engineers have to attain their basic knowledge of public utilities by beginning at the bottom upon graduation and working up to a position where they can exercise their engineering training, I had this experience before graduation.

In the summer of 1905, I started with the Union Electric Light and Power Company of St. Louis, Missouri, now known as the Union Electric Company of St. Louis, Missouri, as a meter repairman and then after a short period of meter reading, was sent out as a helper testing meters and later was transferred to the Electrical Testing Laboratory where I calibrated various instruments and made acceptance and efficiency tests on electrical machinery. At this time, I attended the company's school and had a practical course in electricity and magnetism and had a more intensive course in algebra and trigonometry.

My work in this department involved the testing and calibrating of electrical measuring instruments at the main generating station of the company known as Ashley Street and various substations, testing feeders for voltage tests at load centers and setting relays and regulators.

My experience in the generating station and substation was so interesting to me that I transferred over to the Operation Department and became a substation operator at Station A. [735] Then after one year at college and one

year at the University of Missouri, I worked for the Union Electric Company during vacation and during the years 1909 and 1910 as ground man, lineman, line slip man, estimator and inspector, laying out new wood pole transmission lines and distribution systems.

Q. What has been your experience since graduation in 1912? A. The day after graduation, I started to work for, as it was then called, the Milwaukee Electric Light and Railway Company of Milwaukee, first as foreman of construction of lines to rural communities and lake resorts, then an engineering clerk, writing up orders for construction, then as engineer of wire for the Wire Department, then assistant electrical engineer and finally at the time I left the employ of the company, I was its distribution engineer.

In these several capacities, I laid out and supervised the constructing of steel tower and wood pole transmission lines, customers substations and supervised the re-design of a greater part of Milwaukee's distribution system. I also handled the street and interurban railways and company's telephone and dispatching system.

During this period, I supervised the design of a 7'0" diameter tunnel under the Milwaukee River for steam mains and electric cables, and laid out underground and overhead systems. I also participated in the making of electrolysis surveys and [736] in the operation of the company's gas plant at Racine, Wisconsin.

I examined for purchase hydroelectric plants and distribution system at Fox River and Burlington, Wisconsin, and made system power studies.

Q. Did you have any valuation experience while with the Milwaukee Company? A. Yes, sir, while I was there we started a valuation of all of the company's property and I had charge of the valuation of all of the electric property.

Q. When did you leave the Milwaukee Company and what was your next connection and the nature of your

duties? A. I left the Milwaukee Company in August, 1914, to become electrical engineer and assistant to the manager of The Janesville Electric Company of Janesville, Wisconsin.

As I was the only professional engineer in the employ of the company besides the manager, my duties included the supervision of operation of four hydroelectric plants and two steam power plants; the supervision of all construction, the handling of complaints and line and plant troubles, and required the design of a new head gate structure for the main hydroelectric plant; the supervision of rebuilding of one hydroelectric plant destroyed by fire; the handling of rate matters, voltage tests, power surveys, system maintenance and other operating and financial matters. During this time, [737] I also designed and constructed a new white way street lighting system for the City of Janesville.

Q. When did you leave the Janesville Electric Company and what was your next connection and duties? A. I left Janesville in the summer of 1916 to accept a position with Harold Almert, Consulting Engineer in Chicago, who was engaged on a valuation of the Commonwealth Edison Company, at that time a 50 million dollar property. My duties involved the making of inventories of the substation properties and the underground conduit and cable system.

Q. What was your next position and your duties? A. In January, 1917, I became assistant electrical engineer on the design and construction of a blast furnace and steel mill plant for the Mark Manufacturing Company, now owned by the Youngstown Sheet and Tube Company at Indiana Harbor, Indiana.

In this position, I assisted the electrical engineer on the design, in keeping records of orders placed, shipments and materials and equipment required and on hand, and in the writing of specifications and in the inspection of the construction work.

Q. When did you leave the Mark Manufacturing Company and what was your next position and duties? A. In

August, 1917, I accepted a position with Perin and Marshall, consulting engineers and constructors of New [738] York City as electrical engineer in charge of design of the electrical work for the firm. This organization was engaged in designing and constructing blast furnaces and steel mills in India, China, Great Britain, Canada, and the United States, also, in the design and construction of vegetable oil mills, chemical plants, cement plants, and in mining and metallurgical operations associated with blast furnaces and steel mills.

I was with this organization for six years and in addition to my supervision of design, I also had charge of all the inspection, expediting, ocean shipping, specificating (sic) writing and purchasing and general office routine.

The work involved steam power stations, transmission lines, substations, by-product coke oven plants and similar work to that done by public utilities.

In this capacity, I personally purchased about $28,000,000 worth of material and equipment and handled the purchase of over $60,000,000 within this country, in Canada, and, after World War I, in various European countries.

During this period, I also visited all of the principal steel mills in St. Louis, Chicago, Cleveland, Pittsburgh, Bethlehem and others in the East and some of those in the South. I also had charge of the design of penstocks and anchorages for two 15,000 kilowatt capacity hydroelectric units operating at 1748 feet net effective head for the Andhra Valley Power Supply Company of Bombay, India, and [739] made numerous hydroelectric power estimates and studies.

Q. Please describe your duties in your next connection. A. In July, 1923, I became associated with the firm of McClellan and Junkersfield, Inc., of New York City, first as assistant electrical engineer and then on report and valuation work.

In this capacity, I participated in the design of Cahokia Station at St. Louis and the Avon Station at Cleveland, of high voltage transmission lines and step-up and step-down substations and in the preparation of estimates and had charge of the following undertakings:

Valuation of the Wichita, Newton and Hutchinson, Kansas, natural gas properties of the Electric Bond and Share Company;

A report on a steam electric power station and a district steam heating station for the City of Toronto, Canada;

A report on transportation for the Public Utilities Commission of the District of Columbia;

And a transportation survey for the City of Milwaukee, Wisconsin.

I also assisted and had charge of a portion of the investigation of all the Cities Service Company's utility properties in the United States and I had charge of the investigation in the States of Colorado and Wyoming, and of all the North American Light and Power Company properties in St. Louis, Missouri, and southern Illinois, and prepared numerous reports [740] and financial statements while with this organization.

Q. Mr. Tate, will you please describe your next connection and duties? A. In 1928, I became chief engineer and assistant to the president of the Trojan Engineering Corporation of New York City.

In this capacity, I supervised the design and construction of hydroelectric stations, steam power plant additions, Diesel Engine plants, transmission lines and substations, gas works, natural gas pipe lines, gas distribution systems, ice plants, irrigation plants and general utility structures. I made rate investigations and valuations for rate cases and for purchase and supervised the numerous investigations and the preparation of reports involving water power studies and additions and betterments to existing systems as well as new processes.

Q. When did you leave the Trojan Engineering Corporation and what was your next connection? A. At the end of 1931, I left the Trojan Company and in January, 1932, I became chief valuation engineer for the Public Utilities Commission of the District of Columbia.

In this capacity, I had entire charge of the valuation of the Washington Gas and Light Company, the Georgetown Gas-Light Company, and the Chesapeake and Potomac Telephone Company, and assisted on the valuation of the Capital Traction [741] Company and the Washington Railway and Electric Company and participated in valuation and rate cases.

In the Chesapeake and Potomac Telephone case, I prepared a trended cost of reproduction which was accepted by the Public Utilities Commission and the company. It was based upon trends developed by me largely from the Telephone Company's experience, records and costs.

Q. When did you become an employee of the Federal Government? A. In September, 1933, I accepted a position with the Public Works Administration as Engineer Examiner. My work involved the examination and preparation of reports covering the engineering soundness of applications for loans by municipalities and private interests for water supply and treatment, sewers, gas systems, hydroelectric and irrigation projects, Diesel Engine plants, and gas and electric distribution systems.

Q. How long were you with the Public Works Administration and what was your next position and your duties? A. I left the Public Works Administration on December 28, 1933, to accept a position with the Federal Power Commission as Director of its National Power Survey. My duties were as follows:

Director of National Power Survey, in charge of a survey of the water resources of the United States as they relate to [742] the conservation, development, control and utilization of water power; and of the relation of water power to other industries and to interstate and foreign

commerce; and of the transmission of electrical energy in the United States and its distribution to consumers, and the development of a program of public works.

From March 26, 1936, to July 1, 1941, I was Chief of Division of Gas and Electric Resources, formerly Division of Power Resources and Requirements, in charge of engineering studies and investigations of the power resources of the entire country, including studies of existing and potential markets, economic trends; growth of population and power demands; studies to encourage and promote coordination of power resources and requirements; investigations of the ownership, operation, and control of electric facilities; investigations of the cost of generation, transmission, and distribution of electric energy; and investigations relating to the transportation and sale of natural gas in interstate commerce, and investigations for other purposes; and such other duties as the Commission assigned.

From July 1, 1941, to June 13, 1942, active duty ending April 30, 1942, I was chief of the Bureau of Electrical Engineering and Director of the Commission's National Defense Power Staff. My duties were, under the administrative direction of the Commission and/or the Chairman. I supervised and directed; the collection and analysis of [743] reports covering the operation of utility systems; studies of existing power loads and probable power loads resulting from war orders; determination of capacity available to carry loads, and the areas in which additional capacity is needed and the amount and kind thereof; collaboration with the War Production Board and the Executive Office of the President in locating new industries; cooperation with the United States Corps of Engineers, the Bureau of Reclamation and the Tennessee Valley Authority in planning of power projects to meet the requirements of war industries; collaboration with the War Production Board in determining priorities for power facilities and the rationing of power in areas having deficiencies;

technical studies, in cooperation with the Commission's Bureau of Water Power, relating to power markets for dams to be constructed by the government for multi-purpose river basin developments; investigations and planning for interconnection and coordination of power supply facilities, including new and emergency transmission lines where needed; investigations of applications for approval of consolidations, mergers, security issues, acquisition or disposal of property of utility companies and of interlocking directorates; investigations to determine the jurisdiction of the Commission over electric utility systems; and to carrying out of the Commission's special defense power functions as defined in the Federal Power Act and in the President's letter to the Commission of June 14, 1940.

[744] Q. Will you state when you left the Federal Power Commission and describe your next connection and duties? A. I resigned from the Federal Power Commission effective April 30, 1942, and joined the staff of Chas. T. Main, Inc., architects-engineers of Boston, as its Washington representative, which position I now hold.

My work involved valuation and rate cases, investigations and reports for various agencies of the Federal Government, municipalities, and private interests and has covered the fields of hydroelectric power, steam electric power stations, Diesel Engine plants, transmission systems, munitions plants, natural gas pipe lines and distribution systems, and during the World War II, the handling of matters with the War and Navy Departments, the War Production Board and other war agencies.

MR. SPARKS: Mr. Examiner, I have a document entitled, "Cost of Constructing and Reproducing the Entire Physical Properties of the Pennsylvania Water & Power Company, and Susquehanna Transmission Company of Maryland, as of December 31, 1945." I ask that this be marked for identification as Exhibit No. 31.

TRIAL EXAMINER: The document may be marked Exhibit 31 for Identification.

(The document referred to was marked Exhibit No. 31 for Identification.)

[745] By MR. SPARKS:

Q. Mr. Tate, I hand you a document entitled——

MR. GOLDBERG (interposing): Just a minute. I would like to have a copy of it.

MR. SPARKS: Here is one. I am glad to give you a copy of it.

MR. GOLDBERG: Thank you.

By MR. SPARKS:

Q. Mr. Tate, do you have a copy of the document to which I have just referred, and which has been marked for identification as Exhibit No. 31? A. Yes, sir.

Q. The document entitled in part, "Cost of Constructing and Reproducing the Entire Physical Properties of the Pennsylvania Water & Power Company and the Susquehanna Transmission Company of Maryland as of December 31st"? A. Yes, I do.

Q. Can you identify it? A. Yes, I can.

Q. Mr. Tate, did you prepare this exhibit? A. It was prepared under my direction.

Q. What is the purport of this exhibit? A. This exhibit shows the cost of constructing and reproducing the entire physical properties of the Pennsylvania Water & Power Company, and its subsidiary company in Maryland, [746] the Susquehanna Transmission Company of Maryland.

Q. What is the basis of this exhibit? A. The exhibit represents the results of a study and an investigation of the cost of constructing the entire physical properties of the two companies as of December 31, 1945, by the use of modern construction methods.

Q. How much time was spent in this study and investigation? A. The work was started on or about January 12, 1946, by myself, and beginning on or about January 26 I had the assistance of several engineers from our home office in Boston most of whom had spent a month to six weeks going over the property, and I also had the assistance of several of the company's engineers and accountants and clerks, more or less, continuously up to the present time.

Q. Did you examine the properties that you are determining the cost of reproducing? A. I personally examined the Holtwood Hydroelectric Plant, the Holtwood Steam Plant, the Coal Preparation Plant, the River Coal Plant with the exception of floating equipment, all the major substations, buildings and structures of the companies, several of the patrolman's buildings, some of the buildings in the Village at Holtwood, and all of the company's transmission lines at various points.

Q. How much time was spent in your examination of [747] these properties? A. Three consecutive days, plus parts of other days.

Q. Had you at any time previously, visited the Holtwood Hydro Plant? A. When I was with the Federal Power Commission I visited Conowingo, Safe Harbor, and Holtwood in 1935 and I believe I also saw the Holtwood Hydro Plant in 1936 at the time of the World Power Conference in Washington, but do not recall going inside the plant at that time.

Q. How complete was your recent inspection? A. I examined the hydro plant, steam plant, coal preparation plant, river coal plant and some of the major substations thoroughly, except for the spillway of the dam at Holtwood, which was under water and could not be seen.

Q. Did you also examine the Safe Harbor Plant? A. Yes, sir.

Q. Mr. Tate, what was the purpose of your examination of the property of the company? A. The purpose

of my examination of the properties was to see the major items of equipment, the type of structures, the kinds of material used in the construction, and to familiarize myself with the methods used in the construction, and the character of the soil and rock encountered in the excavation.

The principal purpose of this examination was to compare [748] the Safe Harbor plant with Holtwood as we have used the actual cost of constructing Safe Harbor as a base for the determination of the cost of reproducing Holtwood.

* * *

[749] Q. In what way have you applied the Safe Harbor costs?

* * *

[750] MR. SPARKS: Would you like to have the question read?

THE WITNESS: No, sir; I have it. We have applied the Safe Harbor costs in three major phases of our work.

(A) In the use of a composite labor force such as would be required to reconstruct the Holtwood project.
[751] (B) In the use of Safe Harbor costs of excavation and concrete work.

(C) In the application of indirect costs and general overhead charges.

MR. GOLDBERG: Is that the end of the answer?

MR. SPARKS: Yes.

MR. GOLDBERG: I now move to strike the answer, Mr. Examiner, because, as I have previously stated, the witness is now engaged in setting forth the basis he used in reaching his results as set forth in the Exhibit 31, and I submit, Mr. Examiner, again that if the exhibit is to be rejected, by the same token, this witness is not entitled to testify on the methods he followed in determining that result.

TRIAL EXAMINER: The motion to strike is granted.

By MR. SPARKS:

Q. Will you explain the method of applying the Safe Harbor composite labor force?

MR. GOLDBERG: The same objection, Mr. Examiner, for the reasons already stated.

TRIAL EXAMINER: Objection sustained.

MR. SPARKS: May I take an exception to Your Honor's rulings and state at this time that the remainder of the testimony of this witness will relate to the study of the cost of constructing and reproducing the entire physical [752] properties of the Respondents as of December 31, 1945, as embodied in the document marked for identification as Exhibit 31, and ask for Your Honor's ruling as to whether we shall proceed, or whether such testimony is not admissible.

TRIAL EXAMINER: What is meant by that part of the heading that embraces "Cost of Constructing"? Cost of constructing as of what time?

MR. SPARKS: As of December 31, 1945.

TRIAL EXAMINER: So much of the exhibit and so much of the evidence as counsel would submit as relates to reproduction cost will be excluded.

MR. SPARKS: Well, if Your Honor please, reproduction cost may have several connotations. We have here an exhibit which has been described as the cost of constructing and reproducing the entire physical properties of these Respondents as of December 31, 1945. I don't know from Your Honor's ruling what you mean by "reproduction cost"—that is, whether your understanding of the term "reproduction cost" applies to this exhibit.

MR. GOLDBERG: May I inquire——

TRIAL EXAMINER (interposing): The Examiner understands that what you mean by "reproduction cost"

is what is generally known as reproduction cost new in a rate proceeding.

MR. SPARKS: I don't know that I mean that, if Your Honor please. This witness has prepared this study and he [753] is prepared to describe it in detail and show what it is. I think that is the only logical way to determine the character of the study.

TRIAL EXAMINER: The Examiner will inquire of the witness if this exhibit does not relate to what is generally known as reproduction cost as of some date subsequent to the actual date of construction of the property.

THE WITNESS: I might answer that by saying that this is not a hypothetical cost of reproducing the property such as is commonly considered, but it constitutes for the most part a trending of the original dollars of surviving property—the original cost of surviving property—trending those dollars up to December 31, 1945, price levels.

TRIAL EXAMINER: It does not relate in any way to what is known in the Federal Power Act as "Actual legitimate original cost"?

THE WITNESS: Yes, sir, it is related to that in so far as the company's costs themselves are the actual original cost of the property.

TRIAL EXAMINER: Those are your starting figures?

THE WITNESS: Yes, sir.

TRIAL EXAMINER: But your cost of constructing and reproducing the entire physical properties of the Pennsylvania Water and Power Company and the Susquehanna Transmission Company of Maryland as of December 31, 1945, except for the [754] starting figures, is not actual, legitimate original cost?

THE WITNESS: Except for the starting figures, and I might say that we have eliminated all of the original overheads and indirect charges, and have dealt only with labor

and materials, trending those labor and materials up to the December 31, 1945 price level, but in a few instances where modern construction methods would have reduced the cost considerably, we have used modern construction methods as determined from the cost of the Safe Harbor plant which was built in 1930 or 1931.

MR. GOLDBERG: Mr. Tate, may I ask a question, Mr. Examiner?

TRIAL EXAMINER: Proceed.

MR. GOLDBERG: Has anybody spent the dollars represented by your result?

THE WITNESS: Spent the dollars?

MR. GOLDBERG: Yes, expended them.

THE WITNESS: No one has expended them; no, sir.

MR. GOLDBERG: Obviously, Mr. Examiner, it is not actual cost, and it is only actual cost with which the Commission is concerned. I note that the exhibit contains a column—I think on every page beginning with page 1 and running through page 59—entitled "Actual original Cost of Surviving Property". I assume that that is what it purports to be, and on that assumption, of course, I would not object to [755] that column being received in evidence, because as I understand it, that is no more than the company's claimed actual legitimate cost as presented by Mr. Gunn, but related to surviving property.

TRIAL EXAMINER: Is counsel's statement as to the column headed, "Actual Original Cost of Surviving Property," correct?

MR. SPARKS: As I understood Mr. Goldberg's statement, he said "Actual Legitimate Cost". We have not placed anything in the record characterized as such. Mr. Gunn presented an original cost study.

TRIAL EXAMINER: Are all these figures to be found in Exhibit 31 for Identification in the column headed as described by the Examiner, are they all consistent with and to be found in the witness Gunn's exhibit?

MR. SPARKS: Let me inquire, Mr. Examiner.

TRIAL EXAMINER: Very well.

MR. SPARKS: I might say, if Your Honor please, that I am informed by Mr. Gunn that in the study which has been presented he has more than the $36,414,232 as shown on the first sheet of the tabulations in Exhibit 31.

MR. GOLDBERG: He has about $300,000 more, I think. I suppose that is the overhead. Is that right?

TRIAL EXAMINER: Just a minute. If Mr. Gunn is going to testify, he had better testify from the stand.

[756] MR. GOLDBERG: Perhaps Mr. Gunn had better tell Mr. Sparks and let Mr. Sparks answer.

The figure of $36,414,232 appearing on page 1 of Exhibit 31 in the column entitled, "Actual Original Cost of Surviving Property" is the same figure appearing in Exhibit 25, pages 2 and 3 as "Total Electric Plant in Service."

MR. SPARKS: That is correct. The difference, if Your Honor please, between the figures shown in Exhibit 31 and the total figures shown on Mr. Gunn's exhibit 25 is made up of, first, an adjustment as shown in line 42 of page 2 of Exhibit 25, and construction work in progress as shown in line 44 of page 3 of Exhibit 25 and Electric Plants Held for Future Use, shown in line 25 of Page 3 of Exhibit 25.

MR. GOLDBERG: May I address a question to the witness Tate?

TRIAL EXAMINER: Yes.

MR. GOLDBERG: Mr. Tate, is it not a fact that that portion of the title, "Cost of Construction," contained on the title page of Exhibit 31 relates to the column in the exhibit headed, "Actual Original Cost of Surviving Property"?

THE WITNESS: Well, I think it applies to both columns, because the second column is headed, "Trended Construction Cost as of December 31, 1945."

MR. GOLDBERG: You say it applies in the second column because you use the first column as a jumping-off [757] point?

THE WITNESS: We use a part of it. It is put there for comparison. We eliminated the overheads and used only the actual costs of labor and material.

MR. GOLDBERG: And the column has been included for comparative purposes only?

THE WITNESS: That is right.

MR. SPARKS: You are speaking now with respect to Mr. Goldberg's last question of the column headed, "Actual Original Cost of Surviving Property" on page 1 of the tabulation Exhibit 31?

THE WITNESS: Yes, sir.

TRIAL EXAMINER: The Examiner will not receive evidence of trended construction costs as of December 31, 1945.

MR. SPARKS: Well, now, may I ask if Your Honor intends that ruling to apply to Exhibit 31 marked for Identification in whole?

TRIAL EXAMINER: If the exhibit is offered as an entirety, the Examiner will be compelled to exclude it because of the inclusion therein of trended construction costs, but if the actual original cost of surviving property were offered independently, the Examiner would receive it.

MR. SPARKS: Then, to refer to the testimony at this moment, if Your Honor please, may I say that all of the [758] testimony which Mr. Tate would give at this time would relate to Exhibit 31 as a whole.

TRIAL EXAMINER: He will testify to actual original cost of surviving property?

MR. SPARKS: I think if I may put a question to the witness, if Your Honor please?

TRIAL EXAMINER: You may inquire of the witness.

By MR. SPARKS:

Q. What data would you testify to as to the source of the figures shown under the columns headed, "Actual Original Cost of Surviving Property"? A. That those figures were furnished to me by the company.

Q. Furnished you by the company? A. Yes.

TRIAL EXAMINER: That would be the sum and substance, substantially, of your testimony with regard to actual cost?

By MR. SPARKS:

Q. Would that be the same as the testimony with regard to actual original cost? A. We have made some examinations ourselves of some of the items in order to trend the cost, but so far as the figures set forth in this first column are concerned, they were furnished us by the company.

Q. Mr. Tate——

[759] MR. GOLDBERG (interposing): Mr. Sparks, it is a fact that the data is not being offered in support of the company's claim of cost or claim related to original cost; is that so?

MR. SPARKS: That is correct.

MR. GOLDBERG: In that event, the figures in that column, Mr. Examiner, are already in the record in

Exhibit 25, and of course, there is no need to duplicate them.

TRIAL EXAMINER: With that understanding of what the witness' testimony will be, the Examiner will rule that the testimony will not be received in evidence.

MR. SPARKS: That is on the understanding of what we have stated as to what this testimony of the witness will be related to Exhibit No. 31 for Identification?

TRIAL EXAMINER: Yes.

MR. SPARKS: Very well, sir. I desire to make a proffer.

TRIAL EXAMINER: Is this proffer in narrative form?

MR. SPARKS: It is.

TRIAL EXAMINER: Proceed.

MR. SPARKS: I desire to make the following proffer of reproduction costs concerning both Exhibit 31 for Identification and the testimony of the witness:

On behalf of the Pennsylvania Water & Power Company and the Susquehanna Transmission Company of Maryland we offer in evidence Exhibit No. 31 and the testimony of Mr. Thomas R. Tate, Washington representative of the firm of Charles T. Main, [760] Incorporated, in explanation and support of said exhibit. Mr. Tate is a graduate engineer of the University of Missouri with the Degree of Bachelor of Science, Electrical Engineering, 1912. He had several years' experience with operating utilities in various departments before graduation and since graduation has had thirty-four years' experience, four years with operating utilities and twenty years with consulting engineers and engineering and constructing organizations, and ten years of government experience of which 8½ years were with the Federal Power Commission, and 1½ years with the Public Utilities Commission of the Dis-

trict of Columbia. His experience covers the design, construction, operation and valuation of utility properties and industrial plants. He is a fellow in the American Institute of Electrical Engineers, a member of the American Society of Mechanical Engineers, American Society of Civil Engineers and other engineering organizations, and a registered professional engineer of the State of New York. He has given testimony before various utility regulatory commissions, and Federal District Courts. The exhibit is entitled "Cost of Constructing and Reproducing the Entire Physical Properties of the Pennsylvania Water & Power Company and the Susquehanna Transmission Company of Maryland as of December 31, 1945." This exhibit and the testimony in connection therewith establishes the cost of construction and reproduction cost new of the physical [761] property of these companies in the amount of $62,410,377.

This cost of reproducing the properties of the two companies is not a hypothetical cost of reproduction containing various speculative assumptions. It is, in fact, an adjusted trend to December 31, 1945, price levels of the actual original dollars invested in the surviving property.

The exhibit and testimony are based upon the following premises:

1. That the entire properties would be reproduced identically as they were originally constructed, except some minor items no longer obtainable in which case, the cost of the nearest equivalent modern substitute was used.

2. That substantially the same construction period as was encountered in construction of the Safe Harbor project was used in reproducing the hydroelectric plant, and that the Holtwood Steam Plant would be constructed during a portion of the same period.

3. That similar climatic and river flow conditions prevailed.

4. That the modern construction methods, facilities, and procedure that were actually used in the original construction of Safe Harbor would be repeated in reproducing the Holtwood Hydroelectric plant and similar modern methods would be employed in reproducing the Holtwood Steam Plant.

5. That modern construction methods would also be used [762] in reproducing the transmission lines, substations and other property of these companies.

6. That wages and material prices would remain as they were on December 31, 1945, throughout the entire reproduction period.

7. That sufficient labor would be available to reproduce the properties at the wage rates prevailing as of December 31, 1945.

8. That sufficient materials and equipment would be available at published and quoted prices on December 31, 1945, within prevailing OPA and other governmental regulations.

The adoption of the above premises considerably simplifies the determination of the reproduction cost and makes the total cost conservatively below the probable cost if the properties were to be constructed today; because there have been increases in wage rates and material prices since December 31, 1945.

Exhibit No. 31 and the testimony of Mr. Tate in support thereof are offered for the following purposes:

1. As a basis for determining the extent of the justification for the replacement of property so that the integrity of the original investment of the owners of this property will remain unimpaired.

2. To be used in connection with determining the rate of return approximately applicable to whatever

rate [763] base or bases the Commission may determine, so as to test the propriety and reasonableness of the rate of return and the return and the return allowance by comparison with the returns currently available to other and competitive enterprises of corresponding risk and uncertainty.

3. To be considered and weighed by the Commission in determining the reasonableness of any of the rates, charges or classifications of Respondents as may be subject to the jurisdiction, if any, of the Commission by determining the fair value of the properties of Respondents used and useful in the rendering of the particular services for which such rates, charges and classifications are demanded, observed, charged or collected, and by determining the fair return allowable on such fair value.

Do I understand that Your Honor rules that Exhibit 31 marked for Identification is not admitted in evidence?

TRIAL EXAMINER: May the Examiner see counsel's statement as he has read it?

MR. SPARKS: Yes. Also, I would like to inquire whether Your Honor rules that the testimony in regard to Exhibit 31, whether that is admitted in evidence?

TRIAL EXAMINER: Exhibit 31 for Identification will not be received in evidence. The testimony of the witness as embraced in counsel's proffer of proof will not be [764] received in evidence.

MR. SPARKS: We take an exception, if Your Honor please.

* * *

[765] WILFRED McGREGOR HALL,
was sworn as a witness for and on behalf of the Respondent, and after being examined testified as follows:

DIRECT EXAMINATION.

By MR. SPARKS:

Q. What is your name? A. Wilfred McGregor Hall.

[766] Q. What is your occupation? A. I am an engineer.

Q. Where do you live? A. 1514 Beacon Street, Brookline, Massachusetts.

Q. Where did you receive your education? A. I am a graduate of the University of Colorado, Boulder, Colorado, in 1916. Majored in hydraulic engineering and received a degree B. S. in Civil Engineering.

Q. By whom are you employed? A. I am a director, stockholder and active member of the firm of Charles T. Main, Inc., 201 Devonshire Street, Boston, Massachusetts.

Q. Are you a licensed engineer? A. I am a licensed professional engineer in the State of New York, and the insular possession of Puerto Rico. I have been a senior member of the American Society of Civil Engineers since 1928 and have been listed in "Who is Who" in Engineering since 1937.

Q. How long have you been engaged in practice in engineering? A. 30 years, chiefly in hydroelectric development including dams, power plants, reservoir relocations, construction, preliminary investigations, designs, hydraulic and power studies, cost estimates, large and small projects for 24 years; and consulting engineering, sales [767] engineering, steam plant construction, industrial plant construction, marine construction and military service for the remaining six years. I have been employed in an executive and administrative capacity for the past 24 years.

Q. How much of the time was spent on actual construction? A. 14 years, including work as field and assistant engineer on three projects covering the period of

three years. Engineer in charge or superintendent on six projects covering the period of eleven years.

Q. What is your experience in engineering design? A. Seven years, covering various types of permanent structures and construction plants as well as various temporary structures, camps, villages, offices, shops and coffer dams of various types. My designing experience covers preliminary studies, preliminary designs, appraisals and reports on power and industrial plants and projects.

Q. Have you been design and construction manager of large projects? A. Yes. I held that position on three projects covering a period of four years.

Q. Have you conducted preliminary investigations of various projects? A. Yes. I spent approximately three years entirely in this work.

[768] Q. And you have spent some time in consulting, sales and the army? A. Yes, two years.

Q. In connection with all of this work, have you made a great many estimates of the cost of engineering work? A. Yes, over a period of 25 years, I have made estimates for twenty or more large construction projects which were actually constructed and have made sixty or more bids or preliminary estimates on projects of various sizes. I have also made estimates and appraisals for many types of structures chiefly in connection with hydroelectric developments.

Q. What are the nature of projects on which you have gained your construction experience? A. Dams, dykes, coffer dams, canals, revetments, pipe lines, flumes, penstocks, surge tanks, reservoirs, power plants, pumping plants, switch yards, transmission lines and tunnels.

Q. And you have done design estimates and preliminary investigation in connection with all those types of structures? A. Yes, and also in connection with caissons, marine construction, building construction, industrial construction, docks and bridges.

Q. Have you laid out construction plant, designed and specified proper construction equipment for numerous [769]

projects? A. Yes, that has been a part of my experience for some twenty years.

Q. Will you please give us a record of your employment since you have been practicing engineering? A. From May, 1916, to December, 1917, I was employed by Chas. T. Main, Inc., as field and assistant engineer on the Holter hydroelectric project for the Montana Power Company. This was a 70,000 hp installation costing about $6,000,000 and included 300,000 cubic yard gravity concrete dam.

From January, 1918, to March, 1918, inclusive, I was superintendent of construction for the U. S. Indian Irrigation Service on a small flood control project involving earth and rock jetties, dykes and small dams.

From May, 1918, to December, 1918, I was in the U. S. Army discharged as a Second Lieutenant.

From January, 1919, to January, 1920, inclusive, I was employed by J. A. P. Christfield Contracting Company now United Engineers and Constructors on the Stevenson hydroelectric project of the Connecticut Light and Power Company which involved the installation of a 200,000 cubic [yard] gravity dam, ultimate capacity of 50,000 hp and expenditure of about $6,000,000.

From February, 1920 to April, 1920, I was resident [770] engineer for Chas. T. Main, Inc., on mill building construction costing about $300,000 for the Sanford Mills, Fall River, Massachusetts.

From May, 1920, to March, 1921, I was in direct charge of a portion of the field investigation of hydroelectric sites located on tributaries of the Congo River, Africa. I was employed under Mr. W. F. Uhl, member of the firm of Chas. T. Main, Inc., in this investigation for the Union Miniere du Haut Katanga, Elizabethville, Belgian Congo, Africa, for the proposed construction of high concrete dams and large power installations.

From April, 1921, to August, 1922, inclusive, I was employed by Chas. T. Main, Inc., in connection with the design

and completion [of] plans for several projects in the Belgian Congo, Africa, and several minor hydroelectric projects.

From September, 1922, to April, 1924, I was employed by the U. G. I. Contracting Company, now United Engineers and Constructors, on preliminary investigation of hydroelectric developments for the Connecticut Light and Power Company and the Gloversville New York Utility Company and during this period in 1923, I worked on special designs and construction for a steam power plant.

From May, 1924, to November, 1925, I was in engineering charge and later construction superintendent for the [771] U. G. I. Contracting Company on the Soft Maple hydroelectric project of the Northern New York Utilities, Inc. This project involved a 30,000 hp installation and cost approximately $3,500,000.

From December, 1925 through June, 1926 I was in charge of field investigation on the Housatonic River for the Connecticut Light and Power Company. These were preliminary investigations involving large concrete earth dam projects and power plants.

From July, 1926, to July, 1928, I was employed by the U. G. I. Contracting Company on the Rocky River hydroelectric project of the Connecticut Light and Power Company. The project involved the construction of earth dams, dykes, canals, generating station and pumping plant. I was in charge of engineering and general superintendent of the project, and in 1928 was also district construction manager. My duties not only included the complete hydroelectric project, but also supervision of construction of various substations and transmission line installation.

From August, 1928 to December, 1928, I was in charge of construction on a harbor pipe line installation for the New Haven Gas Company, involving the construction of 6,000 lineal feet in tide water, 40 feet deep.

From January, 1929 to June, 1931 I was superintendent [772] of construction in charge of engineering and construc-

tion on the Jerry O'Connell, Banaeiras, Brazil, hydroelectric project owned by the Compania Electrica de Bahia. I was employed by the Electric Bond and Share Company and the project involved the construction of a hollow, multiple arch concrete dam about one-third of a mile long. The entire project cost approximately $6,000,000.

From July, 1931 to June, 1932, I was engaged in the sale of used construction equipment and steel sheet piling in New York City.

From July, 1932 to October, 1932 I was located in New York City engaged in the practice of consulting engineer.

From 1933 to April, 1937, I was construction engineer in charge of construction on the Wheeler Dam and power plant project of the Tennessee Valley Authority. The ultimate cost of this project was approximately $45,000,000.

From July, 1937 to July, 1941, I was employed as manager of construction and design on several projects for the Insular Government of Puerto Rico, costing about $13,000,000. The projects involved the construction of 3 power plants for an installed capacity of 50,000 kva and included 500,000 cubic yards of concrete, 2,000,000 cubic yards of earth excavation and fill, 1,000,000 cubic yards of rock excavation, 3 tunnels, totaling 3 miles in length, 10 miles of concrete and steel pipe, electrical substation [773] and transmission lines.

From August, 1941 to date, I have been with the firm of Chas. T. Main, Inc. I have been an active member of the firm and a stockholder since October, 1942 and a director since January, 1943. My duties are those of a consultant and executive in connection with designs, construction and appraisals of hydroelectric water supply, water treatment and industrial projects.

Hydroelectric power plant designs totaling 1,200,000 kw in six projects for the U. S. Army Engineers—including Wolf Creek—300,000 kw, Dale Hollow—60,000 kw, Center Hill—150,000 kw and Table Rock—140,000 kw. Also during

this period, I have made appraisals of hydroelectric project with a total capacity of 250,000 kw.

Q. Mr. Hall, have you been engaged in making certain studies and estimates related t the properties of the Pennsylvania Water and Power Company and the Susquehanna Transmission Company of Maryland? A. I have.

Q. Would you please explain the nature of these studies and estimates? A. My work has consisted mainly of making estimates of the cost of a substitute plant.

Q. Just what do you mean by substitute plant? A. In our studies of the Pennsylvania Water & Power [774] Company and the Susquehanna Transmission Company of Maryland properties, consideration was given to the fact that changes in the art had taken place since some of these properties were originally constructed and estimates were made of the cost as of December 31, 1945 of building modern plants to take the place of those presently in use.

Q. Did these estimates cover all of the properties of these companies? A. No, the items covered by the substitute plant estimates were, first, the Holtwood Hydro Plant with the exception of three items, namely land and land rights, the operators' village and roads, railroads and bridges; second, the Holtwood Steam Plant excluding the river coal plant and third, that portion of the two companies' transmission plant represented by the Holtwood Substation, the 66 KV Transmission lines between Holtwood and the Highlandtown Substation and the Highlandtown substation itself, excluding only such land and land rights as are associated with them.

Q. And how were these estimates related to the study which has been marked for identification Exhibit 31? A. I have prepared a summary and an outline of the procedure followed in estimating the substitute plant and the manner of combining these estimates with costs shown in the study marked for identification as Exhibit 31 to determine the cost as of December 31, 1945 of rebuilding [775] all of the properties of these two companies.

MR. SPARKS: Mr. Examiner, I have a document entitled "Pennsylvania Water & Power Company and the Susquehanna Transmission Company of Maryland, outline of Estimating Procedure, substitute and reproduction plant costs as of December 31, 1945," which I ask to be marked for identification as Exhibit 32.

TRIAL EXAMINER: The document may be marked Exhibit 32 for Identification.

(Document marked for identification Exhibit No. 32.)

By MR. SPARKS:

Q. Mr. Hall, do you have before you the document to which I have just referred, which has been marked for identification as Exhibit 32? A. I do not.

Q. I will now hand it to you. Do you now have it? A. I now have it.

Q. As I understand it, the first pages in the exhibit marked for identification as Exhibit 32 contain a description of your procedure in arriving at the summary shown on pages 12, 13 and 14 and the remaining pages show certain supporting data. Is that correct? A. Yes, sir.

Q Now, please, what do the various columns in the summary sheets 12, 13 and 14 of the exhibit marked for [776] identification as Exhibit 32 show?

MR. GOLDBERG: Mr. Examiner, may we have a statement from counsel as to the purpose of Exhibit 32 for Identification, and the testimony?

MR. SPARKS: The purposes, I will state, briefly, at this time are related to the rate of return study, and to contentions that may be made by the company for rate base and to our depreciation studies.

TRIAL EXAMINER: The relationship with respect to these studies set forth is on the basis on substitute plant based on the trended cost?

MR. SPARKS: Page 12 of the exhibit——

TRIAL EXAMINER: (Interposing.) Based on what theory of cost?

MR. SPARKS: I think that if Your Honor would not mind having the witness answer that, he could do it better than I.

[777] THE WITNESS: Based upon the substitute plant as a plant of modern design as described here in the exhibit.

TRIAL EXAMINER: Using what?

THE WITNESS: Using a plant of modern design, practice and construction costs as of December 31, 1945.

TRIAL EXAMINER: Construction costs as of December 31, 1945?

THE WITNESS: Yes. That applies to a large portion of the features of the plant. Other features are presumed to be the same as the original, and in some cases, such as the matter of railroad relocation where items are turned over to these other parties at the time of reconstruction.

MR. GOLDBERG: Mr. Examiner, is this witness being offered to testify as to the alleged actual depreciation of the properties of the Susquehanna Transmission Company of Maryland and the Pennsylvania Water & Power Company?

MR. SPARKS: He is not.

MR. GOLDBERG: What is the pending question?

(The pending question was read.)

MR. GOLDBERG: Mr. Examiner, for the reasons already stated in connection with Exhibits 30 and 31, I object to the question.

TRIAL EXAMINER: Objection overruled.

THE WITNESS: The first column shows the trended cost statement which has already been described. The second

[778] column represents the trended costs of the original plant items which are substitute plant the estimate is to replace. The third column shows that portion of the trended cost statement which represents property of modern design and for which no substitution would be made today that would differ materially in design, performance or cost.

The fourth column is a summary of the substitute plant estimate.

The fifth column is the sum of columns 3 and 4. This sum shown in Column 5 represents the cost at December 31, 1945, of rebuilding all of the properties of these two companies in accordance with modern design and practice.

The figures shown for land and land rights, Account 340 in Columns 1, 3, 4 and 5 were obtained from the company.

By MR. SPARKS:

Q. What is the total cost of rebuilding all of this property as of December 31, 1945?

MR. GOLDBERG: Objection, Mr. Examiner, for the reasons already stated.

TRIAL EXAMINER: The objection is sustained.

MR. SPARKS: May I say at this point, if your Honor please, that all of the rest of the testimony which we would offer through Mr. Hall will relate to the exhibit marked for identification No. 32. Is it the Examiner's ruling that that testimony will not be or is not admissible in evidence?

[779] TRIAL EXAMINER: It is.

MR. SPARKS: I take an exception. We desire to make an offer at this time, if your Honor please, of the testimony which would be tendered in the record by Mr. Hall, of Exhibit 32.

On behalf of the Pennsylvania Water & Power Company and the Susquehanna Transmission Company of Maryland, we offer in evidence Exhibit No. 32 and the testimony of Mr. W. M. Hall, member of the firm of Chas. T. Main, Inc., in explanation and support of said exhibit. Mr. Hall, an active member of the firm of Chas. T. Main, Inc., is a graduate of the University of Colorado, a member of the American Society of Civil Engineers and a licensed professional engineer of the State of New York. His engineering experience covers a period of 30 years during which time he has been active in design, supervision and construction of power plants both steam and hydro as well as having had a vast experience in other engineering fields. The exhibit is entitled "Substitute and Reproduction Plant Costs as of December 31, 1945." This Exhibit 32 and the testimony in connection therewith establishes the cost of a modern substitute plant in the amount of $55,394,792. This study shows the cost of a modern substitute plant at the same location, of the same capacity and capable of performing the same functions as property of present companies now perform. It is based upon the following premises:

[780] 1. That a modern new hydroelectric plant would be substituted for the Holtwood hydroelectric plant and located at the same site.

2. That a modern new steam-electric power station and coal preparation plant would be substituted for the present Holtwood steam station and coal preparation plant and located at the same site.

3. That the two 25 cycle transmission lines running from Holtwood Substation to the Highlandtown Substation in Baltimore would be replaced with a modern transmission line of higher voltage and located along the same right of way but with a 50 foot wider right of way wherever required.

4. That the Holtwood Substation and the Highlandtown Substation would be replaced with modern substitutes and located at the same sites.

5. That all the other properties of the Pennsylvania Water & Power Company and Susquehanna Transmission Company of Maryland would be reproduced exactly as they now exist which includes land and land rights, roads, railroads, trails, the Holtwood Village, the transmission lines other than the 25 cycle Holtwood to Highlandtown lines, and the substations other than Holtwood and Highlandtown, together with all other general plant.

6. That the costs shown in this study for the identical items replaced as referred to in paragraph 5 above, were [781] obtained from company Exhibit 31, entitled "Cost of Constructing and Reproducing the Entire Physical Property of the Pennsylvania Water & Power Company and Susquehanna Transmission Company of Maryland as of December 31, 1945."

7. That as to the items which are not identically reproduced, the new structures, equipment, and so forth, would be those used in a modern plant constructed today at the same location in a plant of like capacity and capable of performing the same functions that the companies' present plant now performs.

8. That substantially the same construction period as was encountered in the construction of Safe Harbor and other similar large projects was used in reproducing the substitute plant.

9. That average climatic and river flow conditions prevail.

10. That the modern construction methods, facilities, and procedure that were actually used in the original construction of Safe Harbor and other large

projects would be repeated in reproducing the substituted portions of the companies' plant.

11. That wages and material prices would remain as they were on December 31, 1945, throughout the entire reproduction period.

12. That sufficient labor would be available at the [782] prevailing wage rates used to reproduce the properties.

13. That sufficient materials and equipment would be available at present published and quoted prices within prevailing OPA and other governmental regulations.

Exhibit No. 32 and the testimony of Mr. Hall in support thereof are offered for the following purposes:

1. As basis for determining the extent of the justification for the replacement of property, for determining the proper accruals for the depreciation in the property so that the original investment of the owners in property will remain unimpaired.

2. To be used in connection with determining the rate of return appropriately applicable to whatever rate base or bases the Commission may determine, so as to test the propriety and reasonableness of the rate of return and the return allowance by comparison with the returns currently available to other and competitive enterprises of corresponding risk and uncertainty.

3. To be considered and weighed by the Commission in determining the reasonableness of any of the rates, charges or classifications of Respondents as may be subject to the jurisdiction, if any, of the Commission, by determining the fair value of the properties of Respondents used and useful in the rendering of the particular service for which such rates, charges and classifications are demanded. observed. charged [783]

or collected, and by determining the fair return allowable on such fair value.

I understand, if your Honor please, that your Honor rules that Exhibit 32 marked for Identification and the testimony of Mr. Hall with regard to that exhibit are not to be admitted?

TRIAL EXAMINER: May I see counsel's statement as he read it?

MR. SPARKS: Yes, sir. (Handing paper to Trial Examiner.)

TRIAL EXAMINER: Exhibit 32 for Identification will not be received in evidence and the testimony of the witness Hall likewise will be excluded in so far as the testimony has been described in counsel's offer of proof.

MR. SPARKS: May I ask whether your Honor rules that if the testimony of Mr. Hall be not fully described in the proffer such as that if I say that all of Mr. Hall's testimony which he would give would relate to Exhibit 32, that that testimony would likewise be excluded?

TRIAL EXAMINER: Yes.

MR. SPARKS: I take an exception.

* * *

[795] TRIAL EXAMINER: The Examiner will not receive the testimony to which counsel has referred.

MR. SPARKS: Very well, sir. We take an exception to the Examiner's ruling excluding the evidence, and I will make an offer of proof.

We offer the testimony of Roland L. Bortner, assistant secretary and right-of-way engineer for the Pennsylvania Water & Power Company, as follows: That Mr. Bortner is a graduate of the Baltimore Polytechnic Institute, has attended Pennsylvania State College and Johns Hopkins University, that he has

had experience in purchasing and valuing rights-of-way since 1923. Between June, 1919, and 1920 he held positions connected with land and right-of-way surveys with the Baltimore & Ohio Railroad and the City of Baltimore. He has had experience in the valuation of land and land rights since 1923 with the Pennsylvania Water & Power Company. He cooperated with the War Department in the acquisition of a right-of-way between Gunpowder and Magnolia, Edgewood Arsenal, and in the last five years has done considerable work for the Consolidated Gas Electric Light & Power Company of Baltimore in connection with the acquisition of rights of way in [796] Baltimore County, Maryland. That he made appraisals of the fair market value of the land and land rights of the Pennsylvania Water & Power Company and Susquehanna Transmission Company of Maryland as of December 31, 1945, covering transmission line rights-of-way and substation or terminal sites listed in Account 340 used by the witness Tate in his reproduction study, Exhibit 31, and testimony, in the amount of $4,027,220, and used by the witness Hall in his substitute plant study, Exhibit 32, and testimony, in the amount of $4,080,689.

The testimony of the witness Bortner is offered as evidence of the fair value of land and land rights of the Respondents carried in Account 340 for rate base purposes and for any other appropriate purpose.

And I understand that your Honor's ruling is that such testimony would not be admitted?

TRIAL EXAMINER: That is correct.

* * *

[797] TRIAL EXAMINER: The hearing will be in order.

Whereupon

HERBERT B. DORAU,

a witness produced on behalf of the Respondents, being first duly sworn, testified as follows:

DIRECT EXAMINATION.

By MR. HULL:

Q. Please state your name, address and occupation. A. My name is Herbert B. Dorau, I reside at 268 Mountain Avenue, Ridgewood, New Jersey. I am a professor of Economics in New York University, chairman of the Department of Public Utilities and Transportation in the School of Commerce of New York University, and professor in the Graduate School of Business of New York University. I have been a consulting economist for more than twenty years.

Q. Will you summarize your education and professional training? A. I was graduated from Lawrence College, Appleton, Wisconsin, in 1919 with an A. B. degree. After one year of graduate study in economics at the University of Wisconsin I was granted an M. A. degree. I continued graduate study at the University of Wisconsin in the field of public utilities and transportation while serving as an instructor. The University of Wisconsin granted the Ph. D. degree in 1928.

[798] During the years 1920-1925 I was an instructor at the University of Wisconsin teaching courses in economics, transportation, money and banking and corporation finance.

In 1925 I accepted appointment as assistant professor of Economics in charge of instruction in public utilities at Northwestern University School of Commerce.

In 1928 I became associate professor. In 1929 Northwestern University granted me a year's leave of absence during which time I engaged in economic and financial consulting work in New York. My leave of absence was extended for a second year during which year I was a lecturer

in Public Utilities in New York University while engaging in financial consulting work.

Since 1932 I have been on the faculty of New York University, as associate professor of Economics to 1936 and as professor of Economics since that time.

During the years 1921 to 1929 I was successively research assistant, research instructor and research associate in the Intitute for Economic Research, engaging in and directing economic research in the fields of public utilities and urban land economics.

I am the author of the following books and articles—and I will be glad to shorten the proceedings and offer this for the record if you so desire.

• • •

[799] TRIAL EXAMINER: You may do so, and the reporter will incorporate it into the record at this point.

(The books and articles referred to are as follows:)

Books

"The Changing Character and Extent of Public Ownership in the Electric Light and Power Industry;"
"Urban Land Economics" (with A. G. Hinman);
"Materials for the Study of Public Utility Economics"; joint author;
"Economic Principles and Problems;"
"Planned Society, Yesterday, Today and Tomorrow;"
"Real Estate Merchandising."

Articles and Research Reports

"Public Utility Financing, 1919-1925." Journal of Land and Public Utility Economics, July, 1925.
"Public Utility Financing, a Review of 1925." Journal of Land and Public Utility Economics, April, 1926.
"The Cost of Railway Capital Under the Transportation Act of 1920." American Economic Review—March, 1927. Journal of Land and Public Utility Economics, February, 1927.

"The Rise and Decline of Municipal Ownership in the Electric Light and Power Industry of Wisconsin." Journal of Land and Public Utility Economics, May, 1927.

[800] "Municipal Ownership in the Electric Light and Power Industry of Massachusetts." Journal of Land and Public Utility Economics, August, 1927.

"Some Measures and Measurements of Telephone Utility Taxation." Journal of Land and Public Utility Economics, November, 1927 (co-author).

"Gross and Net Earnings of Public Utility Enterprises Exclusive of Steam Railway, Telephone and Telegraph Utilities, 1913-1926." Journal of Land and Public Utility Economics, February, 1928.

"Appliance Merchandising Policies and the Future of Gas—Should the Gas Company Set the Standard for Appliance Selling in the Territory Served with Its Products?" Gas Age Record, March 3, 10, and 17, 1928.

"Cost of Railway Capital." Journal of Land and Public Utility Economics, May and November, 1928.

"The New Competition—How to Meet It." American Gas Association Monthly, December, 1928.

"Cost of Railway Capital." Journal of Land and Public Utility Economics, May, 1928.

"Railroads' Command of Capital." Investment Banking, August, 1931.

Some Economic Considerations Bearing on the Place and Significance of the Holding Company in the Organization and Functioning of the Public Utility Industries, Submitted to the Committee on Interstate Commerce of the United States Senate, May 1, 1935. pp. 24.

"Some Alternative Bases for Public Power Projects." The Southern Economic Journal, April, 1938.

[801] "Dispersion of Prices for Domestic Electric Service." Public Utilities Fortnightly, June 9, 1938.

"Rates in the Electric Industry Under Municipal Ownership." Annals of the American Academy of Political and Social Science, January, 1939.

"The Impact of Economics on Accounting." Edison Electric Institute Bulletin, January, 1939.

"The Outlook for Public Utilities." Trusts and Estates, January and February, 1939.

"Public Utilities Accounting." The New York Certified Public Accountant, May, 1941.

"Economic Implications of Public Utility Depreciation Accounting." The New York Certified Public Accountant, June, 1944.

"Socialized Transport and the Future of Enterprise." Railway Age, June, 1944.

By Mr. Hull:

Q. Will you state in somewhat greater detail the character and range of your professional work as an economist? A. My first employment in an economic capacity was for the Public Utilities Acquisition Committee of the Common Council of the City of Milwaukee during 1920, to determine the probable cost of capital for municipal utility acquisition purposes.

[802] This involved a study of the comparative cost of public utility capital and was my initial study of the problem of the cost of money to public utilities. I have since engaged, in so far as my university obligations would permit, in a wide range of economic, financial, accounting and statistical studies concerned with public utility industries and others.

From 1936 to 1938 I made an extensive analysis of the reports of the F. T. C. investigation of utility accounting and financial practices, during 1939 and 1940 I made an extensive statistical analysis on a nationwide basis of comparative electric rate levels and factors influencing rate levels. During the years 1928 to 1932 I had extensive experience in the field of investment analysis and some experience in the financing of public utility enterprises.

I have from time to time acted as consultant to the New Jersey Board of Public Utility Commissioners and served on the Port Protection Committee of the New York Port Authority; during 1930 to 1931 I was a member of the President's Committee on Housing and Home Ownership.

I have appeared in a professional and expert capacity before the Public Utility Commissions of the States of Illinois, Pennsylvania, Indiana and New York; before the Securities and Exchange Commission, the Interstate Commerce Commission and the Federal Power Commission in cases involving the rate of return, depreciation and accounting matters.

[803] I have appeared, by invitation, before professional societies and industrial association meetings such as the American Economic Association, the American Gas Association, and the National Accounting Conferences of the electric and gas utility industries. I originated and for a number of years made the periodic analyses of utility financing published by the Journal of Land and Public Utility Economics.

Q. Have you prepared an exhibit setting forth the changes in the supply of money in the United States over the period 1914-1946? A. I have prepared a tabulation and charts setting forth deposits, investments and loans of all banks as well as currency in circulation and gold stocks in millions of dollars for the period 1914-1946, yes, sir.

[804] Q. Will you briefly explain the meaning and significance of this exhibit?

• • •

[807] A. Very well. The chart in this exhibit graphically sets forth the rise in total bank deposits, gold stocks and currency in circulation, 1914-1945, and the rise of loans from 1914 to 1929 and the subsequent decline of loans. It can be readily and quickly seen that total deposits have gone through two periods of substantial increase since 1933. The first rise took place from 1933 to 1943, during

which period total deposits rose from $36,919 million to $71,027 million. The second and even more rapid rise brought the total of the June 30, 1942, of $71,027 million to $137,688 million as of June 30, 1945.

• • •

[810] MR. HULL: Mr. Examiner, I would like to have marked for identification as Exhibit No. 33 a document bearing this title:

"Before the Federal Power Commission—In the matter of Pennsylvania Water & Power Company and Susquehanna Transmission Company of Maryland, IT-5915—Testimony and Exhibits of Dr. H. B. Dorau relating to the Supply of Money and the Value of the Dollar."

• • •

[812] Q. Dr. Dorau, do you have before you a copy of the exhibit which I have just described and which has been marked for identification as Exhibit No. 33? A. I have.

Q. Will you state whether or not you prepared the explanatory matter preceding the charts in this exhibit? A. I did.

Q. And the charts were prepared under your supervision? A. They were.

• • •

Q. Doctor, what is the meaning and significance of total deposits in dollars? A. Total deposits in dollars measure the quantity of dollar money which the banks owe the depositors and which the depositors can withdraw from the banks and spend as they may choose, time deposits with notice, other deposits on demand. Total deposits measure the potential expressible money spending power of depositors. Deposit dollars are money and thus a major part of the money supply of the country. [813] The increase in deposits therefore measures, to a large extent, the increase in the supply of money in the United States.

Q. Are there other components of the money supply? A. Yes, currency in circulation.

Q. Will you explain your exhibit in further detail? A. With respect to currency in circulation, reference to the chart indicates a gradual increase until 1939 when a rapid rise began. From a level of $6,461 million as of June 30, 1938, the currency in circulation rose to $9,612 million in 1941 to $17,421 million in 1943 and to $26,746 million in 1945.

As of June 30, 1945, currency in circulation was more than eight times the amount of June 30, 1914, and more than four times the quantity as of June 30, 1938.

Gold stocks, because they are at least in theory the basis of our monetary standard of value, are also important. The gold stock of the country has increased from $1,699 million as of June 30, 1915, to $20,213 million as of 1945. The rapid increase in gold stock took place after 1933, since which date the rise has been five-fold.

In 1933 the total of deposit money and currency in circulation was $42,353 million; in 1945 the total of deposit money and currency was $164,667 million, or close to a four-fold increase.

[814] The difference between total deposits and loans is also important. Loans represent the extent to which people are in debt to the banks as distinguished from deposits which reflect the extent to which banks are in debt to their depositors.

As of June 30, 1919, following the last previous war, the excess of deposits over loans may be seen by reference to the tabulation which is a part of this exhibit, to have been only $7,322 million—$32,012 million less $24,690 million.

As of June 30, 1945, the excess of deposits over loans was $109,709 million, or fifteen times the excess of deposits over loans in 1919.

Q. What is the economic significance of this substantial increase in the quantity of money for the determination of a fair return in utility regulation? A. The money revolution in the United States since 1933 constitutes the

largest monetary inflation in the history of the country. The increase in the number of dollars of money in the country since 1933, and even more strikingly since 1941, is without parallel and unprecedented in this country.

The dollar is the economic measure of investment and return, of sacrifice and income. The quantity of dollars is therefore one of the important factors determining the size of the dollar as a unit for the measurement of [815] economic sacrifice and return.

The yardstick as a linear measure does not change in linear significance when the number of yardsticks is increased, but the size of the dollar as a standard of measurement tends to decrease with an increase in the effective quantity of spendable dollars.

A change in the magnitude of any unit of measurement and enumeration destroys its validity as a standard of measurement and comparison.

Merely calling the changed unit of measurement by the same name does not make it the same. The summation of such changed units of measurement, simply because they continue to have the same label, is as invalid as adding pears, peaches, peas and persimmons. The accounting summation of unlike dollars does not measure the investment sacrifice.

If the mile as a unit of linear measurement should have changed in magnitude as the dollar has changed as a measure of sacrifice and gain, no sensible person would draw any conclusions from a comparison of ton-miles of railway service in 1907, 1917 and 1935. Before any informed person would believe that the ton-miles in 1917 exceeded the ton-miles in 1935, he would demand that such calculations be translated into an equated or equivalent number of ton-miles on the basis of the relative magnitude of the different length of the miles used.

[816] Progress in every field of human endeavor has depended on the establishment of standard and comparable units of measurement. When the horsepower was the

power of a horse instead of the energy equivalent of 550 foot-pounds per second, the enumeration of horsepowers was of limited accuracy and meaning.

When the foot was literally a "foot-length" instead of, as now 12 inches, linear measurement and comparison were uncertain and unreliable. It would be no more inappropriate to add nautical miles and land miles than to add 1907 dollars and 1917 dollars, but no respectable geographer would do so.

If the mile as well as the dollar has been redefined at 59 per cent of its former magnitude in 1934, geographers and engineers would not make comparisons and enumeration without equating and adjusting for the difference in the actual comparative magnitude of the standard of measurement.

Q. Can the differences in the dollar as a unit of measurement of economic cost and income be equated so as to afford a reasonably comparable standard for the measurement of investment and return in utility regulation? A. Yes, the variability of the dollar as a unit of economic measurement can be measured with reasonable accuracy so as to afford the basis for equating one size dollar with another. The size of the dollar is measured by the goods and services which it can buy. Money is but the medium of exchange [817] and the dollar is the unit of measurement, but the dollar varies in its purchasing power, its exchangeability for goods and services, and thus in its size.

This variability of the dollar can be equated so that the dollars of different size can be legitimately added and expressed as the equivalent of a fixed and certain sum of any other size of dollar, just as the sum of nautical and land miles can be equated and expressed as either so many nautical miles or the equated number of land miles.

Q. Have you prepared an exhibit which sets forth the change in the yearly average size of the dollar over the period 1902-1945? A. Yes, I have prepared a tabulation which sets forth the purchasing power change in the size

of the dollar by years from 1902 to 1945 and a seven-year moving average from 1905.

Column 1 identifies the years from 1902 to 1945.

Column 2 records the wholesale price index as reported by the United States Department of Labor, Bureau of Labor Statistics, with the average for 1926 equal to an index of 100.

Column 3 translates the index of wholesale prices into the purchasing power of the dollar which is determined by calculating the reciprocal of the annual averages in Column 2, i. e., by dividing the index of wholesale prices [818] into 100.

Column 4 records the total of the seven years of Column 3; i. e., the total of the years 1902-1908 for 1905, and for each succeeding seven-year group in the same way down to 1943, for which a five-year total is ascertained, and for 1944 for which year a three-year total is determined, and for 1945, for which a one-year total is taken.

Column 5 records the calculated seven-year moving average of Column 3 plotted on the fourth year center, except that for the year 1943 a five-year average is calculated and recorded, for 1944 a three-year average, and for 1945 a one-year average.

Column 6 records the translation of the seven-year moving average index of the purchasing power of the dollar to an index with 1945 as 100 for ease of comparison.

Q. Does the United States Department of Commerce calculate and report the changing purchasing power of the dollar? A. Yes, in the Survey of Current Business.

Q. Does it use the same index of wholesale prices which you have used? A. Yes, the Department of Commerce calculates the purchasing power of the dollar as the reciprocal of the index of wholesale prices.

Q. Why did you use a seven-year moving average, [819] except as noted? A. The period of time from 1902 to 1945 is long enough to accommodate a seven-year average, and a seven-year average satisfactorily eliminates

minor and short-term changes which are more in the nature of fluctuations.

Q. Why did you use a five and three-year average for 1943 and 1944 and the one-year average for 1945? A. In order to taper off the seven-year average and bring it down to the current time and date of 1945. This is satisfactory and justified since the trend during these years was in the same direction and accelerating. Moreover, since the continuing trend in 1945 and 1946 is strongly in the direction of higher prices and a cheaper dollar, the result is conservative.

Q. What, in brief, does the index developed, in Column 6 of this exhibit, disclose as to the changing economic size of the dollar? A. Treating the 1945 dollar as 100, or par, the dollar of 1905 was 73.2 per cent larger. The average size of the dollar was larger than in 1945 in every year down to 1918. From 1918 to 1923 it was slightly and temporarily below 100, but since 1922 the purchasing power of the dollar has been above 1945 by as much as 42.3 per cent in 1934 and on the average for the period 23 per cent above 1945.

[820] From 1905 to 1918 the purchasing power of the dollar was on the average 50 per cent above 1945.

From 1918 to 1923 it was on the average 5 per cent below 1945.

For the entire period 1905-1945, the average purchasing power of the dollar on the basis calculated in column 6, was 28 per cent above 1945.

Q. Do you find in these evidences of the changing magnitude of the dollar any basis for the conclusion that the changes in the economic size of the dollar can be disregarded because the fluctuations are compensatory? A. No. There is no evidence to support such an assertion in this exhibit or, in my opinion, anywhere. I have just pointed out that the average of the entire period is 28 per cent above 1945 and that in every year except five during a 44-year period the purchasing power of the dollar was

above 1945. My use of a seven-year moving average is proper treatment of mere fluctuations in the short term, and even if in the long term there were compensations, changing investments and investors would make the assumption of a constant dollar inequitable.

The long term trend, however, is not and has not been compensatory. The price level has been rising since 1897 and the dollar reciprocally declining in size. The trend continues.

[821] Forces and factors justifying the expectation that the dollar will continue to shrink in size are clearly in evidence. Among the more obvious of these factors are the unparalleled quantity of money, the rate of spending, the size of the public debt, and the new and high levels of wages.

Q. Has the dollar been legally re-defined during the period covered by your exhibit? A. Yes, before January 31, 1934 the "dollar" was the name for 23.22 grains of fine gold; after January 31, 1934 the name "dollar" was used to mean 13.714 grains of fine gold. The legal post-1934 dollar is only 59 per cent the size of the pre-1934 dollar. The dollar has been changed legally as well as economically, but the name remains the same, and so bookkeepers add and subtract these different dollars without distinction.

Q. Has the distinction between the calculation of economic sacrifice and return in nominal and actually comparable dollars been recognized in other economic areas? A. Yes. In the field of wage determination and administration the distinction between nominal dollar wages and real wages is fully recognized and well understood by wage earners and others.

Q. What is the economic meaning of the term investment? A. The investment process consists of converting liquid [822] or alternatively applicable economic resources into direct goods capable of income production. Invest-

ment involves the sacrifice of alternative goods and the alternative goods given up measure the investment made.

An investment may be made through the medium of money—as is most common in our day—or by direct investment of labor, risk-taking and the cost of waiting or postponement of income to the future. The investment in any economic undertaking may and commonly does consist of both money investment and direct investment. In any case the investment is measured by the sacrifice made to produce a future income, whether accounted for by bookkeeping or not, and whether in the form of money expenditures or direct sacrifices made without the intervention of the medium of exchange money.

Q. Assuming the entire investment of two enterprises to be reflected by the same number of accounted-for dollars, does it follow that the investment in the two enterprises is the same? A. No, it is the same only in the number of nominal dollars. If those dollars are not of equal size and economic significance, the investment sacrifice is not the same. If one was in 1918 dollars and the other in 1905 dollars, the actual investment would—as measured by the index of dollar purchasing power in Column 6 of my exhibit—be 73 per cent greater in 1905 dollars than the investment [823] of the same number of accounted-for 1918 dollars.

A larger number of small dollars may actually constitute a smaller investment than a smaller number of larger dollars.

Q. What is the economic meaning of the investment standard for utility rate-making? A. The investment standard proposes that the investor receive a fair return on the dollars—or dollar equivalent—which he gave up and invested, i. e; on the sacrifice which he made. It is a sacrifice standard as distinguished from a value standard and cannot be fairly construed to mean the sacrifice of an equal number of other dollars since they would not measure the investment sacrifice made.

Q. Does the sum of the nominal dollars invested—in money and/or goods and services—measure the investment actually made if made in dollars of different economic size and purchasing power? A. Obviously not. An investment made by the sacrifice of dollars having a purchasing power of 100 would be equal to the investment of twice the same number of 50-cent dollars. It seems almost too simple to have to explain that an investment sacrifice of 1,000,000 hundred-cent dollars is the same as an investment of 2,000,000 fifty-cent dollars.

* * * *

[828] MR. GOLDBERG: Let us put it this way: The prices of the very informed investor and the informed investor will both reflect in varying degrees the purchasing power of the dollar; is that not so?

THE WITNESS: I think as a general thing, that is satisfactory, yes.

* * * *

By MR. HULL:

Q. Is it possible to express the nominal investment in an enterprise made in various kinds of dollars in terms of an equivalent number of dollars of equal size and equal investment significance? [829] A. Yes, very easily. The relative size and investment significance of the dollars sacrificed each year can be determined by reference to an index of purchasing power. By weighting the dollars invested each year by their purchasing power an average puchasing power dollar related to any desired base can be obtained and the investment in terms of any weight of dollar determined. In this way the constant dollar equivalent of the investment of heterogeneous dollars of different vintage and size can be determined.

Q. Have you applied this method to the dollars invested in electric plant in service of Pennsylvania Water & Power Company including Susquehanna Transmission Company to determine the investment sacrifice of 1945 dol-

lars? A. Yes, I requested that the company provide me with a distribution of the $36,414,232 of electric plant in service, before adjustments and construction work in progress and property held for future use, by years according to year of origin of the dollars of electric plant in service December 31, 1945.

The Company provided the desired information and I have used the same in the first numerical column of a two-page tabulation and chart which I have prepared.

Q. Will you explain this tabulation and chart?

MR. GOLDBERG: Mr. Examiner, I think it is appropriate for me to make an objection to that question. That question [830] now brings us to the application of the testimony we have here to the actual cost of Pennsylvania Water & Power Company properties and the Susquehanna Transmission Company properties as claimed by those companies. The result, Mr. Examiner, is not the actual cost base or price. And this brings into the record elements which the Commission has rejected, and which the courts have sustained in reviewing the Commission's rejection.

I submit, Mr. Examiner, that it does not alter the situation any to protest that the translation of the actual investment by application of the current purchasing power of the dollar does not represent the result which can be termed reproduction cost, or trended original cost, or any other name that you may care to apply. The fact still remains that it is not actual cost, which is the only type of evidence the Commission has signified it is willing to receive. The fact that it is not actual cost, Mr. Examiner, I submit is fairly evident by the earlier answer of the witness when he stated:

"The investment standard proposes that the investor receive a fair return on the dollars, or dollar equivalent, which he gave up and invested,

that is to say, on the total sacrifice made. It is a sacrifice standard as distinguished from a value standard and cannot be fairly construed to mean the sacrifice of an equal number of other dollars since they would not measure the [831] investment sacrifice made."

In other words, Mr. Examiner, the translation that the witness comes up with in his exhibit and testimony, certainly that is not the actual cost of the properties of the Respondent companies.

TRIAL EXAMINER: Does counsel for the Respondents desire to reply?

MR. HULL: Yes, Mr. Examiner.

First, the Respondents believe that the exhibit and testimony of Dr. Dorau show very much more clearly than anything else could show what was the actual cost of the present property of the Respondent company.

It is a study which has not been, to our knowledge, ruled upon by this Commission as to its relevancy or admissibility, or by any court in the land.

A similar study was presented to the Examiner in the Safe Harbor Case, which case is now before the Commission for determination. After having been offered there and considered by the Examiner for some days, he ruled that it should be admitted because it was the type of study which had not theretofore been passed upon by the Commission.

MR. GOLDBERG: Mr. Examiner, may I bring counsel for Respondents down to date?

A somewhat similar study expressing alleged cost of these items in terms of valuations of the current purchasing power [832] of the dollar, was presented in the City of Pittsburgh v. Pittsburgh and West Virginia Gas Company and others, and in the matter of Pittsburgh and West Virginia Gas Company and Kentucky-

West Virginia Gas Company cases, Dockets G-627 and G-635 before Trial Examiner Marsh, who was the sitting Examiner in those cases.

On objection by counsel for the Staff—and it so happens, Mr. Examiner, that I am Counsel in those cases also—the Examiner excluded such evidence on the grounds that it no longer was evidence of actual cost, which was the only character of evidence that the Examiner would receive, in the light of the Commission's decision.

While it is true, Mr. Examiner, that the presiding Examiner in the Safe Harbor Case received the evidence, it is obvious from his careful consideration of the evidence, the very considerable misgivings he had in regards to its reception, and I submit that an examination of this case clearly discloses, and it is all laid out in the brief of that case, Mr. Examiner, that such evidence would not be admissible, and I am certain that the Commission will so hold when it considers the case.

I further submit, Mr. Examiner, that we are now arguing upon a question which has already been ruled upon by the Examiner in the excluding of IV-A of Schedule 31, I believe, or perhaps 32.

[833] TRIAL EXAMINER: Do the other counsel desire to be heard, counsel for the interveners?

(There was no response.)

MR. HULL: Mr. Examiner, might I make this suggestion: The testimony which Dr. Dorau has prepared explanatory of this exhibit, of it we have now heard 12 pages, and four and a half pages remain. I suggest that we hear the remainder of the testimony before your Honor makes his ruling.

* * *

TRIAL EXAMINER: Data contained on the schedule and chart now under discussion relating to the original

investment in electric plant in 1945 dollars will be excluded.

MR. HULL: I apologize for my lack of familiarity with the procedure in this form. Do I understand that I shall proceed with the questions and answers, and then make a further offer, or should I now make the offer? Is now the time to make the offer?

TRIAL EXAMINER: That is a matter in counsel's discretion. You can advise the Examiner of what you intend to offer in evidence from this point on, and the Examiner will indicate whether he will or not accept it.

MR. HULL: I do not know how I can advise you without [834] reading the testimony.

TRIAL EXAMINER: The Examiner will not receive any testimony or evidence going to the original investment in electric plant in terms of 1945 dollars.

MR. HULL: Your Honor, I do not understand. I have tried to make it clear that this is not the only purpose for which this witness is presented. This witness is also being presented for his evidence and testimony bearing upon the rate of return.

TRIAL EXAMINER: Counsel had better proceed with the questions.

MR. HULL: Thank you.

By MR. HULL:

Q. Dr. Dorau, will you explain this tabulation and chart, please?

TRIAL EXAMINER: There is an objection to that. The tabulation and chart referred to as the chart headed, "Pennsylvania Water & Power Company, Original Cost of Electric Plant in Present Dollars," and the tabulation headed "Original Cost of Electric Plant in Present Dollars—the Purchasing Power of the Dollar as Measured by Wholesale Prices as Reflected

by a Seven-Year Moving Average—1905-1945", is that correct?

MR. HULL: Yes.

TRIAL EXAMINER: The Examiner will sustain the objection to that question on the ground that inseparably bound [835] up in that tabulation and in the chart is this matter of original investment in electric plant in 1945 dollars.

MR. HULL: Is that in addition to your Honor's previous ruling?

TRIAL EXAMINER: That is a statement of the grounds for the ruling.

MR. HULL: I will proceed.

By MR. HULL:

Q. Dr. Dorau, is the $50,091,106.00 indicated on the tabulation and chart upon which the Examiner has just ruled, the cost of reproduction of electric plant in service as of December 31, 1945?

MR. GOLDBERG: Mr. Examiner, before the witness answers, and before I object, I would like to make one comment. One figure is $50,091,000 odd, which is the figure which appears on the tabulation; and then we have the figure of $50,093,000 odd on the chart. I assume that the figure on the chart was rounded off, but it was rounded off to too great an extent.

MR. HULL: My question really refers to the same figure, whether there is some typographical error or not.

MR. GOLDBERG: I was wondering whether they were the same, or whether there was some arithmetical error.

MR. HULL: I think there is.

MR. GOLDBERG: I object to any testimony bearing on the figures stated by counsel which are the results

of the [836] application of the purchasing power of the dollar.

TRIAL EXAMINER: Let the Examiner ask the witness a question whether that is or not true: Doctor, is it or not a fact that the $50,093,000 is or not the result of the application of the purchasing power of the dollar to the original cost of electric plant of Pennsylvania Water & Power Company?

THE WITNESS: Yes, as calculated and established, and as previously described.

TRIAL EXAMINER: The objection is sustained.

By MR. HULL:

Q. Dr. Dorau, is the determination in this exhibit the same as the trended original cost? A. No, it is not.

MR. GOLDBERG: Same objection. I move to strike the last answer to the extent given.

TRIAL EXAMINER: The answer as given by the witness to the pending question is stricken. The objection to the question is sustained.

By MR. HULL:

Q. Dr. Dorau, in your opinion, is the fair original cost in homogeneous current dollars a useful factor in the determination of a fair return under regulation?

[837] MR. GOLDBERG: Same objection, Mr. Examiner?

TRIAL EXAMINER: Objection is sustained.

By MR. HULL:

Q. Dr. Dorau, in your opinion, is the fair original cost in—I beg your pardon, I asked you that question—is it, in your opinion, useful for the determination of the rate base or the fair rate of return? A. It——

MR. GOLDBERG: Same objection.

TRIAL EXAMINER: The objection is sustained.

MR. GOLDBERG: Mr. Examiner, may I add at this time that obviously, since the index used by the witness does not relate to utility construction costs, it is utterly immaterial and irrelevant to any issues in this case.

TRIAL EXAMINER: You may proceed.

MR. HULL: Now, Mr. Examiner I desire to offer in evidence Exhibit No. 33.

The Respondents offer to prove by the witness on the stand, Dr. Dorau, a duly qualified economist with a wide experience in the field of public utility regulation, that he has made studies and prepared exhibits based on reliable statistics which have been compiled by the several departments and bureaus of the United States Government, which show the following:

First, the amount of money in circulation, and the [838] availability for the purchasing of commodities and services, and for investment in each of the years from 1916 to 1945, inclusive.

Secondly, the purchasing power of the dollar in each year from 1905 to 1945, inclusive, as measured by wholesale prices and as reflected by the seven-year moving average, and

Third, upon the basis of these studies and data furnished to him by Respondents and in evidence in this proceeding before the Commission to show:

(a) The original investment of the Respondents in the electric plant in each year from 1905 to 1945, both, inclusive, measured by nominal dollars.

(b) The same original investment in each year from 1905 to 1945, both inclusive, measured by dollars having a purchasing power of dollars in 1945.

(c) The original investment of the Respondents in electric plant was cumulative to the end of each year

from 1905 to 1945, inclusive, measured in nominal dollars, and

(d) The same original investment cumulative to the end of each year from 1905 to 1945, inclusive, measured by dollars having the purchasing power of dollars in 1945.

These studies and exhibits and the testimony of Dr. Dorau relating to it are further offered for the following purposes: First, to be considered and weighed by the Commission in determining the appropriate rate of return which the [839] Commission should apply to the rate base of the Respondent companies in order to determine the rates, charges, classifications, rules, regulations, practices or contracts of the Respondents, subject to the jurisdiction of the Commission, if any, are just and reasonable rates, charges, classifications, rules, regulations, practices or contracts to be observed and enforced.

Secondly, to be considered and weighed by the Commission in determining the rate base to which the Commission should apply the appropriate rate of return in order to determine whether the rates, charges, classifications, rules, regulations, practices or contracts of the Respondents which are subject to the jurisdiction of the Commission, if any, are just and reasonable rates, charges, classifications, rules, regulations, practices or contracts to be observed and enforced.

Third, to be considered and weighed by the Commission in ascertaining how many dollars having the purchasing power of 1945 dollars, the Respondents must receive in the near future from their operations in order to avoid the infringement of their constitutional right under the Fifth Amendment to the Constitution of the United States to earn a fair return for the amount of the property which they have dedicated to the public use.

Fourthly, to be considered and weighed by the Commission [840] the actual investment which the investors of Respondents have made in the property which they have dedicated and devoted to public use.

MR. GOLDBERG: Mr. Examiner——

TRIAL EXAMINER (interposing): Has counsel finished?

MR. HULL: Yes.

MR. GOLDBERG: May I inquire, first, whether that offer also includes the offer of the Exhibit No. 33?

MR. HULL: It is intended to include the exhibit excepting insofar as the testimony found in the exhibit is of record.

MR. GOLDBERG: The thing that troubles me—I tried to listen carefully—it seems to me that, at the outset, the offer of proof undertook to prove through the witness on the stand testimony which the Examiner has admitted in the first twelve pages of the witness' testimony.

[841] MR. HULL: All I intended to include in the offer was the testimony in the latter part, which was excluded by the Examiner as the questions were asked.

MR. GOLDBERG: With that amendment, I think that clears it up.

With respect to the exhibit, Mr. Examiner, I might state that I do not object to the first chart, as such; nor to the tabulation following that first chart, as such; since that is related to the testimony which has been admitted;

Nor do I object to the third tabulation, consisting of 2 pages, the testimony relating to that, Mr. Examiner, has been admitted.

It is the record tabulation in the exhibit.

But I do object, Mr. Examiner, to the tabulation, consisting of 2 pages, which precedes the last page of exhibit, and to the last page of the exhibit, which is the chart applying Dr. Dorau's theory.

I recognize that the portions of the exhibit to which I have objected contain evidence which has already been admitted, in part, and is being offered for admission, in part.

I have reference to the original investment in electric plant in terms of nominal dollars as expressed by this witness in his exhibit; to the purchasing power of the dollar—1945 equals 100, as expressed by the witness in his exhibit.

Inasmuch as, however, Mr. Examiner, such evidence is [842] already in the record, and will be received in the record, I assume, I do not exclude those portions of the tabulations of the chart to which I have objected from my objection.

* * *

TRIAL EXAMINER: The Examiner will rule to exclude Exhibit No. 33, with the following statement:

That if the data contained on the chart headed, "Deposits, Investments and Loans of All Banks; Currency in Circulation and Gold Stocks 1914-1946 (millions of dollars)" and the tabulation headed likewise;
[843] And the further tabulation entitled, "The Purchasing Power of the Dollar as Measured by Wholesale Prices as Reflected by a Seven-Year Moving Average—1905-1945," are submitted in the form of a separate exhibit, that exhibit will be received in evidence.

The further evidence of the witness, Dorau, as stated in counsel's offer of proof, will not be received.

MR. HULL: Mr. Examiner, in view of your Honor's ruling, we may wish to submit a new exhibit including the tabulations which you indicated you would admit.

However, we are very near the end of our direct case, and it may not be physically possible for us to make up those exhibits in time to get them in before the conclusion of our direct case. May we have leave to submit them as soon as it is possible to prepare them?

TRIAL EXAMINER: Yes, advising the Examiner as early as possible when you expect to be able to submit the new exhibit.

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[844] MR. MILLER: Mr. Examiner, I move that the order of procedure be changed so that Pennsylvania Public Utility Commission may produce its evidence on the issue of allocation of any rate reduction after Pennsylvania Water & Power Company, the Federal Power Commission Staff, and Consolidated Gas Electric Light and Power Company of Baltimore have presented their evidence on this issue.

The basis for this motion is the belief that under the suggested changed procedure, duplication of testimony would be avoided and our evidence could be presented in more concise and expeditious form.

MR. FRANCE: If Your Honor please, the Public Service Commission of Maryland likewise desires to move that the order of procedure be changed so that it will be permitted to introduce its evidence after the staff of the Federal Power Commission has introduced their evidence.

TRIAL EXAMINER: The Examiner may say that he has been authorized by the Commission to entertain the motions that counsel have now made, and the Examiner assumes that counsel for the Consolidated Gas Electric Light and Power Company of Baltimore renews his motion made yesterday afternoon?

[845] MR. STUBTEVANT: I do.

TRIAL EXAMINER: Upon further deliberation, the Examiner will rule that the order of presentation of evidence in this proceeding be changed so that the Commission Staff's presentation of evidence will immediately follow completion by the Company of its presentation, and thereafter the order as between Consolidated Gas Electric Light and Power Company of Baltimore, Pennsylvania Public Utility Commission and the Public Service Commission of Maryland will be observed as previously set.

You may proceed with the witness.

MR. SPARKS: If Your Honor please, may the order to which Your Honor has referred authorizing you to change the order of procedure be made a part of the record in this case by reference?

TRIAL EXAMINER: I don't know in just what form that is and I am not able to rule in accordance with that at this moment. The Examiner does not consider it necessary, however.

MR. SPARKS: May I ask Your Honor then as to the date when Your Honor was authorized to change the order of procedure in the case?

TRIAL EXAMINER: Yes, the Examiner was authorized this morning.

MR. SPARKS: This morning?

TRIAL EXAMINER: Yes.

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[849] GEORGE W. SPAULDING,

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DIRECT EXAMINATION.

By MR. MYSE:

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Q. Mr. Spaulding, considering the nature of Penn Water's and Safe Harbor's contracts with Baltimore Company, and the coordinated operation of their hydro resources with the steam generating resources of their customers, including Baltimore, is it your opinion that a cost of service determination can be made of Penn Water's and Safe Harbor's costs for firm power services rendered to Baltimore Company? A. Yes, it is.

[850] Q. Have you made such a study? A. Yes, such a study has been made under my direction.

Q. Will you state the results of that study? A. That study shows that Penn Water's and Safe Harbor's costs for the firm power services rendered to Baltimore Company in 1945, were $5,645,000, and that the costs for such services to be rendered in 1946 are estimated to be $5,623,000.

Q. Are such cost determinations for firm power services only? A. Yes.

MR. MYSE: Mr. Examiner, I ask to have identified as Exhibit No. 34 a chart with the label thereon: "Pennsylvania Water and Power Company, Safe Harbor Water Power Corporation and Susquehanna Transmission Company of Maryland—Facilities Used in Rendering Firm Power Services to Baltimore Company."

TRIAL EXAMINER: The document may be marked Exhibit No. 34 for Identification.

(The document referred to was marked Exhibit No. 34 for Identification.)

By MR. MYSE:

Q. Mr. Spaulding, does this chart which has been marked for identification Exhibit No. 34 show the general

location of the facilities used in rendering firm power service to Baltimore Company? A. It does.

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[856] Q. Do the costs determined for firm power services rendered to Baltimore Company in your study include the costs incurred by Penn Water and Safe Harbor in rendering services to the Pennsylvania Railroad in Maryland? A. Yes, it does.

Q. How are Penn Water and Safe Harbor compensated for such costs? A. The costs incurred by Safe Harbor in rendering joint services to Pennsylvania Railroad in Maryland are included in the basis for the bills rendered by Safe Harbor to Baltimore Company and Penn Water under the Safe Harbor contract identified as Items E, F and G.

In connection with such billing, as shown by Exhibit 17, Baltimore Company pays Safe Harbor 2/3 of such cost and Penn Water pays 1/3. Penn Water's compensation for its costs incurred in rendering joint services to Pennsylvania Railroad in Maryland is received as revenue from Baltimore Company under Penn Water's agreement with Baltimore Company, identified as Items H and I; costs for such services are included in the basis for the bills rendered under this contract.

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[862] Q. Are you familiar with Exhibit 31 prepared by Mr. Tate offered in evidence and with the supporting testimony offered in this proceeding? A. Yes.

Q. Are you familiar with Exhibit 32 prepared by Mr. Hall and offered in evidence and with the supporting testimony offered in this proceeding? A. Yes.

Q. Are you familiar with Exhibits 29 and 30 prepared by Dr. Foster and offered in evidence and with the supporting testimony that he offered in this proceeding? A. Yes.

Q. From your knowledge of Exhibits 29 and 30 and 31, can you say whether or not the cost of firm power serv-

ices rendered to Baltimore Company by Penn Water for 1945 and 1946 would be increased or decreased if you had used the property construction costs from Mr. Tate's Exhibit 31, together with the appropriate rate of return as testified to by Dr. Foster, instead of the investment costs and the rate of return used in your Exhibit 35?

MR. GOLDBERG: Objection, Mr. Examiner, on the ground that the question involves proposed testimony and exhibits [863] offered which were excluded.

TRIAL EXAMINER: Objection sustained.

MR. MYSE: I take an exception.

By MR. MYSE:

Q. From your knowledge of Exhibits 29 and 30 and 32 can you say whether or not the cost of firm power services rendered to Baltimore Company by Penn Water for 1945 and 1946 would be increased or decreased if you had used the property costs from Mr. Hall's Exhibit 32, together with the appropriate rate of return as testified to by Dr. Foster instead of the investment costs and rate of return used in your Exhibit 35?

MR. GOLDBERG: Objection.

TRIAL EXAMINER: Objection sustained.

MR. MYSE: In view of the Examiner's rulings to the last two questions, I desire to make a proffer. We offer to prove by the testimony of this witness, Mr. Spaulding, that Penn Water's costs of rendering firm power services to Baltimore Company are $560,000 in excess of Penn Water's costs shown on Exhibit 36 if the property construction costs shown in Mr. Tate's Exhibit 31 are used together with the appropriate return as testified to by Dr. Foster or offered in evidence in connection with his testimony, instead of the investment costs and return used in Exhibit 35.

Likewise, we offer to prove by this witness that [864] Penn Water's costs of rendering firm power serv-

ices to Baltimore Company are $269,000 in excess of Penn Water's costs as shown on Exhibit 36 if the costs shown in Mr. Hall's Exhibit 32 are used, together with the appropriate return as testified to by Dr. Foster or offered in connection with his testimony, instead of the investment costs and return used in Exhibit 35.

TRIAL EXAMINER: The evidence offered will not be received.

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[867] MR. HULL: Mr. Examiner, Respondent companies have now completed the direct testimony which they have prepared and will offer for the specific purposes of determining as of December 31, 1945:

Firstly: The amount or extent of actual depreciation which existed in the properties of the companies as of that date;

Secondly: the amount of the depreciation reserve [868] balance which was adequate as of that date;

Thirdly, the amount which should be charged for annual depreciation for a reasonable period in the future beginning with that date.

They have not as yet and are not now ready to offer certain studies which they propose to prepare and offer which:

Firstly: Will show the effect of the use of a depreciated rate base which the Commission staff has indicated that it proposes to recommend to the Commission upon the investors of the two companies; and

Secondly: Will rebut the testimony which Commission counsel at transcript page 45 stated that he will present with respect to the earnings of the investors of the companies in the past.

In his opening statement of the issues, Commission's counsel beginning at transcript page 43, line 15,

and extending to page 44, line 22, stated that he would offer proof to show that the "gross investment for the rate base is $32,920,738 which is $5,663,494 less than Holtwood's book figures" and that the last mentioned sum "does not represent actual cost and should be disallowed."

At transcript page 45, lines 4 and 8, Commission's counsel stated that the Staff "will also present analyses of the company's past earnings which will show that the company has earned at least 10 per cent rate of return on its net [869] investment including working capital during its entire period of operations."

He further stated at transcript page 44, lines 11 to 15 that "the Staff does not propose to recommend to the Commission that Holtwood be required to change from the straight line method of depreciation it has always been using". He did not state when he referred to "the straight line method of depreciation it has always been using" that he meant to include as a part of that method the use of an undepreciated rate base with a credit to the rate payers of a reasonable rate of interest on the balance in the depreciation reserve. That is in fact the method which Holtwood has been using since 1931.

It is scarcely to be supposed that he intended to indorse that method, because later on the same page of the transcript at lines 21 and 22 he stated that "the present book reserve is not excessive and should be used in reaching a net rate base in this case".

This statement as we understand it implies that the Staff proposes to recommend that the present book reserve be deducted from the original investment in arriving at a rate base to be used in this case.

Now, a consideration of these statements of Commission counsel will show that the studies which Respondents will make and to which I have just referred are composed almost wholly of evidence that will be

in rebuttal to that which the [870] Staff will offer, and in order that these studies may be most helpful to the Commission they should be based upon the facts as presented by the Commission staff in its direct case.

In order to prepare the studies the Respondents will require all the data necessary to duplicate the Commission's Staff's computations of the depreciation reserve requirements as of December 31, 1945, for Pennsylvania Water & Power Company and Susquehanna Transmission Company of Maryland, together with an explanation of the methods followed in arriving at its results.

These data should include:

(A) The amounts of depreciable property in the same detail as to accounts which Commission's Staff used in computing the company's reserve requirements and the annual allowance for depreciation.

(B) The life table used by Commission's Staff in the same detail as to elements for items of property which the staff used in computing any and all composite lives which entered into any part of their computations.

(C) The date fixed by the Commission's Staff as the date of the beginning of commercial operation of the initial project.

(D) Yearly additions to plant with the original cost and life table used with respect thereto both in the same [871] detail as to accounts which the Commission's Staff used in computing the company's reserve requirements and allowance for depreciation.

(E) Debits to the depreciation reserve by years and by accounts in the same detail as stated in Paragraph (A) above.

(F) The amounts of total investment in electric plant as of the end of each year, and the amount of working capital both as recommended by the Commission Staff.

We bring the matter to the attention of the Examiner at this time for the reason that if the Examiner should be of the opinion that the proposed studies and the testimony relating to them would not be properly in rebuttal, then the Respondent would be compelled to request to the Commission's Staff to supply these data as promptly as possible with the necessary information, and we would have to ask the Examiner for a recess of a sufficient period thereafter to permit these studies to be completed before our direct case is closed.

[872] Now, if I may repeat very briefly the fact that these studies we will make are primarily rebuttal, and if we are furnished promptly with this information that we will be able, by the time that we come to rebuttal testimony, to have the studies completed, but we do not want to close our direct case, by any chance, these are going to be ruled out as rebuttal.

TRIAL EXAMINER: As you say, this is a short summation of your entire statement.

MR. HULL: Yes.

TRIAL EXAMINER: Does Staff counsel have any statement to make in reply?

MR. GOLDBERG: Yes, Mr. Examiner, but a brief one, not as extended as Mr. Hull's, I am sure. Mr. Hull has listed a series of data which he says will be required by the companies to undertake to prepare certain studies which he states he believes are in the nature of rebuttal studies. I am pretty sure that much, if not all, of the data he mentioned will be presented by the Staff when it puts on its case, in the exhibits, or in the oral testimony, or in both. If it does not appear in the exhibits, or in the oral testimony, it

probably appears in the working papers, exhibits very often representing mere summarizations. It may be, however, that certain of the data, without attempting to name it, may not appear either in the working papers or in the testimony, or in the exhibits. [873] I am not saying that may be the case. I do not know. If that be the case, there is no obligation upon the Staff to supply any data named by the counsel that does not appear in the exhibits, or the testimony, or the working papers. The Staff presents its case on the basis that it deems sufficient. That is the only obligation it has in the case. I might inquire at this time whether Mr. Hull now commits himself to furnishing to the Staff all of the data in their possession bearing on the items enumerated by him.

* * * *

MR. HULL: Mr. Examiner, as I understand it, we do not have such data and, therefore, could not supply such data. However, the data requested are, as we understand, all necessary for the computation of the reserve requirement, and the annual depreciation allowance on the theories entertained by the Commission's Staff. I am perfectly willing to commit myself at this time to furnish you with any information that we have, but some of this we do not have——

MR. GOLDBERG (interposing): All right.

[874] MR. HULL: —and never used.

MR. GOLDBERG: Then we both make the same commitments in this case, and I say to the extent there may be such information that counsel for the Respondents seeks in the working papers of the Staff or the exhibits or the oral testimony presented here it will be solely because the Staff presented its case—I mean if it is not in such places—it will be solely because the Staff presented its case in the manner that it deemed sufficient, and such data as does not appear in those

sources I state that it will be the responsibility of the Respondents to secure from their own records which are, of course, the sources of our information.

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TRIAL EXAMINER: Now in the matter of counsel's statement, the Examiner is not able at this time to rule what is rebuttal and what is not proper rebuttal. The ruling can only be made when the case has progressed to a stage beyond this.

The letter addressed to Pennsylvania Water & Power Company, November 16, 1945, by the Acting Secretary of the [875] Commission, states what the order of procedure at this hearing will be as far as Pennsylvania Water & Power Company and Susquehanna Transmission Company of Maryland are concerned. And the Examiner has called upon those companies to present their evidence in chief, or the case on direct, and can only leave it up to counsel for those two companies to determine what their direct testimony and evidence will be.

If counsel desires to take the risk of a later ruling on the part of the Trial Examiner as to what is proper on rebuttal, that is his responsibility. The Examiner will be guided by the general rules of law as to what rebuttal, proper rebuttal testimony is.

MR. SPARKS: May I say, Mr. Examiner, that we have about reached the point where we would normally close, but Mr. Hull has pointed out the situation which results from the order of the Commission requiring us to go first, in this respect: That we were not advised of any of Commission's counsel's contentions until the opening part of the case. It was, therefore, encumbent upon us to guess as to what we ought to put in, as to what might meet future contentions that may be made by Staff counsel, and by others, all others, in fact. So it looks to us as if your Honor's ruling leaves us in

this position where we cannot say that our direct testimony is closed, since it may very well be that other testimony we have, when we have seen the Commission's case, will be relevant, [876] but may be subject to a technical statement as to whether it is direct or rebuttal, or redirect. So I am saying, in substance, simply this, your Honor, that we have completed our presentation, and we have complied with the order as far as we can see, but we do not feel that we ought to be required to say that our direct testimony is now completed when we are not in the position, because of the order of procedure, to state whether or not our direct testimony is completed.

TRIAL EXAMINER: What was that last?

MR. SPARKS: What I am saying, in substance, is simply this, your Honor, that we believe we have complied with the order as far as we can see, but we do not feel that we ought to be required to say that our direct testimony is now completed when we are not, in fact, in a position because of the situation in regard to the order of procedure to state whether or not our direct testimony is, in fact, completed.

Just one other point in that connection: That is this, do we understand now that your Honor has been authorized to change the order of procedure? We do not know whether that extends to the point that your Honor can say that the order may be varied so far as Respondents are concerned in respect that we have mentioned, but if so, we think that it would be proper for your Honor to permit, if it requires a variation in the order of procedure, to permit us to put on such testimony as we believe is proper after the data are in the record, [877] or after they have been furnished to us.

TRIAL EXAMINER: The Examiner said he was authorized to entertain the motions made by counsel for

the Public Service Commission of Maryland, the Pennsylvania Public Utility Commission, and counsel for the Consolidated Gas Electric Light & Power Company, and made no further statement. The Examiner's ruling on those motions was specific. The Examiner cannot change the order of procedure any further.

Counsel for the Pennsylvania Water & Power Company and Susquehanna Transmission Company of Maryland will have to use their own judgment as to what they desire to put on as their direct testimony in this proceeding.

MR. SPARKS: May I point out to your Honor, then, that the ruling will require us to ask for time to gather the data that we have requested of Staff counsel to make the computations necessary for the purposes which Mr. Hull mentioned in order that we may present that as direct testimony, in the event that it may be held that testimony, or part of it, or all of it, is not proper rebuttal testimony.

TRIAL EXAMINER: The Examiner understands counsel's statement made with reference to Respondent companies having completed direct testimony that they have prepared to offer with respect to depreciation and various items related thereto, which he recited.

Counsel takes the position that he is unable to prepare [878] these studies unless he has opportunity to and is able to obtain such data from Staff counsel.

MR. SPARKS: Yes, your Honor.

TRIAL EXAMINER: Then how can counsel support a request for the recess, having that in mind?

MR. SPARKS: It is our position, if your Honor please, as Mr. Hull stated, that this evidence that we would offer, we believe, is rebuttal evidence, but it is only the factor entering into the situation that per-

haps it may be held not to be rebuttal, but to be proper direct testimony, in which event when we come to rebuttal time we would be in a rather serious predicament.

TRIAL EXAMINER: You are asking the Trial Examiner to rule at this time as to what is the scope of your direct testimony; at least what the scope of your direct testimony should be.

MR. SPARKS: I do not believe so, your Honor.

I believe I can state it this way: We are prepared to say to your Honor that this is all the evidence we have at this time, but there is the likelihood, or possibility, rather, that some further testimony we have may be termed direct testimony and in that event we merely want your Honor to permit us to put it on, and permit us to finish our case today without saying that we close our direct presentation.

MR. GOLDBERG: Mr. Examiner, I gather the impression [879] from Mr. Sparks' statement that in addition to the matters discussed by Mr. Hull, the company is thinking in terms of presenting that testimony; and also they are thinking of presenting other testimony, which I seem to gather is prepared at this time. I would like to inquire, if there is other prepared testimony, what is its nature.

MR. SPARKS: I think the answer to that is "no", if your Honor please.

MR. GOLDBERG: Now, Mr. Examiner, I would just like to say this in response to Mr. Sparks' statement, the Staff was not advised of the company's contentions in this case, but the Staff, nevertheless, prepared its case on the basis of its own investigation, and its own position on the elements of this rate case. I do not know why the Respondents could not have gone out and have done likewise. I submit further, Mr. Examiner, that the Respondents, while perhaps not as spe-

cifically advised, as they were at the outset of the hearing, of the position of the staff, they were well aware of that position, particularly certain counsel in this case who participated in the Safe Harbor Water Corporation rate case, Docket IT-5914. For that matter, Mr. Examiner, the Commission could have said to the company, "Come on in and defend your rates." There is no obligation on the Commission or the Staff or anybody else to put in any case. And the Commission could have done that and the company would have had to come forward with every bit of [880] evidence that they had in support of their position without anything else being done. The contentions of the Staff make no difference whatsoever as to that type of testimony. The fact of the matter is that all of the testimony could have been presented on the basis of the company's own contentions, not on the basis of the Staff's contentions, if the company had seen fit to do so, and could, of course, have been presented as direct testimony, but there is nothing incumbent upon the Staff with regard to the nature of the direct testimony of the company.

TRIAL EXAMINER: Counsel for the company's position is this, is it not, that without presentation of evidence by Staff counsel he would not undertake at this time any further preparation of evidence; in other words, there are no studies on these subjects which are mentioned in counsel's statement? There are no studies on those subjects now under course of preparation; is that correct?

[881] MR. SPARKS: I do not think that is quite true, because there were some statements by Mr. Goldberg with regard to the effect of a depreciated rate base, as Mr. Hull has mentioned, that we might find ourselves in the position of having to answer even though there was no testimony in the record presented by Staff counsel.

MR. GOLDBERG: If that be so——

TRIAL EXAMINER: The whole thing is that no steps are in progress on the part of the company for the preparation of testimony or exhibits for offering at this stage of the proceeding; that is your case on direct?

MR. SPARKS: That is correct, if Your Honor please, except for the corrections and what we suggest as to whether some of the testimony described by Mr. Hull may be held some time to have been proper on direct and not on rebuttal.

TRIAL EXAMINER: The counsel will not be able to determine what he shall do in that direction until the Examiner has ruled what is the proper scope of rebuttal; is that it?

MR. SPARKS: Yes.

TRIAL EXAMINER: The Examiner can only make his ruling when he arrives at that point.

MR. SPARKS: But I think Your Honor could rule that we need not be in the position of saying that our direct testimony is completed, but I think we can say that we [882] have nothing further to offer at this time.

TRIAL EXAMINER: The Examiner cannot anticipate what his ruling will be in regard to rebuttal in the light of all the discussions we have had. The Examiner will rule that this is time for the counsel for the two companies to present whatever testimony in evidence they wish to present in connection with their case in chief.

MR. SPARKS: We will take an exception.

* * *

[883] MR. SPARKS: If Your Honor please, may I ask Your Honor to direct Staff counsel to furnish or make available to Respondents the data requested by Mr.

Hull in his statement this afternoon, and to give us a recess of six weeks from the time that that is furnished or made available to us, to permit us to prepare further evidence with regard to depreciation.

TRIAL EXAMINER: This matter still has to do with the stage in this proceeding which will be reached in the due course of events and which has to do with rebuttal testimony.

The request that counsel now makes will undoubtedly be answered in part if Staff counsel now proceeds to put on his testimony.

MR. SPARKS: That, I think, is the difficulty, Your Honor. It may be answered only in part.

TRIAL EXAMINER: We will take that matter up when we come to it.

MR. SPARKS: I understand then that Your Honor has denied my request?

TRIAL EXAMINER: That is correct.

MR. SPARKS: We take an exception, if Your Honor please.

Now, if Your Honor please, we request that Respondents be given a recess of at least two weeks in order that we may do the best we can with what data we have to prepare [884] further testimony on depreciation before we close our case.

TRIAL EXAMINER: Counsel is now in no way modifying the statement which was made with regard to the Respondent companies' having completed the direct testimony which they have prepared and will offer, as contained in the statement which was made after the last witness left the stand.

MR. SPARKS: No, we are not varying that statement, if Your Honor please, but——

TRIAL EXAMINER (interrupting): This present request relates to that identical statement, does it not?

MR. SPARKS: It relates to that statement, and to the further statement that we will have some additional evidence which may be subject to the question of whether it is direct or rebuttal evidence.

TRIAL EXAMINER: The Examiner has already stated his position with regard to that question, and the request is denied.

MR. SPARKS: May I make it plain, if Your Honor please, that we did not mean to imply that we have completed and closed our direct evidence on depreciation. That was the whole purpose of the statement which Mr. Hull made.

* * *

[885] TRIAL EXAMINER: The Examiner understands counsel's position and has instructed counsel for the company to proceed at this time with such evidence and testimony as properly relates to his case in chief, and if counsel is unable to do that at this time, the Examiner will instruct that the proceedings continue at this moment.

MR. SPARKS: We take an exception to Your Honor's ruling, and I state at this time that this is all the evidence we have to offer at this time as to our case in chief, and I should like to call Your Honor's attention to the fact that there are a number of exhibits on which ruling has been reserved, so that we cannot close our case in chief until those rulings have been made.

May I also say, if Your Honor please, that for the purpose of expediting these proceedings and to advise the Respondents of the contentions of the Government, as represented by the Staff of the Commission and Commission counsel, it is requested that Commission counsel be required to state for the record the contentions of the Commission Staff as to each of the following particulars:

1. Is the authority of the Commission to regulate and control rates or charges in this proceeding to be exercised under Part I of the Federal Power Act? If so, under which sections?

2. Is it contended that either of the States of [886] Pennsylvania or Maryland has not authorized, empowered or provided a commission or other agency for the regulation and control of the rates and charges of payment for services to be rendered by Respondents or by their customers engaged in public service, within the meaning of Section 19?

3. Is it contended that either of the States of Pennsylvania or Maryland has not provided a commission or other authority to enforce the requirements of Section 20 within their respective States?

4. Is it contended that the States of Pennsylvania and Maryland are unable to agree, through their properly constituted authorities, on the services to be rendered by Respondents or on the rates or charges of payment therefor, within the meaning of Section 20?

5. Is it contended under Section 20 of the Act that the Commission has jurisdiction in this proceeding to regulate and control the services rendered by Respondents to Consolidated Gas Electric Light & Power Company of Baltimore, and to regulate and control the component part of the rates and charges of payment for such services as do not constitute interstate or foreign commerce, particularly the special facilities services comprising the furnishing of the Highlandtown substation facilities and the Gunpowder Falls transmission line in the State of Maryland?

6. Is it contended under Section 20 that the Commission [887] has jurisdiction in this proceeding to regulate and control any of the services rendered by Pennsylvania Water & Power Company, by itself or

jointly with Safe Harbor Water Power Corporation, to Metropolitan Edison Company, Pennsylvania Power & Light Company, Philadelphia Electric Company, or Pennsylvania Railroad Company, all in the State of Pennsylvania, and to regulate and control the rates and charges of payment for any of such services? If so, which services, rates and charges to which companies?

7. Is it contended that the Commission has jurisdiction in this proceeding under the Act to regulate and control or to determine and fix by order any divisions of rates or charges which may be received by Pennsylvania Water & Power Company for services rendered jointly with others? If so, which divisions?

8. Is it contended that the Commission has jurisdiction in this proceeding under the Act to regulate and control or to determine and fix by order any rates or charges for services rendered jointly with others without making such other participants in such joint services parties respondent to this proceeding?

9. Is it contended under Part II of the Act that the Commission has any jurisdiction to determine and fix by order any of the rates, charges or classifications of Pennsylvania Water & Power Company for services rendered its customers? [888] If so, is the authority of the Commission in this proceeding to be exercised under Part II of the Act, particularly Sections 206 (a) or 206 (b) thereof?

10. Is it contended under Part II that the rates or charges of Pennsylvania Water & Power Company and Safe Harbor Water Power Corporation for services to Consolidated Gas Electric Light & Power Company of Baltimore are for the transmission or the sale of electric energy, within the meaning of Sections 201 (b) and 206 (a), and that thereby the Commission has jurisdiction in this proceeding under such Sections to

determine the justness and reasonableness of such rates or charges and to fix the same by order?

11. Is it contended under Part II that the Commission has any jurisdiction in this proceeding to determine and fix by order the component part of the rates and charges of Respondents for the special facilities services rendered to Consolidated Gas Electric Light & Power Company, comprising the furnishing of the Highlandtown substation facilities and the Gunpowder Falls transmission line in the State of Maryland?

12. Is it contended under Part II that the Commission has any jurisdiction in this proceeding to determine and fix by order the component part of the rates and charges of Pennsylvania Water & Power Company and Safe Harbor Water Power Corporation to Consolidated Gas Electric Light and [889] Power Company for the services rendered by them jointly with others to the Pennsylvania Railroad Company in the State of Maryland?

13. Is it contended under Part II that the rates or charges of Pennsylvania Water & Power Company, by itself or jointly with Safe Harbor Water Power Corporation, for any of the capacity, energy or special services to Metropolitan Edison Company, Pennsylvania Power & Light Company, Philadelphia Electric Company or Pennsylvania Railroad Company, all in the State of Pennsylvania, are subject to the jurisdiction of the Commission in this proceeding? If so, which of the rates or charges for such services to which of such customer companies?

14. Is it contended under Part II that the rates and charges of Pennsylvania Water & Power Company jointly with Safe Harbor Water Power Corporation, Consolidated Gas Electric Light and Power Company of Baltimore and Potomac Electric Power Company

for services to Pennsylvania Railroad Company are sales of electric energy at wholesale, within the meaning of Sections 201 (b) and 201 (d), and are thereby subject to the jurisdiction of the Commission in this proceeding?

15. Which of the rates, charges, or classifications for services, which it may be contended are subject to the jurisdiction of the Commission in this proceeding under Part II, or which of the rules, regulations, practices or [890] contracts affecting such rates, charges or classifications is it contended are unjust, unreasonable, unduly discriminatory, or preferential?

The Respondents state that in order to expedite this proceeding in an orderly manner and to afford them a fair and adequate opportunity to know and meet any of such contentions, if made, Commission Counsel should be required to reply to the foregoing interrogatories. The complexity of the questions which may arise, as stated in the foregoing interrogatories, illustrates and shows the handicap that the Respondents have been subjected to by the orders of the Commission in this proceeding. Failure to indicate the contentions of the Government in the above respects, or in any other respect unknown to Respondents, will deprive Respondents of the fair hearing required by the Federal Power Act and by the due process clause of the Fifth Amendment to the Constitution of the United States.

For the foregoing reasons, it is also requested that counsel for any of the other parties to this proceeding also be required to state for the record their contentions as to each of the foregoing particulars. In addition, it is also requested that each of such other parties be required to state whether or not it is contended that the character and form of the rates, charges or classifications for services rendered by Respondents under any existing contracts or [891] the

services themselves should be changed or modified in any manner.

We ask, if Your Honor please, that the statement of contentions which we have just requested be made to the Respondents no later than the time when counsel for the Staff completes his direct testimony.

* * *

[892] TRIAL EXAMINER: With respect to counsel's statement as to contentions, the Examiner deems that no ruling is required at this time.

MR. SPARKS: That certainly is acceptable, if your Honor please, so long as we can get a statement of those contentions before counsel for the Commission closes his direct case.

TRIAL EXAMINER: At that time if counsel for the companies feels that he needs further specification of the issues, he will renew his motion to the Trial Examiner.

MR. SPARKS: Very well, sir.

MR. GOLDBERG: Mr. Examiner, I am not making any undertaking at this time to respond to any of the inquiries [893] addressed to counsel by Mr. Sparks. In the first place, I do not think that it is necessary for counsel for the Staff to take any position with respect to those matters.

Moreover, Mr. Examiner, if my recollection serves me right, all or virtually all of those claims contained in those paragraphs enumerated by Mr. Sparks were recited in one form or another in Respondents' petition for specifications of issues and reconsideration of the order of procedure, and the Commission denied that petition.

Moreover, it appears to me from the Commission's order that it has announced under what authority this proceeding would go forward, and I think that we can

take that announcement to mean that the Commission considers that it has jurisdiction under the Federal Power Act.

In any event, as I say, I am not making any commitment now with respect to those inquiries. I did not pretend to follow them. They were being read quickly and they were rather long and rather complicated.

I should like to ask of counsel—they can do it now or they can do it before this proceeding terminates, but certainly before this proceeding terminates—that they set forth in detail in what respects the companies' presentation of its case in this proceeding would be affected by the answers that would be made to those questions, whether they be yes or no or howsoever they may be made; in other words, what case would [894] they present in these proceedings had they known what the contentions were—and I submit they know what the contentions are.

I would like to have them set forth in what respects they consider specifically that they are deprived of due process of law.

I submit, Mr. Examiner, that no matter what position the Staff would take with respect to the inquiries directed to the Staff that the Respondents would present no different case than they are now presenting or will have presented when these proceedings are terminated. In no way whatsoever could the claims as to jurisdiction affect their claims as to the elements of a rate case. I know not of one element of evidence that they would present in this proceeding if the answers to the questions were one way or another, and I will await with patience and with a great deal of anticipation a response to these inquiries.

I have a few questions to direct at this time to counsel myself.

At transcript page 34, counsel stated that this Commission "has no jurisdiction over the rates, charges

and classifications of Pennsylvania Water & Power Company under Part 2 of the Act for the reason that the company is to be treated as a licensee and may be considered to be a purchaser of power from a licensee for use in public service, and is therefore [895] subject to Part 1 of the Act only". Does counsel for the respondent mean by that statement that the Commission must treat the respondent as a licensee? That is the first question.

MR. SPARKS: Do you expect an answer now in view of your reply to my inquiries?

MR. GOLDBERG: That is a very simple question and it is set forth in the transcript. If you feel you cannot answer it now, I have no objection to your thinking it over.

MR. SPARKS: I have no doubt that I can answer it, but I would like to know what your other questions are.

MR. GOLDBERG: Surely. Is it the contention of the respondents that Penn Water is presently subject to Part 1 of the Act including Section 20, assuming that the prerequisites of Section 20 are valid and have been met, and by "prerequisites" I mean those alleged conditions in Section 20 to which counsel has already referred?

MR. SPARKS: The question is not clear to me, if your Honor please.

MR. GOLDBERG: What is there about the question that counsel does not understand?

TRIAL EXAMINER: The reporter will repeat it.

(The record is read.)

MR. SPARKS: I don't know which prerequisites he is talking about, if your Honor please. Section 20 is a long [896] paragraph.

TRIAL EXAMINER: Very well.

MR. GOLDBERG: I will specify. I have reference to this phrase "or such states are unable to agree through their properly constituted authorities on the services to be rendered or on the rates or charges of payment therefor".

Now, the next question is: When counsel made the statement "may be considered to be a purchaser of power from a licensee for use in public service and is therefore subject to Part 1 of the Act only", which appears at transcript page 34, lines 10 to 12, did counsel mean by that statement that Penn Water must be treated as subject to Part 1 of the Act, if subject to the Act at all, because it purchases electric energy from Safe Harbor, a licensee under Part 1?

TRIAL EXAMINER: Read that.

(The record is read.)

TRIAL EXAMINER: Before we get into a discussion of all of these contentions, which it occurs to the Examiner is more properly a matter for briefs, the Examiner will ask counsel how necessary it is to have answers at this time in his proceeding with his direct evidence?

MR. GOLDBERG: Having stated a contention in the record, Mr. Examiner, I believe I am entitled to know what it means, and all my questions are related to a clarification of their first contention set forth on page 34 of the transcript.

[897] My other questions, about due process and what sort of a case they would have put in here if they knew what the answers to the questions would be—which I submit they know—and that, Mr. Examiner, relates to matters directed to the Staff counsel.

* * *

[898] STANLEY W. ROLAND,
a witness called by Federal Power Commission, being first duly sworn, testified as follows:

DIRECT EXAMINATION.

By MR. GOLDBERG:

Q. Please state your name and address. A. Stanley W. Roland, 4316 North Glebe Road, Arlington, Virginia.

Q. Mr. Roland, may I suggest that you speak up? They cannot hear you over to the left of me at the table. What is your occupation? A. Electrical engineer.

Q. Are you employed by the Federal Power Commission? A. Yes, sir.

Q. What is your position with the Federal Power Commission? A. I am the head of the Electric Rate Investigation Section in the Division of Rates and Certificates.

Q. How long have you been employed by the Federal Power Commission? A. Since April, 1934.

Q. Will you state your educational training as it relates to your profession? A. I received the Bachelor of Science Degree in [899] Electrical Engineering from the University of Wisconsin in 1926. Received the Master of Science Degree in Electrical Engineering from the Harvard Engineering School in 1933. Completed graduate courses in Public Utility, Economics and Power Transmission at the Massachusetts Institute of Technology during the summer of 1931.

I also did some graduate work in Electrical Engineering in connection with my teaching at the Michigan State College and at the University of Missouri.

Q. Please describe your experience as an engineer before coming to the Federal Power Commission? A. Prior to entering the University of Wisconsin, I was employed for about six months as an apprentice electrician for an electrical contractor in Rockford, Illinois, and for about 1½ years as a meter-tester and as an electrician on

substation construction work for the Rockford Electric Company.

Between school terms, while attending the University of Wisconsin, I was employed by the same company as an electrician for maintenance and new construction work at its combined steam and hydroelectric power station at Rockford. I also worked as a draftsman and inspector in the company's distribution department.

Following graduation from the university I was employed as a cadet engineer by The Milwaukee Electric [900] Railway & Light Company. By that Company I was first assigned to the electrical maintenance crew at Lakeside steam electric station, and from there I was transferred to the Power Sales Department where I stayed until 1928. My work in that department consisted primarily in making studies of the comparative costs of purchased power and power generated at customer-owned power plants.

I also made studies and recommendations regarding the installation of capacitors and synchronous motors on customers' premises, and worked together with the engineering department in planning customer-owned substations.

During the 1928 and 1929 school-year, I was employed as an instructor in Electrical Engineering at the Michigan State College, Lansing, Michigan.

From 1929 to 1932, I was employed as an instructor in Electrical Engineering at the University of Missouri. During the summer of 1930 I was employed as a test engineer in the Power Transformer Department of the General Electric Company, Pittsfield, Massachusetts.

I came with the Federal Power Commission in 1934. During the school-year 1940-1941 I was an associate in Electrical Engineering at George Washington University, teaching an evening class in Electrical Engineering.

Q. Would you describe in general the nature of your experience with the Federal Power Commission? A. When I first came with the Commission in April, [901]

1934, I was assigned to work on the preparation of questionnaire forms to gather engineering and statistical information for the National Power and National Electric Rate Surveys, and to set up the machinery for obtaining this information from all the major electrical utility companies in the United States.

After completing this work I was assigned to assist the Chief of the Power Requirements Division in studying the possibility of interconnecting and coordinating the operations of the hydro and steam-electric facilities in several of the Southeastern states, and to devise methods for making similar studies for other areas in the country.

I spent about one year as a special assistant to the Commissioner in charge of the National Power and Electric Rate Surveys, devoting my time principally to review and analysis and editing of numerous engineering and statistical reports prepared by the staff of the Survey.

Subsequently, I devoted some time to the preparation of the questionnaire form called "Power System Statement" Form No. 12, which is used to gather data on the facilities and operations of electric power systems in the United states.

[902] In 1938, several Commission engineers, and I, were loaned to the City of Fort Worth, Texas, to make field and office studies to determine the cost of constructing an electric distribution system for the city. For two years, I made office and field studies of the facilities and operations of a number of electric utilities to determine whether or not such facilities were subject to the jurisdiction of the Federal Power Commission.

These studies included analyses of contracts, computations and preparation of exhibits relating to energy flows over the facilities of Jersey Central Power and Light, Public Service Electric and Gas Company of New Jersey, and of the Staten Island Edison Corporation, Docket IT-5518.

I also made field studies of the facilities, operations, energy transfers across state boundaries, and sales at

wholesale of a number of operating companies comprising the New England Power and Western Massachusetts Companies.

I made similar field studies regarding energy flows on the Hartford Electric Light Company and Connecticut Power Company system.

In connection with Docket IT-5513, involving New York Power and Light Corporation and Twin States Gas and Electric Company, I made a field study and testified as to the facilities used for the transmission and sale of electric energy across a state boundary.

[903] I have participated in other proceedings before the Commission involving studies of power contracts and of the facilities for the transmission and sale at wholesale of electric energy transmitted to or from points outside the State.

During the course of my employment with the Commission, I have had a number of special assignments covering technical studies relating to the adequacy of transmission facilities; engineering and economic studies to determine probable markets for power in the vicinity of proposed hydroelectric projects; field and office studies regarding the facilities and operations of The Deepwater Operating Company and the Delaware Power and Light Company, in connection with a preliminary investigation of the rates charged the Philadelphia Electric Company; analysis of documents submitted by public utilities regarding the proposed sale of their properties, and the preparation of reports thereon to the Commission covering the engineering and economic aspects of such proposals; field investigations and cost studies in connection with the Commission's investigation of the southwest power pool which was formed to supply power to a large aluminum plant in Arkansas.

I spent about one year analyzing the proposed cost of special facilities involved in war power contracts subject to Commission review under the President's directives, to determine their reasonableness. Immediately prior to the

assumption of my present duties, I was head of the Transmission [904] Section in the Commission's Bureau of Power.

Q. Who is your immediate supervisor at the present time? A. Mr. Edgar S. Coffman, Chief, Division of Rates and Certificates.

Q. Is your work in the Division assigned by Mr. Coffman? A. Yes.

Q. What assignments were you given in connection with this proceeding? A. I was instructed by Mr. Coffman to prepare a report describing the facilities and operations of Pennsylvania Water and Power Company, and the Susquehanna Transmission Company of Maryland's properties; to estimate the probable service lives of the properties owned by these two companies; to make a study of the transmission of electric energy by Pennsylvania Water & Power Company and by Susquehanna Transmission Company of Maryland, from Pennsylvania to points of sale at wholesale for resale in Maryland and from Maryland to points of sale at wholesale for resale in Pennsylvania.

I was also instructed to estimate the cost to Pennsylvania Water & Power Company of furnishing electric service to its resale customers, and to ascertain the date that commercial operations of the Holtwood hydroelectric project commenced.

Q. What parts of this assignment did you personally [905] undertake? A. I prepared the estimates of probable service lives and made the study of transmission of electric energy across state lines.

The other assignments were handled by Mr. George Davis and Mr. Clifton Howell, under my general supervision. Mr. Howell assisted me in my assignment regarding service lives as did Mr. M. E. Bybuth and Mr. I. C. Jeffery, both of whom are no longer with the Commission.

Q. As a result of studies made, are you prepared to state whether Pennsylvania Water & Power Company owns

and operates facilities for the generation of electric energy? A. I am.

Q. Does Pennsylvania Water & Power Company own and operate facilities for the generation of electric energy? A. Yes, it does. In my testimony, I usually refer to Pennsylvania Water & Power Company as "Holtwood".

Q. What type of generating facilities does Holtwood own and operate and where are they located? A. Holtwood owns and operates a hydroelectric plant and a steam electric plant, both of which are located on the Susquehanna River at Holtwood, Pennsylvania. In my testimony, I usually refer to these plants as the Holtwood plants.

Q. Does Holtwood own and operate facilities for the transmission of electric energy? [906] A. Yes.

Q. Does the Susquehanna Transmission Company of Maryland own and operate facilities for the transmission of electric energy? A. Yes. In my testimony, I usually refer to Susquehanna Transmission Company of Maryland as "Susquehanna".

Q. Are the facilities owned and operated by Holtwood and Susquehanna usually referred to as the Holtwood System? A. Yes, they usually are, and in my testimony when I refer to the Holtwood System, I refer to the facilities owned and operated by Holtwood and Susquehanna.

Q. Does Holtwood receive electric energy from other electric utility companies? A. Yes.

Q. From what companies does Holtwood receive electric energy? A. From the Safe Harbor Water Power Corporation, Metropolitan Edison Company, Pennsylvania Power and Light Company, Philadelphia Electric Company, and Consolidated Gas Electric Light & Power Company of Baltimore.

Q. Have you made a study to determine whether or not the transmission facilities owned and operated by Holtwood and Susquehanna Transmission Company of Maryland transmit energy from a state to points outside thereof? A. I have.

[907] Q. Will you outline briefly the sources of information which you employed in making the studies which you stated you have made? A. I examined reports which are filed with the Federal Power Commission each year by Holtwood and Susquehanna. The reports designated "Power System Statement", Federal Power Commission Form No. 12, contain system operating data, maps, diagrams and other engineering data.

Other reports which I examined are designated "Annual Report", Federal Power Commission Form No. 1, and contain financial and operating data as well as information as to physical facilities.

I also examined information which I obtained from Holtwood especially for these studies, regarding the amounts of generation at the Safe Harbor and Holtwood plants, energy transfers over various circuits, energy sales by Holtwood, points of delivery and metering for various periods of time which I specified.

I also discussed matters relating to energy flow, interconnection points, metering points, and points of sale to other utilities with engineers at Holtwood.

Holtwood also furnished me with a pamphlet containing system engineering data, which I used, and I examined some of the facilities involved in these studies, in the field.

MR. GOLDBERG: Mr. Examiner, at this time I ask to [908] have marked for identification as Exhibit No. 37 a map entitled, "Transmission Lines and Interconnections of the Pennsylvania Water & Power Company and Susquehanna Transmission Company of Maryland."

TRIAL EXAMINER: The map will be marked Exhibit No. 37 for Identification.

(The document referred to was marked Exhibit No. 37 for Identification.)

By Mr. Goldberg:

Q. Mr. Roland, what do those various sources of information which you employed in making your studies show regarding the ownership of transmission lines by Holtwood and Susquehanna? A. In answering that question, I would like to refer to a photostatic copy of a transmission map which Holtwood filed with the Federal Power Commission in its Federal Power Commission Form No. 12, "Power System Statement" for 1944, and which carries Holtwood file number A-130463, which is now Exhibit No. 37.

This map marked for identification as Exhibit No. 37 shows the transmission lines owned and operated by Holtwood and Susquehanna as well as transmission lines owned by others. The solid black lines shown as located within the State of Pennsylvania designate transmission lines owned and operated by Holtwood.

The solid black lines shown as located within the State [909] of Maryland designate transmission lines owned and operated by Susquehanna. A short section of 110 kv line extending from Consolidated of Baltimore's Philadelphia Road Substation, located across the street from Highlandtown Substation, to its Gunpowder Substation, is owned by Susquehanna but leased to the Baltimore Company. This is shown as a dashed line on the map.

Q. What does Exhibit 37 show with respect to the various lines owned and operated by Holtwood and Susquehanna? A. Exhibit 37 shows for each line owned and operated by Holtwood and Susquehanna the type of supporting structure, kva rating per phase, frequency, number of circuits per structure, kva rating per circuit, length of the line, and the size and type of conductor.

For example, the two lines shown in heavy black are 220 kv, three-phase, 60 cycle, single circuit lines supported on steel towers.

The two lines extending from Holtwood to Highlandtown are 66 kv, 3-phase, 25 cycle, each line consisting of two circuits supported on steel towers.

The line extending from Conestoga Substation near the Safe Harbor plant to Perryville, Maryland, consists of four 132 kv single phase, 25 cycle circuits supported on steel towers.

The line from Holtwood to Coatesville consists of two [910] 66 kv, 3 phase, 60 cycle circuits, supported on steel towers.

The line from Holtwood to York is also two 66 kv, 3 phase, 60 cycle circuits, supporting on steel towers. The tie line between the Safe Harbor and Holtwood Plants is also double circuit, 66 kv, 3 phase, 60 cycle, supported on steel towers.

Q. Are the lines which you have described facilities for the transmission of electric energy? A. Yes, they are.

Q. Does Holtwood deliver electric energy to other companies which those companies sell? A. Yes.

Q. To what companies does Holtwood deliver such energy? A. Consolidated Gas Electric Light and Power Company of Baltimore; Pennsylvania Power and Light Company; Philadelphia Electric Company; Metropolitan Edison Company, and to Pioneer Electric Company.

Q. Does Holtwood deliver any electric energy to any other person? A. Yes.

Q. To whom does it make such deliveries? A. To Pennsylvania Railroad Company.

Q. Under what contracts are Holtwood's deliveries made to other utility companies? A. Deliveries to the Baltimore Company are made under [911] contracts in evidence in this proceeding as Items E, F, G, H and I.

Deliveries to Pennsylvania Power and Light Company and to Pioneer Electric Company are made under Lancaster Power Supply contract of May 1, 1933, between Holtwood, Safe Harbor and Pennsylvania Power and Light Company, as supplemented by agreements of June 19, 1934, November 1, 1939, and October 14, 1941.

Firm deliveries to Philadelphia Electric Company are made under Coatesville Power Supply contract of August

1, 1933, between Holtwood, Safe Harbor and Philadelphia Electric Company, as supplemented by agreement of December 13, 1938.

The sale of interchange power to Philadelphia Electric Company through the Pennsylvania Railroad is provided for in the parallel operation agreement of June 22, 1938, between Baltimore Company, Philadelphia Electric Company, Safe Harbor, Holtwood and Pennsylvania Railroad, and in the interchange and load shifting agreement of June 22, 1938, between Holtwood and Philadelphia Electric Company.

Deliveries to Metropolitan Edison Company are made under contract of November 15, 1945, between Holtwood and Metropolitan Edison Company.

Q. Have you examined the contracts which you have just named? A. Yes.

[912] Q. Have you examined the billings under those contracts? A. Yes.

Q. Does Holtwood receive delivery of electric energy under any of those contracts from any of the companies to which it makes deliveries? A. Yes.

Q. Will you name them? A. Baltimore Company, Pennsylvania Power & Light Company, Philadelphia Electric Company and Metropolitan Edison Company.

Q. Does Holtwood receive payment from any of the companies to which it makes deliveries of electric energy under any of the contracts which you named? A. Yes.

Q. What service does Susquehanna perform? A. Susquehanna is engaged solely in transmitting energy for Holtwood.

Q. Does Holtwood sell any of the electric energy delivered under any of the contracts to which you have referred? A. Yes.

Q. To what companies does Holtwood sell electric energy delivered to those companies by Holtwood under any of the contracts to which you have referred? A. Baltimore Company, Pennsylvania Power & Light Com-

pany, Philadelphia Electric Company and Metropolitan Edison [913] Company.

Q. Does Holtwood sell electric energy under those contracts to any of the four companies which you named, for resale? A. Yes.

Q. Will you name the companies? A. Baltimore Company, Pennsylvania Power & Light Company, Philadelphia Electric Company and Metropolitan Edison Company.

Q. I take it that by the Baltimore Company you mean the Consolidated Gas Electric Light and Power Company of Baltimore? A. Yes, sir.

Q. Does Exhibit 37 designate the points at which the Holtwood System interconnects with the faciilties of other utility companies? A. Yes.

Q. At what points does the Holtwood System connect with the facilities of Consolidated Gas Electric Light & Power Company of Baltimore? A. The Holtwood System connects with the facilities of the Baltimore Company at the latter's Riverside and Westport Substations and at Susquehanna's Highlandtown Substation in Baltimore, Maryland. These three points are designated on the transmission map, Exhibit No. 37, by the symbol "W".

[914] Q. Does Holtwood deliver energy to Baltimore Company at these points? A. Yes.

Q. Does Holtwood make deliveries of energy to others for the account of Baltimore Company? A. Yes.

Q. At what points are such deliveries made? A. Holtwood delivers energy to the Pennsylvania Railroad at Conowingo and Perryville, Maryland, for the account of the Baltimore Company. These points of delivery are designated by the symbol "W-1". I am referring to Exhibit 37 again.

When I say that Holtwood delivers energy to the Railroad Company at these points for the account of the Baltimore Company, I mean that the actual sale to the Railroad Company is made by Baltimore, but the energy sold is

transmitted to these points over facilities owned and operated by Holtwood and Susquehanna.

Holtwood also delivers energy to the Potomac Electric Power Company for the account of the Baltimore Company at the point of connection of the 220 kv transmission facilities owned by Susquehanna Company and the 220 kv facilities owned by the Potomac Electric Power Company, at a point northeast of Takoma Park, Maryland. At this point, designated on Exhibit 37 as "W-1", the sale of energy to the Potomac Electric [915] Power Company is made by the Baltimore Company.

Q. What are, in general, the facilities by means of which the sales of electric energy by Holtwood, for resale, to which you have testified are made? A. Such facilities include transmission lines, substations, metering and other equipment used for recording and billing the amounts sold.

Q. Have you made studies to determine, for some particular period, the amounts of electric energy transmitted from Pennsylvania, over the facilities of Holtwood and Susquehanna across the Pennsylvania-Maryland state line to points of delivery in Maryland? A. Yes.

Q. Upon what information are these studies based? A. They are based upon information furnished me by Holtwood showing the amounts of energy transmitted over those circuits from Holtwood to the Baltimore Company, in Maryland, and to the Potomac Electric Power Company during the years 1943 and 1944. Potomac Electric Power Company's facilities are usually referred to as the Washington System.

The combined facilities of Consolidated Gas Electric Light & Power Company of Baltimore, and of Potomac Electric Power Company, are usually referred to as the Baltimore-Washington System. In my testimony, I sometimes use these abbreviations.

[916] MR. SPARKS: Your Honor, I wonder if the witness could go a little more slowly. It is very hard to follow

him when he is speaking so rapidly, and Mr. Goldberg is speaking so rapidly.

THE WITNESS: I will be glad to do so.

By MR. GOLDBERG:

Q. Is electric energy also transmitted over the transmission facilities owned and operated by Susquehanna and Holtwood from the Baltimore-Washington System to the Holtwood System in Pennsylvania? A. Yes.

Q. Have you made studies to ascertain the quantities of energy which have been so transmitted? A. Yes.

Q. Have you prepared an exhibit showing the quantities of energy which have been so transmitted? A. Yes.

MR. GOLDBERG: At this time, Mr. Examiner, I ask to have marked for identification as Exhibit No. 38 a tabulation entitled "Electric Energy Transfers Across Maryland-Pennsylvania Boundary over Facilities of Pennsylvania Water & Power Company and Susquehanna Transmission Company of Maryland, by Months, Values in Megawatthours."

TRIAL EXAMINER: The document handed the reporter will be marked Exhibit 38 for Identification.

[917] (The document referred to was marked Exhibit No. 38 for Identification.)

By MR. GOLDBERG:

Q. What does Exhibit No. 38 show with respect to the amounts of energy transmitted from Holtwood's system in Pennsylvania to the Baltimore-Washington system in Maryland over transmission facilities owned and operated by Holtwood and Susquehanna? A. This exhibit prepared from data furnished me by Holtwood, shows the amounts of electric energy transmitted during each month of the years 1943 and 1944 from the Holtwood System in Pennsylvania to the Baltimore-Washington System in Maryland over the 220 kv and 66 kv transmission circuits.

[918] Q. Mr. Roland, was Exhibit 38—I think you have already stated—— A. I beg your pardon?

Q. What does 38 show with respect to the amount of energy transmitted over the Holtwood system in Pennsylvania to the Baltimore-Washington system, and over the other transmission facilities owned and operated by Holtwood; is that what it does show? Is that correct? A. It does show the energy transmitted from Pennsylvania to Maryland, and from Maryland to Pennsylvania. This exhibit was prepared from data furnished me by Holtwood, showing the amount of electric energy transmitted during each month for the years 1943 and 1944 from the Holtwood system in Pennsylvania to the Baltimore-Washington system, and over the 220 kv and 66 kv transmission circuits.

Q. I notice on Exhibit 38, Column headings, "Meter 5", "Meter 6", "Meter 34"; to what do those numbers refer? A. These numbers identify the meters by reference to a diagram prepared by Holtwood.

When I first requested Holtwood for information regarding energy generation and energy flows at various points on the system, I requested that I be furnished with a diagram showing interconnection points and metering points. In order to simplify the work for the Commission's staff, Holtwood prepared a one-line diagram of the Holtwood-Safe Harbor- [919] Baltimore-Washington transmission system showing thereon the location of certain watthour meters. Each of these metering points was given a number. In furnishing the information regarding energy generation and energy transfers, Holtwood identified the point of metering by referring to the numbers shown on the one-line diagram. I have copies of that diagram which carries the Company file Number H-1045.

MR. GOLDBERG: Mr. Examiner, at this point I ask to have marked for identification as Exhibit No. 39 a diagram entitled, "Pennsylvania Water & Power Company, one-line Diagram of Main Metering Points on Holtwood-Safe Harbor-Baltimore-Washington Interconnected System."

TRIAL EXAMINER: The diagram just handed to the reporter will be marked as Exhibit No. 39 for Identification.

(Exhibit No. 39 was marked for Identification.)

By MR. GOLDBERG:

Q. Mr. Roland, is Exhibit 39, which I show you, the one-line diagram to which you have referred in your last answer? A. It is.

Q. What does this diagram show? A. On this diagram, it will be noted that Meter No. 5 is located at the Safe Harbor Plant and is in the 220 kv circuit extending from Safe Harbor to Ellicott and from there to Westport and to Takoma. It will also be noted [920] that Meter No. 6 is located at the Safe Harbor Plant and is in the circuit extending from Safe Harbor Plant to Riverside. These meters are of the ratchet type and therefore, measure the energy transferred in one direction only, that is, there are two sets of ratchet meters in each circuit, one measuring the send-out over that circuit from Safe Harbor, and the other measuring the amount delivered to the Safe Harbor bus from that circuit. Similar metering equipment is installed in the other 220 kv circuit. Meter No. 34 is located on the low tension side of the Highlandtown Substation. This meter is not of the ratchet type and, therefore, measures the net amount of energy delivered to the Baltimore Company at this point.

Q. What does Exhibit 38 show with respect to the amount of energy transmitted by the Holtwood System from Pennsylvania across the Pennsylvania-Maryland boundary to the Baltimore-Washington System in Maryland over the 220 kv circuits? A. During the year 1943, a total of 435,416 mwh, as measured by meters located at Safe Harbor, were transmitted from the 13 kv 60 cycle bus at Safe Harbor to the Baltimore-Washington system in Maryland over the two 220 kv circuits. During the year 1944, 281,610 mwh were so transmitted from Pennsylvania to Maryland.

Q. At what points was the energy transmitted from [921] Pennsylvania to Maryland over the 220 kv circuits, delivered to Baltimore-Washington system? A. The amounts of energy which I stated were transmitted from Pennsylvania to Maryland over the 220 kv circuits were delivered to the Baltimore Company at Riverside and Westport, and to the Washington Company at Takoma Park.

Q. What does Exhibit 38 show with respect to the amount of electric energy transmitted from Maryland to Pennsylvania over the two 220 kv circuits? A. During the year 1943, 127,838 mwh were transmitted over the two 220 kv circuits from Maryland to the 13 kv, 60 cycle bus at Safe Harbor. During the year 1944, 201,075 mwh were transmitted from points in Maryland to Safe Harbor over the two 220 kv circuits.

Q. What does Exhibit 38 show with respect to the amount of energy transmitted from Pennsylvania to the Highlandtown Substation in Baltimore over the 66 kv circuits? A. During the year 1943 a net of 370,806 mwh of electric energy was transmitted by the Holtwood System from Pennsylvania to the Highlandtown Substation over the 66 kv circuits. The energy supplied to the Highlandtown Substation over these circuits is 25 cycle, 3 phase. During the year 1944, a net of 321,206 mwh were transmitted by the Holtwood System from Pennsylvania to the Highlandtown Substation in Maryland over the 66 kv circuits.

[922] Q. Is electric energy also transmitted from the Highlandtown Substation to the Holtwood Hydro Electric Plant over the 66 kv circuits? A. The records which I obtained from Holtwood show that there were times when small amounts of energy were transmitted from the Highlandtown Substation to the Holtwood Substation over the 66 kv circuits. The data indicate, however, that the amounts transmitted from Highlandtown to Holtwood are extremely small in comparison to the amounts transmitted from Holtwood to Highlandtown. I was also informed by

the operators at the Highlandtown Substation that it was very seldom that energy was transmitted from the Highlandtown Substation to Holtwood. An examination of the hourly data furnished by Holtwood at my request for 20 days of 1944 indicates that the amount of energy transmitted from Highlandtown to Holtwood was less than 1 per cent of the amount of energy transmitted from Holtwood to Highlandtown.

Q. Have you attempted to show the amount of electric energy transmitted from Pennsylvania to Maryland and from Maryland to Pennsylvania, over the 220 kv and 66 kv circuits, in graphic form? A. I have.

MR. GOLDBERG: At this time, Mr. Examiner, I ask to have marked for identification the exhibit No. 40, a chart [923] bearing the title, "Electric Energy Transfers Across Maryland-Pennsylvania Boundary over Facilities of Pennsylvania Water & Power Company and Susquehanna Transmission Company of Maryland by Months."

TRIAL EXAMINER: The chart handed the reporter may be marked Exhibit No. 40 for Identification.

(Exhibit No. 40 is marked for Identification.)

* * *

[926] Q. Mr. Roland, at the conclusion of yesterday's session we had just marked Exhibit No. 40 for identification? A. Yes.

Q. Will you explain what that exhibit shows with respect to transmission of electric energy between Maryland and Pennsylvania by Holtwood and Susquehanna Transmission Company? A. Exhibit 40 shows the amounts of electric energy transmitted from Pennsylvania to Maryland, and from Maryland to Pennsylvania, over each of the 220 kv circuits and over the 66 kv, 25 cycle circuits, during each month of 1943 and 1944. The length of the bar above the zero line is a measure of the amount of electric energy transmitted to Pennsylvania from Mary-

land. The length of the bar below the zero line is a measure of the amount of electric energy transmitted during the month from Pennsylvania to Maryland. The cross-hatched portion of the bars below the line represent net energy transfers over the 66 kv, 25 cycle circuits to Highlandtown. The remainder of the bar represents energy transfers over the two 220 kv circuits. This chart was prepared from data shown in Exhibit 39.

Q. Mr. Roland, am I correct—I think I heard you say that the bar chart was prepared on the basis of the [927] data in Exhibit 39? A. Yes.

Q. Is it not Exhibit 38? A. Well,——

Q. I think it should be. I show you Exhibit 38. A. (Inspecting) It should be Exhibit 38.

Q. Then you amend your answer to read Exhibit 38? A. I do.

Q. What accounts for the substantial variations shown in the amounts transmitted from Maryland to Pennsylvania during 1943 and 1944? A. These variations are primarily the result of variations in the flow of the Susquehanna River.

During the spring months when the river flow is high generation at Safe Harbor and Holtwood Hydro is also high, hence, during these months the flow of energy is predominantly from Pennsylvania to Maryland. During the low-flow period, which usually occurs during the summer and fall the generation at Safe Harbor and at the Holtwood plants is not sufficient to meet the requirements of Holtwood's customers in Pennsylvania, hence, during those periods substantial quantities of steam-generated energy are transmitted from Maryland to Pennsylvania to supplement the output of Safe Harbor and Holtwood plants.
[928] During 1943, the flows in the Susquehanna River were such that the generation at Safe Harbor and Holtwood Hydro was greater than the average by 95,232 mwh. In 1944, the output of Safe Harbor and Holtwood Hydro plants was less than average by 181,386 mwh. This largely

accounts for the relatively greater amounts of energy transmitted from Pennsylvania to Maryland in 1943. It also accounts for the relatively greater amounts of steam generated energy which were transmitted from Maryland to Pennsylvania in 1944.

The amounts of energy transmitted across the Pennsylvania-Maryland boundary over the 220 kv and 66 kv circuits of Holtwood is also affected to some extent by the amounts of economy energy interchanged by Holtwood and its Pennsylvania customers.

MR. GOLDBERG: At this time, Mr. Examiner, I would like to have marked for identification as Exhibit 41 a diagram entitled "Pennsylvania Water & Power Company, Baltimore, Maryland, System and Interconnections Showing Interconnecting Lines for the Various Companies."

TRIAL EXAMINER: The diagram will be marked Exhibit No. 41 for Identification.

(The document referred to was marked Exhibit No. 41 for Identification.)

By MR. GOLDBERG:

Q. Mr. Roland, relating your answer to Exhibit 41, [929] what do your studies show regarding the amounts of electric energy transmitted from the Conestoga Substation to the Pennsylvania Railroad at Conowingo and Perryville over facilities owned and operated by Holtwood and Susquehanna? A. The markings in blue ink on this diagram were made by me after consulting with Mr. Von Eiff, interconnection engineer for Holtwood. This diagram shows four circuits extending from the Conestoga Substation to Perryville. Two of these circuits, designated as P-5 and P-6, because of the switching at Perryville, transmit most of the energy interchanged with Philadelphia Electric Company, at Perryville through the facilities of the Pennsylvania Railroad Company. That is, at times Holtwood supplies energy to Pennsylvania Railroad for rail-

road service north of Perryville which is considered interchange delivery by Holtwood to Philadelphia Electric Company.

At other times, Philadelphia Electric Company supplies energy to Holtwood at Perryville through the facilities of the Pennsylvania Railroad. Such deliveries are considered as interchange deliveries by Philadelphia Electric Company to Holtwood. Some of the energy so delivered by Philadelphia Electric Company is transmitted by Holtwood from Perryville to Conestoga Substation. The balance of the energy received by Holtwood from Philadelphia Electric Company, at Perryville is used for railroad service south of Perryville [930] and, therefore, is considered a delivery by Holtwood to Pennsylvania Railroad for the account of the Baltimore Company.

During 1944, Holtwood delivered 36,527 mwh to the Pennsylvania Railroad at Perryville for the account of the Philadelphia Electric Company, since it was for railroad service north of Perryville. Approximately 30,000 mwh of this amount was transmitted from the Conestoga Substation to Perryville over the circuits designated as P-5 and P-6.

The balance of the energy delivered at this point for the account of the Philadelphia Electric Company was transmitted over the two circuits designated as P-7 and P-8, or from Washington over the Railroad Company's lines.

During 1944, Philadelphia Electric Company delivered to the Holtwood Company at Perryville, a total of 33,388 mwh. About 10,800 mwh of this energy was transmitted from Perryville to Conestoga over the circuits designated as P-5 and P-6. The remainder was supplied to the Railroad Company's facilities south of Perryville, which is considered a delivery by Holtwood to the Railroad Company, for the account of the Baltimore Company.

The two circuits shown on Exhibit 41 and designated as P-7 and P-8 transmit energy from the Conestoga Substation to the Pennsylvania Railroad Company at Fishing

Creek, between Holtwood and Conowingo, and at Conowingo and Perryville. [931] The amounts transmitted over these circuits to the Pennsylvania Railroad Company at Conowingo and Perryville, Maryland, are deliveries to the railroad for the account of the Baltimore Company, that is, sales to the railroad in Maryland, are considered as sales by the Baltimore Company to the railroad.

In 1944, the Holtwood Company transmitted 122,477 mwh to the Railroad Company, at Conowingo and Perryville over circuits P-7 and P-8 for the account of the Baltimore Company.

Data furnished by the Holtwood Company indicates that relatively small amounts of energy were transmitted over circuits P-7 and P-8 from Perryville to the Conestoga Substation.

Q. Mr. Roland, referring to the diagram marked for identification as Exhibit 41, which I show you, am I right in reading that diagram that the two small blue lines below the words "Donegal Tap" are the Donegal Tap? A. Well, the Donegal Tap is right outside of the Safe Harbor Station. On this diagram the Donegal Tap really would be above the blue lettering "Donegal Tap".

Q. Above and to the right, is that correct? A. Yes.

Q. I see. A. The blue lines below the words "Donegal Tap" indicates the interconnection between the facilities of Safe Harbor and Holtwood.

[932] Q. Now, with respect to the amounts of electric energy which Exhibits 38 and 40 show as being transmitted by the Holtwood System from Pennsylvania to the Baltimore-Washington System in Maryland over the 66 kv circuits during the year 1944, where was that energy generated? A. During the year 1944, most of that energy was generated at Holtwood Hydro Plant in Pennsylvania.

Q. How do you determine that? A. The energy delivered by Holtwood to Baltimore Company at Highlandtown over the 66 kv circuits is 25 cycle, 3 phase. The gen-

erators producing that 25 cycle, 3 phase energy are at the Holtwood Hydro Plant.

Q. How much 25 cycle hydro generating capacity is installed at Holtwood hydro? A. There are 8 water turbine driven 25 cycle generating units having an aggregate capacity of 87,000 kilowatts at the Holtwood hydro plant.

Q. What is the principal market for the energy generated by these units? A. Most of the energy generated by these units is delivered to Baltimore Company at Highlandtown.

Q. How much was generated by the 25 cycle units at Holtwood in 1944? A. Generation by the main 25 cycle units at Holtwood totalled about 388,000 mwh in 1944.

[933] Q. What other market is there for 25 cycle energy generated at Holtwood? A. In 1944, Holtwood delivered 30,034 mwh of 25 cycle energy to Pennsylvania Power and Light Company at Lancaster, and during the same year 13,283 mwh of 25 cycle energy were supplied to the 60 cycle system through the two 5,000 kilowatt frequency changers located at Holtwood hydro.

Q. As I understand it, the only outlet for 25 cycle energy generated at Holtwood hydro, other than to Baltimore, is to Pennsylvania Power & Light Company, and to the 60 cycle system through the frequency changer. Is that right? A. Yes.

Q. How much of the 25 cycle energy generated at Holtwood hydro was delivered to Baltimore in 1944? A. A net of 321,206 mwh.

Q. Was the generation and delivery of that energy a part of Holtwood's service to Baltimore? A. Yes.

Q. With respect to the amounts of electric energy which Exhibits 38 and 40 show as being transmitted by the Holtwood system from Pennsylvania to the Baltimore-Washington system in Maryland over the 220 kv circuits during 1944. Where was that energy generated? A. Most of it was generated at the Safe Harbor plant.

Q. How do you determine that? [934] A. During 1944 relatively small amounts of energy were supplied to the Safe Harbor plant from other sources in Pennsylvania, hence most of the energy transmitted from Safe Harbor to Maryland over the 220 kv circuits came from Safe Harbor generation.

Q. To what other companies does Safe Harbor sell its capacity and energy? A. The entire output of Safe Harbor is sold two-thirds to Baltimore Company and one-third to Holtwood.

Q. Who transmits the energy sold to the Baltimore Company by Safe Harbor? A. The energy purchased by Baltimore Company from Safe Harbor is transmitted from Safe Harbor over the Holtwood system.

Q. With respect to the amounts of electric energy which Exhibits 38 and 40 show was transmitted from the Holtwood System in Pennsylvania, to the Baltimore-Washington System in Maryland, during the year 1944, was that electric energy consumed at points outside of the State of Pennsylvania? A. Yes. The Baltimore Company sells the energy it received from Holtwood to its customers in Maryland. One of Baltimore's customers is the Potomac Electric Power Company, which receives electric energy directly from Susquehanna's facilities at Takoma Park Maryland. Potomac Electric Power [935] Company distributes that energy to its customers in Maryland and in the District of Columbia.

Q. With respect to the amounts of electric energy which Exhibits 38 and 40 show was transmitted from Maryland to Pennsylvania, during 1944, in which state, or states, was that energy generated? A. Electric energy transmitted from Maryland to Pennsylvania, over the 220 and 66 kv circuits was generated in the plants of the Baltimore Company, in Maryland, or in the plants of the Potomac Electric Power Company, in the District of Columbia. Some of it may have been generated in the plants of industrial

companies located in Maryland which supplied relatively small amounts of energy to the Baltimore Company.

Q. With respect to the amounts of electric energy which Exhibits 38 and 40 show is transmitted from Maryland, to Pennsylvania, did you make any studies to ascertain whether or not any of that energy was sold by Holtwood for resale to other electric utility companies in Pennsylvania? A. Yes, I did.

Q. Referring to Exhibit 41, will you designate the points at which Holtwood sells electric energy to others in Pennsylvania, at wholesale for resale? A. Holtwood sells electric energy for resale to Pennsylvania Power & Light Company at the Donegal Tap, which [936] is located near the Safe Harbor plant; at Lehman Farm. At the interconnection point shown directly below the number designating circuit 18 at the Holtwood hydro plant, and at the interconnection point shown directly below the number designating Circuit No. 3, at the Holtwood hydro plant.

Holtwood sells electric energy for resale to the Philadelphia Electric Company, at the latter's Newlinville Substation in Coatesville, Pennsylvania. The interconnection points at this substation are shown directly below the numbers designating Circuits 13 and 14.

Holtwood also sells electric energy for resale to the Metropolitan Edison Company, at the Violet Hill Substation in York, Pennsylvania. The points of interconnection at this substation are shown to the right of the 69 kv bus in circuits 82 and 83 at Violet Hill.

At this point, since the low tension equipment including the transformers at Violet Hill Substation were recently sold to the Edison Light & Power Company, the interconnection points as shown on Exhibit 41 at the Violet Hill Substation are different from what they now show on Exhibit 41. The interconnection point shown just to the left of the numbers 82 and 83 are correct. The interconnection points shown in the four low tension feeders should

be eliminated and there should be interconnection points shown between the high tension side of the transfer and the high tension bus; that is, in [937] each one of the transformer circuits between the high tension side of the transformer and the high tension bus.

Q. In other words, if I understand that last answer, Mr. Roland, the diagram marked as Exhibit 41 was prepared before that sale of the Violet Hill Substation took place, is that right? A. That is correct.

TRIAL EXAMINER: When did that sale take place? How recently?

THE WITNESS: I was just informed that it was, I believe, in February or March of this year that the sale took place.

TRIAL EXAMINER: Can you make the changes on Exhibit 41 for Identification which would bring that exhibit up to date?

THE WITNESS: Yes.

TRIAL EXAMINER: It would be preferable to have a supplemental sketch rather than to change the exhibit itself. Is that possible?

MR. GOLDBERG: Will it be satisfactory to the Examiner if the witness indicates by a cross, let us say, the new points of delivery?

TRIAL EXAMINER: I think so.

MR. GOLDBERG: And eliminate the old points of delivery shown on Exhibit 41 by just crossing them out?

By MR. GOLDBERG:

[938] Q. Can that be done that way, Mr. Roland?

TRIAL EXAMINER: So long as it is clear what the old points were and what the new points are after the changes have been made.

By MR. GOLDBERG:

Q. Can it be done in the way I suggested, Mr. Roland? Have the Exhibit 41 show the new points of delivery by cross-marks which we can designate as "new points of delivery since sale of the Violet Hill Substation", and then we can designate the old points by writing on the exhibit "old points of delivery prior to sale of substation". Can it be done that way, Mr. Roland? A. Yes, that can be done.

MR. GOLDBERG: May I suggest then, Mr. Examiner, that that be done as has just been indicated?

MR. MYSE: It might be wise to check whether or not there has been a change in the metering points as well as the interconnection. I think there has been some change—I am not sure.

TRIAL EXAMINER: That can be taken up before the exhibit is ruled on.

MR. GOLDBERG: Then we will check on that and make all the necessary changes to make it conform to the situation since the sale of the substation early in 1946.

By MR. GOLDBERG:

[939] Q. Now, Mr. Roland, will you continue with your answer with respect to delivery points by Holtwood? A. Holtwood sells and receives energy on an interchange basis with the Philadelphia Electric Company, at Thorndale, Pennsylvania, and at Perryville, Maryland, through the facilities of the Pennsylvania Railroad Company.

Q. Will you describe the facilities by means of which electric energy shown on Exhibits 38 and 40 was transmitted from Maryland to Pennsylvania, and can be transmitted to the interconnection points which you have just described, using if you will Exhibit 41 for reference purposes. A. The bulk of the electric energy transmitted from Maryland

to the Holtwood System in Pennsylvania, is transmitted over the two 220 kv circuits.

Small amounts of energy are transmitted from the Highlandtown substation in Maryland, to the Holtwood plant in Pennsylvania, over circuits 1, 2, 5 and 6.

The energy transmitted from Maryland to Pennsylvania, over the 220 kv circuits comes into the Safe Harbor Plant over circuits Nos. 2302 and 2303. There are transformers in these two circuits which step the voltage down from 220 kv to 13 kv. These transformers are owned and operated by the Safe Harbor Water Power Corporation. The 13 kv side of these two transformers, Nos. 2202 and 2203, connect directly to the north and south buses at Safe Harbor. From this bus, [940] energy received from Maryland can be transmitted through Circuits 692 and 693, through transformers in each circuit which steps the voltage up to 69 kv, to Donegal Tap and to Lehman Farm. At these two points, electric energy is sold at wholesale for resale to the Pennsylvania Power and Light Company.

Electric energy delivered to the bus at Safe Harbor can also be transmitted over Circuits 692 and 693, to the 13 kv, 60 cycle bus at Holtwood plant, over Circuits 15 and 16 via Lehman Farm.

Energy transmitted from Maryland to the 13 kv, 60 cycle bus at the Holtwood plant over the circuits which I have named can be transmitted from this bus to the Metropolitan Edison Company, at the Violet Hill Substation in York over Circuits 11 and 12, to the Philadelphia Electric Company at its Newlinville Substation in Coatesville over Circuits 13 and 14, and to the Pennsylvania Power and Light Company's Engleside Substation in Lancaster over Circuit 18.

Electric energy transmitted to the 60 cycle bus at Holtwood can also be transferred to the 25 cycle buses at the Holtwood hydro plant, through frequency changers 61 and 62. From the 69 kv, 25 cycle bus at the Holtwood hydro plant, electric energy can be transmitted to the Pennsyl-

vania Power & Light Company's Engleside Substation in Lancaster over Circuit No. 3.

[941] Q. Are the facilities which you have designated facilities for the transmission of electric energy? A. Yes.

Q. You stated that you made studies to ascertain whether or not electric energy transmitted from Maryland to Safe Harbor is sold by Holtwood to its customers in Pennsylvania. Is that correct? A. Yes.

MR. GOLDBERG: At this point, Mr. Examiner, I would like to have marked for identification an exhibit consisting of 22 pages entitled, "Generation and Transmission of Electric Energy on Holtwood-Safe Harbor System and Transmission from Maryland to Holtwood's Resale Customers in Pennsylvania by Hours for Twenty Days of 1944."

TRIAL EXAMINER: The document handed to the reporter may be marked Exhibit No. 42 for Identification.

(Exhibit No. 42 is marked for Identification.)

By MR. GOLDBERG:

Q. Mr. Roland, referring to Exhibit 42 for Identification which has just been marked? A. Yes, sir.

Q. Did you prepare this exhibit? A. It was prepared by me and one of my assistants under my direct supervision.

Q. What in general does it purport to show? [942] A. This document shows the generation and transmission of electric energy on the Safe Harbor-Holtwood System as well as the amounts of electric energy transmitted from Maryland to Holtwood's resale customers in Pennsylvania during each hour of twenty days in 1944.

Q. Does it show the percentage of the energy delivered to Holtwood's wholesale customers in Pennsylvania which is transmitted from Maryland? A. Yes, that is shown in columns 14, 17 and 29.

Q. How were the twenty days chosen which you used in your study? A. I selected representative days. On July 26, 1945, I called on Mr. Von Eiff, Interconnection Engineer of Holtwood, to discuss with him the matter of obtaining a record of hourly watt-hour meter readings at various points on the Holtwood system during a low-flow period.

Mr. Von Eiff stated that in 1944 low flows occurred during the month of August. I asked for a period of low flows for the reason that during low flows on the Susquehanna River, I anticipated that electric energy transfers from Maryland to Holtwood's customers in Pennsylvania would be at a maximum. On the basis of Mr. Von Eiff's statements I selected the week beginning August 20, 1944. At that time, on blank forms which I had with me, I designated the various circuits with the appropriate meter number for which I wished to secure [943] hourly data for the entire week of August 20, 1944. Mr. Von Eiff had the hourly readings which I requested transcribed from Holtwood Company log sheets to the blank forms which I had provided. The completed forms were mailed to us on August 20; I returned to Baltimore during the latter part of August, 1945, and examined the company's log sheets showing hourly generation at Safe Harbor as well as the hourly input to Safe Harbor from Maryland over the 220 kv circuits for each day of 1944. From an examination of these log sheets and from an examination of a tabulation showing average daily river flow in the Susquehanna River at Holtwood for each day of 1944, I designated twelve additional days and requested that Holtwood furnish hourly data for each of these days similar to that furnished for the week of August 20. In November I asked Mr. Von Eiff to furnish similar data for April 19, 1944.

MR. MYSE: Do you mean 1944?

THE WITNESS: I meant to say 1945—in other words, I returned to Baltimore during the latter part of August,

1945, and examined company's log sheets. Is it to that you refer?

MR. MYSE: Yes.

By MR. GOLDBERG:

Q. Proceed. A. In making my selections I endeavored to designate days which would cover a wide range of stream flow but which would give particular emphasis to and would be reasonably [944] representative of those periods when river flows were such that the amounts of energy supplied from Maryland to supplement the Safe Harbor and Holtwood plants were a maximum. For this reason, 17 of the total of 20 days I designated were for days when the average daily stream flow was 21,200 cfs or less.

MR. GOLDBERG: Mr. Examiner, I ask to have marked for identification as Exhibit No. 43 a tabulation entitled, "Pennsylvania Water & Power Company Susquehanna River Flows."

TRIAL EXAMINER: The tabulation may be marked Exhibit No. 43 for Identification.

(The document referred to was marked Exhibit No. 43 for Identification.)

By MR. GOLDBERG:

Q. Briefly, Mr. Roland, refer to Exhibit 43 and tell us what that exhibit shows? A. Well, it shows the river flow in the Susquehanna River, 24 hour average in thousands of cubic feet per second, as measured at the Holtwood Plant.

Q. That is for the year 1944 only? A. For the year 1944.

Q. How does a flow of 21,200 cfs compare with the median flow of the Susquehanna River? A. The median flow of the Susquehanna River at Holtwood based on 1917 to 1941 flows is 21,000 cfs.

[945] Q. On how many days in an average year of flow would the flows be equal to or less than 21,000 cfs? A.

According to a flow duration curve for the Susquehanna River at Holtwood based on 1917 to 1941 flows, which was submitted by Pennsylvania Water & Power Company, in its application for license for the Holtwood project—Exhibit I-1 Section 12—stream flows would be equal to or less than 21,000 cfs for approximately 182 days of the year. That is such flows would be available approximately 50 per cent of the time.

Q. Referring to Exhibit 43, for how many days in 1944 was the average stream flow 21,200 cfs or less? A. There were 218 such days.

Q. During what months did they occur? A. January, February, June, July, August, September, October, November and December.

Q. Do you consider that energy flows on the Holtwood-Safe Harbor system during the selected 17 days on which stream flow was 21,200 cfs, or less, are reasonably representative of energy flows during the 218 days during which stream flow was 21,200 cfs or less? A. Yes. By that I mean, that if detailed studies of hourly flows were made for the 218 days, the results would, in general, be comparable to the results shown in Exhibit 42 for the selected 17 days when flows were [946] 21,200 cfs or less.

Q. On what basis did you select the other three days? A. April 27, 1944, was designated as an example of high river flow. The flow on that date was 149,100 cfs. December 11, 1944, was designated because it was the day when the system peak load of the year occurred on the Safe Harbor-Holtwood-Baltimore power pool. The river flow on December 11 was 37,400 cfs. April 19, 1944, was designated because it was the day of maximum hourly output from the Safe Harbor-Holtwood system. The river flow on that day was 61,500 cfs.

Q. Why did you designate only three days of high river flow? A. In general, as river flows increased above 21,200 cfs, the number of hours of zero generation at Safe Harbor decreased as did the amounts transmitted to Safe

Harbor from Maryland. When river flows were in excess of roughly 40,000 cfs, little or no energy was transmitted from Maryland to Safe Harbor. In view of this situation, I decided to make only a few calculations for periods of river flows in excess of 21,200 cfs.

Q. What approximations or errors, if any, are involved in your studies in which you show the amounts of energy transmitted from Maryland to the Holtwood system in Pennsylvania and sold by Holtwood for resale in Pennsylvania? [947] A. I was advised by Mr. Von Eiff that Holtwood attempts to limit the errors in its watt-hour meters to within plus or minus two per cent. Operators read these to the nearest mwh which may introduce a fairly large percentage of error where the readings are very small. Most of the readings which I am dealing with in my study are, however, sufficiently large so that any error from this source is negligible.

In view of the fact that the meter readings which I employ in my studies are readings to the nearest mwh, I also made my calculation to the nearest mwh. Calculated values of less than 0.5 are indicated by a dash. I have also neglected transmission losses in my studies which introduces a small error. In a few cases, energy transfers over a particular circuit reversed its direction during the hour. For those hours, I used the net transfer over the circuit during the hour for some of my calculations. This may introduce a small error.

During the low-flow periods, one of the house units at Safe Harbor is in operation either for generation or as a condenser, even though the main generating units are idle. During periods of high flow, when the main units are in operation as generators, both house units are also in operation as generators. I was advised that up to two megawatts might be delivered to the main bus from the house units during the high flow periods. In my studies, I have not taken [948] into account the fact that during low flows, station service may be supplied from the main bus and that

during high flows some of the output of the house units may be supplied to the main bus.

Q. In your opinion, do the possible errors which you named, and the approximation which you used, materially affect the accuracy of your computations? A. No, excepting the computations for the relatively few hours during which the energy transfers were very small.

Q. Referring to Exhibit 42, will you describe how you computed the quantities of electric energy, if any, transmitted from Maryland to Pennsylvania Power & Light Company, at Donegal Tap and at Lehman Farm and to Pennsylvania Water & Power Company's Holtwood Station, using some particular hour as an example. A. From data shown on the first five columns of Exhibit 42, I computed the percentage of the total amount of energy supply to the 13 kv, 60 cycle bus at Safe Harbor which was transmitted from Maryland.

For example: Column 1, of page 1, which is for Wednesday, January 26, 1944, shows the amount of generation by the 60 cycle main units at Safe Harbor during each hour of the day. During the hour ending 2 A. M. that day the generation by these units was zero. The output of the main 60 cycle generators at Safe Harbor is measured by meter No. 1, which [949] metering point is shown on Exhibit 39. Column 2 shows the amount of energy transferred from the 25 cycle bus to the 13 kv, 60 cycle bus at Safe Harbor through the frequency changer. The amounts shown in Column 2 are measured by meter No. 3 "out".

During the hour ending 2 A. M. on January 26 no energy was transferred from the 25 cycle bus to the 60 cycle main bus through the frequency changer.

Column 3 shows the amounts of energy supplied to the 13 kv, 60 cycle bus at Safe Harbor from the 69 kv circuits. These amounts are measured by meter No. 8 "in".

During the hour ending 2 A. M., no energy was supplied to the Safe Harbor bus over the 69 kv circuits.

Column 4 shows the amounts of electric energy transmitted from Maryland to the 13 kv, 60 cycle bus at Safe

Harbor over the two 220 kv circuits as measured by meters numbers 5 and 6 "in".

During the hour ending 2 A. M., on January 26, sixty-seven megawatthours were transmitted from Maryland to the 13 kv, 60 cycle bus at Safe Harbor. Column 6 shows the percentage of the total amount of energy supplied to the 13 kv, 60 cycle bus at Safe Harbor which was transmitted during the hour from Maryland. That is, this column is equal to the entries in column 4 multiplied by 100 and divided by the entries in column 5.

[950] During the hour ending 2 A. M. on January 26, 100 per cent of the electric energy supplied to the 13 kv, 60 cycle bus at Safe Harbor was transmitted from Maryland.

From the entries in Columns 7 through 10, I computed the percentage of the total sendout from Susquehanna-Safe Harbor over the 69 kv circuits which was transmitted from Maryland.

For example: Column 7 shows the amounts of electric energy transmitted from the 13 kv, 60 cycle bus at Safe Harbor to Maryland as measured by meters numbers 5 and 6 "out". No energy was so transmitted during the hour ending 2 A. M. on January 26.

Column 8 shows the amount of energy transferred from the 13 kv, 60 cycle bus to the 25 cycle bus at Safe Harbor through the frequency changer and is measured by meter No. 3 "in". During the hour ending 2 A. M., 23 megawatt hours were so transferred.

Column 9 shows the sendout from Safe Harbor over the 69 kv circuits as measured by meter No. 8 "out". During the hour ending 2 A. M., 43 megawatt hours was transmitted out of Safe Harbor over the 69 kv circuits towards Donegal, Lehman Farm and the Holtwood Station.

Column 10 shows what portion, in megawatt hours, of the total send-out from Safe Harbor over the 69 kv circuits was [951] transmitted from Maryland. During the hour ending 2 A. M., the total sendout from Safe Harbor over the 69 kv circuits was transmitted from Maryland. Column

11 shows the percentage of the total sendout from Safe Harbor over the 69 kv circuits which came from Maryland. During the hour ending 2 A. M., this percentage was 100, being equal to column 10, multiplied by 100 and divided by column 9.

From columns 12 and 13, I computed the percentage of the deliveries made to Pennsylvania Power & Light Company at Donegal, which were transmitted from Maryland. That is, column 12 shows the amount of energy delivered to Pennsylvania Power and Light Company via Donegal. The entries in this column are equal to the sum of the deliveries to Lancaster as measured by meter No. 12; to Little Inch and Big Inch as measured by meters 9 and 10; to South Manheim as measured by meter No. 13; to South Akron as measured by meter No. 14, plus or minus the net interchange at Harrisburg as measured by meter No. 11.

From these meter readings, I determined that 7 megawatt hours were delivered to Pennsylvania Power and Light Company, at the Donegal Tap during the hour ending 2 A. M., on January 26.

Column 13 shows what portion, in megawatt hours, of the total deliveries to Pennsylvania Power and Light Company via Donegal were transmitted from Maryland.

[952] During the hour ending 2 A. M., this was 7 megawatt hours. Column 14 is the ratio of column 13 to column 12 in per cent. During the hour ending 2 A. M., 100 per cent of the total amount delivered to Pennsylvania Power and Light Company via Donegal was transmitted from Maryland.

From columns 15 and 16, I computed the percentage of the deliveries made to Pennsylvania Power & Light at Lehman Farm, which were transmitted from Maryland.

For example: Column 15 shows the amount of electric energy delivered to Pennsylvania Power and Light Company at Lehman Farm and is measured by meter No. 15 to Lancaster. During the hour ending 2 A. M., January 26, 16 megawatt hours were delivered to Pennsylvania Power and Light Company at this point.

Column 16 shows the portion, in megawatt hours, of the total deliveries to Pennsylvania Power and Light Company at Lehman Farm which was transmitted from Maryland. During the hour ending 2 A. M., 16 megawatt hours, or the total amount delivered to Pennsylvania Power and Light Company at Lehman Farm during the hour, was transmitted from Maryland.

Column 17 is the ratio of column 16 to column 15 in per cent.

From the entries in columns 18 and 19, I computed the percentage of the deliveries to the 13 kv, 60 cycle bus at Holtwood via Lehman Farm, which were transmitted from [953] Maryland. That is, column 18 shows the amount of electric energy transmitted to the 13 kv, 60 cycle bus at Holtwood via Lehman Farm as measured by meter No. 28 "in" at Holtwood. During the hour ending 2 A. M., 20 megawatt hours were so transmitted. The minus sign in front of some of the entries in column 18 means that the flow during the hour was in a direction opposite to that indicated by the column heading.

[954] That is, for some of the hours the flow reversed its direction and energy was transmitted from the 13 kv, 60 cycle bus at Holtwood toward Lehman Farm.

Column 19 shows the portion, in megawatthours, of the total deliveries to the 13 kv, 60 cycle bus at Holtwood via Lehman Farm, which came from Maryland.

MR. MYSE: May I interrupt for a moment and ask you what that small N in parentheses is?

MR. GOLDBERG: I was just about to reach that.

By MR. GOLDBERG:

Q. Will you please continue? A. During the hour ending 2 A. M., January 26, 20 megawatthours, or the total amount delivered to the bus at Holtwood, came from Maryland.

Column 20 is the ratio of Column 19 to Column 18 in percent.

Q. I note that opposite some of the entries, for example during the hour ending 11 P. M., Column 18, for January 26, 1944, you have an "N" in parenthesis. What does the "N" signify? A. The letter "N" following some of the entries in Column 18 means net flow during the hour. That is for some of the hours the flow reversed its direction in the hour, so I used the new flow. For example, on January 26, 1944, during the hour ending 11 P. M., 7 megawatthours was transmitted [955] to the 13 kv, 60 cycle bus from Lehman Farm as shown in Column 25 and 1 megawatthour was transmitted from that bus to Lehman Farm as shown in Column 30 during the same hour both being measured by Meter No. 28. The net flow for that hour was, therefore, 6 megawatthours.

Q. Do blank spaces indicate zero values? A. Yes.

Q. How do you conclude that all of the electric energy delivered to Pennsylvania Power and Light Company at Donegal and at Lehman Farm and that all of the energy delivered to the 13 kv, 60 cycle bus at Holtwood via Lehman Farm during the hour ending 2 A. M., January 26, came from Maryland? A. All of the energy delivered at those three points during that hour was transmitted from Safe Harbor over the 69 kv circuits. All of the electric energy supplied to the 13 kv, 60 cycle bus at Safe Harbor during that hour came from Maryland; therefore, all of the energy supplied to Pennsylvania Power & Light Company at Donegal and at Lehman Farm, and to the Holtwood bus via Lehman Farm had to come from Maryland.

Q. In other words, if I understand your answer, of the 67 megawatthours transmitted from Maryland to Safe Harbor during the hour ending 2 A. M., January 26, 23 megawatthours were supplied to the 25 cycle bus through the frequency changer and 43 megawatthours were transmitted away from Safe Harbor over the 69 kv circuits—am I right so far? [956] A. Yes.

Q. And of that latter amount, 7 went to Pennsylvania Power & Light Company at Donegal, 16 went to Pennsyl-

vania Power & Light Company at Lehman Farm, and the 20 megawatthours remaining went to the bus at Holtwood. Is that correct? A. Yes.

Q. Did that same condition obtain during other hours on January 26, 1944? A. Yes. The same condition obtained during the first seven hours of the day and also during the hours ending 11 P. M., and 12 P. M.

Q. Have you prepared an exhibit showing the magnitude and direction of flow on the Holtwood-Safe Harbor System for the hour ending at 2 A. M., on January 26, 1944? A. I have.

MR. GOLDBERG: At this time, Mr. Examiner, may I have marked for identification as Exhibit 44 the exhibit described by the witness in his last answer?

TRIAL EXAMINER: Yes, the document may be marked Exhibit 44 for identification.

(The document referred to was marked Exhibit No. 44 for Identification.)

By MR. GOLDBERG:

Q. Mr. Roland, I show you Exhibit 44 and ask you if that is the exhibit to which you have referred in your last [957] answer. A. That is correct.

Q. And I take it the numbers near the arrows indicate the magnitude of flows in megawatthours, is that correct? A. That is correct.

MR. MYSE: Do the figures show the net flow during the hour?

THE WITNESS: As I recall, for this particular hour there was no reversal during the hour, therefore it would not only be the net but would be also the gross flow. I mean, the direction of flow was in the same direction during the hour.

By MR. GOLDBERG:

Q. Referring you to page 1 of Exhibit 42, the hour ending at 2 A. M., on January 26, 1944, it appears, does it

not, that there were no reversals of flow? A. That is correct, yes.

Q. In your studies of energy transfers for the 20 days, did you find hours in other days when all the energy delivered to Pennsylvania Power & Light Company at Donegal and at Lehman Farm and all the energy delivered to Holtwood via Lehman Farm, was transmitted from Maryland? A. Yes. There were 204 hours representing 43 per cent of the total hours in the 20 days when all the energy delivered to Pennsylvania Power & Light Company at Donegal was [958] transmitted from Maryland.

There were 189 hours representing 39 per cent of the total hours, when all the energy delivered to Pennsylvania Power & Light Company at Lehman Farm, and 180 hours representing 38 per cent of the total hours, when all the energy delivered to the bus at Holtwood via Lehman Farm, was transmitted from Maryland.

Q. During how many hours of the 20 days, did you find that there was no generation by the main 60-cycle generators at Safe Harbor? A. There were 239 such hours representing 50 per cent of the total hours.

Q. During how many hours of the 20 days did you find that all of the energy supplied to the 13 kv, 60 cycle bus at Safe Harbor came from Maryland? A. There were 213 such hours representing 44 per cent of the total number of hours in the 20 days.

Q. Did you determine how many hours during the year 1944 when there was no generation by main units at Safe Harbor? A. Yes. In 1944, there was no generation by main units at Safe Harbor during 1,882 hours, or 21.4 per cent of the total hours in the year.

Q. Did you make such a determination for each month in the year 1944? [959] A. Yes.

Q. What percentage of the total hours of each month in 1944 was the generation by main units at Safe Harbor zero during the hour? A. There was no generation by main units at Safe Harbor during 22.2 per cent of the

hours in January; 19 per cent in February; zero per cent in March, April and May; 8.3 per cent in June; 29.8 per cent in July; 48 per cent in August; 45 per cent in September; 32.2 per cent in October; 36.7 per cent in November, and 16 per cent in December.

* * * *

[960] Q. Mr. Roland, do you find it generally true that when the hydro units at Safe Harbor are shut down, energy is transmitted to Safe Harbor from Maryland? A. During the 20 days energy was transmitted to Safe Harbor during all the hours when the main hydro units were shut down. On the basis of this sampling, which I consider to be reasonably representative, and judging from the fact that during all months of 1944, except the high-flow months of March, April and May, substantial quantities of energy were transmitted to Safe Harbor from Maryland, I would conclude that energy was transmitted to Safe Harbor from Maryland when the hydro units at Safe Harbor were shut down.

Q. Were there some hours during the 20 days when electric energy was transmitted from Maryland to Safe Harbor during the same hours when energy was generated by the main units at Safe Harbor? A. Yes.

Q. Will you state how much electric energy was transmitted from Maryland to Safe Harbor during some hour when there was generation by the main units at Safe Harbor? A. Referring to page 3 of Exhibit 42, which is for Wednesday, Feb. 16, 1944, it will be noted that during [961] the hour ending 1 P. M., 37 megawatthours were transmitted to the 13 kv 60 cycle bus at Safe Harbor from Maryland as shown by column 4.

During the same hour, 15 megawatthours were generated by the main 60 cycle units at Safe Harbor as shown in column 1. No energy was supplied to the 60 cycle bus during that hour from the frequency changer. The total amount of energy supplied to the 60 cycle bus at Safe Harbor during that hour was, therefore, 52 megawatthours.

Of this amount, 71 per cent was transmitted from Maryland.

Q. During that some hour, how much was delivered from Safe Harbor to Pennsylvania Power and Light Company? A. During the hour ending 1 P. M., on February 16, 1944, a total of 41 megawatthours as shown by column 9 were transmitted to the Donegal Tap from the Safe Harbor bus, over the 69 kv circuits. During that hour, eight megawatthours were delivered to Pennsylvania Power & Light Company at the Donegal Tap, and 23 were delivered to Pennsylvania Power & Light Company at Lehman Farm, as shown in columns 12 and 15 respectively.

Q. During the hour ending 1 P. M., February 16, 1944, how much was delivered from Safe Harbor to the 13 kv, 60 cycle bus at the Holtwood Substation? A. During that hour, 10 megawatthours were delivered to the 13 kv, 60 cycle bus at the Holtwood Substation, as [962] shown by Column 18.

Q. Did you attempt to determine what part, if any, of the electric energy transmitted from Maryland to Safe Harbor during the hour ending 1 P. M., on February 16, 1944, was sold to Pennsylvania Power & Light Company at Donegal and Lehman Farm, and what part, if any was transmitted to the Holtwood bus? A. Yes, I did.

Q. Upon what basis did you make that determination? A. A bus, such as the 13 kv, 60 cycle bus at Safe Harbor, the 13 kv, 60 cycle bus and the 11 kv, 25 cycle bus at Holtwood Station, provides a common connection for several supply and feeder circuits and may be regarded as pooling the energy delivered to it by the supply circuits. For this reason, I have assumed that circuits transmitting electric energy from such a common connection, which is jointly supplied from two or more sources simultaneously, transmit energy from each of those sources in the ratio that the amounts supplied from each bears to the total supply.

Q. Why did you make that assumption? A. The layout of the main buses and circuits and switching arrange-

ments at Safe Harbor and Holtwood hydro are such that co-mingling of energy takes place when energy is supplied at those points simultaneously from more than one source. For this reason, it was necessary to apportion [963] a share of the energy supplied from each source to each of the sendout circuits.

Q. In your opinion is such an assumption reasonable? A. Yes.

Q. Is it necessary to make that assumption for every hour in order to determine the percentage of energy transmitted from Maryland in the circuits showing sendout from Safe Harbor? A. No.

Q. Under what conditions is it unnecessary? A. It is unnecessary when the entire supply at Safe Harbor is from Maryland, that is, when the entry in column 6 is 100 per cent.

Q. Is it unnecessary to make that assumption for other hours in order to determine whether or not some energy transmitted from Maryland is sent out from Safe Harbor during such hours? A. Yes.

Q. Have you nevertheless used that assumption to determine the percentages shown in column 6 for certain hours in which it is not necessary to use the assumption in order to determine that some of the send-out from Safe Harbor over the 69 kv circuits must be energy transmitted from Maryland? A. Yes.

• • •

[964] Q. Mr. Roland, a moment ago when you said that it was unnecessary when the entire supply at Safe Harbor is [965] from Maryland, that is, when the entry in column 6 is 100 per cent, were you referring to column 6 of Exhibit 42? A. That is correct.

Q. Under what conditions do you do that? A. When the sendout over the 69 kv circuits at Safe Harbor exceeds the supply to the 13 kv, 60 cycle bus from the main 60 cycle generators and from the frequency changer at Safe Harbor,

some of the sendout over the 69 kv circuits had to come from Maryland. That is, when the entry in column 9 is greater than the sum of the entries in columns 1 and 2, the difference had to be supplied from Maryland.

Q. Referring to your calculations in which you have used the assumption to which you previously referred, will you please describe the application of that assumption? A. As I stated previously, on February 16, 1944, during the hour ending 1 P. M., 41 megawatt hours were transmitted from Safe Harbor to Donegal over the 69 kv circuits, and that of this amount, 8 megawatt hours were delivered to Pennsylvania Power & Light Company at Donegal, and 23 megawatt hours to Pennsylvania Power & Light Company at Lehman Farm. I also stated that the remaining 10 megawatt hours were delivered to the 13 kv, 60 cycle bus at the Holtwood Substation.

Since 71 per cent of the amount transmitted at Safe Harbor came from Maryland during that hour, I have [966] considered that 71 per cent of the amount transmitted from Safe Harbor and sold to Pennsylvania Power & Light Company at Donegal and Lehman Farm, and that 71 per cent of the amount transmitted from Safe Harbor to the Holtwood Substation during that hour came from Maryland, and that the balance came from the 60 cycle main generating units at Safe Harbor. Thus, of the 8 megawatt hours delivered to Pennsylvania Power & Light Company at Donegal, 6 megawatt hours as shown in column 13 came from Maryland and 2 megawatt hours from Safe Harbor generation; of the 23 megawatt hours sold to Pennsylvania Power & Light Company, at Lehman Farm, 13 megawatt hours as shown in column 16 came from Maryland and 7 megawatt hours from Safe Harbor generation.

Likewise, of the 10 megawatt hours delivered to the Holtwood Substation, 7 megawatt hours as shown in column 19, came from Maryland and 3 megawatt hours from Safe Harbor generation.

Q. Have you prepared an exhibit showing the magnitude and direction flows of Holtwood and Safe Harbor system and transmission from Maryland to Holtwood's resale customers in Pennsylvania? A. I have.

MR. GOLDBERG: At this time, Mr. Examiner, I ask to have marked for identification Exhibit 45 the diagram referred to.

[967] TRIAL EXAMINER: The diagram may be marked Exhibit 45 for Identification.

(Exhibit No. 45 was marked for Identification.)

By MR. GOLDBERG:

Q. I show you Exhibit 45 for Identification, Mr. Roland, and I ask you if this is the exhibit to which you have referred in your last answer? A. That is correct.

Q. Mr. Roland, what is a "bus"? A. A bus conductor or group of conductors is a switch gear assembly which serves as a common connection for three or more circuits. That is the definition which appears on Page 97 of The American Standard Definitions of Electrical Terms.

Q. Going back to Page 1 of Exhibit 42 you stated that during the hour ending 2 A. M., January 26, 1944, 20 megawatt hours were transmitted from Maryland to the 13 kv, 60 cycle bus at Holtwood. What happened to that energy? A. The 20 megawatt hours transmitted from Maryland to the 13 kv, 60 cycle bus at Holtwood, together with the energy supplied by the steam units at Holtwood and from Pennsylvania Power & Light Company during that hour, was transmitted out from the 13 kv, 60 cycle bus at Holtwood to Metropolitan Edison at York, to Philadelphia Electric Company at Coatesville, to the 11 kv, 25 cycle bus at Holtwood through the frequency [968] changer and to the station service bus at Holtwood.

Q. In column 28 for the hour ending 2 A. M., January 26 you show 20 megawatt hours from Maryland and in column 29 you show 54 per cent from Maryland. How did

you arrive at those amounts? A. Column 21 shows the amount of energy generated by the steam electric units at Holtwood and is measured by meter No. 24. Column 22 shows the amount of energy generated during the hour by the 60 cycle hydroelectric units at Holtwood and is measured by meter No. 25.

Column 23 shows the amount of energy transferred from the 11 kv, 25 cycle bus to the 13 kv, 60 cycle bus at Holtwood through the frequency changer and is measured by meter No. 23 "out."

Column 24 is the total amount of energy supplied to the 13 kv, 60 cycle bus at Holtwood from the 60 cycle generating units and from the frequency changer at Holtwood.

Column 25 shows the amounts transmitted from Lehman Farm to the 13 kv, 60 cycle bus at Holtwood as measured by meter No. 28 "in."

Column 26 is the sum of the amounts supplied to the 13 kv, 60 cycle bus at Holtwood from the Metropolitan Edison Company and the Pennsylvania Power & Light Company and is equal to the sum of the meter readings numbers 27 and 29 "in."

[969] Column 27 shows the total amount of energy supplied to the 13 kv, 60 cycle bus at Holtwood.

Column 28 has the same entries as column 19 and shows the portion in megawatt hours of the total amount of energy transmitted to the 13 kv, 60 cycle bus at Holtwood via Lehman Farm which came from Maryland.

Column 29 is the ratio of the column 28 to column 27 expressed in per cent. During the hour ending 2 A. M. a total of 37 megawatt hours was supplied to the 13 kv, 60 cycle bus at Holtwood. Of this amount 20 megawatt hours or 54 per cent was transmitted from Maryland via Safe Harbor and Lehman Farm.

Q. Will you explain what the entries in columns 30 to 35 inclusive represent? A. Column 30 shows the amount of energy transmitted from the 13 kv, 60 cycle bus at Holtwood to Pennsylvania Power & Light Company and in a

few instances to Safe Harbor via Lehman Farm. The amounts so transmitted are measured by meter No. 28 "out".

Column 31 shows the amount of energy delivered to the Metropolitan Edison Company and the Edison Light and Power Company at Violet Hill Substation in York, Pennsylvania, over circuits 11 and 12. The amounts delivered to these two companies are measured by meter No. 29 "out".

Column 32 shows the amount of energy delivered to [970] Pennsylvania Power & Light Company, over circuit No. 18 as measured by meter No. 27 "out".

Column 33 shows the amount of energy delivered to Philadelphia Electric Company, at Coatesville over circuit Nos. 13 and 14, as measured by meter No. 26. In this connection, I should point out that the meters used for billing Metropolitan Edison Company are located at the Violet Hill Substation, therefore, the amount actually delivered to this company at Violet Hill over circuits 11 and 12 would be less than the amount measured by meter No. 29 in the amount of transmission losses between Holtwood Station and the metering points at Violet Hill Substations.

Likewise, the amount delivered to Philadelphia Electric Company at Coatesville is less than the amount shown by meter No. 26 by the amount of losses between Holtwood and Coatesville.

Column 34 shows the amount of energy delivered to the frequency changer from the 13 kv, 60 cycle bus at Holtwood as measured by meter No. 23 "in". Column 35 is the total amount of sendout from the 13 kv, 60 cycle bus at Holtwood.

Q. I notice in some of your answers you have used the expression "PP & L Company" occasionally. When you use that in your answer or anywhere in your exhibits, does it refer to the Pennsylvania Power & Light Company?

A. Yes.

Q. What portion of the total amount of electric [971] energy transmitted from the 13 kv, 60 cycle bus at Holtwood to the Metropolitan Edison Company, to Philadelphia Electric Company, and what portion of the total amount supplied to the frequency changer during the hour ending 2 A. M., on January 26, came from Maryland? A. As shown in column 29, 54 per cent of the total amount of electric energy supplied to the 13 kv, 60 cycle bus at Holtwood during that hour was transmitted from Maryland. As I stated previously, I have considered that circuits transmitting electric energy from any bus which is supplied from two or more sources simultaneously, transmits energy from each of those sources in the ratio that the amount supplied from each bears to the total supply.

Accordingly, 54 per cent of the electric energy delivered to the Metropolitan Edison Company and to the Philadelphia Electric Company, and 54 per cent of the energy supplied to the frequency changer during the hour 2 A. M., January 26, was electric energy transmitted from Maryland.

In other words, during that hour approximately 3 megawatt hours were transmitted from Maryland to the Metropolitan Edison Company and approximately 11 megawatt hours were transmitted from Maryland to the Philadelphia Electric Company, and approximately 5 megawatt hours were transmitted from Maryland to the 60 cycle end of the frequency changer at Holtwood.

[972] Q. In other words, then, to obtain the amounts of electric energy transmitted from Maryland to the Metropolitan Edison Company over circuits 11 and 12, and to the Pennsylvania Power & Light Company, over circuit 18, and to the Philadelphia Electric Company, over circuits 13 and 14 and to the frequency changer from the 13 kv, 60 cycle bus at Holtwood, you multiply the percentage figures shown in column 29 by the total deliveries as shown in columns 31, 32, 33 and 34. Is that correct? A. Yes.

Q. Column 29 then shows the percentage of the total deliveries of electric energy to Metropolitan Edison over circuits 11 and 12; to Pennsylvania Power & Light Company over circuit 18; and to Philadelphia Electric Company over circuits 13 and 14 which came from Maryland via Safe Harbor? A. Yes.

Q. During how many hours of the twenty days to which you have referred was electric energy transmitted from Maryland via Safe Harbor and Holtwood to Metropolitan Edison at York; to Pennsylvania Power & Light Company, over circuit 18; to Philadelphia Electric Company at Coatesville; and to the 11 kv, 25 cycle bus through the frequency changer? A. Electric energy was transmitted from Maryland via Safe Harbor and Holtwood to Metropolitan Edison Company during 268 hours.

[973] To Pennsylvania Power & Light Company over circuit 18 during 51 hours; to Philadelphia Electric Company during 277 hours; and, to the 60 cycle end of the frequency changer during 217 hours. In terms of percentage of total hours in the 20 days, these amounts are 56, 11, 58 and 45 per cent, respectively.

[974] Q. Will you explain how you derived the entries shown in columns 36 through 39? A. Column 36 shows the amount of energy supplied to the 11 kv, 25 cycle bus from the 13 kv, 60 cycle bus through the frequency changer at Holtwood, as measured by meter No. 22 "out".

Column 37 shows the amount of electric energy generated by the 25 cycle units at Holtwood as measured by meter No. 20.

Column 38 shows the amount of energy transmitted from the Highlandtown Substation in Maryland to the Holtwood Station. The amounts so transmitted are measured by meter No. 34 located at Highlandtown.

Column 39 is the total amount of electric energy supplied to the 11 kv, 25 cycle bus at Holtwood.

Q. Is electric energy at times transmitted from Maryland via Safe Harbor and the 13 kv, 60 cycle bus at Holt-

wood, to the 11 kv, 25 cycle bus at Holtwood? A. Yes. For example, during the hour ending 3 A. M., on January 26, 54 per cent of the energy supplied to the frequency changer from the 13 kv, 60 cycle bus was transmitted from Maryland. Therefore, approximately 4.3 megawatt hours, which is the product of columns 29 and 36, was supplied to the 11 kv, 25 cycle bus at Holtwood from Maryland.

Q. The amount of energy transmitted to the 11 kv, 25 cycle bus at Holtwood from Maryland via Safe Harbor is [975] equal to the entries in column 29 multiplied by corresponding entries in column 36, is that right? A. Yes.

Q. What part of the electric energy transferred to the 11 kv, 25 cycle bus from the 13 kv, 60 cycle bus at Holtwood came from Holtwood's steam-electric units during the hour ending 2 A. M., January 26, 1944? A. The ratio of the entries in column 21 to the entries in column 27 multiplied by the corresponding entries in column 36 are the amounts transferred from the steam-electric units to the 11 kv, 25 cycle bus at Holtwood. For the hour ending 2 A. M., January 26, 1944, the amount transferred was 16 divided by 37 multiplied by 8, or about 3.5 megawatt hours.

Q. What became of the energy transferred from Holtwood's steam plant to the 11 kv, 25 cycle bus? A. The electric energy so transferred was transmitted in part to Highlandtown and in part to Pennsylvania Power & Light Company.

Q. Will you explain the entries in columns 40 to 43 inclusive? A. Column 40 shows the amount of energy delivered to Pennsylvania Power & Light Company, over Circuit No. 3, as measured by meter No. 18, located at Engelside Substation in Lancaster, column 41 shows the amount of energy transmitted [976] from Holtwood to Highlandtown, Maryland, over Circuit Nos. 1, 2, 5 and 6 as measured by meter No. 34 at Highlandtown.

Column 42 shows the amount of energy transferred from the 25 cycle bus to the 13 kv, 60 cycle bus through the frequency changer at Holtwood as measured by meter No. 22 "in".

Column 43 is the total sendout from the 11 kv, 25 cycle bus at Holtwood.

Q. Are there times when electric energy is transmitted from Maryland via Safe Harbor and Holtwood to Pennsylvania Power & Light Company, over Circuit No. 3? A. Yes. For example, during the hour ending 2 A. M., January 26, 1944, two megawatt hours as shown by column 40 were delivered to the Pennsylvania Power & Light Company from the 11 kv, 25 cycle bus at Holtwood. During the same hour 8 megawatt hours as shown in column 36 were transferred from the 13 kv, 60 cycle bus to the 11 kv, 25 cycle bus through the frequency changer and during that hour was the only source of supply to the 11 kv, 25 cycle bus.

As shown in column 29 for the hour ending 2 A. M., January 26, 1944, 54 per cent of the energy supplied to the 13 kv, 60 cycle bus during that hour came from Maryland.

Since all the energy delivered to Pennsylvania Power & Light Company from the 25 cycle bus during that hour came from the 13 kv, 60 cycle bus through the frequency changer, it follows that it would include the same percentage of [977] energy from Maryland as that shown in column 29. In other words, during those hours when no energy is generated by the 25 cycle generators at Holtwood, and no energy is received from Highlandtown, the amount of energy transmitted to Pennsylvania Power & Light Company, over Circuit No. 3, from Maryland via Safe Harbor is equal to the entry in column 29 multiplied by the entry in column 40.

Q. How would you determine what percentage of the total amount of electric energy delivered to Pennsylvania Power & Light Company over Circuit No. 3 came from Maryland for those hours when energy is transferred from the 13 kv, 60 cycle bus through the frequency changer to the 11 kv, 25 cycle bus and when during the same hour energy was generated by the main 25 cycle units at Holtwood? A. The amount of energy in megawatt hours

transmitted from Maryland via Safe Harbor to the 11 kv, 25 cycle bus through the frequency changer is equal to the entries in column 29 multiplied by the entries in column 36. The ratio of the product so derived to the total amount of electric energy supplied to the 11 kv, 25 cycle bus as shown in column 39 multiplied by 100 is the percentage of energy from Maryland via Safe Harbor which is transmitted to Pennsylvania Power & Light Company over Circuit No. 3.

Q. During how many hours of the 20 days was some electric energy transmitted from Maryland via Safe Harbor and [978] Holtwood to Pennsylvania Power & Light Company over Circuit No. 3? A. There were 235 such hours representing 49 per cent of the total hours in the 20 days. The amounts for some of those hours are very small.

Q. Did you find any hours during the 20 days when electric energy delivered to Pennsylvania Power & Light Company over Circuit No. 3 was electric energy transmitted from Highlandtown over Circuits Nos. 1, 2, 5 and 6? A. Yes. During the hours ending 3 A. M. to 6 P. M., on November 12, 1944, all the energy delivered to the Pennsylvania Power & Light Company over Circuit No. 3 came from Highlandtown, Maryland, over Circuits Nos. 1, 2, 5 and 6.

Q. Was the electric energy transmitted from Maryland to the Pennsylvania Power & Light Company at Donegal and Lehman Farm, to Metropolitan Edison Company at York, to Philadelphia Electric Company at Coatesville, as shown by Exhibit No. 42 consumed outside of Maryland? A. Yes.

Q. Was the transmission of electrical energy from Maryland to Pennsylvania a daily occurrence in 1944? A. With the exception of the high flow months, that is, March, April and May, electric energy was transmitted from Maryland to Safe Harbor at some time during practically every day of 1944.

[979] Q. Does it follow from what you have just said, that with the exception of the high flow months of March, April

and May, some electric energy was transmitted from Maryland and delivered to Holtwood's customers in Pennsylvania every day of the year? A. Yes, the number of hours that such transmission from Maryland to Holtwood's customers in Pennsylvania, as well as the amounts transmitted, would vary over a wide range, of course, as shown by Exhibit 42.

Q. From the study you have made, do Pennsylvania Water & Power Company and Susquehanna Transmission Company of Maryland each own and operate facilities for the transmission of electric energy, which is transmitted from one or more states and consumed at points outside thereof? A. Yes.

Q. Are the amounts of such electric energy so transmitted substantial? A. Yes. This is evident from a comparison of the amounts so transmitted to the requirements at Coatesville, Pennsylvania, a city of 14,006 population, 1940 census. For the entire year of 1944, the energy requirements to serve Coatesville was 152,292 megawatt hours at a maximum demand of 24.5 mw.

Q. Does the transmission of such substantial amounts occur frequently? [980] A. Yes.

Q. Generally speaking, what are the facilities for the transmission of such energy? A. The substations and transmission lines owned by Holtwood and Susquehanna as shown on Exhibit 37 are used for that purpose.

Q. Does Holtwood sell for resale electric energy so transmitted? A. Yes.

Q. To what companies does Holtwood sell for resale electric energy so transmitted? A. Baltimore Company, Pennsylvania Power & Light Company, Philadelphia Electric Company and Metropolitan Edison Company.

Q. Do Holtwood and Susquehanna each own and operate facilities for such sales? A. Yes.

Q. Generally speaking, what are those facilities? A. Those facilities would include the substations and transmission lines owned by Holtwood and Susquehanna, as

shown on Exhibit 37, together with metering and other equipment for billing and recording sales.

Q. Do Holtwood and Susquehanna own and operate facilities for such transmission and sale at wholesale, which are not used for the generation of electric energy? [981] A. Yes.

Q. Do Holtwood and Susquehanna own and operate facilities for such transmission and sale at wholesale, which are not used in local distribution? A. Yes, with the possible exception of some of the low tension equipment at Susquehanna's Highlandtown substation, which might be regarded as distribution facilities.

Q. Do Holtwood and Susquehanna own and operate facilities for such transmission and sale at wholesale which are not used only for the transmission of electric energy which is not transmitted from any state and consumed at a point outside thereof?

• • •

MR. MYSE: I don't understand that question, if your Honor please.

MR. GOLDBERG: Mr. Examiner, there is a purpose in phrasing that question in that fashion.

TRIAL EXAMINER: The witness may answer it.

THE WITNESS: Yes, that follows from one of my previous answers.

By MR. GOLDBERG:

Q. Do Holtwood and Susquehanna own and operate facilities for such transmission and sale, which are not facilities for the transmission of electric energy consumed wholly by the [982] transmitter? A. Yes.

MR. GOLDBERG: That completes Mr. Roland's testimony on this subject, Mr. Examiner, with one question that I meant to ask and failed to.

By MR. GOLDBERG:

Q. Referring to Exhibit 45 which I show you, Mr. Roland, do the figures appearing at the upper section of

that exhibit and the arrows represent the magnitude and direction of flows? A. Yes, the arrows indicate the direction and the figures indicate the amounts in megawatt hours.

Q. And that is true of Exhibit 44, is that right? A. That is right.

MR. GOLDBERG: At this time, Mr. Examiner, I offer in evidence Exhibits 37, 38, 39, 40, 41, 42, 43, 44 and 45.

TRIAL EXAMINER: Is there any objection to the receipt of these exhibits marked for identification?

MR. SPARKS: No objection, subject to cross-examination, your Honor. We would like to ask your Honor to reserve ruling on Exhibit 42.

TRIAL EXAMINER: Any objection by counsel for the interveners, any one of them?

(No response.)

TRIAL EXAMINER: Exhibits 37, 38, 39, 40 and 41 are [983] received in evidence.

(The documents previously marked for identification Exhibit Nos. 37, 38, 39, 40 and 41, are received in evidence.)

TRIAL EXAMINER: The ruling on Exhibit 42 is reserved. Exhibits 43, 44 and 45 are received in evidence.

(The documents previously marked for identification Exhibit Nos. 43, 44 and 45, are received in evidence.)

* * *

CROSS-EXAMINATION.

By MR. MYSE:

* * *

[986] Q. If I understand you then, you did study other days and you just picked out these 20 days from the days you had studied, is that it? A. Well, when you say other days—the data I had for all the days was very meager. I

looked at the log sheets which gave me the generation at Safe Harbor and the deliveries to Safe Harbor over the 220 kv circuits, and I believe that is all that I had before me. And the number of hours of generation by days at Safe Harbor. I believe that is all the information that I had available when I selected the 20 days, plus this record of the stream flows—the daily stream flows.

* * * *

[987] Q. Referring to Exhibits 38 and 40? A. 38 and 40?

Q. Yes. A. I have that before me.

Q. On both these exhibits you have a note that the amount shown did not include transfers across the Pennsylvania-Maryland boundary over the Conestoga-Perryville lines; is that correct? [988] A. Yes.

Q. Will you tell me why you did not include those transfers? A. I do not know whether I could have gotten the data accurately by months for that.

Q. Does that complete your answer? A. I was just considering and trying to think back as to why I did not include them. I think the main reason probably was I considered that the deliveries to the railroad company were deliveries to the ultimate consumer, and we were not concerned with that.

Q. All the deliveries over this line were deliveries to the ultimate consumer; is that correct? A. No, that is not true because part of the deliveries over that line is for interchange with the Philadelphia Electric Company. That is the only reason I can think of now, I may have had for not taking that into account.

* * *

[990] RE-DIRECT EXAMINATION.

By MR. GOLDBERG:

* * *

[991] Q. Referring to the notes on Exhibits 38 and 40 which are to the effect that they do not include the transfers across Pennsylvania, Maryland Boundary over the Con-

estoga-Perryville line: Did I understand you to say that that line is used to serve the railroad? A. Not exclusively.

Q. Is the service to the railroad single phase service? A. Yes, sir.

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[992] SAMUEL JOSEPH,

was called as a witness by and on behalf of the Federal Power Commission, being first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION.

By MR. GOLDBERG:

Q. Please state your name? A. My name is Samuel Joseph.

Q. Where do you reside? A. I reside in Paterson, New Jersey.

Q. What is your present occupation? [993] A. I am engaged in the textile manufacturing business in Paterson.

Q. Please explain the nature of your participation in this case? A. On August 1, 1945, I was granted a year's leave of absence by the Commission under an arrangement which contemplated that I would return from time to time for such work as the Commission might require.

In September or October, 1945, the Commission requested me to testify in the Louisville Gas & Electric Company case before the Kentucky Public Utilities Commission and I did so.

On February 1, 1945, after my leave had run for six months, I tendered my resignation effective at the pleasure of the Commission. My resignation was accepted as of April 12, 1946.

I was requested to accept an assignment covering limited participation in this case in the capacity of con-

sultant to the Commission. It is in this latter capacity that I now appear as a witness.

Q. Will you please state your educational background? A. I graduated from the Wharton School of the University of Pennsylvania in 1928, with a degree of Bachelor of Science. I attended Columbia University Graduate School of Business Administration and did some work towards a master's degree. I graduated from the Brooklyn Law School in 1933 [994] with a degree of Bachelor of Laws. I was granted a certificate as a certified public accountant by the State of New York in 1932, and was admitted to the bar of the State of New York in 1934.

Q. Will you please state your experience? A. I was first employed in the rate regulating field in 1934. I have worked on state-wide investigations of the telephone rates in Louisiana, Alabama and West Virginia.

I have also worked on investigations of other utility companies, including electric, water and gas companies.

I have testified before the Louisiana and Alabama Public Service Commissions, the Public Service Commission of West Virginia, the Federal Power Commission, the Utah Public Service Commission, the Kentucky Public Utilities Commission and the Securities and Exchange Commission.

In 1943 I was loaned by the Federal Power Commission to the Office of Price Administration. I testified as a witness for the Office of Price Administration in a case involving the Washington Gas Light Company before the District of Columbia Public Utilities Commission.

In 1942 I was loaned by the Federal Power Commission to the Utah Public Service Commission, and testified as a witness for that Commission in a case involving the Utah Power and Light Company. On October 10, 1944, the Utah Commission's order in all respects was unanimously affirmed by the [995] Supreme Court of the State of Utah. In discussing the question of rate of return the Utah Su-

preme Court, in its opinion, made specific reference to the exhibit I had introduced in that case.

I began employment with the Federal Power Commission in August, 1939. I was first employed as a Senior Examiner of Accounts and was assigned to the investigation of the Natural Gas Pipeline Company of America and the Texoma Natural Gas Company, as accounting examiner in charge.

Q. Was that the case that went to the Supreme Court in which the Commission's order was affirmed? A. That was the case, yes, sir.

Q. Will you proceed with your statement of your experience? A. While with the Federal Power Commission I received several promotions and held the position of Chief Examiner of Accounts in the Division of Finance at the time of my resignation.

I have taken part in the investigations of the following companies:

The Southern Bell Telephone and Telegraph Company, in the States of Louisiana and Alabama; New Orleans Public Service Company; Louisiana Power and Light Company; Louisiana Public Utilities Company; Baton Rouge Water Company; Chesapeake and Potomac Telephone Company of West Virginia; [996] Wheeling Electric Company; Appalachian Electric Power Company; the Natural Gas Pipeline Company of America and Texoma Natural Gas Company; Panhandle Eastern Pipe Line Company; Michigan Gas Transmission Corporation; Interstate Natural Gas Corporation; El Paso Natural Gas Company; Washington Gas Light Company; Utah Power and Light Company; Cities Service Gas Company; Memphis Natural Gas Company; Mississippi River Fuel Corporation; Safe Harbor Water Power Corporation; and Louisville Gas & Electric Company.

My duties with the Federal Power Commission included responsibility for making studies and conducting research on the subject of fair rate of return for public

utilities. In this connection I was charged with the duty of keeping informed on the important subject of income and excess profits taxes, and the relationship of such taxes, both present and prospective, to the earning of a fair rate of return by the utility companies.

Q. While you were employed as a member of the Commission's staff did you prepare exhibits on the subject of fair rate of return? A. I did.

Q. Did you submit such exhibits and testify on the subject of fair rate of return in proceedings before the Federal Power Commission and other commissions? A. Yes, I did. I prepared and submitted exhibits [997] on the subject of fair rate of return in the Interstate Natural Gas Company case, the El Paso Natural Gas Company case, the Cities Service Gas Company case, the Mississippi River Fuel Company case, the recent Safe Harbor Water Power Corporation case, and the United Fuel Gas Company case, all of which were before the Federal Power Commission.

In addition, I prepared and submitted exhibits on the subject of fair rate of return in the Utah Power and Light Company case before the Utah Commission and in the Louisville Gas & Electric Company case before the Kentucky Commission.

Q. Can you give a general description of the nature of the exhibits which you sponsored in these cases? A. Briefly, the exhibits which I sponsored might be described as comprehensive statistical compilations which were designed to afford, and which in my opinion actually did afford, the Commissions to whom they were presented a sound basis for the exercise of judgment in the establishment of a fair rate of return for public utilities. The exhibits were brought down to date for use in each proceeding. This work of keeping the information current was done by myself and other members of the Commission's staff.

Q. I take it from what you have said that the exhibits were prepared for the specific purpose of aiding the

Federal Power Commission and other commissions in deciding the issue of fair rate of return in a rate case, is that [998] correct? A. Yes, sir.

Q. When you compiled and prepared the exhibits of which you have spoken, did you have in mind any decision or decisions of the United States Supreme Court? A. Yes, I had in mind especially the Bluefield Water Works decision.

In addition, I considered as pertinent the statement made in the United Railways v. West case, to the effect that what is a fair rate of return is not capable of exact mathematical demonstration.

I might add that exhibits similar to those I have mentioned were before the Supreme Court in the Natural Gas Pipeline Company of America case, and in the Hope Natural Gas Company case.

MR. GOLDBERG: At this time, Mr. Examiner, may I have marked for identification with the next exhibit number—I think it is 46—the document entitled: "Docket IT-5915, Pennsylvania Water & Power Company, Rate of Return Study," dated April 15, 1946.

TRIAL EXAMINER: The document may be marked Exhibit 46 for Identification.

(The document referred to was marked Exhibit Exhibit 46 for Identification.)

By MR. GOLDBERG:

[999] Q. Mr. Joseph, I direct your attention to Exhibit No. 46 for Identification, and ask you whether that exhibit is similar to the exhibit on fair rate of return which you sponsored in the cases you have mentioned? A. Yes, it is.

Q. How was the Exhibit 46 for Identification prepared? A. Basically, the exhibit flows from those exhibits which I prepared while I was a member of the Commission's staff.

The charts and tabulations are substantially similar to those used in the exhibits which I previously sponsored.

The statistics and information subsequent to that contained in the last similar exhibit which I sponsored has been compiled by members of the Commission's staff in accordance with my request.

Q. Mr. Joseph, does each chart or table in Exhibit 46 for Identification show the source from which you obtained the data and information contained therein? A. Yes, I think it does. Throughout the exhibit the source of the data is shown in an appropriate place at the bottom or end of the schedule.

Q. In your judgment, Mr. Joseph, does Exhibit No. 46 for Identification give the Commission the data and information upon which it can rely in establishing a fair rate of return for the Pennsylvania Water & Power Company and [1000] Susquehanna Transmission Company of Maryland in these proceedings? A. Yes, in my opinion the exhibit furnished the Commission with a comprehensive statistical background, and affords a sound basis for the exercise of judgment in the establishment of a fair rate of return for an electric utility such as the Pennsylvania Water & Power Company and Susquehanna Transmission Company of Maryland.

Q. To your knowledge the Exhibit No. 46 for Identification, or a substantially similar exhibit, has been submitted by Federal Power Commission witnesses in other proceedings before this Commission? A. Yes. My predecessor, Mr. Charles W. Knapp, Jr., submitted very similar exhibits in the Natural Gas Pipeline Company of America case, the Chicago District Electric Generating case, the Colorado Interestate case, the Hope Natural Gas Company case and in the earlier Safe Harbor Water Power Corporation rate case.

Q. You mean the 1939 Safe Harbor case, is that right? A. Yes, the 1939 Safe Harbor case.

Q. Has the exhibit been brought down to date for each proceeding? A. Yes. In so far as possible the exhibit contains the latest information at the time of its compilation for use.

[1001] Q. Will you, Mr. Joseph, define the terms "return" and "rate of return"? A. The "return" received by a public utility consists of the amount of revenue remaining after deduction of necessary and reasonable operating expenses, rents, taxes, and depreciation and amortization accruals, but before provision for interest, dividends, or additions to corporate surplus. This "return" is ordinarily conceived of as the product of a "rate base" times a given "rate of return". Conversely, the "rate of return" may be defined as that percentage rate which, when applied to the rate base, will yield the total overall return for the particular utility.

MR. GOLDBERG: That ends the direct testimony of this witness, Mr. Joseph.

At this time I offer in evidence Exhibit No. 46 for Identification.

TRIAL EXAMINER: Any objection to the offer of the exhibit?

MR. SPARKS: No objection, subject to cross-examination.

TRIAL EXAMINER: Any objection on the part of counsel for any of the intervenors?

(No response.)

TRIAL EXAMINER: Hearing no response, Exhibit No. 46 for Identification is received in evidence.

(Exhibit 46 for Identification is received in Evidence.)

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[1066] JOHN M. NEWLANDS,
a witness produced on behalf of the Federal Power Commission, being duly sworn, testified as follows:

DIRECT EXAMINATION.

By MR. GOLDBERG:

Q. Will you state your full name for the record, please? A. John M. Newlands.

Q. Are you employed by the Federal Power Commission? A. I am.

Q. How long have you been employed by the Federal Power Commission? A. Continuously by the Commission since March, 1939.

[1067] Q. What is your position with the Federal Power Commission? A. I am a Chief Examiner of Accounts.

Q. In what bureau or division of the Commission are you employed? A. In the Division of Accounts of the Bureau of Accounts, Finance and Rates.

Q. Will you describe generally your education and experience and your duties with the Commission? A. I attended Bates College, Lewiston, Maine, and was graduated with the degree of Bachelor of Science in 1928. I studied accounting and finance at Northeastern University, Springfield, Massachusetts.

I am a certified public accountant in the State of New York. I was employed for about 2 years prior to my graduation from college by the Diamond Match Company as bookkeeper in charge of all factory accounting and cost records for the Springfield, Massachusetts plant.

After graduation I joined the staff of Scovell Wellington Company of New York City, certified public accountants with whom I remained about nine years as a senior accountant making audits and investigations.

* * *

[1068] A. In 1938 I entered the employ of Arthur Andersen and Company, Certified Public Accountants, as senior ac-

countant. I left in March, 1939, to join the staff of the Federal Power Commission.

My assignments as public accountant included educational institutions, investment companies, manufacturing and commercial firms, building contractors, including such institutions and firms as Cornell University, White, Weld & Company, L. C. Smith & Corona Typewriters, Inc., Bigelow Sanford Carpet Company, Revere Copper & Brass Company and Henry Holt and Company.

Since entering the employ of the Federal Power Commission I have been engaged mainly on accounting investigations in connection with rate cases, but also assisted in a special investigation of the Associated Gas & Electric Company in 1939.

Q. Will you describe the rate cases on which you have worked and the work you did? A. In the Hope Natural Gas Case, Docket G-100, 101, 113, and 127 I participated in the investigation of the plant investment and the preparation of the study of the depreciation reserve requirement and annual depreciation expense.

[1069] I participated in the investigation of the plant investment of Chicago District Electric Generating Company, Docket IT-5500.

I investigated the plant investment of Natural Gas Pipeline Company of America and Texoma Natural Gas Company, Dockets G-109 and G-112 under the supervision of Mr. Joseph.

In the United Gas Pipeline Company case, G-148, I investigated the plant investment and the historical growth of the United Gas system and prepared a report thereon.

In the Southern Carbon Company case, Docket G-462, I investigated the plant investment and annual and accrued depreciation and prepared a report thereon.

I also collaborated in a report on the revenues, expenses and working capital.

I was in charge of the investigation of the plant investment of the Ohio Fuel Gas Company until transferred to Baltimore on the present case.

Q. What did you do in connection with this proceeding? A. I directed a staff of accountants, making an accounting investigation of the Pennsylvania Water & Power Company and Susquehanna Transmission Company of Maryland, including the plant investment, annual and accrued depreciation, revenue, expenses, working capital, and miscellaneous matters.

[1070] Q. Mr. Newlands, in your answer preceding the last one, you mentioned that you worked under Mr. Joseph's supervision. Is that the same Mr. Joseph who has testified in this proceeding? A. It is.

Q. What records did you use in carrying out your assignment? A. I examined the corporate and accounting records and supplementary documents and correspondence of Pennsylvania Water & Power Company and Susquehanna Transmission Company of Maryland, and the similar records of its predecessors, McCall Ferry Power Company, Susquehanna Contracting Company, J. E. Aldred, Receiver, for the McCall Ferry Company, and the Bondholders Committee.

* * *

[1075] Q. Did your examination of Pennsylvania Water & Power include the records of its merged subsidiaries? A. Yes. I examined the books of all merged subsidiary companies. Holtwood Power Company, Susquehanna Transmission Company of Pennsylvania and Pennsylvania Transmission Co.

Q. Did you examine the books of any other subsidiaries of Pennsylvania Water & Power Company? A. Yes. I examined the books of Holtwood Coal Company, Baltimore Electro Alloys Company and Susquehanna Canal and Power Company to a limited extent.

Q. As a result of your examination did you prepare a report? A. Yes.

[1076] Mr. Goldberg: At this time, Mr. Examiner, we ask to have marked for identification as Exhibit 51 a report entitled "Docket IT-5915, Pennsylvania Water &

Power Company corporate and financial History—Early History of the Holtwood Project—Plant Investment."

TRIAL EXAMINER: The document will be marked Exhibit No. 51 for Identification.

(Document marked Exhibit No. 51 for Identification.)

By MR. GOLDBERG:

Q. I show you Exhibit 51 for Identification and ask you if this is the report to which you have referred? A. It is.

Q. Of what does the report consist? A. The report is prepared in two parts; Part I consists of a written statement and Part II consists of schedules and appendices.

Q. What is the nature of the written statement? A. The written statement describes the scope of the report, the corporate and financial history of the company, the early history of the Holtwood Development and the plant investment, including a discussion of some of the examiner's adjusting entries.

Q. Will you please describe the schedules and appendices? A. The schedules have all been prepared on a [1077] consolidated basis where applicable. Schedule 1 is a consolidated balance sheet of Pennsylvania Water & Power Company and Susquehanna Transmission Company of Maryland as at December 1, 1945.

Schedule 2 summarizes the plant as recorded on the books and as adjusted by the examiners.

Schedule 3 shows a summary of Electric Plant in Service as reclassified by the company in its plant reclassification studies, reconciled with the original cost as determined by the examiners. The details of construction work in progress are shown on Schedule 4, similar details at December 31, 1944, and 1943 being shown on Schedules 5 and 6, respectively.

A summary of Plant Held for Future Use showing the purpose for which it is held is shown on Schedule 7. The

examiners' adjusting entries are listed on Schedule 8 with a recapitulation on Schedule 9. Schedules 10 to 27 contain supporting details or explanations of the adjustments.

The appendices present balance sheets and statements of cash receipts and disbursements for the predecessor companies and organization, McCall Ferry Power Company, Susquehanna Contracting Company, J. E. Aldred, Receiver for McCall Ferry Power Company and the Bondholders' Committee.

Q. What conclusions did you reach as to the original cost of Electric Plant in service of Pennsylvania Water & Power Company and Susquehanna Transmission Company of Maryland [1078] at December 31, 1945? A. I determined that the original cost of the consolidated Electric Plant in Service of the two companies at December 31, 1945, is $32,920,738.

Q. As I understand it, in all of the figures you have omitted the cents, is that correct? A. Yes.

Q. What conclusions did you reach as to the amount of construction work in progress at December 31, 1945? A. I determined that the amount of the consolidated work in progress at December 31, 1945, is $237,361.

Q. What did you conclude was the amount of Electric Plant Held for Future Use at December 31, 1945? A. I determined the amount of the consolidated Electric Plant Held for Future Use to be $77,918 at December 31, 1945.

Q. How does your determination of the original cost of Electric Plant in Service compare with the cost claimed by the Company? A. The amount determined by me is $3,493,493 less than the original amount claimed by the company as at December 31, 1945, as shown on schedule 3 and $3,468,643 less than the adjusted amount claimed by the company in their Exhibit 25.

Q. Your reference to schedule 3 in your last answer was to Exhibit 51, is that right? A. Yes.

[1079] Q. How does your determination of the amount of construction work in progress at December 31, 1945, com-

pare with the amount claimed by the company? A. It is the same.

Q. How does your determination of the amount of Electric Plant for Future Use compare with the amount claimed by the company? A. It is the same.

Q. Do you recommend that the entire amount of construction work in progress and electric plant held for future use be included in the rate base?

• • •

[1080] A. The answer is "no."

Q. What portion of the amounts in construction work in progress and electric plant held for future use do you recommend for inclusion in the rate base?

• • •

A. In the determination of the rate base for the year 1945, none of the Electric Plant Held for Future Use, as shown by schedule 7, should be included and none of the construction work in progress shown on schedule 4, except Job Order C-1789 for the purchase of additional rights for the Coatesville Transmission Line, in the amount of $30,124. The Electric Plant Held for Future Use is excluded because the company does not have a definite plan for its use.

Construction Work in Progress is excluded because it is the company's policy to compensate itself for its investment in uncompleted construction by adding interest to construction cost until the property is placed in service. The Non-Project Property included therein totaling $52,140, consists mainly of property located above Safe Harbor which cannot be used for [1081] the Holtwood Development.

Job orders totaling $67,848 consisting of rights-of-way held for possible future use in connection with a proposed new Lancaster Transmission Line are excluded because the company has no definite plan for their use. The line

if built will bring in additional revenue to compensate for the additional investment.

The cost of the additional rights for the Coatesville Line on job order C-1789 in the amount of $30,124 is included in the rate base because the property was actually in service during the entire year 1945.

Q. In this case is original cost synonymous with investment? A. Yes.

Q. Why is original cost synonymous with investment in this case? A. Because all of the property was constructed by the present company and its subsidiaries or was placed in operation by it. There were no acquisitions of operating units or systems.

* * *

[1082] Q. On page 40 of the written statement you make a comparison of the amount of interest during construction as determined by the examiners with the total interest actually paid by the company from April 1905 to December 1910.

Would the amount of interest allowed by you exceed the interest paid by the company if you excluded from the interest paid the amount applicable to the period of suspension of construction? A. It would. The total interest paid by the company for the period from April 1905 to December 31, 1910, exclusive of the amount applicable to the period of suspension was approximately $839,000 which is $262,000 less than the amount allowed by the examiners in determining the original cost of the properties.

* * *

[1129] EDWARD L. DUNN,
a witness produced on behalf of the Federal Power Commission, being first duly sworn, testified as follows:

DIRECT EXAMINATION.

By MR. GOLDBERG:

Q. Will you state your full name for the record, please? A. Edward L. Dunn.

Q. Are you employed by the Federal Power Commission? A. I am.

Q. How long have you been employed by the Federal Power Commission? A. I have been employed continuously since March, 1937.

Q. What is your position with the Federal Power Commission? A. Supervising Accountant.

Q. In what Bureau or Division of the Commission are you employed? A. I am in the Division of Accounts, which is part of the Bureau of Accounts, Finance and Rates.

Q. Will you describe generally, your education and [1130] experience and your duties with the Federal Power Commission? A. I attended Missouri University for one year and also completed the LaSalle Extension University course in accounting. I have also taken advanced courses in accounting and finance at Columbia University in New York City.

For approximately three years I was in the accounting department of Laclede Christy Clay Products Company, St. Louis, Missouri, performing bookkeeping and cost accounting duties.

In 1934 and 1935 I was in the employ of the Federal Power Commission making accounting examinations and reports on electric power companies involving, among other things, determination of original cost.

Then I left the Commission to enter the employ of National Lead Company, 111 Broadway, New York City. I was in the Comptroller's office as an accountant and my

duties included tax studies, depreciation studies, internal audits, costs of manufacturing and refining, and general accounting duties. I returned to the Commission in 1937.

My duties with the Federal Power Commission since 1937 have consisted of the preparation and supervision of accounting investigations and accounting reports. These investigations and reports include gas and electric rate cases and numerous other cases and special assignments, such as assistance to State regulatory authorities, particularly with respect to rate case matters.

[1131] Q. In your employ at the Federal Power Commission, have you participated in any rate cases? A. Yes.

Q. Will you name the cases and describe your participation? A. One of the early rate cases was Safe Harbor Water Power Corporation Docket IT-5494. I did the field work on that case relating to depreciation accounting, and assisted Mr. C. W. Smith in preparing the report. I had charge of the field investigations and of the reports on plant and depreciation in the Canadian River, Colorado Interstate and Colorado Wyoming cases. Docket numbers G-118, 121 and 124.

I was examiner in charge of the Hope Natural Gas Company Docket G-100, 101, 113 and 127 and the Panhandle Eastern Pipe Line Company case, Docket numbers G-200 and 207, in all of which cases the Commission's orders were sustained by the Supreme Court of the United States.

It was my responsibility to determine the earnings, financial condition, the cost of plant, depreciation and depletion, allowances for working capital, revenues, expenses and taxes in those cases.

I supervised the accounting and reports for the Mississippi River Fuel Corporation, United Carbon Company and Southern Carbon Company rate case Docket numbers G-462 which included the cost of plant, annual and accrued depreciation [1132] and depletion, working capital, revenues, expenses, income accounts and so forth.

I also devoted a substantial part of my time, during the year 1943, to supervising and testifying in the Utah Power & Light Company rate case, decided by the Utah Commission about October, 1943. I testified in that case on annual and accrued depreciation, revenues, expenses, working capital and other subjects.

I was on loan to the Utah Commission. The Utah Commission's decision was affirmed by the Supreme Court of the State of Utah recently. Similarly, I have been on loan to the city of Cleveland, Ohio, and Louisville, Kentucky, in connection with electric rate cases.

Q. In connection with the Commission's investigation of the rates of Safe Harbor Water Power Corporation in Docket IT-5914 were you in charge of certain phases of that investigation? A. Yes, I was in supervisory charge of the accounting work.

Q. Did you make any studies in connection with the Safe Harbor case? A. Yes.

Q. What studies did you make? A. Determination of annual and accrued depreciation, revenues, expenses, cost of plant, working capital, taxes, [1133] balance sheet and surplus analyses, among other.

Q. Did you testify in that case? A. Yes.

Q. On what subjects? A. The subjects covered by the studies I described.

Q. Did you testify in any of the other rate cases you have mentioned? A. Yes.

Q. Please name them and tell us what subject your testimony covered. A. I testified in the Hope Natural Gas Company case on rate base, annual and accrued depreciation, revenues and expenses, taxes and other subjects. I testified in the Panhandle Eastern Pipe Line rate case on operating costs, earnings, depreciation and plant costs. In the Mississippi River Fuel case I testified on taxes, operations, and trended labor costs.

Q. In connection with the Commission's investigation of the rates of Pennsylvania Water & Power Company and

Susquehanna Transmission Company of Maryland are you in charge of the accounting investigation? A. Yes.

Q. Have you had the assistance of other accountants in your work on this case? A. Yes, a staff supervised by John M. Newlands.

[1134] Q. Did they perform their work under your general direction and supervision? A. Yes.

Q. And are the exhibits which you are about to offer based on the investigation made by you and under your direction? A. Yes.

• • •

[1142] Q. Did you make a study of annual and accrued depreciation of Pennsylvania Water & Power Company and Susquehanna Transmission Company? A. Yes, on a consolidated basis.

Q. Did you prepare an exhibit containing the results of your study? A. Yes.

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[1143] Q. Mr. Dunn, I hand you Exhibit 61 for Identification and ask you if that is the exhibit to which you have referred? A. It is.

Q. Generally will you please tell us what this exhibit shows? A. It shows the company's depreciation plan and practices and the depreciation expense and depreciation reserves accumulated pursuant to the plan. It shows the adjustments to the depreciation reserve proposed by the Commission's Staff. It also shows the details of depreciation expense computed on the basis of service lives recommended by the Commission's staff engineers and the cost of plant subject to depreciation. It shows the reserve requirement based upon those service lives, the initial plant investment, additions and retirements from the initial date of operation.

Q. Have you included in the exhibit a statement which explains and supplements the schedule? A. Yes.

Q. What depreciation method does the company follow? A. The straight line depreciation method, based

upon service lives and depreciation rates determined by Mr. Walls and applied to the cost of depreciable property.

Q. Did Holtwood use the amounts recorded in the general ledger plant account in its depreciation computations? [1144] A. No. The cost of depreciable property was obtained from a statement of McCall Ferry Power Company as of January 31, 1909, showing the actual cost in various property accounts and to this was added actual expenditures for the year 1910 and for each successive year thereafter.

Q. How do the present service lives compare with the service lives estimated by the Commission's staff? A. The present overall composite rate used by the company is 2.08 per cent or a composite life of 48 years as compared with the staff's rate of 1.74 per cent or 58 years. However, comparison of service lives as determined by Mr. Walls should be made on the basis of the plant at 1930 because the company has used an overall rate of 2½ per cent on property installed since 1930.

Q. What does the comparison show when the 2½ per cent rate on additions since 1930 is excluded? A. The company's composite rate is 1.89 per cent or 53 years as compared with the staff's rate of 1.74 per cent or 58 years.

Q. Did the company adopt the 2½ per cent depreciation rate on additions simultaneously with the effective date of the contract with Consolidated of Baltimore which provided that Consolidated of Baltimore would pay the allowance for depreciation? A. Yes.

[1145] Q. What is the amount of depreciation expense for 1945 computed on the basis of the staff's depreciation rates applied to the cost of depreciable plant? A. $465,277, which does not include automobile depreciation.

Q. How much depreciation expense did the company charge during the year 1945? A. $574,245, also excluding automobile depreciation.

Q. What is the reserve requirement as of December 31, 1945, based upon the staff's service lives and cost of plant? A. $8,408,373.

Q. How does this compare with the book reserve? A. The book reserve, after applying adjustments thereto for unrecorded retirements and plant additions is $8,763,118 as of December 31, 1945, which is $354,745 more than the reserve requirement.

Q. When was this excess accumulated? A. During the past three years, 1943, 1944 and 1945.

Q. Should the amount of $354,745 be transferred to earned surplus? A. Not in my opinion.

Q. Why not? A. It has been the company's practice to charge certain maintenance to the reserve because it claims the annual depreciation charge provides for such maintenance. [1146] There is a considerable amount of accumulated wear on the surface of the dam which the company claims can be repaired at a cost of from $500,000 to $750,000. In view of the fact that the company has actually collected about $350,000 from its customers for this purpose, the reserve should be retained.

Otherwise, the repairs to the dam would be charged to maintenance, thereby duplicating the costs in the operating accounts and in the power bills.

Q. Should any other item of maintenance be charged to the book reserve in the future? A. No. The reserve is necessary to provide for the retirement of property not maintenance of property. To the extent that a portion of the reserve can be determined to have been accumulated for such large items of maintenance as the resurfacing of the dam or, for example, maintenance which was postponed during the war, which would be maintenance deferred, it is reasonable to charge the cost to the reserve established for such purposes.

Q. Did the company clearly distinguish between deferred maintenance and current maintenance in its charges to the reserve? A. No. Schedule 8 shows a description of the maintenance items charged to the reserve in the amount of $363,769.05. Many of the items fail to meet even the company's definition of deferred maintenance.

[1147] Q. What is the company's definition of deferred maintenance? A. As stated on page 16 of Exhibit 61 it covers in general repair and resurfacing of concrete structures including dam, welding turbines, resurfacing turbine distributors, rewinding generators and rewinding transformers. The rewinding of generators and transformers are replacements; therefore, deferred maintenance, as used by the company, includes deferred replacements. In certain instances the company has charged additions to plant to the reserve. By deferred maintenance is usually meant the amount that would have to be expended to bring the plant to the highest standard of condition. It would cover all ordinary repairs.

Q. Does the depreciation cost include deferred maintenance, either in the annual expense or accumulated depreciation? A. No, but it does cover the cost of items which are retired and replaced as well as items which are retired and not replaced.

Q. What would be the result of charging maintenance to the depreciation reserve? A. The result would be to capitalize operating expenses.

Q. Have you made a study of working capital of Pennsylvania Water & Power Company? A. Yes, on a consolidated basis.

[1148] Q. And by that I assume you mean to include the Susquehanna Transmission Company of Maryland? A. Yes.

Q. Have you prepared an exhibit containing the results of your studies? A. I have.

[1166] GEORGE H. DAVIS,
a witness produced on behalf of the Federal Power Commission, being first duly sworn, testified as follows:

DIRECT EXAMINATION.

By MR. GOLDBERG:

Q. Please state your full name. A. George H. Davis.

Q. What is your occupation? A. Electrical Engineer.

Q. Are you employed by Federal Power Commission? A. Yes.

Q. What is your present position? [1167] A. I am employed as an engineer engaged in the investigation of rates, in the Division of Rates and Certificates.

Q. How long have you been employed by Federal Power Commission? A. Since April 1943.

Q. What has been your professional education? A. I was graduated from the University of Maine in 1901 with a degree of Bachelor of Science in electrical engineering and spent the following year as a part-time instructor in the Electrical Engineering Department, and taking graduate courses in engineering.

Q. What has been your experience before coming to Federal Power Commission? A. After 2½ years testing electrical machinery at the Schenectady Works of General Electric Company, a year under civil service appointment with the War Department as electrical engineer at Vancouver Barracks, Washington, and two years with Portland General Electric Company, on construction and operation in Portland and Salem, Oregon, I was employed from 1908 to 1928 by the Idaho Power Company and its predecessors, with headquarters at Boise, Idaho.

Q. What was the nature of your work during that period? A. I was engaged in practically every phase of electric utility operation, holding successively such positions [1168] as meter tester, superintendent of distribu-

tion, division manager, general superintendent of operation and valuation engineer.

This last position was connected with a special assignment on the inventory and appraisal of the company's entire system. Following this, I was given another special assignment to participate as Rate Engineer in a general rate case before the Public Utilities Commission of Idaho.

Q. What was the nature of your work as rate engineer? A. That work involved the preparation of cost studies, the design of rates, the preparation and presentation of exhibits and testimony before the State Commission and later before the Federal District Court.

Q. After leaving the Idaho Power Company, where were you employed? A. I was employed for four years by Electric Bond and Share Company, in New York, where my work consisted of cost and rate studies connected with the various subsidiary operating companies, consulting with members of the operating staffs and assisting them in problems of rate design, [1169] cost analyses, studies of operating results and allied problems.

Q. Where were you next employed? A. In 1932 I was employed by the receivers for the Middle West Utilities Company and later by the reorganized company in Chicago where I was engaged with problems very similar to those in my previous work, having to do with utility operating companies in various parts of the country under widely varying conditions.

Q. What has been the nature of your work with Federal Power Commission? A. I was appointed to the staff in April 1943 as a rate investigator and was engaged in the analysis of large power contracts, in connection with war production. This was for the purpose of determining the reasonableness of the rate and involved cost studies and rate surveys.

Q. Who is your immediate supervisor? A. Stanley W. Roland, Head of Electric Rate Investigations Section.

Q. Is your work assigned by Mr. Roland? A. Yes.

Q. What was your assignment in connection with this proceeding? A. First, to make a complete study of the contracts under which Holtwood sells the output of its plants and [1170] purchases and interchanges energy with other companies. The digest of these contracts which I have prepared is included in the operating report which has been placed in evidence here as Exhibit 47.

Next, to make an analysis of the total capital cost and operating expense of Holtwood and Susquehanna for the year 1944, with an allocation of those costs to the customers being supplied and a comparison of such allocated costs with the charges collected for service for that year.

Q. When you say Holtwood and Susquehanna, what do you mean? A. In my testimony, I refer to Pennsylvania Water & Power Company as "Holtwood" and to The Susquehanna Transmission Company of Maryland as "Susquehanna."

Q. Have you prepared an analysis and allocation of the total costs of Holtwood and Susquehanna? A. Yes.

Q. What are the sources of the information used in your study? A. The basic figures used in my cost analysis, consisting of the rate base, operating expenses, taxes and depreciation for the year 1944 I secured from the accounting examiners of the Commission's staff which figures have been presented in evidence here. The sales and engineering and operating data used are those contained in the annual reports FPC [1171] Form 1, and the Power System Statements FPC Form 12, which have been submitted to the Commission by Holtwood and other companies in the interconnected system serving Federal Power Commission Power Supply area 6.

I have received additional information furnished by Holtwood at the request of the Commission's staff, including complete billing data by months for Holtwood's customers, monthly generation of energy at Holtwood and

Safe Harbor, and monthly transfer of energy over the various transmission lines.

I have visited the Holtwood plants and talked with the operators, particularly concerning the meters and records of measurement on the various outgoing circuits. I have also visited the system load dispatchers' office in Baltimore and examined the metering arrangement.

I have consulted with Mr. Spaulding and Mr. Von Eiff, Interconnection Engineer, and their associates of Holtwood, concerning methods of operation, the interpretation of contracts and costs of production and transmission. In company with Mr. Roland, I consulted with Mr. R. T. Greer, of Baltimore Company, who is in charge of the operations of the interconnected system, concerning the capacity value of the hydro plants to the Baltimore system.

I have examined cost studies made jointly by Holtwood and Baltimore Company. From my study of the contracts, under which Holtwood disposes of its entire output and purchases [1172] ½ of the output of Safe Harbor, I have obtained information concerning the relations of Holtwood with its customers in Pennsylvania, with Baltimore Company and with Safe Harbor. Information as to methods of operation, the use of special facilities, metering and delivery points for firm power and interchange, has also been obtained from these contracts.

Q. What do you mean by Federal Power Commission Power Supply Area No. 6? A. Area 6 includes the Holtwood, Safe Harbor, Baltimore, and Washington systems, but not the systems of Holtwood's customers in Pennsylvania.

Q. When you speak of Holtwood's customers, to whom do you refer? A. There are five customers who receive all of Holtwood's available firm power. These customers are—

Pennsylvania Power & Light Company, Philadelphia Electric Company, Edison Light & Power Company, Penn-

sylvania Railroad Company in Pennsylvania, and Baltimore Company.

Sales to the Pennsylvania Power & Light Company represent the requirements of its Lancaster District. Sales to the Philadelphia Electric Company represent the requirements of Coatesville and adjacent territory. Sales to the Edison Light and Power Company represent 40 per cent of the requirements of the City of York. Sales to the Pennsylvania Railroad Company represent the requirements in Holtwood's [1173] service area in Pennsylvania, and sales to Baltimore Company represent the balance of the dependable capacity available from the Holtwood system, and the balance of the energy that would be available from that system in a year of average river flow.

Q. Has there been any change in the agreements with these customers since 1944? A. Yes, the contract with Edison Light & Power Company for the supply by Holtwood of a part of the requirements of York, Pennsylvania, and the contract with Metropolitan Edison Company for interchange, was canceled as of Dec. 31, 1945.

A new contract was executed between Holtwood and Metropolitan Edison Company for the supply of firm power by Holtwood and economy interchange between the two systems. Under the new contract, Holtwood has no direct relation with Edison Light and Power Company. My study is based on the conditions of 1944, and includes the service supplied to Edison Light & Power Company as reported for that year.

Q. Please outline briefly the method used in your analysis? A. The study consists of six principal steps. One, analysis of plant in service, and the assignment of facilities used primarily for service to one customer directly to that customer, and the assignment to a pool for later allocation of those facilities that are jointly used for [1174] the service of all customers.

Two, analysis of depreciation reserve, working capital, materials and supplies, in order to develop the rate base in

accordance with the assignments of plant in service to individual customers and the pool.

Three, analysis of operating expenses on the same basis as plant and rate base.

Four, assembly of total costs, including operating expense, taxes, depreciation and return in accordance with the assignments to individual customers and the pool.

Five, allocation of pool costs to capacity and energy components and development of unit capacity and energy costs.

Six, application of unit costs to customers measured loads, assembly of special facility and pool costs for each customer and a comparison of total cost of each customer's service with charges collected for that service in 1944.

These six steps of the study are set up in an exhibit consisting of tables showing the results of each step, with supporting schedules showing details of the important items.

MR. GOLDBERG: May we have marked for Identification, Mr. Examiner, a document entitled, "Pennsylvania Water & Power Company, Cost Allocation" as Exhibit 64.

TRIAL EXAMINER: It will be marked 64 for Identification.

(A document is marked Exhibit 64 for Identification.)

[1175] By MR. GOLDBERG:

Q. I show you Exhibit 64 for Identification. Is that the exhibit to which you have just referred? A. It is.

Q. Coming back to the first step, the analysis of plant in service; please identify and explain your assignment of the principal items of plant? A. This analysis of plant is shown in Table I of Exhibit 64. The entire production plant consists of equipment jointly used for service to all customers and is assigned to the pool, as shown in line 3, column 6 of Table I. Some items of transmission plant

are devoted almost exclusively to the service of one customer and are assigned directly to that customer. In this group are the Highlandtown Substation, the Holtwood-Highlandtown Line and the Baltimore Gunpowder Line, which are for all practical purposes, used exclusively for service to Baltimore and are assigned directly to Baltimore Company. These items are shown on lines 4, 5 and 6, column 5 of Table I.

The line from Holtwood Substation to Coatesville, Pennsylvania and the switching facilities at Newlinville Substation in Coatesville are assigned directly to Philadelphia Electric Company as indicated in column 2, Table I.

Four small items consisting mostly of switching stations connections to the Holtwood-Lancaster Line and metering [1176] equipment are assigned directly to Pennsylvania Power & Light Company, as shown by items in column 1, of Table I. The 220 kv lines from Safe Harbor to Baltimore serve more than one purpose.

During the four or five months of high river flow they are used principally for the benefit of Baltimore Company, to transmit Safe Harbor power to Baltimore; during the two or three months of extreme low flow they serve principally to transmit energy from Baltimore to Safe Harbor, to make up the deficiency in Holtwood's supply to its Pennsylvania resale customers and to the Pennsylvania Railroad Company.

During the balance of the year, they are used to transmit energy alternately in each direction; from Safe Harbor to Baltimore during the day to help carry Baltimore Company's peaks; and from Baltimore to Safe Harbor during the night to carry the Pennsylvania loads while the hydro plants store water.

The cost of these lines should therefore, be assigned partly to the pool to represent their joint use for service to all customers, and the balance directly to Baltimore Company to represent that part of their use for Baltimore Company's service alone. The exact proportion is

not mathematically determinable but the joint use for customers other than Baltimore is obviously the smaller part. This joint use consists of supplying the deficiency in Holtwood's [1177] available energy during extreme low water seasons and in supplying energy to the Pennsylvania customers during off-peak periods of other seasons to permit the storing of water at the hydro plant.

Considering these conditions, I have assigned 2/3 of the investment in these lines directly to Baltimore service and 1/3 to the pool, as indicated on lines 7, 8, 9, 10 of Table I.

I believe this to be in reasonably close accord with the proportion of use.

The Conestoga substation at Safe Harbor and the line from this substation to Perryville, Maryland, are used for service to the Pennsylvania Railroad Company in both Pennsylvania and Maryland.

In 1944, 39 per cent of the energy supplied from Safe Harbor through this substation and line was delivered to the Railroad Company in Maryland, for the account of Baltimore Company. 39 per cent of the investment in these facilities is, therefore, assigned to Baltimore Company, and the balance to the Pennsylvania Railroad Company, as shown on lines 11, 12, and 13 of Table I.

The line from Holtwood to the Violet Hill substation at York, Pennsylvania, is also used for more than one purpose. It supplies a portion of the firm requirements of Edison Light & Power Company at York, and also serves as a tie between [1178] Holtwood and Metropolitan Edison Company, for the interchange of energy which latter is a joint use for service to all of Holtwood's customers. The cost of this line is assigned 29% to Edison Light & Power Company, and the balance to the pool on the basis of the energy transmitted, for the two purposes. The substation at York is assigned directly to Edison Light and Power Company on the basis of its use for that customer alone.

The balance of transmission plant consisting of the Holtwood Substation, the Holtwood-Safe Harbor line and miscellaneous items of jointly used facilities are assigned to the pool as shown on line 22 of Table I.

After these direct assignments, there remain some items of intangible and general property shown on lines 24 and 25 which I have assigned to the pool.

The totals of the six groups as thus assigned give the total classified plant in service as shown in line 26 of Table I.

Q. What is the second step? A. Having the total plant in service classified as set up in Table I the next step is to develop the rate base in accordance with the same classification, by deducting depreciation reserve and adding an allowance for working capital to each group of plant investment. This classification is set up in Table II.

Q. How is the depreciation reserve classified? [1179] A. The amount of depreciation reserve applicable to each group in the classified plant is computed on the basis of years in service and the rate indicated by the estimated service life. These amounts, I secured from the Staff's accounting examiner and they are shown in line 3 Table II and on line 3, are shown the amounts of net investment for each group of property obtained by deducting depreciation reserve from the amounts of plant in service.

Q. When you stated you had secured the amount in line 3 from the Staff's accounting examiners, I think you meant to say line 2 rather than line 3, is that right? A. That is right. I beg your pardon. The depreciation reserve which was deducted are the amounts which I secured from the accounting examiners.

Q. And they appear in line 2 of Table II? A. Yes, sir.

Q. How is working capital determined? A. Cash working capital is estimated at 12.5 per cent of operating

expenses, exclusive of purchased power. The total amount thus derived is allocated to the classified plant groups in proportion to the operating expense of each group, exclusive of purchased power. The ratios of operating expense of each group to the total operating expense are shown on line 26 of Table III.

Q. Do you mean line 26? [1180] A. That line is changed to 19.

Q. In other words, when you said line 26, you meant line 19? A. Line 19, yes.

Q. Now go on. A. Materials and supplies, after eliminating fuel and other items belonging to the pool, are allocated to the classified plant in proportion to the investment in each group. The amounts of working capital allocated to the propert groups are shown on lines 4 and 5 of Table II and on line 7, is shown the classified rate base obtained by adding working capital to the net investment.

Q. In your third step the analysis of operating expenses, please explain the principal items? A. Operating expenses are classified into the same groups as the items of plant; that is, the expense assigned to each group is that involved in the operation and maintenance of the facilities and equipment already assigned to that group. The operation and maintenance expenses of the individual lines and substations are assigned directly to the customers, in accordance with the previous assignment of investment. This classification is shown on Table III.

Q. How do you determine the operation and maintenance expense of a particular line or substation? A. The operation and maintenance expense of each line [1181] is shown in Holtwood's report to the Commission, FPC Form 1. The operation and maintenance expenses of individual substations were made available at the request of the Commission's staff. The actual operating expense of the switching stations at Newlinsville Substation, in Lancaster, Donegal Substation, Donegal Tap near Safe Harbor,

Engelside Substation, Manheim and South Akron are not kept separately in Holtwood's accounts, and in this study have been estimated at 2 per cent of the investment.

Q. In Table III of Exhibit 64 why do you show production cost exclusive of purchased power? A. Group totals are obtained without this item for the purpose of obtaining ratios for allocating cash working capital and some items of taxes which are not affected by purchased power.

Q. You show $1,789,874 in Table III as the total operating expense, exclusive of purchased power. Is that the total operating expense of Holtwood and Susquehanna? A. Yes, but that is not the way the company reports it. The total operating expense as reported by Holtwood for 1944 is $2,579,099. The actual expense for which detailed items are reported is $3,207,966. This is reduced in the company's report by a credit of $628,867, representing revenue received from the net interchange of energy with customers in Pennsylvania.

[1182] The reported expense also includes the total cost of Susquehanna, which contains an amount of $128,776 for taxes and $65,060 for depreciation. These amounts are combined with the respective amounts of taxes and depreciation expense of Holtwood, and are deducted from the total actual operating expense. An item of $9,703 designated "miscellaneous credits" in the computation of Holtwood's bill to Baltimore Company is also deducted, which leaves $1,789,874 as shown on Table III. The reconciliation of this amount with the total expense, as reported by Holtwood, is set up in Table III-A.

Q. Coming now to the fourth step, the assembling of total costs, please explain the important items? A. Total costs are assembled under the same classification as that used for plant, and this classification is shown in Table IV. There are five main items:

(a) The operating expenses as classified in Table III, and shown on line 1 of Table IV.

(b) Purchased power, shown on line 2, is 1/3 of the Safe Harbor bill as adjusted by the Commission's accountants, and is assigned entirely to the pool.

Q. Is that line 2 of Table IV? A. Yes.

Q. Proceed. A: (c) Taxes are classified into four groups:

(1) Property and capital stock taxes.

[1183] (2) Old age and unemployment insurance.

(3) Gross receipts and PUC assessment.

(4) Federal and State Income Taxes.

Groups 1 and 4 are allocated to customers and to the pool in proportion to investment.

Group 2 is allocated to customers and to the pool in proportion to operating expenses.

Group 3 is allocated entirely to customers in proportion to gross revenue collected from each.

The total of the groups thus allocated constitute the next item, which is line 3 of Table IV.

(d) Depreciation expense is computed for each item of equipment in the classified plant at the respective rates indicated by the estimated service life of each, and these amounts are totaled for each customer and the pool, and shown on line 4 of Table IV.

(e) The last item is return on the rate base at 5 per cent, which is computed for each customer and the pool from the classified rate base in Table II.

* * *

[1184] Q. Mr. Davis, after you have assembled the total costs of service, what is the next step? A. The total costs of special facilities having been allocated respectively to the customers for whose service they are used, the next step is to allocate to the several customers on the basis of use, the cost of jointly used facilities in the pool. To do this, I have first classified all pool costs into production and transmission costs, dividing production into hydro and

steam and again dividing steam production expense into fixed and variable items.

This allocation is shown in Table V. In this classification of the pool costs, I have started with Plant in Service and followed the same procedure as with the special facilities, allocating depreciation reserve and working capital and setting up the rate base for each property group, as shown in lines 1 to 12, of Table V. I then assembled total costs for these groups in the same way as for the special facilities assigned directly to customers. This classification is shown on lines 13 to 20 of Table V.

Q. What are the items assembled in the total classified pool costs? A. They are the same items that were assigned to the pool in Table IV; namely, operating expense, taxes, depreciation and return.

[1185] Operating expenses are assigned directly to the facilities in each group as shown on line 13 of Table V and in the case of steam production the cost is divided into fixed and variable costs. Taxes, as shown on lines 15 and 16 are allocated to the four groups of pool facilities in the same way they were allocated to individual customers. Items of Property, Capital Stock, and Income Taxes, are functions of investment; Retirement and Unemployment Insurance are functions of operating expense, and these items are allocated respectively in proportion to plant investment and operating expense of the four groups.

Depreciation expense is computed for each group of facilities in accordance with the rate indicated by the estimated service life. Return is computed at 5 per cent of the rate base for each group. Purchased power, representing the cost of Holtwood's one-third share of Safe Harbor power, as such cost has been adjusted by the accounting examiners, is shown on line 19 and is added to Holtwood's hydro production cost. The totals of these four groups are the total pool costs. Hydro production and transmission costs are considered fixed costs and steam production is divided into fixed and variable costs.

Q. Do you show fixed and variable costs of steam production in Table III? A. They are not identified as such, but the cost [1186] of fuel, water and maintenance of boilers, boiler plant equipment, and coal handling equipment are selected as the significant items, varying with the energy output of a steam plant and are classified in Table V as variable costs. All other steam production costs are classed as fixed costs. Detail of this classification is shown in Table V-c.

Q. Is this the generally accepted method of classifying steam production costs? A. I don't know that you would call any method "generally accepted." The expenses which I have classed as variable are the ones which primarily are a function of plant output although they may be affected to some extent by the installed capacity of the plant. Other items of expense which primarily are a function of the capacity of the plant are in turn affected to a slight extent by plant output. Some methods of allocation, therefore, go into minute detail, dividing nearly every item of plant expense between fixed and variable components on ratios which are partly empirical and partly based on judgment. Unless a plant is operated under laboratory test conditions, much of the data necessary for such an allocation are not directly available and judgment becomes the major factor in the allocation. The classification which I have used in this study is a close approximation and I believe it does not omit any detail [1187] which would materially change the final result.

Q. Why should purchased power be classed with the hydro plant costs? A. The Safe Harbor bill is made up of the same type of items as are included in the hydro costs already assembled, being one-third of the total cost of the Safe Harbor plant. This cost should be treated in the same way as the Holtwood hydro group in further allocation.

Q. What further allocation have you made of these four groups of pool costs? A. These costs are next

reclassified into capacity and energy components from which unit costs per kilowatt of capacity and per kilowatt-hour of energy may be derived. This reclassification is shown on lines 21 to 25 of Table V.

Q. What is the basis of this allocation? A. First, all variable costs are placed in the energy component and the steam production fixed cost group in the capacity component.

Q. Is there a particular reason for this? A. As already described, these costs were classified as fixed and variable on the basis of the predominance of plant capacity or of energy output in the factors which determine the amount. I am now attempting to classify all costs on the basis of the function to which the various costs primarily are devoted; that is, whether that of [1188] providing capacity or of supplying energy, which is the same basis on which fixed and variable costs of steam production were classified.

Q. Are costs which may be called variable the only ones which you allocate to the energy component? A. No, there are other considerations indicating the function for which fixed costs are incurred.

Q. What are such considerations? A. We have a good example right here in the case of the Holtwood and Safe Harbor hydro plants. At both of these plants, generating capacity has been installed considerably in excess of the dependable capacity available.

Q. How do you determine how much dependable capacity is available? A. Studies are made by the company at the end of each year to determine how much capacity these hydro plants at Holtwood and Safe Harbor can be expected to provide on the estimated load curve of Federal Power Commission Power Supply Area No. 6 for the following year or in other words, how much the hydro plants will be able to reduce the steam capacity that would otherwise be required to carry next year's load.

Q. What is the basis of these estimates of dependable capacity? A. These estimates are made on the basis of "Most Adverse Flow Conditions" and on "Average or Median Flow [1189] Conditions," and are included in the Power System Statements, FPC Form 12, filed each year with the Commission.

In this allocation, I have used the dependable capacity estimated by the Company for the month of December under adverse flow conditions. The computation of dependable capacity is based on a regular weekly cycle of drawdown and refill of the Safe Harbor pond which requires that the water be up to maximum level every Monday morning. The additional capacity which could be made available in case of emergency by use of this storage in excess of the regular weekly cycle, is also computed.

The dependable capacity reported for December with weekly refill of Safe Harbor pond is 197,000 kilowatts for the combined hydro plants. The excess available by further use of Safe Harbor storage is computed at 57,000 kilowatts. This additional capacity is used only in case of emergency and obviously is of a different quality from capacity under a weekly recovery program. It would be quickly exhausted by a continued emergency and with low river flow would require considerable time for storage replacement. It appears, therefore, that while it does not have the full value of capacity available under normal operation of the storage pond, it is available in case of need and should be credited with some value in this allocation. I have taken the total dependable capacity to be 197,000 kilowatts as reported for weekly [1190] recovery operation, plus one-half of the additional 57,000 kilowatts of storage capacity or a total of 225,500 kilowatts.

Q. How do you use this in determining capacity and energy cost components? A. I have taken this 225,500 kilowatts as the portion of the installed capacity which can be considered as available for providing capacity to firm power customers. The balance of the installed capacity,

or 96,000 kilowatts is the portion which can be considered as installed for the primary purpose of producing additional energy during periods of high river flow.

The installed capacity, or machine capability of the two hydro plants is 334,000 kilowatts. 225,500 kilowatts devoted to providing capacity is 67.5 per cent of the total and on this basis 67.5 per cent of the total hydro cost is allocated to the capacity component and 32.5 per cent the energy component.

Q. In determining the proportion of installed capacity which can be considered firm, why do you include the Safe Harbor plant? A. Dependable capacity is estimated and reported only for the combined hydro plants of Holtwood and Safe Harbor. Holtwood has purchased under contract one-third of Safe Harbor capacity and output. The dependable capacity of Safe [1191] Harbor alone is determined by prorating the aggregate dependable capacity of the two plants in the ratio that the installed capacity of Safe Harbor bears to the installed capacity of the two plants. Holtwood's share of Safe Harbor dependable capacity is obtained by taking one-third of the amount prorated to Safe Harbor.

Q. What other pool costs are included in this reclassification? A. Transmission cost is the only remaining item and that is allocated entirely to the capacity component. This gives a total capacity component of $2,782,719 and a total energy component of $1,412,971 as shown on line 25 of Table V. From the total capacity cost and the total customers load supplied by the plant, a unit cost per kilowatt of capacity is derived. From the total energy cost and the energy delivered to customers, a unit energy cost is derived. From these unit costs and the measured loads of Holtwood's customers, the allocated cost of supplying each customer is derived.

Q. How have you determined the capacity from which you develop a unit cost per kilowatt? A. This unit cost is based on the aggregate noncoincident load delivered to

the customers' meters; that is, the sum of the annual maximum demands of all customers regardless of when each occurred.

Q. Why do you use noncoincident demand? [1192] A. Because it is intended to apply the unit cost thus developed to each customer's maximum demand for the year, and this unit if it is thus applied to the demand of every customer will obviously allocate the total amount of capacity cost, and will allocate it to each customer in proportion to his maximum capacity requirement rather than to his requirement at the particular time the system peak occurs.

Q. Is that, in your opinion, an equitable method of allocating capacity costs to the customers served by Holtwood Company? A. I believe it is equitable because in this way the benefits of all the diversity there is between customers' demands is distributed equally among the customers.

Q. How is this total noncoincident demand determined? A. The maximum demands of the three wholesale customers in Pennsylvania are directly measured. The maximum demand of the Pennsylvania Railroad, in Pennsylvania, is measured in combination with its demand in Maryland. The capacity available for Baltimore Company is not a measured quantity, but is the residuum of the total available dependable capacity after all firm power customers' demands are supplied and must, therefore, be determined by a process of elimination. This process is summarized in Table V-A.

Q. Will you please describe this process? A. I have already discussed the dependable capacity [1193] of the hydro plants made up of 197,000 kilowatts available under a weekly recovery cycle plus ½ of the 57,000 kilowatts additional capacity available from the use of Safe Harbor pondage, making a total of 225,500 kilowatts which is available for the system peak in Federal Power Commission

Power Supply Area 6, and is 67.5 per cent of the total installed capacity.

In addition to the hydro capacity, the Holtwood Steam Plant has an effective capacity of 26,000 kilowatts, all of which is considered dependable due to the ample opportunities for scheduled maintenance. This makes a total dependable gross generating capacity of 251,500 kilowatts.

Deducting the reported station use and transmission loss at the time of system peak of 23,000 kilowatts, leaves a net dependable capacity of 228,500 kilowatts. This is shown on line 12 of Table V-A, together with the amounts for Holtwood and Safe Harbor hydro plants prorated on the ratio of installed capacity. The requirements of the three resale customers in Pennsylvania at the time of system peak was 84,000 kilowatts and that portion of the Pennsylvania Railroad Company requirements delivered in Pennsylvania which is considered to be furnished by Holtwood, and for which Holtwood collects the charges was 28,397 kilowatts.

This is the Pennsylvania portion of the total Pennsylvania Railroad demand based on the proportion of the total [1194] energy that is delivered in Pennsylvania. This makes a total Pennsylvania customer demand at the time of system peak of 112,397 kilowatts which must be supplied out of Holtwood's dependable capacity before any is available for Baltimore.

To translate customer's maximum loads into required station capacity, consideration must be given to the necessary reserves to insure dependable service. A reserve capacity of 10 per cent to 12 per cent is generally considered adequate with a tendency toward lower amounts for larger systems and power pools. Using 10 per cent as a reasonable reserve gives a required capacity of 123,637 kilowatts to furnish dependable service to the Pennsylvania resale customers and to the Railroad load in Pennsylvania. Deducting this required capacity of 123,637 kilowatts from the total dependable capacity of 228,500 kilowatts leaves

104,863 kilowatts of dependable capacity available for Baltimore and the Railroad load in Maryland. By prorating the net dependable capacity of both Holtwood and Safe Harbor hydro plants in proportion to the installed capacity in each, the Safe Harbor portion is determined to be 141,065 kilowatts. Deducting Baltimore Company's two-thirds of this from the balance available from both plants, leaves 10,820 kilowatts of dependable capacity available to Baltimore from Holtwood's plant, plus its 1/3 share of Safe Harbor.

Q. How is this 10,820 kilowatts used in allocating [1195] capacity costs to the customers served by Holtwood Company? A. This 10,820 kilowatts is taken to be the maximum capacity furnished during the year 1944 to Baltimore Company by Holtwood.

Q. Did the load delivered to Baltimore never exceed this amount? A. It was much greater during the months of high river flow, but that was not firm power and could not be depended on to serve firm power loads.

The larger load during periods of high river flow constitutes the use of the excess installed capacity to produce the greatest practicable amount of energy from the available water. This 10,820 kilowatts was all the dependable capacity that Holtwood had left to deliver to Baltimore at the time when Baltimore Company's need for capacity was greatest and when, if Holtwood's capacity had been available, it would have drawn its maximum demand. For the purpose of allocating capacity cost to the service furnished by Holtwood to Baltimore Company, this 10,820 kilowatts is comparable to the maximum annual demands of the Pennsylvania customers, and is included with such demand to determine the aggregate noncoincident demand of all customers on which to base a unit capacity cost. These noncoincident demands totaling 144,780 kilowatts are shown in Table V-D.

Q. What are the annual unit costs per kilowatt [1196] of capacity and per kilowatt hour of energy? A. The

total cost allocated to the capacity component in Table V is $2,782,719 and dividing this by the aggregate noncoincident demand of 144,780 kilowatts gives a unit cost per kilowatt of $19.22 per year.

The total energy sales to Pennsylvania customers and the balance available to Baltimore from Holtwood's plants, plus its 1/3 share of Safe Harbor energy in a year of average river flow is 988,166,756 kilowatt hours. Dividing the total energy cost of $1,412,971 by the total energy gives us a unit cost per kilowatt hour of 1.43 mills.

The sources of energy generated in 1944 and the disposition of this energy are shown in Table V-B. To the total amount of energy available in 1944 is added 104,182,056 kilowatt hours which is the estimated additional amount of energy that would be available to Baltimore Company in a year of average river flow. The sales to resale customers and to the Pennsylvania Railroad Company in Pennsylvania, with the balance available to Baltimore Company adjusted to an average water year, are shown in Table V-D.

Q. What result do you obtain by the application of these unit costs? A. The application of unit costs to the demand and energy of each customer to determine the total cost of power and energy supplied is shown in Table VI. The total costs of [1197] special facilities provided for each customer, as developed in Table IV, are added to the capacity and energy costs, as derived from the unit costs, to get the total Holtwood Company costs. To these totals are added the cost of energy supplied by Baltimore.

Q. What energy is supplied by Baltimore? A. Holtwood is not able to meet its firm power obligations from its own plants during the low water months and the deficiency is made up at times by energy delivered from Baltimore to Safe Harbor over the 220 kilovolt lines. During 1944 Baltimore furnished a total of 125,317,000 kilowatt hours to Holtwood. No charge was made for this energy. The cost of producing and delivering it, however, is a part of the cost of supplying the firm power requirements of

Holtwood's customers and is added to Holtwood's energy cost at 4 mills per kilowatt hour or a total amount of $501,268.

This cost is allocated to each customer in proportion to the energy delivered or available and the total amount is credited to Holtwood's cost of furnishing services to Baltimore.

Q. How is the rate of four mills determined? A. The average production cost of Baltimore Company in 1944 was 4.6 mills and the incremental cost, including only fuel, water and maintenance of boiler and coal handling plants was 3.4 mills. A cost of 4 mills is considered reasonable [1198] for making up the deficiency in the supply of energy to Pennsylvania customers.

Q. What is the final result of your determination of total costs applicable to the several customers? A. After deriving the total cost of furnishing the service to each customer, a comparison of these costs is made with the charges for such service in 1944. This comparison shows a total revenue in excess of allocated cost of $2,720,264, of which 73.7 per cent is applicable to Baltimore, 8.4 per cent to Pennsylvania Power & Light Company, 5.9 per cent to Philadelphia Electric Company, 0.9 per cent to Edison Light & Power Company and 11.1 per cent to Pennsylvania Railroad Company for service in Pennsylvania.

Q. Are the charges shown in Table VI the actual bills rendered to these customers by Holtwood Company? A. They are the actual bills in every case, except for service to Baltimore. In this case, two items are included in addition to the bill rendered by Holtwood.

Q. What are these items? A. First, an amount of $628,876, which is the net revenue received by Holtwood from interchange sales in Pennsylvania, and second, an item of $133,750 which is revenue received from the Conowingo Companies for the addition of 8.5 feet to the elevation of Conowingo forebay, which raises the level of the Holtwood tailrace a corresponding [1199] amount.

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Q. Why should these items be included in the revenue received from Baltimore? A. Under the contract with Baltimore Company, Holtwood sells the entire residual capacity and energy of its plant, plus its one-third share of Safe Harbor capacity and energy after the firm power requirements of its Pennsylvania customers have been supplied. The energy sold in interchange to customers in Pennsylvania, without firm commitment, was a part of the residuum belonging to Baltimore Company, and was sold with the consent or at the request of Baltimore Company. It was in effect, therefore, a sale by Baltimore Company and the revenue was turned over to Holtwood. The revenue is accordingly added to that collected directly by Holtwood from Baltimore Company.

Q. How is this interchange energy accounted for in your cost allocation? A. It is included in energy sold to Baltimore Company just as if it had actually been delivered to the Baltimore system.

Q. What is the second item in addition to the actual bill rendered to Baltimore Company? A. It is a payment of $133,750 received from Conowingo Companies in compliance with an agreement under which Holtwood allowed the water of the Conowingo Pond to be backed up 8.5 feet [1200] above the level claimed by Holtwood as its tailrace level.

Q. How do you explain the inclusion of this payment in the revenue received from Baltimore? A. This agreement to raise the head of the Conowingo pond at the expense of the head at Holtwood's hydro plant constitutes a sale of a part of the potential capacity of the Holtwood plant, which would otherwise have been available to Baltimore Company. It is, therefore, a part of the residual plant capability to which Baltimore Company is entitled and for which Baltimore Company would otherwise have been obliged to pay. This, therefore, is in effect, a sale by Baltimore of a part of its entitlement from Holtwood's capacity and the money received is turned over to Holtwood.

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[1201] CROSS-EXAMINATION.

By MR. MYSE:

* * *

[1203] Q. With respect to Table V, I think you testified that the amount of $992,535 recorded in line 19 as purchased power was adjusted by the accounting examiners. What is the nature of that adjustment you referred to? A. That was a computation of the costs of Safe Harbor on—I am informed by the accounting examiners—on the same basis as the cost that the Holtwood plant is computed as presented here.

Q. Do those costs appear in any exhibits presented to date in this proceeding? A. I could not answer that. The figure was given to me by the accounting examiners.

Q. Which accounting examiners? A. Mr. Dunn.

MR. MYSE: May I ask counsel for the Commission, have those figures been presented in any exhibits to date?

MR. GOLDBERG: I am just trying to consult with Mr. [1204] Dunn. You are referring, Mr. Myse, are you, to line 19, Table V?

MR. MYSE: Yes.

MR. GOLDBERG: Mr. Dunn informs me that that appears in the consolidated income statement, Exhibit 60 on schedule 5 on page 27 of that exhibit.

By MR. MYSE:

Q. Well, then, Mr. Davis, as I understand it, the figure of $992,535 does not represent the actual bills rendered by Safe Harbor in 1944 to Holtwood? A. It does not.

* * *

[1205] Q. Explain a little what you mean by the Holtwood service area in Pennsylvania? A. The railroad load is accounted for and charged for by Holtwood and Baltimore on the basis of the energy delivered in Pennsylvania and

Maryland. I have used that division to indicate service area so far as the railroad load was concerned.

Q. Then, as I understand it, you define Holtwood's service area for the railroad load as all the area in Pennsylvania, is that right? A. Yes.

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[1207] By Mr. Miller:

Q. Your study reflects factual conditions in the year 1944 only and does not apply either to the year 1943 or the year 1945, is that correct? A. Yes.

Q. And of course it does not apply to the year 1946? A. No.

Q. Your approach if applied to different years would produce different results, according to the variation of many factors, among such factors being the river flow of the Susquehanna River, is that not correct? A. I have attempted to compensate for the variations in the river by using the energy that is estimated as available in an average year as reported by Holtwood.

Q. That appears in Table V-A, is that correct? A. Yes, I have added there 104,182,000 kilowatt hours which they estimated would be an additional amount available for Baltimore in an average year.

Q. If contract commitments between the Holtwood Company and the customers have changed since 1944, your results are no longer applicable to such changed conditions, [1208] are they? A. Any change in the sales in Pennsylvania, of course, would mean more capacity used in Pennsylvania—any increase, I should say of sales in Pennsylvania would mean more capacity used in Pennsylvania and less balance available for Baltimore or vice versa.

Q. And your results would change according to the changes in contractual commitments? A. That is right.

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[1211] Mr. Hull: With respect to the revised exhibit in connection with the testimony of Dr. H. B. Dorau.

I call your Honor's attention to the fact that in connection with the testimony of Dr. H. B. Dorau, he heretofore offered an Exhibit 33, which was rejected.

However, counsel for the staff, Commission's staff, [1212] indicated, at transcript page 841 lines 4 to 15, that he had no objection to the first char' and to the first two tabulations of that exhibit.

And Your Honor, at transcript page 842, line 20, running over to page 843, line 18, indicated that if those three documents, the first chart and the two tabulations, were prepared as a separate exhibit and offered they would be received.

We have now prepared a document which I ask to be marked for identification as Exhibit No. 65, bearing this title: "Before The Federal Power Commission—In the Matter of Pennsylvania Water and Power Company and Susquehanna Transmission Company of Maryland IT-5195—Exhibit of Dr. H. B. Dorau Relating to the Supply of Money and the Value of the Dollar." This exhibit which we asked to be marked as Exhibit No. 65 contains the chart and the two tabulations that we have heretofore referred to, and we now offer them in evidence.

MR. GOLDBERG: Am I to understand that this exhibit is being offered in relation to the testimony of Dr. Dorau.

MR. HULL: In conjunction with the testimony.

MR. GOLDBERG: In other words, am I to understand that this testimony is in relation to Exhibit 65?

MR. HULL: That is correct.

MR. GOLDBERG: As I understand, the offer is not intended to relate to the determination of rate base or any of the other elements mentioned by Respondents' counsel when the ruling was [1213] made on Exhibit No. 53—is that the right number? Is that correct?

MR. HULL: 33.

MR. GOLDBERG: 33.

MR. HULL: It is offered for the purpose for which the Examiner said it might be admitted, and you agreed it could be admitted.

MR. GOLDBERG: I agreed it could be admitted as such, as statistics of the purchasing power of the dollar, but I did not agree to its admission if it is intended to be offered in any way to be related to the rate base or rate of return, or any other purpose.

MR. HULL: It is offered in connection with the rate of return,—not in connection with the rate base.

MR. GOLDBERG: In connection with the rate of return you say?

MR. HULL: Pardon?

MR. GOLDBERG: In connection with the rate of return.

MR. HULL: Yes, and any other appropriate use which the Commission may see fit to make of it.

MR. GOLDBERG: Confining myself and guiding myself by the express statement of counsel that he is relating it to these things and without any determination as to how the Commission may intend to use it, I have no objection.

TRIAL EXAMINER: The document heretofore referred to and now handed to the reporter will be marked Exhibit 65 [1214] for Identification.

(A document is marked Exhibit 65 for Identification.)

TRIAL EXAMINER: Before the Examiner concludes his ruling on this exhibit which has now been marked Exhibit No. 65 for Identification is there any other objection by any party present?

(No response.)

TRIAL EXAMINER: Hearing no objection, Exhibit 65 for Identification is received in evidence.

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[1217] TRIAL EXAMINER: The hearing will be in order.

Before we proceed with the testimony, the Examiner would like to inquire as to whether the Intervenors, other than Consolidated Gas Electric Light & Power Company of Baltimore, as to which the Examiner is advised they intend to present testimony, any others intend to present any testimony at this stage of the proceeding; that is, the Examiner will call on the Consolidated Gas Electric Light and Power Company first, and then upon counsel for the Pennsylvania Public Utility Commission, and then upon counsel for the Public Service Commission of Maryland.

At this time those intervenors should be prepared with whatever testimony or evidence they intend to present and offer on direct. Will any of those two counsel have testimony?

MR. MILLER: Mr. Examiner, we will have no direct testimony. We will have testimony in rebuttal we anticipate. I might say, in order to clarify the record as to the Pennsylvania Commission's position, that the Pennsylvania Public Utility Commission has authorized me to state that it denies the jurisdiction of the Federal Power Commission over sales by Respondent, Pennsylvania Water and Power Company, to Pennsylvania customers in Pennsylvania. The bases for this denial are as follows:

[1218] 1. Pennsylvania Water and Power Company is a licensee in legal contemplation since it has filed an application for a license under the Federal Power Act and the Federal Power Commission, taking jurisdiction of that application, has signified that it would

grant a license subject to certain conditions. As a licensee, Pennsylvania Water and Power Company is subject to the rate jurisdiction of the Federal Power Commission under Part I of the Federal Power Act and not under Part II of the Act. Under Part I of the Act, applying to licensees, Federal Power Commission jurisdiction attaches only if and when the states concerned in relation to the transactions involved are unable to agree upon cooperative regulation. Not only is there no showing on the present record that the Commonwealth of Pennsylvania and the State of Maryland are unable through the Public Service Commission of Maryland and the Pennsylvania Public Utility Commission to achieve complete proper and adequate regulation through cooperative procedure, but I can state affirmatively that the Pennsylvania Commission sees no reason to believe that the state authorities cannot achieve such regulation through such procedure. Pennsylvania Public Utility Commission has always been willing and now stands ready to cooperate with the Maryland Commission in the development of appropriate determinations and believes that the cooperative procedure contemplated by the Federal Power Act is not only the legal but the most appropriate and practical [1219] manner in which to attain solution of the problems involved in regulation of the rates of Pennsylvania Water and Power Company;

2. Section 19 of the Federal Power Act clearly provides that the service and rates of a licensee shall be subject to control by the duly constituted agency of the state in which the service is rendered or the rate charged and not by the Federal Power Commission except where no such duly constituted state agency exists.

3. Pennsylvania Public Utility Commission is the duly constituted agency of the Commonwealth of Pennsylvania for the regulation and control of the service

and rates of Pennsylvania Water and Power Company, among others, and, on December 5, 1944, instituted a proceeding to determine the fairness, reasonableness and justness of the rates and charges of that company at our complaint docket No. 14028. This proceeding is active. A questionnaire calculated to elicit pertinent information has been transmitted to Pennsylvania Water & Power Company and the answers filed from time to time are being analyzed by the Pennsylvania Commission staff.

4. Pennsylvania Water and Power Company sales and deliveries to Pennsylvania customers of energy generated by steam or falling water in Pennsylvania do not constitute transactions over which Federal Power Commission has rate [1220] jurisdiction because no element of interstate or foreign commerce is present in such transactions. This position is taken on the basis of the phraseology of Part II of the Federal Power Act which throughout clearly contemplates State Commission jurisdiction over the transactions mentioned.

5. Sales and deliveries of energy by Pennsylvania Water & Power Company to the Pennsylvania Railroad Company in Pennsylvania are not subject to Federal Power Commission rate jurisdiction as such transactions (1) have no element of interstate or foreign commerce and (2) are retail transactions clearly exempted from Federal Power Commission jurisdiction by the phraseology of Part II of the Federal Power Act. Jurisdiction over such sales and deliveries clearly resides in Pennsylvania Public Utility Commission.

6. Federal Power Commission has no jurisdiction to fix or determine the apportionment of joint rates or rates for service rendered jointly with others by Pennsylvania Water & Power Company or for energy sold by Pennsylvania Water & Power Company jointly with others, since the Federal Power Act does not confer

this jurisdiction. Pennsylvania Public Utility Commission, however, is specifically given jurisdiction over the apportionment of joint rates of public utilities by Section 306 of the Public Utility Law, approved May 28, 1937, Pennsylvania Pamphlet Laws 1053, as amended. This situation demonstrates that Pennsylvania Commission regulation of the [1221] rates and charges of Pennsylvania Water & Power Company for energy delivered to Pennsylvania customers in Pennsylvania is complete and the point is particularly pertinent in this record since all of the rates charged by Pennsylvania Water & Power Company to Pennsylvania customers are rates which must be apportioned by reason of the joint obligations of Pennsylvania Water & Power Company and others under all of the contracts with Pennsylvania customers.

It would clarify our manner of thinking on jurisdiction greatly if Mr. Goldberg would state for the record Pennsylvania contracts over which the Commission Staff asserts that the Federal Power Commission has jurisdiction?

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Mr. Goldberg: Mr. Examiner, before I proceed to answer Mr. Miller's request for a statement from me as to what contracts the staff considers the subject of the Commission's jurisdiction, which I thought was clear at this point, but if it is not, I will be glad to restate it, I would like to have Mr. Miller respond to a few questions that I have in connection with his statement so that I may understand his position more clearly.

Does Mr. Miller contend that the Pennsylvania [1222] Commission's jurisdiction attaches both to the generation of hydro electric energy by Pennsylvania Water & Power Company and to the generation of elec-

tric energy by steam by Pennsylvania Water & Power Company, under section 20 of Part I of the Act?

MR. MILLER: I do not understand what you mean by "generation", Mr. Goldberg. We contend that the Pennsylvania Commission's jurisdiction attaches to the rates of the Pennsylvania Water & Power Company for energy generated either by hydro or steam. Does that answer your question?

MR. GOLDBERG: I think so. In other words, you contend that the Pennsylvania Commission may regulate the rates regardless of the fact that part of the electric energy used to service the customers may have been generated by steam?

MR. MILLER: That is correct.

MR. GOLDBERG: Now then, under what section of the Pennsylvania Public Utility Law or any other provisions of Pennsylvania law does counsel for the Pennsylvania Commission contend that the Pennsylvania Commission has authority to sit jointly with a State Commission or confer jointly with them to fix rates?

MR. MILLER: Excuse me while I look it up here (examining). Under Section 913 of the Pennsylvania Public Utility Law.

MR. GOLDBERG: Do you have it there?

[1223] MR. MILLER: Yes.

MR. GOLDBERG: May I see it?

MR. MILLER: Certainly (handing).

TRIAL EXAMINER: Is there some short specific provision in the section that counsel has referred to that can be read into the record?

MR. MILLER: Yes, sir. I will read it, Mr. Examiner.

"Section 913: Joint hearings and investigations. Reciprocity." (A) "The Commission shall have full power and authority to make joint investigations, hold joint hearings within or without the Commonwealth, and issue joint or concurrent orders in conjunction or concurrence with any official, board, commission, or agency of any state or of the United States, whether in the holding of such investigations or hearings, or in the making of such orders, the Commission shall function under agreements or compacts between states or under the concurrent power of states to regulate the interstate commerce, or as an agency of the Federal Government, or otherwise."

The second paragraph of the section deals with motor vehicles and so forth.

MR. GOLDBERG: Does counsel for the Pennsylvania Commission contend that Section 19 of the Federal Power Act relates to interstate commerce?

MR. SPARKS: I did not understand that. Did Mr. Goldberg [1224] say interstate commerce or intrastate?

MR. GOLDBERG: Interstate.

TRIAL EXAMINER: Read the question.

(Question read.)

MR. GOLDBERG: You made some references to Section 19 in your statement. I do not have it before me, but I want to be clear as to your understanding of Section 19. Does it apply, in your opinion, to interstate commerce, or only to intrastate commerce?

MR. MILLER: My point on Section 19, Mr. Goldberg, was simply that it provides as to service and rates that a licensee shall be subject to and controlled by the duly constituted agency of the state in which the service is rendered or the rates charged.

MR. GOLDBERG: Insofar as the service is intrastate commerce, is that right?

MR. MILLER: We claim jurisdiction only over rates for energy delivered in Pennsylvania to Pennsylvania customers.

We feel that that is not interstate commerce in the sense that it can be regulated by the Federal Power Commission.

MR. GOLDBERG: What I am trying to find out is your view of section 19. Is it your view that section 19 relates to regulation of intrastate commerce only?

MR. MILLER: No, I have no such view.

MR. GOLDBERG: Is it your view that section 19 relates [1225] to interstate commerce?

MR. MILLER: No, not alone.

MR. GOLDBERG: Does it at all relate to interstate commerce, to rates involving the transmission of electric energy in interstate commerce?

MR. MILLER: I think, Mr. Goldberg, you are asking me for a legal opinion beyond the scope of my statement as to what the application of section 19 should be.

MR. GOLDBERG: I am trying to find out how you conceive section 19 is to be applied, and that is what I thought your statement involved. Do you contend that if the sales to the Pennsylvania customers are in interstate commerce that such sales may be regulated by the Pennsylvania Commission alone or jointly, as you say, under section 19?

MR. MILLER: Yes.

MR. GOLDBERG: You mentioned a proceeding by the Pennsylvania Commission—I think you stated the order was December 5, 1944?

MR. MILLER: That is correct.

MR. GOLDBERG: Does that investigation relate to the sales of electric energy by Pennsylvania Water & Power Company to the Consolidated Gas Electric Light & Power Company of Baltimore?

MR. MILLER: It is general in its terms and relates to everything which the Pennsylvania Commission may find to [1226] be within its jurisdiction. The jurisdictional lines have not been drawn in that proceeding as yet.

MR. GOLDBERG: Is it the position of the Pennsylvania Commission that the sales of electric energy to the Consolidated Gas Electric Light and Power Company of Baltimore by Pennsylvania Water & Power Company are subject to the Pennsylvania's Commission jurisdiction?

MR. MILLER: That, I think, would remain to be seen. That is not my present position, however. I am limiting my statement or position at this time solely to sales in Pennsylvania to Pennsylvania customers.

MR. GOLDBERG: Then, as I understand it, you are not saying that the present investigation of the Pennsylvania Commission relates to rates involved in the sales of electric energy to the Consolidated of Baltimore by Pennsylvania Water & Power Company, is that right?

MR. MILLER: No, I am not saying that, Mr. Goldberg. I am saying that the jurisdictional lines have not been drawn in that proceeding, but my position in that regard is that the Federal Power Commission does not have jurisdiction but that the Pennsylvania Commission does, over sales to Pennsylvania customers in Pennsylvania.

MR. GOLDBERG: That is the extent of your position, is that right?

MR. MILLER: Yes.

[1227] MR. GOLDBERG: What phraseology of Part II of the Act do you refer to in your statement?

MR. MILLER: I refer to all of the phraseology in Part II of the Act. I would have to read all of Part II, Mr. Goldberg, to answer that question.

MR. GOLDBERG: Is there any part of it that you can point out right now as supporting the position you have taken on this record?

MR. MILLER: We do not rely on any specific part; we rely on the phraseology of the part as a whole.

MR. GOLDBERG: Is there any part out of that you would care to point out to us right now?

MR. MILLER: No.

MR. GOLDBERG: Just one more question. You talked of the jurisdiction of the Federal Power Commission with respect to joint rates. May I have your definition of "joint rates"?

MR. MILLER: I have no definition ready, Mr. Goldberg. I would say that the rates charged by the Pennsylvania Water & Power Company, the Respondent, for services rendered jointly with other parties, would be joint rates.

MR. GOLDBERG: Well, of course, a definition that uses a word to be defined is not very helpful. I appreciate, perhaps, that you may not have been prepared to define the contention you are making. Are you using it in the sense that it was used in the Interstate Commerce Act?

[1228] MR. MILLER: I am using it in the factual sense in which Pennsylvania Water & Power Company renders service in conjunction with other contracting parties.

MR. GOLDBERG: Are you using it at all in the sense that it is used in the Interstate Commerce Act?

MR. MILLER: Yes, I take it it is used in whatever legal sense the factual situation indicates.

MR. GOLDBERG: Now, then, Mr. Examiner, I have been requested by counsel for the Pennsylvania Commission to state the position of the Staff as to the Commission's jurisdiction over the contracts of the Pennsylvania Water & Power Company. I thought it was clear, but I am willing to state it again.

It is the position of the Staff that all of the contracts of the Pennsylvania Water & Power Company for the transmission and sale of electric energy at wholesale in interstate commerce are subject to the Commission's jurisdiction, but the Staff is not contending that the Commission should assert jurisdiction over the contract between Pennsylvania Water & Power Company and the railroad for railroad service. That is the only exception the Staff is making.

In so stating, Mr. Examiner, of course, that does not preclude the Commission from asserting jurisdiction if it wishes to.

MR. SPARKS: At this time, if Your Honor please, I have a statement to make.

[1229] TRIAL EXAMINER: Just one minute. Does counsel for the Public Service Commission of Maryland have a statement to make?

MR. FRANCE: Not except to say that we will have one witness. We will be ready when called, and it should not take over 20 minutes to half an hour on the direct.

TRIAL EXAMINER: Does counsel have anything to say with respect to the remarks just entered in the record by the counsel for the Pennsylvania Public Utility Commission?

MR. FRANCE: If Your Honor please, it is my understanding that the Public Service Commission of Maryland requested the Federal Power Commission to assume jurisdiction in this case. I was not counsel for the Public Service Commission of Maryland at the time the case originally started and I cannot speak at firsthand, but certainly our position is clear in the record.

I think there is a letter in the record from the Public Service Commission of Maryland to the Federal Power Commission requesting them to assume jurisdiction.

TRIAL EXAMINER: Is it proper to construe the situation to sum up to this, that as of the time of the need of the Public Service Commission of Maryland, there has not been any agreement between the States of Maryland and Pennsylvania such as provided for in Section 20 of the Federal Power Act?

MR. FRANCE: No, sir. There were some preliminary [1230] negotiations between the two commissions as I understand it, and subsequently, the Maryland Commission then wrote to the Federal Power Commission requesting it to assume jurisdiction.

TRIAL EXAMINER: Very well.

MR. FRANCE: I think that is an accurate statement.

* * *

[1231] RALPH L. THOMAS,
a witness called on behalf of the Consolidated Gas Electric Light and Power Company of Baltimore, being first duly sworn, testified as follows:

DIRECT EXAMINATION.

By MR. STURTEVANT:

Q. Will you please state your name and your present position? A. Ralph L. Thomas. I am vice president of the Consolidated Gas Electric Light and Power Company of Baltimore; also a director and a member of the Executive Committee of that company. As vice president, I am in charge of the Electric Operation and Engineering including inter-system transactions and operations.

* * *

[1234] Q. In connection with what phase of the present proceeding are you testifying? A. I am concerned solely with the question of the allocation of any reduction in the operating revenue or rates of Holtwood Company that may be ordered by the Federal Power Commission.

Q. Yes,—— A. (Continuing) I want to make that clear, in view of my former association with the Holtwood Company.

* * *

[1235] Q. Mr. Thomas, what type of hydro developments are the Holtwood and Safe Harbor projects? A. Run of river type.

Q. What is meant by a "run-of-river" type development? A. It is a hydro development in which the [1236] quantity of water which can be stored behind the dam is negligible in relation to the annual power output. The purpose of the dam is to create a head and the storage of water is incidental. River flow cannot be stored in any appreciable quantity and to a large extent water must be used as it runs down the river.

* * *

[1237] Q. Mr. Thomas, would it be economic to develop either plant on the basis of continuous power output? A. No, it would not.

Q. To what extent is variation from a true run-of-river output possible at Holtwood and Safe Harbor? A. Mr. Spaulding, in his testimony at page 128, spoke of the utilization of pondage. During low flows the daily cycle consists of lowered output in the early morning hours when the load is light and of increased output in the peak-load hours of late morning and early afternoon. Weekly cycles during which the pond elevation is slightly decreased to get increased power on the heavy load week-days, and then allowed to reach maximum again over the week-end, are also used.

Under exceptional circumstances the drawdown could be extended over a longer period than one week.

Q. Would it be economical to develop either Safe Harbor Plant or the Holtwood Plant on the basis of utilizing the pondage without supplementary steam electric supply? A. No, this would not be economic.

Q. Will you explain how it is possible to justify economically the development of these sites? A. The load of an ordinary electric system is not constant, but varies during the hours of each day and of the week, the peak loads coming in the morning or early hours. Hydro developments of the Holtwood and Safe Harbor type can [1238] be justified if the hydro capacity and energy during periods of low flow can be used to skim off the upper portion of the load curve and supply peak systems.

In this manner the hydro capacity can replace an amount of steam electric capacity many times as great as the continuous firm power available from the same quantity of water.

* * *

Q. How has Holtwood company obtained the backup steam-electric supply with which to firm up its hydro ca-

pacity? [1239] A. * * * Holtwood Company has relied almost entirely on the Baltimore steam plants to firm up its hydro capacity. Initially, there were provisions for minor use of small standby steam-electric plants of the Pennsylvania customers, but generally speaking they soon fell into disuse.

* * *

[1241] Q. Is the supply of power and energy to Baltimore Company similar or comparable to the supply of the four Pennsylvania customers of Holtwood Company? A. It is not.

* * *

Q. Please explain the difference. A. Holtwood Company and Baltimore Company pioneered in developing the correct principles of operating a combined hydro steam generating supply system. Over a period of many years the operations of the plants of the two companies were coordinated to obtain maximum overall economy, usefulness, and reliability. The operating arrangements reached their culmination in the 1931 [1242] Holtwood and Safe Harbor contracts. There has been much testimony regarding those contracts in this and previous cases. Suffice it to say here that under those contracts the Baltimore, Holtwood and Safe Harbor companies were closely knitted together into a unified regional power system by which energy can be generated, purchased and supplied in the most economical manner.

[1243] Baltimore Company is entitled to receive all of the power and energy available to Holtwood Company after the requirements of the Pennsylvania firm power customers had been met, Baltimore Company may therefore be called the residual receiver.

Baltimore Company is also obligated to coordinate its facilities and power supply with those of Holtwood Company, and to supply back-feed steam electric energy to Pennsylvania as required to supplement the hydro supply

and to make it possible for Holtwood Company to sell conventional firm power in Pennsylvania.

• • •

[1253] Q. Now, Mr. Thomas, reverting to the 1931 Baltimore-Holtwood power contract, will you explain the nature of Baltimore Company's payments to the Holtwood Company, and the effect thereof? A. Under the 1931 agreement, Baltimore Company contracts in effect to pay to Holtwood Company annually an amount which, together with whatever revenue Holtwood Company receives from its other customers will yield to Holtwood Company a net revenue determined by the contractual formula which is independent of kilowatts and kilowatt hours.

It is evident that under this arrangement any reduction in rates paid for power and energy by any of the Pennsylvania customers is automatically charged to and immediately made up by Baltimore Company without any compensating increase in the supply of power and energy to Baltimore Company.

Likewise, any increase in operating expenses and taxes that Holtwood Company has is immediately and automatically paid by Baltimore Company.

This contractual arrangement again distinguishes Baltimore Company from the Pennsylvania customers. And I want to emphasize that point particularly because there are some friends of mine here today representing the Pennsylvania customers, and I am not sure they understand the workings of [1254] the Baltimore-Holtwood Contract and understand that when they get a reduction, Baltimore immediately and automatically makes it up.

• • •

[1264] Q. In connection with the comments you have made on Mr. Davis' cost-of-service study, do you desire to say anything about contract renewals entered into by Holtwood Company with the Metropolitan Edison Company for the supply to York? A. Yes. I previously referred to that as the peak service type of contract. Under that contract

Holtwood Company [1265] originally contracted to supply 20,000 kilowatts of peak service to Metropolitan Edison and, due to an increase in load, that has now been increased to 21,000 kilowatts. The use of that figure would, of course, change the results in Mr. Davis' study.

Q. Now, as I understand—— A. Excuse me. I might indicate, however, that that peak service contract also provides for rates which are very much lower than the corresponding rates in the other contract. I am not prepared to say what the net effects of the substitution of 1946 conditions would be.

I might also comment that I think that is a very desirable type of contract for Holtwood Company to have.

• • •

[1282] CROSS-EXAMINATION.

• • •

[1285] By MR. GOLDBERG:

• • •

[1290] Q. Does Consolidated purchase electric energy from [1291] Holtwood?

MR. SPARKS: I object to that, if Your Honor please.

TRIAL EXAMINER: On what ground?

MR. SPARKS: I object to it on the ground that this witness is not qualified to state whether or not the transactions contemplated by those contracts constitute a sale of energy, or whether they constitute a sale of some other kinds of services.

TRIAL EXAMINER: Objection overruled.

• • •

THE WITNESS: Yes, sir; we purchase energy among other services.

By MR. GOLDBERG:

Q. And that energy is purchased under Items H and I in this proceeding? A. Yes.

Q. I show you Items H and I (indicating). A. Yes.

Q. And does Consolidated purchase electric energy from Safe Harbor? [1292] A. Yes.

Q. And does that purchase take place under Items E, F and G in this proceeding?

MR. SPARKS: Same objection, if Your Honor please.

TRIAL EXAMINER: Overruled.

MR. SPARKS: Exception.

THE WITNESS: Yes.

By MR. GOLDBERG:

Q. And when you testified just now that Consolidated purchases electric energy, you were using the term in the sense of kilowatt hours, is that right? A. Yes.

Q. That is right? A. Yes, as far as I know, every report we filed with the Commission showed the number of kilowatt hours we purchase from those companies.

* * *

[1319-A] DIRECT EXAMINATION.

* * *

[1321] MR. SPARKS: Mr. Examiner, in response to the request of [1322] counsel for the Commission contained at pages 894 to 896 inclusive of the transcript record in this proceeding, as to clarification of our statement of the issues, as we saw them, at page 34 of the transcript, we now make the following statement:

Counsel's inquiries were directed to and confined to the first issue with respect to the jurisdiction as stated by us at transcript page 34. His first inquiry was directed to the meaning of that part of our statement that "This Commission has no jurisdiction over the rates, charges and classifications of Pennsylvania Water & Power Company under Part II of the Act, for the reason that the Company is to be treated as a licensee * * * and is, therefore subject to Part I of the Act only."

We mean by that statement that by virtue of the proceedings had by this Commission in its Docket No. IT-5524 and its orders issued therein dated November 3, 1939 and November 23, 1943, in connection with Holtwood Project No. 1881, Pennsylvania Water & Power Company must be treated in this proceeding as a licensee under Part I of the Federal Power Act.

Counsel's second inquiry is far from clear but in an effort to answer it we assume it to be stated as follows:

Is it the contention of Respondents that Pennsylvania Water & Power Company is presently subject to Part I of the [1323] Act, including Section 20, assuming that the States directly concerned are unable to agree through their properly constituted authorities on the services to be rendered or on the rates or charges of payment therefor?

In answer to this question we repeat that the record does not show that the two states directly concerned, namely, Maryland and Pennsylvania, are unable to agree through their properly constituted authorities on the services to be rendered or on the rates or charges of payment therefor; in the absence of such evidence and an appropriate finding by the Commission based thereon, this Commission has no jurisdiction over any of the rates, charges or classifications of Pennsylvania Water & Power Company under Part I of the Act. If it is assumed that there will be substantial evidence in the record to support such a finding by the Commission our contention is that any rate regulatory jurisdiction the Commission may have in that event over Pennsylvania Water & Power Company is limited by Section 20 to the authority to regulate and control only so much of the services rendered, and of the rates and charges of payment therefor as constitute interstate commerce.

Counsel's third inquiry was directed to the meaning of that part of our statement at transcript page 34 that "This Commission has no jurisdiction over the rates, charges and classifications of Pennsylvania Water & Power Company under Part II of the Act, for the reason that the Company * * * [1324] may be considered to be a purchaser of power from a licensee for use in public service, and is, therefore, subject to Part I of the Act only."

Counsel inquired if that statement had reference to purchase of electricity by Pennsylvania Water & Power Company from Safe Harbor who is a licensee under Part I. In reply we state that we had reference to the fact that, as the evidence shows, Pennsylvania Water & Power Company does make payments to Safe Harbor, who is a licensee under Part I of the Act as stated by Commission Counsel.

Our contention is, however, that such payments are not the result of a purchase and sale of power by Pennsylvania Water & Power Company from Safe Harbor but are, on the contrary, payments of a division to Safe Harbor of revenues received by Pennsylvania Water & Power Company from Consolidated Gas Electric Light & Power Company of Baltimore for joint services rendered by Safe Harbor and Pennsylvania Water & Power Company to the Baltimore Company and to others. However, if contrary to the evidence in this proceeding it should be contended by Commission counsel that such payments are not divisions but arise out of a purchase and sale of power by Pennsylvania Water & Power Company from Safe Harbor then we contend that by reason of such contention of Commission Counsel, Pennsylvania Water & Power Company must in that event be treated as a purchaser of power from a licensee for use in public service; and that under Section 20 the respective jurisdictions of [1325]

the States and the Commission over the rates and charges of such purchasers of powe. from licensees, together with the statutory conditions and limitations thereon, are the same as over licensees under the Act.

MR. GOLDBERG: Just one or two questions of counsel who just read the statement.

With respect to the second portion—paragraph 2, if I may call it that—I understood counsel to say that if the Commission has any jurisdiction at all, it is limited only to that portion of the service which is in interstate commerce. To use an example, does that statement mean this,—Assume that 50 per cent of the energy used to serve the Pennsylvania customers comes from Maryland and is clearly in interstate commerce, and the balance, the other 50 per cent, originated in Pennsylvania and was used to serve the customers in Pennsylvania; does counsel mean that in the illustration I have just used if the Commission has jurisdiction at all, the Commission may only fix 50 per cent of the rate?

MR. SPARKS: I think the answer to that is that our contention would be that the Commission could not fix any of the rate.

MR. GOLDBERG: I am glad I asked that question because it puts a different light on the statement.

The other question that I ask for clarification purposes is, I noted in response to my third inquiry, Mr. Sparks [1326] said, "purchase of electricity".

Did he mean purchase of electric energy?

MR. SPARKS: My recollection is that Mr. Goldberg used the same word.

MR. GOLDBERG: No, my question is at page 896 and I said, "Because it purchases electric energy." That is at lines 13 and 14 on that page.

MR. SPARKS: If Your Honor please, our use of the term there was in the light of the provision in Section 20 which refers to power, and if the word is to be changed, then we would use the word "Power" in our answer.

MR. GOLDBERG: May I ask how counsel for the Respondents interprets Section 20?

MR. SPARKS: It covers all character of services, if Your Honor please, such as they may be provided for under their various contracts.

MR. GOLDBERG: In other words, you think that the phraseology of Part I is broader than it is in Part II?

MR. SPARKS: I am not sure what you mean by that, Mr. Goldberg.

MR. GOLDBERG: You made specific reference to power in Section 20 and stated it would include all services in the contract of Holtwood, and I was wondering if you were making a distinction between the use of that word and the use of the phraseology in the jurisdictional provisions of Part II.

[1327] MR. SPARKS: We do take the position that the word "Power" is a broader word than the word "energy" in Part II.

MR. GOLDBERG: Electric energy?

MR. SPARKS: Electric energy.

MR. GOLDBERG: Just one or two other questions.

One of my purposes in asking these questions is, as the Examiner knows, the large number of questions that have been directed to me, and although I feel they have been answered, I plan to study them during the recess. I want to study them in the light of the answers that have just been given.

Counsel stated with respect to the illustration I used—50 per cent interstate electric energy, and 50

per cent intrastate electric energy—that it would be their contention that the Commission has no jurisdiction at all. Is it the contention of the Respondent that if any part of the electric energy used to serve, let us say, the Pennsylvania customers, is in intrastate commerce, then the Federal Power Commission has no jurisdiction?

MR. SPARKS: Yes.

• • •

[1331] TRIAL EXAMINER: The Examiner assigns the following item designations to material introduced in evidence by Respondent's counsel by reference to the official files of the Commission:

Item "O" will designate the petition for specification of issues and reconsideration of direction fixing order of procedure filed April 3, 1946, now referred to at transcript 49 and 1329.

Item "P" to the letter addressed to Pennsylvania Water and Power Company by the Acting Secretary of the Federal Power Commission dated November 16, 1945, stating the order of procedure, now referred to in the transcript at 49 and 1329.

• • •

[1333] MR. GOLDBERG:

• • • You will recall, Mr. Examiner, that at transcript pages 885 to 890, inclusive, counsel for the Respondents in this proceeding requested that staff counsel be required to state for the record the contentions of the staff with respect to certain matters included in fifteen inquiries which counsel for Respondents read into the record.

If the Examiner has no objection I will go forward with the position of the staff at this time?

TRIAL EXAMINER: Does counsel wish to state it orally, or has he the matter referred to prepared in

form for submission to the reporter for incorporation into the record?

MR. GOLDBERG: I am afraid I must state it orally by reason of its preparation. I think probably it would enable everyone here who has not heard the questions before, to understand the answers.

TRIAL EXAMINER: Very well.

MR. GOLDBERG: Counsel for Respondents stated that answers to the inquiries by staff counsel were necessary "to expedite this proceeding in an orderly manner and to afford them"—that is the Respondents—"a fair and adequate opportunity to know and meet any of the contentions of the Staff."

Counsel for Respondents also stated that the "complexity of the questions which may arise, as stated in the (fifteen) inquiries, illustrates and shows the handicap to which [1334] Respondents have been subjected by the orders in this proceeding."

Respondents state further, Mr. Examiner, through their counsel, that failure to indicate the contentions of the Staff in regard to the fifteen inquiries will deprive them of the fair hearing required by the Federal Power Act and the fifth amendment of the Constitution.

Before turning to the fifteen questions, I should like to state that notwithstanding Respondents' statements to the contrary they have been heretofore advised of Staff counsel's position on all of the matters contained in the fifteen inquiries. That presentation of their case has in no wise been handicapped. This clearly appears from the record, and further Respondents' presentation discloses a complete awareness of Staff counsel's contentions.

Staff counsel, however, Mr. Examiner, has no objection to stating again his position with respect to

the matters referred to in the fifteen questions, and I shall answer them in the order in which they appear in the transcript.

Question No. 1 is as follows:

"Is the authority of the Commission to regulate and control rates or charges in this proceeding to be exercised under Part I of the Federal Power Act? If so, under which sections?"

Although the question, Mr. Examiner, is phrased in terms of Commission action, I assume that the Respondents intended [1335] to secure Staff counsel's position.

Staff counsel contends that jurisdiction in this case exists under Parts I and II of the Act, and more particularly under Sections 20, 205, 206 and related sections.

[1336] Question number two is as follows: "Is it contended that either of the states of Pennsylvania or Maryland has not authorized, empowered or provided a commission or other agency for the regulation and control of the rates and charges of payment for services to be rendered by Respondents or by their customers engaged in public service within the meaning of Section 19?"

Staff counsel, Mr. Examiner, does not understand the reference to or the relevance of Section 19 in this case. If Respondents will explain to staff counsel the relevance or the reference to Section 19, I will undertake to respond in the light of that explanation, should response be necessary.

Question number three is as follows: "Is it contended that either of the states of Pennsylvania or Maryland has not provided a commission or other authority to enforce the requirements of Section 20 within their respective states?"

Staff counsel contends that assuming there has been no repeal by implication of the provisions of Section 20 relating to state activity in regard to interstate rates by licensees, that the state commissions of Maryland and Pennsylvania have no legal power to agree on the rates and services rendered by Penn Water in interstate commerce to Consolidated of Baltimore, Pennsylvania Power and Light Company, Metropolitan Edison Company, and Philadelphia Electric Company.

Question number four is as follows: "Is it contended [1337] that the states of Pennsylvania and Maryland are unable to agree, through their properly constituted authorities, on the services to be rendered by Respondents or on the rates or charges of payment therefore within the meaning of Section 20?"

In view of my answer to question three the answer to question number four is, of course, "Yes."

Question number five is as follows: "Is it contended under Section 20 of the Act that the Commission has jurisdiction in this proceeding to regulate and control the services rendered by Respondents to Consolidated Gas Electric Light and Power Company of Baltimore and to regulate and control the component parts of rates and charges of payment for such services as do not constitute interstate or foreign commerce, particularly the special facilities services comprising the furnishing of the Highlandtown and the Gunpowder Falls transmission line in the state of Maryland?"

Staff counsel contends that the agreement of June 1, 1931, and supplements thereto, between Consolidated of Baltimore and Penn Water, which agreement is known in this proceeding as items "H" and "I", is a contract by Penn Water for the sale of electric energy to Consolidated of Baltimore at wholesale in interstate commerce, and that under such contract Penn Water

does sell electric energy at wholesale in interstate commerce to Consolidated. Further, staff counsel contends that there is no question of intrastate commerce involved in [1338] Items "H" and "I".

Staff counsel contends, also, that the Commission has jurisdiction under Section 20 to regulate and control the rates and charges for the interstate transmission and sale of electric energy for resale which is made by Penn Water under Items "H" and "I".

Question No. 6 is as follows: "Is it contended, under Section 20, that the Commission has jurisdiction in this proceeding to regulate and control any of the services rendered by Pennsylvania Water and Power Company, by itself or jointly with Safe Harbor Power Corporation, to Metropolitan Edison Company, Pennsylvania Power & Light Company, Philadelphia Electric Company, or Pennsylvania Railroad Company, all in the state of Pennsylvania, and to regulate and control the rates and charges of payment for any of such services? If so, which services, rates and charges to which companies?"

Staff counsel contends that Penn Water sells electric energy at wholesale in interstate commerce to Metropolitan Edison Company, Pennsylvania Power and Light Company, and Philadelphia Electric Company, and that the sales of electric energy made under those contracts are not made jointly by Penn Water and Safe Harbor.

Staff counsel further contends that Safe Harbor sells all of its electric energy under the contract identified in this proceeding as Items "E", "F", and "G" to Penn Water and [1339] Consolidated of Baltimore.

Staff counsel contends that the rates and charges under Items "H" and "I" in this proceeding and in the sales of electric energy to Pennsylvania Power and Light Company, Metropolitan Edison Company,

and Philadelphia Electric Company, are all subject to the Commission's jurisdiction under Section 20. Staff counsel is not asserting any claims with respect to Exhibit 10, which is the Pennsylvania Railroad contract, but that is not to say that the Commission is without jurisdiction over that contract.

Question number seven: "Is it contended that the Commission has jurisdiction in this proceeding under the Act to regulate and control or to determine and fix by order any division of rates or charges which may be received by Pennsylvania Water and Power Company for services rendered jointly with others? If so, which divisions?"

Question number 7 has no relevance to the proceeding for, as staff counsel views it, Penn Water has no joint rates.

Question number eight is as follows: "Is it contended that the Commission has jurisdiction in this proceeding under the Act to regulate and control, or to determine and fix by order, any rates or charges for services rendered jointly with others, without making such other participants in such joint services parties respondent to this proceeding?"

This question is likewise irrelevant, because as staff [1340] counsel views it, Penn Water has no joint rates.

Question number nine: "Is it contended, under Part II of the Act, that the Commission has any jurisdiction to determine and fix by order any of the rates, charges or classifications of Pennsylvania Water and Power Company for services rendered to its customers? If so, is the authority of the Commission in this proceeding to be exercised under Part II of the Act, particularly Sections 206 (a) or 206 (b) thereof?"

Staff counsel contends, among other things, that the Commission has jurisdiction under Part II to de-

termine and fix by order the rates, charges or classifications of Penn Water for the transmission and sale of electric energy at wholesale in interstate commerce to Consolidated of Baltimore, Pennsylvania Power and Light Company, Philadelphia Electric Company, and Metropolitan Edison Company.

Staff counsel contends that such authority exists, particularly under Sections 205, 206 and related sections.

Question number ten: "Is it contended under Part II that the rates or charges of Pennsylvania Water and Power Company and Safe Harbor Water Power Corporation for services to Consolidated Gas Electric Light and Power Company of Baltimore, are for the transmission or the sale of electric energy within the meaning of Sections 201 (b) and 206 (a), and that thereby the Commission has jurisdiction in this proceeding under such sections to determine the justness and reasonableness of [1341] such rates and charges and to fix the same by order?"

Staff counsel contends that Penn Water sells electric energy at wholesale in interstate commerce for resale to Consolidated of Baltimore under Items "H" and "I", so designated in this proceeding, that the sales of electric energy in interstate commerce for resale made by Safe Harbor are made only under Items "E", "F" and "G", and that Safe Harbor and Penn Water are not engaged jointly in selling electric energy at wholesale in interstate commerce for resale to Consolidated of Baltimore, and that the Commission has jurisdiction under Part II to regulate the rates or charges for the transmission or sale of electric energy to Consolidated of Baltimore by Penn Water.

Question number eleven: "Is it contended under Part II that the Commission has any jurisdiction in this proceeding to determine and fix by order the com-

ponent parts of the rates and charges of Respondents for the special facilities services rendered to Consolidated Gas Electric Light and Power Company, comprising the furnishing of the Highlandtown substation facilities and the Gunpowder Falls transmission line in the state of Maryland?"

Staff counsel contends that the Commission has complete jurisdiction under Part II of the Act to regulate the interstate transmission or sale of electric energy for resale in interstate commerce to Consolidated of Baltimore by Penn Water.

[1342] Question number 12: "Is it contended under Part II that the Commission has any jurisdiction in this proceeding to determine and fix by order the component parts of the rates and charges of Pennsylvania Water and Power Company and Safe Harbor Water Power Corporation to Consolidated Gas Electric Light and Power Company for the services rendered by them jointly with others to the Pennsylvania Railroad Company in the state of Maryland?"

Question number 12 is irrelevant for, as staff counsel views it, Penn Water and Safe Harbor are not engaged in rendering joint service and staff counsel is asserting no claims with respect to the Pennsylvania Railroad contract.

Question number 13: "Is it contended under Part II that the rates or charges of Pennsylvania Water and Power Company by itself or jointly with Safe Harbor Water Power Corporation for any of the capacity, energy or special services to Metropolitan Edison Company, Pennsylvania Power and Light Company, Philadelphia Electric Company, or Pennsylvania Railroad Company, all in the state of Pennsylvania, are subject to the jurisdiction of the Commission in this proceeding? If so, which of the rates or charges for such services to which of such customer companies?"

Staff counsel contends that Penn Water is engaged in the sale of electric energy for resale in interstate commerce to Metropolitan Edison Company, Pennsylvania Power and Light [1343] Company, and Philadelphia Electric Company, and that Penn Water and Safe Harbor do not render any services jointly to these companies.

Staff counsel also contends that the sales of electric energy described are subject to the Commission's jurisdiction under Part II of the Act.

Staff counsel is not asserting any claims with respect to Exhibit 10, which is the Pennsylvania Railroad contract, but that is not to be construed as meaning that the Commission is without jurisdiction over this contract.

Question number 14: "Is it contended under Part II that the rates and charges of Pennsylvania Water and Power Company, jointly with Safe Harbor Water Power Corporation, Consolidated Gas Electric Light and Power Company of Baltimore, and Potomac Electric Power Company, for services to Pennsylvania Railroad Company, are sales of electric energy at wholesale within the meaning of Sections 201 (b) and 201 (d), and are thereby subject to the jurisdiction of the Commission in this proceeding?"

This question is irrelevant for staff counsel is asserting no claims with respect to the Pennsylvania Railroad contract.

Question number 15: "Which of the rates, charges or classifications for services, which it may be contended are subject to the jurisdiction of the Commission in this proceeding under Part II, or which of the rules, regulations, practices or contracts affecting such rates, charges, or classifications, is [1344] it contended are unjust, unreasonable, unduly discriminatory or preferential?"

Staff counsel contends that the rates involved in the sale of electric energy at wholesale in interstate commerce by Penn Water to Consolidated of Baltimore, Metropolitan Edison Company, Pennsylvania Power and Light Company and Philadelphia Electric Company are unjust and unreasonable. Staff counsel further contends that the Commission's authority relates not only to the rates involved but to all of the provisions of the contract and all terms and conditions thereof which the Commission in the exercise of the authority may order revised in accordance with the facts in this case.

MR. SPARKS: Of course, Mr. Examiner, I have not had an opportunity to analyze the answers which Mr. Goldberg has given. Obviously he has not answered all of the questions directly or specifically, so I should like some time to study the answers after we have had an opportunity to read them in the record, and take such position and make such representations here as we deem advisable at that time.

* * *

[1348] JOHN A. WALLS.

* * *

CROSS-EXAMINATION.

By MR. GOLDBERG:

* * *

[1362] Q. Isn't it a fact, Mr. Walls, that construction work on the McCall Ferry project ceased in November, 1907? A. I do not believe that is the case, but I am not competent to testify on that. There are others in the company who have investigated the matter who may be called upon to give you that information.

Q. I am interested in your statement that you do not believe it is the case. Why do you say that? A. I believe that some construction work was done in 1908.

[1363] Q. Such as? A. Work on Cully's Cut.

Q. Tailrace excavation? A. Yes. Some concrete placement, building of a ramp, design of the plant details, etc.

Q. And those matters which you have just enumerated are matters which came to your attention when you first went to the project in 1909, or since 1909? A. Both.

Q. Did you in connection with the company's original cost determination review the matter of cessation of construction work on the McCall Ferry project? A. Not in detail at all.

* * *

[1364] Q. Did you express an opinion at the time you talked to him that there had been no cessation of construction work in November, 1907? A. I don't think I did because that would be subject to definition as to what is cessation of construction, whether it is temporary or for a limited period such as for the season or because of a flood. I do not believe I discussed those things in detail to a degree that I remember.

[1365] Q. What did you think Mr. Gunn was discussing with you when he was talking about cessation of construction work in November of 1907? A. I think that was a general term for the interruption which took place in the normal, or we might say steady, progress of construction work due, in the case of 1907, to the failure of the Knickerbocker Trust Company.

Q. You say "Interruption which took place." What do you mean by interruption? A stopping of the work for a limited period of time and then resumption at a later date? A. No, not necessarily.

Q. What do you mean? A. Interference with the steady progress of the work. I do not believe that at that time all of the people were discharged from the work. Some work may have gone on at very slow pace. That I don't remember.

Q. You say not all of the people were discharged. Do you know how many people they had before November 1907, working on the project? A. I don't remember.

Q. Do you know how many people they retained? A. A few.

Q. How many? A. I don't remember.

Q. Very few? [1366] A. I judge a few.

Q. You wouldn't call the few that remained, a construction crew, would you? A. It depends on what they were doing.

Q. What were they doing? A. I don't know. I don't recall.

• • •

[1368] Q. At least describing the work generally as you have, your impression of what was carried on, isn't it fair to describe the work during the period which I refer to as the period of cessation, and you as the period of interruption to construction, as consisting of necessary maintenance, clean up, tailrace excavation, and the placing of a small amount of concrete required to protect the existing plant.

• • •

[1369] THE WITNESS: That was important work, and it is my impression that it consisted generally of that, but the Tailrace work was an especially important construction job.

By MR. GOLDBERG:

Q. It was the type of work which could be carried on independently of the cessation. Isn't that so? A. I don't understand what is meant, "Independently of the cessation."

Q. It was a special job which could be carried on, even though no other construction work was going on at the project. [1370] Isn't that so? A. It could be, but it was not carried on for that reason. I judge it was carried on

because it was such an essential portion of the work to get completed so as to be out of the way when the powerhouse construction would start.

* * *

Q. The work was continued, as you understand it, to secure the benefit of progress which had already been made in completing the tailrace excavation. Is that right? A. No, sir. This was work that it was desirable to do if possible with the least interference with the powerhouse construction. It was because of this situation that the tailrace was below, in other words, south of the powerhouse, and the excavated rock from the tailrace had to be carried across the construction area to the north of the powerhouse and there deposited in a ramp. Had the powerhouse construction work [1371] and the tailrace construction work gone on together there would have been a certain amount of confusion in bringing the cars of rock from the south to the north and in bringing the machinery in from the east to the west and in bringing concrete materials in from east to west crossing over this very limited construction area. So it seems to me it was a great advantage to get that tailrace work out of the way before the powerhouse construction started, and I should think as an engineer that it would make the cost of the construction cheaper in the end to have done it that way.

Q. Doesn't your explanation bear out what I said some moments ago, that it was a special type of job? A. Any type of job in connection with a power plant might be said to be special.

Q. It was the type of job which you had said it was beneficial to carry on when other construction work, particularly of the powerhouse, was not going on. Isn't that so? A. That is true.

* * *

[1491] Q. * * * Mr. Walls, just how did the failure of Knickerbocker Trust Company make it impossible for McCall Ferry Power Company to secure necessary funds to continue construction? A. I can't answer that. That can be answered by somebody who has gone through the record and studied it.

Q. But you have testified it was the failure of the Knickerbocker Trust Company that made it impossible for McCall Ferry Power Company to secure the necessary funds for continuing construction of its plant. As a result they had to curtail their work. A. That is right. That is a matter of general knowledge at the time, but I don't have in mind the details.

Q. I want to know what your general knowledge is based on. I want to know how much substance your opinion has. A. I know there was the Knickerbocker Trust failure. I am aware from the records that the work was curtailed as a consequence of lack of money, attributed to the Knickerbocker Trust failure. I can't go into any further detail without examining the records, but you can get all of that information from witnesses who will be available.

Q. I am trying to find out what you know about it. How much money was on deposit with the Knickerbocker Trust [1492] Company when it failed? A. I don't know.

Q. If it hadn't failed was there sufficient money in the bank to complete the project? A. I don't know.

Q. Do you know whether in the initial financing sufficient funds were secured to complete the project as planned? A. Of the McCall Ferry Company?

Q. Yes. A. I do not know.

Q. If it were the fact that when the project was initially financed by McCall Ferry Power Company they had not secured sufficient funds to complete the project, would you say that the failure to complete the project was due to the bankruptcy of the Knickerbocker Trust Company? A. Yes.

Q. Why? A. Because I have had too much experience in constructing power plants where money was not available at the beginning in sufficient amounts, and where it was necessary to scrape it together from time to time, often under considerable hardship, but nevertheless work was carried on. I refer now to the Shawinigan Power plant.

Q. But assuming further that there wasn't enough money [1493] in the Knickerbocker Trust Company to complete the project, and enough funds could not have been secured from Knickerbocker Trust Company on loan, using the initial financing as collateral, would you still say that the failure of the Knickerbocker Trust Company caused the cessation of the work in November of 1907? A. Yes, in this sense: That the Company might have secured funds from some other source.

Q. Why didn't it go to another source? A. It wasn't practicable at that time. There was a panic.

Q. When was the initial financing done? A. I don't know.

Q. You know it was in 1905, don't you? A. No, I don't remember.

Q. Let's assume it was in 1905. When did the Knickerbocker Trust Company fail? A. I think in November of 1907. I am not sure of the month.

Q. So if my assumption as to the completion of the initial financing is correct there was a period of two years during which time the McCall Ferry Power Company knew they did not have enough funds to complete the project. Isn't that so? A. That I judge is so.

[1494] Q. And during those two years they had the opportunity of securing the additional funds, didn't they? A. I assume so.

Q. There was no panic in those two years? A. Not that I know of.

Q. There had been no failure of the Knickerbocker Trust Company? A. True.

Q. So, despite the fact the opportunity was available to them, they made no effort to secure those funds. Isn't that so? A. That is true, but I assume there was no necessity in the absence of fore-knowledge of the panic. It would perhaps be better to get the money later on if it was going to be available and pay less interest on it.

* * *

[1515] Q. What work other than that performed by Empire was carried on by the receiver, Mr. Aldred, during the receivership? [1516] A. Designing work, contracting for equipment, organization of the personnel to be expanded later into the force required for later design, construction and operation.

I judge that there were property matters that came up for consideration, but I was not familiar with them.

Q. Did you mention the letting of construction contracts?

I think you mentioned contracts for equipment. I was wondering whether you had intended to include, in contracts for equipment, contract with Empire Engineering? A. I had omitted to mention that. It is true that that is one of the things the receiver did.

Q. Who was carrying on the design work? A. It was being carried on under my direction.

Q. Under your direction? A. Yes.

Q. So that began not earlier than November 1, 1909? A. The additions or changes to the previous plans were started then under my direction. But there were pretty complete detailed plans for much of the work in existence at that time.

* * *

[1517] Q. What contracts for equipment were made during the receivership? A. I cannot be too sure about that, but I think in connection with the generators and turbines, possibly other electrical equipment, but I do not recall definitely the dates when those contracts were entered into.

Negotiations started during the receivership, but whether they were terminated then or later on in 1910, I do not recall.

[1518] Q. Who undertook the organization of personnel during the receivership? A. The Empire Engineering Corporation had its own organized personnel, and when I came in November 1, I started to organize the company's personnel.

Q. What were these property matters that you refer to? A. I wasn't familiar with the property matters at that time, but I think that there was some disagreement over property matters with a man named Heine, at Pequea. I think also matters were taken up with the Pennsylvania Railroad, but I am not sure of that as to date.

Q. Relocation of tracks? A. Not the relocation itself but some property matters growing out of the relocation of the tracks.

Q. Who was carrying on the property matters? A. Mr. Clarke.

* * *

[1687] Q. Glancing down the balance of page 2 and page 3 of that report [Exhibit 79], do you find any statements in there to which you find you cannot subscribe now? A. With the exception of the interpretation which I have placed upon the first sentence of the fourth paragraph I see nothing to which I would object greatly other than the statement that there has recently been installed a system of flash boards at the top of the dam whereby we obtain an increased head of four feet with resultant increase in the storage capacity above the dam. I take no exception to that.

> "This device should give the plant an increased efficiency of about 25 per cent at the low stage of the river."

[1688] I think that statement is one which really requires amplification because the device actually produced greater

pondage and greater head. I do not know how you would apply a percentage figure to those two things.

* * *

[1752] Q. You have told us that Safe Harbor makes its service available under the three-party contract, Items "E", "F" and "G", Exhibit No. 71 up to the end of December 31, 1945, that is for Exhibit 71 to Edison Light and Power, Exhibit 73, Philadelphia [1753] Electric, and Exhibit 76 to Penn Power and Light Company. Right? A. Yes, sir.

Q. What do you mean when you say, "Safe Harbor makes its services available" under those contracts, taking up each one separately, if you will? A. In general I mean by making its services available that Safe Harbor, by contract, is supposed to stand ready to supply the entitlements of the customers as the customers may draw on those entitlements.

The entitlements differ under the four contracts. They are very different as to details and each contract, of course, would have to be considered by itself in all its details in connection with any explanation.

Q. Perhaps I can simplify it by asking the direct question: Does Safe Harbor under the contracts known as "E", "F" and "G" in this proceeding sell electric energy to Consolidated and to Penn Water?

MR. SPARKS: I object, if Your Honor please, on the ground that the contracts speak for themselves.

TRIAL EXAMINER: Objection overruled.

THE WITNESS: "Sell electric energy" is perhaps a very loose and inaccurate way of specifying. There is billing on the basis of energy but energy is only one of the attributes of the service which the customer is entitled to draw, others being, [1754] for example, power, power factor and voltage and frequency and perhaps other characteristics.

By Mr. Goldberg:

Q. Aren't power factor and voltage conditions of service? A. I would say that they are all conditions of service. Voltage and energy is a condition of service, also.

[1755] Q. In other words, you sell electric energy of certain characteristics. That is when you say "Power factor and voltage". Isn't that so? A. No, sir. I don't think it is quite that. I think we sell service. It is up to the customer to draw under his entitlement as much of that as he wishes at such times.

Now, then, it is the duty of the supplier to provide that the draft of energy be in accordance with the terms of the contract, for instance, within a certain voltage range and that there should be a certain amount of power available, if that is what you mean.

Q. You are telling us that in connection with the sale of electric energy when you say that a company sells electric energy the term covers many conditions of service involved in that sale. Right? A. I would say that selling electric energy is a loose way of speaking. It sells electric service and billing is based partly on energy. I think that is the better way to speak of it.

Q. Can the customers utilize the service without the electric energy? A. No, sir, no more than it can utilize the service without the power or without the frequency or the voltage or the phases and so forth.

Q. So the electric energy they receive is a [1756] consideration to the payment they make. Right? A. Is one of the attributes of the service. I don't know how to interpret it otherwise.

Q. Is it inaccurate for me to say that Safe Harbor sells electric energy under items E, F, and G, to Consolidated and Penn Water? A. If you mean by that what I mean, that actually what is sold is service, if that is a short way of saying that and perhaps an imperfect way then it is all right.

Q. And part of that service is the electric energy—right? A. Part of that service is having available electric energy and power under various stipulated conditions.

Q. Right, such as power factor, voltage— A. But not energy alone or power alone or phase alone.

Q. The power factor is determined by the customer's load, isn't it? A. In part, but also determined by the relative excitation of the fields of the supplier and customer.

Q. You are saying that a part of the service rendered under items E, F, and G is the electric energy delivered to Consolidated and Holtwood under the conditions prescribed in that contract—right?

* * *

[1757] THE WITNESS: I wouldn't say it is a separable part. I might say it is one component mixed in with others, all of which are required to be available by the supplier to the customer.

By MR. GOLDBERG:

Q. All right. You name all of the components of service to Penn Water and Consolidated by Safe Harbor under items E, F, and G. A. Energy.

Q. Electric energy? A. Electric energy, electric power.

Q. What's that second one? A. Electric power, frequency, voltage, power factor cooperation, proper number of phases, and a supply naturally is subject to variation from time to time as to the quantity of energy, and there are certain tolerances with respect to voltage, frequency and power factor.

Q. Will you say there are certain—when you say there are certain tolerances you mean there is a certain leeway from the power factor designated in the contract, voltage and frequency designated in the contract—is that right? A. Yes, sir, from the normal.

Q. Will you describe now all of the components of service under Exhibit 71 by Safe Harbor? [1758] A. They would be the same as to the characteristics and service but would differ as respects the amounts as perhaps in some other respects, too.

Q. You mean may differ in the amount of kilowatt hours and the demands? A. And perhaps the voltage and some other things.

Q. But Exhibit 71 would involve, would it not, electric energy, electric power, frequency, voltage, power factor, proper number of phases, and the supply subject to variation from time to time with respect to the quantity of energy and would involve certain tolerances with respect to the voltage, frequency and power factor—right? A. Yes, sir.

Q. In other words, all of the components of service that are in items E, F, and G, are also in Exhibit 71, with the qualification that in Exhibit 71 there may be variations in the detail in degree—right? A. I think that is right.

Q. Is that true of Exhibit 72? A. I think so.

Q. Exhibit 73? A. I think so.

Q. Exhibit 76? A. Yes, sir.

Q. Do you know of any contracts that do not involve [1759] these components of service which you have described? A. I don't recall any now.

Q. In other words, it may be said that in all contracts the disposition, the output of generating units to customers involve these components of service you have described—right? A. Yes, sir; • • •

• • •

[1763] Q. What you have told us about the rendering of this electric service amounts to this, does it not: Someone decides to buy his water in bottles, spring water, for instance. He just does not buy water. He wants such water to have a certain bacterial content and so forth; isn't that so? A. Yes.

Q. And that is what you have in mind when you break up the kilowatt hours in these components, the same way that I just broke up the water into its components, bacterial content, and so forth? A. It is a little different from that because the customer couldn't be satisfied merely with energy which he might draw, let us say, over 24 hours a day at low power, because his load might be peaked, which would require him to have that energy available during certain hours at a very high rate, in other words, a high power.

Q. In other words, it is like this man I am talking about that buys water. He is not satisfied with just any water. He wants water of certain characteristics at the times he needs it and wants it. Right? A. Yes. I think the example would be a little more apt if you would refer to flowing water where the customer can [1764] open his spigot at his wish and draw the amount of water which he wishes at the pressure which he wishes and have the characteristics which he wishes.

* * *

[1765] Q. The commodity that you generate, transmit, sell to your customer, that is the electric energy or kilowatt hour component—right?

* * *

THE WITNESS: No, sir. I should say the commodity is the electric service which consists of energy and these other attributes.

By MR. GOLDBERG:

Q. But the commodity that you generate is the electric energy or kilowatt hours—right? A. We generate energy at a certain rate and under certain conditions, but that does not make energy the commodity in my opinion.

Q. To get that ultimate commodity there are other factors that are involved such as rate of delivery that you

mentioned and voltage and frequency—right? A. No. I should say when you look at electric supply as a whole, energy is just one characteristic of it, and energy is not the only thing that is sold. Ordinarily the billing is on the basis of energy, plus, of course, charges for other services which might be rendered.

* * *

[1766] Q. Is it your statement that Safe Harbor does not sell electric energy under Items "E", "F" and "G" to Consolidated and Penn Water? A. I believe that is the case, that it does not sell energy itself to Consolidated. Consolidated draws energy.

Q. You say it does not sell electric energy to Consolidated itself? A. It does not sell electric energy itself to Consolidated.

Q. By that you mean that the electric energy that is sold to Consolidated and Holtwood is the result of the other characteristics or conditions of service that you mentioned, [1767] such as frequency, voltage, power factor, proper number of phases, electric power, and so forth—right? A. Not quite that. It is more this way: that the supplier holds itself ready to supply the draft of energy which may be drawn at the customer's volition, and the billing in the case of Consolidated is not related to energy as it is with the other customers, including the railroad, Lancaster, Coatesville, Metropolitan.

* * *

[1769] Q. Now to get back to my question: Does Safe Harbor sell electric energy to Consolidated and to Holtwood under [1770] Items "E", "F" and "G"?

* * *

THE WITNESS: I don't think that it does. It sells service.

By MR. GOLDBERG:

Q. It does not sell electric energy? A. As such, no. It sells service.

Q. What does that "as such" mean? A. Energy is one attribute of the service, but one among many. I don't want to exclude the thought that energy comes into the supply that is taken by Consolidated, but it is not the billing basis and it is not what Safe Harbor, to my mind, sells.

• • •

[1771] Q. The energy that you conceive of as being transmitted over those lines at Baltimore are measured in terms of kilowatt hours at the customer's premises—right? A. Yes, sir.

Q. Nevertheless, you say Safe Harbor does not sell electric energy under their contract, right? A. That is my interpretation of it, yes, sir.

TRIAL EXAMINER: May I test one of your answers you gave previously by reversing the language a bit? Would you say as an attribute of service that Safe Harbor sells energy?

[1772] THE WITNESS: No, sir, I don't think Safe Harbor sells energy to Consolidated. It makes energy available to Consolidated and Consolidated draws that energy but does not pay for that energy on the basis of the amount of energy it receives.

TRIAL EXAMINER: Not even as an attribute of service?

THE WITNESS: Not even as an attribute of service to Consolidated Company, although I would prefer my explanation to an assertion that energy was not an attribute of service. That is a little difficult for me to decide at the moment.

By Mr. Goldberg:

Q. Are you saying in that answer to the Trial Examiner, Mr. Walls, that Safe Harbor does not sell electric energy to Consolidated because the contract does not provide a rate per kilowatt hour like some contracts do? A. Yes, in the sense that Consolidated pays the same amount, you might say, whether the energy is great or little so that the billing is not dependent upon the amount of energy, as, for example, in cases where in the old times electric lighting was sold on a flat rate. You paid so much and used the lamps in your house as much as you pleased.

Q. You say, then, that there is no sale of electric energy because the payments under the contract are not arranged in terms of a rate per kilowatt hour—right? A. Yes, sir, I would say then that sale is not attached to energy.

[1773] Q. But that is not the fact, is it, with respect to the contracts which are numbered 71, 73 and 76. Is that right? A. I would say in all cases we ought to use the words "sell service" and not "sell energy." But actually energy is billed along with demand charge for power in contracts 71, 73 and 76.

Q. Would you say that electric energy is not sold under Exhibits 71, 73 and 76? A. Strictly speaking energy is not sold. It is service that is sold.

Q. Is it your statement that strictly speaking electric energy is never sold, that it is service that is sold? A. I would think that would be a more accurate way of speaking, but it is not the usual way and very often I do not speak of it in that accurate way.

Q. In the usual sense you would say electric energy is sold under Exhibits 71, 73 and 76—right? A. Yes, sir.

Q. But you would not say that in the usual sense with respect to Items "E", "F" and "G"—right? A. Yes, sir.

Q. And you would not say it in the usual sense with respect to Items "H" and "I", which is the contract be-

tween Holtwood and Consolidated—is that right? A. Yes, sir.

[1774] Q. You consider the contracts "E", "F" and "G" and "H" and "I" of the same character and on the same footing—right? A. In general, yes, sir.

• • •

Q. I mean what is the difference between what is delivered at Lancaster, York, Coatesville, Holtwood and Baltimore? A. They are all the same in that they are electric supply .

Q. All kilowatt hours? A. All kilowatt hours with the other attributes.

• • •

[1775] Q. • • • Let me start over again. Let me first mention the contracts under which Penn Water sells. Those contracts in 1939 are Items "H" and "I", Exhibit 71, Exhibit 73, and Exhibit 76—right? A. Pennsylvania Railroad should be included.

• • •

[1776] Q. I mentioned "H" and "I", the two-party agreement. A. Yes.

Q. Exhibit 71, which is the York supply, Exhibit 73, Coatesville supply, Exhibit 76, Lancaster supply, and you have added Pennsylvania Railroad contract. Right? A. Yes, sir.

Q. Then the only contract they had in 1939 to purchase were items "E", "F" and "G"—right? A. I think that is right.

Q. I am not talking about the interchange agreements. A. Yes.

Q. And the situation was the same in 1940, wasn't it? A. Yes, sir.

Q. And the same in 1941? A. Yes, sir.
Q. And the same in 1942? A. Yes, sir.
Q. And 1943? A. Yes, sir.
Q. The same in 1944? A. Yes, sir.
Q. The same in 1945—right? [1777] A. Yes, sir.
Q. But in 1946 Exhibit 71 was superseded and replaced by Exhibit 72, which is the agreement between Penn Water and Metropolitan Edison—is that right? A. Yes, sir.
Q. In 1932 what contracts did Safe Harbor have? I can help you on one of them, "E", "F" and "G"—— A. I don't remember.
Q. Which is the three-party contract. That certainly was in existence in 1932, right? A. Yes, sir. I would have to look up the others. I don't recall at the moment.
Q. If you find that they had any other contracts in 1932 I wish you would let me know. A. Very well.
Q. In 1933, and for every year up to and including today, Safe Harbor had the contract identified as Items "E", "F" and "G"—right? A. Yes, sir.
Q. Do you say that Safe Harbor had any other contracts between 1933 and today for the sale of electric energy? A. Other contracts than what?
Q. "E", "F" and "G".
A. It had contracts, omitting for the moment consideration for the sale of electric energy.
[1778] Q. All right. A. It had other contracts.
Q. Had what? A. It had other contracts, but I don't recall the dates of them.
Q. Are you referring to the Lancaster power supply contract which is dated May 1, 1933? A. Yes, sir.
Q. Are you referring to the Coatesville power supply contract dated August 1, 1933? A. I think so, yes, sir.
Q. You would say, then, that Safe Harbor had contracts with those companies named in Exhibit 73 and 76 in 1933 and for every year thereafter including today—right? A. Yes, sir.

Q. And you would say that beginning with 1935 Safe Harbor had an agreement known as the York power supply contract beginning with that date down to and including December 31, 1945. Is that right? A. Yes, sir.

Q. Would you say that Safe Harbor has an agreement with Metropolitan Edison Company known as the Metropolitan Edison power supply contract of November 15, 1945?

• • •

[1779] THE WITNESS: No, sir.

• • •

Q. Now, is it your statement that Safe Harbor sells, first, to use your term, electric service under Exhibits 71, 73 and 76? A. Yes, sir.

Q. Now, will you say, accepting my phrase, that it sells electric energy under those contracts? A. Excepting?

Q. No, not excepting but accepting my phrase that it sells electric energy under those contracts. A. No, I would say that it sells only electric service.

Q. Electric service? A. Yes.

Q. And you say that Safe Harbor sells electric service under Items "E", "F" and "G"—right? A. Yes, sir.

Q. Isn't it a fact that Safe Harbor sells all of its electric service, to use your terms, under Items "E", "F" and "G"? [1780] A. I don't know how that would be interpreted. As I look at it, being a party to these three contracts, Safe Harbor may be said to be in position to sell and may be selling service. It is a legal matter and I can't decide it.

• • •

Q. • • • is it your statement that Safe Harbor does not render all of its electric service under Items "E", "F"

and "G"? A. I think that it does render all of its service under Items "E", "F" and "G", but it renders that service to a pool, which service is extended to other customers.

Q. And that is the case with respect to Exhibit 72, is it not?

• • •

THE WITNESS: Except for the legal implications I think that is true.

• • •

[1781] By MR. GOLDBERG:

Q. Your engineering and layman's concept—right? You were not giving me a legal answer when you said "That is true"—right? A. No, sir, an engineering answer.

• • •

Q. Now, then, in view of the fact that the electric service is fed into a pool, the condition of service was the same under the superseded contract, Exhibit 71, as it is under Exhibit 72—right? A. Legally, or engineering viewpoint?

Q. Engineering viewpoint. [1782] A. I see no difference.

• • •

[1783] MR. GOLDBERG: I think I can dissipate any confusion which may exist.

TRIAL EXAMINER: Very well.

MR. GOLDBERG: If I were to say this: Exhibit 71 is the York Power Supply contract under which service was rendered to Edison Light and Power Company.

Penn Water and Safe Harbor were named parties in that agreement.

That contract was superseded by Exhibit 72, beginning January 1, 1946, and in the new contract only Penn Water is a named party, Safe Harbor is not.

Now, then, Mr. Walls has stated that with respect to the superseded agreement, Exhibit 71, service was rendered by Safe Harbor by reason of the fact that it fed its service into a pool which pool was drawn upon, perhaps, to meet the [1784] requirements of Edison Light and Power and Metropolitan Edison, and he has further agreed that under the new agreement, Exhibit 72, Safe Harbor still feeds its service into a pool and that pool is drawn upon to serve Metropolitan Edison.

By Mr. Goldberg:

Q. Have I correctly stated it, Mr. Walls? A. I think so.

• • •

[1786] Q. Why was Safe Harbor included in Exhibit 71, and left out of Exhibit 72, even though in both cases its service is rendered by feeding into a pool? A. I don't know.

Q. You signed the contract which is known as Exhibit 71 in behalf of Penn Water and Safe Harbor as president of both companies, didn't you? A. Yes, sir.

Q. When you signed it in behalf of Safe Harbor as its president were you of the opinion that Safe Harbor was going to render service directly to the purchasing companies in Exhibit 71? A. I can't remember fully, but it seems to me that it [1787] was desirable to have Safe Harbor a party to the contract partly for tax reasons and perhaps partly for assurance to the customer that the customer would be protected by Safe Harbor's intervention, and perhaps for other reasons. I don't remember them now.

Q. How could the customer be assured of service by having Safe Harbor included in the agreement then if Safe Harbor had been left out of the agreement? A. The customer would have been dependent upon Penn Water only had Safe Harbor been left out, and I suppose the customer might have felt that he had an extra assurance by having Safe Harbor as a party.

Q. How could he have extra assurance by having Safe Harbor's name in the contract if Safe Harbor sells all of its service under items E, F, and G? A. I can't explain it.

Q. In other words, if it sells all of its service under items E, F, and G, it has nothing left to sell to the customer under Exhibit 71, isn't that so? A. There may be a legal element involved there that I am not competent to speak of.

* * *

[1788] THE WITNESS: If Safe Harbor is a party to the contract with York Edison with the consent of the other parties, Penn Water and Consolidated, I should think that Metropolitan would have more assurance of supply than if it relied upon a contract with Penn Water alone.

By MR. GOLDBERG:

Q. Isn't it a fact that the provisions of the items E, F, and G require the sale of all of Safe Harbor's service to Consolidated and Penn Water? Right?

* * *

THE WITNESS: Safe Harbor contract, as I recall it, gives a contractual entitlement to Penn Water and Consolidated on a ratio of one-third and two-thirds, but that contractual entitlement I think must be construed in the light of the contract between Consolidated and Penn Water, so there is an involvement there that prevents me from answering that question.

* * *

[1791] Q. I mean did Safe Harbor under the provisions of Exhibit 71 sell any electric service to the customer companies in that contract? A. All I can say is that it didn't bill it. What was meant by selling it I don't know from your sentence.

Q. If they had sold it wouldn't they have billed it? You mean they give it away? A. Well, I think if selling and billing are to be considered together then Safe Harbor didn't sell.

Q. As a matter of fact, every penny of revenues that Safe Harbor has ever received it received under the electric service rendered in connection with items E, F, and G. Isn't that so? A. So far as I remember at the moment.

* * *

[1792] Q. Mr. Walls, entirely from the viewpoint of your familiarity with the operations of the company as its chief executive officer and as its chief engineer for many years, can you tell us which of the contracts of Pennsylvania Water and Power Company involve the transmission or sale of electric energy in interstate commerce? A. The Penn Water Consolidated contract.

Q. Items H and I? A. Yes, sir.

* * *

[1793] Q. And speaking again from your knowledge of the company, that is of Safe Harbor Water Power Corporation this time, having been associated with that company as its chief executive officer and in other responsible positions since its incorporation, which of the contracts of Safe Harbor involve the transmission or sale of electric energy in interstate commerce in your opinion?

MR. SPARKS: I will object to the question, if your Honor please, on the ground that although Mr. Goldberg may be willing to state that he is asking the question in order to elicit an answer not legal in its implications that the answer necessarily does involve legal implications.

The reason I say that is this: If it were not for the language in the Act referring to transmission and sale of energy in interstate commerce, I am quite sure

Mr. Goldberg would not ask the question. That means that there must be some effort here to have the witness testify with regard to the meaning of those terms in the Federal Power Act.

• • •

[1794] TRIAL EXAMINER: The previous question involved Penn Water?

MR. GOLDBERG: Yes, the same question except this involves Safe Harbor.

TRIAL EXAMINER: Let the Examiner state this: That as far as legal concepts are concerned he understands what Respondent's counsel's objection amounts to and why he makes it.

If this question had been asked at the very outset of the cross-examination the Examiner would be willing to invoke a more stringent or stricter rule in the consideration of whether he would sustain that objection or not. But this witness has been cross-examined this morning at some length on this very subject, and there has been a great deal of difficulty on the part of the cross-examining attorney and the witness to get their ideology or ideas in line.

Now, then, in view of the difficulties encountered this morning in connection with this witness' engineering opinion as to whether energy was involved under these contracts, the Examiner will permit the present question to be [1795] put as a necessary culmination, or as a last resort, to counsel in getting answers concerning the transmission of energy, or the sale of energy.

• • •

[1796] TRIAL EXAMINER: Involved in this question is some conception of what interstate commerce is.

MR. SPARKS: That is right.

TRIAL EXAMINER: To that extent counsel's objection is well taken.

But in view of the whole discussion which has been had with regard to the operations of these two companies the Examiner believes the witness is capable of answering the question without injustice to himself or Respondent.

The objection is overruled.

MR. SPARKS: May it be understood, if your Honor please, that the witness is not giving a legal answer to the question?

TRIAL EXAMINER: That is correct.

• • •

[1797] THE WITNESS: From an engineering viewpoint I should say the three party contract——

By MR. GOLDBERG:

Q. Items E, F, and G. A. Items E, F, [redacted] G. I can't trace any particular kilowatt in interstate commerce.

Q. We know, for instance, that the kilowatt hours that go over the 220 K. V. lines from Safe Harbor to Baltimore which originate at Safe Harbor originate in Pennsylvania and are transmitted into Maryland. Right? A. Yes, sir.

Q. When I said "interstate commerce", that is what you understood me to mean, origin in one state and transmission into another state—right? A. Yes, sir.

• • •

[1799] Q. As an engineer, and as a man familiar with the operations of Pennsylvania Water and Power Company, is it your statement that the York Power Supply contract, the Coatesville Power Supply contract and the Lancaster Power Supply contract do not involve the transmission

of electric energy which originated outside of the State of Pennsylvania? A. No, I should say that electric service is sometimes backfed from Maryland to these customers, and that perhaps sometimes interchanged power from some of them may cross the line into Maryland?

Q. Yes, and that the amounts of electric energy which are transmitted up to the supply centers of Coatesville, York, and Lancaster under those agreements we have discussed this morning are in substantial amounts which originated in Maryland, isn't that so? A. Amounts of electric supply are substantial at times.

Q. And as a matter of fact the York power, the Lancaster power and Coatesville power supply contracts actually have a rate per kilowatt hour, haven't they? A. Yes, sir.

Q. And substantial amounts of the energy at times which are sold at the rates shown in those contracts come from Maryland—right? A. Yes, sir; I think that is so. [1800] Q. Let me show you those excerpts from the complaint for injunction and declaratory judgment which were marked this morning as Exhibit 85.

It is the fact, is it not, that you stated to the Court in that complaint that, "For many years plaintiff has sold electric energy so developed at wholesale in interstate commerce."

Isn't that so? A. Yes, sir.

Q. And when you made that representation to the Court you believed it to be in accordance with the facts. Isn't that so? A. Yes, except that I was not particular for this purpose about the significance of the word "sold electric energy."

Q. You thought it was an accurate way to say it to the Court under oath, didn't you? A. Sufficiently accurate for these purposes; yes, sir.

Q. Did you in any way qualify that statement when you made it? A. No.

Q. What agreements that Pennsylvania Water and Power Company had at that time, in 1940, did you consider

represented agreements under which sales of electric energy in interstate commerce were made? [1801] A. I suppose under the Penn Water and Consolidated contract.

Q. Items H and I? A. Items H and I.

Q. And also the York, Lancaster and Coatesville power supply contracts. Isn't that so? A. Yes, they should be included, too.

Q. And the electric energy to which you were referring that was sold in interstate commerce was the electric energy which Holtwood purchases from Safe Harbor under items E, F, and G, and itself generates. Isn't that so? A. A portion of that.

Q. Yes, as well as the energy which comes up at times from Maryland which you refer to as backfeed. Right? A. Yes, sir.

Q. When you said that "For many years", plaintiff has been selling electric energy in interstate commerce, what period of time does that "For many years" have reference? A. I suppose since October 1910.

Q. Showing you Exhibit 86, the excerpts from the amended complaint, it's a fact, is it not, that the same statement was made in the amended complaint? A. Yes, sir.

Q. What you have told us about the statement as made in the complaint when first given applies to the statements as made in the amended [1802] complaint? A. Yes.

Q. May I show you Exhibit 87, excerpts from the petition of review which we discussed this morning?

It is a fact, is it not, that the same statement as was made in the original complaint and the amended complaint were made in the petition for review—right? A. Yes.

Q. And what you have told us about the statements in the petition, in the amended complaint and the original complaint, apply to the statement as made in the petition for review—right? A. Yes, sir.

Q. And those statements, if made today, would be accurate statements, isn't that so? A. Yes, sir, if made with the same thought in mind.

* * *

[1812] Q. I am saying that the basis for the statements appearing in Exhibits 88 and 89 is the statements appearing in Exhibit 85 and Exhibit 86 and our discussion relating to those statements—right? A. I assume that is so.

* * *

By Mr. Goldberg:

Q. Mr. Walls, do you agree with this statement: "All of the capacity and energy available from Respondent's power development is sold under a contract dated June 1, 1931, and supplements thereto dated August 1, 1932, and November 22, 1939, between the Safe Harbor Water Power Corporation, Consolidated Gas Electric Light and Power Company of Baltimore, and Pennsylvania Water and Power Company"? By "Respondent's" in [1813] that quotation I meant Safe Harbor Water Power Corporation.

* * *

The Witness: I think that is the case, except as may be modified by any of the other agreements in which Safe Harbor has entered with other customers.

By Mr. Goldberg:

Q. You mean the York power supply, the Coatesville power supply, and Lancaster power supply contracts which have been marked in this case? A. Yes, sir, and including the Pennsylvania Railroad contract, perhaps, too.

Q. What modifications do you have in mind? A. That some of the service of Safe Harbor may be considered as furnished or furnishable to Coatesville, Lancaster, Pennsylvania Railroad, and so forth.

* * *

[1814] Q. Has Safe Harbor rendered any service in the past under the Coatesville, Lancaster and York contracts that you know of? A. In the sense of furnishing supply to the pool of Penn Water and Safe Harbor that might be considered to be the case. I am speaking now not contractually but from the viewpoint of the energy which comes from Safe Harbor and the other services.

Q. But that energy which is supplied to the pool by Safe Harbor is supplied in accordance with the provisions of items "E", "F" and "G". Isn't that so? A. As perhaps modified by Safe Harbor's commitments under the contracts 73, 76, and so forth.

Q. All you mean by that is that Penn Water's necessities [1815] of meeting the requirements under the Coatesville, York and Lancaster contracts have a bearing on the manner in which, and the amounts of energy, it takes under items "E", "F" and "G"—right? A. I was looking at this from the viewpoint of the energy that is contributed, you might say, to the pool by Penn Water and Safe Harbor, being available to Coatesville, Lancaster, and so forth, without giving consideration to the contractual elements. I am speaking only now of the flow of service. Do I get your point?

Q. You are talking in terms of the pool operating to supply the lowest cost energy at all times wherever needed. Is that it? A. That is it, yes.

Q. In other words, for the purpose of securing the maximum overall economy? A. Yes.

Q. In that sense you say that electric energy generated by Safe Harbor may be the cheapest energy at any particular time, and in accordance with the arrangements between the companies that energy will be used by Penn Water to meet the requirements at York, Lancaster and Coatesville—right? A. Well, that brings in a question of contractual relations. No, I was thinking of this solely from the viewpoint of the electric service itself, not considering it as received by Penn Water and dealt out by Penn Water.

* * *

[1816] Q. Well, if I understand what you mean by considering that Safe Harbor at times renders service to Pennsylvania Power and Light, Philadelphia Electric, Edison Light and Power up to the end of 1945 and Metropolitan Edison, when Safe Harbor is down and the energy is steam-

generated energy coming up from Maryland, it may be said under those circumstances that Consolidated is rendering service to the Pennsylvania customers, too, isn't that so? A. Yes, sir.

* * *

[1817] Q. Do you know why Consolidated is not a party to the Coatesville, York, and Lancaster contracts?

* * *

[1818] TRIAL EXAMINER: The witness may answer the question limiting his answer to what he knows about that from an operating standpoint.

THE WITNESS: Actually service from Consolidated gets to Coatesville and the other customers as a general operating procedure. I suppose that that service would be covered by the "H" and "I" contracts.

* * *

[1819] Q. You just said that from an operating procedure the electric energy which is fed into the pool by Consolidated gets up there and is covered by the provisions of Items "H" and "I"—right? A. That I assume it would be covered.

Q. Yes. When Safe Harbor feeds the energy into the pool isn't it fair to assume that that is covered by the provisions of Items "E", "F" and "G"? A. That may be so, but not necessarily exclusively so. It is possible that the other contracts to which Safe Harbor is a party may have to be considered. That is a contract matter which I do not feel I am competent to pass upon at the moment.

Q. Do you know whether Safe Harbor ever has rendered any electric service under the Coatesville, Pennsylvania and York contracts? A. If the sense of rendering service is that some service from Safe Harbor mixed in with Penn Water's service or not has been received by Coatesville, then I should say that there has been service rendered.

Q. Otherwise not—is that right? That is the only [1820] sense in which you can conceive of Safe Harbor rendering service? A. I think so.

Q. To York, Coatesville and Lancaster—right? A. I think so.

Q. And what you are saying would apply to Potomac Electric Power Company when it feeds energy into the integrated pool—right? A. Will you make the question a little more definite?

Q. Potomac Electric Power Company is tied in to the regional transmission system of which Consolidated, Safe Harbor and Holtwood are members. Right? A. Yes.

Q. There are times when Potomac feeds electric energy into the pool which goes up toward Baltimore—right? A. Yes.

Q. When it does that, and if that energy moves on up to the Pennsylvania customers, it can be said that they render service, too—right? A. Yes, sir.

* * *

[1822] Q. Would you say that the contracts I have just described, which are items "E", "F" and "G" in this proceeding, provide for two distinct services, that is: (a) sale of electric power and energy available from the Safe Harbor development to its two customer utility companies, Consolidated and Holtwood—and (b) construction, operation and maintenance by Holtwood Company of certain transmission lines from Safe Harbor to Baltimore and Washington and certain other transmission facilities.

* * *

THE WITNESS: Using the word "service" there in place of "energy" I think that would be correct.

By MR. GOLDBERG:

Q. You mean instead of "sale of electric power and energy" you want to say "sale of electric power and service"? A. "Sale of electric service" involving readiness to [1823] supply the power and energy, among other things.

Q. The two statements I have asked you to agree with I read from pages 11 and 12 of the main brief filed by George T. Hambright, Arthur H. Hull, George Ross Hull, and Hull, Leiby and Metzger, counsel for Safe Harbor in the Commission's investigation of rates and charges of that company in Docket No. IT-5914. I want you to look at those two statements as they appear in the brief beginning on page 11 and ending on page 12 as I point them out to you and ask you if you can categorically agree with the statements as made in the brief. A. That being a statement of counsel of company, I would agree with it as a statement made on a contractual matter by counsel in which I would have confidence.

Q. In other words, you agree with those two statements because you have confidence in the counsel that made the statements. Is that right? A. Yes, sir.

Q. But is it your statement that you do not agree with it in the light of your knowledge of the operations of Safe Harbor Water Power Corporation? A. No, I don't say that.

Q. Do you agree with it in the light of your knowledge of those statements, in the light of your knowledge of the operations of Safe Harbor Water Power Corporation? A. If this is a statement intended to cover contractual [1824] obligations and operations I would think that the operational effects on the supply from Safe Harbor might result in not all of the supply of Safe Harbor going directly to Consolidated and Penn Water but some of it perhaps going directly to the customers.

Q. That disposition would depend on Penn Water, wouldn't it? A. I think so.

* * *

[1831] MR. GOLDBERG: May it be stipulated, Mr. Examiner, that page 17 of the main brief filed by Messrs. Hambright, Arthur and George Hull and Hull, Leiby and Metzger in the Safe Harbor case, IT-5914, con-

tains this statement: "Although Respondent"—meaning Safe Harbor—"is a party with Holtwood Company to many of the latter's firm power contracts, Respondent's entire output is sold contractually to Baltimore and Holtwood Companies"?

MR. SPARKS: I will stipulate to that but not to the relevancy of the statement in these proceedings. I object to it on that ground.

TRIAL EXAMINER: Very well. The objection is overruled.

By MR. GOLDBERG:

Q. Holtwood's firm power customers are Pennsylvania Power and Light Company, Metropolitan Edison Company and Philadelphia Electric Company—is that right? [1832] A. And Pennsylvania Railroad Company.

* * *

Q. The effect of Items "H" and "I" is that Consolidated is entitled to all of the steam and hydroelectric energy which Holtwood generates and purchases from Safe Harbor, less that amount which Holtwood must use to supply the requirements of the Pennsylvania firm customers. Is that a fair statement? A. May I have that read, please?

(Question read.)

THE WITNESS: Well, in general. I wouldn't say that is a closely accurate statement. I would have to think it over.

* * *

[1833] Q. Holtwood does generate electric energy at its steam and hydro plants—right? A. That is right.

Q. And it also purchases from Safe Harbor. Is that right? A. Yes, sir.

Q. Consolidated under its agreement with Holtwood, Items "H" and "I", is entitled to all that less the amount which Penn Water uses to supply the requirements of its

firm customers of Pennsylvania. Isn't that so? A. That seems to be right.

Q. Isn't it true that the contractual arrangements that exist between Consolidated, Safe Harbor, Holtwood and their respective customers were so arranged to permit the maximum coordination for overall economy of service and operations? A. Yes, sir.

Q. And that end could not have been achieved if allocations of rates, charges and revenues were required. Isn't that so? A. It certainly could have been achieved only with great difficulty and perhaps not at all.

Q. In other words, one of the advantages of the type of arrangements that exist between Safe Harbor, Consolidated and Holtwood and their respective customers is the avoidance of the need of allocations of rates, charges and revenues. Isn't that so? A. Yes.

[1834] Q. I want to show you Safe Harbor's counsel's request for findings in the Safe Harbor case, Docket No. IT-5914, as contained in their main brief. I refer more particularly to Finding No. 20, which is as follows:

> "The rates and charges made and received by Respondent"—meaning Safe Harbor—"for the sale of electric energy under the contract dated June 1, 1931, are just and reasonable."
>
> Do you agree with that statement?

* * *

[1836] A. I would have to change the wording a little bit and say that rates and charges made and received by Respondent for the sale of electric service under the contract dated June 1931, are just and reasonable from the economic viewpoint—though I cannot say that they are just and reasonable from the regulatory viewpoint because I am not competent.

Q. You find you cannot agree with the finding as it stands in the request to the Commission by your counsel. Is that right? A. As a layman I would word it differ-

ently, but I, of course, cannot take exception to the way counsel has written it.

Q. You retained them to express a legal view of the matter and you are not in a position to say their legal view is not the correct one. Is that right? A. Yes, sir.

Q. I direct your attention to the request for findings in the same document I described, more particularly number 21, and ask you if you agree with that one which is as follows: "The rates and charges made and received by Respondent"—meaning Safe Harbor—"for the sale of electric energy under the contract dated June 1, 1931"—meaning items E, F, and G—"and the rules, regulations and practices pertaining to such charges are not unjust, unreasonable, unduly discriminatory, nor preferential."

[1837] MR. SPARKS: I object to that, if your Honor please, on the ground it has no materiality.

TRIAL EXAMINER: Read the question, please?

(Question read.)

MR. SPARKS: Do you have it before you, Mr. Walls?

THE WITNESS: Yes, sir.

TRIAL EXAMINER: Objection is overruled.

THE WITNESS: Taking exception again to the phrase "Sale of electric energy".

By MR. GOLDBERG:

Q. You agree? A. I would not feel that I am competent to disagree with counsel in an expression concerning this regulatory aspect of discrimination, preferentiality, and so forth.

Q. How about with respect to their reference to the contract as a sale of electric energy involving the sale of electric energy? Are you competent to disagree with them on that? A. As an engineer I would refer not to the sale of energy but to the sale of electric service.

Q. This is not the first time you have seen findings 20 and 21, is it, Mr. Walls? A. No, sir.

Q. Have you ever taken exception to the way it was phrased before this? [1838] A. No, sir.

Q. Did you see it before it was filed with the Commission? A. I think so.

Q. Before it was printed? A. Possibly.

Q. You took no exception to it? A. No, sir.

MR. GOLDBERG: May it be stipulated that Findings 20 and 21, which I have just been discussing with the witness, were requested findings that the Commission has been asked to make in the Safe Harbor proceeding known as Docket No. IT-5914?

MR. SPARKS: I stipulate to that effect, if your Honor please, but I object on the ground they are not material to this proceeding.

TRIAL EXAMINER: Objection is overruled.

• • •

Q. You are thoroughly familiar, are you not, Mr. Walls, with that Safe Harbor case in which proceedings the brief from which I have been reading was filed. Isn't that so? A. I am not thoroughly familiar. I know in general about it.

Q. You attended all the sessions of the hearing, didn't [1839] you? A. Yes, sir.

Q. You testified in that case? A. Yes, sir.

Q. And you testified rather fully about the contractual arrangements of Safe Harbor, didn't you? A. I think so.

Q. So you certainly are familiar with those aspects of the case, anyway, aren't you? A. To an extent; yes, sir.

Q. Do you know of any contention in the Safe Harbor case that Safe Harbor does not sell electric energy under items E, F, and G?

MR. SPARKS: Objection on the ground it is not material here what contentions were made in the Safe Harbor case.

TRIAL EXAMINER: Let me have the question, please?

(Question read.)

TRIAL EXAMINER: Objection is overruled.

THE WITNESS: No, I don't remember any.

By MR. GOLDBERG:

Q. Do you know of any contention that was made in that case that the rates, charges or services under items E, F, and G, are joint rates, charges and services?

MR. SPARKS: Objection.

TRIAL EXAMINER: Objection overruled.

[1840] THE WITNESS: No, I don't remember.

By MR. GOLDBERG:

Q. Do you know of any contention in that case that Safe Harbor sells electric energy under items H and I?

• • •

MR. SPARKS: Same objection.

MR. GOLDBERG: That is H and I in this proceeding, Mr. Examiner.

TRIAL EXAMINER: Objection overruled.

• • •

Q. You don't remember any such contention? A. I don't remember any.

Q. Do you know of any contention in that Safe Harbor case that the services rendered to Consolidated under items H and I are rendered jointly by Safe Harbor and Holtwood?

MR. SPARKS: Objection—same objection.

TRIAL EXAMINER: Objection overruled.

THE WITNESS: I don't remember any.

By MR. GOLDBERG:

Q. Do you know of any contention in that case that the services rendered to Pennsylvania Power and Light Com-

pany, [1841] Philadelphia Electric Company, and Metropolitan Edison Company are rendered jointly by Safe Harbor and Holtwood?

MR. SPARKS: Same objection.

TRIAL EXAMINER: Objection overruled.

THE WITNESS: I don't remember any.

By MR. GOLDBERG:

Q. Do you know of any contention in that case with respect to the rates and charges or services of Safe Harbor other than those involved in items E, F, and G?

• • •

MR. SPARKS: Same objection.

TRIAL EXAMINER: Objection overruled.

THE WITNESS: I don't remember any.

• • •

[1842] Q. Do you know of any contract that it was contended in the Safe Harbor case did involve rates, charges or services by Safe Harbor and should be passed on by the Commission in that case?

MR. SPARKS: Same objection on the ground it has no materiality in this proceeding.

TRIAL EXAMINER: Objection overruled.

• • •

THE WITNESS: I don't remember any.

By MR. GOLDBERG:

Q. Do you know of any contention in the Safe Harbor case that the Federal Power Commission is without jurisdiction over the rates, charges or services of Safe Harbor because they are joint rates, charges or services?

MR. SPARKS: Same objection.

• • •

[1843] THE WITNESS: I don't remember.

• • •

TRIAL EXAMINER: Objection is overruled. The answer may stand.

By MR. GOLDBERG:

Q. You say you don't know of any? A. That is right.

Q. Do you know of any contention in the Safe Harbor case that the Commission is without jurisdiction over any of Safe Harbor's contracts because they involve the sale of capacity and not sale of electric energy?

MR. SPARKS: Same objection.

TRIAL EXAMINER: Just a minute, please.

Objection is overruled.

THE WITNESS: I don't know of any.

* * *

[1844] MR. SPARKS: Of course, we take the position they are not appropriate, none of these questions, based on contentions made in Safe Harbor are material. I insist that is correct, if your Honor please.

What was contended in the Safe Harbor case has no bearing here whatever. Other contentions may still be made in Safe Harbor. It is not too late.

* * *

[1852] TRIAL EXAMINER: The Examiner feels this way: You are not going to be able to prove basic jurisdiction by proving [1853] inconsistent statements. That goes to the weight to be given to expert opinion on the theory a good deal you have to establish with respect to jurisdiction will have to be derived from expert opinion. There will have to be a limit to this inconsistent statement business.

* * *

[1859] Q. Mr. Walls, in 1944 Safe Harbor had its contract with Consolidated and Holtwood, known as Items "E", "F" and "G" in this case—right? A. Yes, sir.

Q. And that was true in 1945—right? A. Yes, sir.

Q. And it is true in 1946, right? A. Yes, sir.

Q. And in 1944 Safe Harbor was also named in the contracts which have been marked for identification as Exhibits 71, 73 and 76—right? A. Yes, sir.

Q. And that was also true all through the year 1945—right? A. Yes, sir.

Q. And from January 1, 1946, up to and including today, Safe Harbor still had its contracts which have been marked for identification as Exhibits 71 and 76—right? A. Yes, sir.

[1860] Q. But 73 was superseded. Is that correct? A. Yes, sir.

Q. I am sorry. I should say that it still had in 1946 up until today its contracts which have been identified as Exhibits 73 and 76—right? A. That is right.

Q. And 71 was superseded at the end of 1945—right? A. Yes, sir.

Q. And it was not a party to the contract which is identified as Exhibit 72. Is that correct? A. That is correct.

Q. And when we referred to the year 1944, the contracts that Safe Harbor had, we meant the entire year 1944, didn't we? A. Yes, sir.

Q. And in 1944 and 1945, and that part of 1946 which has expired, Safe Harbor sold its entire output under Items "E", "F" and "G"—right?

* * *

[1861] Mr. Goldberg: If the word "sold" offends counsel for the Respondents I am willing to substitute "disposed." Disposed of its entire output to Holtwood and Consolidated.

* * *

A. No, I believe from an engineering viewpoint that Safe Harbor's supply was at times and in part supplied to others than Holtwood and Consolidated; namely, some of the Pennsylvania customers and including the Pennsylvania Railroad.

Q. Did Safe Harbor supply that or did Holtwood supply that? A. I am speaking of the flow of supply from Safe Harbor is an engineering sense and not speaking of the legal concept [1863] growing out of any contractual arrangement.

Q. In other words, you are saying that Safe Harbor generated the electric energy, generated electric energy which in part was used to supply the requirements of the Pennsylvania Railroad and the Pennsylvania customers. Is that it? A. Yes, sir, using energy in the sense that I have used it.

* * *

[1863] Q. You are saying Safe Harbor generated a supply which in part was delivered to Consolidated and in part was delivered to Holtwood, and the part delivered to Holtwood was in turn delivered by Holtwood to the Pennsylvania customers and the Pennsylvania Railroad—right? A. No, sir, I am not saying that at all. I am speaking not of delivery in the contractual sense. I am speaking of the flow of supply. That supply would flow directly over transmission lines to various customers other than Consolidated [1864] and Safe Harbor.

Q. I was not speaking of the delivery in a contractual sense. I understand you prefer not to discuss it in that sense. I was speaking of it in terms of flow. In those terms Safe Harbor generated a certain supply. Is that right so far? A. Yes, sir.

Q. Part of that supply was transmitted to Consolidated—right? A. At times, yes, sir.

Q. Over the facilities of Safe Harbor, Penn Water and Susquehanna Transmission Company of Maryland—right? A. Yes, sir.

Q. The part which was not so transmitted was transmitted to Holtwood—right? A. No, sir. For example, a portion of it would go pretty directly into the Pennsylvania Railroad system at Safe Harbor. A portion of it might go at times directly to Lancaster over transmission

lines owned by the Lancaster Company. A portion might go down to Holtwood and thence go to Lancaster or York or Baltimore.

Q. In other words, there is a path of flow to the railroad directly from Safe Harbor. Is that right? A. Yes, sir.

Q. And to Pennsylvania Power and Light Company for its Lancaster Division there are two paths of flow—one directly [1865] to Safe Harbor and the other by way of Holtwood. Is that right? A. Yes, sir.

Q. And you are saying that the flow to the Lancaster Division could have gone at times directly and at times through Holtwood. Is that it? A. Yes.

Q. And the supply to the railroad that went directly from Safe Harbor, that was for the account of what company? A. That I don't know. I am speaking now only of the flow of supply technically and not legally.

Q. Isn't it a fact that Safe Harbor's facilities do not connect directly with the railroad? A. Yes, sir.

* * * *

[1867] Q. In 1939 would it be fair to say that you were fully equipped, based upon your experience and qualifications, to express a factual opinion as to what Pennsylvania Water and Power Company was engaged in doing? A. I think so, in general.

[1868] Q. It was with that knowledge and information that you reviewed that application from a factual viewpoint, not intending to review it from a legal viewpoint. Is that right? A. Yes, sir.

Q. And in reviewing it from a factual viewpoint you found nothing in it which would cause you to take any exception to the statements in the application—right? A. I don't recall that I found any.

Q. In 1939 Holtwood had the contract known as Items "E", "F" and "G"—right? A. Yes, sir.

Q. Same one it has today—right? A. Yes, sir.

Q. It had the contract known as Items "H" and "I"—right? A. Yes, sir.

Q. The same one it has today? A. Right.

Q. It had in 1939 all of the contracts that it had up to the end of 1945, namely, the Lancaster, Coatesville, and York Edison supply contracts—right? A. Yes, sir.

Q. The only change which has taken place since that time is the supersession of the York contract by the new one between Penn Water and Metropolitan Edison—is that right? [1869] A. Yes, and a new one, Pennsylvania Railroad.

Q. I am sorry. I keep forgetting that one, because I have said in this case I am making no assertions with respect to that agreement. But it had that one in 1939? A. Yes, sir.

Q. And it has it today? A. Yes, sir.

[1870] Q. Reviewing the statements in the application entirely from a factual viewpoint, based upon your knowledge of the operations of Pennsylvania Water and Power Company at that time, you found no reason to take exception to the statement in the application that applicant, meaning Penn Water, does no "retail distribution business"—right? A. Yes, sir.

Q. And you found no reason to take exception to the statement that "With one exception all of applicant's power and energy is sold at wholesale to public utility companies who resell and distribute the same." Is that right?

THE WITNESS: The first part of the question, please?

(Question read.)

THE WITNESS: No, sir, remembering, of course, my qualifications as to energy and sales.

By MR. GOLDBERG:

Q. Yes. How could I forget that, Mr. Walls?

Incidentally, that paragraph went on to name the companies that were referred to as the companies to whom

the sales were made, and they were named as Pennsylvania Power and Light Company, Edison Light and Power, Philadelphia Electric Company, and Consolidated of Baltimore—right? A. Yes, sir.

Q. And also reference was made to the fact that the company at that time had certain interchange agreements [1871] relating to economy, power and energy flow with Pennsylvania Power and Light and Philadelphia Electric Company and Metropolitan Edison Company. A. Yes, sir.

Q. Just to make it complete, not overlooking our friend the Pennsylvania Railroad Company, it went on to say that Pennsylvania Water sells power and energy to the Pennsylvania Railroad at Safe Harbor—right? A. That includes Pennsylvania Railroad; yes, sir.

Q. In that application the company undertook to describe for the Commission the facilities which it referred to as facilities owned and/or operated by Pennsylvania Water and Power Company for transmission of electric energy in interstate commerce and for the sale of electric energy at wholesale energy in interstate commerce. Is that so? A. It does show that.

Q. It undertook to describe the facilities in those terms—right? A. Yes.

Q. On the page following are shown the facilities referred to in that description—right? A. Yes, sir.

Q. The line number is shown, the voltage, the number of circuits, and the ownership by Pennsylvania Water, Susquehanna Transmission Company of Pennsylvania, Pennsylvania [1872] Transmission Company, and Susquehanna Transmission Company of Maryland—right? A. Yes, sir.

Q. Susquehanna Transmission Company of Pennsylvania and the Pennsylvania Transmission Company are the two companies that were merged in 1939 with and into Pennsylvania Water and Power Company. Is that right? A. Yes, sir.

Q. This application we are discussing bore on the merger of those facilities into the company? A. Yes, sir.

Q. Line Number 1 is a 66 K. V. line, and that is the line that is described as running from Holtwood, Pennsylvania to Baltimore, Maryland—is that right? A. Yes, sir.

Q. And Line number 2 is also a 66 K. V. line and is also described as running from Holtwood, Pennsylvania to Baltimore, Maryland—is that right? A. Yes, sir.

Q. Those lines at times carry Safe Harbor's output down to Baltimore for delivery. Is that right? A. At times, but those two lines are most frequently used for service from Holtwood.

Q. To Baltimore. A. To Paltimore, because those are 25 cycle, three phase lines.

[1873] Q. Those two lines are tied in directly to Holtwood. They are not tied into Safe Harbor. Is that right? A. That is right.

Q. In other words, Penn Water utilizes those lines to deliver at times energy which it receives from Safe Harbor and transmits on down to Consolidated in Baltimore and also to transmit energy which Holtwood itself produces from its project. Is that right? A. Without any contractual implications, that is correct.

Q. I wanted to stay away from that.

You meant you don't know whether those lines are used in connection with items H and I. Is that it? A. I don't pretend to be able to say whether those lines are used in connection with some specific contractual arrangement, but they are used to transmit service, part of which may come from Safe Harbor and part of which may be from Holtwood and part of which may be from other sources.

Q. Such as the interchange from the Pennsylvania customers. A. Yes.

Q. Line No. 3 is shown in the application as a 66 K. V. line which is described as running from Holtwood, Penn-

sylvania to Coatesville, Pennsylvania. Is that right? A. Yes, sir.

[1874] Q. That line is the line that is used to provide the supply to the Edison Light and Power Company under that agreement which was superseded November 1, 1945—right? A. Yes, sir. As you speaking of Coatesville?

Q. Yes. A. No.

Q. Instead of referring to the Edison Light and Power at Coatesville, we should have referred to the Philadelphia Electric Company—is that right? A. Yes.

Q. That is the line that is used to supply the requirements of the Philadelphia Electric Company for its Coatesville division under that agreement which already has been marked. Is that right? A. That is correct.

Q. And line No. 4 is described as a 66 K. V. line running from Holtwood, Pennsylvania to York, Pennsylvania—right? A. Yes, sir.

Q. And that is the line that up to the end of 1945 was used to supply the requirements of Edison Light and Power at York. Is that right? A. That is correct.

Q. And the next line, Number 5, is the 66 K. V. line running from Holtwood, Pennsylvania to Lehman Farm, [1875] Pennsylvania. Right? A. Yes, sir.

Q. And that is the line that is utilized to supply the Lancaster division requirements of Pennsylvania Power and Light Company under that contract which has been marked in this proceeding—right? A. I would say rather that is a line used to connect Safe Harbor and Holtwood over which at times energy flows, which, having reached Holtwood, may go back over a line from Holtwood to Lancaster.

Q. To meet the requirements—— A. Of the Lancaster Company.

Q. To meet the requirements of the Company in its Lancaster division under the contract which already has been marked—right? A. Yes, sir.

Q. Then there is a line which is designated Number 6, 66 K. V. line which is shown as running from Holtwood, Pennsylvania to Piney Island, Pennsylvania. That is an entirely strange line to me. A. That is a little stub line running from the powerhouse to other transmission lines which take off from the island.

Q. Near the middle of the river—is that it? A. Near the middle of the river.

[1876] Q. Then there is line No. 7, 66 K. V. Line shown as running from Safe Harbor, Pennsylvania, to Lehman Farm, Pennsylvania. Is that right? A. Yes, sir.

Q. Does that line, like the other Lehman Farm line that we described, serve the same purposes we mentioned in connection with the first Lehman Farm line? A. Yes, sir.

Q. Then line No. 8 is a transmission line 110 k. v. from Baltimore, Maryland to Gunpowder, Maryland. Is that right? A. Yes, sir.

Q. What is the function of that line? A. That line carries the service of Consolidated Company from its substation in Highlandtown out to Gunpowder where it connects with a belt line owned by Consolidated running for quite a distance around Baltimore.

Q. Then we have several lines designated as running from Safe Harbor, Pennsylvania to Perryville, Maryland, of 132 K. V. In what connection are those lines used? A. Those lines are used for the 25 cycle service used by the Pennsylvania Railroad Company.

Q. That is the line to which you recently had reference which runs from Safe Harbor but is owned and operated by Pennsylvania Water and Power Company—right? [1877] A. Yes, sir.

To make it clear I think we spoke before of an extension of this line to the Safe Harbor, or near to the Safe Harbor, powerhouse. That is just a technical matter.

Q. I see.

Then, as line No. 12, a 220 k. v. line from Safe Harbor, Pennsylvania to Westport, Maryland, that line is owned and operated by Pennsylvania Water and Power Company to the extent that it is in Pennsylvania, and by Susquehanna Transmission Company of Maryland to the extent that it is in Maryland—is that right? A. Yes, sir.

Q. And that is one of those lines that is used to carry electric energy directly from Safe Harbor down to Baltimore—right? A. Yes, sir.

Q. In connection with items E, F, and G in this proceeding—right? That is the three-party contract—tripartite contract. A. Yes, sir, and in connection with any interchange, etc.

Q. That backfeed you were talking about sometimes comes up on that line. Is that right? A. Yes, sir.

Q. Then the next line is a line shown as running from [1878] Ellicott City, Maryland to Takoma Park, Maryland. That is owned and operated by Pennsylvania Water and Power Company. Is that right? A. Through the Susquehanna Transmission Company of Maryland.

Q. Is that the line that is used when deliveries are requested at Takoma Park, Maryland by Consolidated under the provisions of that three-party agreement? A. That is one of the lines. There is another circuit, also, on the railroad.

TRIAL EXAMINER: What is the K. V. in that line?

MR. GOLDBERG: 220.

By MR. GOLDBERG:

Q. Then there is a final line shown of 220 K. V. from Safe Harbor, Pennsylvania to Dundalk, Maryland. Is that right? A. Yes, sir.

Q. Is that operated by Penn Water in part and Susquehanna Transmission Company in part? A. Yes, sir.

Q. In connection with the three-party agreement, items E, F, and G—is that right? A. Yes, together with the interchange, etc.

Q. Mr. John E. Malone was one of your counsel in that case. Is that right? A. Yes, sir.

[1879] Q. And Mr. Hambright was the other? A. Yes, sir.

Q. Isn't it a fact that no mention is made in that application of joint service by any one? A. I don't see any.

Q. You don't recall taking any exception to the application at that time because no such reference was made, do you? A. No, sir.

Q. Directing your attention to paragraph "K" of the application in Docket No. 5582, was it factually correct to say that the facilities of the Susquehanna Transmission Company of Pennsylvania which are to be merged with the applicant's facilities, that is Penn Water, consist of the Pennsylvania portion of two double-circuit steel tower transmission lines extending from Holtwood, Pennsylvania, to points in the State of Maryland? A. Yes, sir.

Q. It is indicated in the next sentence, isn't it, that further particulars about those lines, lines 1 and 2, are shown on that table which you and I have just finished discussing as part of paragraph "F". Is that right? A. Yes, sir.

Q. Then continuing, was it factually correct to say, based upon your knowledge of the operations of the company, [1880] that those lines, "are at present used in the transmission of electrical energy generated by applicant and sold to Consolidated Gas Electric Light and Power Company of Baltimore and will be so used after the proposed merged is consummated." Was it factually correct to say that at that time? A. I can't say as respects the legal implications.

Q. I don't want you to. A. But otherwise that is true. However, it must be understood, naturally, that service might come back over those lines.

Q. Go back in both directions, the backfeed from Consolidated at times of low water would come up through those lines. Is that right? A. Yes, sir.

Q. When you say that you can't say legally, you relied entirely upon your lawyers analysis of the legal conclusion based upon the operating facts. Is that right? A. I think so, sir.

MR. SPARKS: Were you relating that question to what was stated in the application, Mr. Goldberg?

MR. GOLDBERG: That is right.

By MR. GOLDBERG:

Q. Since 1939 up to and including today those lines have been used in the operating manner described in that application—right? In other words, they have been used to transmit [1881] electrical energy which is sold by Penn Water to Consolidated from Holtwood to Baltimore and have also been used to carry the backfeed. Is that right? A. They have been used for the transmission of energy back and forth.

Q. In connection with Holtwood sales to Consolidated—right? If you don't like "sales", in connection with Holtwood's business transactions with Consolidated. A. That is so in part; yes, sir.

Q. I was wondering about that "in part". It disturbs me a little bit. What does that implication imply, that "in part"? A. That has reference to the legal aspect of the thing.

• • •

[1885] Q. Mr. Walls, I would like to show you your direct testimony in the Safe Harbor case on November 1, 1944, Docket No. IT-5914, at page 36. You testified in that case, did you not, talking about the McCall Ferry project, that "It was not until 1905 that construction work on any of these schemes was actually initiated. In that year the McCall Ferry Power Company was formed and work was started on the so-called [1886] McCall Ferry (now Holtwood) Dam at Piney Island. However, the McCall Ferry Power Company ran into financial difficulties in 1907 with

the dam and powerhouse only partly constructed and had to suspend work."

You so testified, did you not? A. Yes, sir.

• • •

Q. In connection with your testimony on cross-examination about the Tailrace excavation work that was carried on in 1908, was it? A. Yes, sir.

Q. You also testified at Transcript 1371 that it was a great advantage to get that Tailrace work out of the way before the powerhouse construction started.

Do you recall when the powerhouse construction resumed?

MR. SPARKS: Excuse me just one minute. Your reference to cross-examination, Mr. Goldberg, is in this proceeding?

MR. GOLDBERG: Yes.

By MR. GOLDBERG:

[1887] Q. Do you recall when the construction started on the powerhouse? A. Started before this time. That was an ill-advised way of speaking of this matter. I should have said, "Get that Tailrace work out of the way before there was a concentration of work around the powerhouse." Actually the powerhouse construction started before 1908.

Q. You are talking about started by McCall Ferry before 1908? A. Yes.

Q. I was talking about that period of suspension when the Tailrace work was carried on. You said it was desirable because it was a good idea to get it out of the way before construction of the powerhouse started. By "started" in that instance you meant construction resumed. Right? A. Yes.

Q. I was trying to get at this: When was it resumed? Do you recall? A. It was resumed, as far as I know, in August of 1909.

• • •

[1896] Q. Was there ever any doubt about the engineering feasibility of the project? A. I don't know that there was doubt by competent engineers, but there was a great deal of public doubt, particularly in the minds of those who had been living along the river and had seen it in flood and during ice runs, and furthermore in Baltimore there was doubt expressed as to whether the dam would stand up under the impact of the river forces. That doubt, however, was largely in the minds of the lay public and also in the minds of some investors.

Q. You say the public in the vicinity of the dam had some doubts about its engineering feasibility and some investors may have had similar doubts? A. Yes, the people who lived along the river and knew its wildness would say frequently that "Wait until the next flood comes and this dam will not be here."

* * *

[1911] Q. You say Empire Engineering was engaged in performing its work when you arrived? A. Yes, sir.

Q. Was it proceeding on the basis of the old Cooper plans? A. Yes, sir.

Q. And did it continue the entire time it was on the project on the basis of the old Cooper plans? A. With such modifications as were introduced by us into those plans that were found necessary as a consequence of the development of the work.

Q. What was that? A. The design of the transformer house was one of [the] big jobs that we had very near the outset.

Q. You mean a new design or consideration of the old one? A. I think it was rather a redesign.

[1912] Q. Are are sure it was not merely a revision of the old design that had been prepared? A. Well, it was a revision of the old design in certain respects, particularly the interior of the transformer house, for I recall that we decided on a different high-tension bus arrangement, and

the employment of a different type of disconnector or high-tension circuit breaker. I think at that early date, also, I was concerned with the design of the transmission line and preparing for ordering insulators, towers, cable, and determining upon a route for the transmission line so that I might advise those concerned with acquisition of property where they should work, and what property they should acquire, which latter work was under the charge of Mr. Clarke. It was a rather hectic first few months on the job.

Q. Well, modification of design of the transformer house, concerned with the design of the transmission house, ordering insulators. That doesn't sound very hectic to me. What else was going on that involved modification? A. Auxiliary equipment.

Q. You were redesigning the auxiliary equipment, you say? A. Yes. That was in connection with the oil lubricating and purification system, the cable and wire control layouts, circuit breaker layouts, governor pump installations and piping, together with the accumulator tank arrangements. [1913] Sometime along in there, of course, there was the head and tail gate situation to be struggled with.

I can't recall now all of the many things we had to deal with promptly.

Q. I think you have done a pretty fair job of doing some recalling at that point. I wonder now if you can look at that Exhibit 90 and recall what faulty designs you were referring to at that time in the light of your reaching back into your memory a few minutes ago. A. I remember, though I don't recall at what time I gave consideration to the matter, the deflection wall, the boom piers, the track layouts to give access to the powerhouse for the bringing in of machinery at the different levels required during the construction operations. My memory indicates that I was very busy, both at Holtwood and in traveling around to the manufacturers, going over the designs to incorporate

the improvements in the art as far as it was possible, and negotiating, or helping to negotiate, additional equipment contracts.

Q. You say you undertook as one of the first things you did when you arrived in November of 1909 to study the plans that had been prepared when McCall Ferry Power Company was carrying on the work. Is that right? A. Yes, sir.

Q. What did those plans cover? A. Those plans covered the dam with its appurtenant [1914] wing walls and abutments, covered the powerhouse, I think the gatehouse and the transformer house, with machinery layout, and some layout of auxiliary equipment, but I recall that the switchboard layout was changed very materially.

Q. McCall Ferry had plans for the switchboard layout? A. Had plans, but they were changed materially.

Q. You named the dam and appurtenant works, powerhouse, gatehouse, transformer house, machinery layout, layout of auxiliary equipment and switchboard layout. Any other plans they had? A. The equipment layout would include, of course, the auxiliary equipment of which there was a great amount.

Q. That is all you can remember right now? A. All I can remember at the moment. I may be able to recall a lot more later.

Q. The plans covering the dam and appurtenant structures were the plans being followed by Empire Engineering when you arrived. Is that right? A. Yes, sir.

Q. And the plans with respect to the powerhouse were also being followed by Empire Engineering at the time you arrived. Is that right? A. Yes, sir, but they had not gotten very far ahead with those beyond putting in concrete preparatory to receiving some of the turbine parts that had to be placed first in the [1915] concrete. I refer now to draft tube parts and so forth.

* * *

[1918] A. The machinery had been ordered but there were many changes in machinery in connection with the develop-

ment of the art, among them being the thrust bearings for the generating units.

Q. That change was not made until you arrived on the scene? A. That change was not decided upon until I arrived on the scene and had consultations with the turbine manufacturer as respects the details. Now, I don't know how long before the turbine people had been trying to work out something better than the pressure type thrust bearing, but I do remember that we gave thought to the substitution of a roller bearing and made investigations as to where roller bearings had previously been used with success.

• • •

[1931] Q. Isn't it a fact, Mr. Walls, that Penn Water's generating facilities consist of the Holtwood hydro electric plant and the adjacent steam electric plant?

• • •

THE WITNESS: • • • I think that its owned facilities consist of those two generating plants together with transmission lines and other property.

• • •

Q. In addition to those sources of supply of electric energy to Penn Water, Penn Water's other sources are Safe Harbor and the interchange agreements it has with its Pennsylvania customers and Baltimore? A. That depends upon what it meant by sources.

Q. Sources of supply to Penn Water.

• • •

[1932] Q. Yes. When I say Consolidated I had in mind that that might include electric energy coming up from Potomac Electric Power Company. With that addition is my statement a correct statement?

• • •

THE WITNESS: Sources of supply to Penn Water's system, I think that is correct.

• • •

[1933] Q. But so far as Consolidated's payment is concerned, to Holtwood it is independent of the amount of energy delivered to Consolidated, the provision being that the payment made by Consolidated is to represent the difference between the revenues received by Penn Water from its Pennsylvania customers and a stipulated return over and above Penn Water's operating costs?

• • •

THE WITNESS: I would have to answer that yes and no—yes, to the first part, no to the second. The second part omits consideration of operating expenses.

• • •

[1934] Q. By "operating costs", I meant to include operating expenses? A. I think that is right. It is, of course, a very brief resume of a very voluminous contract so that there may be exceptions.

Q. Of course, the bills that are already in evidence show the steps by which you arrive at all that. A. Yes, sir.

• • •

[1955] TRIAL EXAMINER: Just a minute. I don't think it makes any difference what this witness knows or thinks about sales. It is the underlying fact to which it will be applied in the interpretation of the statute.

• • •

[1956] Q. There has be [been] no change in the operations of Safe Harbor and Penn Water since 1932. Isn't that right? A. You mean as respects the——

Q. Physical operations? A. —flow of service?

Q. That is right. A. No, I think the flow of service has been the same in general.

Q. Yes, and it is still the same today. A. Yes, in general.

• • •

[1957] Q. But based upon your knowledge of the company's operations you never had reason to take exception

to the use of those words "sales of electric energy." Isn't that so? A. I don't remember that I did.

• • •

[1980] Q. Having examined those pages it appears, does it not, that Mr. Thomas testified in 1939 that he carried on the negotiations with respect to the agreement which has been identified in this proceeding as Items "E", "F" and "G". [1981] Isn't that right? A. Yes, sir.

• • •

MR. SPARKS: I object to the question on the ground such evidence is not material and relevant to this proceeding, and I move the answer of the witness be stricken.

TRIAL EXAMINER: Objection overruled.

By MR. GOLDBERG:

Q. Copies of that agreement had been filed with the Commission—is that right—Mr. Thomas so states.

[1982] MR. SPARKS: Objection.

TRIAL EXAMINER: Objection overruled.

THE WITNESS: Yes, sir.

By MR. GOLDBERG:

Q. And Mr. Hambright asked Mr. Thomas this question, did he not: "I believe later the Commission or somebody else asked for additional copies." Is that right? A. Yes, sir.

Q. And in response to that question Mr. Thomas testified as follows, did he not, "Yes. In November 1932, the Federal Power Commission issued its order No. 31 which called for filing the contract, and on December 20, 1932, Mr. Walls signed a letter which I addressed to the Federal Power Commission acknowledging receipt of orders—order No. 31, report on rates and services, and stating this: 'This company sells electric power and energy to only two customers, namely, the Consolidated Gas Electric Light and Power Company of Baltimore and the Pennsyl-

vania Water and Power Corporation [Company] under a three-party contract dated June 1, 1931, a printed copy of which was sent to you on July 14, 1931. This agreement has been modified by a supplemental agreement dated August 1, 1932, a copy of which is enclosed. The company has no other rate schedules, tariffs or contracts.' "

He so testified, did he not?

MR. SPARKS: Objection.

[1983] TRIAL EXAMINER: Objection overruled.

THE WITNESS: Yes, sir.

By MR. GOLDBERG:

Q. Was that an accurate statement in Mr. Thomas's answer? A. I do not know that it was accurate from the legal viewpoint, and as respects technical accuracy I don't know that it was not intended that service from Safe Harbor would not flow to other customers.

• • •

[1990] Q. As far as 1939 was concerned the statements made in that letter were still correct. Isn't that so? A. I judge they were correct legally and I judge they were correct from a technical viewpoint for the purposes intended.

• • •

Q. In other words, you never felt this need for that exactitude in relation to the 1939 and 1944 rate proceedings of the Federal Power Commission with respect to Safe Harbor. Isn't that so? A. I think that is so.

Q. But you feel that need in this proceeding. Isn't that [1991] right? A. I feel that desire on my part to express the matter as accurately as I reasonably can for the purposes at issue.

• • •

[1994] Q. I am not worried about that. I want to know why it would be inaccurate to refer to sales of power and energy under items E, F, and G from your own viewpoint as an engineer familiar with all of the company's operations. A. It is not an accurate statement.

Q. It is not an inaccurate statement, is it? A. It may be considered an inaccurate statement because of the omission of qualifications. That I don't know. It would [1995] depend upon the use to which the statement will be put.

Q. But everybody knows that when you speak of sales of electric energy from an engineering viewpoint there are necessarily voltage, phases, frequency, power factor, power factor cooperation involved. Isn't that so? A. I don't know as everybody does.

Q. Every qualified engineer? A. That term is loosely employed.

Q. You have employed it—right? A. I have employed it and I may expect to employ it that way again.

Q. Though a qualified engineer, you have employed it —right? A. Yes, sir.

Q. And when you employed if you had in mind that the sale of electric energy has certain characteristics and attributes involved, such as phases, voltage, frequency, and the other things you mentioned. Isn't that so? A. Yes, sir, unless there is some reason in my mind to make a distinction and a more accurate statement.

Q. But the statement that is made when engineers speak of sales of electric energy is an accurate one. A. For the purposes probably for which the statement is made when it is not necessary to have extreme accuracy or it is sufficient to use a phrase connoting a lot of different [1996] things.

Q. What you are saying is that it is accurate from an engineering viewpoint to speak of sales of electric energy, but to be very technical about it we should break it down into the components such as you have. Is that right? A. If there is necessity for such technical accuracy, and generally there is not.

Q. And up to this proceeding you have seen no need for this technical accuracy? A. I don't recall that I have used it before especially in any other case.

Q. Do you sell voltage? A. Not except in a very loose way of speaking.

Q. Does a customer buy voltage? A. To the extent that voltage is a component of energy, power, and the other services rendered, he may be said to buy it, but not buy voltage alone.

Q. Voltage alone is just no good to him. You can't do anything with it. Is that right? A. Generally not.

Q. It has no independent standing from an engineering viewpoint—isn't that so? There is no significance to say "voltage-period." Isn't that so?

• • •

[1997] A. A person might want voltage for a certain purpose regardless of the energy involved.

Q. That might be so, but he would have that energy in that voltage. Right? A. I am thinking somebody might buy voltage for a precipitator, for instance.

• • •

Q. I have no objection to your going ahead, even though you may think it is too technical. I would like to hear about it. A. A person may wish to secure voltage for certain experimental or other purposes, disassociated with any energy, but I would take the position that what is generally supplied is energy together with the current, voltage, and other characteristics and services, not voltage alone, not perhaps energy alone.

• • •

[2092] Q. Some of the service being supplied to Holtwood and Consolidated as described in the excerpts that are before you [2093] you say were going to the Pennsylvania Railroad? Is that right? A. No, sir. I meant that some of the electric supply derived from Safe Harbor itself, and I refer to the 25 cycle supply, was intended to go to the Pennsylvania Railroad.

Q. That supply Safe Harbor was paid for. Is that right? A. I assume so.

Q. And it was paid for that supply by whom? A. I assume by Penn Water and Consolidated.

Q. Pursuant to bills rendered by Safe Harbor to them. Is that right? A. I believe so.

Q. Which bills were prepared in accordance with items E, F, and G—is that right?

* * *

THE WITNESS: As far as I know.

* * *

[2095] Q. * * * There is a new agreement today between Pennsylvania Water and Metropolitan Edison which supersedes the old York supply agreement—right? A. Yes, sir.

Q. Today does any of the electric energy generated by Safe Harbor go up to York? A. I assume that it would at times.

Q. In other words, no change in the operations has occurred. You have had a change in the names of the contract, though. Is that right?

* * *

THE WITNESS: There has been no change in the operations in general so far as I know.

* * *

[2101] Q. Safe Harbor supply as it was under the old contract is today still available under the pool. Is that right? A. Yes, sir.

Q. I want to direct your attention to Section 3 of Article 4 of that contract, which is Exhibit 72 in this proceeding, and I want to read to you a portion of Section 3 as follows: "Holtwood shall supply to Metropolitan, and Metropolitan shall receive, hourly amounts of firm energy equal to the hourly integrated generation of Holtwood and Safe Harbor in excess of 50,000 k. w. h. per hour multiplied by the ratio of Holtwood's firm power obligation to Metropolitan as specified in Section 1 hereof." That is as far as I am going to read, Mr. Walls.

From an engineering standpoint what does that mean? A. It is difficult to make a resume of it, but I would say in part that it means that there shall be held available a [2102] supply of electric service to Metropolitan to be limited in certain numerical fashion, as indicated here.

Q. How did Safe Harbor get into that picture? I don't understand that. From an engineering viewpoint how does Safe Harbor fit into it? A. Did I say Safe Harbor?

Q. No, but Safe Harbor is mentioned in there. The formula apparently is dependent upon the generating facilities of Holtwood and Safe Harbor. Is that it? A. That is true.

Q. That is the reason for the reference to Safe Harbor. Is that right? A. I don't think I mentioned either company.

Q. I know you didn't, but I am trying to find out why is there the reference to Safe Harbor and Holtwood? From an engineering viewpoint where does Safe Harbor fit into that picture? A. It was necessary to bring Safe Harbor into the picture in order to determine the limitations of service which Metropolitan could call for.

• • •

[2103] Q. In other words, Holtwood at times utilizes the supply available from generating facilities of Safe Harbor to meet its firm power commitments under the new contract with Metropolitan Edison, and that is why the reference is there in Section 3 of Article 4, to Safe Harbor and Holtwood—right? A. That may be.

Q. That is the fact, isn't it, Mr. Walls? [2104] A. I would have to give that further thought to make sure of that.

Q. Isn't that what you just told us before, just preceding this last question of mine? Perhaps we had better have my question read. A. I think it would be better.

(Previous question read.)

By MR. GOLDBERG:

Q. Do you wish to expand on that answer, Mr. Walls? Isn't the answer to my question "Yes"? A. I think it is.

• • •

[2126] Q. When Consolidated's entitlement of two-thirds does not flow to Consolidated, it does not do so because in accordance with a desire to obtain the maximum economy from the operation of the pool it may be dispatched to other load centers to meet the requirements of Consolidated and Holtwood's customers. Is that it?

• • •

MR. SPARKS: May I ask a question, Mr. Goldberg? When you say, "It does not do so", do you mean there the reason it does not do so is, and so forth?

MR. GOLDBERG: Yes.

MR. SPARKS: Thank you.

THE WITNESS: I would say that is true, adding, however, the words "and Safe Harbor's customers, including the Pennsylvania Railroad."

By MR. GOLDBERG:

Q. Has Safe Harbor derived any revenue from sales by it to the Pennsylvania Railroad? A. Not directly, no, sir.

Q. Has it ever derived any revenues from sales to Metropolitan Edison Company, Philadelphia Electric Company, and Pennsylvania Power and Light Company?

• • •

[2127] THE WITNESS: I don't think so.

By MR. GOLDBERG:

Q. Did it render any supply of energy to the Pennsylvania Railroad in 1935? A. I think it furnished supply to the Pennsylvania Railroad in 1935, at least during a portion of that year.

• • •

[2167] Q. Mr. Walls, did you ever see the term "Flow of electric [2168] service" in a contract? A. No, sir, I don't think I have.

Q. Did you ever use that term prior to this case? A. I think I have given thought prior to this case as to distinction between electric service and electric energy, but I do not recall using it formally.

Q. What do you mean by "Formal"? A. In any contracts or statements that would be more than communications between myself and my associates.

Q. In speaking of the operations of the company in the past isn't it a fact you have spoken of it in terms of sales of electric energy? A. Yes, sir, I used the expressions that I thought would be understood by those to whom I was addressing my remarks.

Q. Did you use that phraseology when you talked to lawyers? Is that it? A. Which phraseology?

Q. "Sales of electric energy". A. Yes, I do at times.

Q. Did you use it when you talked to your engineering associates in the company? A. I have often done that.

Q. Used it when you spoke to your accounting associates in the company? [2169] A. I have often done so when there was no necessity of being particularly accurate as I wish to be in this case.

Q. You did not think you were being inaccurate when you spoke to them about sales of electric energy, did you? A. No, sir.

* * *

[2188] Q. * * * Did you consider that the tailrace excavation work that was carried on by McCall Ferry Power Company and Pennsylvania Water and Power Company was necessary? A. It was necessary in the sense of being desirable in order to increase the effectiveness of the Holtwood plant by increasing the head available at that plant.

Q. In other words, as you cut a deeper tailrace you

add a certain amount of head to the plant. Is that it? A. Yes, sir.

Q. And the amount of head available to a hydroelectric plant has a bearing on the economy of operations of a hydro [2189] plant. Is that right? A. It has a bearing upon the total amount of power and energy that can be derived from the plant, for instance, in a 50 foot head plant one foot of additional head would increase the energy and power by two per cent, but furthermore the capacity that would be obtainable from the same sized turbine would be greater than two per cent.

Q. Is my information correct about this: Tailrace excavation work was started by McCall Ferry Power Company, was carried on to some extent in 1908, and was completed by Penn Water after November 1, 1909. Is that right? A. I wouldn't say it was completed. Rather this way: That the bulk of the work was done before 1909. Considerable additional amount of work, but small relatively to the earlier work, was done about 1913 or 1914. Then a little additional work was done at a later period, with still a possibility of doing some more.

* * *

[2192] Q. Was the work which was carried on in the early days on tailrace excavation in 1908 and 1909 successful? A. Yes, sir.

* * *

[2198] Q. What does the flashboard add? A. Flashboards are about 4 feet 6 inches or 4 feet 9 inches high. The water is not always carried up to the top of the flashboards or sometimes we allow it to overflow the flashboards a little to get additional head rather than to save the water. So conditions vary there.

Then if there is a prospect of a freshet coming down the river and we know in advance, or are able to estimate in advance when that discharge will arrive at Holtwood, we

may draw down the water in advance of the freshet even though that would not be in accordance with the usual weekly draw down. So the head is constantly varied.

Q. You usually up there speak about 52 to 56 feet with the flashboards? A. That is a good range.

* * *

[2199] Q. Isn't [it] a fact that the available head of the Holtwood plant has decreased since 1916? A. No, I wouldn't say that as a general thing. I would rather be inclined to say that it has decreased some by reason of Conowingo backwater.

Q. It has decreased some? A. Has decreased some by reason of Conowingo backwater, but it has increased some after the construction of Safe Harbor because Safe Harbor and Holtwood are endeavored to be operated as a unit for the best utilization of the river discharge and the heads available at the two plants, so that sometimes it is found desirable to increase the head at Holtwood by proper manipulation of discharge through Safe Harbor and sometimes water is stored above the Safe Harbor Dam perhaps decreasing the head at Holtwood more than would have been the case had Safe Harbor not been constructed.
[2200] But on the whole I think that the effective head at Holtwood has been increased.

There is another reason for that deriving from the fact that by manipulating the discharge from Safe Harbor we are able to restore flashboards on the crest of the Holtwood dam more promptly and so extend the useful period of those flashboards.

Q. You mentioned the decrease of the head in connection with construction of the Conowingo project below Holtwood. Because of that decrease in the head available at Holtwood through construction of the Conowingo project I am correct, am I not, in stating that certain payments are made by Conowingo to Holtwood, for loss of the benefits of that head; is that right? A. Yes, sir, certain payments

are made by Conowingo which have to do with permission to Conowingo to flood back, and an effect of such flooding back is to decrease it, you might say, effective head at Holtwood, • • •

• • •

[2223] Q. Did you have any trouble with the design of the transmission line? A. I don't recall any trouble with design; no, sir.

Q. Were the plans for the transmission line prepared after November, 1909? A. Yes, I am sure of that because I, myself, made up the original design and I think we were taking up the matter of insulators at least early in 1911, and the design of the tower would have had to be determined upon in general before we could have determined upon the types of insulators to be used.

Q. You said early in 1911. You meant early in 1910? A. 1910. Thank you.

• • •

[2224] Q. When you said that you, yourself, had designed that transmission line I remembered the other day you had said that was one of the things they were in a hurry for and that is why you put your attention on that? A. Yes, sir.

Q. Had any designs at all been prepared for that transmission line by McCall Ferry Power Company that you remember? A. I don't remember of any.

• • •

[2227] Q. Did you also design the substation at Baltimore? A. The general design, yes, but of course not the details.

Q. Were there detailed designs available from McCall Ferry Power Company or was that also done by your force? A. That was done entirely by our force.

Q. I suppose because of its association with the transmission line the design of the substation was one of the things that was gotten to pretty promptly after November, 1909, after November 1, 1909? A. I think that a general

design would have had to be determined upon pretty early, and I think that we tried to design that station so that it would be somewhat similar to the transformer house at Holtwood. But I think we were delayed in getting the property and then could not complete the designs in all detail until we got the property.

Then, as I say, after we got the property we found the quicksand situation.

• • •

[2232] Q. This morning, Mr. Walls, we spoke about the flashboards on the dam which increased the head. Are those flashboards generally of the same type which you had there at the dam in 1911? A. No, sir. We did a lot of experimenting with flashboards. Flashboards had been in use for quite a number of years, but in our situation we had to be very particular to have flashboards installed that would release quite accurately at a pre-determined water flow because we thought we should be sure that we would not flood back beyond our riparian rights. So we experimented with a number of different types as opportunity afforded, and finally developed the type of flashboard now in use.

Q. You say a pre-determined water flow was necessary, rather that the flashboards would go out at a pre-determined [2233] water flow. That was true in 1911. Is that right? A. Yes, sir.

Q. Are we to understand that in 1911 the type of flashboard you were using would not go out at the pre-determined water flow? A. They were irregular in their action and therefore we feared that such irregularity might cause us to flood back upon the property over which we didn't have releases, and at that time we were threatened with suits in connection with encroachments upon property by our backwater.

Q. What was there about the flashboards you were using in 1911 which made them irregular in their action? A. We didn't know how the pins would act.

I recall that some of the pins would bend very slowly, whereas for reliability of action pins that will either break or release quickly would be desirable.

For instance, a pin might bend to a 45 degree angle and then hold up there. It would take a considerably greater head of water than we had estimated or we desired to bend the pin over flat. So we tried different kinds of steel. We tried notched pins, and we tried also various devices other than pins. Wicket or butterfly gates and quite a number of devices were evolved, some of which were tried on the dam and some of which were tried elsewhere, I think in a little channel between Piney Island and Holly Island.

[2234] Q. So it was the reaction of the pin to the pressure of the water which was the drawback in 1911. Is that it? A. That and of course we made improvements in the panels themselves. We also had to learn how to handle the flashboards sometimes to be able to remove them, but more particularly to be able to reinstall them at the earliest possible moment with water flowing over the crest of the dam.

We don't have to be that particular now because we can hold back water for a little while at Safe Harbor and get a dry dam crest to work on.

Q. With respect to handling of the flashboards, that was a matter of operation—right? A. That was a matter of operation, but it was also a question of design.

Q. You mean the type of design of the panel determined the method of operation of the flashboard? A. Yes, for instance, I think we had strap irons fastened vertically to the boards. The strap iron formed a loop at the top of the boards for handling.

It is my impression we tried out a number of different kinds of strap iron arrangements. We tried using sills, wooden sills on the crest of the dam in order to make the flashboards more easily seated so that they wouldn't leak so much.

Q. What were the panels of the flashboard being used [2235] in 1911 made of? A. I think either 1 inch or 1½ inch boards fastened together.

My impression is that they were fastened together with wooden vertical pieces, but that I am not quite sure of. I believe they were wired to the pins and we used manure and sawdust for tightening them.

Q. When you said you made improvements in the panelling what did you have in mind? A. I don't remember the various steps we went through but I think it was a question of the length of the panels which had to be determined with the view of being able to handle them more readily.

The shorter the panel the easier it would be to handle when water was going over the dam, that is to say it would be easier to install it. On the other hand shorter panels meant more vertical joints that would have to be caulked. If the panels were not rigid enough they would bend under water pressure and leak.

Q. These improvements of which you speak came about as a matter of your operating experience with the panels you were using. Is that it? A. I would say it was this way: The panels weren't accurate enough in their operation to suit us so we designed this and that alternative and tried these out under operating [2236] conditions. Also we tried them out under test conditions as I have indicated before.

Q. When you say that the panels you were using in 1911 were not accurate enough in their operation to suit you, does that mean that they actually failed to perform their function? A. No, I meant by that both panels and pins together. But they were not accurate in their point of release as respects the height of the water and there was question, also of getting the kind of flashboard that would be cheapest to handle that would be capable of being tightened with the least trouble and expense and that would release uniformly.

One of the troubles we had was that the panels might release, say, over a thousand fleet of the length of the dam and leave the panels standing on the balance of the dam, whereby the water would discharge over the section where the flashboards had released and would be retarded over the other section, giving backwater that was undesirable.

Q. Had that actually happened at times? A. Yes, sir.

[2237] Q. All right. A. Then there was one type we experimented with which was very satisfactory in certain respects. We found difficulty with it because the operation of these flashboards would at times be interfered with by trash floating in the river. This was the type that we called the butterfly flashboard where we could release a long line of flashboards by releasing the end one and the other flashboards would drop out consecutively like cards falling one after another. But the difficulty was that the openings would be clogged up. These flashboards were also satisfactory with regards to easy replacement but we had to abandon them finally because of the trash consideration.

Q. But generally speaking isn't it fair to say that the flashboards in use today are of the same type that were in use in 1911? A. Of the same general type, yes.

* * *

[2292] Q. Before the 1931 agreement between Consolidated and Holtwood was entered into which we know in this proceeding as Items "H" and "I", what did Holtwood sell to Consolidated? A. Holtwood sold electric service.

Q. Just as they do today. Is that right? A. Holtwood also sells electric service today.

Q. You have mentioned earlier in this proceeding that it was your recollection that Safe Harbor was named in the agreements which are identified in this proceeding as 71, 73 and 76, for tax purposes. Do you recall that? A. Yes, sir.

Q. Naming Safe Harbor in those agreements for tax purposes had no bearing on the question of service being

rendered by Safe Harbor. Isn't that so? A. I think that it did not have any bearing.

Q. Is it you recollection that there was some advantage to be gained in lower income taxes if Safe Harbor were named in those contracts?

MR. SPARKS: Did you say income taxes, Mr. Goldberg?

MR. GOLDBERG: Or other types of taxes.

THE WITNESS: I think that it was thought that advantage would be gained perhaps at the time or perhaps later on—that [2293] I don't recall.

By MR. GOLDBERG:

Q. Was the advantage solely in relation to income taxes or other types of taxes? A. I think gross receipts tax was an element taken into consideration.

Q. Is that a federal gross receipts tax or state? A. I think it was a state tax.

* * * *

Q. Yes. What state did you have in mind—was it Maryland or Pennsylvania, or both? A. I think it was Pennsylvania.

* * * *

Q. If Safe Harbor were not named in Exhibits 71, 73 and 76, which I place before you, would that have any bearing upon the operations of Safe Harbor?

* * *

[2294] THE WITNESS: I don't know whether it would have any contractual bearing but I don't believe it would have any bearing upon the furnishing of service from a technical viewpoint.

By MR. GOLDBERG:

Q. Yes. That is what I had in mind. In other words, physical operations? A. Yes, sir.

* * *

[2300] Q. Who schedules the generation of Safe Harbor?

A. That is the result of a number of decisions, deriving in part from the desires for service of, let us say, Consolidated, Pennsylvania Railroad, Washington, and electric groups to the north.

As a consequence of such demand for service the load dispatchers at Baltimore in the employ of Consolidated and Holtwood determine upon that allocation of service that it is [2301] hoped will be most advantageous from the viewpoint of coordination of the facilities of Safe Harbor with the other facilities available through interconnection, etc.

Q. Those load dispatchers that you referred to, they schedule the operations of all other plants on the interconnected system, including the hydro at Holtwood and the steam at Holtwood and the steam at Consolidated. Isn't that so?

A. They control more precisely the operations at Safe Harbor and Holtwood, while Consolidated, a little more precisely, controls its own steam operations. But these three sources with others must be coordinated so that the load dispatchers actually consider the situation as a whole.

Q. In other words, when there is a demand from the electric groups to the north—and by that I take it you mean the Pennsylvania firm customers we have talked about in this case——

A. Or the interconnected customers.

Q. When there is a demand from them the load dispatchers look at the integrated system as a whole, and in view of the operations to derive the maximum economy schedule for generation to supply that demand for the north the cheapest source of generation at that time. Is that right?

A. It is not only economy. For instance, of particular importance during the war time was the maintenance of the [2302] maximum amount possible of stored water so that at times it would have been more economical to draw on that stored water with the prospect of replacing it later from a freshet or over the week end. But consider-

ations such as that sometimes enter to cause deviation from mere economy considerations.

Q. Ultimately, however, it is a long range economy consideration which brings it about. A. I think that is a fair statement.

Q. Rather than a shorter range economy program? A. Yes, sir.

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[2304] Q. We do know, don't we, that Safe Harbor has no direct connection with the facilities of Consolidated or Pennsylvania Power and Light Company and Philadelphia Electric Company, Edison Light and Power Company and [2305] Metropolitan Edison Company. Is that right? A. I think that is true as respects physical connection.

Q. Or with the Pennsylvania Railroad? A. Yes, sir.

Q. The only direct connection, direct physical connection, that Safe Harbor has is with the facilities of Holtwood. Isn't that so? A. Yes, sir.

Q. When Safe Harbor's generation passes off Safe Harbor's facilities on to the facilities of Holtwood, Safe Harbor no longer has anything to do with the disposition of that energy. Isn't that so? A. That is a little difficult to say. Technically that transmission is practically instantaneous.

Q. I realize that when there is a load at one end there is generation at the other. A. Yes, sir.

Q. But nevertheless the flow of the supply from Safe Harbor on Penn Water's facilities is controlled by Penn Water. Isn't that so? A. You mean controlled contractually or from an operating standpoint?

Q. From an operating standpoint. A. I would say that it is controlled by all of the equipment that is physically connected, not only Safe Harbor and Holtwood's equipment, but the equipment of such companies [2306] as Metropolitan Edison and perhaps Philadelphia Electric, because the path over which the service flows depends not upon the generating source alone but upon the inter-action

of the equipment of the receivers. For example, supply intended for the North might flow in part over the circuit to York and in part over the circuit running north towards Harrisburg on the east side of the river. That division isn't in the hands or control of either Safe Harbor or Holtwood alone, but depends upon phase relations, voltages and so forth, a part of which are in the control of all of those connected physically to the system.

• • •

[2315] Q. For purposes of this question I want you to assume, and not to pass upon the legal interpretation, that the Federal Power Commission in this case will have the power and authority not only to direct what rates are to be charged but will have the authority to require rewriting of any contracts in accordance with what it deems to be the facts.

Now, then, with that in mind, suppose the Federal Power Commission at the end of this proceeding orders Exhibits 73 and 76 to be rewritten to eliminate Safe Harbor from those agreements, would you say that such elimination of Safe Harbor would prevent Penn Water from rendering the service required under Exhibits 73 and 76?

• • •

MR. SPARKS: I assume you are speaking from an operating standpoint, Mr. Goldberg?

MR. GOLDBERG: Yes, physical operations.

THE WITNESS: As respects reliability of service, I don't believe there would be any loss.

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[2316] Q. In other words, the operation of Penn Water and Safe Harbor would continue just as they are today?

• • •

A. Yes, sir.

• • •

Q. Can you make energy available to customers without voltage? A. No, sir.

Q. Can you make it available to them without phase? A. Not except in the sense of direct current.

Q. Can you make it available to them without frequency? A. Not except in the sense of direct current.

Q. Can you make it available to them without power factor? A. Not except in the sense of direct current.

Q. Can you make it available to them without proper [2317] number of phases? A. Not except in the sense of direct current.

Q. Can you make it available to them without electric power? A. No, sir.

Q. Do Safe Harbor and Holtwood have any direct current sales? A. No, sir.

Q. When we were talking about scheduling of operations by the load dispatchers, they schedule those operations looking at the total system load; don't they? A. Looking at the total system load and the details, also.

* * *

[2320-A] Q. Did Pennsylvania Water and Power Company at one time investigate the possibility of building a roller dam at Holtwood? A. Yes, sir.

Q. Will you, for my sake and for the sake of the record, tell us what a roller dam is? A. A roller dam is a contrivance designed to be placed on the top or crest of an overflow dam for the purpose of raising the level of the water above the dam. The roller dam rolls on inclined guides so that it may be rolled up out of the way to permit flood water and ice and trash to pass underneath it, or it may be raised up a few feet to let water pass in limited amount.

It was investigated with the thought that it would give a greater head than would be safely obtainable from the use of flash boards, but the idea was not carried out and later on, when Safe Harbor was planned, the back water from the Holtwood dam was designed to extend up to the tailrace of Safe Harbor.

A roller dam, you might say, would look something like a huge rolling pin that would roll up out of the way.

Q. Did I understand you to say that the idea was abandoned after investigation had been made of it? A. It was abandoned after it was decided to locate Safe Harbor, as was done, but for a number of years prior to that [2321] the thought of eventually installing a roller dam remained with us. It is not entirely out of the question that it might not be desirable to install later on a roller dam at Holtwood, but of a less height than originally was contemplated so that we might do away with the flash boards which are difficult to manipulate.

Q. This investigation of roller dams was started by Allner as early as 1912. Isn't that so? A. Yes, sir, that was at the time when we were considering different types of flash boards and different sorts of devices. It has merits even today.

Q. All right. A. That grew out of the lack of head gates, or flood gates, on the Holtwood dam such as have been installed at Safe Harbor and as were installed at our suggestion at Conowingo Dam.

Q. Did Pennsylvania Water and Power Company make an investigation for storage reservoir sites at Holtwood Dam during early years of operation? A. Yes, sir.

Q. Do you remember when those studies were made? A. I think they were started, or at least were in operation, in 1911. I think we thought of it nearly from the beginning because we had been doing similar work in Canada, and naturally our attention would be drawn to the possibilities of doing something of that sort in Pennsylvania.

Q. The idea, however, was given up. Is that right? [2322] A. It was given up temporarily. Investigations were made and later on we acquired some property suitable for a dam site on the Raystown branch of the Juniata River, but eventually, at the request of one of our then customers, we turned that property over to that customer for eventual use by their customers. A development at Raystown is still being considered by the Federal Government.

Q. But as far as Penn Water is concerned the idea was abandoned a long time ago, that is the idea of storage reservoir sites which were investigated in the early days? A. No, I wouldn't say that, because even in recent years it was with some regret that I look back to our turning over that dam site to a company which did not develop it. I think there is still a possibility there.

Q. Nothing definite? A. No, but computations have been made of the type of construction that might be suitable there and estimates of cost were made and also estimates of the possible beneficial effects to plants further down the stream. That has been done even in recent years.

* * *

[2379] Q. Wasn't that because Safe Harbor renders no service under Exhibits 71, 73 and 76? A. I don't know because Safe Harbor does render service to the other companies.

Q. Does it have any rates or charges for those services? A. Not rates and charges, no, but it render service.

Q. Does it render such services free of charge? A. I judge not.

Q. Where are the rates or charges for the services Safe Harbor renders? A. I don't know.

Q. Has it ever received any payment for those services? A. Payment from whom?

[2380] Q. Pennsylvania customers under Exhibits 71, 73 and 76? A. No. I am speaking of services here in the technical sense.

Q. To include electric energy. A. To electric service which has such attributes as electric energy, etc.

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Vol. II

TRANSCRIPT OF RECORD

(Pages 535 to 1050)

Supreme Court of the United States

OCTOBER TERM, 1951

No. 428

PENNSYLVANIA WATER AND POWER COMPANY AND SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND, PETITIONERS,

vs.

FEDERAL POWER COMMISSION ET AL.

No. 429

PENNSYLVANIA PUBLIC UTILITY COMMISSION, PETITIONER,

vs.

FEDERAL POWER COMMISSION

ON WRITS OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

PETITIONS FOR CERTIORARI FILED NOVEMBER 16, 1951

CERTIORARI GRANTED FEBRUARY 4, 1952

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[2388] GEORGE W. SPAULDING.

* * *

CROSS-EXAMINATION.

By MR. GOLDBERG:

* * *

[2391] Q. Did I understand you to say that Exhibit 72 in this proceeding, which I now hand you, provides for the delivery of electric energy to Penn Water by Metropolitan Edison? A. Provides for the interchange arrangements whereby Penn Water has and does and is receiving energy and other interchange services, frequently of a capacity nature, from Metropolitan Edison—yes, sir.

Q. Would you say Penn Water and Safe Harbor receive that electric energy? A. Safe Harbor is not a named party to this contract.

Q. Aside from the fact it is not a named party would you say that it receives electric energy from Metropolitan Edison under Exhibit 72? A. No, I would not say it did.

Q. Suppose it were a named party? Would you say that it did? A. I would; yes.

Q. Did I understand you correctly? Did you say that Pennsylvania Power and Light Company, under Exhibits 76 and 77 furnishes electric energy to Safe Harbor and Penn Water? A. I think so.

Q. Will you point out the provisions? A. Article Roman numeral VIII of Exhibit 76 being the Lancaster Power Supply contract of May 1, 1933, between [2392] Pennsylvania Power and Light and Penn Water and Safe Harbor provides that interconnection and parallel operation will be undertaken as promptly as possible and that arrangements will then be made for an equitable division of the cost of any changes in the facilities, etc.

Exhibit 77, which is a letter agreement of April 28, 1939, between Pennsylvania Power and Light and Penn Water and Safe Harbor, is a supplement, or an amendment, to Exhibit 76 and provides in paragraph 11 thereof for economy interchange, in paragraph 12 for emergency

interchange, and in paragraph 14 for the joint use of transmission facilities for those purposes.

Q. In other words, the provisions for firm power supply and interchange are part of the same agreements. Is that right? A. They are incorporated in the same contracts; yes.

Q. You just referred to the joint use of transmission facilities.

What transmission facilities of Safe Harbor are jointly used in connection with Exhibits 76 and 77? A. Paragraph 14 reads in part as follows:

> "In order to secure the greatest practical benefit"——

Q. Let me interrupt. Paragraph 14 from what exhibit? A. Exhibit 77, which is the letter agreement of April, 1939.

> "In order to secure the greatest practical benefit in [2393] the utilization of those tie-in facilities in the Harrisburg and Lancaster areas which may be available to either party providing a path between Generating Companies and Receiving Company in parallel with the path owned by or available to third parties with whom both parties are interconnected."
> —I will not read the rest unless it later becomes necessary.

Those are the facilities providing a path between generating companies and receiving companies, some of them, of conrse, owned by Safe Harbor and some by Penn Water and some by Pennsylvania Power and Light, and reference is here made to other facilities owned by third parties outside of th s contract which are neither owned or operated by any of the parties to the agreement.

Q. Who are the third parties not named in that agreement? A. Metropolitan Edison Company, Edison Light and Power of York, and I believe the Philadelphia Electric Company and the Pennsylvania Railroad.

Q. What facilities of the Pennsylvania Railroad?
A. As I explained a few minutes ago, the interchange of energy and capacity over the facilities of the railroad are of a little different nature in operation from those in any other interconnection agreement. It frequently occurs that Penn Water and Safe Harbor will supply to the Pennsylvania [2394] Railroad Company at Safe Harbor energy and capacity in excess of its "Contractual requirements" which I am using here in a technical sense and not a legal sense, and at such times such electric services are used by the Pennsylvania Railroad to meet its requirements on other sections of its electrified system.

Meters have been installed at several points on the Pennsylvania Railroad's electrified system for the purpose of determining the amount of such excess energy used by the railroad on its other sections and such capacity and energy and other services are accounted for as though sold to the Philadelphia Electric.

When electric services are furnished by the Philadelphia Electric to Penn Water and Safe Harbor in the reverse direction, the principle is just the reverse.

Electric services are furnished by the Philadelphia Electric and used by the railroad to meet its requirements in what we refer to as the contractual load area of Penn Water, Safe Harbor, Consolidated Gas Electric Light and Power Company of Baltimore, and when such services are received and so used by the railroad in that section of their system which is normally supplied from Safe Harbor it is accounted for as being energy and other electrical services delivered by Philadelphia Electric to Pennsylvania Water and Power Company under the interconnection agreement which I indicated [2395] a few minutes ago had not been so far identified in these proceedings.

Q. I didn't hear the description of the facilities of the Pennsylvania Railroad. You spoke about the operations but I didn't hear you describe the precise transmission facilities of the Pennsylvania Railroad. A. I en-

deavored to point out that it is a matter on the one hand of Penn Water and Safe Harbor supplying services to the railroad's transmission system and these being then transmitted or carried by the railroad to whatever part of their system they may desire, and, on the other hand, when Philadelphia Electric Company may supply the railroad services in excess of their contractual requirements the railroad transmits that capacity and energy and other services to the section of the railroad system which is normally supplied from Safe Harbor.

It is in that way that the railroad's facilities are used really by themselves rather than by us, but it forms a parallel path over which, at least for accounting purposes, we directly consider that power flows, energy flows, and other electrical services flow from Penn Water on the one hand to Philadelphia Electric on the other hand.

• • •

[2396] Q. I am trying to understand your answer.

You said by "Us", and then you said it was not exact, you were referring to the joint use of facilities in Exhibit 77. I say by whom? A. There are several paths, and by paths, I refer to electric transmission lines, over which electric power, energy and other services are transmitted as interchange between Penn Water and Safe Harbor on the one hand and between their Pennsylvania customers on the other. It becomes necessary for operating purposes to account for the power flows on each of those parallel paths separately. Recognition frequently is given to that fact, that energy and capacity, reactive and other services, may actually be transmitted over one path though finally received by or used by a third party with whom Penn Water and Safe Harbor may have a direct path, but because of electric operations of the integrated systems it is not possible to control the flow of capacity, energy, reactive and other services over the single path between Penn Water and Safe Harbor on the one [2397] hand, for instance, and Pennsylvania Power and Light on the other

but rather some of those services may flow over one or more of the other parallel paths.

* * *

[2398] THE WITNESS: I will refer to Exhibit 37. The parallel path you first asked me to describe which includes certain of the railroad's facilities are in part shown on Exhibit 37. Between the main generator bus at Safe Harbor and the railroad's facilities there is, first, a 25,000 K. W. frequency changer which permits conversion of three-phase sixty cycle electric services to 25-cycle single-phase electric services.

In parallel electrically with that frequency changer are two water-wheel generators of approximately 30,000 kilowatt [2399] capacity each, providing for the supply of 25-cycle single phase service.

These three machines are connected by an electric cable system owned by Safe Harbor through the hill to a sub-station owned by Pennsylvania Water and Power Company adjacent to the project boundary of Safe Harbor, and there the service is transformed to 132 K. V. And there are then two paths over which such electric service may flow, the first being toward Thorndale, Pennsylvania, near Coatesville, shown on the upper right-hand portion of Exhibit 37, over facilities owned by the Railroad, and the other path being over transmission lines owned by Pennsylvania Water and Power Company and S. T. Co. of Maryland, toward Perryville, Maryland, shown at the head of Chesapeake Bay about the middle and toward the right-hand side of Exhibit 37.

At that point the transmission lines of Penn Water and the subsidiary interconnect with the transmission network of the Pennsylvania Railroad Company and power may flow to the right or toward Philadelphia and New York.

At the points indicated as Thorndale, Pennsylvania, and Perryville, Maryland, there are installed electric meters for the purpose of determining the amount of

electric energy and other services which flow to that portion of the Pennsylvania Railroad's system not normally supplied by Penn Water and Safe Harbor, and, on the other hand, will meter that power and [2400] energy which flows from the Northern Portion of the Pennsylvania Railroad's transmission system toward that portion of the railroad's system normally supplied by Holtwoood and Safe Harbor.

It is the metering of the power and energy at Thorndale and Perryville that is used for accounting purposes under the Philadelphia Electric-Penn Water interchange contract which has not yet been identified in these proceedings.

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[2407] Q. With respect to the transaction that you described under which Penn Water, you said, furnishes or stands ready to furnish electric services to Baltimore, will you point to the provisions in Items "H" and "I" covering the rates or charges? A. For such service?

Q. Yes. A. Well, I have just described or endeavored to describe that there are two transactions, and the dollar payments made [2408] or collected by Penn Water are the net dollar result of the two transactions.

Q. You mean by that last statement that in Items "H" and "I" there is not shown a separate rate covering the backfeed transactions? A. Not as such, Mr. Goldberg. You have to go back to the 1927 agreement which I think is Item "H".

Q. Yes. A. And there you find in Article 6 of that 1927 agreement the provisions for the services to be rendered by Electric, as it is referred to in here, meaning Baltimore Company, to Power, and therein meaning Penn Water, under this contract.

Q. Is that still in effect today? A. Yes, sir.

Q. And that is the provision that covers the backfeed by Consolidated to Penn Water? A. Yes, sir.

Q. Where is the rate shown for that? A. There is no rate shown other than the statement, "For all such

energy Power will be billed for the daily net amount of such backfeed at actual costs plus ten per cent."

MR. MYSE: Will you read the entire paragraph? It is very short.

THE WITNESS: Article 6. Heading, Steam Energy Purchased.

> "Upon request of Power, Electric will supply to Power steam [2409] generated energy in excess of Electric's own requirements up to the limit of its available generating capacity, provided, however, that Electric is not obligated to start up a station which would not otherwise be operated. For all such energy Power will be billed for the daily net amount of such backfeed at actual costs plus ten per cent, (10%). The costs to be used are those reported on Electric's monthly production statement covering the month during which steam energy was furnished to Power."

By MR. GOLDBERG:

Q. So that the rate, if we may speak of it as such, for the backfeed energy from Consolidated steam electric plants is covered in the provision you just read—right? A. Yes, sir.

Q. Where are the rates and charges for the transaction whereby in a technical and operating sense Penn Water sells, in your terms, electric service to Consolidated? A. There are no rates in the usual sense of a rate for capacity, a rate for energy, a rate for reactive, a rate for certain specified facilities, but there is a formula incorporated in the contract of June 1, 1931, which is the basis for the payments made for the services rendered, for the net services rendered, by Penn Water to Baltimore on the one hand and by Baltimore to Penn Water on the other.

Q. What article is that in in Item "H"? A. Article III.

[2410] Q. All right. A. I should include or add to that, or at least indicate, that the Article III of the 1931 contract was amended by a contract between the same two parties dated September 29, 1939, which amendment affects the payments to be made under Article III.

Q. Now, you say the Article III of Item "H" and the amendment contained in Item "I" cover the backfeed by Consolidated to Penn Water? A. I think that requires a little additional explanation.

Q. All right. A. The contract of June 1, 1931, set out a method for computing the payments for the services to be rendered by Penn Water to Baltimore Company, and then stated that any matters not specifically covered or contrary to the matters incorporated in the 1927 contract would be continued, with the result that the parties have always considered for accounting and billing purposes that the section referring to steam generated energy to be made available by Baltimore Company to Penn Water was a separate item to be considered in connection with the 1931 contract, and for several years accounting under that separate article, referring to the purchased energy, was continued.

There then was a span of years, particularly after the Safe Harbor plant of the Safe Harbor Water Power Corporation was fully available, when there was no "daily net backfeed". Again, in the late 30's, with the increasing requirements of the [2411] Pennsylvania customers of Penn Water and Safe Harbor requiring more and more of the output of the Safe Harbor and Holtwood developments there was necessarily less energy available to Baltimore Company. As a corollary during extreme low flow periods, and particularly on Sundays, there was a daily net backfeed from Baltimore Company to Penn Water to supplement the services provided by Penn Water and Safe Harbor to their Pennsylvania customers.

The operating committee, set up under provisions of Item "H", of which I am the member for Penn Water

and Safe Harbor, considered the question of accounting for "daily net backfeed", and, with advice of counsel, concluded that inasmuch as the accounting for such backfeed did not affect the operating incomes of either Baltimore Company on the one hand or Penn Water on the other, and as I recall it, because no other party was involved or interested—and this is from memory—it was concluded that we need not account for that energy for billing purposes, and I think no accounting of such backfeed on the bills of the companies has been carried on at least in the last five or six years, and I do not believe there has been any since the early 30's. But there has still been full recognition that that Article 6 in the 1927 contract was applicable.

* * *

[2420] Q. In connection with Exhibit 77, and more particularly the paragraph numbered 14 which is entitled, "Joint use of transmission facilities", will you describe the transmission facilities of Safe Harbor that are jointly used in connection with Exhibit 77?

THE WITNESS: May I have the question, please?

(Question read.)

THE WITNESS: I will refer to Exhibit 41.

Generally in the upper left-hand portion of Exhibit 41, there is shown the station layout of the Safe Harbor hydro plant, or station as it is called here, and designated in blue ink is the term Donegal Tap.

The facilities owned by Safe Harbor and operated by Safe Harbor are those between that 13 K. V. bus of the hydro station in heavy black through the transformers owned by Safe Harbor transforming the electric services from 13 K. V. to 66 K. V. and from those transformers up to the top of the hill above the [2421] plant, at which point they interconnect with the transmission facilities owned and operated by Penn Water.

When I refer to facilities I am, of course, referring only to the transformers, oil circuit breakers, and associated equipment and I have not included such things as meters and control, which are rather extensive and which are owned and operated by Safe Harbor in manipulating or controlling facilities owned by Penn Water.

Q. Have you finished your answer? A. Yes, sir.

MR. GOLDBERG: May I have the answer read, please?

(Answer read.)

By MR. GOLDBERG:

Q. When you say "facilities on top of the hill" you mean Manor sub-station, do you? A. Manor sub-station is at the top of the hill, but Safe Harbor owns what we refer to as the river span of the transmission line, including the first tower on top of the hill at which point interconnection is made with the facilities of Penn Water.

Q. Those spans are 220 K. V. spans? A. No, the ones I am referring to are 66 K. V. spans.

Q. There are several 220 K. V. spans? A. And Safe Harbor owns them, also, but they are not——

[2422] Q. Involved? A. —the transmission facilities referred to in paragraph 14 of Exhibit 77.

Q. In other words, the transmission facilities referred to in paragraph 14 of Exhibit 77 are the facilities you have described, including the 66 K. V. spans from the transformer pockets up to Tower No. 1, up to and including Tower No. 1, which is adjacent to the Manor sub-station. Is that right? A. I have forgotten about the Tower number, but it is including the first tower on the hill.

Q. Otherwise my statement is correct—is that right? A. That is correct.

Q. Other than the transmission facilities that you have described of Safe Harbor in connection with Exhibit 77 what are the other transmission facilities of Safe Harbor?

We have already mentioned the 220 K. V. spans. A. Yes.

Q. Are there others besides that? A. You mean other than those referred to in Exhibit 77?

Q. That is right. A. There are the 220 K. V. transformers stepping up from 13 K. V. to 220 K. V. We usually refer to those technically as transmission facilities. I don't know what the legal connotation may be. Safe Harbor also owns and operates the 13 K. V. single phase 25-cycle cable system from the frequency [2423] changer and single phase generator terminals in the Safe Harbor Powerhouse in the tunnel through the hill to the Conestoga sub-station of Penn Water where connection is made to the single phase railroad bus of Penn Water.

I would consider those transmission facilities, again speaking from a technical sense.

I don't know whether the tremendous amount of cable, control cable, switches, metering, relays, etc. which are associated with the transmission facilities of Penn Water but which are owned and operated by Safe Harbor in the main control room at Safe Harbor, would be considered a portion of the transmission facilities. I think from a technical point of view I would say they were, because the Safe Harbor control room has two large control boards, a 25-cycle board and a 60-cycle board.

The 60-cycle board controls all of the transmission facilities of Safe Harbor to which I have just referred, including both the 220 K. V. and the 66 K. V. facilities, and the 25-cycle—I want to go back to 60-cycle facilities. They also control the transmission line facilities at Manor substation, and on the tap circuit, previously referred to as the Donegal Tap circuits owned by Penn Water, but which is used to control the tie-in facilities with Pennsylvania Power and Light, and again referred to in paragraph 14 of Exhibit 77.

[2424] Referring now to the 25-cycle control board, the entire board, with the exception of the two generators and

the one frequency changer panels, which make up perhaps less than 20 per cent of the control board, are devoted to the control of the transmission circuits of Penn Water and of the Pennsylvania Railroad Company at Conestoga substation, jointly owned by Penn Water and Pennsylvania Railroad. In addition there are several metering circuits provided by Safe Harbor in order that the Safe Harbor operating force may actually control the flow of power between the plants of Safe Harbor and Penn Water and those [of] Metropolitan Edison Company, Pennsylvania Power and Light Company and Philadelphia Electric Company over the railroad circuits, and it is the operating force at Safe Harbor which very largely controls the flow of power over these interconnected tie-lines.

The facilities were provided at Safe Harbor because of the large installation of capacity there and the fact that that capacity is frequently operated as the only reserve capacity on the system, which I referred to in my direct examination in connection with Exhibit 8, I believe, so that that operating group has a large part of the responsibility for the division of load between the Safe Harbor plant, which is to be furnished to the customers of Penn Water and Safe Harbor, and the load from Holtwood or from the other generating sources on the system, all of which I believe, [2425] might be considered as transmission facilities.

* * *

[2430] Q. Is voltage a part of the electric service? A. I would say the voltage was an attribute of electric [2431] service, yes.

Q. Is it required in connection with the electric service? A. Most certainly is, and if the voltage is not there, then the service is not there.

* * *

[2448] Q. And sometimes when special facilities are provided there is a special charge for it and sometimes it is

part of the demand and energy charge, isn't it? A. That is correct.

Q. Do you know of any contracts where frequency, voltage, phases and power factors are not mentioned? A. Offhand I don't recall except in the interchange agreements they are not always specified because reference is made in them to the furnishing of the services at a specified point that is usually referred to in some other firm power agreement, and therefore the repetition may not have been necessary.

Q. May not have been necessary? A. That is right, but it is implied just the same.

• • •

[2450] Q. So that when the contract speaks about the supply of power and energy or capacity and energy, necessarily included in those phrases are the other attributes you mentioned—voltage, point of delivery, phase, frequency, and the like—right? A. They may be assumed, but usually the contract at some point will specify what those other attributes must be.

Q. That is right. It will specify that the electric energy and capacity to be interchanged and supplied, is to have certain characteristics. Right? A. That is correct.

• • •

[2452] Q. Does Safe Harbor receive interchange energy under Exhibit 72 from Metropolitan Edison? A. Not directly.

Q. Does it do so indirectly? A. Well, when interchange energy is received by Penn Water alone as results from operations under Exhibit 72, or when such energy, capacity and other interchange services are received by Penn Water and Safe Harbor under the operations of [2453] Exhibits 76 and 77, such energy is available to those two companies in meeting their operating performances under its other contracts, and as I have testified in my direct we must and do consider Holtwood and Safe Harbor

not only as a single operating development but we must consider their operations together. That is why I referred to the energy being received by Holtwood and Safe Harbor directly under the operations of Exhibits 76 and 77, but being received by Safe Harbor indirectly under the operations of Exhibit 72.

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[2458] Q. Does Safe Harbor make any payments for the Interchange energy it receives under Exhibit 72?

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THE WITNESS: No.

By MR. GOLDBERG:

Q. Does Penn Water? A. Yes.

Q. Does Safe Harbor make any payments for the interchange energy it receives under Exhibits 76 and 77?

• • •

THE WITNESS: No.

By MR. GOLDBERG:

Q. Does Penn Water? A. Yes.

Q. Penn Water makes the payments under Exhibits 72, 76 and 77 to Metropolitan Edison and Pennsylvania Power and Light Company respectively—right? [2459] A. That is correct. The bills rendered to Pennsylvania Power and Light and Metropolitan and the payments made by Penn Water to Metropolitan Edison and Lancaster are made only by Penn Water.

Q. Does Safe Harbor reimburse Penn Water for any of those payments under Exhibits 72, 76 and 77?

• • • •

THE WITNESS: There are no bills rendered or payments made between Safe Harbor and Penn Water for such transactions.

By MR. GOLDBERG:

Q. The fact of the matter is that the only payment between Penn Water and Safe Harbor are the payments made

by Penn Water under items E, F, and G—right? A. Those are the only payments made; yes, sir,—in dollars, of course.

Q. What do you mean when you tack on that last phrase, "In dollars"? A. We are speaking of bills. I am stating that when we are talking of bills we are talking about dollar transactions.

Q. Are payments made in any other form? A. Well, Penn Water receives energy and capacity from Safe Harbor, yes.

Q. Under items E, F, and G. A. Yes.

[2460] Q. And pays for it? A. Payments are rendered for it, yes, but not in proportion to the services received.

Q. All you mean by that is that Penn Water pays for one-third of Safe Harbor's capacity and energy output—right? A. Under "E", "F" and "G" Penn Water pays one-third of the revenues Safe Harbor expects to receive under "E", "F" and "G" in exchange for its entitlements.

Q. And you are saying that though it pays for one-third of its entitlements it does not necessarily receive that one-third. Is that right? A. That is right.

Q. That one-third may go to the Pennsylvania firm customers—is that right? A. Yes, sir.

Q. And when it goes to the Pennsylvania firm customers—— A. Of Penn Water and Safe Harbor.

Q. I am not adding that. When it goes to the Pennsylvania firm customers, Philadelphia Electric, Pennsylvania Power and Light Company and Metropolitan Edison, those companies reimburse Penn Water for the energy they received—right? A. Those companies reimburse Penn Water for the electrical services rendered to them by Penn Water direct or by Penn Water and Safe Harbor, as the case may be.

Q. They pay only Penn Water—right?

[2461] The accounting and billing is all done by Penn Water. Is that right? A. That is right.

Q. They pay only Penn Water. Is that right? A. Payments are made only to Penn Water.

Q. And Penn Water pays Safe Harbor only under the provisions of Items "E", "F" and "G"—right? A. All payments made by Penn Water to Safe Harbor are made under the provisions of Items "E", "F" and "G".

Q. And if Penn Water were not to receive any part of that one-third but instead three-thirds went down to Consolidated, Penn Water would nevertheless pay Safe Harbor for the one-third of its entitlements under Items "E", "F" and "G"—right? A. You are assuming no contractual changes, of course, but merely that under some conditions three-thirds might go to Baltimore?

Q. That is right. That is an assumption, three-thirds may not go. Let's assume that it does. A. Under those conditions Penn Water still makes payments to Safe Harbor equal to one-third of the total revenues to be received by Safe Harbor under "E", "F" and "G".

Q. Yes, and Consolidated reimburses Penn Water for all of that three-thirds under Items "H" and "I"—right? A. Under that assumption that would be correct.

* * *

[2463] Q. This is the fact, isn't it—that what Penn Water pays to Safe Harbor under Items "E", "F" and "G" is wholly independent of what Penn Water receives from Metropolitan Edison, Philadelphia Electric and Pennsylvania Power and Light Company—isn't that so? A. That is correct.

* * *

[2467] Q. What did you understand kilowatt-hour sales to mean when you were using that on Exhibit No. 9? A. I made it very clear from the footnote on Exhibit No. 9 that the revenues were the total revenues received including charges for all services rendered, and perhaps I should have said both electrical services and other transmission services rendered.

Q. Perhaps you should have said kilowatt-hour sales and other electric services? A. The kilowatt-hour sales, as shown there, was the accounting designation used in the Federal Power Commission reports wherein we do account for the energy, both the energy generated ourselves and the energy received from others. That is the energy recorded as being delivered to the firm power customers of Penn Water and Safe Harbor.

[2468] Q. Isn't it a fact that you prepared Exhibit No. 9 and thought it was perfectly proper to refer to it as kilowatt-hours sales because it represented delivery by Penn Water to the Pennsylvania customers of kilowatt-hours for compensation? A. Yes.

Q. And you thought it was perfectly proper to use that designation in connection with your technical explanation of electric services. Is that right?

• • •

THE WITNESS: Apparently that is a part of the transaction. I saw nothing wrong with it then. I don't think I see anything wrong with it now.

By MR. GOLDBERG:

Q. I don't, either.

Now, then, will you describe for us the sales of power and energy with all of those attributes that you have mentioned, voltage, frequency, and so forth, that are made by Penn Water on a firm power basis and on an exchange basis? A. May I have the question again, please?

[2469] (Question read.)

THE WITNESS: Under contracts identified as Exhibits 73, 74, 75, Penn Water and Safe Harbor provide services, some electrical services, some special facility services, to Philadelphia Electric Company at Coatesville. Some of those services originate in the hydroelectric plant of Holtwood. Some originate in the steam electric generating station at Holtwood. Some originate in the hydroelectric plant of Safe Harbor Water Power Corporation.

Those services are provided for Philadelphia Electric Company at Coatesville on the one hand directly over the transmission facilities from Holtwood and on the other hand over the generating and transmission facilities of Safe Harbor and the transmission facilities of Penn Water. Hence, to Coatesville.

The metering of the energy, the metering of the demand under those agreements is provided for at the Newlinville sub-station of the Philadelphia Electric Company at Coatesville. Although the services rendered under these contracts, Exhibits 73, 74, and 75, are rendered jointly by Penn Water and Safe Harbor, the accounting for the energy and the billing for the energy, demand and special facilities services are carried out by Penn Water acting for itself and for Safe Harbor. Under these contracts there are no interchange services. They are strictly firm power services.

There is provision for interchange in emergency services [2470] but to my recollection there has not been any accounting or billing for such services under those contracts since 1933.

* * *

Q. I wanted to interpose. When you were discussing the origin of the source of supply to the Philadelphia Electric Company, I recall that you mentioned the Safe Harbor hydro plant, the Holtwood hydro plant, and the steam electric plant. You overlooked mentioning steam electric plants of Pepco and Consolidated. Is that right? A. I suppose I also overlooked the generating facilities of Pennsylvania Power and Light and Metropolitan Edison Company from whom we also purchase interchange energy, and I guess I should have included those because from time to time we receive energy over our northern interconnections as well as from Baltimore, and they in turn from Washington, and to the extent that is received that is mixed with the services of the Safe Harbor and Holtwood supply.

Q. Does Penn Water submit a bill to Philadelphia Electric Company on behalf of Safe Harbor and itself? A. The bill is rendered by Penn Water for itself and for Safe Harbor, but Safe Harbor's name does not appear on the bill, I think. I am not certain of that.

• • •

[2475] Q. What you are telling me amounts to this: That although Consolidated at times furnishes substantial amounts which are used to supply the requirements of Philadelphia Electric by Penn Water, it is not fair to state that Consolidated renders service to Philadelphia Electric Company or that Penn Water renders a bill to Philadelphia Electric Company on behalf of itself and Consolidated because there is an agreement between Holtwood and Consolidated known as Items H and I whereunder Consolidated is reimbursed for that supply. Is that it?

• • •

THE WITNESS: I would like to make about five replies to that because I don't agree with the whole thing.

• • •

THE WITNESS: You referred to substantial amounts being furnished by Baltimore Company. If you refer to substantial in the sense that at some particular hour it is a large proportion, then I would agree. But if you are referring to substantial as being large in kilowatt-hours or large in percentage taken over a period of a week or a month or a year, I would not agree.

[2476] By MR. GOLDBERG:

Q. All right. Go on from there. A. You referred to the supply by Baltimore Company of large amounts used by Penn Water for its services to Philadelphia Electric Company.

Of course, I don't think I could agree with that inasmuch as when the energy is received by Penn Water it is impossible to earmark where that energy goes, or to say it

goes to Philadelphia Electric at Coatesville or to P. P. and L. or to the Pennsylvania Railroad. It is true that the services rendered by Baltimore to Penn Water are mixed with Penn Water and Safe Harbor's own services and the mixture after conversion perhaps in phase, perhaps in voltage, perhaps in frequency, then is used with Penn Water and Safe Harbor's own services in rendering service to the Philadelphia Electric Company at Coatesville.

Q. Go on from there.

Have you done this tracing job which enables you to say you cannot trace it? A. I have attempted to do a tracing job and cannot.

Q. You have not succeeded? A. I could make some hypothetical assumptions and take some proportionate figures, yes, but I don't know what energy goes to Philadelphia Electric because I cannot, to use an expression we frequently use, paint the [2477] kilowatt-hours.

Q. Or put bells on them? A. Or ribbons.

* * *

TRIAL EXAMINER: Read that last question again, please.

(Question read.)

THE WITNESS: I cannot answer that question because I don't believe I understand it.

Baltimore Company does not render any service, if I understand that question, to the Philadelphia Electric Company at [2478] Coatesville.

* * *

Q. As I understand it, you say that Safe Harbor and Penn Water jointly render electric service to Philadelphia Electric Company? A. Yes, sir.

Q. Do you say that because Safe Harbor happens to be named in the contract or do you say that because part of Safe Harbor's supp generation, find its way to Coatesville? A. I say it because it is a party to the contract,

[2479] furnishing of a service under a contract in a technical sense.

Q. Suppose Safe Harbor did not produce any electric energy which was used to meet the demands of Philadelphia Electric under the contracts which we have discussed as Exhibits 73, 74 and 75. Would you still say that the supply to the Philadelphia Electric Company is a joint supply by Penn Water and Safe Harbor? A. Technically it would not be a joint supply if Safe Harbor did not provide any of the services. I don't know what the legal connotations are.

Q. I see. You are not talking about the significance of naming them? A. Naming what?

Q. Naming Safe Harbor in the contract. When you spoke of joint supply you had in mind that Safe Harbor actually generates a certain amount of kilowatt-hours which are used to supply the requirements of Philadelphia Electric Company at Coatesville—is that right? A. Yes, I was.

* * *

[2481] Q. Isn't all of the supply that Safe Harbor furnishes under Items E, F, and G, isn't it furnished under Items E, F and G and paid for under that agreement?

THE WITNESS: May I have the question again, please?

(Question read.)

THE WITNESS: There are four questions there. All electrical services of Safe Harbor are not furnished under E, F, and G although all of the payments made to Safe Harbor for all of the services rendered to its several customers are paid for, the payments are computed and made in relation to and under the provisions of contract identified as items E, F, and G.

* * *

Q. You said that items E, F, and G do not cover all of the services rendered by Safe Harbor. What do they not cover? A. Do not cover the services rendered to the

Pennsylvania Railroad Company at Safe Harbor, services rendered to Pennsylvania Power and Light Company, jointly of course in [2482] the latter case with Penn Water and in the former case jointly with Baltimore, Potomac Electric Power Company, Penn Water and Safe Harbor.

It renders service to Philadelphia Electric Company at Coatesville under contract identified as Exhibits 73, 74 and 75.

Q. Are you finished? A. I think so. I think I covered them all. As well, of course, as the services rendered to Baltimore under E, F, and G.

Q. What is the Safe Harbor Company required to furnish the railroad that is not—specifically—that is not covered in items E, F, and G? A. Electric services.

Q. Such as? A. Capacity, energy, wattless, frequency, phase, voltage, special facilities.

Q. What special facilities? A. Railroad frequency changer, two single phase generators, cables to Conestoga Substation.

Q. You say those things are not covered under items E, F, and G. A. Not specifically, no. Payments are made under E, F, and G, but the services are not rendered under E, F, and G, are not supplied or provided under E, F, and G.

[2483] Q. Do you mean to tell me that the reimbursement for the railroad frequency changer, the cables, and the other facilities that you have mentioned are not involved in the computation of the payments to be made by Holtwood and Consolidated to Safe Harbor? A. Not at all. I said the services were not rendered all under E, F, and G. But I specifically stated in addition that all the payments Safe Harbor receives for services rendered, to whomever it may render, are made under the provisions of contracts E, F, and G.

Q. In other words, the provisions of E, F, and G are broad enough to include compensation for all services rendered by Safe Harbor.

MR. SPARKS: I think that is a legal question, if your Honor please, and calls for a legal conclusion.

MR. GOLDBERG: I want his understanding of it.

TRIAL EXAMINER: Objection overruled.

THE WITNESS: The contract is broad enough to cover the payments but it is not broad enough to cover the services, nor did it intend to.

• • •

[2491] Q. In view of the fact that Consolidated at times may be rendering joint service to Coatesville with Penn Water, do you know why it is not a named party to the agreement? A. I do not consider Baltimore ever renders joint service to the Pennsylvania customers of Penn Water and Safe Harbor. They are not named parties to the contract and they are not operated, they do not have an operating responsibility [2492] to those Pennsylvania customers as distinct from the legal obligation.

• • •

[2493] Q. From an operating point of view what does it mean, then, to say Baltimore Company is entitled to two-thirds and Holtwood Company is entitled to one-third. A. Just what it says, it has entitlement but not the services.

Q. You mean to tell me that from an operating viewpoint under Items "E", "F" and "G" Consolidated cannot demand that Safe Harbor supply it with two-thirds of its output? [2494] A. When you say "cannot demand" it seems to me that is a legal question, whether they can demand it or not. From an operating point of view it seems we ignore the question of whether or not they would or should or could get the entitlements. They are interested only in where the energy and the services go from a most economical operational viewpoint, and we are not interested from an operating point of view in what the obligations are, because entitlements from an operating point of view, and

not from a legal point of view, does not mean services. It may mean revenues instead of services.

Q. No, it means entitlements of capacity and energy, doesn't it? A. Entitlements, yes.

Q. It does not mean revenues, it means entitlements of capacity and energy. A. Entitlements from an engineering point of view can be either two-thirds—speaking of Baltimore Company because that was your question, I think—Baltimore is entitled to two-thirds of the capacity and energy, and, of course, other services of Safe Harbor. Now, that entitlement may be in the form of services or it may be in the form of revenues received for those services provided to others which Baltimore does not get, but to which they are entitled.

* * *

[2495] Q. Let me see. If Consolidated is entitled to two-thirds, but its two-thirds go to Holtwood, which company uses it in turn to supply its Pennsylvania customers, Consolidated nevertheless pays Safe Harbor for that two-thirds, and under Items "H" and "I" receives the benefit of the revenues derived by Holtwood in the use of that electric supply. Is that right? A. From an accounting point of view that is right, from a billing point of view. You are speaking now of the energy and capacity and other services of Safe Harbor going to Penn Water for its sole use with its Pennsylvania customers, which I believe would only be Metropolitan Edison, because to all of the other customers, Safe Harbor and Penn Water, have joint responsibilities.

Q. I know what your view is on that. We have already [2496] discussed that partly this morning and partly this afternoon. And the reason why Consolidated might not at times receive that two-thirds is solely in connection with the operation of the pool to supply electric energy from the cheapest possible sources to the various points of deliveries? A. Not entirely, but that is the way the operations are carried out. You have on the one hand the opera-

tions of all the resources of Safe Harbor, Penn Water and Baltimore which are coordinated for maximum economy and utilization of resources.

You have, secondly, the requirements of Penn Water's and Safe Harbor's joint customers for which Safe Harbor and Penn Water have certain operating responsibilities.

You have also Penn Water's customer, Metropolitan Edison, to which Metropolitan has the sole operating responsibility.

* * *

And you have to consider them from an operating point of view of hour-by-hour and day-by-day and week-by-week planning and dispatching of services. You have to consider them from the operating responsibilities of the respective parties between Penn Water and Safe Harbor with the Pennsylvania customers on the one hand, Penn Water and Baltimore on the other hand. You have to consider the entitlements of Baltimore and Penn Water under "E", "F" and "G". So you have the operating [2497] responsibilities, you have the accounting for the flow of energy, and, of course, you have the legal responsibilities which we have not talked about.

By Mr. Goldberg:

Q. Isn't it a fact that Consolidated controls the disposition of its entitlements so that it may derive from the disposition of its entitlements the greatest amount of revenues, and necessarily benefit? A. What do you mean by the first part of your question?

Q. Consolidated directs where its entitlements are to be utilized if it is not going to Consolidated? A. When do you mean it directs? When it approves contracts or when it jointly with Penn Water plans on the operation of the system from day to day and hour by hour?

Q. When the operations of the system are planned. A. That is not the sole responsibility of Baltimore by any means. That is a joint responsibility of Baltimore and

Penn Water. That is the reason the operating committee was set up, to provide for that very thing.

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[2498] Q. With respect to the entitlement of Consolidated under Items "E", "F" and "G", and under Items "H" and "I", are you saying that Consolidated does not determine the disposition of those entitlements? A. I am afraid we are confusing the entitlements on a contractual basis and the entitlements on an hour-by-hour dispatching basis. I thought we were talking about entitlements up until a few minutes ago on a contractual basis. By "contractual" I mean the operating responsibilities.

As far as those entitlements are concerned, Baltimore is entitled, under "E", "F" and "G", to two-thirds of the power and energy and other services of Safe Harbor, but it does not always, in fact it very seldom, gets those two-thirds in the form of services, but in lieu thereof does receive the revenues paid for those services to which Baltimore is entitled.

[2499] Q. And when the electric energy to which Baltimore would otherwise be entitled is used to supply other customers on the system, the customers of Penn Water, for instance, Consolidated's interest lies in the disposition of that electric energy at the sources where it derives the greatest amount of revenues? A. It is a joint responsibility for that, Penn Water and Baltimore Company having a joint responsibility and equal joint responsibility for that, although the ultimate dollar benefit does flow under H and I and E, F and G, which you have to take together, to the Baltimore Company.

Q. The Baltimore Company does not alone decide on the disposition of that energy—is that correct? A. That is correct.

Q. You say that from an operational standpoint. A. That is right.

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[2500] By MR. GOLDBERG:

Q. The discussion we have been having flowed from your description of the sales of firm power and energy under Exhibits 73, 74 and 75, to Philadelphia Electric Company at Coatesville. What other sales of firm power and energy are made by Penn Water? A. Well, again we have the word "sales" to consider, but Penn Water and Safe Harbor furnish firm power services to the Pennsylvania Power and Light under contracts identified as Exhibits 76 and 77, and it is evident from knowledge of the operations and the flow of power in the general sense in which we speak of it that a large part, if not the preponderance of the services rendered to Lancaster under these P. P. and L. contracts, 76 and 77, are rendered by Safe Harbor, but both companies, from an operating point of view, are responsible for the firm power services. By "both companies" I mean Safe Harbor and Penn Water.

Q. If Safe Harbor were not named in the contract could you still say from an operating viewpoint they are joint services? A. Yes, I wouldn't say they were rendering joint services but I would say the services were of a joint nature because it is necessary to take the two hydro plants and the Holtwood steam plant and consider them as a single project. They are operated that way. They were conceived that way, and [2501] the services are rendered as though they were one.

Q. May we in this case include the Consolidated Steam Electric plants, too, as rendering joint services to Lancaster? A. No.

Q. Is that because you do not believe that the electric energy at times comes up from Consolidated and flows to Lancaster? A. No.

Q. Is it because there are no operating responsibilities of Consolidated? A. That is one reason.

Q. Where do you derive these operating responsibilities? A. From the contracts on the one hand and from the method of operation on the other.

Q. Suppose there are none in the contract? Could there be a rendering of joint service from an operating standpoint? A. There could be; there wouldn't necessarily have to be.

Q. Suppose Safe Harbor were not named in Exhibits 76 and 77? Would you say they were joint services from an operating standpoint? A. I would.

Q. Would you say that with respect to Consolidated? A. No.

[2502] Q. They both would be on an equal footing then, wouldn't they? A. No.

Q. Why not? A. Because the operating responsibilities of the two hydro companies have to be taken together.

Q. But you wouldn't—— A. Speaking now of the operating responsibilities as distinct from the contractual responsibilities, legal responsibilities.

Q. We don't have any contractual responsibilities so you must speak of operating responsibilities that are not derived from the contract. Right? A. That is right.

Q. Where, from what source do you impose an operating responsibility upon Safe Harbor in the absence of an agreement? A. Because a lot of the switching equipment relating to the supply of Pennsylvania Power and Light is operated and controlled by the Safe Harbor operating personnel.

Q. Is that operated and controlled by the Safe Harbor personnel in connection with any contractual provisions you know of? A. No, I don't think so. The fact is they are.

Q. Suppose Safe Harbor tomorrow said, "We are not going [2503] to operate the switching equipment for you any more." Is there anything Holtwood could do about it? A. Safe Harbor is a party to the P. P. and L contracts, items 76 and 77 right now.

Q. I want to eliminate that from our discussion. Assuming that tomorrow they are not named in the contract, Safe Harbor says, "We are tired of working the switching

equipment for you. We are just not going to do it any more."

Is there anything Holtwood could do about it? A. Holtwood would have to approve their being eliminated from the contract. I assume that is a legal matter, though.

Q. Holtwood would have to approve Safe Harbor's being eliminated from Exhibits 76 and 77? A. I would think so.

Q. You mean Holtwood has no freedom of action?

MR. SPARKS: You mean Safe Harbor?

By MR. GOLDBERG:

Q. You mean Safe Harbor has no freedom of action with respect to that contract? A. We are not getting into a legal field, but companies do not take their responsibilities under a contract lightly.

Q. Let's assume that Safe Harbor is eliminated from the contract. A. In what manner?

Q. They are removed. [2504] A. How?

Q. The same way you removed them from the Metropolitan Edison contract. A. By writing a new contract?

Q. If you wish. A. All right.

Q. Or by amending the existing contract? A. With the consent of all parties.

Q. I will let you assume that for the time being. A. All right.

Q. Where would Safe Harbor have any operating responsibilities for the operations of any of Holtwood's equipment? A. Their operating responsibilities are there, and if Safe Harbor said, "We will not operate them any longer", it would be up to Holtwood to make other provisions, electrically, mechanically, to do that work themselves.

Q. In other words, you say that there are no provisions that you know of which would require Safe Harbor to continue working that equipment. Is that right? A. You have assumed that they no longer are parties to contracts 76 and 77.

Q. That is right, are no longer parties. A. I don't recall any other obligations. There may be some.

[2505] Q. Referring to Exhibits 76 and 77, where are these obligations that Safe Harbor has for the operation of Holtwood equipment? A. I didn't say there were any. I said they were a named party to the contract.

Q. I was under the impression that the obligations they had for the operation of the equipment were in Exhibits 76 and 77. A. I am sorry. I didn't intend to give you that impression.

Q. So we cannot look to Exhibits 76 and 77, even though they are named parties, for any obligations which require Safe Harbor to operate Holtwood's equipment. Is that right? A. It isn't Holtwood's equipment. It is its own equipment. It may be P. P. and L.'s equipment. We are talking about the controls I talked about a while ago.

Q. Switching equipment? A. In part they are Holtwood's equipment operated from the Safe Harbor plant by the Safe Harbor personnel. That is right.

Q. Now, does Safe Harbor operate Holtwood's equipment because of anything in Exhibits 76 and 77? A. I don't recall any specific provisions. I am looking to see if there are. There may be. There is certainly a very definite implication in Article Roman numeral VIII of [2506] the contract marked for identification as Exhibit 76.

Q. What is that statement you refer to from which you derive some sort of an implication? A. The various provisions of this renewal agreement are agreed to between the parties, to which Safe Harbor is a party, with the understanding that receiving companies Lancaster system will be so connected, and will be operated in parallel with other systems, and that each of the parties hereto will arrange and operate its facilities in such manner as may be necessary for such parallel operation.

Q. Now, then, under what agreement has that arrangement been made between Holtwood and Consolidated? A. I don't understand.

Q. You just indicated that Holtwood and Safe Harbor have to make arrangements about the operation of facilities to carry out the requirements of the agreement. A. It is a mutual matter. All three parties agree to that.

Q. Where is the agreement between Safe Harbor and Holtwood for the operation by Safe Harbor of Holtwood's equipment? A. I don't know of any. I don't think there needs be as long as Safe Harbor is a party to the contract.

Q. Is it items E, F, and G?

THE WITNESS: May I have the question again?

[2507] (Question read.)

THE WITNESS: I don't think so. Of course, under items E, F, and G, Safe Harbor receives revenue to cover its expenses in such operation and its return on the investments provided for such matters. But that is not what we were talking about. We were talking about the operating responsibilities and not the revenues therefor.

* * *

Q. And we were hunting for some contract that you could refer to which shows the operating responsibilities. Isn't that so? A. I think that is right.

Q. We have not been able to find one yet. A. I don't think there needs to be.

Q. At least we have not been able to find one? A. So long as Safe Harbor is a party I don't think we need one. But, again, from a legal point of view of course I am not considering that matter.

Q. In connection with Exhibit 71, did Safe Harbor operate any of Holtwood's equipment? A. No.

Q. It didn't have to? It had no operating responsibilities? A. It had certain operating responsibilities; yes.

Q. Doesn't have them any more today, does it?

[2508] A. Yes.

Q. It has them today even though they are not a named party in Exhibit 72? A. That is right.

Q. Have the same ones they had under Exhibit 71. Isn't that right? A. No, I wouldn't say they are the same ones.

Q. How do they differ? First tell us the operating responsibilities under Exhibit 71 and then tell us the operating responsibilities under Exhibit 72. A. Under Exhibit 71 Safe Harbor had operating responsibilities for power and energy as well as for the operation of certain facilities, or for the manipulation of certain of Safe Harbor's facilities in connection with the operating responsibilities of Exhibit 71.

As respects Exhibit 72, Safe Harbor is not a named party, but the contract, Exhibit 72, between Penn Water and Metropolitan Edison Company very specifically referred to the services that must in part be provided by Safe Harbor. They are not quite the same in some respects, but they are still operating responsibilities.

As for the operation of facilities or the manipulation of facilities in connection with contracts Exhibits 71 and 72, I don't think there is any difference.

Q. Now you say that Safe Harbor still has responsibilities [2509] under Exhibit 72. Yet we know they were not named. Is that right? A. That is correct.

Q. How do they get paid for carrying out those responsibilities? A. Under E, F, and G.

Q. How did they get paid for those operating responsibilities when Exhibit 71 was in existence? A. Under E, F, and G.

* * *

[2517] Q. Does Safe Harbor receive any revenues for the sale of electric energy capacity and use of facilities, whether special facilities or otherwise, other than the amounts paid to it by Penn Water and Consolidated under items E, F, and G? A. No.

Q. Isn't it correct to say that the investments made by Safe Harbor in all facilities owned by it, and the operating expenses incurred by Safe Harbor in connection with the operations of those facilities, are included as a basis for

[2518] the bills rendered by Safe Harbor to Consolidated and Penn Water under items E, F, and G, copies of which bills are in this proceeding as Exhibit 17? A. I think you may have two questions in there, Mr. Goldberg. I should like to consider them separately if I may have the reporter read them back.

MR. GOLDBERG: Yes.

(Question read.)

THE WITNESS: As we discussed yesterday, Safe Harbor may make, and has made, investments for facilities under contracts other than those identified as items E, F, and G, but the specified return on such investments, as well as the operating expenses incurred in connection with such facilities, are a part of the computations used to derive the total revenues receivable by Safe Harbor under its contract identified as items E, F, and G.

By MR. GOLDBERG:

Q. Now, with reference to your statement that Safe Harbor may make and has made investments for facilities under contracts other than the contracts identified as items E, F, and G in this proceeding, you there had reference, did you not, to your testimony of yesterday relating to the installation of the additional 25-cycle single phase unit which was required to meet the increased loads of the Pennsylvania Railroad. Is that right? [2519] A. In part. But I also have reference to the installation by Safe Harbor of the frequency changer units for the conversion of three-phase 60-cycle electric services to single phase 25-cycle electric services in conjunction with its services rendered to the Pennsylvania Railroad Company jointly with others, and I also had reference to the other investments made in connection with such services to the railroad, such as the cable system, tunnel, structures, etc., that would not otherwise have been required.

I also think I should refer to those investments in facilities made by Safe Harbor Company as necessary in

connection with the services rendered to Pennsylvania Power and Light Company under contracts identified as 76 and 77, such services being rendered jointly by Safe Harbor and Penn Water.

Q. Any others? A. Not of any material nature that I think of at the moment.

Q. What facilities did you have reference to in connection with Exhibits 76 and 77 which Safe Harbor has installed for purposes of that agreement? A. Consisting largely of 66 K. V. switching equipment and oil circuit breaker, disconnect switches and the like; also the control equipment including relays, meters and the like required in connection with the operation of the transmission system of Penn Water under the exhibits identified as [2520] 76 and 77.

Q. Is it your statement that the equipment you have described in connection with Exhibits 76 and 77 were not installed by Safe Harbor until Exhibit 76 was consummated? The date of the agreement is May 1, 1933, for your information. A. I think that is correct.

Q. Is there any provision in that agreement for the installation of the equipment you have described by Safe Harbor? A. Which agreement are you referring to?

Q. Exhibit 76. A. I don't think they are set out specifically there.

Q. Can you point out where there are any references made to them? A. May I see Exhibit 77, please?

Q. Yes. A. Article Roman numeral III of Exhibit 76, Section 4, "All power and energy delivered hereunder shall be metered at or in cases not practicable shall be corrected to the low tension terminals of the stepdown transformers at Engleside Substation. Necessary billing meters shall be installed and maintained by and at the expense of Generating Companies."

Q. Stopping right there——

Mr. Myse: May he finish his answer, Mr. Goldberg?

The Witness: I have not looked further.

[2521] By Mr. Goldberg:

Q. Go ahead and look further. A. I think I referred yesterday to Article Roman numeral VIII of Exhibit 76 relating to the interconnection and parallel operation, in which reference is made to "arrangements for an equitable division of the cost of any changes in or additions to the facilities or equipment of either party necessary to accomplish these results."

By "these results" reference is made to interconnection and parallel operation of the Lancaster division of P. P. and L. with its other divisions.

Then as respects Exhibit 77 reference is made in paragraph Arabic 7, "Manor Substation and Transmission Line." It there provides that "On or before November 1, 1941, (unless development of a new type of circuit breaker will require a longer time in which event a date not later than May 1, 1943, shall be agreed upon between the parties) Generating Companies will construct and thereafter will operate and maintain at a location near the Safe Harbor plant, a high tension bus and switching station (to be known as Manor Substation) shown schematically on attached diagram Exhibit —M—."

I will not read any more unless it becomes necessary.

Q. I want you to look through the entire agreement and point out everything in that connection because I propose [2522] asking you some more questions about it. A. Perhaps I should stop here and refer to this paragraph because the dates I have mentioned for having Manor Substation available, of course, are behind us.

Q. And it is not available? A. It is not yet available but other facilities have been provided in lieu of it which I want to refer to.

Q. All right. A. Letters were exchanged between Safe Harbor on the one hand and Pennsylvania Power and Light on the other, agreeing that the installation of Manor Substation as herein proposed might be deferred.

Q. Was that letter solely between Safe Harbor on the one hand and Pennsylvania Power and Light on the other?

A. That is my recollection. Safe Harbor at that time was writing to explain why certain facilities were not available, but I believe that although it was written by Safe Harbor reference was made to the fact that it was writing for both parties.

Q. Will you check that? I would like to know who wrote the letter. A. Yes, sir.

Q. If you can find a copy of it bring it in to the hearing room with you. A. Yes, sir.

[2523] Although the substation installation was not completed on the dates herein specified, Pennsylvania Power and Light came to Penn Water and Safe Harbor in about 1942 for the purpose of discussing the service problems arising because Manor Substation had not been built.

The outgrowth of those discussions was that Safe Harbor installed a 66 K. V. oil circuit breaker on the intake deck of the power house together with 66 K. V. buses and disconnect switches, including of course, control, metering and relaying equipment.

The purpose of this oil circuit breaker was to tie electrically together the 66 K. V. circuits of Safe Harbor known as 692 and 693 in order to equalize the loading on these two circuits which had become unbalanced due to the increasing amounts of power and energy flowing at times north and at times south on the 66 K. V. line of Pennsylvania Power and Light between its Harrisburg Substation and the Manor Substation of Penn Water.

It was further understood, and I believe in writing, that the installation of this 66 K. V. oil circuit breaker and related equipment was not considered a substitute for Manor Substation but would defer Manor Substation until such times as the parties found that the Manor Substation facilities were required to provide the reliability of service to which both companies agreed was desirable and necessary.

[2524] Q. You say that you made reference to another letter. Is that another letter or the same letter? A. No, it would be another letter if it is in writing. I am not

sure whether or not it is in writing. My recollection is that it was.

Q. Will you check that and bring a copy of that along with you? A. I will.

Under paragraph 8, "Method of operation", reference is made to certain metering facilities that would be provided by Generating Companies to permit the control or regulation of the amounts of power and energy otherwise referred to.

Then paragraph 14, "Joint use of transmission facilities", which we referred to yesterday, which involves in part the joint use of Safe Harbor's facilities.

Q. Those transmission facilities of Safe Harbor that you described yesterday in connection with paragraph 14 of Exhibit 77, are we to understand that those facilities would not have been installed if Exhibit 77 had not been consummated? A. No, I didn't intend to give that impression.

There may be other references or implications that I didn't notice as I read through the two contracts.

Q. Now with respect to Articles III and VIII of Exhibit 76, were the facilities which you described as having been installed by Safe Harbor in connection with Exhibits 76 and 77 [2525] installed pursuant to Articles III and VIII of Exhibit 76? I have reference to your description of 66 K. V. switching equipment and oil circuit breaker, disconnect switches, control equipment including relays and meters and the like, in connection with the operation of the transmission system of Penn Water under Exhibits 76 and 77. A. Most of the facilities that I referred to, or at least that portion of the facilities I referred to as being installed on the intake deck of Safe Harbor, were installed in lieu of Manor Substation covered by paragraph Arabic 7 of Exhibit 77.

Q. Let me see if I—— A. The other facilities, the controls, meters, etc., were in part provided for Penn Water in connection with the flow of electric services between the

hydro developments of Safe Harbor and Penn Water, and would have been provided irrespective of Exhibits 76 and 77, but others were provided in order to carry out the intent and purpose, and specifically for that intent and purpose, of Exhibits 76 and 77.

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[2530] MR. GOLDBERG: Yes. I want you to define electric operations and then electric services and tell me what is the difference between the two.

THE WITNESS: Electric services, as Mr. Walls has used [2531] that term and as I have referred to it yesterday, include each and all of the attributes referred to by Mr. Walls and which we discussed a few minutes ago. It may be necessary, and in most cases it is necessary, to provide special facilities of a transmission nature in order that the electric services may be rendered, and, of course, as we are using it here such electric services are rendered under contracts, most of which have been identified in these proceedings.

There are also other special facilities from time to time provided by Penn Water and referred to in my direct testimony that had no relation to the supply of electric services by Penn Water and Safe Harbor, and a specific example of that is the 110 k. v. transmission line constructed by S. T. Co. of Maryland, a subsidiary of Penn Water, between the Philadelphia road substation of Baltimore Company and a second transmission and distribution substation of Baltimore Company in Baltimore County, I believe known as the Gunpowder switching station.

Such transmission facilities were provided for the sole and exclusive use of Baltimore Company and have no relation to, nor are they involved in, the rendering of electric services with its attributes which we have been discussing.

Q. What is electric operations? A. Of what?

Q. You said there is a difference between electric operations and electric services. Define electric operations. [2532] A. Electric operations would include the supply or

rendering of electric service, the operating of the special facilities provided for the exclusive or joint use of one or more of the customers, together with the operations of the general facilities of Penn Water and Safe Harbor, including the generators, turbines, the concatenated group of facilities within the powerhouse referred to by Mr. Walls, and its many auxiliaries.

Q. So that when you speak of electric services you have in mind the attributes of the electric service which you and Mr. Walls have mentioned in this proceeding. But when you speak of electric operations you have in mind the physical operations of the facilities which are utilized in rendering the electric service. Is that it? A. That is correct.

Q. Now, when you mentioned other special facilities in connection with your definition of electric services you said, if I recall correctly, that such facilities have no relation to the supply of electric services. Do I understand by your statement "have no relation" you had in mind that you do not conceive of such facilities as attributes of electric service? A. I am lost. I will have to have it read back.

(Question read.)

THE WITNESS: I would like to have that clarified, if I may, use of "other special facilities."

[2533] Q. You said, "Of the 110 k. v. line of S. T. Co." A. Yes. Under the contract identified as "H" and "I", and by agreement of the parties, Penn Water through its subsidiary, S. T. Co. of Maryland, provided certain 110 k. v. transmission facilities. Those electric facilities are not required nor used in the supply of electric services by Penn Water to Baltimore, and the electric services would be just as complete in every respect whether the Gunpowder line had been provided or not.

Q. In other words, you do not conceive of the Gunpowder line as an attribute of the electric service being rendered? A. I do not conceive of any facility being

an attribute of electric service, nor do I conceive that this Gunpowder line is a required, necessary or useful electric facility in connection with the rendering of electric services by Penn Water to Baltimore.

Q. By that statement, however, you are not passing on the question of whether the facilities are to be included in the rate base? A. No. We were talking about operations.

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[2536] Q. Do you know that any rendering of electric services to Penn Water by Safe Harbor are made under Items "E", "F" and "G"? A. That is right, any that are made are made under "E", "F" and "G".

Q. And that is the fact without regard to Exhibits 76 and 77. Isn't that so? A. The fact that what services are rendered are rendered under "E", "F" and "G"?

Q. That is right? A. That is true.

Q. And that would continue even if Safe Harbor were not a named party in Exhibits 76 and 77. Isn't that so? A. The fact that all services rendered to Penn Water are rendered by Safe Harbor under Items "E", "F" and "G"?

Q. Yes. A. That is right.

Q. And isn't it those services rendered under Items "E", "F" and "G" which Penn Water relies on in part to meet the requirements of Philadelphia Electric, Pennsylvania Power and [2537] Light Company, and Metropolitan Edison Company?

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A. • • • If I understand your question the answer is "yes." I want to be sure that I do. The services, the electric services, rendered by Safe Harbor to Penn Water may be used by Penn Water together with its own electric services to meet whatever obligations Penn Water has toward the service requirements of its customers, meaning Metropolitan Edison, Pennsylvania Power and Light, Philadelphia Electric Company at Coatesville, and the

Pennsylvania Railroad, and Baltimore Company.

Q. Now, in view of that fact does it not follow that even if Safe Harbor would not be a named party under Exhibits 76 and 77 the electric operations of Safe Harbor in rendering electric service to Penn Water and Consolidated would have been unaltered?

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[2538] THE WITNESS: No, I think they would have been materially altered.

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[2539] Q. All right, now. If its one-third entitlement under Items "E", "F" and "G" were all that were required by Holtwood to meet the requirements of Pennsylvania Power and Light Company, it was able to do so when Safe Harbor was named and it is still able to do so when Safe Harbor is not named. Is that right? A. Perhaps.

Q. Why is there any "perhaps" about it? A. I don't understand for certain just what your premise is, but I think it may be.

Q. Well, I want to be absolutely certain that you understand.

[2540] If, to meet the requirements of Pennsylvania Power and Light Company when Safe Harbor was a party to Exhibits 76 and 77, Penn Water was able to meet it by reason of the reecipt of electric energy it is entitled to receive under Items "E", "F", and "G" from Safe Harbor, it will still be able to meet it by reason of that entitlement under Items "E", "F" and "G", even if Safe Harbor were to be removed from that agreement? A. Well, under the first instance when Safe Harbor and Penn Water render service jointly to Pennsylvania Power and Light Company, and to use your example of a million kilowatt hours I believe it was, I don't know what portion of that million kilowatt hours was rendered by Penn Water and what portion was rendered by Safe Harbor under contracts identified as Exhibits 76 and 77. But whatever amount Safe Harbor may have rendered to Pennsylvania Power and

Light Company, when Safe Harbor is removed Safe Harbor must increase the services rendered to Penn Water by that amount in order that Penn Water may meet the full obligations now of the million kilowatt hours to Pennsylvania Power and Light under Exhibits 76 and 77.

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[2542] Q. Penn Water is obligated to serve Pennsylvania Power and Light, isn't it? A. Jointly with Safe Harbor.

Q. When Safe Harbor can't serve it does Penn Water just turn its back on its obligation?

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A. Penn Water and Safe Harbor have a joint obligation. If Safe Harbor at any one time does not have any electric services available, then Penn Water must supply them itself.

Q. And it would supply it at least in part? A. What?

Q. It would supply it at least in part? [2543] A. When?

Q. Through this drawing under Items E, F, and G. Right? A. Entitlements have no relation to the services rendered. I thought we cleared that up last night.

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Q. Now, then, if Holtwood received its one-third—— A. If Holtwood did receive one-third of the electric services?

Q. Yes. A. As specified by the entitlement?

Q. Yes, it would use that one-third to meet its obligations to Pennsylvania Power and Light Company under Exhibits 76 and 77. Right? A. And all of its other obligations; yes.

Q. And if the one-third was not sufficient to enable it to meet its other obligations it would try to meet it through generation at its steam electric and hydroelectric plants and perhaps through backfeed from Consolidated. Right? A. Or from its other Pennsylvania customers, yes.

[2544] Q. And that is the fact even if Safe Harbor is not named in Exhibits 76 and 77? A. That is right.

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Q. Aren't the electric operations under Exhibit 72 today of Safe Harbor the same as they were under Exhibit 71? A. But under 72 those electric—you said electric operations?

Q. Electric operations? A. Electric operations are quite different under 72 than under 71.

[2546] Q. Go ahead. A. Because of the very nature of the two contracts. They require quite different operations. Procedures, the methods are the same, but the operations are different.

Q. What do you mean by "procedures and methods"? A. Well, the fact that they operate the plant today is the same as it was before but the way the plant is operated, the way Safe Harbor is operated today, is different from the way it was operated before as respects the contracts for power supply to the York area.

Q. What are the differences? How was it operated under Exhibit 71 and how is it operated today? A. Under Exhibit 71 Safe Harbor and Holtwood and the other facilities were operated in a manner to provide the electric services required equal to forty per cent each hour in the year of the service requirements, electric service requirements, of the Edison Light and Power Company of York.

Under Exhibit 72 the electric services rendered to the York area are no longer a flat and constant percentage of the electric service requirements of the York area but vary generally in proportion to the river flow.

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[2547] Q. And that is what changes have taken place in the electric operations of Safe Harbor other than the generation of quantity that you have mentioned in the rendering of service under Exhibit 72 as distinguished from the rendering of service under Exhibit 71? A. Rendering of electric service?

Q. Yes. A. Under Exhibit 71 Safe Harbor rendered electric services to Edison Light and Power Company jointly with Penn Water.

Under Exhibit 72 Safe Harbor Water Power Corporation does not render any electric service to Metropolitan Edison Company but rather, in part at least, to Pennsylvania Water and Power Company.

Q. Has that affected the electric operations of Safe Harbor other than the quantity of generation required? A. The operating responsibilities have changed but the actual rendering of service in the way I understand you to mean, that the methods of operations, procedures of operations have not changed on the part of Safe Harbor Company, but the operating responsibilities have changed. [2548] Q. By "operating responsibilities" you have reference to the responsibilities of Safe Harbor under provisions of Exhibit 71 and the provisions of Exhibit 72. Is that right? A. I do.

Q. You have reference to contractual responsibilities. Is that right? A. That is right.

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Q. You mentioned certain facilities installed by Safe Harbor in connection with electric energy that is ultimately delivered to the Pennsylvania Railroad Company. Among other things named was the frequency changer unit for conversion of 3-phase, 60-cycle energy to 25-cycle single phase, and the cable system and other things you mentioned. Would those facilities have been installed by Safe Harbor if there were no requirements of delivery of electric energy to Pennsylvania Railroad? A. I don't know.

Q. You do know, however, that Safe Harbor installed them by reason of the requirements of delivering electric energy to Pennsylvania Railroad at certain characteristics. [2549] Is that right? A. That is right.

Q. Can you point to the provisions of any contract that has been identified or received in evidence in this proceeding whereunder those installations were made by Safe Harbor?

THE WITNESS: May I have that question read?

(Question read.)

THE WITNESS: What do you mean by "whereunder"?

By MR. GOLDBERG:

Q. You have Exhibits 76 and 77? A. Yes, I can do that from the Pennsylvania Railroad contract, which is Exhibit 10?

MR. SPARKS: Yes. Here it is.

THE WITNESS: I am referring to Exhibit No. 10, being the composite form of the several contracts with the Pennsylvania Railroad Company for the supply of electric service to the Pennsylvania Railroad by the "Supplying companies", which refer to the Pennsylvania Water and Power Company, Safe Harbor Water Power Corporation, the Consolidated Gas Electric Light and Power Company, and the Potomac Electric Power Company, and passing over the several preambles to the original contract which do refer to services and special facilities Article II, Section 2, states in part, "Electric Companies shall supply such additional power and energy when called upon [2550] under this Section, under the terms and conditions of this contract, and such additional power and energy, which may be furnished in part by additional single phase hydro generation", which of course, was to be installed at Safe Harbor.

Article Roman numeral III, Facilities, "Facilities to be provided and points of Supply."

"Electric Companies shall install, operate and maintain all generating, transmission and switching equipment, except"—and then it refers to the 60 cycle 110 K. V. circuit to be provided by the railroad between a point south of Baltimore and the Benning plant of Potomac Electric Power Company.

It also refers in that Article to the fact that Electric companies shall install, operate and maintain "such special equipment and facilities provided for the use of and at the request of Railroad Company, as may be called for from

time to time under the provisions of Articles VIII and IX."

Article Roman IV, "Characteristics of Supply." It includes the provision that: "The fields of the generators shall be designed and equipped with suitable voltage regulators", and so forth, indicating a characteristic of the facilities to be provided.

As I understand it, Mr. Goldberg, you want reference to the facilities provided by Safe Harbor.

[2551] By Mr. Goldberg:

Q. Safe Harbor, yes. A. Only?

Q. Yes. A. Article Roman VIII, "Annual charges for specified equipment and facilities." Therein Section 1 states: "At the written request of and upon reasonable notice by Railroad Company, Electric Companies shall install, operate and maintain single phase water wheel generators, converting equipment, cables, special 25-cycle bus for single phase supply to Railroad Company and switching equipment, step-up transformers and transmission lines under terms and conditions as herein specified. Railroad Company shall call on Electric Companies to provide additional single phase generating or converting capacity when the maximum"—and then it goes on to indicate conditions under which railroad may call for such additional capacity.

It also provides in that article that "Railroad Company shall endeavor to request the single phase waterwheel generators and transmission lines not less than eighteen (18) months, and other equipment and facilities not less than fifteen (15) months in advance of the date when such equipment shall be required."

That is not the whole of that section but enough to indicate the nature of railroad's request.

[2552] It further states in that article, "All such equipment shall be complete and adequate for the purpose intended regardless of whether all necessary details and parts are specifically mentioned in the tables."

I might mention that this article also refers to tables which are attached and made a part of that contract which

specify in more complete detail the special facilities to be provided thereunder.

Section 2 of Article VIII specifies the annual charges to be paid by the railroad on the equipment to be provided by the supplying companies which are referred to in two general sections.

The first section refers to the initial equipment, including reference to equipment to be installed at Safe Harbor, and at or near Benning, and the second section referring to the additional equipment to be provided as required.

The first item under this group includes the first additional 25,000 K. W. frequency changer set at Safe Harbor, and additional frequency changer sets at Safe Harbor in addition to the first addition.

I might say that the initial equipment to be provided, as I will refer to later, included one waterwheel generator to be installed in the Safe Harbor plant and one frequency changer to be installed at the Safe Harbor plant, and then specified payments were to be made for those facilities and [2553] others, and when additional facilities were to be provided specified payments were again stated in the contract subject to adjustment for commodity prices.

Reference is then made to an additional waterwheel generator, to additional switching facilities at Safe Harbor in the Conestoga Substation, and then in Section 5 of Article VIII it states the payments to be made to cover the first hydro unit at Safe Harbor, the first frequency changer unit, the 25-cycle single phase bus to be owned by Penn Water, the connecting cables between Safe Harbor plant and this substation bus, the step-up transformer substation, and the transmission line from Safe Harbor to Perryville.

Then in Section 8 of Article VIII it provides that at such time as the railroad company shall call on "Electric Companies" to provide an additional single phase capacity at Safe Harbor under the provisions of this Article VIII, the "Electric Companies" will have the option to provide

either an additional frequency changer or an additional water-wheel generator.

Then in article Roman numeral IX provision is made for "Electric Companies" to provide additional facilities not specified in the contract, and that the annual charges shall be a percentage of the cost of such facilities plus cost of operation and maintenance.

It also refers to certain joint use of facilities [2554] including communication and metering circuits, and I should add that special facilities have been provided by Safe Harbor and by Penn Water under the provisions of Article IX, and payments are being made currently in accord with such provisions.

Q. Which facilities are those? A. Facilities in Conestoga Substation owned and operated by Penn Water in part, and in part occupied by the Pennsylvania Railroad.

Certain facilities were provided with the extension of the railroad's electrification in Pennsylvania in 1937 and 1938.

Q. By Safe Harbor? A. Such facilities in part being provided by Penn Water and in part being provided by Safe Harbor.

Q. Is that part of this cable system which you mentioned? You mentioned provisions of cable systems by Safe Harbor. A. No, this is something else. When the railroad provided on its own behalf for certain transformers and high tension switching equipment, and it is quite an elaborate layout, the controls, including relays, meters, etc., were provided in the Safe Harbor plant control room for the operation of these railroad facilities. That involved certain cable facilities between the control point at Safe Harbor on [2555] the one hand and the switches, etc., in Conestoga Substation on the other, and Safe Harbor does own and operate such control cables and receives payment therefor in accordance with these pro-

visions, but they were not the cable systems referred to under preceding articles.

Although there are other minor references to facilities, coordinated uses, etc., I shall pass to the tables of the contract where a more specific description is given of the larger special facilities.

Table Roman I-A, covers the initial converting equipment at Benning and the initial generating and converting equipment at Safe Harbor, and it therein states that "Electric Companies will provide, operate and maintain in and adjacent to the Safe Harbor Hydro-Electric Plant at Safe Harbor, Pa., one—25-cycle waterwheel generator", with certain specified characteristics, and "cable connection between the 60-cycle side of this machine and the main station——"

I think I had better read in the entire part.

"Electric Companies will provide, operate and maintain in and adjacent to the Safe Harbor Hydro-Electric Plant at Safe Harbor, Pa., one—25-cycle waterwheel generator, 28,000 K. W., 80 per cent P. F." That means power factor—"single phase rating; one 60/25-cycle frequency changer, 25,000 K. W. 80 per cent P. F., single phase rating on 25-cycle side, with cable connection between the 60-cycle side of this machine and the main station 60-cycle bus; single [2556] phase cables together with oil circuit breakers, disconnecting switches, control and other appurtenant equipment for connecting both 25-cycle machines to a 13 K. W. outdoor, 25-cycle single phase bus located in a substation near the mouth of Conestoga Creek at an annual charge of"—and so on.

I might indicate there a moment which facilities were to be provided, were provided, irrespective of what may be said in here, what facilities were provided by Safe Harbor and what facilities were provided by Penn Water.

It states here the "Waterwheel generator and frequency changer unit were provided in or immediately ad-

jacent to the Safe Harbor hydro-electric plant", and were so provided by Safe Harbor.

Safe Harbor also provided the single phase cables, 25-cycle cables, between these machines and the 25-cycle railroad bus which was located in the Conestoga Substation of Penn Water.

The oil circuit breakers on that bus and the disconnecting switches were installed, owned and operated by Penn Water, but the controls for such facilities are again carried back to the main control room of Safe Harbor.

Then turning to Table II-A, initial substation at Safe Harbor, there again provision is made for this outdoor substation, 25-cycle single phase bus, etc., all of which was [2557] provided by Penn Water, but the controls, including certain relaying and metering equipment, were carried back to the control room at Safe Harbor.

TRIAL EXAMINER: What do you mean by "carried back"?

THE WITNESS: The operating mechanism for an oil circuit breaker for opening and closing the breaker is ordinarily located on the oil circuit breaker structure. The mechanism is electrically controlled. That control may be adjacent, or it may be a long distance away, sometimes miles away.

[2558] TRIAL EXAMINER: Were those controls controls which were already installed and in use by Safe Harbor or were they controls installed for this particular purpose?

THE WITNESS: They were installed for this particular purpose.

TRIAL EXAMINER: By Safe Harbor?

THE WITNESS: By Safe Harbor, that is the controls themselves, including the cable circuits from the equipment running back through the tunnel and the powerhouse to the control room.

TRIAL EXAMINER: All right.

Where is Conestoga Substation?

THE WITNESS: Conestoga Substation is adjacent to the Safe Harbor plant, and perhaps a quarter of a mile away from the nearest part of the plant, there is a hill intervening, and a tunnel has been drilled through that hill through which the power cables and control cables are run.

The substation itself lies on the bank of Conestoga Creek and is adjacent to, immediately adjacent to, the project boundary but outside of the project boundary of Safe Harbor.

TRIAL EXAMINER: You may continue.

THE WITNESS: Table III-A provides for additional converting equipment at Safe Harbor, none of which has as yet been requested by the railroad.

Table IV-A, additional water wheel generator at Safe [2559] Harbor covers the second water wheel generator which was requested by the railroad, or, rather, when the railroad requested additional capacity in accord with the provision I read a few moments ago Safe Harbor and the other electric companies had the option of installing either a second water wheel generator or a second frequency changer, and chose to install the water wheel generator under the provisions of Table IV-A. Those facilities were installed in 1941 or 1942.

Table V-A includes provisions for additional transformer and switching equipment at Safe Harbor. Again, a large amount of facilities have been installed and payments are being made under provisions of Article V-A. A portion of the investment is owned by Penn Water and a portion by Safe Harbor.

Table XI-A covers facilities for communication and in part for metering, and in part for supervisory control which involve controls, meters, and so forth, some of which, as

those tables clearly indicate, are located in the Safe Harbor control room, and some at other places.

* * *

[2560] Q. Are the facilities which are referred to in Item "G" as having been requested by Baltimore Company and Holtwood Company for installation by Safe Harbor pursuant to Article III of Item "E" covered in Exhibit 10? A. Yes, they are. Do you want me to designate it?

Q. If you wish to designate it. It is not necessary. A. Those facilities are specifically designated in Table IV-A.

Q. So that even though the facilities are designated in Exhibit 10, before the facilities were installed by Safe Harbor requests for their installation were made pursuant to the provisions of Item "E"? Right? A. No.

Q. Referring you to the second "whereas" clause of the first page of Item "G", doesn't that clearly show that Safe Harbor was requested by Baltimore Company and Holtwood Company to install additional machinery and equipment provided for in Exhibit 10 pursuant to Article III of Exhibit "E"? A. I don't read it that way, Mr. Goldberg.

Q. How do you read Article III of the Original Agreement, referred to on the first page of Exhibit "E"?

* * *

[2561] THE WITNESS: I understand this supplement agreement identified as Item "G" that we are referring to to provide for the entitlements of the services to be rendered in connection with a seventh water wheel generator known as No. 1 unit which was installed by Safe Harbor Company under the provisions of the railroad contract we have just been referring to as Exhibit No. 10.

By MR. GOLDBERG:

Q. Isn't it a fact that though the facilities you have just referred to are included in Exhibit 10, that nevertheless Penn Water and Consolidated, pursuant to Article III

of Item "E" in this proceeding, requested Safe Harbor to install those facilities? A. May I have that question read, please?

(Question read.)

THE WITNESS: No.

By MR. GOLDBERG:

Q. Now we agree, don't we, by referring to the second "whereas" clause of the first page of Item "G" that Baltimore Company and Holtwood Company requested Safe Harbor to install the facilities you have described to provide for increased power and energy requirements of Pennsylvania Railroad Company. Do [2562] we agree on that?

* * *

A. No.

* * *

Q. Do you agree that Baltimore Company and Holtwood Company are referred to in the second "whereas" clause on the first page of Item "G"? A. Their names appear there.

Q. Do you agree that it there states that Baltimore Company and Holtwood Company have requested Safe Harbor Company to install additional machinery and equipment in order to provide for increased power and energy requirements of the Pennsylvania Railroad Company? A. Those words appear in there.

[2563] Q. You agree that it says that? A. I agree the words you read are there.

Q. Do you agree it says that, Mr. Spaulding?

TRIAL EXAMINER: Answer the question yes or no.

MR. SPARKS: If Your Honor please, he said he agrees it appears in the document.

TRIAL EXAMINER: There seems to be some difference. The witness is making a difference in words.

MR. SPARKS: Apparently Mr. Goldberg is, too.

TRIAL EXAMINER: I am going to instruct the witness to give a categorical answer yes or no.

THE WITNESS: I would like to have the question again, please.

TRIAL EXAMINER: Very well.

(Question read.)

THE WITNESS: It so states.

By MR. GOLDBERG:

Q. And those facilities are described in Exhibit 10? A. They are.

Q. And it also states on the first page of Item "G" in the second "whereas" clause that the request was made by Holtwood Company and Baltimore Company pursuant to Article III of "The Original Agreement." Is that right? A. It so states.

Q. What is the Original Agreement? [2564] A. It states in the first "whereas" clause it is the agreement of June 1, 1931.

Q. That is Item "E" in this proceeding. Is that right? A. Yes.

Q. So the reference is to Item "E"—right? A. It is.

• • •

[2572] Q. Nevertheless, Safe Harbor energy was still being utilized under Exhibit 71 as it had been under the Exhibit superseded by 71 to supply the requirements of Edison Light and Power Company?

• • •

[2573] A. Using "utilization" in the physical and operating sense and not the legal sense, because there may have been a legal change, and there certainly was a change in the operating obligations as a result of the contract identified as Exhibit 71, physical operations, and leaving out the additional interconnection path which was established at

about that time, the physical operations of Holtwood and Safe Harbor as respects its services to Edison Light and Power were not different except, perhaps, in magnitude and other characteristics of time and so on.

Q. In all my questions to you along these lines it has been my intention to confine myself to physical operations and not to worry about the legal implications of contractual provisions or the legal implications of including somebody's name in a contract. I have been a little bit concerned that where you have at first blush disagreed with me you were thinking of legal implications. I want to disabuse your mind of that. A. I don't know whether I can entirely eliminate the terms of the contract, and again I am not speaking of the legal terms of the contract but the operating obligations of the contract.

Q. You mean your understanding of what the contract means from an engineering viewpoint? A. That is right.

[2574] They certainly were different under Exhibit 71 from what they were prior to that.

• • •

[2578] Q. When the flow of energy from Safe Harbor passes off Safe Harbor's facilities and on to the facilities of Penn Water, from then on Penn Water controls the flow of that energy. Is that right?

In the sense that Penn Water then owns and operates the facilities on which the electric energy flows. A. Penn Water owns and operates the facilities but one cannot, by holding up one's hand, control the flow of power.

Q. I realize that. In other words, neither can Safe Harbor do anything about it when that generator starts going, when the load is put on—right? A. Oh, yes. Safe Harbor in control of the generator can do just that.

Q. You mean it can stop the generator from generating? A. That is right.

Q. I didn't mean that. I mean when the load is on the generator starts generating, from then on Safe Harbor

cannot control the flow. Is that right? A. I am afraid that is not right because it is really Safe Harbor, through the control of its generator, together with the control of its railroad frequency changer used largely for the supply of electric services to Pennsylvania Railroad, is in perhaps the one position on the interconnected position where it can control the division of flow itself, [2579] under the instructions, of course, of the load dispatching office in Baltimore which again is jointly operated by, and the expenses are paid by, Holtwood and Safe Harbor, each paying one-half.

Q. But that control, if it exists at all, exists only so long as the energy remains on Safe Harbor's system—right? A. No, I cannot agree with that.

Q. When the energy passes off Safe Harbor's system on to the facilities of Penn Water is Safe Harbor then in a position to control the flow of that energy? A. I am afraid you are getting into a legal field rather than a technical field. Technically Safe Harbor is the one who can control it. Whether or not it flows over its own system, over the electric facilities of Penn Water, or of any one of the other interconnected electric systems, Safe Harbor can control the flow where perhaps the owner of those facilities cannot.

Q. Are you basing that last answer on any legal concepts? A. None at all.

Q. I want to stay with the technical aspects of it solely. I do not want to get into any legal aspects of it. A. That is the reason I have not agreed with you, because I am sticking to the technical aspects. I have [2580] endeavored to say I am not considering the legal aspects.

Q. You say that when the generation takes place at Safe Harbor and the flow of energy moves on to Holtwood's facilities, Safe Harbor still may control and can control the flow of that electric energy. Is that right? A. That is right, physically they can and do.

Q. How? A. I will endeavor to use a mechanical analogy.

Q. What is that? A. I will endeavor to use a mechanical or hydraulic analogy.

[2581] Q. All right. A. If we have a reservoir with three pipe lines leading to some three different basins, but we also have a pipe connection between two of those lines some distance from the reservoir, the operator of that reservoir is the only one who can control the flow of water in those pipes, including the lateral connections, unless someone may install a valve in one of those pipes where he shuts the water off.

Perhaps my analogy is none too perfect, because actually Holtwood is situated like the man with the valve except that Holtwood cannot, as my analogy might indicate, slow up or turn off only part of the water. Holtwood can only stop the flow of water by opening up or breaking the pipe. Holtwood is not in a position to open up the valve and thereby control the amount of flow in that pipeline.

Reverting to our actual physical operation: Safe Harbor, under normal conditions, has as was shown by Exhibit 8 in this proceeding very frequently the only or at least a portion of the spinning reserve capacity on the system, except perhaps in very high flow when all of its resources are being utilized. Therefore Safe Harbor is the logical operating plant to change its generation.

If at a given time there is a definite amount of power flow from Safe Harbor to Holtwood and, hence, to York, and at the same time there is a definite amount of power flow between Safe Harbor over the railroad circuits to Philadelphia, and thirdly, [2582] from Safe Harbor over the facilities of Pennsylvania Power and Light to Harrisburg, Safe Harbor has the greatest opportunity, and under normal operating conditions the only opportunity, of changing the flow of power on those three parallel paths to the northern system. By changing the total amount of generation they change not only the flow on all three of those paths simultaneously but having control as with a valve, being the railroad frequency changer at Safe Har-

bor, of the amount of flow over one of those they are therefore able largely to control the flow over all three of those parallel paths.

Q. As I understand it, the control extends to the amount and quantity? A. Oh, yes.

Q. That will pass on to those three lines radiating from Safe Harbor. Is that it? A. Yes.

Q. But once the quantity passes on to those three facilities and enters the system of Penn Water, Safe Harbor's control is at an end. Isn't that right? A. Physically?

Q. Yes. A. I don't see it.

Q. Take the analogy of the reservoir. The man at the reservoir can control the amount of water entering each of those paths. Right? [2583] A. That is right.

Q. That is where his control ends. Isn't that so? A. Technically that is not correct.

Q. Well, what other control does your man at the reservoir have? A. He doesn't need any other.

Q. Well, what else did he have aside from what he might need? He opens up the pipes and lets a certain amount of water go into each one of them? A. That is right.

Q. Then he closes the pipes. What other control does he have once he has done that? A. That is all. But that is all he needs to control the flow of power over these three parallel paths.

Q. Not at all. I think you said there was a connection between one of the lines radiating from the reservoir and another one some distance from that. Is that right? A. That is right.

Q. Now, then, that connection between lines A and B, shall we call them, presents another opportunity for altering the flows in lines A and B—right? A. No.

Q. Well, you can transfer a certain amount from A to B by reason of that connection or from B to A. Isn't that so? A. You can, but as long as the flow in the three paths [2584] are the same the flow in the lateral pipe is

going to be the same by the laws of nature, and other physical facts.

Q. Did you call it the basement? Did you say the basement? A. Basin.

Q. The connection of the basin to line B does not mean that that basin is going to receive all of the water that the man at the reservoir put into line B if part of that water is diverted from B over to A. Isn't that so? A. But who is going to divert it?

Q. Not the man at the reservoir—right? A. But the man at the reservoir is the only one who has any control over the amount.

Q. Let's hire somebody for the purpose of making use of that connection between A and B. A. Oh, if you change the size of the pipe, if you change the size of the outlet, you change the relations.

Q. What is the purpose of the connection with A and B if it is not for the purpose of diverting part from A to B or B to A as may be desired? A. That was not part of my assumption, as to what the purpose was. I was just saying they were there.

Q. But in your assumption you put in a connection between two of the radiating lines, and I have named them A and B. [2585] A. Yes.

Q. Having put that connection in there what did you put it in there for? A. Because it more readily simulates the many interconnecting lines that exist on the electric power system of Penn Water and Safe Harbor.

Q. And the interconnections are for the purpose of diverting the flows on to different lines as required? A. That is correct. Once the size of the transformers and the constants for circuits are fixed, the flow of the power on the three main lines and the radial line will not change unless another factor takes place we have not considered, unless the needs of the customers or persons at the three water basins at the end of the line should change. Then all the relations are changed.

Q. Holtwood under such circumstances might be in a position to bring about the changes but Safe Harbor would not be. Isn't that so? A. I don't agree with that. Changes might come about because of the change in the load requirements of the customers on Penn Water—Safe Harbor system on the one hand or at the three basins in our hydraulic analogy. The reason Holtwood Company is not in a position to do very much about the division of load is because its steam plant is normally operated at base load and does not vary its output. Furthermore, its frequency [2586] changers between its three-phase 60-cycle system and its three-phase 25-cycle system are seldom used, and when used have no manual control. Thirdly, because the only remaining 60-cycle capacity that Holtwood has of its own at Holtwood are two water wheel generators of very minor size compared to the installed hydroelectric capacity at Safe Harbor. It is for that reason that I felt confident in assuming that Holtwood could not control the flow on our water pipes, because it did not have any amount of additional water to inject into these pipes to change the division of flow.

Q. You have said in your answer that Holtwood is not in a position to do very much about the division of flows. When you say "isn't in a position to do very much" about it, that means to me that they can do something about it. Is that right? A. I don't think I ever said that Holtwood, in our earlier discussions, did not have any available capacity to control those loads. I think I carefully stated that under normal conditions Safe Harbor was the one major factor in the control of the flow of loads. I am quite sure I made that qualification.

Q. You were just speaking in terms of division of flows which Holtwood could control in relation to capacity. Did you mean generating capacity? A. I did.

Q. How about control in relation to switching and the like on the lines? [2587] A. I am endeavoring not to get too technical because the usual way of controlling power

flow over a network where you have three parallel paths is by the installation of a transformer bank with a phase angle control. There are no phase angle control transformers in our network. The only other way, therefore, that the division of load could be changed would be to open up a transmission circuit, and that would, of course, change the flow but it would usually give some concern to the customer whose circuit you open.

Q. Once the flow passes off Safe Harbor's facilities onto the facility of Holtwood it is only Holtwood that can exercise the latter control you have just named? A. That is correct. By "latter control" you mean opening up a circuit?

Q. Yes, changing flows by opening up a circuit. A. Yes.

* * *

[2637] Q. Taking the component parts of the contract you do not know from a technical and operating sense what the preamble means when it says that "York Company is engaged in the generation, distribution and sale of electrical power and energy." Is that right?

* * *

THE WITNESS: That is a different question. I think I can answer that one. From a technical and operating sense that gives me a very good picture of what the general operations of [2638] the York Company were expected to be.

By MR. GOLDBERG:

Q. Go ahead and tell us what that is. A. York Company is engaged in the generation, distribution, and sale of electric power and energy. I don't know what constitutes a sale, but to my mind that means that the York Company had certain operating responsibilities under that contract, or that had to be referred to and considered in connection with this contract from an operating point of view.

Q. What were the operating responsibilities it had? A. It had to generate, transmit and provide electric services, as I view it from a technical point of view.

Q. All right. Now, what did you cover by the electric services? The words "power and energy"? A. Yes, to my mind that would include all of the attributes that we have been talking about relating to electric services.

Q. And the words "power and energy" were used to cover those attributes. Is that right? A. In this particular instance; yes.

Q. Yes. That is right, isn't it? A. In this particular instance.

Q. Yes. Now, go on to the next place where you find reference to "power and energy". [2639] A. I find it in the next paragraph of the recitation.

Q. Of Exhibit 71? A. That is right.

Q. What does it state there? A. "Metropolitan now supplies electrical power and energy to York Company at 2300 volts, at a point adjacent to York Company's Central Substation."

Q. What was your understanding of the words that you have read?

Mr. Myse: You mean from an operating standpoint again or general understanding?

Mr. Goldberg: Technical and operating sense.

The Witness: From an operating standpoint Metropolitan here only supplies electric power and energy. I take that to mean, and have taken that to mean, for the purposes in which I have used this contract in a technical and operating sense, that Metropolitan was going to supply certain electric services with all the attributes we have been discussing.

By Mr. Goldberg:

Q. There, again—— A. To a point near York Company's Central sub-station.

Q. And there, again, the electric services, with all of the attributes you have named in connection with that phrase, are covered by the words "power and energy". Is that right? [2640] A. Yes, from an operating point of view they were.

Q. And from a technical point of view? A. Well, for the only technical reason that I would have any occasion to refer to this contract, yes.

Q. You referred to that contract for technical reasons —didn't you? A. Yes.

• • •

[2662] A. Energy is the result of voltage and current.

Q. How about frequency? Do we get that in there? A. Energy could be made available at a frequency. They are all closely interrelated, Mr. Goldberg. To say one can be present without the others is ignoring the practical aspects of the components themselves.

Q. You surprise me, Mr. Spaulding. You just have been telling us all of them are not present. A. They all don't have to be but they all have an interrelation.

Q. Now let's see if we can establish that interrelation firmly in my mind. You said that power is the result of energy and time? A. That is right.

Q. Is it correct to say that energy is the result of voltage and current, and to stop there? A. No.

Q. What else do I need? A. You have to take into consideration time there as well.

Q. I see. So is it correct for me to say energy is the result of voltage, current and time? A. Of course, there must be frequency present. There must be phase present.

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[2697] Q. Is it a fact that under items H and I Consolidated is entitled to all savings effected by Penn Water's contracts with its Pennsylvania customers?

• • •

[2698] THE WITNESS: What do you mean by the "savings resulting from its Pennsylvania customers"?

By Mr. Goldberg:

Q. Savings you referred to at transcript 183 and 184 in your direct testimony. A. May I see that, please?

Q. Yes. I was just going to furnish the references. I think also at 196 of your direct testimony and 209 of your direct testimony.

• • •

The Witness: That is correct.

By Mr. Goldberg:

Q. In other words, such savings as are secured through coordinated system planning and through interchange transactions are applied in reduction of the amounts Consolidated has to pay to Penn Water to make up the return Penn Water is assured of under items H and I—right? A. In part. The other savings result from operating savings of Baltimore Company themselves so that they result from the contracts taken as a whole.

Q. Am I correct in my understanding about the operations that Penn Water makes interchange sales and purchases of power and energy when the generation of energy at a lower [2699] cost plant on one system can be used to replace generation at a higher cost plant on another system?

• • •

The Witness: Where we refer to interchange sales we are referring to the operating transactions between Penn Water on the one hand and Metropolitan on the other under the interchange provisions of Exhibit 72; and between Penn Water and Safe Harbor on the one hand and Pennsylvania Power and Light on the other, with respect to the interchange provisions of Exhibits 76 and 77; and between Penn Water on the one hand and Philadelphia Electric on the other, as respects the provisions of the interchange arrangement which has not yet been identified in this proceeding between Penn Water and Philadelphia Electric. The savings resulting from such interchange transactions were

referred to in the pages you mentioned or adjacent thereto in my direct testimony.

* * *

[2700] Q. That is interchange transactions take place when the generation of energy at a lower cost plant on one system can be used to replace generation at a higher cost plant on another system? A. That is correct.

* * *

[2717] Q. Will you explain what you meant at transcript 127 beginning at line 16 when you said, "The contractual arrangements for such interchange provide for an equitable division of the savings in operation expense between the buying and selling companies in such transactions"? A. It is a little involved, but speaking generally first if you have a transaction of an interchange nature between two companies, as I have described here on page 127, line 16, and above that on the same page, such transactions are arranged whenever one company can generate a small increment of capacity and energy and other electric services at less additional cost than the other company can provide the same services.

TRIAL EXAMINER: How is that determined? How do you know when you can get it on that basis?

THE WITNESS: We have a load dispatcher in an office in Baltimore responsible for the operations of the two hydro companies. Expense of that office is divided between Penn Water on the one hand and Safe Harbor on the other.

That load dispatcher has before him at all times figures showing what it would cost to generate 20,000 kwh. or other increments of energy and to provide 20,000 k. w. or other increments of capacity on each of the several systems with which we are interconnected.

He also has before him, or can readily obtain, the corresponding costs for providing the same electric services from [2718] Consolidated Gas Electric Light and Power

Company of Baltimore and perhaps of the Potomac Electric Power Company in Washington.

He then can determine, and does determine, subject to supervision, of course, whether there would be a saving by having one of the several alternate sources provide an increment of electric service the next hour or the next day. Usually they don't try to schedule it further ahead than that.

If he finds that there is a saving in having one company provide such service over having another company provide the service, he is authorized to make the arrangements to obtain that electric service from the company having the lowest cost. By "lowest cost" I mean the cost of producing that increment of additional energy and capacity or other services.

Now, after he has authorized the transaction and it is carried out, the load dispatcher, together with the power economy group who has responsibility for the accounting of the dollars of cost in such transactions, will determine, first, how much of those services were actually received. And he would determine from the company providing those services what their costs were in providing that increment of service. He will also determine from the company receiving those services what their cost would have been if they had provided themselves that increment of service.

Now, it may be that on the one hand those services would have cost $100 in one company and $150 by the other company. [2719] Having gotten all those figures together, and as I testified in my direct testimony you divide the savings, the customer or the party who did provide the facilities will receive $125 and those dollars will be accounted for as coming from, being debited to the company who did not spend any of the dollars but got the service.

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[2720] By MR. GOLDBERG:

Q. By third or fourth party transactions you mean nonmember companies of the integrated system. Is that it?

A. No, I wouldn't say that, because I don't know what you mean by "integrated" system. But if it were a company other than the named party to one of the interchange transactions we have been referring to this afternoon.

Q. When you mentioned this load dispatcher who directs who is to supply the increment of service at various times, does he limit his concern solely to Safe Harbor, Penn Water and Consolidated, or does he extend his directions for supplying the increments of service to Philadelphia Electric, Pennsylvania Power and Light Company, Metropolitan Edison, and Potomac Electric Power Company? A. The load dispatcher I was referring to as being responsible for the operations of Penn Water and Safe Harbor system contacts directly, and makes arrangements with, the corresponding load dispatcher of the Philadelphia Electric [2721] system, the Pennsylvania Power and Light system, and the Metropolitan Edison system.

If third-party transactions are to be provided or arranged for with another company to the north of one of the three I mentioned, then those arrangements are made between the Penn Water-Safe Harbor load dispatcher on the one hand and perhaps, as an example, the Philadelphia Electric load dispatcher on the other, and he in turn will make arrangements with the third party.

Q. The third party to the north are those New Jersey companies you mentioned yesterday. Is that it? A. That is right.

Q. How about Potomac Electric Power Company? Where do they fit into the picture? A. The Baltimore Company, Consolidated Gas Electric Light and Power Company of Baltimore, also has a load dispatcher, and it is his responsibility to know what the costs are on his own system, meaning Baltimore's system, and on the system of Potomac Electric Power Company. He makes whatever arrangements are to be made between Baltimore and Potomac Electric Power Company, because Penn Water and

Safe Harbor have no operating arrangements for such transactions with Potomac Electric Power Company.

TRIAL EXAMINER: This will not interrupt your cross-examination?

[2722] MR. GOLDBERG: No.

TRIAL EXAMINER: How does Holtwood-Safe Harbor load dispatcher in Baltimore know what the cost of energy would be if supplied by Consolidated if he doesn't know where Consolidated will get it?

THE WITNESS: He has to get that from Baltimore's load dispatcher and Baltimore's load dispatcher has to know that first.

TRIAL EXAMINER: He sits there and tries to figure out where he will get his energy for the next hour, or his services for the next hour?

THE WITNESS: That is right.

TRIAL EXAMINER: Now, then, if he does not know where Consolidated will get it, in other words, he has to use approximation, then talk with Consolidated's dispatcher to find out whether that approximation is correct or not. Is that right?

THE WITNESS: That is about right, sir. They are sitting at a desk with a telephone in front of them and using it almost continually. By "continually" I mean the very large part of each hour. They have before them figures which show right along what the costs are this minute, the next hour and the next hour and so on for at least 24 hours ahead.

TRIAL EXAMINER: Those cost figures, then are made up as they go along each day?

THE WITNESS: They are, and they are continually being exchanged. Probability is that right now all of these load [2723] dispatchers, and seven or eight may be involved, can tell you this minute what the costs are now

on each one of these systems, and they may change the costs in the middle of an hour if the load suddenly comes up by a thunderstorm.

TRIAL EXAMINER: They do not use a standard price good for that day all through the year?

THE WITNESS: No, it is an elaborate table filled in hour by hour. Of course, there are basic figures. I hesitate to complicate it, but let me take the Philadelphia Electric Company's system, for example. The system operator, or the load dispatcher, as I have termed him, of the Philadelphia Electric system knows tomorrow morning what generating units he expects to have running, and if those generating units are all running and loaded as he had expected them to be he knows what the cost of each unit would be.

Now, he also estimates what units, and how many units, he will need to meet an estimated load requirement for an hour or for a day.

If, due to weather conditions, or other unforeseen conditions, the load is higher or lower he could tell you now what the effect of an increment change would be on his system tomorrow at any hour you might ask him. To that extent there are some basic figures that do not change. But as to what the actual costs are, and they will depend on how many units are running and how much load you have on a unit, that is something [2724] he has to figure out as he goes along.

* * *

[2725] Q. Now, then, before the Penn Water and Safe Harbor load dispatcher calls up the Metropolitan Edison load dispatcher to request the delivery of a certain supply, does he communicate with Consolidated to get the Consolidated dispatcher's views on that? A. He will naturally communicate with the dispatchers of all these systems with which he has interchange arrangements [2726] in order to find out from what source it can be obtained most economically.

Q. Suppose the interchange supply were to be used for furnishing Consolidated's needs? Would the Penn Water load dispatcher communicate with the Consolidated load dispatcher to ascertain, or determine, the source from which he was going to secure the supplies? A. May I have the question again, please?

(Question read.)

THE WITNESS: Not necessarily. If the Penn Water-Safe Harbor load dispatcher advised Baltimore Company that he was in a position to obtain a specified amount of electric services the next hour, and knew from the information before him that the cost of such service would be less than Baltimore would have to expend in providing the same service, inasmuch as the service was going to Baltimore, and I presume we are still talking about interchange transactions, Baltimore would have naturally the right to say they didn't want it on the one hand, but they wouldn't be concerned with the name of the party from whom Penn Water might be going to get it on the other.

Q. In supplying Consolidated's requirements under Items "H" and "I" is Penn Water obligated to secure the supply from the cheapest possible source at all times? A. It has a joint obligation with Baltimore Company to plan and operate the system in such a way that the result will be [2727] the minimum of cost to the system.

Q. Well—— A. And it is therefore a joint obligation of Baltimore and Penn Water and Safe Harbor to do so, and therefore I think it is an obligation of Penn Water to assure itself, as well as assure Baltimore, that it did carry out the transactions in such a manner as the costs would be a minimum.

Q. And the interchange agreements then are part of the means of securing the maximum economy from the operations of the system and are so utilized. A. The interchange agreements make possible economies in the operation of the system which would not be possible without them.

Q. When you refer to the joint responsibility of Safe Harbor, Penn Water and Consolidated to operate the system to secure the greatest amount of benefits cost-wise and perhaps operation-wise as well, you are referring to the operating committee which is set up. Is that right? A. The operating committee is the group who carries out the operations to do that, yes.

Q. Is the operating committee in session every day? A. No, indeed.

Q. But if they are not in session every day, how is it carried on during that period of time when the operating committee is not in session? [2728] A. The operating committee have assistants who devote a larger part of their time to such matters, and the operating committee has also delegated a certain amount of such duties to a group known as the power economy group. That power economy group is made up of perhaps six or eight people, including certain clerical assistants, and the expenses of that office are borne one-third by Baltimore Company, one-third by Penn Water, and one-third by Safe Harbor, and the functions and duties and responsibilities of that group, the power economy group, are derived only from the operating committee so far as those duties relate to the contracts we have been discussing. And that power economy group in turn instructs at times, and informs at other times, the load dispatchers of the facts that they may need and have before them to actually perform the things that I have been discussing with you and the Examiner.

Q. Sooner or later, then, the functions of the operating committee and its assistants and the functions of the load dispatchers are correlated, and there is an exchange of information to carry out the operations of the system for maximum—— A. For maximum overall economy and maximum utilization of resources.

Q. And that applies to the operations in respect to Items "E", "F", and "G", "H" and "I", Exhibits 72, 73, 74, 75, 76, and 77, and the unidentified interchange

agreements you and I [2729] have discussed today. Is that right? A. I don't know whether that is taking in too much territory or not, but as long as it is limited to the joint responsibilities of the operating committee to provide the maximum economy it is naturally necessary to give consideration to all of the necessary operations required in connection with these contracts you have mentioned, and others, of Baltimore Company—with the Bethlehem Steel, with Potomac Electric Power Company, and many other contracts. But that does not mean that I, as a member of that operating committee, have any particular working knowledge or operating knowledge of the requirements under those contracts of Baltimore Company.

Q. However, you have a knowledge, or general knowledge, at least, of the operations and of the costs involved? A. Yes. It is necessary to have that in order to know whether it is possible to carry out these interchange arrangements, to obtain the minimum of operating costs, or maximum of economy, within the limits of the provisions of those other contracts. Otherwise, I have no interest in them——

Q. Yes. A. —as a member of the operating committee.

Q. Yes, naturally it has to be within the provisions of the existing contracts—right? A. Yes.

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[2735] Q. When you speak of Items H and I, and E, F, and G being interdependent, in what sense do you use the word "interdependent"? A. That they have to be taken together.

Q. In what sense do they have to be taken together—legally? A. That I don't know. I was speaking of it from an operating sense.

Q. From a physical sense. A. I think so, if by "physical" you mean from the operating point of view.

Q. Well, from an operating point of view how are they interdependent? A. The operations are carried out, and

can be carried out, as they are carried out, only because both of them are [2736] there, and we seldom, and by "we" I mean the operating people, think of one contract or the other contract, but think of them together in our operating practices, carried out as though, and only because, both of them are there. We make no distinction between one or the other except for the accounting of energy on the one hand and the preparation of the bills on the other as distinct from the operations under the two contracts.

Q. Would you say that they are interdependent in the sense that when Penn Water and Consolidated contracted under Items E, F, and G with Safe Harbor for Safe Harbor's entire output that Penn Water and Consolidated were then able to contract under Items H and I in such manner as to effect the complete coordinated utilization of the facilities of Penn Water, facilities and resources of Penn Water and Safe Harbor? A. I think you have to take them together in order to be able to obtain the operating benefits that are obtained. I don't know what the parties had in mind.

Q. I am interested in what you had in mind when you said "interdependent". A. I had in mind that you have to consider them together from an operating point of view. You cannot consider one separately from the other.

Q. Because you do not get complete coordination of the [2737] facilities and resources of Safe Harbor and Penn Water without consideration of Items H and I, and E, F, and G—is that it? A. In part, but also because you cannot determine whether electric services are coming from one or the other, under one of the other contracts or from one of the other plants and other facilities.

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[2757] JOHN A. WALLS.

* * *

CROSS-EXAMINATION.

By MR. GOLDBERG:

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[2776] Q. Mr. Walls, isn't it a fact that as a result of the review you have made of the exhibits described in your statement [2777] that in each of the years 1935 to 1945 inclusive, without exception, Safe Harbor represented to the SEC that Safe Harbor sells electric energy? A. Yes, sir.

Q. And isn't it a fact that it represented that such sales of electric energy are made to only two customers, namely, Consolidated and Penn Water under the agreements we know of in this proceeding as Items "E", "F" and "G"? A. Yes, sir.

Q. Isn't it a fact that in each of the years 1935 to 1945 inclusive, without exception, Safe Harbor represented to the Securities and Exchange Commission that its revenues are derived solely from the sale of electric energy which are made to Consolidated and Penn Water? A. I think so.

Q. Revenues from sales of electric energy, not these other operating revenues?

MR. SPARKS: Yes, but your question, I think, stated "Isn't it a fact that Safe Harbor represented that its revenues were solely from the sale of electric energy?"

By MR. GOLDBERG:

Q. Let me amend the statement to say that its revenues from the sales of electric energy were derived solely from sales of electric energy to Consolidated and Penn Water? A. That is a more correct statement.

[2778] Q. Isn't it a fact that throughout that period of time, 1935 to 1945, inclusive, Safe Harbor never suggested to the Securities and Exchange Commission that it sells

electric energy under any other contracts? A. That is the case so far as I know.

Q. Isn't it a fact that at no time from 1935 to 1945, inclusive, had Safe Harbor ever suggested that it sells electric energy jointly with Penn Water or any other Company?

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THE WITNESS: I do not know of any unless there be an implication to that effect in the legal language in these exhibits.

By MR. GOLDBERG.

Q. From an engineering viewpoint you found no such implications, did you? A. I did not find any such.

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[2797] Q. Now, as a result of your examination of the exhibits which you have referred to in your statement this morning, you know, do you not, that in each of the years 1935 to 1945, inclusive, without exception, Penn Water represented that it sells electric energy to Consolidated under Items H and I? A. Yes, sir, in these statements.

Q. And that it represented at all times during that period that it purchases electric energy from Safe Harbor under [2798] Items E, F, and G? A. Yes.

Q. And that at all times during that period Penn Water represented that it sells electric energy to Philadelphia Electric Company, Pennsylvania Power and Light Company, Metropolitan Edison Company, and Edison Light and Power Company?

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THE WITNESS: I think so, but I don't recall at the moment whether that was for every year.

By MR. GOLDBERG:

Q. At least the exhibits will speak for themselves? A. Yes, sir.

Q. And as a result of your examination of the exhibits referred to in your statement this morning you know, do

you not, that it was never represented by Penn Water that jointly with Safe Harbor it sells electric energy to any customers. Is that right? A. Unless there was some legal implication to that effect.

Q. Otherwise you saw nothing to that effect? A. Correct.

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[2799] Q. And in your examination of the exhibits you saw no representations by Penn Water that it sells capacity and not electric energy to Consolidated under Items H and I. Isn't that right? A. As far as I remember, yes, sir.

Q. And you do not know of any statements filed by Penn Water with the S. E. C. in which it made contrary representations. Isn't that right? A. I don't recall them.

Q. And as in the case of Safe Harbor, Penn Water's representations were also representations to the Public and to prospective investors and present investors—right? A. I think that that is so.

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[2816] Q. I show you Exhibit 73, Mr. Walls. Is that exhibit framed in accepted nomenclature among engineers? A. Yes, sir, that would be understood by engineers, but it is not an accurate representation of the operating situation.

Q. Is it accepted expression when they speak about sale of electric power and energy in that agreement? A. It is accepted in the sense of being usual and there being no necessity to be more explicit, yes, sir.

Q. And it is accurate when used in Exhibit 73, isn't it? A. Sufficiently accurate for the purposes of the contract.

Q. It is sufficiently accurate in connection with any disputes which might arise under the contract—isn't that so? A. I don't know about that. I often find in contracts that the intent does not appear later on after investigation by lawyers to be the intent that I thought the contract was founded upon, so that disputes arise. What

disputes arise in connection with that contract I don't know.

Q. When it states, at page 3 of Exhibit 73 that PX, meaning Philadelphia Electric Company, may obtain electrical energy, what does it mean? A. It means electric supply if interpreted in the fashion [2817] I would interpret it.

Q. It means electric services? A. Yes, sir.

Q. And that is accepted nomenclature for describing electrical services, isn't it? A. That is accepted nomenclature for the purposes of a contract like this but it is not a fully accurate description.

Q. Mr. Walls, you know, as an engineer of many years' experience, that it is accepted nomenclature not only for purposes of contracts but for any other purposes you have ever heard engineers discuss the subject. Isn't that so? A. No, sir, I wouldn't say that.

* * *

Q. And you have used them as synonymously with "electric services"—right? A. I think that "power and energy" have often and even generally been used in contracts as synonymous with electric service, but not always. In the old days they generally referred to "power" without the word "energy."

Q. They were using them as encompassing the word "energy"—[2818] right? A. Yes, sir.

Q. Back there in 1920? A. Well, and earlier than that.

Q. Along in 1920 as well? A. Yes, sir. But I do not believe that electric service itself is synonymous with "power and energy." In other words, it may sound queer, but "power and energy" may be used sometimes as a substitute for electric service but "electric service" may convey a meaning that is more than that conveyed by "power and energy."

Q. Engineers use them interchangeably, power and energy used as synonymous with electric services by engi-

neers. Isn't that so? A. Yes, but very loosely. When used that way it may be incorrect.

Q. You use it that way yourself? A. Often, and expect to do so in the future.

Q. Other engineering associates in your company do that? A. Yes, sir, where there is no need to be more accurate.

Q. And in contracts there is need to be careful, isn't there? A. There is need to be careful, but there is not always need to be fully explicit.

Q. Although there is not need to be fully explicit, [2819] "power and energy" has been carefully used in the contracts of the company to cover what you are today referring to as electric services. Isn't that so? A. I think it has not been carefully used. I think it has been loosely used because it is a convention.

Q. Would you say that it is now necessary to revise your contracts? A. I shouldn't think so.

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[2834] Q. In other words, you were negotiating for electric services, for example, under Exhibit 72, is that right? A. Yes, sir.

Q. And the electric services were described in the [2835] terms used in that agreement? A. Yes, sir.

Q. And that is the case in the other agreements which I have shown you; is that right? A. Yes, sir.

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[2840] GEORGE W. SPAULDING.

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CROSS-EXAMINATION (Continued).

By MR. GOLDBERG:

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[2877] Q. Have you had an opportunity to check any of the matters I requested you to check, Mr. Spaulding, one of them being—did Penn Water submit a bill to Philadelphia Electric Company in behalf of Penn Water and Safe

Harbor? A. I find no evidence that a bill has been rendered to the Philadelphia Electric Company for firm power services at Coatesville which was rendered both by Penn Water and Safe Harbor.

I don't say there aren't any, but I have not been able to find any.

Q. The bills you are able to find appear to have been rendered in the name of Penn Water only to Philadelphia Electric Company. Is that right? A. That is correct.

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[2880] Q. In other words, the terms of the agreements for firm power supply and interchange supply among the several systems that you have just mentioned are such as to permit the shifting of supply in the network to various load centers so that the cheapest possible source of generation is being used to meet the load requirements of the systems you have named—is that right? A. That is right.

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Q. In other words, provision has been made for coordination of the operations of the systems you have named, namely, Safe Harbor system, the Consolidated system, the Penn Water system, Philadelphia Electric system, Pennsylvania Power and Light system, Metropolitan Edison system, and Pepco system. Is that right?

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THE WITNESS: The several agreements which we have been referring to in the last several days, together with other [2881] agreements which have not been identified in these proceedings, permit coordinated operations of and between the parties you have named to the extent that transmission facilities permit.

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[2893] Q. Well, do you know of any provisions in any of the agreements which have been identified in this proceeding, or received in evidence, which authorizes Penn Water to take Safe Harbor's share of the savings under Exhibits

76 and 77 and credit them wholly to Consolidated in connection with provisions [2894] of Items "H" and "I"? A. I don't think I do, but when Baltimore Company undertook, under "E", "F" and "G" and "H" and "I", to provide a specified return dollarwise with certain adjustments to Safe Harbor on the one hand and Penn Water on the other, those companies at that time gave up any opportunities to increase their earnings as the result of any economies within the company, or any economies of coordinated operation with others. As a result of those agreements, therefore, any savings that should properly result, and do result, from the equitable division of savings resulting from coordinated operations go to reduce the payments made by Baltimore Company to Safe Harbor on the one hand and to Penn Water on the other. Under "E", "F" and "G" Baltimore Company pays a specified dollar payment for the entitlements it receives under that contract. Baltimore does not get those entitlements, never expected to get those entitlements as such, namely, as electric services. In lieu of its entitlements of electric services it does receive the revenues obtained from the sale of electric services to which Baltimore Company is entitled under "E", "F" and "G".

A further accounting, and all further accounting, of savings or economies resulting from the operations of Safe Harbor on the one hand and Penn Water on the other, all go, accountingwise, to reduce the net revenues paid by Baltimore Company to Holtwood Company, that is, Penn Water, under the contract identified as [2895] "H" and "I".

Q. In other words, whatever savings there may be as a result of the coordinated operations go to reduce Consolidated's payments to Penn Water under Items "H" and "I", a contract to which Safe Harbor is not a party. Right? A. It is not a named party, no, sir.

Q. And my statement is right? A. That is right.

Q. And part of these economies you say belong to Safe Harbor—right? A. I think they do.

Q. And though they belong to Safe Harbor they are used by Penn Water in an agreement to which Safe Harbor is not a party—right? A. They are so accounted for.

Q. They are so used—right? A. They are so accounted for.

Q. Do you make some distinction between them? A. I don't know whether there is a distinction.

Q. But none of these savings are in any way involved in the payments made under Items "E", "F" and "G" by Consolidated and Penn Water. Is that right? A. Payments by Consolidated and Penn Water are entirely independent of services rendered.

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[2896] These savings do not affect in any way the payments made by Baltimore and Penn Water to Safe Harbor under contract identified as "E", "F" and "G".

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[2897] Q. The objective of the coordinated operations, as I understand it, is to use the cheapest source of supply to meet the requirements at various load centers—right? A. Generally, yes.

Q. And is that practice followed with respect to Exhibit 73, for example, the Coatesville power supply contract? A. Generally.

Q. And that—— A. Yes, but let us be sure there is no misunderstanding about that. That has to do only with the total generation on the system and not the responsibilities of the respective parties to this overall interconnected system we have been talking about. The coordinated operations are one thing. The operating responsibilities are quite something else. So that when we talk about the savings resulting from coordinated operation we are talking about the savings resulting from the scheduled operations and not the savings resulting from the operating responsibilities under any single contract.

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[2904] Q. When Exhibit 71 was entered into were Items E, F, and G changed in any way? A. I don't know, Mr. Goldberg, whether or not it was.

Q. Well, you know it is marked in this case. Look at it and tell me what was changed, if anything? A. I don't mean that anything in writing was changed, but I don't know whether the provisions of E, F, and G, or the operating responsibilities under E, F, and G, were changed when contract identified as 71 was entered into or not, with [2905] the approval of all parties.

Q. Exhibit 71 was entered into—do you know of any amendments entered into with respect to Items E, F, and G at that time? A. No, I am pretty sure there were none.

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Q. What was done to Items E, F, and G, when Exhibit 73 was entered into? Amended, supplemented, revised? A. There were no changes made when 73 was entered into.

Q. Or when 74 was entered into—right? A. That is correct, no changes in E, F, and G in writing as such.

Q. What does that—no changes in E, F, and G in writing as such mean? A. That is right.

Q. You mean there were no changes in writing that you know of? A. I don't know whether there was any change in the responsibilities of the parties or not. I think there must have been, without being a lawyer. E, F, and G was entered into in 1931, and there were certain entitlements to which Baltimore was entitled to on one hand and Penn Water entitled [2906] to on the other.

Then subsequent to that time, and as I recall it after the charter rights of Safe Harbor were extended by the Pennsylvania Commission in 1932, subsequent to that time the contract between Penn Water, Safe Harbor, and Edison Light and Power Company was entered into with the approval of Baltimore Company and Penn Water. I don't know from the legal point of view what changes took place in the contracts identified as E, F, and G, but certainly something took place right at that time. And again

when the contracts were entered into in 1933, I believe it was, with Coatesville, the contract identified as Exhibit 73, Safe Harbor was made a party to that contract, made a party to that contract with the written consent and approval of Baltimore Company.

Penn Water, of course, likewise, was a party. Certainly some change took place in the obligations and responsibilities of Safe Harbor under E, F, and G when it entered into those contracts.

Now, as an engineer, I don't know what the changes were, but it certainly changed the entitlements of the services as distinct from dollars under E, F, and G. Baltimore and Penn Water still were entitled to two-thirds and one-third, but certainly Baltimore did not expect to get, and did not get, as much services from Safe Harbor under E, F, and G, after Safe Harbor entered into the contracts identified as Exhibits [2907] 71, 73, and 76, and the Pennsylvania Railroad contract.

TRIAL EXAMINER: Where did Safe Harbor get that written consent from Consolidated entered as Exhibit 73?

THE WITNESS: Before——

TRIAL EXAMINER: Have we marked it for identification?

THE WITNESS: No.

TRIAL EXAMINER: This is something new, then? You are testifying to something which has not been testified to before? I do not recall it.

THE WITNESS: I think it has been referred to, Mr. Examiner, but the letters have not been identified.

MR. GOLDBERG: You took the words right out of my mouth, Mr. Examiner. I was about to request that written consent be brought in here.

TRIAL EXAMINER: Very well.

MR. GOLDBERG: Mr. Spaulding, will you provide us with Consolidated's consent, if it exists, to Exhibits 71, 72, 73, 74, 75, 134, 76 and 77?

THE WITNESS: How about the railroad contract. Of course, Safe Harbor was a party to the railroad contract. My recollection is that no written approval was necessary from Baltimore Company for Safe Harbor to enter into the railroad contract because Baltimore Company itself was a party thereto.

By MR. GOLDBERG:

Q. Do you have something in writing on Exhibit 10? [2908] A. No, there is nothing in writing, I mention that because——

Q. Is it your interpretation as to why there is nothing in writing? Is that right? A. I don't attempt to make an interpretation as to why there is nothing in writing. I explained that there was no letter because counsel for Baltimore Company and Penn Water felt that the fact that Baltimore Company and Penn Water were already a party to the contract, any formal approval was unnecessary. I remember that because I participated in those discussions.

Q. You have nothing in writing on that? A. No, it was agreed nothing in writing was necessary.

* * *

[2921] Q. Well, are the operations of Safe Harbor and Consolidated physically inseparable in the same way that you testified at transcript 195, that the operation of Penn Water and Safe Harbor to Baltimore Company are physically inseparable? A. No, there is a distinction between them.

Q. What is the distinction? A. The two hydro plants and the steam plant of Penn Water are operated as a single combined source of electric services, and it is impossible to distinguish between the services from one plant and the services from the other plant. By "plants" I

mean the hydro and steam plants of Penn Water on the one hand and Safe Harbor on the other.

You cannot determine whether the kilowatt comes from one [2922] plant or the other, or a kilowatt hour, or a K. V. A. comes from one plant or the other.

You can tell how much of each the two plants provide, but their operations are closely coordinated in order that full utilization may be made of the river flow and of the storage available largely above the Safe Harbor dam, but including such storage as is available below the Safe Harbor dam in the Holtwood pond.

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[2923] Q. You say the operations of Consolidated are not as closely coordinated with those of Safe Harbor and Penn Water as are the operations of Safe Harbor and Penn Water—right? A. That is right.

Q. You say there is some difference of degree—right? A. That is right.

Q. Where does that difference of degree begin to take effect? A. It takes effect all through the operating responsibilities.

Q. You say that it is impossible to distinguish between the services being rendered by Safe Harbor hydro and the services from Penn Water's hydro and steam plant—right? A. Generally.

Q. Is it possible for you to distinguish between the services being rendered by Consolidated's steam plant and [2924] those being rendered by Penn Water and Safe Harbor hydro? A. Yes.

Q. How can you make that distinction? A. Well, it can be done and it is done.

Q. Can it be done at the time you have power coming up from Baltimore and generation at Safe Harbor? A. Yes.

Q. How do you do it? A. You know how much capacity and energy and other services are being generated from the two hydro plants on the combined system, and

you know what is being generated by the power resources of Baltimore on the other hand.

Q. You know that with respect to the coordination of the two hydros up there on the Susquehanna and steam plant at Holtwood—right?

THE WITNESS: May I have that question?

(Question read.)

THE WITNESS: Yes.

By MR. GOLDBERG:

Q. What is there which enables you to distinguish what is being rendered by Consolidated when there is generation at Safe Harbor but does not enable you to make the same distinction where there is generation at the Safe Harbor and Holtwood hydros and at the Holtwood steam plant? A. May we refer to Exhibit No. 8?

[2925] Q. Yes. A. And looking at the upper right-hand diagram we see the electrical services provided by hydro, which includes the services provided from the Holtwood hydro plant to Penn Water and at Safe Harbor hydro plant at Safe Harbor. They are operated in the upper part of that curve, shown colored in green, in a manner to obtain the maximum use of the hydro capacity and the hydro energy. It is impossible to say what kilowatt, or what kilowatt hour of that green area, comes from Holtwood and what comes from Safe Harbor. In any hour it is easy to determine how much comes from each, but the way in which the river flow is used in the two plants, and the two plants operate in service, you have to take the operation of the two plants together in order to obtain the maximum utilization of the river flow.

If you take the section below the green area you find a portion of the curve which is indicated comes from steam source No. 3.

My testimony in connection with that exhibit indicated that that steam source is used to provide electric services required in that area.

Now, in that instance, although there may have been several combinations of boilers and turbo generators, and in fact there may have been such units in several plants, they are not inter-dependent on each other, and although it is not [2926] shown here as to which steam plant or steam source is fitted into each imaginary square of that area it could readily be done by knowing the relative incremental costs of those several combinations of boilers and turbo generators. So there is no inter-relation of the steam sources in that group although there is a very close inter-relation resulting from the very close operation and operating responsibilities of the two hydro plants in the green area.

• • •

[2945] Q. I show you now, Mr. Spaulding, the annual report of Pennsylvania Water and Power Company for the year ended December 31, 1945, to the Federal Power Commission on F. P. C. Form No. 1 and direct your attention to pages 512 and 513 of that report. At those pages does Penn Water report the sales of electric energy to anybody? A. In column (p) of page 513, Schedule 530, "Sales to Other Electric Utilities," there is reported according to the instructions of the Federal Power Commission certain kilowatt hour figures.

Q. To whom is it reported by Penn Water that they sell electric energy on pages 512 and 513? A. Well, there is a recording of kilowatt hours in this schedule of energy, as indicated by the items reported in column (p) to the Consolidated Gas Electric Light and Power Company of Baltimore to the Pennsylvania Power and Light Company to the Philadelphia Electric Company at Coatesville and [2946] to the Edison Power and Light Company at York. I don't know that it indicates an energy sale. It is a recording of energy in connection with this statement.

• • •

[2947] Q. And the sales to the other electric utilities are [2948] shown as being made to Consolidated of Baltimore,

Pennsylvania Power and Light Company, Philadelphia Electric Company, and Edison Light and Power Company —right? A. Yes. The entries on pages 512 and 513 are made in relation to the sales to those companies as an accounting matter.

Q. You mean an accountant made up pages 512 and 513? A. I think an accountant prepared the framework within which certain figures were entered.

Q. You mean an accountant for the Federal Power Commission? A. I don't know.

Q. Who is this accountant you referred to who prepared the framework? A. May I refer to instruction No. 4?

Q. On page what? A. 513. "The number of kilowatt hours sold should be the quantities shown by the bills rendered to the purchasers."

I want to point out that although kilowatt hour figures are shown for each of the four companies, they are not figures that appear on all of the bills rendered, and the figures entered in column (p), "Kilowatt hours", is merely an accounting by the companies of the energies produced, purchased, and so forth, in order to have a complete accounting on these pages and other subsequent and preceding pages of all of the energies which the companies must report.

Q. In other words, you are saying that the items are there [2949] reported at pages 512 and 513 in that form because the schedule requires the company to follow that form and it had no choice. Is that right? A. That is right.

Q. Now, then, it did exercise its choice, however, of explaining to the Commission, didn't it, that though it was including in column (p) certain amounts of kilowatt hours that they had certain meanings other than those which might be carried away from reading the schedule alone—isn't that so? A. Yes.

• • •

Q. Now, though Penn Water felt free to indicate how the schedule should be read at pages 512 and 513, did it say that it does not sell electric energy to the companies shown at page 512, namely, Consolidated of Baltimore, Pennsylvania Power and Light Company, Philadelphia Electric Company, and Edison Light [2950] and Power Company?

• • •

THE WITNESS: As respects Pennsylvania Power and Light Company, Philadelphia Electric Company and Edison Light and Power Company it does not say it did not sell electric energy. There certainly is the implication they did not sell electric energy to Baltimore Company.

• • •

[2952] Q. Now, then, it does appear, doesn't it, from the first note on page 513-a that Pennsylvania Water and Power Company describes its customers in Pennsylvania, namely Pennsylvania Power and Light Company, Philadelphia Electric Company and Edison Light and Power Company as "its other (firm) customers"?

• • •

THE WITNESS: I think that is a general statement of what is recorded here.

• • •

[2953] Q. Well, look at it, Mr. Spaulding. Look at those pages and tell me if you see anything there and what it is about a representation that the customers I have named are the joint customers of Safe Harbor and Penn Water? A. I don't know whether there are any implications in that or not. I don't see any.

Q. You see nothing expressed there to that effect, isn't that so? A. There is no specific reference to it here.

Q. As a matter of fact, there is an express reference there that Pennsylvania Power and Light Company, Philadelphia Electric Company, and Edison Light and Power Company are Penn Water's firm customers. Isn't that so? A. Perhaps.

Q. No "perhaps" about it, Mr. Spaulding. That is the case, isn't it? A. I don't know what the implication of that is.

[2954] Q. I am not talking about implications. I am talking about express representations.

You just look at the first page of 513-a and tell me if you find anything in there which enables you to disagree with my statement? I will have my statement read to you.

TRIAL EXAMINER: Read the statement, please?

(Statement read.)

THE WITNESS: Yes.

By MR. GOLDBERG:

Q. Now, if they were the joint customers of Penn Water and Safe Harbor, don't you think Penn Water would have said so? A. I don't know.

Q. You participated in the preparation of that report, didn't you? A. I did.

Q. Why didn't you say so? A. Because this statement is not all mine.

Q. Who wrote that statement? A. It is the combination of my suggestions and lawyers'.

Q. And you didn't suggest, did you, that it should be represented that the Pennsylvania customers were the joint customers of Penn Water and Safe Harbor—isn't that so? A. I wouldn't say that.

Q. Did you represent they should be so described? [2955] A. I don't remember.

Q. If you had suggested that would your suggestions have been rejected? A. I don't know.

Q. Did you make the suggestion? A. I don't recall.

Q. How long ago was that? A. About six months.

Q. Six months ago did you conceive of Pennsylvania Power and Light Company, Philadelphia Electric Company, and Edison Light and Power Company as the joint customers of Safe Harbor and Penn Water? A. Certainly.

Q. Yet you didn't so state, did you? A. I did not so state.

Q. In a report which you were signing as representing the accurate facts. Is that right?

• • •

A. I think so.

Q. And in representing that they were the facts you [2956] did not represent that the Pennsylvania customers were the joint customers of Safe Harbor and Penn Water —right? A. It doesn't state here that they were joint customers.

Q. And that means you did not make such a representation. A. That is right.

Q. Even though at the time you were preparing the report you state you conceived of them as the joint customers of Safe Harbor and Penn Water—right? A. When you say, "Conceived of them", the idea is that——

Q. You looked upon them. A. Right.

Q. You do know that you signed that report, don't you? A. I do.

Q. And in signing that report, Mr. Spaulding, you said to the Federal Power Commission that you were making an oath as the vice-president of Pennsylvania Water and Power Company that you had examined the report, that you believed all statements of fact contained in the report are true and that the report is a correct statement of the business and affairs of Penn Water with respect to each and every matter set forth in the report during the period from and including January 1, 1945 to December 31, 1945—right? A. That is right.

• • •

[2962] Q. • • • Now, then, we know, don't we, Mr. Spaulding, that Safe Harbor did not report that it had made any sales of electric energy to Pennsylvania Power and Light Company, Philadelphia Electric Company, and Edison Light and Power Company during the year 1945. Isn't that so? [2963] A. The Safe Harbor report to the Federal Power Commission for the year ending December 31, 1945, does not record any sales to other electric utilities, other than to Baltimore and Penn Water.

Q. Directing your attention to page 524 of Penn Water's report on F. P. C. No. 1 for the year ended December 31, 1945, do we find the report by Penn Water of interchange transactions? A. There are recorded transactions in the schedule "interchange power" appearing on page 524, of Penn Water's report to the Federal Power Commission for the year 1945.

Q. And the interchange transactions are reported as having taken place with what companies? A. Philadelphia Electric Company, Pennsylvania Power and Light Company, Metropolitan Edison Company.

Q. Are they shown as interchange transactions in any way with Safe Harbor? A. No.

Q. As a matter of fact, if you turn to page 524, Safe Harbor's report for 1945, you find they report no interchange power transactions—right? A. That is correct.

Q. So we can tie this into discussions we had at an earlier date, firm power sales reported at pages 512 and 513 to the Pennsylvania customers in 1945 were made under Exhibits [2964] 71, 73, and 76. Is that right? A. Yes, if you include the amendments and supplements to those contracts you just referred to.

Q. You mean Exhibits 74, 75 and 76. Is that right? A. That is correct.

[2965] Q. And the interchange transactions reported by Penn Water, which we have just referred to, were made under Exhibits 77, 71 and 134—is that right? A. No, they were not made under 71 with Edison Light and Power. They were made under agreement between Metropolitan Edison and Penn Water dated March 11, 1931.

Q. That is the one we have not yet identified in the record as an exhibit—right? A. That is right.

We have not, of course, referred to the railroad contract but such accounting in connection with the railroad contract is recorded in the annual reports.

Q. With reference to the sales to the railroad, that is shown on page 514 of the report, isn't it? By "report" I

mean Penn Water's report to the FPC for the year ended December 31, 1945, on form No. 1. A. That is correct. Such accounting is shown on Schedule 532 "Sales to Railroads and Railways."

Q. And in this report Safe Harbor shows that Schedule with nothing in it—right? A. That is right.

Q. Penn Water reports at pages 522 and 523 of its 1945 report, "Purchases", and it reports those purchases as being made from Safe Harbor—right? A. It does.

• • •

[3061] Q. Referring to Exhibit No. 9, what portion of the $3,531,520, shown for the year 1944, was paid to Safe Harbor as its share of what you have referred to as the joint services rendered to the firm power customers in Pennsylvania? A. None of it directly.

Q. What portion was paid indirectly? A. I don't know.

Q. Do you know whether any portion was paid indirectly? A. Yes, I know that some of it was. I don't know just how much.

[3062] Q. Was it paid to Safe Harbor as a share of its revenues resulting from the joint services to the Pennsylvania customers?

• • •

THE WITNESS: Not as such.

By MR. GOLDBERG:

Q. As a matter of fact, it was paid to Safe Harbor under Items "E", "F" and "G", wasn't it, by Penn Water? A. Either by Penn Water or by Baltimore Company.

Q. Referring to Exhibit No. 17, which is the Safe Harbor bill to Holtwood for the year 1944, and to Baltimore Company, what amount is shown as the amount Holtwood Company is to pay to Safe Harbor? A. For the year 1944 Penn Water paid Safe Harbor under "E", "F" and "G" $1,214,553.53.

Q. Was that amount part of the $3,531,520 shown on Exhibit No. 9? A. It was not earmarked as such.

Q. In other words, if this $1,214,553 was a part of the $3,531,520 it was not paid to Safe Harbor as a share in the revenues resulting from services rendered to the Pennsylvania customers? A. I don't know whether it was or not, but not as such.

Q. But was used by Penn Water to meet its obligations to Safe Harbor under Items "E", "F" and "G", isn't that so? [3063] A. Possibly so.

Q. So that if the $1,214,553 were a part of the $3,531,520, the utilization of the $1,214,000 by Penn Water to meet its obligations to Safe Harbor is in the same category as the utilization by Penn Water of the revenues it received from Conowingo to pay any other obligations that Penn Water may have. Isn't that so? A. I don't know whether one is a prior payment of the other or not, prior obligation for payment or not.

Q. Well, the $3,531,520 and the payments received from Conowingo constitute revenues to Penn Water—right? A. Among others, yes.

Q. Now, then, if the payment made by Conowingo—incidentally, what is the payment in dollars made by Conowingo to Penn Water—do you know?

* * *

MR. GOLDBERG: $133,750. I see it on Exhibit 18.

By MR. GOLDBERG:

Q. Is that right? A. That is right.

Q. If we added the $133,750 to the $3,531,520 shown on Exhibit 9 we would have a total of $3,665,270. Does that sound right to you? A. Sounds about right.

Q. Now, then, that would represent revenues available to [3064] Penn Water to meet its obligations—right? A. Those revenues with others, yes.

Q. And it could use the $133,750 to meet its obligation to Safe Harbor under Items "E", "F" and "G", couldn't it? A. So far as I know.

Q. And that is what you mean by Safe Harbor receiving indirectly revenues—— A. I don't know whether any other obligations or legal responsibilities are involved, but generally that is what I had in mind.

Q. That is what you had in mind when you said that Safe Harbor was receiving indirectly part of the revenues from the Pennsylvania customers, because it is used in the manner, it may be used in the manner, we have discussed. Is that right? A. That is right.

Q. In other words, it can be said that I receive part of my salary from you indirectly. Isn't that so? A. That is so.

Q. You pay taxes to the United States Government, don't you? A. Yes.

Q. And the United States Government pays my salary? A. I don't know. I assume so.

Q. I assume so, too. But it may be said that indirectly you pay my salary, in part at least. Isn't that so? [3065] A. Is that a question?

Q. Yes. A. It might be so said.

Q. Nevertheless, you and I are not rendering any joint services that you know of, is that right? A. It hasn't appeared so.

Q. Does Safe Harbor render services for which it receives no reimbursement? A. It renders service for which it receives no reimbursement as such.

Q. Those services it renders to the Pennsylvania customers, Philadelphia Electric, Pennsylvania Power and Light Comapny, and Metropolitan Edison Company? A. I don't think it renders any service to Metropolitan Edison Company but it renders service to Pennsylvania Railroad. Of course, we have that.

• • •

[3067] Q. When you say Safe Harbor can only perform its obligations to the Pennsylvania customers jointly with Penn Water, do you mean by that statement that Safe Harbor can't make delivery without utilizing Penn Water's

facilities? A. Under the present contract they could not unless some other arrangements were made.

Q. In other words, you see joint service because Safe Harbor must rely on Penn Water's facilities to make delivery. Is that it? A. That is one element of joint service, yes.

* * *

[3092] Q. At transcript 193, beginning with line 4, you testified that Consolidated "Has the assurance for a long period, extending to 1980, of the advantages and certainty of a large source of hydro service which is closely coordinated with its own steam resources, and offering the opportunity to achieve the maximum economy of system operations." You so testified, did you not? A. I did.

Q. And, conversely, Penn Water has the assurance for a long period, extending to 1980, of the advantages and certainty of guaranteed earnings? A. I assume so, as long as the contract remains in effect.

* * *

[3101] Q. Consolidated has a contract obligation under items H and I to supply that steam backup—is that right? A. That is correct, and at the request of Penn Water.

Q. During such times as Holtwood would have to resort to Baltimore for a supply to meet the Pennsylvania requirements I have named in the preceding questions, and Baltimore was entitled to receive part of Safe Harbor's hydro-electric output under items E, F, and G, to avoid the necessity of having the electric energy from Safe Harbor go down to Baltimore and then back up to Holtwood it is merely diverted from Safe Harbor to Holtwood. Isn't that the way it works?

MR. SPARKS: May we have the question, please?

THE WITNESS: Before the question is read may I ask what these Pennsylvania customers are?

By MR. GOLDBERG:

Q. Philadelphia Electric, Metropolitan Edison, Pennsylvania Power and Light, and the State of Pennsylvania

load of the Pennsylvania Railroad? A. You included Pennsylvania Power and Light?

[3102] Q. Yes.

• • •

THE WITNESS: That is not the whole story.

By MR. GOLDBERG:

Q. Is that part of the story? A. I don't know. First of all, the requirements of these Pennsylvania customers to which you referred are in part the joint responsibility of Penn Water and Safe Harbor. I do not know what part of those responsibilities are Safe Harbor's or what part are Penn Water's so that I cannot determine how much Penn Water must obtain from Baltimore under your assumption that it would receive such services from Baltimore only in order that it might meet its responsibilities in part alone and in part joint to these Pennsylvania customers.

• • •

[3104] Q. All right. Are there times when Consolidated's entitlement under items E, F, and G is used to supply the requirements of the Pennsylvania customers?

• • •

[3105] THE WITNESS: The entitlements were arbitrarily determined where it was recognized they would have no significance as such in relation to the actual services rendered, and I don't believe I can answer your question categorically except to say that at times Safe Harbor does have an operating responsibility to the Pennsylvania Railroad, in your example, and as a result of that operating responsibility does not have left available for delivery to Baltimore as much as it would otherwise have.

Q. What it would otherwise have delivered to Baltimore is diverted to take care of the requirements of the Pennsylvania Railroad, for example. Is that right? A. It isn't diverted.

Q. It isn't sent down—— A. It is used for that purpose by Safe Harbor and Penn Water jointly.

Q. It isn't delivered down to Consolidated? A. That is right.

Q. If it were delivered down to Consolidated, had Safe Harbor and Penn Water needed it to meet the Pennsylvania requirements, that would only mean Baltimore would have to send [3106] it right back again. Isn't that so? A. Perhaps.

Q. So instead of going through all that they just don't send it down to Baltimore and use it up there in Pennsylvania. Isn't that it? A. I don't know.

Q. You just told us that there are times when instead of sending the electric energy to Consolidated in Baltimore it is used to meet the requirements of the Pennsylvania customers. Right? A. No, I don't think I said that.

Q. I just don't hear; then. A. Safe Harbor has a certain amount of electric services. Baltimore, under the contract, is entitled to two-thirds of those services. Safe Harbor has other operating responsibilities other than those referred to and covered by Exhibits "E", "F" and "G". To the extent that Safe Harbor uses electric services to meet its obligations to the Pennsylvania Railroad or other Pennsylvania customers there is that much less electric services available to Baltimore Company.

* * *

[3108] Q. And they never have existed because under the operating arrangements when Safe Harbor or Penn Water need Consolidated's entitlements to meet the Pennsylvania requirements, instead of the electric energy being delivered to Consolidated it is utilized up in Pennsylvania? A. No, that is not right, because Baltimore doesn't have available to it anywhere near the same electric services, [3109] measured in services, that it had in 1931. It hasn't as many services because of the operating responsibilities assumed by Safe Harbor in entering into these other contracts.

Baltimore's entitlement under "E", "F" and "G" ha been converted from services into dollars which it receives under contract identified as "H" and "I", or rather as accounted for under the contract identified as "H" and "I", being those revenues received for the electric services to which Baltimore Company was originally entitled but to which it does not now receive and cannot receive so long as Safe Harbor meets its contractual obligations, and by that I mean its operating responsibilities.

Q. You mean that when Consolidated gave its consent to the agreements which were made with the Pennsylvania customers—— A. Including the Pennsylvania Railroad.

Q. —it thereby authorized the diversion of its entitlements to Pennsylvania? A. Not from a contractual responsibility point of view. I don't know what it did contractually from a legal point of view.

Q. What did it do from an operating point of view? A. From an operating point of view Safe Harbor undertook additional operating responsibilities not theretofore assumed by it, and thereby had less electric services available to Baltimore Company under the contract identified as "E", "F" and "G".

[3110] Q. When Baltimore approved the consummation of the contracts with the Pennsylvania customers it thereby, from an operating point of view, permitted the utilization of its electric service entitlements in Pennsylvania to meet the requirements of the Pennsylvania customers. Isn't that so? A. I don't know what you mean by "permitted." It authorized it.

Q. You say it authorized it? A. Yes.

Q. With that substitution for my "permitted" you would say "Yes"? A. Let me go back to the question before I answer.

MR. GOLDBERG: All right.

(Question read.)

THE WITNESS: Well, it authorized Safe Harbor to undertake these additional operating responsibilities know-

ing full well that that included an authorization for the use by Safe Harbor in meeting those responsibilities of services which theretofore had been available to Baltimore Company either under "E", "F" and "G" or under "H" and "I".

• • •

[3133] Q. And have you always considered that those operating responsibilities that Safe Harbor had were joint operating responsibilities? A. That is right, I have considered them joint operating responsibilities.

Q. And when you have considered them as joint operating responsibilities you mean joint operating responsibilities of Penn Water and Safe Harbor—right? A. That is correct.

Q. And when you have considered them as the joint [3134] operating responsibilities of Penn Water and Safe Harbor, has it been your thought, your opinion, that Safe Harbor is responsible for supplying all of the requirements in the event Penn Water does not supply them? A. I don't think I ever had a definite opinion on that, and probably because there has only been one situation that I can think of when Penn Water was unable to furnish electric services to anyone. That was during the 1936 flood when Penn Water had to shut down, or rather when the elements shut down Penn Water's hydro and steam plants, and at that time Safe Harbor was the only company in a position to supply or to render electric services to these Pennsylvania customers, but I don't think even then that in retrospect I had any opinion as to whether they did then or would now have any particular portion of the operating responsibilities.

• • •

[3206] Q. As an engineer fully informed as to the operations of Safe Harbor under its contracts, fully aware, as you have stated, of the distinction between selling electric energy and selling electric services, you nevertheless found it entirely appropriate in the Safe Harbor proceeding to

describe the revenues received by Safe Harbor under the contract we know in this proceeding as items E, F, and G as "Revenue from energy sales". Isn't that right?

* * *

THE WITNESS: I did so state it, and I did not qualify it, although I was fully aware of the distinction between energy and electric services.

* * *

Q. Did you mean "Yes"? A. I don't know.

* * *

[3207] Q. Is the answer "Yes"? A. I think so.

Q. I want you to be sure, Mr. Spaulding. I don't want you to say that you testified "Yes" when you did not intend to. You seem to have some doubt. Is it correct to say that you can answer that question "Yes"? [3208] A. Let me have it again, please?

(Question read.)

THE WITNESS: Apparently I did at that time.

By MR. GOLDBERG:

Q. Then your answer is "Yes"? A. Yes, it is.

* * *

[3225] Q. Did Safe Harbor provide special facilities in connection with the operation of the Exhibits 76 and 77? A. Yes.

Q. Are they jointly used? A. I think they are jointly used by all three parties to those contracts.

Q. Can it be said any of them were provided for the specific use of Pennsylvania Power and Light Company? [3226] A. No, I do not think so, but they were provided specifically in connection with the services and operating responsibilities to the Pennsylvania Power and Light Company.

Q. Had those facilities been provided in connection with Exhibit 136? A. I do not think they were.

Q. Generally what kinds of facilities were they? A. Transmission facilities in a broad sense.

Q. What is that? A. In a broad sense, switches, breakers, high tension equipment and controls, transmission lines and the like.

Q. Weren't they required in connection with the operation of Exhibit 136? A. I don't think there were any provided by Safe Harbor until after the execution of Exhibit 76 and after 76 went into effect.

Q. Would they have been required in connection with Exhibits 76 and 77, even if Safe Harbor were not a party to the agreement? A. I don't know.

Q. Could the electric services be rendered to Pennsylvania Power and Light Company that are called for under Exhibits 76 and 77 without the facilities installed by Safe Harbor? A. I don't know. I don't think so.

[3227] Q. Because those facilities are required in connection with the supply of energy which originates in Safe Harbor that is used to render the electric services to Pennsylvania Power and Light—is that right? A. In connection with electric services rendered by Safe Harbor and supplied by Safe Harbor in that connection that is right.

Q. That is in connection with electric services which have to go through the Safe Harbor facilities, whether they originate at Safe Harbor or originate at Baltimore or Potomac Electric Power Company?

* * *

THE WITNESS: I am sorry. What facilities are we talking about here now?

By MR. GOLDBERG:

Q. The ones you said were provided after Exhibit 76 was consummated? A. Then that is correct.

* * *

[3229] By MR. GOLDBERG:

Q. Based upon the discussion we have been having so far this morning would it be fair to say that when you said that the special facilities were in part for joint use

that your use of the word "joint" did not depend upon Safe Harbor having any operating obligations or responsibilities in connection with the rendering or supplying of electric services?

• • •

THE WITNESS: That is correct.

• • •

[3255] Q. No, I am talking about Safe Harbor agreeing to the adjustments shown in Exhibits 18 and 19 for 1944 and 1945.

MR. SPARKS: Relating to the $9,000 odd dollar item now?

MR. GOLDBERG: That is right. Item "X".

THE WITNESS: No, Safe Harbor was not consulted in the matter.

By MR. GOLDBERG:

Q. They don't have to be consulted? A. Not as respects——

Q. Items H and I? A. H and I under normal conditions.

• • • •

[3257] Q. Referring to Exhibit 17 you have stated, however, that it does not show a breakdown of costs of service rendered by Safe Harbor to the various persons you say received service from Safe Harbor. Is that right? A. That is right, and, of course, in referring to the expenses on the one hand and the "return" on the other, these exhibits show such items in relation only to the investments made by the respective companies.

Q. You mean Exhibit 17, for instance, shows the investments of Safe Harbor, 18 or 19 show the investments of Penn Water involved? A. They don't show the investment but the expenses and return relating to those investments.

Q. Right. Those are all the investments involved in rendering electric service? A. No, that is not right.

Q. What investments are left out? A. In 18 and 19 the investments are not shown under paragraphs A and B, but only the contractual returns, in a general sense, for those investments. But again we are only referring to revenues, and there are other investments that have been made by Penn Water which were excluded in the determination of the amounts shown in paragraphs A and B.

Q. Were they excluded from paragraphs C, D, E, F, H and [3258] X? A. The expenses incurred in connection with those facilities, to the extent there may be expenses incurred, are included in paragraph "C". They do not affect the items shown in paragraphs "D" and "E", but they do have an effect on paragraph "F".

Q. What investments of Penn Water did you have reference to when you said "certain investments of Penn Water are not included in the Exhibits 18 and 19"? A. There are quite a few of them. I will endeavor to refer to a few. Certain investments in property held for future use, certain investments made following the 1936 flood which were made to strengthen certain structures as protection against the elements more severe than were experienced in 1936, and there were several other major items that I don't recall right now, but I remember there were such.

Q. With respect to the investments which were made to strengthen structures in connection with the 1936 flood, were those capital investments or were they non-capital investments? A. They were capital investments.

Q. When you say that they are excluded, are they the types of investments upon which Penn Water, you feel, is entitled to earn a return? [3259] A. Definitely.

Q. And you say it is not earning a return on the investments it made in 1936 to strengthen the structures? A. I do not care to characterize it that way. I will say that it is not included in the basis on which a specified return is computed for the purpose of deriving the amounts shown in paragraphs A and B of Exhibits 18 and 19.

Q. Why aren't they included? Is somebody preventing Penn Water from including them? A. I didn't understand.

Q. Why aren't they included? Is somebody preventing Penn Water from including them? A. They were the results of negotiations between Baltimore Company and Penn Water.

[3260] Q. You mean as a result of negotiations between Baltimore Company and Penn Water it was decided not to include the investments made in strengthening structures as a result of the 1936 flood? A. That is correct.

Q. How about this investment in property held for future use. Is that excluded because of an agreement between Penn Water and Consolidated? A. No, sir. Penn Water has never included it in the computation of these amounts, have not included those items that I referred to as not being included. That decision was not arrived at because of any disagreement. Penn Water never to date has urged their inclusion.

Q. I see. But Penn Water is urging their inclusion now, if I understand your testimony. A. No, sir. I say that in my opinion they should be included in the determination of costs, but that I believe Penn Water has been proper in not including them as a basis for the revenues in connection with the formula set out in the contract identified as H and I.

Q. But if they are included as costs of service, that changes the revenues, does it not? A. It would.

Q. Yes.

Are these other investments that you cannot recall right [3261] now in the same category, Penn Water has of its own volition never insisted upon their inclusion? A. No, I think that those decisions were made as a result of compromise. One I do recall now, an investment made by Penn Water in connection with the installation of Cottrell Dust Precipitators at the Holtwood steam plant. In Penn Water's judgment the installation of those facilities were most essential.

Q. But as a result—— A. Baltimore Company disagreed. A compromise was arrived at whereby Baltimore is now paying, or rather that one-half of such investment has been included in the basis for deriving the figures shown under paragraph (b) of Exhibits 18 and 19.

Q. So that it is your statement that with respect to the bill that Holtwood renders to Consolidated, the revenues there shown are not computed on all investments that Penn Water has made, meaning those investments you have described? A. And others of similar nature which I don't remember.

• • •

[3313] Q. Well, you said that the original reason for making Safe Harbor a party to Exhibit 71 was to provide that the capacity and energy of Safe Harbor, to which the Holtwood Company was entitled on the one hand and received and used on the other hand, would be available in that contract to Edison Light and Power Company. What I am unable to fathom is why it was necessary to make Safe Harbor a party to accomplish that feature. A. I don't know why Safe Harbor had to be a party. I [3314] know that it was made a party.

• • •

Q. I want to know if what was sought to be accomplished by including Safe Harbor could not as well have been accomplished even if Safe Harbor had been omitted? A. I think it might have been accomplished practically but the operating responsibilities would not necessarily have been the same.

Q. You mean this: That although it could have been accomplished there would not have been, in your view of it, any responsibility on Safe Harbor to Edison Light and Power Company? [3315] A. That is right, and I think that that has to be predicated on the assumption that Penn Water could have had sufficient electric services available to meet the requirements of Edison.

• • •

[3317] Q. Now, then, how did making Safe Harbor a party to Exhibit 71 make it any more certain that the capacity and energy of Safe Harbor which Holtwood receives and uses would be available under Exhibit 71? A. Well, by making Safe Harbor a party to Exhibit 71 Edison Light and Power Company has the assurance that Safe Harbor will perform these services jointly with Penn Water, and if Safe Harbor were not a party York wouldn't know whether it was going to or not.

Q. Well, if Safe Harbor were not a party—withdraw that.

By making Safe Harbor a party does that enable Safe Harbor to assure Edison Light and Power Company that the energy which Holtwood Company receives from Safe Harbor will be available under Exhibit 71? A. I think it does.

Q. How? What control does Safe Harbor have over what Holtwood does with the electric energy received by Holtwood? A. I don't think it has any control over what Holtwood does, but it undertakes an operating responsibility with Penn [3318] Water to provide electric services to York. York can now look to both companies.

TRIAL EXAMINER: Do you know whether York insisted that Safe Harbor be made a party to the contract?

THE WITNESS: I do not know whether they insisted or not, sir.

By MR. GOLDBERG:

Q. Whose idea was it that Safe Harbor be included? A. I do not know that.

* * *

[3323] Q. Why should there be any difference simply because you take somebody's name out of a contract? A. But you change the operating responsibilities.

* * *

Q. You say that Safe Harbor right now has an operating responsibility to Philadelphia Electric and Pennsylvania Power and Light Company. Right? A. They do, and by "they" I mean Safe Harbor does have operating responsibilities to those parties.

[3324] Q. Now, then, with respect to your second reason on page 239, which was with respect to Safe Harbor's right to sell and distribute electric energy at wholesale in York County, did you mean by that that it was believed that Safe Harbor did not have the authority to sell electric energy in York County? [3325] A. That is getting into a legal matter.

Q. I want just your understanding of it. A. All right. If I may give my understanding in non-technical language. In 1931 it is my understanding that Safe Harbor had been limited by the Pennsylvania Commission, the Pennsylvania Public Service Commission, to the extent that it might sell—and I use the word "sell" as I understand it was used—electric services to Penn Water and to Baltimore Company, and further limited the extent that such services could be resold by Penn Water only to its then existing customers. At that time its only existing customers were the Edison Light and Power Company of York, Pennsylvania Power and Light Company at Lancaster, and I think by that time the Company at Coatesville was owned and operated by Philadelphia Electric. I am not sure of that.

Subsequent to 1932, or possibly during the latter part of that year, a request was made to have the latter restriction, namely that electric services could only be resold by Penn Water to its then existing customers, extended or expanded in order that Safe Harbor might sell direct to customers other than Baltimore and Penn Water, and I don't recall there was any limitation on the customers. Yes, there was. However, I don't recall what that limitation was. I know that it specifically was permitted to sell

directly to the Pennsylvania Railroad in Manor Township, and I am not sure it was [3326] limited to that township but I know the permission extended to that township. Permission was also granted to sell directly to the companies operating in Lancaster, York and Chester counties, and I don't remember whether the names of the companies were specified or not.

I was referring to that action in my answer on page 239.

I think I should conclude that where I said "approvals were granted" they were granted by the Pennsylvania Utility Commission.

Q. Somebody wanted Safe Harbor included in those contracts, Exhibits 71, 73 and 75—right? A. More specifically Exhibit identified as No. 10.

Q. Somebody wanted Safe Harbor included in Exhibit 10—right? A. I think that is right.

Q. Who was that somebody? A. The Pennsylvania Railroad Company.

Q. Who wanted Safe Harbor included in Exhibit 71? A. I don't recall whether anybody wanted it, but I suppose they did. I don't recall.

Q. How about Exhibit 73 and Exhibit 76? A. At the time the permission was granted to extend its rights, if that is the proper expression, I know that the hearings before the Pennsylvania Commission were largely relating to Exhibit 10 and to Exhibit No. 139. There may have [3327] been other matters discussed, but they related largely to that, and it was around Exhibit 10 or the Pennsylvania Railroad contract that most of the testimony related, but the advantages of being able to sell electric services by Safe Harbor directly to others was fully recognized, first, as it would permit a reduction in total taxes paid, as is referred to also on page 239, and further it was recognized that by permitting electric services of Safe Harbor to be sold directly by Safe Harbor or resold by Penn Water to others, and I am referring now to Exhibit 139, there would result additional savings from economy operations

or interchange operations as I have referred to them and of course to the general public.

Q. Wasn't the tax reason the real reason for naming Safe Harbor in Exhibits 71, 73 and 76?

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[3328] THE WITNESS: I have no reason to believe it was the "real reason" or the principal reason. I know that it was one material reason.

• • •

[3330] Q. When Safe Harbor secured the right to sell electric energy to others than Consolidated and Holtwood in that proceeding you described before the Pennsylvania Commission in 1932, that merely removed a barrier to naming Safe Harbor to Exhibits 71, 73, 76 and Exhibit 10. Isn't that so? A. It did remove a barrier.

Q. All right. A. I don't want to qualify it.

Q. That wasn't the reason why it was named in those agreements? A. Then I don't understand what you mean.

Q. You stated that one of the reasons for naming Safe Harbor was to save taxes—right? A. That is correct.

Q. Having in mind that that was a reason for naming Safe Harbor, was the removal of a legal restriction a reason for naming Safe Harbor in its contracts? [3331] A. Not if I understand your question, but I don't think I said that here.

Q. Look at page 239. "There were also two other reasons. One was a legal reason having to do with the right of Safe Harbor to sell".

That wasn't a reason for naming them, was it? A. I think I understand your point now, and again I am getting into legal grounds. I will have to apologize for my lack of legal knowledge because it is strictly legal, but my understanding is that Safe Harbor was named a party to Exhibit 71, that is one of the reasons and there were several, to assure—and that is not the right word to use but I hope it will be understood—that Safe Harbor might establish

the legal right to sell either directly o: with others in York County in the future.

Now, Mr. Examiner, that is the best explanation I can give.

Q. In other words, there was a barrier to naming Safe Harbor? A. Pardon?

Q. There was a barrier to naming Safe Harbor in the agreements? A. In all of the agreements; yes, sir.

Q. And that barrier was removed in 1932 by reason of the proceedings before the Pennsylvania Commission that you [3332] mentioned—right? A. That is right.

Q. Then after that barrier was removed it was possible to name Safe Harbor in the agreements—right? A. In any and almost all agreements as far as I know.

Q. Now, why was it desirable to remove the barrier? A. In order that Safe Harbor could undertake certain specific and joint operating responsibilities in connection with Exhibit 10 and other contracts of Penn Water.

Q. It was to save taxes? A. Among other reasons, yes.

Q. Wasn't that the only reason?

* * *

[3333] THE WITNESS: What's the only reason? I thought we were talking about reasons all afternoon.

[3334] By MR. GOLDBERG:

Q. Savings of taxes. A. I gave three reasons on page 239.

Q. I know what you gave.

Wasn't the tax reason the only reason for seeking to eliminate the barrier and naming Safe Harbor? A. No, sir. I had stated very recently that one of the reasons, if not the initial impelling reason—and I underscore initial,—that Safe Harbor's rights were extended, or that a request was made to extend them, was in order that Safe Harbor could undertake its responsibilities under the railroad contract identified as Exhibit 10.

Q. But that reason didn't have anything to do with naming them in Exhibits 71, 73 and 76—right? A. That is right.

Q. Was tax savings the only reason for naming them in Exhibits 71, 73 and 76? A. I don't understand so.

Q. Did the tax reason have anything to do with assurance of supply? A. I don't think so.

* * *

[3385] Q. When I asked you this question, which I am about to repeat, you said you could not answer it unless you left Pennsylvania Railroad out of consideration.

Leaving them out of consideration I would like to have you answer the question:

When stream flow gets down that low—and by "that low" I mean around 2500 C. F. S.—is it your statement that any deficiencies which may exist, exist only because of a method of operations that is intended to achieve maximum overall economy and maximum overall utilization of resources? A. I think that is right.

Q. In other words, there are never any deficiencies that exist solely because of the lowness, if I may put it that way, of stream flow? A. Of course, I have to take into consideration in my answer, and I did take into consideration, the fact that there is storage in the Holtwood and Safe Harbor ponds sufficient to carry all of the firm power obligations of Penn Water and Safe Harbor to Metropolitan Edison, Pennsylvania Power and Light and to Coatesville for over a week and perhaps several weeks depending just on what the variations in flow may be. You realize, of course, we seldom have flows in the vicinity of 2500 C. F. S. for any length of time. We can, of course, call on pondage or water storage for such very low periods, but [3386] normally we do not use the pondage in that manner, that is, solely for the firm power consumers, but rather use it for the overall maximum economy considering the other contracts of Penn Water and Safe Harbor and the use of natural resources.

Q. Have you in your last answer considered what is available to Penn Water under the interchange agreements as backfeed from Consolidated or have you intended to eliminate that from your answer? A. I did eliminate it in my answer.

Q. You intended not to give that any consideration? A. I thought that was your question.

Q. In saying that there is never a time when a deficiency in supply is the result of low flows?

* * *

THE WITNESS: And by "deficiency" as you are using it, you mean those occasions when Penn Water and Safe Harbor either obtain supplemental energy and other services from others or use their pondage for the short periods. Of course, the latter method is not the one normally used. Rather we do supplement the services in order that we may obtain maximum overall economy and maximum utilization of natural resources.

* * *

[3387] Q. In other words, at all times Penn Water and Safe Harbor, as you look upon the situation are self-sufficient when it comes to meeting the requirements of the Pennsylvania customers. By "self-sufficient", I mean they don't need the interchange and they don't need the backfeed. A. No, I don't mean that at all. We don't ordinarily look at operations in that manner.

You have asked me to look at it in that manner and I have given you an answer accordingly. Actually, of course, we do operate the system giving consideration to all of the contracts and the operating responsibilities under each and every one of them. And it is for that reason that we do procure, and by "We" I am speaking of Penn Water and Safe Harbor, backfeed energy from Baltimore in part and interchange from the northern companies in part in order that the maximum utilization of natural resources and the maximum economy can be obtained in consideration of the

expressed intent to do so under E, F, and G and H and I.

Q. As I understand your answer, you are saying from a practical standpoint, from a practical operating standpoint, there is available these supplies from Metropolitan Edison, Philadelphia Electric, and Pennsylvania Power and Light and Consolidated which enables Penn Water to meet the [3388] requirements of the Pennsylvania customers. Is that right? A. That is right.

Q. But looking at it from the standpoint of the provisions of the contract, is it your statement that Penn Water is at all times self-sufficient? A. May we add Safe Harbor to Penn Water?

Q. All right. A. Under normal operations Penn Water and Safe Harbor do require supplemental services in order that they may operate to obtain maximum overall economy and fullest utilization of natural resources.

Q. And from a practical viewpoint you say they have always been able to get supplemental supply? A. That is correct, there always has been ample supplemental services available to it.

Q. And they have been able to get it without a firm obligation on the part of any of the suppliers to Penn Water or Safe Harbor or both—right?

* * *

THE WITNESS: What do you mean by "firm obligations"?

By MR. GOLDBERG:

Q. Intended to be available at all times. A. That is correct, there is no firm obligation on the part of any customer to Penn Water and Safe Harbor.

[3389] Q. On the part of the supplier to Penn Water and Safe Harbor. You said "customer", didn't you? A. On the part of the suppliers of such supplemental energy.

* * *

[3392] Q. Has there ever been a time during the existence of Exhibit 72 that you were of the opinion that Safe Harbor

was rendering electric services under Exhibit 72? A. To whom?

Q. Either Penn Water or Metropolitan Edison? A. It certainly is true that Safe Harbor in my opinion has not and is not rendering electric services to Metropolitan Edison Company under Exhibit 72, but Safe Harbor does have an operating responsibility to Penn Water in connection with the latter's operating responsibility to Metropolitan Edison under Exhibit 72.

Q. And Safe Harbor's operating responsibility to Penn Water in connection with Exhibit 72 originates under Items E, F, and G, does it not? A. I think it does.

Q. Has there ever been a time during the existence of Exhibit 72 that you were of the opinion that Safe Harbor [3393] was supplying electric services under that agreement? A. Yes, it has continually since the contract has been in force and effect, that is since January 1, 1946.

Q. In other words, since January 1, 1946, Penn Water has continuously used electric energy generated by Safe Harbor to meet its obligations to Metropolitan Edison under Exhibit 72? A. And by "electric energy", I am referring to electric services of which energy is one of the attributes.

Q. Has there ever been a time during the existence of Exhibit 72 that you were of the opinion that Safe Harbor had operating responsibilities under that contract? A. Isn't that the same question you just asked me?

Q. No, no. I was talking about supplying electric services and rendering electric services before that. Now we are talking about operating responsibilities, which is another one of your phrases. A. Safe Harbor has not an operating responsibility to Metropolitan Edison under Exhibit 72, but it has an operating responsibility to Penn Water in connection with the latter's operating responsibility to Metropolitan Edison under Exhibit 72.

• • •

[3410] Q. In Article IX of Exhibit 72 this statement appears: "Holtwood represents that for the purposes of this article it is in a position to include the energy and/or capacity of Safe Harbor and for such purposes the same shall be treated as though it were owned and controlled by Holtwood."

How was Holtwood able to state that it is in a position to include the energy and/or capacity of Safe Harbor in connection with Article IX and to further state that the energy and/or capacity of Safe Harbor shall be treated as though it were owned and controlled by Holtwood?

• • •

THE WITNESS: I don't know.

• • •

[3411] Q. What does it mean when Holtwood states that it is in a position to include the energy and/or capacity of Safe [3412] Harbor for the purposes of Article IX and that for such purposes the same shall be treated as though it were owned and controlled by Holtwood?

• • •

THE WITNESS: To me as an operating man my understanding is that Penn Water was in a position to arrange for the interchange sales of certain energy and capacity from the Safe Harbor plant as though Holtwood and Safe Harbor were rendering those services jointly so far as Article IX is concerned.

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Q. How did it get into that position? What are the facts and circumstances that enable it to make such an arrangement?

• • •

THE WITNESS: First, Penn Water and Safe Harbor operate [3413] their respective hydro plants for a maximum overall economy and for maximum utilization of natural resources. They have been doing that for some time.

Secondly, this contract was entered into by Penn Water with the knowledge and consent of Baltimore Company who was the other party with Penn Water that had whatever entitlements were due them from Safe Harbor Company.

By Mr. Goldberg:

Q. Under Items E, F and G? A. I think so, after taking into consideration the other contracts.

Q. Have you completed your answer? A. Yes.

Q. This reason that you gave, that Penn Water and Safe Harbor operate their respective hydro plants for maximum overall economy and maximum utilization of natural resources, and have been doing it for some time, that applies throughout the period 1932 to date—right? A. That is correct.

Q. And the reason you gave that Exhibit 72 was entered into by Penn Water with the knowledge and consent of Baltimore Company, who was the other party with Penn Water who had entitlements under E, F, and G, that applies to all contracts which Penn Water ever has entered into since Items [3414] H and I were entered into—right? A. I think that is correct.

Q. And that has been the case since 1931, then, the date of Item "H"? A. The early part or middle of 1931—that is correct.

Q. So that the reasons that you gave as enabling Penn Water to assure the availability of the energy and/or capacity of Safe Harbor in connection with the interchange arrangements under Exhibit 72, are reasons that have existed since 1931 and were available to Penn Water throughout the period 1931 to 1946. Right?

* * *

The Witness: I think so.

By Mr. Goldberg:

Q. In other words, without naming Safe Harbor in Exhibit 72, Penn Water was able to make an assurance to

Metropolitan Edison with respect to the energy and/or capacity of Safe Harbor. Right? A. For interchange purposes only, and that means with a limited responsibility on a time to time basis.

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[3427] Q. Now, if they can do it with respect to interchange why can't they do it with respect to firm power obligations? A. I don't know. Perhaps they can.

Q. And they probably can do it without even asking Safe Harbor, can't they? A. I don't know.

Q. They did it with respect to interchange, didn't they? A. Apparently so.

Q. You know that is so, don't you? A. Subject to the discussion we have just had, yes.

Q. You know that is so because you were intimately associated with those negotiations. A. I have endeavored to recite what happened.

Q. As a matter of fact, there is reliance upon Safe Harbor's capacity and energy for the purpose of meeting the firm power requirements in Exhibit 72, isn't there? A. Very definitely.

Q. And there is that reliance again without Safe [3428] Harbor's inclusion in Exhibit 72, isn't there? A. Safe Harbor is not a named party, nor does it have any operating responsibilities directly to Metropolitan Edison under Exhibit 72.

Q. But there is an assurance of supply to Metropolitan Edison under Exhibit 72 which involves the capacity and energy of Safe Harbor? A. I think that is right.

• • •

[3433] Q. Had there been a change in the tax laws in Pennsylvania between the time Exhibit 71 was entered into and Exhibit 72 was consummated? A. I think so, but I am not too familiar with the tax laws.

Q. And it was because of that change in tax laws that you said "The third reason no longer appeared to exist." Is that right? A. I think that was part of it.

Q. Was there any other part of it? A. Not except that I understood that the tax situation, whatever it was then, or is now, and it has not been changed since this contract was entered into or negotiated, did not appear to be important.

• • •

[3436] Q. When electric energy is not sold to Consolidated under Items H and I, what electric services does it receive? A. It may receive a lot of electric service without there being any energy present—capacity services, power factor cooperation or reactive, voltage, current, frequency.

Q. Are you finished, Mr. Spaulding? A. I think so.

Q. When you mentioned voltage and current did you have in mind wattless energy? A. I did.

Q. Wattless power, I should say. A. I think that is right. Of course, there could be the capacity service where there was no current or reactive [3437] present, merely a readiness to serve.

Q. In connection with Article 6 of Item "H" does Consolidated provide any such services such as a readiness to serve? A. At times there may be on an interchange basis when there have been arrangements made for the interchange of capacity without any energy and Baltimore may make that service available on its own system without any change in the current energy or power flowing.

Q. When no energy is flowing to Consolidated you stated that such services as capacity, power factor cooperation, reactive, voltage, current and frequency were being furnished Consolidated by Penn Water? A. There can be, and may be.

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[3443] Q. You say revenues received by Penn Water are used to reduce Consolidated's payment under Items H and I to Penn Water—right?

• • •

THE WITNESS: May we be a little more specific? The revenues which are actually collected by Penn Water from the firm power customers of Pennsylvania, in part for services rendered alone by Penn Water and in part for services rendered jointly by Penn Water and Safe Harbor, may reduce the payments made by Baltimore to Penn Water under H and I in the sense that the formula for computing the revenues receivable by Penn Water under H and I take such revenues from Pennsylvania customers into consideration.

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[3445] Q. Now, then, do you say that Safe Harbor receives revenues from the supply of power and energy to persons or corporations other than Consolidated and Holtwood that should be credited by Safe Harbor in computing the power bill to Consolidated and Holtwood? A. I don't know. It is not so accounted for today, and has not been for the duration of the contract.

Q. If there were such revenues there is the provision under which the credits could be made in the power bill computations—right? A. I think so.

Q. But there are no such credits being made today—right? A. Not currently, no.

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[3454] MR. SPARKS: That is correct.

Mr. Examiner, upon review of the record we find there is one matter which Mr. Goldberg requested of Mr. Spaulding, which has not yet been reported upon. Mr. Spaulding is ready at this time to report on it, and it involves a reference to the Pennsylvania proceedings in 1932.

MR. GOLDBERG: If you will identify that proceeding, Mr. Spaulding, I would appreciate it.

THE WITNESS: At transcript page 3334, you asked me to identify the proceeding before the Public Service Com-

mission of the Commonwealth of Pennsylvania relating to the modification of that Commission's order, fixing the companies to which Safe Harbor Company was allowed to sell directly or indirectly.

The petition to the Commission for permission to sell its service to others than originally determined was dated March 29, 1932.

The report and order of the Commission is dated January 10, 1933, in re "Application of Safe Harbor Water Power Corporation for modification of the certificate of public convenience approving the beginning of the exercise of the rights, power or privilege of the supply, storage or transportation of water and water power for commercial and manufacturing purposes in Manor township, Lancaster County, and Chanceford township, York County, by amending the [3455] restriction which limits service to certain customers named therein."

The application docket shown on that order is No. 21579 (folder No. 2).

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[3479] Q. What do you mean when you say that the electric services from Consolidated are co-mingled with the electric services at Safe Harbor or at Holtwood? A. I mean that those electric services such as kilowatt-hours, kilowatts and reactive, which involves current and voltage, of course, when those are mixed with similar services, or other electric services of the Safe Harbor Company or of another company or another source, there is a co-mingling of those electric service attributes.

Q. Are you using "mixed" and "co-mingling" synonymously? A. I think so, except that I am using it in an electrical sense.

Q. You are using it in an electrical sense? A. Yes, and I have no high, scientific implications in that use, either, Mr. Goldberg.

Q. You can be sure I haven't either, because I don't know what they are.

I am interested in finding out how these electric services from Consolidated mix with electric services from other sources of supply. A. Well, I don't want to be too technical. Perhaps you will forgive me if I used an expression that the Examiner used [3480] not long ago. There is a vector relation between them which results in a new vector, and that is the type of co-mingling I am talking about.

TRIAL EXAMINER: I used it correctly, didn't I? It was about three weeks ago.

THE WITNESS: Yes, you used it very properly, Mr. Examiner. It is a simple way of expressing what is being described on the stand.

* * *

[3502] By MR. GOLDBERG:

Q. From the time Safe Harbor began operating in 1932, it is the fact, is it not, that Penn Water in connection with its commitments under Exhibits numbered 136, 137, 138, and 139 relied at times upon the supply from Safe Harbor, right?

THE WITNESS: May I have that question again, please?

(Question read.)

THE WITNESS: No, that is not strictly correct. Safe Harbor electric services could not be used by Penn Water in respect to the contract identified as 139 until after the Pennsylvania Commission had authorized Safe Harbor to permit [3503] its energy so to be used.

By MR. GOLDBERG:

Q. Let me see if I understand you? A. I think that as respects the other three contracts, namely, 136, 137, 138, that Safe Harbor's electric services were available to Penn Water for the latter's use in rendering services to the named companies in those three contracts, customer companies in those three contracts.

Q. I don't understand why Safe Harbor's electric services were not available for use to Penn Water in connection with Exhibit 139. A. Because until the Pennsylvania Commission authorized such use by Penn Water, Penn Water could not use Safe Harbor's services in connection with Exhibit 139. So there was a period from the execution of 139 up until the final order of the Pennsylvania Commission permitting such use that Safe Harbor's services could not be used by Penn Water in connection with that contract.

Q. Let's see. The electric services would be available to Penn Water under Items E, F, and G—right?

THE WITNESS: May I have that question?

(Question read.)

THE WITNESS: I assume so.

By MR. GOLDBERG:

Q. Having been made available to Penn Water under Items [3504] E, F, and G, what restriction was there on Penn Water which would have prevented it from using the electric services and supplying Metropolitan Edison under Exhibit 139? A. It was a restriction which went with the certificate of public convenience and necessity issued by the Public Service Commission of Pennsylvania to Safe Harbor Water Power Corporation which limited such use.

Q. Wasn't that restriction that Safe Harbor could only sell to Consolidated and Penn Water? A. No, it went further than that. It provided that Penn Water could only use such services for resale to its then named customers, and as I recall those named customers they were Chester Valley Electric, Edison Light and Power Company of York and Pennsylvania Power and Light Company. It did not include Metropolitan Edison.

Q. So there was a restriction upon Penn Water's use of the electric energy received under Items E, F, and G from Safe Harbor. Is that it? A. That is correct.

Q. When Penn Water was undertaking to supply Metropolitan Edison during that period of restriction did

it have to make some sort of an identification of the electric energy it received from Safe Harbor and somehow or other keep it from getting into Metropolitan Edison's system? A. It had to establish an electrical barrier to prevent that flow.

[3505] Q. Did it? A. It did.

* * *

[3520] Q. Mr. Spaulding, why did you limit your determination in Exhibit 35 to firm power services?

* * *

THE WITNESS: I did not limit it to firm power services. I made adjustments for interchange services as well.

By MR. GOLDBERG:

Q. The title of your exhibit is "Costs of Penn Water's and Safe Harbor's firm power services rendered to Baltimore Company, 1945 and 1946." Shall we change that title? A. No, but in that study, and in connection with my testimony relating thereto, the operating savings resulting from all interchange transactions become a credit or are passed on to Baltimore Company, and therefore in determining costs of services of Penn Water and Safe Harbor to Baltimore Company, proper adjustments were made in order that all of those benefits from operating savings resulting from [3521] interchange were credited to Baltimore Company in accordance with the provisions of the actual operations and the contracts relating thereto.

Q. In firm power services you included backfeed from Baltimore and interchange services to the Pennsylvania customers. Is that right? A. That is right.

Q. And backfeed and interchange sales do not involve a continuing operating obligation. Isn't that so?

* * *

THE WITNESS: That is right.

By MR. GOLDBERG:

Q. Well, then, in what way are they firm power services? A. The resultant effects, or the resultant services

of Penn Water and Safe Harbor are firm power services, and the operating economies resulting from interchange become a credit, in effect at least, to the Baltimore Company, and they were so treated.

Q. Even though they may become a credit to the Baltimore Company, you may not treat them as firm power services. Isn't that so? A. And I didn't treat them as firm power services.

Q. Even though you included them in your study of the [3522] costs of firm power services rendered to Baltimore Company. Is that right? A. The interchange operations involving the purchase or procurement of interchange services from Baltimore Company on the one hand and from the Pennsylvania customers on the other are in part used by Penn Water and Safe Harbor in connection with the rendering of firm power services, but the operating savings from the interchange transactions between Baltimore Company and Penn Water on the one hand and between Penn Water and Safe Harbor and another company on the other hand were credited to Baltimore Company in Exhibit 35.

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Q. You say that the supply from Consolidated was used by Penn Water and Safe Harbor in connection with rendering firm power services. Did I understand you correctly? A. Frequently, yes.

Q. You mean firm power services to Metropolitan Edison and Pennsylvania Power and Light Company, Philadelphia Electric Company? A. Yes, among others, and that is the energy that we have been talking about the last few days as the supplemental [3523] energy that Penn Water and Safe Harbor use in connection with their firm power obligations.

Q. Do they use it in connection with their obligations under Exhibit 10? A. It may be.

Q. Do you know whether they do? A. I can't earmark the kilowatt hours.

Q. You mean you don't know? A. I cannot paint the kilowatt hours. I have accounted for them that way.

Q. You mean you have accounted for them on the theory that they are so used? A. That is right, together with other services.

Q. In determining the costs of Penn Water's and Safe Harbor's firm power services rendered to Baltimore Company—and please understand I am using your title, not accepting that as the fact—have you included the costs of all these attributes of electric services that you have been discussing throughout your cross-examination?

* * *

THE WITNESS: I think so.

* * *

[3524] Q. In the third paragraph of that general statement on Page 2 of Exhibit 35 you stated that schedules 3, 4 and 5 of Exhibit 35 provide the basis for the determination of the capacity and energy service components of Penn Water's and Safe Harbor's combined firm power services to Baltimore Company. Is that right? A. It so states.

Q. Did you by that statement intend to cover all of the attributes of electric services you have been discussing? A. I did.

Q. So that in the phrase "capacity and energy" you covered voltage, power, phase, capacity, power factor, current, frequency and every other attribute you have ever mentioned in this proceeding as an attribute of electric service. Isn't that so? A. I don't think there are any other attributes, but I [3525] did so include them.

Q. You thought it appropriate to include them that way, did you?

* * *

THE WITNESS: I presume so, because my allocations were limited to the allocations of capacity and allocations of energy. I had no basis for making an allocation of the other attributes of electric service because no records of sufficient completeness are available for the purpose.

I did give careful consideration to them and concluded that by the allocation that was used for capacity and energy that I had properly included the allocation of all of the other attributes of electric service.

* * *

THE WITNESS: And I would like to add that I did [3526] recognize that I was making a very conservative assumption with respect to the services rendered to Baltimore Company, because, in my opinion, and based on the meager records that are available, Baltimore is provided with a very much higher percentage of power factor cooperation than any of the otner customers of Penn Water and Safe Harbor.

By MR. GOLDBERG:

Q. Do I understand by your last statement that you have been very liberal to Consolidated—— A. I think I was liberal to Consolidated in that respect, that is correct; generous, may I say.

Q. That is what I meant. Now, then, you say you don't keep adequate records to enable you to make an allocation of the costs of voltage, of power, of phase, of power factor cooperation, of current and of frequency. Is that right? A. I didn't say that. I said I did not have sufficiently accurate records to make an allocation of the cost of power factor cooperation between the customers.

Q. Why doesn't the company keep adequate records for that? A. Because it has not heretofore used them in connection with the computation of the bills rendered, and this is the first time that it has had to make a cost allocation of this nature.

Q. Is it your statement that costs are incurred by Penn [3527] Water and Safe Harbor in connection with the furnishing of voltage, power, phase, power factor, current and frequency? A. Let's take them one at a time if we may.

Q. All right. Voltage. A. Costs are incurred in maintaining constant voltage, yes.

Q. Power. A. That is part of the other services rendered, including energy and capacity.

Q. In other words, the costs of power are in the capacity and energy. A. I think so.

Q. Why do you call it a separate attribute? A. I don't know that I would call it a separate attribute. It is treated separately under certain circumstances and referred to in some instances as power and in some instances as capacity and energy, and I have used it because it has been so used.

Q. And even in your technical distinctions which you have been making it is all right to do that, isn't it? A. I think so.

Q. Any costs incurred in connection with phase? A. Yes, it costs considerably more to provide single phase power than three-phase power.

Q. Are those costs in the capacity and energy? [3528] A. No, usually related to the special facilities installed.

Q. How about power factor cooperation? Any costs incurred? A. Very definitely.

Q. How about current? A. I think that that is one of the attributes that is allocated in connection with capacity and energy.

Q. And it is all right to say that current is not really a separate attribute, isn't it? A. No, I don't think I would say that. I would say that I could not determine the separate costs for current by itself.

Q. How about frequency? Any costs incurred? A. Costs are incurred in order to maintain frequency tolerance desirable, and frequently very high costs are incurred.

Q. Have you left out of your Exhibit 35 the costs incurred in rendering firm power services to Baltimore for voltage, phase, power factor and frequency? A. I have by the method used assumed that with an allocation of special facilities on the one hand, of capacity on the other hand, and of energy on the third hand, that the other at-

tributes of electric service were in the resultant proportion. I did not attempt to make a separate allocation [3529] of costs for power factor cooperation, a separate determination of the costs incurred for frequency, that is for the maintenance of frequency within close tolerances, nor for the costs incurred in maintaining voltage within close tolerances.

There are costs incurred, but in my opinion they could not readily be segregated separately.

Q. And you think you have gotten them in, anyway, as part of capacity and energy. Is that it? A. I think I have gotten them in in connection with all of the costs I have used and that I have allocated them to Baltimore on a very conservative basis.

Q. Well, if you do not have the records which enable you to determine what the costs are in connection with the rendering of voltage services, could you fix a rate for the voltage services rendered to Consolidated? A. If it appeared to be of sufficient importance a special charge could be made for maintaining that service, yes.

Q. Do you think it is of sufficient importance? A. It has not been so considered to date.

Q. Do you consider it now of sufficient importance? A. I do not think it is of sufficient importance to segregate from the other costs, no.

Q. From the capacity and energy; right? A. I think that those costs are properly allocated to Baltimore as I have done.

[3530] Q. In other words, you think it will be all right just to fix a rate for capacity and energy. Is that right? A. I didn't say that at all, Mr. Goldberg.

Q. You think you will have to fix a rate for voltage? A. No, I don't think so.

* * *

[3531] Q. Up to the present time the company has never kept adequate records so that you could determine the costs of rendering voltage, phase, power factor and frequency by

[3532] Penn Water and Safe Harbor to Baltimore Company—right? A. As separate components I think that is correct. I emphasize "separate components", as distinct from electric services as such.

Q. Do you know why they have not kept records to enable them to make that segregation? A. Because it has not been necessary to segregate them in connection with the determination of the charges to be made under the contracts.

Q. And it is not necessary today, is it? A. Not in a determination of the charges to be rendered under the contracts.

Q. The determination of the charges to be rendered under the contracts are based upon investments of Penn Water and Safe Harbor, all of their operating expenses and all of their costs, with the exception of those investments and those costs you and I discussed the other day wherein you indicated that certain investments and certain costs are not included by reason of negotiations between Consolidated and Penn Water. Isn't that so?

* * *

THE WITNESS: That is my understanding, and such payments or charges are independent of the actual services rendered or the proportion of the attributes that may or may not be [3533] present in those electric services.

* * *

[3544] Q. So that with respect to the question of costs incurred by Penn Water alone for service rendered to Consolidated, or for service to any of Penn Water's customers, it follows, does it not, that Exhibit 35 does not supply the data required to make a proper allocation of excess revenues among the various customers served, and in my use "excess revenues" I want you to assume that may be the result.

* * *

THE WITNESS: Of course, I don't agree with that assumption.

• • •

[3545] THE WITNESS: I will have to qualify the answer, Mr. Examiner. It does in my opinion supply all the data necessary to compare the revenues with the costs incurred in connection with the firm power services rendered by Penn Water and Safe Harbor to Baltimore.

• • •

Q. How about Penn Water alone? A. No, it does not do that and it cannot do that.

• • •

[3598] Q. Under what operating conditions are those capacity services we are talking about furnished to Consolidated?

MR. SPARKS: May we have the question, please?

(Question read.)

THE WITNESS: Perhaps we can refer to Exhibit 8.

[3599] By MR. GOLDBERG:

Q. All right. A. The capacity available to the system, and therefore in part available to Baltimore Company, in high-flow as shown by the lower left-hand chart is available 24 hours during the day. During what I may term "intermediate flows" or a flow approaching average flow, that is shown in the lower middle chart, the hydro capacity may in part be operated as spinning reserve or may in part be available to Baltimore Company, and in low flow generally shown by the lower right-hand chart a large part of the hydro capacity operated is being operated as spinning reserve. It can not be shown, of course, from those charts on Exhibit 8 how much of that capacity is being furnished to Baltimore, but it does show the nature of the operations, and various manners of operations.

Q. You say you can not determine how much of the capacity is being furnished to Baltimore from Exhibit 8?

A. No, sir, but you asked me under what operating conditions. I endeavored to explain it from reference to Exhibit 8.

Q. Yes, I appreciate that. Have you determined how much is being furnished, how much capacity is being furnished, to Baltimore under the three operating conditions you show on Exhibit 8? A. Well, of course, the three typical or different conditions that are shown when you look at them from the [3690] yearly operation tend to merge one into the other. There is no sharp distinction except, perhaps, for high-flow between something just below high-flow and there is a gradual change down to the lower flows. It requires consideration of the operating records of the companies in order to determine what the capacity services were and how frequently they were rendered.

Q. Have you determined that? A. I have analyzed those operating records, as I have said several times. My answer was not a mathematical answer. I did not add up any figures and arrive at a conclusion by dividing by so many hours.

Q. But as a result of your analysis you reached the one conclusion, 50 per cent? A. No, indeed. I reached the conclusion that the capacity services to Baltimore were considerably more than 50 per cent of the time. I should say that capacity service is being rendered more than 50 per cent of the time. It may be in varying amounts and in varying times during any day.

I also considered the time or the hours or the amounts of energy that are being delivered to Baltimore Company and where reactive records were available, the amount of such services rendered, but they are of a more limited nature. From an analysis of those records I concluded that a 50-50 allocation was a reasonable one to use.

[3601] Q. Did you conclude it was the only reasonable one? A. No. I have stated that ratio might vary one way or the other. I cannot state how much it would vary. It was for that reason I made some check figures to see

whether the resulting answer would have been materially different had I used some figure other than 50 per cent, and when I found that a reasonable range in the vicinity of 50-50 did not materially change the answer I was satisfied to use the exact figure of 50-50.

Q. Did you feel that the 50-50 basis was appropriate for the Pennsylvania customers as a group? A. I did not consider the Pennsylvania customers alone as a group. As I explained yesterday, I gave consideration to the use and usefulness of these services to each, as well as to groups of these customers, and it was because the use and usefulness of the services did vary materially both in amounts and in the variation of those amounts during the year that I concluded that a 50-50 allocation was reasonable.

* * *

[3618] TRIAL EXAMINER: Very well.

Counsel for the Pennsylvania Public Service Commission.

By MR. MILLER:

Q. Mr. Spaulding, will you define the term "backfeed" for the record? A. I think I have used the term "backfeed" in only one instance, and that relating to the electric services supplied by Baltimore Company under Article 6 of the 1927 agreement.

On occasions, and I may in this record have so used it, we have referred to "backfeed" from our Pennsylvania customers over the inter-connected transmission lines we have with them in connection with interchange transactions. I think both uses are correct because backfeed takes place when these interchange services are flowing in the opposite direction from that in which the electric services are flowing for which those facilities were provided.

Q. Using backfeed in the sense that you have stated, [3619] is it always possible for Safe Harbor Water Power Corporation and Pennsylvania Water and Power Company to meet the total of their firm power obligations to Penn-

sylvania Power and Light Company, Metropolitan Edison Company, Philadelphia Electric Company and the Pennsylvania Railroad Company in Pennsylvania without any backfeed from Baltimore Company if the Safe Harbor and Holtwood ponds are operated and controlled in a manner which will best utilize the natural resources of the Susquehanna River, and will also represent or be the most economical operation of the Safe Harbor and Holtwood hydro facilities, and if the Holtwood Steam Plant is used for the purpose of supplying firm power to Pennsylvania customers in Pennsylvania?

Would you like to have that question read? A. I would like the first part of it read. I think I understand the last part.

(Question read.)

THE WITNESS: Yes, so long as Penn Water and Safe Harbor are in a position during those unusual occasions of very "low flow" to arrange for the supplemental energy from their Pennsylvania customers under the existing interchange arrangements.

• • •

Q. Are they now in such a position? A. They are.

[3620] Q. Do Penn Water and Safe Harbor have such arrangements? A. Yes, sir, in connection with the interchange provisions of contract identified as Exhibit 72 with the Metropolitan Edison Company, the contracts identified as Exhibits 76 and 77 with the Pennsylvania Power and Light Company, and the contract identified as Exhibit No. 134 with the Philadelphia Electric Company.

[3621] Q. Are the Pennsylvania firm power obligations always met without any backfeed from the Baltimore Company? A. No.

Q. Why not? A. The procurement of supplemental energy under its interchange arrangements, including Article 6 of the 1927 contract identified as Item "H", are arranged in order to obtain maximum overall economy con-

sistent with maximum utilization of natural resources and in recent years, that is the last few years, it has been more economical to procure such energy from the Baltimore Company largely because they had available generating facilities with a lower operating cost than was available at the time on the systems of these companies to the north with whom we have interconnections.

Q. Then is it accurate to say that under the existing physical and contractual situation the obligations of Safe Harbor and Penn Water to the Pennsylvania customers, including the Pennsylvania Railroad Company in Pennsylvania can be completely fulfilled without any backfeed from Baltimore Company but that by reason of economic factors some backfeed from Baltimore is used in fulfilling the obligations?

THE WITNESS: May I have the question again, please?

(Question read.)

THE WITNESS: Yes, I would say so. There are physical connections by which those services can be procured from [3622] northern companies under the interchange contracts I have just referred to, and the contract provisions provide for procuring them from the point where it is most economical, and that is the reason that a large, or a considerable, portion of the supplemental energy required by Penn Water and Safe Harbor has been obtained from Baltimore Company under Article 6 of the contract identified as Item "H".

• • •

[3640] MR. STURTEVANT: Now, Mr. Spaulding, do you have an opinion as to whether the additional capacity of No. 3 Unit at Riverside would be needed in the system if the Pennsylvania Power and Light contract was terminated in 1948 and power now sold to Pennsylvania Power and Light was not resold to any customer in Pennsylvania?

• • •

THE WITNESS: I would have an opinion if I did not know [3641] that you also were considering capacity in addition to No. 3 at Riverside, and so is the Bethlehem Steel Company. That puts me in a position where I can not specifically answer your question.

• • •

THE WITNESS: I have an opinion that if the Pennsylvania Power and Light contract were to be terminated and the services were not to be resold that somewhere on the system there would not be the need for some amount of capacity. I don't think it would be as much as No. 3 Unit, but it might approach it.

• • •

By MR. GOLDBERG:

Q. When you stated to Mr. Miller that the requirements of the Pennsylvania customers in Pennsylvania could be met, always be met, by Penn Water and Safe Harbor, in answering his question I take it that you included in the source of supply the electric energy output of Safe Harbor and such supply from Consolidated as was coming up to Pennsylvania to supply the [3642] Pennsylvania Railroad. Is that right?

• • •

A. I will try to answer it in two ways. I did take into consideration all of the electric services of Safe Harbor in making that answer. I did not take into consideration, regardless of whether I should have or not, but I did not take into consideration the operating responsibilities of Baltimore Company to the Pennsylvania Railroad for the electric services of the Pennsylvania Railroad in the state of Pennsylvania.

Q. But you did consider that there was available to you all of Safe Harbor's output?

• • •

—despite Safe Harbor's agreement to sell two-thirds of its output to Consolidated under Items E, F and G. Isn't that so?

• • •

[3643] THE WITNESS: I did consider that all of Safe Harbor's electric services, and that includes its output, were available to Penn Water and Safe Harbor to meet their respective obligations, whatever they may be, respectively, to the Pennsylvania customers. I went beyond that and assumed that all of the electric services required by the Pennsylvania Railroad in the state of Pennsylvania were to be met from the electric services available to Penn Water and Safe Harbor without any of the electric services to which Baltimore Company may have been obligated to supply in connection with the railroad supply in Pennsylvania.

* * * *

Q. You did that despite the obligations of Safe Harbor to Consolidated for two-thirds of its output to Consolidated. Is that right, under Items E, F and G? A. I did not recognize in my answer that any portion of Safe Harbor's output or electric services went to Baltimore Company.

[3644] Q. Nor did you recognize that it belonged to Baltimore, did you? A. I don't understand that question.

Q. When I said "belonged to Baltimore" I meant Consolidated had paid for it. A. Consolidated paid two-thirds of the revenues to which Safe Harbor is entitled for all of its electric services to whomever it may be rendered.

* * *

[4352] DONALD GUNN.

* * *

CROSS-EXAMINATION (Continued).

By MR. GOLDBERG:

* * *

[4379] Q. In other words, the integrity of the investment in the property resulting from depreciation is maintained when you have provided an annual allowance for the depreciation which is taking place. Is that right?

* * *

THE WITNESS: The question seems to me to be a little bit obscure, but I think that that might be true if you provided it in the right amount, of course.

By MR. GOLDBERG:

Q. Yes, with that qualification you agree? A. Oh, as I understood the question, yes.

• • •

[4384] Q. All right. Let us take a small illustration to develop your thinking. We have the original cost of an element [4385] of property at $1,000. A. Yes, sir.

Q. In providing for depreciation, let us assume zero salvage, Mr. Gunn, to simplify our problem. Now, then, would you provide depreciation for a thousand or for more than $1,000? A. For $1,000 as I understand the regulations.

Q. And you would provide it for only $1,000 even though you contemplated replacing the property when it is retired. Right? A. Yes.

Q. Now, then, let us assume further that replacement will cost $2,000. A. Yes.

Q. Though you estimate that the replacement upon retirement of the existing property will cost $2,000 you would still provide only $1,000 in depreciation. Right? A. Yes, under the Federal Power Commission's regulation.

Q. Because you are providing for the cost of the property over its service life?

• • •

THE WITNESS: Yes, that is what we are endeavoring to do.

By MR. GOLDBERG:

Q. So that your provision for depreciation of the [4386] existing property is only a provision which may be available to the company when it replaces the property. Right?

• • •

[4387] THE WITNESS: I think that is generally correct unless some of the words have some special meaning. It seems to me it is justly stated.

By MR. GOLDBERG:

Q. I was not using any special meaning in the words. A. As I understand your question that seems to be correct.

• • •

[5629] J. RHOADS FOSTER.

• • •

CROSS-EXAMINATION (Continued).

By MR. GOLDBERG:

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[5659] Q. Now, these opinions as to fair return and fair rate of return expressed at transcript pages 649 and 650 were [5660] influenced, I assume, by the data in Exhibit 30, Schedule 11, which were excluded by the Trial Examiner. Is that right? A. Certainly.

• • •

[5666] Q. Now are we to understand that the data in Exhibit 29 influenced your conclusion as to fair return and fair rate of return in this proceeding? A. They did and Schedule 11 of Exhibit 30 presents a diagrammatic view of the process by which it influenced my conclusion.

Q. And the other data in Exhibit 30, as well as Schedule 11, had a bearing on your conclusions, is that right? A. That is right, and I am not aware I presented any data which were wholly irrelevant to my conclusion.

• • •

[5675] Q. No, I mean this: Could you, without a consideration of the data on Schedule 11 of Exhibit 30, have reached a conclusion as to the fair rate of return in this case? A. Without a consideration of that data or of data of [5676] similar nature I could not.

Q. In other words, you must, before you can reach a conclusion as to fair rate of return, consider the "fair value" of the property. Is that right?

* * *

[5678] A. You used the term "fair value". I, of course, do not know what meaning you attach to the term. Assuming that you mean cost of reproduction as such I think, perhaps, it is obvious that cost of reproduction does not provide the only, or even the most appropriate, bit of evidence. We are here concerned with evidence. The starting point was, and subject to the assumption of a prudent investment rate base always would be, the return expressed either gross or net, which would be obtained by applying a rate of return derived on the basis of hypothetical replacement cost or presently experienced cost of capital or some such basis, or derived by applying the original capital cost to the prudent investment. But there remains the question of the reasonableness and adequacy of that result in terms of the facts of the existing competitive society, and those facts are competitive costs.

Now, cost of reproduction is not the best evidence of present-day competitive costs. Other evidence available is the present level of wholesale commodity prices in relation [5679] to levels which existed at the time of the construction of the particular property. That evidence, however, again is general, or is particularly general.

More directly significant is the evidence of the present-day cost of constructing facilities of modern technological design which would be capable of producing the same service or equivalent goods.

Q. In other words, you would not stop with merely a consideration of reproduction cost because that is not necessarily synonymous with fair value, but you would want to go beyond that and consider other indicia of value such as, as you have stated, purchasing power of the dollar, substitute plant costs, and the like. Is that right?

* * *

THE WITNESS: It is true, Mr. Goldberg, that cost of reproduction is not necessarily synonymous with fair value. It is not correct to say, or to imply, that the process of testing to which I have referred is a process of determining fair value. In applying these tests of the reasonableness and adequacy of the return arrived at by use of a prudent investment rate base method we need not be concerned with fair value in the sense of the Smythe v. Ames rule, and it certainly is not an application of that rule or method.

[5680] By MR. GOLDBERG:

Q. Well, in reaching your conclusion in this case you did so by tests against data, against plant data, which is other than actual cost. Right?

* * *

THE WITNESS: I did so by tests involving cost of plant which were other than actual costs and by tests involving other price data, and I did so for the reasons which I have just outlined.

* * *

[5766] Q. You are saying that in companies of corresponding risks and uncertainties to Penn Water, investors in common stock of those companies are capitalizing prospective earnings at 8½ per cent. Isn't that so? A. The validity of that proposition, of course, depends upon its validity in the case of Penn Water, which is to be tested by the facts with respect to the Penn Water situation, and which is precisely what I attempted to do.

Q. You did not test it by looking at facts of companies with corresponding risks and uncertainties. Isn't that so? A. Because it would have been a complete waste of my time to resort to secondary and indirect evidence when direct and more adequate and satisfactory evidence is available.

Q. And your answer is that you didn't so test it. Right? A. I so testified.

Q. Now, then, what you did was to determine the appropriateness of your 8½ per cent conclusion by considera-

tion of earnings—price ratios of companies which were not of corresponding risks and uncertainties. Isn't that so? A. That is not true.

[5767] Q. Are they of corresponding risks and uncertainties? A. I have answered that question by saying I have made no study to determine what companies are of corresponding risks and uncertainties.

Q. Then you concluded that 8½ per cent was appropriate by a consideration of earnings-price ratios of companies as to which you made no determination of their comparability from a risk characteristic standpoint to Penn Water. Isn't that so? A. That question has been answered in the negative.

Q. Did you or did you not determine—and I must repeat this because I think that the answer should be "Yes" to my preceding question on the basis of what you told me—did you or did you not determine whether your six companies were of corresponding risk and uncertainty to Penn Water? A. I made no study for the purpose of quantitative measurement of differences in investors appraisals of risk as between the Penn Water common stock and the common stocks of the other six companies. It is true, of course, that the earnings-price ratios expressed as averages over a long period of years give some indication of the difference between investors appraisals of risks in the case of Penn Water and their composite or typical appraisals in the case of the six.

* * *

[5780] Q. Dr. Foster, do investment houses, investment service houses such as Standard and Poor's, in their published analyses of electric utilities, show earnings as reported or as adjusted for non-recurring items? A. The houses to which you refer customarily, at least, in their reports of operations show earnings as reported and compute earnings per share on the basis of the equity income as shown in the income statement in the annual reports to stockholders.

I recall in that connection, however, a paragraph from the book "Security Analyses" by Graham and Dodd, who are recognized authorities, that in situations where the amount of equity income is affected by irregularities such as non-recurring items, or charges to income which should be charges to surplus, or vice versa, the financial services might well give consideration to omitting a statement of earnings per share from their service.

Q. What edition of Graham and Dodd's? A. Second edition. I don't remember what page. Somewhere in the three-hundreds, I suspect.

* * *

[5802] Q. When did the investor first become concerned about regulatory action affecting Penn Water?

Let me limit the question to regulatory action by the Federal Power Commission. A. I believe the date of the order of the Federal Power Commission instituting the rate proceeding was early in the month of September 1944.

Q. Is it your statement that it is only the actual institution of proceedings which caused the investors concern? A. I believe that is generally a valid proposition.

Q. Doesn't the prospect of regulatory action cause him to reflect his concern in the earnings-price ratios? A. The prospect of regulatory action, or the possibility of regulatory action continually exists in the case of any enterprise which, because of its characteristics, is subject to the exercise of legislative power in the peculiar form in which that power is exercised in the case of what we know as public utilities.

That possibility exists even before a particular enterprise or enterprises of a class have been in fact designated as public utilities. When they have been so designated and the legislative power has been delegated to a regulatory Commission that prospect of regulatory action, of course, is less remote.

[5803] But investors generally do not readjust their thinking until something occurs which makes action leading to a

possible reduction of rates immediate or definitely in prospect.

* * *

[5804] Q. This is what I get out of your answers. The prospect of regulatory action exists continually. Right so far? A. In the case of enterprises of this type it does.

Q. And since it exists continually doesn't that mean that the earnings-price ratios continually reflect the investor's apprehension, if I may put it that way, of regulatory action, but that it is reflected in various degrees in the earnings-price ratios to a lesser extent when the prospect is remote, to a greater extent as the prospect becomes less remote. Right? A. That is true. I think, however, until the prospect becomes one of relative immediacy because of the implementation of regulatory power no significant consideration is in fact given to it.

* * *

[5818] A. * * * I think the point of significance in connection with your question is that it is the institution of the proceedings which raises the questions, yet to be answered by the conclusion of the proceeding, which created the uncertainties and which has the disadvantageous effect on investor appraisals.

The conclusion of a proceeding, whether a proceeding of this nature or a proceeding with respect to rates, tends to [5819] substitute certainty, however bad the prospect may be, for uncertainty.

So if the pendency of the licensing proceeding has an adverse effect on market prices because of the investor's concern with what might happen, I would expect that influence to be evident in the period following the institution of the proceeding.

The chart shows that following November, 1939 the earnings-price ratio for the Penn Water common stock rose steadily and continued to rise until I believe December of 1941. That movement was in response to general conditions. It was accompanied by a similar movement of

other earnings-price ratios and, therefore, is not to be explained by this unique situation affecting Penn Water.

One more step: It also is evident from the chart that the Penn Water earnings-ratio moved from a position below the average to a position above the average. That behavior, however, is characteristic of the earnings-price ratios for common stocks in the case of which the equity is thin and the leverage is substantial or the risk is considered by investors to be relatively larger because of any other factor, and it may be observed that from the period from 1933-1934 to 1935-1936, the same kind of behavior is observed except that the movement is from a position above at the time of relatively low prices to a position below at the time of relatively high [5820] prices.

• • •

[5821] A. I testified that in my opinion the comparative behavior of the Penn Water earnings-price ratios is accounted for as between these cyclical movement by its character as investment opportunity, referring particularly to the leverage position of the equity, and I have reached that conclusion because of my general knowledge of the behavior of earnings-price ratios of common stocks in various positions with respect to capital structure and because of my observation of the behavior of this common stock in relation to other common stocks at various times in the case of some of which the consideration to which you referred was not present.

Q. Are you saying that the 1939 proceeding did not influence the earnings-price ratios, the earnings-price ratio behavior, shown on Chart 1 of Exhibit 29 during the latter part of 1939 and through 1941? A. No. I am saying definitely and unequivocally that there is no evidence that it did influence the behavior of the earnings-price ratios significantly in relation to the influence of other factors which account for the amplitudes of variation.

Q. How can you say that there was no significant influence on the behavior of Penn Water's earnings-price ratios

subsequent to 1939 when prior to that time the [5822] fluctuations of Penn Water's earnings-price ratios had been above and below that of the six companies? A. I said there was no evidence there was any significance.

Q. How do you arrive at the conclusion there is no evidence of a significant influence? A. Because the behavior is more rationally explained by consideration of other influences.

• • •

[5833] Q. That is not the fact when you look at 1937 to 1939. Part of the time the line for the six companies is above Penn Water and part of the time it is below, and if you look over [5834] at 1922 to 1928, throughout that period of time the earnings-price ratios for the six companies is always above those of Penn Water? A. That is true with the reference to the particular periods which you have identified.

Q. Yes, and market prices were low during those periods and yet the earnings-price ratios of Penn Water were not proportionately higher than those of the six companies. Isn't that so? A. Market prices were relatively lower than at other times and during parts of the periods the Penn Water earnings-price ratios were relatively lower.

• • •

[5838] Q. Isn't this the fact: Other things being equal, the investor in common stock will pay more for that stock which pays out in dividends a larger percentage of the earnings available for common and in which the percent of gross income available for equity income is higher? A. That is a statement of two separate tendencies, each, I believe, being the typical behavior.

Q. That is why I said "other things being equal." A. I referred to it as two separate tendencies because the two variables which are identified here are independent of each other and, of course, may not operate in the same direction in any one case.

Q. The figures we have been examining, that is yours given on direct on pages 539 to 541, and those I have given you from 1939 to 1945, inclusive, indicate, do they not, that the percentage for Penn Water, the percentages for Penn Water, are at least as favorable, if not more so, than the percentages for the four of the six companies, speaking, [5839] of course, from the investor point of view? A. So far as these two factors are concerned and their influence, if indicated by reference to the typical influence, the answer is "yes."

Q. Yes. In other words, we cannot look to the factors involved in a comparison of these percentages for the differences in the earnings-price ratios from 1939 to 1945 between Penn Water and the medial four of six companies you used in Chart 1 of Exhibit 29. Isn't that so? A. That is true. In presenting these percentages it was in no way my intention to attempt to explain those differences.

Q. What other factors could explain that difference in earnings-price ratios between Penn Water and the medial four of six companies in the period 1939 to 1945? A. I can answer that kind of a question only in terms of possibilities and probabilities.

Q. If that is the only way you can answer that I will have to take your answer that way. A. The investor's appraisals of the Penn Water investment opportunity reflect, of course, all of the factors which in his opinion influence or may influence the prospective income and the stability of that prospect. Size of enterprise in relation to size of other enterprises is such a consideration.

[5840] As a typical or general proposition some advantage exists as a result of increasing size up to certain limits only.

The investor is concerned, in the appraisal of any such opportunity, with the character of the market served. The favorable market characteristics are those which include the maximum prospect of growth. Also, of course, the character of the demands are significant, demands of differ-

ent types of users having divergent relationships with business cycle and other influences.

The exposure of the facilities and, consequently, the investment to physical hazards is a factor.

We touched earlier today upon the question and comparative effect of exposure to regulatory action. The quality of the management of the enterprise is a consideration.

Those are among the factors which, as a matter of business judgment, are considered in making investment choices.

Q. In other words, we must look to these factors to find an explanation if it exists for that differential shown on Chart 1 of Exhibit 29 in the earnings-price ratios of Penn Water in the form of six companies in the period 1939 to 1945, inclusive. Is that right? A. The explanation of the differential exists in the composite investor judgment. I am merely identifying these [5841] factors which commonly enter into the formulation of that judgment.

• • •

[5846] Q. Am I correct in drawing this conclusion as to your statement on size of enterprise? While increase in size is a mixed blessing, the blessing involved in increasing size overcomes any additional hazards, responsibilities and risks which may be involved due to increases in size? A. Undoubtedly, and in overwhelming degree at the levels of size customarily experienced.

• • •

[5854] A. Proportion of gross income available as equity income, expressed as the average for the years 1939 to 1945 inclusive, is 72.1 per cent for Penn Water.

For the group of four other common stocks, consisting of Commonwealth Edison, Consolidated Edison, Consolidated Gas of Baltimore, and Detroit Edison the average is 65.6.

[5855] Referring now to the dividend earnings ratio, or per cent equity income paid out as dividends, I have an average of 83.5 for Penn Water.

The average for the group of four common stocks which you supplied to me, consisting of Boston Edison, Consolidated Gas of Baltimore, Detroit Edison, and Pacific Gas and Electric Company, is 83.3 per cent.

• • •

[5856] Q. Yesterday we discussed at some length your views with respect to the effect on earnings-price ratios for Penn Water of the Federal Power Commission proceeding which involved Penn Water's right to operate its hydroelectric project without a license, and my recollection is that you testified that you did not consider the influence of that proceeding had any significant effect on the earnings-price ratio. Is that a fair statement? A. I believe so.

• • •

THE WITNESS: I testified there is no evidence it had a significant effect and that the behavior is more rationally explained by consideration of other influences.

• • •

[5885] Q. I would like to know if you determined the reasons for the differential between the earnings-price ratios of the medial four of six companies and of Penn Water in the period 1939 to 1945, which differential appears on Chart 1 of Exhibit 29? A. The reason for the differential was stated generally at an earlier point in the testimony. The earnings-price ratios of common stocks, regarded by investors as relatively risky common stocks, fluctuate much more widely with changing securities market conditions than do the earnings-price ratios for common stocks regarded by investors as having a relatively stable prospective income.

Q. And you say that is the reason for the difference in the period 1939 to 1945 on Chart 1 of Exhibit 29. Is that it? A. I say that that behavior is a fact and that that presents the only rational explanation of the behavior during that period.

Q. It is your statement that the investor looked upon [5886] the medial four of six companies as having more

stable prospects of income than Penn Water. Is that right? A. That is correct.

Q. Which of those six companies that you studied have an assurance of a definite amount of income, whatever it may be, up to 1980? A. No one of the six companies has either definite assurance or guarantee of income stable in amount to 1980 on or to any other remote date.

Q. But Penn Water has that, hasn't it? A. It does not.

Q. Did you know that Penn Water has a contract which assures it until 1980 a fixed amount of income, even after adjustment by a regulatory commission of the extent of the rate of return? A. I am certain that in any economic or financial sense the contract to which you refer does not provide for Penn Water a guarantee or definite assurance of income to the year 1980, I am equally assured that the investors do not so regard the Penn Water contract.

[5887] Q. Your own notes to Schedule 2 on Exhibit 29 on page 8 reflect the company's statement that its contractual arrangement with Consolidated constitutes virtually a guarantee of earnings on its capital stock. Isn't that so? A. The note to which you refer is within quotation marks and is an excerpt from the annual report of the company.

Q. Yes. And your own notes, which you included as a background to your considerations, show exactly what I have just stated. Right? A. The excerpt includes the words which you have used.

Q. Which of those six companies can say that? A. No one of the six companies is either a wholesaling company supplying a limited number of customers or a company having a contract of this form.

Q. None of those six companies have that type of stability of earnings; right? A. None of the six companies has a contract of this form, nor does any one have whatever additional stability of income would be provided by such a contract.

Q. You know, don't you, that the earnings of the six companies are dependent upon economic cycles, business

cycles. Is that right? A. The earnings of the six companies in the composite are influenced by business cycle changes.

Q. You know that is not the fact with respect to Penn [5888] Water. It can sneer at depressions. Right? A. Under the form of the contract, as long as that contract remains effective and operative, the earnings available to the equity of Penn Water tend to be stabilized.

Q. The stability of the earnings of Penn Water are shown beyond doubt, aren't they, by the dividend records of the company throughout the depression?

* * *

THE WITNESS: The dividends paid per share by Penn Water were maintained without change at $3 per share from 1929 to 1934 inclusive.

By MR. GOLDBERG:

Q. How about the six companies? How many of them maintained a record like that? A. I would have to examine the facts to answer the question specifically. The dividends paid by Boston Edison, which in 1929 were $12.80, declined to $9 in 1934.

The dividends of Commonwealth Edison Company, which in 1929 were $8, declined to $4 in 1934.

Dividends of Consolidated Gas of Baltimore, which in 1929 were $3.60, remained unchanged.

[5889] MR. SPARKS: You mean non-changed through 1934?

THE WITNESS: Yes.

MR. GOLDBERG: Let me interpose here.

By MR. GOLDBERG:

Q. That is the company which has the contract which runs until 1980 with Penn Water, isn't it? A. I believe Consolidated of Baltimore is a party to the contract to which you refer.

Q. A pillar of strength, isn't it? A. Is the contract a pillar of strength to the one who receives the benefits and to the ones not benefited?

The dividend of Consolidated Edison of New York declined from $4 in 1929 to $2 in 1934.

Q. Do you have your dividend rate for 1935? Didn't it fall below $2? A. Yes, in 1935 in the case of Consolidated Edison the dividend rate was $1.

I have not checked any split of the common stock in the case of that company.

Q. I think there was a split on Boston Edison of four for one. A. At a later date?

Q. At a later date, I think, and Standard and Poor's show dividend rates of $3.10, for example, for 1929. And $2 for 1936, for example. That would indicate a split-up. [5890] A. I should have prefaced the reading of these figures by the explanation that they represent the annual rate at which dividends were being paid at the end of the year.

In the case of Detroit Edison the dividend rate was $8.

MR. SPARKS: In 1929?

THE WITNESS: Yes, in 1929. It was $4 in 1934.

In the case of Pacific Gas and Electric Company the dividend rate was $2 for 1929 and $1.50 in 1934.

I believe 1934 represents the lowest level which was reached in that decline of dividend rates and that after adjustments were made for split-ups the rate increased in subsequent years.

• • •

[5891] Q. Wouldn't you say that an investor, an informed investor, considers the reports put out by Standard and Poor's as stock guide reports and bond guide reports? A. That service is very well-known and widely used and I have no doubt that investors consider it.

Q. I want to show you the latest Standard and Poor's report on the stock and bonds of Pennsylvania Water and Power Company, which is dated August 23, 1946, and ask you if it is not a fact that under the caption "Prospects" it is stated that "The company's contract with strong Consolidated Gas of Baltimore results in fairly stable earnings." A. I read the sentence which you have quoted.

Q. Would you refer to Consolidated Gas of Baltimore as a strong company? A. Consolidated Gas of Baltimore is an electric and [5892] gas utility serving a metropolitan area and generally a strong company in the sense that it is regarded by investors as a company with better than average prospects so far as income stability is concerned.

Q. It also states under that caption I have referred to, doesn't it, that, "One uncertainty in the outlook is the possibility of regulatory pressure upon the high rate of return"? A. It does.

Q. Do you agree with that statement? A. Certainly.

• • •

[5895] Q. Under the caption "Earnings determinants", it is stated, is it not, that "A ready market for all power and fixed earnings well above debt requirements are assured by the [5896] power contracts. Most of these extend beyond the bond maturities. While regulatory pressure may result in lower power rates, since the return on property is high, fixed charges would still be earned by adequate margins."

It so states, isn't that so? A. It does.

[5897] Q. These reports from which we have been reading are available to the informed investors, aren't they? A. They are available to investors and I believe are examined by some investors.

Q. I think you would agree that the reporting service is an unbiased one? A. I have every reason to agree with that statement.

Q. And its purpose is to present information to the investor to give him pertinent facts upon which to base a decision with respect to alternative opportunities for investment. Right? A. I believe that is a purpose.

• • •

[5931] A. As a proposition standing by itself it is true that more recent experience is entitled to more consideration as a guide to the probable future than is experience remote in time.

• • •

[5966] Q. And there are statements on pages 107 and 125 which show that not only did the study proceed on the theory that the most recent reports of operations and financial management are given the greatest weight, but that the results of your studies confirm the opinion that investors give the greatest weight to the most recent operating results and that the results of previous years are given progressively less attention as they become more remote. Isn't that so? A. That is as it appears in the report and I believe is correct as a general statement.

Q. What qualifications would you put to it now? A. Investors give to the reported results of operations of recent years greater attention in considering future possibilities than they give to the results of operations as reported for more remote years.

We have expressed generally the proposition that the future is unknowable, that nevertheless the market price reflects the appraisal of the prospect of income in the future.

Therefore, I believe the statement which you quoted is valid. I would not so much qualify as to point out that it is far from, and did not purport to be, a complete statement of the manner in which past earnings for the more recent period is used by investors and by analysts in the process of estimating the future.

[5967] Q. In other words, how they use it quantitatively. A. In arriving at specific estimates, yes.

In that same connection it might be pointed out that the appraisals, of which we are now speaking, reflect the appraisal of future income and correspond to the capitalization rates. We are not speaking of the earnings-price ratios, and the conclusion that the results of recent operations are more significant to the investor in forecasting the future in no way invalidates the proposition that a full cycle must be considered.

Q. I was not implying any challenge to that, but the fact remains that in your study in this case you gave equal weight to 1939 earnings-price ratios, which were included

in your cycle, and to the earnings-price ratios of 1945, which were included in your cycle, and to the earnings-price ratios of all intermediate years in that cycle. Isn't that so?

THE WITNESS: May I ask for clarification?

MR. GOLDBERG: Yes.

THE WITNESS: You are now referring to the——

By MR. GOLDBERG:

Q. Chart 1 of Exhibit 29? A. Earnings-price ratios of Penn Water?

Q. That is right. A. I did arrive at the conclusion on the basis of an average which involved giving equal consideration to each [5968] period within the cycle, with the qualification as to the treatment of the Penn Water earnings-price ratios after September, 1944.

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Q. At transcript 516, lines 20 to 24, you testified that the replacement cost concept, as you use it, includes the assumption that the enterprise is a going concern, but [5969] necessary and unavoidable costs are associated with achieving the status of a going concern in a position to obtain capital on the basis of a hypothetical capitalization.

What are these "necessary and unavoidable costs"? A. The replacement cost concept is a reflection of the competitive or present cost approach to the problem. Assuming for the purpose that regulation seeks to provide for the regulated enterprise two things: First, all the advantages which are associated with the exclusive right to serve within a given service area, which are substantial and significant advantages. Secondly, that at the same time it seeks to avoid monopoly returns.

It is a cost concept and would limit the returns to those which would be realized if the enterprise were in fact competitive and if the competition were effective.

Now, what is the actual situation as to the functioning of competition? A number of enterprises establish themselves in a particular line of endeavor. They manufacture

tin cans, for illustration. They have as going concerns certain advantages over a new enterprise which would come in and afford increased and additional competition on the basis of improved methods, or whatever other advantage may become available to such a possible competitor.

But to some extent offsetting the economies thus available which will result in a reduction in the price of the [5970] product, everything else being equal, is the fact of the costs associated with becoming a going concern.

I did not place emphasis on those costs. I, however, did call attention to the consideration in connection with Schedule 10, that is the overall capital cost rate of 4.9 per cent, defined as a hypothetical replacement cost rate, includes no cost of replacing existing capitalization. It assumes freedom to obtain capital represented by a particular capital structure of maximum economy without including any costs associated with an existing capital structure.

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[6002] Q. I would like to direct your attention to a statement appearing on page 23 of the Federal Communications Commission's report on the problem of the rate of return and public utility regulation which we referred to this morning, page 23 being a part of Chapter II. The statement is as follows:

"The historical cost of fixed income capital may be calculated directly from the corporation's accounting records, and may be expressed as a ratio between the annual obligations and the proceeds realized by the company from the security issues in question.

"With respect to common stock capital, a different situation exists. When the stock was sold no contractual or fixed rate was established. The very essence of the situation of common stockholders is that they are entitled [6003] to the earnings remaining after all other items have been deducted and only to such earnings. Common stock is necessarily purchased by the investor subject to this quali-

fication, and it appears that there can be no assumption of fixed rate to be paid throughout the future. Without such a rate the historical cost of this class of capital cannot be calculated."

Do you agree with the statements I have read? A. I do generally.

Q. What qualifications do you make? A. None if it is understood that the statement which you read means that a historical cost rate cannot be calculated for equity capital in the sense that such a historical cost rate can be calculated for debt, and preferred stock capital.

Q. I understand—— A. It is true that the return expectations and cost of equity capital can be estimated at the time of commitment of equity capital.

I am making a distinction between the words "estimated" and "calculated".

Q. You agree that common stock is necessarily purchased by the investor subject to the qualification expressed in the statement that the very essence of the situation of common stockholders is that they are entitled to the earnings remaining after all other items have been deducted, and only [6004] to such earnings? A. That is right.

Q. And that it appears that there can be no assumption of the fixed rate to be paid throughout the future? A. That is right.

Q. Now I would like to direct your attention to this statement appearing on page 23 of that same report and continuing on to page 24. The statement is as follows:

"It has been contended by some investigators that a historical cost of common stock capital may somehow be computed by reference to the dividend rates prevailing at the time the stock was sold. This approach assumes that the investors purchase the stock on the basis of these dividends, and with the expectation that they would be continued indefinitely. If dividends are increased it is stated that past investors are not entitled to this increase, and that the cost of capital attributable to their shares should

be figured at a different rate from the cost of capital derived from any new shares sold.

"It appears that this approach ignores the fundamental characteristic of common stock as the claimant of residual earnings. If common stock did in fact bear fixed dividend rates, the historical cost of such capital could be computed, but when dealing with stock without such fixed costs it appears that the current cost approach must be adopted so [6005] far as this class of investment is concerned.

"This problem of the determination of proper costs in respect to common stock capital will be given detailed consideration in subsequent sections of this report."

I think we can ignore the last sentence. Ignoring that last sentence about detailed consideration do you agree with the statement I read? A. I do.

* * *

[6006] Q. I refer you to Page 28 of the FCC report. May I draw your attention to this statement: "In any event, in so far as the return on common stock capital itself is concerned, the current cost approach appears to be the better method of measurement. Indeed, as was stated previously, this approach seems to be the only logical possible one. Furthermore, it appears to be an essential characteristic of common stock that returns are variable. Investors who primarily want secure, relatively low incomes will turn to other classes of securities. Common stock investors are those most willing to bear risks, and, as a class, probably expect their incomes to vary with changing economic circumstances.

"The legal position of common stock as the claimant of all residual earnings also tends towards a fluctuating income. And, most important, it is usually possible to vary the return on common stock without adversely affecting the company's credit.

"There might not be serious disagreement that it would be desirable for the rates of return on all classes of secu-

rities to vary with changing economic conditions, if such variations did not adversely affect the company's credit position in the case of securities with fixed income rights."

Do you agree with those statements? A. I do with the qualification that I would desire to [6007] give more consideration to the meaning of the last two sentences which appear here.

I do agree generally with what is stated here, particularly because the reference is to the return on common stock capital and not to the rate of return.

Q. Were you making a distinction in your last answer between return on common and rate of return on common or between return on common and rate of return on the rate base? A. I am making a distinction between rate of return on the common stock equity represented in the rate base and return on common stock equity. In the case of a utility with only common stock equity there is no difference as a result of that distinction.

Q. What is the difference when a company is not entirely capitalized with equity capital? A. There is a tremendous difference. The return is the product of the rate of return applied to whatever may be the rate base.

Q. And your rate of return takes into consideration a return on the equity capital. Right? A. The overall rate of return includes a component which represents rate of return on equity capital. The amount of return provided for the equity capital is significantly dependent upon the rate base to which that rate of return is applied.

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[6027] Q. Wouldn't you say that arithmetic averages are of doubtful validity? A. I would say that the validity of arithmetic averages [6028] depends upon the nature of the data, upon the understanding with which the averages are used and upon the purpose for which they are used. I agree that often arithmetic averages are used improperly and may be of doubtful validity for a specific purpose.

Q. Their doubtful validity arises from the fact that the average tends to obscure the variations in the individual figures from a certain "norm". Isn't that so? A. That is true. An examination of the average as such does not reveal anything that is back of the average or is represented by it.

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[6036] Q. Did you know that the major portion of Penn Water's common stock was issued either as bonus stock or in exchange for bonds? A. I believe so. I am not informed as to the exact proposition.

Q. About 85,000 shares? A. Yes.

Q. Under such circumstances there would have been no underwriters' discounts and commissions. Isn't that so? A. So far as the issuance of the common stock is concerned?

Q. Yes. A. That is correct.

Q. That would indicate that the actual cost to Penn Water as financing costs is far less than .75 per cent. Isn't that right? A. So far as cost of equity capital represented by that block of common stock is concerned.

Q. Assuming 8.51 per cent is the correct equity capitalization, and adding .75 per cent to it, aren't you actually giving the common stockholder more than 8.51 per cent if the company had not incurred the cost of .75 per cent for financing?

THE WITNESS: May that question be read, please?

[6037] TRIAL EXAMINER: Yes.

(Question read.)

THE WITNESS: The question is not clear to me. The 8.5 per cent is an estimate of the required yield on equity capital on a hypothetical replacement cost basis. The 9¼ per cent is an estimate of the cost of equity capital on the same basis.

Q. But Penn Water never experienced that .75 per cent insofar as the equity capital was concerned that we have discussed, so there is no occasion to increase the 8.51 per

cent by .75 per cent. Isn't that so? A. It would be necessary to recognize and allow for the cost of equity financing for the purpose of arriving at an estimate of the total cost to an enterprise of such capital.

[6038] Q. Even though such costs had never been experienced by the company? A. The definition of hypothetical replacement cost specifically excludes recognition of and measurement of past cost.

Q. You have not assumed that Penn Water would redeem its bonds and issue equity capital in lieu thereof, have you? A. I have not made any assumption as to what Penn Water may actually do.

Q. In determining the cost of the issues of bonds of Penn Water, isn't it a fact that you have carried forward as expense of the refunding issue amortized debt discount and expense incurred when the refunded issue was first plotted? A. That is correct.

Q. I think you did that with respect to Penn Water's 1940 issue of bonds. Right? A. I believe so.

Q. You know that was not in accordance with the accounting Penn Water carried out for that debt discount and expense pursuant to the requirements of the Federal Power Commission, do you? A. I do know that.

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[6048] Q. What would have been the cost of the bonds of Penn Water if you had not carried forward the unamortized debt discount and expense which we were discussing at the close of yesterday's proceeding and which unamortized costs appear on Schedule 4, page 3 of Schedule 4, of Exhibit 29? A. They appear on page 3 of Schedule 4 as Item 49, I believe.

Q. Yes. A. I have in pencil on my copy of that exhibit such a computation which shows for the series due 1964, a cost of 3.21 per cent, and for the series due 1970, a cost of 3.13 per cent.

Q. Yes, we had 3.14. That is close enough.

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[6049] Q. Would it be fair to say that the average of the 3.21 and the 3.13 is 3.17? A. I have not determined the average. It undoubtedly is within that range of .08.

Q. Yes, I think you probably recognized that I included the word "fair" because I recognize sometimes weighting factors are involved, but I didn't think any weighting factors here would have any significant effect. Is that right? A. I belive you are right.

* * *

[6565] DONALD GUNN,

* * *

CROSS-EXAMINATION (Continued).

By MR. HALL:

Q. Are you the same Mr. Gunn who testified in this matter previously? A. Yes.

* * *

[6566] Q. Are we to understand that you are responsible for Exhibits 25, 26 and 27? A. I am responsible in the sense that I had supervision over the preparation of them, yes, sir.

Q. When you say you had supervision do you mean that you are prepared to answer questions with respect to the determinations of the matters shown in those exhibts? A. Yes, to the extent that I can recall them at present. [6567] However, I would like to say this: That Exhibit 26 has about 125 typewritten pages in it. Exhibit 27 has nearly 500 pages in it. They were prepared seven and eight years ago. My memory of all the details may be somewhat limited but I am prepared to go as far as I can.

Q. Have you reviewed those exhibits in connection with this proceeding? A. Yes, sir, I have reviewed them but I have not had an opportunity to review them as much as I would like to have.

Q. Is anyone else responsible for a portion of these exhibits? A. I am afraid I don't understand what you

mean by "responsible." Are you using the word in the same sense as you did when you asked me if I were responsible?

Q. Even though someone else or others may have assisted in the preparation of those exhibits, you are taking the ultimate responsibility as I understand it? A. Yes, with their assistance.

Q. As of what date did you begin your original cost study?

MR. SPARKS: You are now referring to the items "K" to "N" Mr. Hall or to Exhibit 25?

MR. HALL: Total original cost study, wherever it may be reflected in the exhibits.

MR. SPARKS: Including the Items "K " to "N"?

[6568] MR. HALL: Yes.

THE WITNESS: May I have the question now, please?

(Question read.)

THE WITNESS: During the latter part of 1937 or the early part of 1938.

By MR. HALL:

Q. As of what date was your study completed? A. I believe it was completed and filed in either May or June, 1940.

Q. How many were assigned to make the original cost study? A. The force engaged on that study varied from time to time. As I recall it, it ran as high as 30 or 35 men.

Q. How many of them were accountants? A. Of the people who devoted their time exclusively to the original cost study there were either three or four accountants.

Q. Who were they? A. Mr. William H. Eichhorn, Mr. Frisch—I don't believe I recall his initials now—Mr. Frederick Stupp. Those were the ones who devoted all of their time to the study.

In addition to them there was Mr. O'Connor, who advised me on certain phases of it and devoted a part of his time.

Q. Were the four individuals that you have named, Eichhorn, Rich, [Frisch] Stupp and O'Connor employees of Penn Water? [6569] A. Yes, sir.

Q. What positions did each one of those individuals hold? A. You mean what positions did they hold at the time of the study or now?

Q. That is correct, at the time of the study. A. Mr. Eichhorn was simply assigned to work on the original cost as my assistant. I don't remember he had any specific title.

Q. Was he an officer of the company? A. He was made an officer of the company near the completion of the study. It may have been after the completion but it was about that time.

Mr. O'Connor was, I believe, Vice President and Secretary of the company at that time.

Mr. Frisch and Stupp were simply employed by the company simply for the original cost study. I don't recall they had any particular title.

Q. Was their employment terminated upon the completion of the study? A. Yes.

Q. Did Pennsylvania Water and Power Company issue a work-order providing for the original cost study? A. I believe they did, although I am not certain of that.

Q. My information, Mr. Gunn, is that the work-order is [6570] Number M-1711. Does that check with your recollection? A. Yes, I believe I recall that.

Q. According to my information, Mr. Gunn, there was a total of $229,000 which was incurred pursuant to that work-order up to December 31, 1942. Does that check with your figures? A. That sounds like about the amount.

Q. You have referred to accountants who assisted in the preparation of your original cost study. Which one of those accountants was responsible for the decisions in connection with accounting matters? A. I don't know just

how to answer that for this reason: Mr. Eichhorn gave me certain advice on accounting matters, and so from time to time did the other accountants. I also looked to Mr. O'Connor for my guidance on the treatment of accounting problems, and most of them also were discussed with company counsel. So I can not categorically state, I believe, who was generally responsible for the accounting decisions.

Q. Could you indicate one of the principal accounting problems you faced? A. I don't recall offhand any particular problem. It was just a multitude of small accounting questions which arose and upon which I had the advice of the accountants and the advice of the company counsel.

Q. Don't you recall some specific problem that required [6571] accounting consultation? A. No, I don't believe I do recall any.

Q. When you completed and submitted your report, Exhibit 26, to Mr. Walls was it accompanied by a letter of transmittal?

* * *

THE WITNESS: It seems to me it was, although I don't seem to have a copy of it in the report.

By MR. HALL:

Q. The copy of Exhibit 26 which I have, Mr. Gunn, appears to contain a copy of your letter of transmittal, which copy appears to bear your signature and is dated August 20, 1940. Is that right? A. Yes, sir, that is correct.

Q. In your letter of transmittal you state that the report, Exhibit 26, superseded a previous draft of the early history of Penn Water. Is that correct? A. Yes, sir, that is correct.

Q. As of what date was the previous draft completed? A. I don't know. The way this Exhibit 26 developed was piecemeal over a period of two years, and at all times we had parts of a draft from the very beginning, and the preparation of the report simply increased. As more facts came into our [6572] hands we incorporated them. As I

recall it, it was a loose-leaf book affair. It wound up in the form you see it here in this exhibit.

Q. Wasn't the previous draft you referred to a complete draft? A. Well, for a time prior to the date of this letter we had a complete draft. As I recall it, it was very badly marked up with numerous revisions and numerous adjustments in it.

Q. Was this previous draft you refer to the first draft prepared covering the early history of Penn Water? A. As I said, there was no category of drafts. It was simply a process of evolution by which this was developed.

Q. Who prepared the various parts comprising the total of the previous draft? A. I prepared some. Mr. Eichorn [Eichhorn] prepared some. Mr. Chase prepared some of them. We all worked on them together at various times.

Q. Will you specify what parts each one of the individuals you named were responsible for? A. I don't think either one of the individuals I named had total responsibility for any part of it.

Q. Didn't they have total responsibility except for your overall supervision? A. If that can be called total responsibility I suppose [6573] they did. However, I did, myself, devote a considerable part of my time to the development of the history of the McCall Ferry project, and the three of us worked on the thing together and simultaneously. In the end, when we had the draft of the story in substantially complete form, we took it to company counsel and went over it with company counsel.

Q. What was the purpose of taking it to company counsel? A. To advise company counsel as to what the story was so they could in turn give us legal advice on the filing of the original cost claim.

Q. Who is the counsel you refer to? A. Simpson, Thacher and Bartlett; Snyder, Hull, Leiby and Metzger; Mr. Dozier A. Devane, who was formerly General Solicitor for the Federal Power Commission. I understand he is now a Federal Judge.

MR. GOLDBERG: In Florida.

THE WITNESS: There was also Mr. Hambright, of Lancaster, who was one of company counsel who advised with us.

By MR. HALL:

Q. Did the criticisms and comments you received from company counsel cause the rewriting of the previous draft into the form embraced in Exhibit 26? A. No, I don't think so. As I recall it, the draft we had when we discussed it with company counsel was already so badly marked up and mutilated it was necessary to rewrite it [6574] for that reason as a result of my own corrections.

Q. What matters covered by the present draft incorporated in Exhibit 26 were not covered in the initial draft? A. Well, some of the things that weren't covered was the information obtained from various people who had been connected with McCall Ferry Power Company, that is the subject matter of the affidavits of Fisk, Hutchinson, Lee, and the other people who had been connected with the original development.

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[6575] Q. Do you consider, and were Exhibits 26 and 27, prepared as support for Items "K" to "N"? A. Yes, I think they could be so described.

MR. KING: Excuse me, Mr. Hall. I think the record ought to show, and I believe you will agree with this, that both Exhibits 26 and 27 were furnished to the Commission staff.

MR. HALL: I think there is a statement somewhere in the record to that effect.

When were they furnished to the staff?

[6576] THE WITNESS: Within the first month or six weeks, I would say, after the Commission staff came to the company's office for the purpose of preparing for the Commission's presentation of the Safe Harbor rate case. I think that was somewhat over two years ago.

By Mr. Hall:

Q. Can you fix the date of that occasion? A. Only in my memory. I just recall they had been there some weeks before they asked for it. As I recall it, Mr. Dunn requested them. He came to me and said he was ready to start on his accounting preparation of the Pennsylvania Water and Power Company case and asked me what information I had. I gave him Exhibits 26 and 27.

Q. Are you sure you gave the Commission accountants Exhibit 27 along with Exhibit 26 at the same time, or did the Commission staff have to ask for Exhibit 27? A. It was not my intention they should have to ask for it. I don't recall.

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By Mr. Hall:

Q. Mr. Gunn, why were you selected to prepare the report represented by Exhibit 26? A. I don't know.

[6577] Q. When were you initially employed by Penn Water? A. I don't recall that. I was employed by Safe Harbor in October, 1930, and from the time of my employment with Safe Harbor I performed certain duties for Penn Water. I believe in the middle thirties, probably 1934 to 1936, the company began the practice of allocating part of my salary to Penn Water. I don't know which one of those events would determine any first employment in the sense you ask the question but those are the facts.

Q. In what capacity were you initially employed by Safe Harbor? A. To assist in the construction of the Safe Harbor project. I was in charge of the field-work.

Q. What positions have you held subsequent to the date you have mentioned with Penn Water and Safe Harbor? A. I have been assistant chief engineer of both companies and I am now chief engineer of Penn Water and assistant advisory engineer of Safe Harbor Water Power Corporation.

Q. As of the date you began your original cost investigation, how many officers, directors and employees did

Penn Water have who had been with the company since 1910?

[6578] THE WITNESS: May I have the question?

(Question read.)

THE WITNESS: I don't know. That could be determined.

MR. HALL: You know some.

THE WITNESS: Yes, some, but not all that category.

By MR. HALL:

Q. Will you state the ones you do recall? A. Mr. Walls, Mr. Rintoul, Mr. Allner, and I believe Mr. O'Connor. Those men were among the officers. Of course, Mr. Aldred had been there from the beginning, and there were undoubtedly some other members of the board of directors who had been, although I don't recall [redacted] and who they were.

My difficulty is I don't recall who were on the board of directors in 1936. Among the employees there are several old employees. I don't know offhand who they all are.

Q. Were any of the six individuals you have named connected with the Holtwood project while McCall Ferry Power Company was carrying on the activities in connection therewith? A. None of them so far as I know. I think I can say none of them were. I am certain of that.

Q. Do you know whether or not the employees were canvassed to determine their early connection with McCall Ferry and Penn Water?

MR. KING: May we have a little better limitation on that [6579] question? Canvassed when?

MR. HALL: When the original cost study was undertaken.

THE WITNESS: I made an effort to determine what employees there were available either then employed by Penn Water or otherwise from whom I might be able to get in-

formation about the early history. I recall that I attempted to locate the records of Mr. Ehle, who had been connected with the McCall Ferry Company. I believe I also contacted a Mr. C. H. Anderson who had been a general foreman on the McCall construction. There were one or two other people I believe I succeeded in locating when I was making an effort to get at the technical facts relating to the history of McCall Ferry Power Company.

By Mr. Hall:

Q. Can you state why it was that one of the older employees or officers was not selected to prepare Exhibit 26? A. No, I cannot.

Q. Or the original cost studies? A. No, sir, I cannot.

Q. Wouldn't their personal knowledge of the early events place them in a better position than you to prepare the reports? A. I don't think so, because I had the benefit not only of their knowledge of it but all the people who I could [6580] find who had been connected with the McCall Ferry Power Company.

Q. I believe you testified you first became connected with Penn Water between 1930 and 1936. Is that right? A. Yes.

Q. Accordingly you have no personal knowledge of the early history of Penn Water? A. That is right.

Q. But other individuals did have personal knowledge of the early history of Penn Water. Isn't that so? A. Yes, I imagine so. I imagine they also had something else to do besides making original cost studies.

Q. That was true of you, too, wasn't it Mr. Gunn? A. I don't know. I couldn't be too sure of that. Work was rather scarce at that time.

Q. Is that why you were selected, Mr. Gunn? A. I don't know what was in the minds of the people who selected me.

Q. Because of your lack of personal knowledge, is it not fair to say that the statements which you have made

in Exhibit 26 are not based on personal knowledge but are predicated upon conclusions which you reached as a result of your study? A. Yes, sir, that is correct to say. I have no personal knowledge whatever of McCall Ferry's construction nor, indeed, [6581] with any of the events in the history of Holtwood Company prior to 1930.

Q. Were all of the essential facts relating to the early history of Penn Water available to you? A. I don't believe I quite understand that. I don't know just how to answer that. If all of the facts that are included in Exhibit 27 and Exhibit 26 and three or four filing cases full of records in Baltimore which the staff has had access to in the last two years were available to me. If there are any more facts available there then they were not available to me.

Q. Is it not a fact that in the preparation of Exhibit 26 in many instances you had necessarily to draw upon suppositions and conjectures? Isn't that so, Mr. Gunn? A. Yes. The reason you will find those suppositions—and I believe they are all indicated in Exhibit 26—is because of cases where we didn't have proof which looked positive to me. I didn't want to indicate we had proof if we didn't have it.

Q. I believe you have indicated that the report, Exhibit 26, was prepared by others under your general supervision. Is that right? A. That is not quite right. I also worked on the preparation myself as well as supervised that and other phases of the original cost study.

[6582] Q. Except for that modification my statement is correct? A. Yes, sir, that is correct.

Q. Before you set Exhibit 26 up in final form, I believe you have indicated that you had a tentative draft? A. I had a draft which was an evolution. I started off with an explanation of how I came upon the facts in Exhibit 27: A part of the facts in Exhibit 27 I found in the company's records early in my study of original cost. I then prepared a first draft, or the beginning of Exhibit 26 based upon those facts. Many of the facts in Exhibit 27 came from

sources outside of our company—from the records of others and from the exhibits supplied by people who had been connected, the affidavits supplied by people who had been connected with McCall Ferry Power Company. As more and more information came into my hands I continually revised what is now Exhibit 26, until it gradually evolved into the form you now see it.

* * *

By Mr. Hall:

Q. To whom did you submit your tentative draft for [6583] review and comment other than the attorneys you have referred to, Mr. Gunn? A. At various stages of the preparation of Exhibit 26 I submitted it to different people. I believe I submitted it to Mr. O'Connor, I believe also Mr. Higgins——

Q. Of Lee, Higginson & Company? A. No, of Pennsylvania Water and Power Company. I discussed it with Mr. Walls. I don't recall whether I actually submitted him a copy of the draft or not, but I discussed it frequently with him, reports on which I did not have complete information all during the preparation of Exhibit 26.

Q. You submitted this tentative draft to individuals outside of Penn Water's organization, didn't you, Mr. Gunn? A. Well, except the company counsel. Otherwise, no.

Q. Didn't you submit a portion of your tentative draft of Exhibit 26 to Mr. Fisk? A. Yes, a portion of it, but not the whole. I submitted a portion of Exhibit 26 to Fisk, Hutchinson, and Hopkins, I believe, as I recall it. In other words, I submitted a portion of it which was applicable to their phase, to the phase of the history to which they were concerned, to all of those people of whom I asked for statements.

Q. Why were you interested in having others review and comment upon your tentative draft? A. To verify it against their memories as to its [6584] accuracy.

Q. Did the comments cause any revisions to be made? A. Oh, yes. They made it possible for me to put the facts together so that they appeared to make a consistent story. For example, without the information given me by Fisk and Hutchinson it would have been probably impossible for me to put the whole story together, because at that stage there was vital information missing and I couldn't seem to find the complete pattern into which all of the facts I then had could fit.

Q. When you got the information you have just referred to you still didn't have all of the essential information, and for that reason you had to draw upon suppositions and so forth? A. I believe I had all the important information. I had to fill in certain more or less minor points from supposition and conjecture. I think that is correct.

Q. Are those revisions that you have referred to reflected in the present Exhibit 26? A. Yes, sir, the present Exhibit 26 is final.

Q. Would you state specifically what suggested revisions were made by those who reviewed the tentative draft but were not incorporated in Exhibit 26? A. I don't recall there were any, if I understand your question correctly. May I have it again, please?

[6585] (Question read.)

THE WITNESS: I don't recall there were any.

By MR. HALL:

Q. I take it from what you have said that you believed that those who reviewed your tentative draft had historical data which you had not examined prior to the submission of a portion of the tentative draft to them. A. Yes, I thought perhaps they did have. That is the reason I went to them for their assistance.

* * *

[6586] By MR. HALL:

Q. In the first paragraph of your letter of transmittal to Mr. Walls, Penn Water's president, you state that it was

upon the basis of the facts contained in this report, Exhibit 26, that the company's claim for parts of its original cost was predicated. Isn't that so? A. Yes, sir.

Q. Will you detail the parts of Penn Water's claim which are predicated upon the statements contained in Exhibit 26?

* * *

[6587] THE WITNESS: No, I cannot give you the details of them. The only thing I can say that Exhibits 26 and 27 were prepared for the purpose of supporting the company's original cost claim in any and every respect they might serve for that purpose. I can't go through and undertake to pick out each and every item that might be in some way supported by Exhibit 26 and Exhibit 27. I think the whole cost claim is in some way supported by it.

By MR. HALL:

Q. You certainly wouldn't have any trouble indicating the major items of claim contained in Exhibit 26?

MR. KING: May I inquire, Mr. Hall, what you mean by "major"?

MR. HALL: Any substantial item.

MR. KING: Dollarwise?

[6588] MR. HALL: Yes.

THE WITNESS: I would say interest during construction is one item that is supported by Exhibit 26 and Exhibit 27. The acquisition cost of early lands and water power rights is another, the compensation paid to various people who assisted in the early development of the project prior to the formation of the McCall Ferry Power Company. It seems to me those are the major items.

By MR. HALL:

Q. Wouldn't you also include in the major items the cash value of the stock of the McCall Ferry Power Company and Penn Water, that is so-called cash value? A. Yes, I would include the cash value of that stock given for

services. That is what I had reference to when I mentioned compensation of those who had rendered services, that compensation being largely in the cash value of this stock.

Q. In the second paragraph of your transmittal letter you state that you made a thorough investigation of the early history of Penn Water and its predecessors. Is that right? A. Yes, sir, it is as thorough as Exhibit 26 is.

Q. You also state, do you not, that you believe all of the available sources of information were examined which you thought would reveal early historical facts? [6589] A. Yes, sir.

Q. You further state in the letter of transmittal:

"We believe that all of the available sources which could be expected to reveal early historical facts have been carefully examined." Is that correct? A. Yes, sir.

Q. Did any individuals other than those you have named assist you in the preparation of Exhibit 26?

MR. SPARKS: You mean during the cross-examination, Mr. Hall?

MR. HALL: This morning.

THE WITNESS: Including everybody in the company and out of the company?

By MR. HALL:

Q. Yes. A. I don't know. I may have gotten odd bits of information contained in Exhibits 26 and 27 from other people. I think I have named the people who supplied most of it.

Q. For instance? A. Maybe I haven't, either. Some of the information in Exhibit 27 was obtained from Coudert Bros., Hutchinson's lawyers.

Q. During the course of your investigation, did you find any documentary or other evidence in conflict with the statements which you have made in Exhibit 26? [6590] A. No, sir, except to the extent it is contained in Exhibit 26. I make that reservation because of the data that is given in

Exhibit 26 on stock value. If you want to call some of that contradictory, perhaps some of it is.

* * *

[6596] Q. And did you go through the same process in arriving at other conclusions reached in your report? By that I mean the same process you went through in arriving at the date of October 1, 1911, weighing evidence and rejecting evidence? A. What process do you refer to?

Q. Weighing evidence and rejecting evidence in part. A. I am not aware of having weighed any evidence and rejecting it. I didn't consider the annual reports you referred to as evidence of the date of commercial operation.

Q. Do you mean that you didn't find any evidence which was in contravention of the conclusions that you reached in Exhibit 26? A. No, I can't quite answer that question simply. I found a considerable volume of evidence which had to be considered in arriving at the date of October 1, 1911. The [6597] evidence was not all of exactly the same sort. However, it seemed to me an impartial weighing of it all indicated October 1, 1911, was the proper date of commercial operation.

Now, to the extent that all of the evidence I had was not identical it might be said to have been somewhat in contradiction.

Q. What you are saying is that even though you had considerable evidence available to you, you did not discuss or refer to all the evidence in your report, Exhibit 26? A. No, that is not what I am saying.

Q. What are you saying? A. I am saying this—perhaps I am wrong.

Mr. Sparks: Do you want the question again, Mr. Gunn?

The Witness: Yes, I want the question. I had better have it read.

(Question read.)

THE WITNESS: The answer to that is "Yes." I obviously couldn't put all the evidence in that small report.

By MR. HALL:

Q. In other words, you weighed the evidence in your mind without discussing it in your report? A. Yes, we have a very great volume of evidence in the company's records which couldn't possibly be incorporated in Exhibit 26. For example, we have the operating log sheets of the power plants. We have a vast volume of operating records, [6598] all of which have a very vital bearing on the determination of the date of commercial operation and couldn't possibly be incorporated in Exhibit 26. All of the evidence, however, has been available to the Commission staff for the last two years.

Q. Mr. Gunn, generally what documentary and other evidence did you examine in connection with the preparation of your report? I am talking now only about the evidence in the files of Penn Water.

MR. KING: By "report" you mean Exhibit 26?

MR. HALL: Yes, I mean Exhibit 26.

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THE WITNESS: I examined all of the evidence I could find in the files. That included operating records, construction diaries kept by McCall Ferry Power Company, the books of accounts, the documents and facts relating to the bankruptcy in McCall Ferry Power Company, those relating to the reorganization of the company, and the early log sheets, operating log sheets, of the company, as well as all of the general correspondence files.

By MR. HALL:

Q. Did you examine any documentary evidence not in Penn Water's possession? A. Yes.

[6599] Would you specify the other documentary evidence? A. I examined documentary evidence which was obtained from the files of Coudert Bros., that was obtained from the

files of Lee, Higginson, and I believe I also obtained some from the files of Simpson, Thacher & Bartlett.

Q. Would you identify the law firm last mentioned? A. They were the counsel who were brought into the McCall Ferry Project when Fisk's firm took control of the project. They were Fisk's lawyers that he generally used in connection with his promotion, as I understand it.

Q. What documentary evidence are you relying on when you say the Fisk Company took control of the McCall Ferry project? A. On Hutchinson's statement that they took control and also Fisk's statement that they took control, and I believe the general impression that I obtained from Mr. George C. Lee, of Lee, Higginson, that they took control.

Q. Did you examine the files of Bertron, Storrs & Griscom? A. I obtained information from their files. It is included as an item in Exhibit 27. It is information relating to the price at which they carried the securities of McCall Ferry Power Company. I think it is Part 23.

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[6600] Q. Doesn't Mr. Adams state in his letter of May 27, 1938, that "We are not able to be of great assistance to you in this matter, as several months ago we had all of our correspondence files prior to 1914 destroyed to reduce storage space."? A. Yes, it does state that.

Q. What files did they have, then? A. They had some stock ledger, I believe, in which they had recorded the value of these securities.

Q. They didn't have any correspondence file, did they? A. No.

Q. The Mr. Adams I referred to is Secretary and Treasurer of Bertron, Griscom & Company. Is that right? A. That is right.

Q. Is that firm a successor to Bertron, Storrs & Griscom? A. Yes, sir.

Q. Did you attempt to secure any information from Mr. H. F. Dimock? A. I attempted to locate any papers

that were left by his estate. As I recall it, I believe Mr. Dimock was dead at the time I was making the original cost study.

Q. Did you locate any papers? A. No, I did not. I understood any records relating [6601] to McCall Ferry Power Company long-since had been destroyed.

Q. Did you attempt to secure any information from W. B. Parsons? A. No, I don't recall I did. I didn't expect Parsons would have any information particularly pertinent that I couldn't get otherwise. For example, Parsons would have been an outright duplication of Hutchinson.

Q. At least you thought that. A. Yes.

Q. But you didn't know that to be a fact? A. He was a consulting engineer and so was Hutchinson. I would expect they would both have the same information available to them, except Hutchinson would have more.

Q. Parsons prepared a more extensive report relating to the proposed Holtwood development? A. Yes, sir, and I had his report.

Q. That report is incorporated as Part 3 of Exhibit 27? A. Yes, sir.

Q. Is Mr. Parsons still alive? A. I believe he is dead.

Q. Was he alive when you were making your original cost study? A. I really don't know. In any event I made no attempt to contact him.

Q. Did you attempt to secure any information from Mr. [6602] C. A. Coffin? A. I believe I did. As I recall it, Mr. Coffin was dead.

Q. You say he was dead? A. As I recall it he was, yes.

Q. Who did you contact to get permission to examine his files? A. I think I inquired of General Electric Company if they still had his files.

Q. What was Mr. Coffin's connection with General Electric? A. I believe he was president.

Q. During the construction of the Holtwood project? A. During construction of the Holtwood project, yes.

Q. Did General Electric have any files relating to the construction and early history of the Holtwood project? A. No, not that I recall.

Q. So the files of General Electric were of no assistance to you? A. No, that is right.

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[6603] Q. Are you an accountant, Mr. Gunn? A. No, sir.

Q. Have you ever studied accounting? A. No, sir.

Q. What if any accounting experience have you had? A. I don't think I have ever had any experience as an accountant. I have had some experience on the segregation of expenditures between operating expenses and capital. If you call that accounting I have had that much accounting experience. I never have laid any claim to that distinction, to the distinction of being an accountant.

Q. This experience you have referred to is in connection with single entry accounting or double entry accounting? A. I don't know. It didn't seem to me to make any difference.

Q. You are an engineer by profession, however? A. Yes, sir, I try to be.

Q. So that in preparing your studies on original cost you brought to it your engineering knowledge, is that right, and not accounting training and experience? A. Yes, I think that is correct, except that I had the assistance of several capable accountants in the preparation of this, as I have already explained.

[6604] Q. Do you mean the four individuals that you previously referred to—Eichhorn, O'Connor, Rich, and Stupp? A. Yes, I referred to those. I believe I should make a correction there. In referring to Rich, I think the man's name I had in mind was Frisch instead of Rich.

Q. F-r-i-s-c-h? A. Yes.

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By Mr. Hall:

Q. What accounting problems did Mr. Eichhorn assist you with? A. As a matter of fact, the biggest accounting problem I believe was the preparation of the accounting control statement which was used in the reconciliation of the book cost with the physical inventory of the property.

Q. That assistance rendered by Mr. Eichhorn involved no accounting conclusions included in your results. Is that so? [6605] A. May I have that question, please?

(Question read.)

The Witness: I wouldn't say that is correct at all. It seems to me it did. Certainly he had to come to some accounting conclusions to prepare these control statements.

By Mr. Hall:

Q. What conclusions do you refer to now? A. Conclusions necessary to prepare the statements.

Q. What are they? A. Whatever conclusions an accountant must arrive at in order to prepare such a statement.

Q. Can you state what Mr. Eichhorn did involved reaching accounting conclusions? A. As I understand an accounting conclusion it did.

* * *

[6606] Q. Did Mr. Eichhorn make any accounting contributions to acquisition cost during the early period? A. I don't believe I understand what you mean by "acquisition costs during the early period." To what do you refer to?

Q. Lands, rights of way, and water power rights. A. He made a contribution to the extent he assisted me in the preparation of Exhibit 26, and that deals with acquisition costs.

[6607] Q. What assistance did Mr. Eichhorn give you on the cash value of the securities?

Mr. King: What securities, Mr. Hall?

MR. HALL: Of McCall Ferry Power Company and Penn Water.

THE WITNESS: His assistance on that problem was limited to his participation in assisting me in the preparation of Exhibit 26 and Exhibit 27.

By MR. HALL:

Q. What parts of those exhibits? A. The whole of those exhibits.

Q. With respect to what accounting principles did you consult Mr. Eichhorn? A. I don't have any recollection of any particular consultation. Any time I needed accounting advice I went generally to Mr. Eichhorn. On some problems I perhaps also consulted Mr. O'Connor.

Q. Do you recall any specific instances in which you consulted with him? A. No, I don't know.

Q. What accounting contributions did the other accounting individuals make to your original cost study? A. Their contribution was primarily the analysis of the company's books to derive the details of the costs as recorded there. Those other accountants worked under the supervision of Mr. D. L. Wetzel.

[6608] Q. Those were figures and not conclusions, is that right? A. Yes.

Q. Is Mr. Wetzel an accountant? A. No, sir. He has had considerable cost-keeping experience.

Q. Did he render any assistance to you? A. Oh, yes, a very considerable amount.

Q. Of an accounting nature? A. I don't believe I understand what you mean by rendering assistance of an accounting nature.

Q. Did he arrive at any accounting conclusions which assisted you in your determinations? A. That doesn't help me very much. I can tell you what he did. I don't know whether that would be——

Q. I think that would clarify it. What did he do? A. He had working under his supervision a group of people

that I believe run as high as 18 or 20 whose duty it was to first make a physical inventory, and then make an analysis of the company's cost records, and then reconcile the analysis of the cost records with the inventory of the company's property.

If that involved accounting conclusions or assistance, then he rendered it. If it didn't, he didn't.

Q. You are familiar with Electric Plant Accounts Instruction [6609] 3-D, are you? Will you refer to Page 39 of the instructions to Electric Plant accounts? A. Yes, sir, I am familiar with that.

Q. Did any accountant determine the meaning of this construction of Section 3-D? A. I wouldn't say they finally determined it.

Q. Who finally determined it? A. I would say it was a joint determination between myself and the accountants and the company's counsel.

Q. How did the accountants interpret Instruction 3-D? A. The same way that the company has treated it.

Q. You mean they were all in agreement? A. Yes, I think we were all in agreement.

Q. What was the conclusion reached by all of you as to that instruction? A. When the consideration for property is other than cash the value of such consideration shall be determined on a cash basis.

Q. What did you determine: the value of the property or the value of the securities? A. We were uncertain on that as to which one we should determine. I thought perhaps maybe we ought to determine both.

Q. What does Instruction 3-D require? A. There is also uncertainty about that.

Q. Then there was not any unanimity of opinion there? [6610] A. It was a unanimity of lack of it, then. Let us put it that way.

Q. How did you finally conclude Instruction 3-D had to be construed? A. That it had to be construed we had to estimate the value of the securities which were given in

exchange for services, and in doing that it was necessary in some cases to estimate the value of the services as a measure of the value of the securities.

[6611] Q. Do you interpret instruction 3-D to mean that you are to determine the cash value of the securities by determining the value of the property or service?

THE WITNESS: May I have that question, please?

(Question read.)

By MR. HALL:

Q. That is services which are rendered? A. No, I wouldn't necessarily interpret it that way. However, in the case of McCall Ferry Power Company, where the securities were never traded on the market, there obviously was no other way to value the securities except on the basis of the things for which they were exchanged.

* * *

Q. What you did then, Mr. Gunn, was to determine the [6612] value of the services rendered and attribute that value to the securities. In other words, the value of the services were deemed to be the cash value of the stock issued for the services? A. Generally speaking I think that is true. Of course there were other elements which entered into it but generally speaking I think that is a true statement.

Q. You assumed there was an equivalence between the two. Is that right? A. Yes, where it was based directly on that basis. For instance, in the case of Lee, Higginson service I assumed there was an equivalence between the services and the value of the stock given at the time it was exchanged.

* * *

[6615] Q. Where is the cash value of the securities of the McCall Ferry Power Company and Pennsylvania Water and Power Company which you claim, recorded on the books?

THE WITNESS: May I have the question, please?

(Question read).

THE WITNESS: I don't think I made any such claim as that, but an amount sufficient to cover the value of the securities of McCall Ferry Power Company is most certainly included in the opening entry of Pennsylvania Water and Power Company.

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[6620] Q. To whom do you have reference when you say "Hutchinson interests"? A. To Hutchinson and his father-in-law, Mr. Dimock.

• • •

Q. Were those the only individuals included in the group which you referred to as the Hutchinson interests? A. So far as I know. That was a term we used to [6621] designate Hutchinson himself, and Dimock, both of whom we knew were a part of the group, and also, if you will notice, Hutchinson in his statement which he gave us in connection with the development of the history of the McCall Ferry was not very definite as to who had rendered him financial assistance and for that reason I couldn't be more definite.

If you wanted to broaden the term I think you could say that Beyer and Willson, and at one time I think Bogart, was associated with Hutchinson.

Q. How about W. B. Parsons? A. I believe I was mistaken in mentioning Bogart. I believe I had in mind Mr. George S. Morison who was a consulting engineer. I understand he was at one time associated with Hutchinson in the development of the river. Before the organization of McCall Ferry Company, Morison had died and I believe Hutchinson had bought his interest.

Q. Would you include C. A. Coffin as a member of the Hutchinson group? A. No, I didn't have in mind Coffin as a member.

Q. In other words, the persons you have named were associated with Cary T. Hutchinson for the purpose of developing a hydroelectric project on the Susquehanna River? A. That is my understanding of it.

Q. Was H. F. Dimock, Hutchinson's father-in-law? A. Yes, sir.

[6622] Q. What positions had Hutchinson held, or what activities had he engaged in, with the York Furnace partnership? A. Cary T. Hutchinson had been retained to supply advice to the partners on the possibility of using electricity in connection with the reduction of iron ore in the vicinity of York Furnace.

* * *

[6625] Q. What was the York Furnace Power Company? A. The York Furnace Power Company?

Q. Was it a partnership? A. Yes, sir, it was a partnership.

Q. Who were the members of the partnership? A. Beyer and Willson, a man by the name of Shoff, and two others formed the co-partnership. I don't know who the [6626] two others were.

Q. Holman and Franklin? A. I really don't know. But those two names sound familiar.

Q. I show you this document. A. Yes; that is correct, John W. Holman.

Q. The document which I just showed you to refresh your recollection, Mr. Gunn, was an agreement dated February 21, 1902, between the members of the partnership and Cary T. Hutchinson. Is that right? A. Yes, sir.

Q. Had you ever seen this document before? A. I don't recall. I looked at a vast number of documents. I may have or I may have not. I assume that I did.

Q. Is it a fact that Holman, Shoff and Franklin dropped out of the partnership leaving Beyer and Willson as the sole partners?

THE WITNESS: May I have the question, please?

(Question read).

THE WITNESS: It is my understanding Beyer and Willson wound up with the partnership as the sole members.

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[6628] Q. What was York Furnace Power Company's connection with Hutchinson? A. I think it varied from time to time. His first connection, as I recall it, was when York Furnace Power Company employed Hutchinson as an engineer and consultant in connection with the reduction of iron ore in the locality of York Furnace through the use of electricity. Then, as I understand it later, after Beyer and Willson had taken over the interest of the other parties in the York Furnace partnership, Hutchinson bought from them an option to buy York Furnace property, and then subsequent to that it is my understanding that at least Beyer—I don't recall what became of Willson—became counsel for Hutchinson on local land matters, and in effect Hutchinson's agent in the securing of further water power rights necessary to the Hutchinson development at McCall Ferry.

[6629] I believe after the formation of McCall Ferry Power Company, Beyer was local counsel for McCall Ferry Power Company.

Q. Didn't Willson also carry on activities for Cary T. Hutchinson, such as acquisition of property, and so forth?

TRIAL EXAMINER: Can you answer the question without looking something up?

THE WITNESS: I don't recall offhand. I was just looking at Exhibit 26 to refresh my memory.

It appears Willson did continue his interest in McCall Ferry Power Company, as shown on page 40 of Exhibit 26.

By MR. HALL:

Q. It is a fact, is it not, that York Furnace Power Company had acquired properties along the Susquehanna River for the purpose of developing a hydroelectric project

in connection with its business or proposed business? A. Yes, sir.

Q. Will you turn to the map at the back of Exhibit 26 which purports to show land acquisitions by three groups, the first of which is listed as Hutchinson properties, the second as McGaw properties, and the third, McCall Ferry Power Company acquisitions? A. Yes, sir, I have that before me.

Q. The buff-colored portions include lands owned at one [6630] time by York Furnace Power Company. Is that right? A. Yes, sir, the holdings of York Furnace Power Company are included in that buff-colored section, although the buff-colored sections are not limited to the holdings of York Furnace Power Company.

* * *

[6640] By Mr. Hall:

Q. I believe you have indicated Mr. Beyer acted in Hutchinson's behalf in purchasing the land along the Susquehanna River for the Holtwood development? A. Yes, I believe he did.

Q. Did he not also act in the same capacity for McCall Ferry Power Company after its organization? [6641] A. Yes, I believe so. I think he was also counsel for McCall Ferry Power Company.

Q. Is it a fair statement to say that as a result of Beyer's business activities in connection with York Furnace Power Company and its acquisition of lands for power development that he was familiar with property acquisitions along the river and power properties? A. Will you read that one, please?

(Question read.)

The Witness: Yes, I think that is a fair assumption.

By Mr. Hall:

Q. As a result of his knowledge, don't you think it also fair to say he was acquainted with the value of such prop-

erties and with the prices that were being paid therefor? A. I will have to have that read back.

(Question read.)

MR. KING: Who is "he"?

MR. HALL: Mr. Beyer.

THE WITNESS: He was unquestionably familiar with the prices he was paying for the property. I don't know whether his knowledge would extend to the other parts of your question or not.

By MR. HALL:

Q. He was also familiar with the value of such properties, wasn't he? [6642] A. I really don't know whether or not he was.

Q. It is reasonable to assume he was. Isn't that so? A. I don't know.

Q. He was actively engaged in the acquisition of properties along the river, wasn't he? A. After he began to represent McCall Ferry Power Company he was buying them under Hutchinson's supervision. Which one had the knowledge as to the value of the property I don't know. Beyer was a lawyer and Hutchinson was an engineer. Hutchinson was the man who had knowledge of the use to which the properties would be put.

Q. What do you mean when you say Beyer was acquiring land under Hutchinson's supervision? A. I thought after Hutchinson took the option on the York Furnace, to buy the York Furnace properties from Beyer, whatever Beyer was doing after that it was as Hutchinson's agent.

Q. Beyer acquired certain properties for the York Furnace Power Company. Is that right? A. You mean prior to the time he gave the option to Hutchinson?

Q. Yes. A. That was not a conspicuously successful enterprise.

Q. He was fully aware of the prices and values and so forth in so far as acquisition of lands was concerned. Isn't

[6643] that so? A. He was aware of the prices he paid. I don't know whether or not he was aware of anything else.

Q. Don't you think it reasonable to assume that Beyer, when he paid for the land which he acquired, was aware of the values of those lands? A. Are you referring in that question to when he was buying them for York Furnace Power Company or for Hutchinson?

Q. Both. A. No, I don't know whether or not he was aware of the value.

Q. He was acquiring some of the properties in contemplation of constructing a hydroelectric project for his partnership, York Furnace Power Company, wasn't he? A. Yes, sir. As I said it was not a conspicuously successful enterprise.

Q. Had York Furnace Power Company constructed projects? A. No.

Q. Then what was not a successful enterprise? A. The acquisitions of water power rights for the purpose of building what York Furnace contemplated as a project.

Q. Why do you say that, Mr. Gunn? A. Because it was not built.

Q. Do you know why it wasn't built? A. No, I really don't. There were several factors [6644] which might have contributed to it. In the first place the advice Hutchinson gave Beyer and Willson concerning the reduction of iron ore as I recall was that it was not a feasible proposition. The next thing I know Beyer and Willson had sold an option to Hutchinson to buy the properties. Now, that is about all I know about it.

* * *

[6645] Q. Mr. Gunn, I show you a photostatic copy of a document which in the first two paragraphs reads "This agreement made this 21st day of February, 1902, between John W. Holman and Frederick Shoff, George B. Willson and William F. Beyer, all of the county of Lancaster and state of Pennsylvania, parties of the first part, and Dr. Cary T. Hutchinson of the city of New York, party of the second part, witnesseth:"

Do you recognize this document? A. Yes, sir. I believe I have seen it before. It seems to be Hutchinson's first option on the property.

Q. That is my understanding of this document, Mr. Gunn. Doesn't it refer on the first page to Hutchinson's proposed development? A. Yes, sir, but that is not the question you just asked me.

* * *

Q. If, according to this document which is Hutchinson's original option on the York Furnace Power Company properties, that is the portion covered by his original option, that the land [6646] is being acquired for the purpose of damming the river, then Beyer and Willson knew that he was acquiring the property covered by this option for the purpose of the Holtwood dam. Isn't that so? A. Well, they certainly knew that he was buying the property for the purpose of the hydroelectric development. Whether they knew the scope of the project Hutchinson had in mind for McCall Ferry Power Company at the McCall site is extremely doubtful because Hutchinson himself didn't know. I think that is obvious. As a matter of fact, if you recall from the history of McCall Ferry Power Company they financed for a dam to elevation 155 and they renegotiated an arrangement with Pennsylvania Railroad and raised the elevation to 185, and then the railroad negotiation fell through and they reduced it back to 165. So it was not until 1907 that anybody knew the scope of the project that was going to be built at McCall Ferry site.

* * *

[6647] Q. Who were the incorporators of the Hillside Water and Power Company? A. Jacob Hill Byrne, W. F. Jack, George B. Willson, Walter M. Franklin, and W. F. Beyer. They were the nominal incorporators, I guess you would call them. At least they were the first ones.

Q. They were the dummy incorporators, in other words? A. I think that is probably what you would call them.

Q. Were they also the incorporators of Susquehanna Water and Power Company? A. Yes, sir.

Q. In forming Hillside and Susquehanna were the incorporators acting in their own behalf or in behalf of Hutchinson? [6648] A. I would say they were acting in behalf of Hutchinson.

Q. Who were the incorporators of McCall Ferry Power Company? A. May I have the question?

(Question read.)

THE WITNESS: The dummy incorporators, if we may call it that, were the same five individuals.

By MR. HALL:

Q. In whose behalf were they acting at the time they formed the McCall Ferry Power Company? A. I think they were acting in behalf of the Hutchinson interest and the bankers.

Q. What was the capitalization of McCall Ferry at the outset? A. One thousand dollars.

Q. Ten shares? A. Ten shares of $100 each.

Q. Was McCall Ferry Power Company incorporated on April 14, 1905? A. That is a rather difficult question. The merger of the Hillside Water and Power Company and the Susquehanna Water and Power Company was executed on April 1, 1905, and the formal documents issued by the Secretary of State of Pennsylvania, I believe, were dated April 14. I don't know which one of those actually effects the incorporation.

[6649] Q. Who held the ten original shares, Mr. Gunn? A. The incorporators, as I understand it.

Q. Who received the ten shares from the incorporators? A. Who received them when? You mean ultimately?

Q. When the incorporators disposed of the ten shares, who got them? A. They ultimately went four shares to Hutchinson and six to Harvey Fisk and Sons.

Q. When you say that they ultimately went to Hutchinson and Fisk, were divided between them, when did that

occur? A. I suppose it occurred on June 13, 1905, or thereabouts.

Q. What makes you say that? A. Well, that was the date in which all of the agreements affecting the disposition of the stock and the transfer of the lands took place, and I assume, therefore, that these shares of stock probably were transferred at that time.

Q. I show you a copy of a letter dated June 22, 1905, written by Lorenzo Semple to Cary T. Hutchinson, Esq., No. 60 Wall Street, Manhattan, New York. This copy was copied from a copy contained in Susquehanna Contracting Company's file number 30.

MR. KING: May we see it before you submit it to the witness, please?

MR. HALL: Yes.

[6650] MR. KING: Thank you.

By MR. HALL:

Q. Have you seen that letter before today, Mr. Gunn? A. I presume I have, or at least had the information contained in it.

Q. When I said the letter was contained in file number 30 of Susquehanna Contracting Company, I believe you will agree that the files of Susquehanna Contracting Company are now in the possession of Penn Water? A. Yes, that is right.

Q. According to the second paragraph of that letter, Mr. Semple states as follows: "I also send you receipt for $155,500, signed by Beyer, Willson and the Lancaster Trust Company and Franklin and Marshall College. Also Certificates Nos. 1, 2, 3, 4 and 5, each for two shares of the capital stock of the McCall Ferry Power Company endorsed in blank. These represent the $1,000 in capital stock which you have received from Beyer and Willson."

It is so stated in that letter? A. Yes, sir, the letter so states.

Q. According to this letter, then, the ten shares of stock, that is the incorporators' shares, were delivered to Hutchinson on June 22, 1905? A. I don't know you could necessarily draw that conclusion for this reason. Lorenzo Semple was Hutchinson's [6651] lawyer. It is true that Semple transmitted the shares to Hutchinson on June 22. Now, when they may have come into Lorenzo Semple's hands I don't know from this letter. It evidently was before June 22.

Q. But according to this letter Semple was delivering the incorporators' shares to Hutchinson on June 22, 1905. Isn't that right? A. Yes, sir, the letter so states.

[6652] Q. You don't have any information to indicate to the contrary, do you? A. To the contrary of the proposition that Lorenzo Semple sent the stock to Hutchinson on the 22nd?

Q. Yes. A. No, sir, I do not.

Q. Will you identify Lorenzo Semple for the record? A. Yes, sir. I already did. He was Hutchinson's counsel.

Q. Were the incorporators also the directors of the McCall Ferry Power Company? A. Yes, sir, they were apparently incorporators, directors and stockholders.

Q. Was Beyer president and Willson secretary and treasurer of the McCall Ferry Power Company? A. Yes, sir.

Q. They were the only officers that the company had at the outset? A. Yes, sir, in this stage of the dummy incorporation.

Q. Did Hillside and Susquehanna own any property or have any assets? A. Not that I recall other than whatever they may have acquired with the proceeds of their $1,000.

Q. Were those two companies active companies? A. No, sir, I don't think they were.

[6653] Q. I believe you have indicated Hutchinson carried on property acquisitions and investigations in his own name with Beyer and Willson's assistance? A. Yes.

Q. You state, Mr. Gunn, in Exhibit 26 at pages 6 and 7, that Hutchinson formed a partnership with one George S. Morison, a consulting engineer, to investigate the possibilities of generating and selling power. Do you have a copy of the partnership arrangement? A. No. If it isn't in Exhibit 27 I don't have it.

Q. As of what date was the partnership formed? A. I don't have that fact. The only thing I know of that partnership is what is included in Hutchinson's affidavit.

Q. You don't know the terms of the partnership arrangement? A. No, sir.

• • •

[6654] Q. How did you determine that a partnership existed? A. Hutchinson stated to me that such a partnership existed, and it is also stated in Hutchinson's affidavit which is Item No. 1 in Exhibit 27.

Q. Does that affidavit constitute your sole basis for your knowledge of the arrangement between Morison and Hutchinson? A. It constitutes, as I recall, my sole knowledge it was a partnership arrangement. It doesn't constitute my sole knowledge they were associated on the river. It constitutes my only knowledge as to the character of the association, as I recall it.

• • •

[6655] By Mr. Hall:

Q. How does this partnership arrangement enter into the complete history that you referred to? A. It is a fact.

Q. Why did you leave out the details? A. Because I didn't think the details were pertinent in the first place, and I doubt if I could have gotten them in the second place.

Q. How do you know that you couldn't have gotten them, Mr. Gunn? A. I don't know I couldn't have gotten them. I just said I doubt if I could get them. Hutchinson told me that practically all of his personal records long ago had been destroyed in connection with the McCall Ferry

project, and he was relying only on his memory. I didn't expect him to remember those details for forty years.

Q. According to the last three lines in paragraph No. 1 [6656] of Exhibit 27 it is stated that Hutchinson "Reviewed and examined pertinent data and records, including the pertinent records and data of McCall Ferry Power Company and thoroughly refreshed his mind and memory in connection therewith."

What documents were used to refresh Hutchinson's mind and memory as to his partnership arrangement with Morison? A. Several of the documents included in Exhibit 27, and all of them were included in the participation which I said was made available to Hutchinson, which is in the company's files, and which are available to the Commission Staff.

Q. Will you refer to Exhibit 27 and indicate the parts thereof that you used to refresh Hutchinson's recollections as to the partnership arrangement? A. I can't remember offhand which ones we supplied to him. They are, however, in the company's files.

Q. Are any of them in Exhibit 27? A. I am sure they are, but I don't recall which ones. Of these participations there were five or six made up, and they all had different numbers and different exhibits which were included now as items in Exhibit 27. I can't recall offhand precisely which exhibits were included in each one of the participations supplied to the people who gave us their recollection on this problem.

• • •

[6659] Q. Have you found any evidence of the partnership? A. I don't recall that I have. I didn't know there was a partnership between Hutchinson and Morison until Hutchinson told me there was.

Q. If that is the case, Mr. Gunn, there are no records that you could have shown Mr. Hutchinson that could have served to refresh his recollection. Isn't that so? [6660] A. On that part?

Q. Yes. A. Yes, that is true, there are no records I could have shown him.

Q. Or about anything else relating to the partnership? A. No. As I told you before, I didn't know there was a partnership until Hutchinson told me. As I recall, there certainly was nothing I gave him to refresh his recollection on that.

Q. Did Hutchinson tell you that in his initial conference with you? A. I don't recall in which conference he told me. He told me in one of the early conferences, yes.

Q. How many conferences did you have with him? A. Seems to me like four, five or six.

Q. Can you fix the date of the earliest conference with Hutchinson? A. I don't have anything before me to fix it. I can refer to the company's records and fix it.

Q. Did you make notes and keep notes as to your conferences? A. What kinds of notes?

Q. As to what took place in the conferences? A. No.

Q. Did you keep any records of the subject matter of [6661] your conferences? A. No, sir. As I said before, Exhibit 26 was in the state of evolution, and as information came to me it was incorporated in Exhibit 26.

Q. Didn't you write that information down for the purpose of incorporating it into Exhibit 26? A. Well, it was written down and became a part of Exhibit 26.

Q. Are you saying that it became a part of Exhibit 26 only after the affidavit was prepared? A. No, I think it became a part of Exhibit 26, or certain parts of it did, as Hutchinson gave them to me.

Q. You wrote Exhibit 26, in other words, and then prepared the affidavit? A. At the time the affidavit was prepared Exhibit 26 certainly was in the process of evolution, as I described to you this morning how it was prepared.

Q. Then the affidavit in effect represented the evolution that you are talking about? A. No, I wouldn't say that.

The affidavit was prepared by Hutchinson's counsel and represented Hutchinson's recollection based upon all of the information I had given to Hutchinson. Now, he had during various conferences before the affidavit was prepared given me most of the information that ultimately went into his [6662] affidavit.

This information about the Morison partnership, as I recall it, was given to me in one of the early conferences.

Q. Did Hutchinson have any personal files not in the possession of Penn Water which covered the period from 1900 through 1910? A. He told me he did not.

Q. Then he relied solely on what you gave him plus his recollection. Is that right? A. I think that is probably true. That is my understanding of it.

Q. Did Hutchinson draw upon your deductions and analysis of the basic records that you supplied to him to refresh his recollection?

MR. KING: May we have that question?

(Question read.)

THE WITNESS: To refresh his recollection when?

By MR. HALL:

Q. When you conferred with him? A. Well, I don't know. There was perfectly free discussion which took place between Doctor Hutchinson and myself, and there were the documents before us. I told him all I knew about them. I don't know what he drew on and what he didn't.

Q. Did you give him any information which was not [6663] contained in the documents which you had in your possession at that time?

THE WITNESS: May I have that question, please?

(Question read.)

THE WITNESS: Obviously not.

If I didn't have the information from the documents I didn't have any information and obviously couldn't give him any information.

By MR. HALL:

Q. In Exhibit 26 at page 12, Mr. Gunn, you state that Hutchinson retained Morison as a consulting engineer after the end of the partnership until Morison's death in 1903.

Whom did Hutchinson retain as consulting engineer at that time?

MR. KING: What time?

THE WITNESS: 1903?

By MR. HALL:

Q. Yes. A. After Morison's death?

Q. Yes. A. I don't know whether or not he retained anybody. Sometime between there and June 13, 1905, he evidently retained William Barclay Parsons.

Q. You don't know the exact date he retained Parsons? A. No, I do not.

[6664] TRIAL EXAMINER: You said June.

THE WITNESS: I mean January, 1905; January 13, 1905.

By MR. HALL:

Q. Parsons was associated with Hutchinson in his proposed power project. Isn't that so? A. I don't know what you mean by "associated."

Q. He was engaged by Hutchinson to make engineering studies and so forth? A. Yes.

Q. And the report he prepared is embraced in part 3 of Exhibit 27. Is that right? A. Yes, sir, as I recall it is in there.

* * *

[6672] Q. Mr. Gunn, is it correct to say that the Holtwood project was conceived by Cary T. Hutchinson, electrical engineer, about the year 1901?

* * *

[6673] A. Yes. It appears that Hutchinson first became interested in development of hydroelectric power on the Susquehanna River in 1901 or 1902. However, the difficulty I was having was this: I don't think that when he first

became interested in the river that he had in mind the precise location or the scope of the project that was ultimately built at the McCall site.

Q. What I mean to say is that he conceived the desirability and the possibility of a project in the general area that the Holtwood project now is located? A. Yes.

Q. About the year 1901? A. Yes, I think that is about right.

Q. Did the Hutchinson group carry on their activities in competition with two other major interests known as Harlow-McGaw and Welch interest? A. Yes.

Q. Did Hutchinson, to protect his position at Holtwood, acquire property below the site of the proposed dam? A. Yes, sir.

Q. Were such acquisitions intended to interfere with and delay execution of the Harlow-McGaw and Welch plants? A. Yes, I think that was their general purpose.

Q. The Welch holdings I believe were located in the general vicinity of the present Conowingo project. Is that [6674] right? A. In that general vicinity, yes.

Q. Did the Welch holdings overlap the Harlow-McGaw properties to any extent? A. Well, Harlow-McGaw properties, I think it would be more proper to say, overlapped the Welch properties and McGaw properties, both, particularly Harlow-McGaw's ownership of the Welch——

Q. The Welch holdings on the lower Susquehanna partially overlapped the Harlow-McGaw properties. The Harlow-McGaw properties extended upstream into the territory involved not only in the present Holtwood development but even beyond that development into the present area of the Safe Harbor development? A. Yes, that is true. Harlow-McGaw properties, of course, also extended downstream through the Welch properties.

Q. Yes, that is my understanding. As I understand it, Welch and Harlow-McGaw were opposing interests for land and water rights, but not Welch and Hutchinson. A. That is my understanding of it.

Q. Were all three groups competitors for power markets and financing? A. Yes, I think they were.

Q. Did the overlapping of the separately-controlled properties, together with the aspirations of the opposing groups, present a stumbling block for the financing of any of [6675] the contemplated projects prior to Hutchinson's option obtained from Harlow-McGaw?

* * *

A. Yes, I think the overlapping did constitute a stumbling block.

Q. However, Hutchinson did finally enter into a compromise agreement with Harlow-McGaw on April 14, 1903, which removed Harlow-McGaw's opposition to the Holtwood development? A. That is correct.

Q. That option agreement was never carried out? A. No, it was not carried out because Fisk ultimately bought the whole of the Harlow-McGaw holdings.

Q. But notwithstanding the fact that it was never carried out, the option agreement did break the previously-existing deadlock and permit Hutchinson to go forward with the development? A. Yes, sir.

Q. Did Harlow-McGaw in April, 1905, make the final [6676] attempt to bring the entire river area under one management by suggesting a plan to Harvey Fisk and Sons for the consolidation of all interests on the Susquehanna River? A. As I recall it that is correct. They first suggested, I believe, a proposal for overall development of the river, and then later, when Harvey Fisk and Sons didn't accept that they proposed to sell the properties to Harvey Fisk. The thing that confuses me is the fact there was a man by the name of Pullen also trying to accomplish the same thing.

Q. Just prior to Harlow-McGaw's suggestion to the Fisk firm did Charles D. Pullen obtain an option on the Harlow-McGaw properties in an effort to combine the conflicting interests? A. Well, it was quite a little time prior to that. As I recall it, Pullen first obtained an option

on the Harlow-McGaw properties and on the Welch properties, and attempted also to obtain an option on the Hutchinson properties.

Q. Pullen's option was subject, among other things, to Hutchinson's unexpired option. Isn't that right? A. Yes, I think it was. It was also subject to his obtaining an option from Hutchinson to combine Hutchinson's properties with the other at first. Then it was later modified so that it related to Harlow-McGaw and Welch, I believe.

Q. Was McCall Ferry unwilling to pool its interests as suggested by Harlow-McGaw, and did they insist on carrying [6677] out Hutchinson's option? A. Yes, as I understand it they insisted on carrying out Hutchinson's option.

Q. Was that controversy settled on April 27, 1905 by the execution of two contracts for the acquisition by McCall Ferry interests of all rights, properties, and other assets owned by Harlow-McGaw? A. Yes, sir.

Q. And the considerations stated in those two contracts I believe were $200,000 in cash, $250,000 principal amount of McCall Ferry bonds, and $100,000 par value of McCall Ferry common stock? A. Yes, that was the consideration stated in the agreement to purchase Harlow and McGaw's property. But there was also another transaction that took place at that time.

Q. I think I will come to that transaction. If I don't, Mr. Gunn, remind me. A. Yes, sir.

Q. Was one of the contracts for the acquisition of the Harlow-McGaw properties subject to Pullen's option? A. Yes, sir, it is my understanding it was.

Q. Pullen had obtained that option from Harlow-McGaw? A. Yes, sir.

Q. Was this option purchased for $10,000 in cash and $15,000 par value on the common stock? [6678] A. Yes, sir, that was the purchase price.

Q. The option held by Hutchinson which was not exercised covered only a portion of the Harlow-McGaw prop-

erties. Is that right? A. Yes, sir. Those portions that would interfere with the Holtwood project.

Q. But the two contracts obtained on April 27, 1905, were for the total properties of Harlow-McGaw, right? A. Yes, from their total holdings on the river.

Maybe it would be important to note that the option McCall Ferry had with Harlow and McGaw provided for more than just the release or the withdrawal of Harlow's objections to the Holtwood development. It provided for a right of way for a proposed Harlow Railroad and the construction of locks in the Holtwood dam, and navigation facilities above the reservoir, above the Holtwood reservoir.

* * *

[6679] Q. When was the capitalization of McCall Ferry Power Company increased from the original 10 shares to 50,000 shares of common and 50,000 shares of preferred? A. That authorization for the increase in capitalization of McCall Ferry Power Company appears to have taken place on June 13, 1905.

Q. Were both the common and preferred stock of McCall Ferry Power Company voting stock? A. As I recall it they were. I think I can check it if you wish.

Q. Will you do that? A. Yes, they were both voting stock.

Q. Prior to the incorporation of McCall Ferry Power Company, had Hutchinson made any effort to finance the hydroelectric project? A. Yes, I think he had. Prior to that date the underwriting undertaken on March 1 had been tried and failed.

Q. In other words, in February of 1905, Hutchinson did attempt to finance the project? A. Yes, and it failed.

Q. Was that Hutchinson's first attempt to finance [6680] a project as well as the first attempt of anyone associated with him in the proposed project? A. It seems to me that there had been a previous attempt, but I don't have in mind the facts. I think I could verify that if you wish.

Q. Will you do that, please? A. I don't have before me the facts with which to verify that. My recollection is that prior to 1905 some consideration had been given to financing the Hutchinson project, but that it was not nearly on the extensive scale that the March 1 attempt was.

Q. What happened in February of 1905 insofar as Hutchinson's effort to finance the project is concerned? A. It failed.

Q. What did they accomplish in February of 1905 insofar as the financing of the project is concerned? A. They obtained subscriptions, as I recall, for something like half of the bonds.

Q. What financing houses did Hutchinson approach with reference to financing the project in February of 1905? A. As I understand it, the financing house was Bertron, Storrs and Griscom, and Bertron, Storrs and Griscom was working in cooperation with Lee, Higginson & Company.

Q. Was a syndicate formed in February of 1905 for the purpose of financing the project? [6681] A. Yes, sir.

Q. Was that the first time Bertron, Storrs & Griscom had been approached with respect to the financing of the McCall Ferry project? A. That is the first record I know of, the first indication I have found that they were approached.

Q. What was the proposition that the Hutchinson group presented to Bertron, Storrs & Griscom? A. Well, as I understand it it was in principal that the bankers would obtain the necessary underwriting in raising the funds to construct the project. About eight million dollars of bonds would be issued and about four million dollars of preferred stock would be issued, and about four million dollars of common stock.

I believe the preferred stock was to be issued in combination with the bonds and the common stock was to be

divided equally between Hutchinson and his associates and the bankers.

Q. Do you mean that the preferred stock was to accompany the bonds as a bonus? A. Yes, it would accompany the bonds in a combination.

Q. As a bonus? A. Call it whatever you please. They were going with the bonds. The shares of preferred stock were going to be issued with the bonds in combination. [6682] Q. Was the understanding between the Hutchinson group and the other syndicate members reduced to writing? I am speaking now of the original syndicate.

TRIAL EXAMINER: Which was that? February 1905?

MR. HALL: Yes.

THE WITNESS: The financing plan was reduced to writing, I believe, to this extent: That the amount of each different class of security to be issued, I believe, was stated.

By MR. HALL:

Q. Are you saying now that it was reduced to the extent reflected in part 5 of Exhibit 27? A. Yes, sir.

Q. Which is the prospectus and underwriting agreement dated March 1, 1905? A. Yes, sir, it was to that that I referred.

Q. Mr. Gunn, I refer you to page 17 of Exhibit 26, paragraph No. 2. Do you not there state that the "Subscribers to the bonds would receive a bonus of 50 per cent in preferred stock"? A. I believe that is the language which was used in the underwriting agreement.

Q. There is no question about it. The preferred stock did accompany the bonds as a bonus. Is that right? A. It accompanied the bonds, period.

The Dimock, Bertron and Barney underwriting agreement [6683] called it a bonus, as I recall.

Q. Will you point out where in part 5 of Exhibit 27 the preferred stock is referred to as a bonus? A. Do you want me to examine it thoroughly now?

* * * *

THE WITNESS: Mr. Hall, if you refer to page 48 of Exhibit 27, the fourth paragraph and the fourth line, you will find it there called a bonus.

By MR. HALL:

Q. You don't disagree with that description, do you, Mr. Gunn? A. If it has no abnormal connotations, I do not.

Q. What do you mean by "abnormal connotations"? A. In the sense it is to be used as an epithet to discredit the financing.

Q. What does "Bonus" mean to you, Mr. Gunn, as used on page 48 of Exhibit 27? A. It simply means to me that the bonds and the stock were given in exchange for the amount of money that was to be raised.

Q. How much cash was to be received for the bonds, Mr. [6684] Gunn? A. For the bonds and the stock, $900.

Q. Just for the bonds? A. I don't know.

Q. What financial experience have you had, Mr. Gunn? A. Practically none, except my own personal financing, and I haven't been very successful.

* * *

[6685] By MR. HALL:

Q. Have you investigated the mode followed in 1905 in connection with financing hydroelectric projects?

THE WITNESS: May I have the question, please?

(Question read.)

THE WITNESS: I have a general knowledge of it only.

By MR. HALL:

Q. Don't you know it to be a fact that in those days it was a practice to issue bonds with a sweetener in the form of stock? A. I know only that it was the practice, as I understand it, to issue combinations of bonds and stocks for a certain amount of money. You can call it a sweetener or a bonus or anything else you want to. That is all I know about it.

* * *

[6692] Q. As I understand it, part 5 of Exhibit 27 shows the arrangement between the syndicate and the subscribers but it does not disclose the arrangement or agreement among the syndicate members themselves? A. I believe that is correct.

Q. I believe you have indicated in your testimony that you were unable to locate any agreement setting forth the arrangement between the syndicate members themselves? A. That is correct.

Q. Then, as I understand it, you do not know what arrangements were agreed upon between the syndicate members themselves? A. Well, I know from Mr. Hutchinson's affidavit.

Q. If you eliminate that affidavit you have no basis for stating what the arrangement was between the syndicate members themselves? A. That is correct, I believe—if you eliminate that then I wouldn't know.

Q. Do you know what business Dimock, Hutchinson's father-in-law, was engaged in in the four or five years covering the period from 1902 until 1905? A. As I recall it, I believe he was connected with [6693] some steamship company, although I don't know just how. I have very little knowledge at all of his activities.

[6694] Q. Do you know whether Mr. Dimock had been acquainted with Bertron, Storrs & Griscom, or any member of that firm, before the syndicate was formed in February, 1905? A. No, I don't know. I assume he must have been acquainted with them for some time before the formation of the syndicate.

Q. What was the nature and extent of the prior association of Dimock and members of the firm of Bertron, Storrs & Griscom? A. I have no idea.

• • •

[6696] By Mr. Hall:

Q. You have indicated previously that you did not find the agreement between the syndicate members themselves. A. Well, when I answered that question I was under the

impression that you were referring to Dimock, Bertron and Barney.

Q. Why did you think I was referring to those individuals?

TRIAL EXAMINER: Take Page 14 of your Exhibit 26 where you said "Pursuant to this understanding Bertron formed the syndicate."

What was the syndicate?

MR. HALL: That was my question, Mr. Examiner.

THE WITNESS: I don't know, other than Bertron, in cooperation with Lee, Higginson, obtained underwriting to about $4,000,000 worth of bonds.

TRIAL EXAMINER: Yes, but what did you understand was the basis of that statement when you made it?

THE WITNESS: I had reference to Item 5 in Exhibit 27.

TRIAL EXAMINER: What in Item 5 tells you that Bertron formed the syndicate?

THE WITNESS: Item 5, and what Hutchinson said in his affidavit, namely, that he took, either he or Dimock, took his water rights to Bertron to assist in financing to raise enough money to construct the project.

[6697] TRIAL EXAMINER: Where is that?

MR. KING: Item 4, Mr. Examiner, Page 5 of Exhibit 27.

TRIAL EXAMINER: Page 5 of Exhibit 27?

THE WITNESS: Yes, sir, Item 4 at the bottom of that page.

TRIAL EXAMINER: All right. Is that all you know about that as far as the syndicate is concerned?

MR. GOLDBERG: Let's get the reference straight here. The difficulty with the references to Exhibit 27 is that there are two sets of numbers on the pages.

THE WITNESS: Three sets on this page.

MR. GOLDBERG: There is a numbering system for Exhibit 27 which runs from "one" straight to the end. I think it would be better if we all used those numbers.

TRIAL EXAMINER: It is Page 5 of those numbers.

Is that all you know about the formation of that syndicate?

THE WITNESS: Well, I know what is stated in Item 5 of Exhibit 27, and I know that the syndicate, headed by Bertron and managed by these three individuals we have discussed, did obtain subscriptions to about $4,000,000 worth of bonds.

TRIAL EXAMINER: Read that, please.

(Witness' statement read.)

TRIAL EXAMINER: Do you know anything about the character of the syndicate itself?

THE WITNESS: No.

TRIAL EXAMINER: Or the composition of the syndicate, who [6698] composed it?

THE WITNESS: No, I don't know anything more about it than is revealed by Exhibit 26 and Exhibit 27, and perhaps some collateral information we have in our files which has been available to the Commission staff. That is all I know about it.

TRIAL EXAMINER: Does that collateral information indicate anything more about the formation of the syndicate?

THE WITNESS: I don't believe it would.

• • •

[6700] Q. Mr. Gunn, you have referred to Charles T. Barney, I believe, as being one of the managers under the agreement which is part 5 of Exhibit 27. Is that right? A. Yes, sir.

Q. Will you identify Mr. Barney for the record? A. Yes, sir. He was President of the Knickerbocker Trust Company of New York.

Q. When did he first become associated in any manner with McCall Ferry Power Company? A. I don't know.

* * *

[6701] Q. You also referred to Mr. C. A. Coffin as a manager under the agreement which is part 5 of Exhibit 27. Will you identify Mr. Coffin? A. Mr. Coffin? I don't think I referred to him.

Q. I am wrong about that. Will you identify Mr. Coffin [6702] for the record? A. Yes, sir. I understand at that time he was President of General Electric Company.

Q. What part did Mr. Coffin play in the original syndicate? A. May I have the question, please?

(Question read.)

THE WITNESS: I don't know what part he played in the Dimock, Bertron and Barney attempt, but either in that attempt or in the one headed by Fisk, Mr. Coffin obtained subscriptions for some bonds, I believe.

By MR. HALL:

Q. When did Mr. Coffin first become associated with the project?

* * *

THE WITNESS: I can't state precisely when Mr. Coffin was first associated with it, but if you will refer to Page 60 of Exhibit 27 near the middle of the page in a letter written by Gardiner M. Lane to Mr. Robert Fleming, in London, England, on the first page of the letter dated March 10 there is the following statement: "Some time ago Mr. Coffin, [6703] President of General Electric Company, brought the McCall Ferry Power to our attention."

By MR. HALL:

Q. According to the statement made by Mr. Lee as shown at the bottom of Page 66 of Exhibit 27, that "some

time ago" would be about 1903, is that correct? A. Yes, sir, that statement would indicate it was about 1903.

Q. At whose request or sponsorship did Mr. Coffin become associated with the McCall Ferry project? A. I don't know.

Q. What was Mr. Coffin's interest in the initial syndicate? A. I don't know.

• • •

[6704] Q. Can you state that it was a fact that Hutchinson secured funds for his project activities from individuals other than Mr. Dimock? A. I can state it no more than what Hutchinson says in his affidavit. I have no personal knowledge of it.

• • •

[6705] Q. Was Mr. Hutchinson able to recall any individuals whom he reimbursed for advancements which had been made to him? A. He recalled his father-in-law, at least.

Q. Other than his father-in-law. A. I don't recall that he did, although he did identify some people to whom he had been obligated for services, and to whom he made payments.

Q. Who were they, Mr. Gunn? A. One was a Thomas Newhall of Philadelphia, to whom I believe he said he gave 1,000 shares of stock.

Q. What had Newhall done? A. I believe Newhall had assisted Hutchinson in his negotiations with Pennsylvania Railroad Company for the relocation of the tracks.

Q. Anything else? A. As I recall it that is all Hutchinson said he had done.

Q. Do you recall he gave you any other names of individuals to whom [6706] he made reimbursements? A. Well, I believe he paid off his counsel who had assisted him, that is Coudert Bros., who were his counsel up until the time Fisk took control and replaced them. I believe he paid them——

Q. That was not reimbursement for advances made to Hutchinson but rather was payment by Hutchinson for services rendered. A. Yes. I thought that was one and the same thing.

• • •

Q. Dimock, of course, was closely associated with Hutchinson in carrying out Hutchinson's proposals in connection with the project? A. Yes, sir.

Q. What part did Mr. Dimock take in the financing arrangements? A. I don't know, other than that Hutchinson, I believe, says that Dimock made the arrangement with Bertron, Storrs & Griscom. I believe he mentions that. Other than that I don't know what part he took.

Q. Will you identify Lee, Higginson and Company for the record? A. They are a financial house, I suppose you would call [6707] them, a bank in Boston.

Q. Was Mr. Coffin instrumental in bringing Lee, Higginson & Company into the financing? A. I don't know, but Lee, Higginson's records show Mr. Coffin called their attention to it. Whether or not that constituted bringing them in I don't know.

Q. Under the initial financing plan by Hutchinson, Dimock, Bertron, which is covered by the document comprising part 5 of Exhibit 27, what disposition was to be made of the common stock? A. One-half of the issue of $4,000,000 par value of common stock was to be given to the bankers, and one-half was to be given to Hutchinson.

Q. What is the basis for that statement, Mr. Gunn? A. Mr. Hutchinson's affidavit.

Q. What connection did Mr. Gardiner M. Lane have with Lee, Higginson & Company? A. He was a partner.

• • •

[6709] Q. • • • Lee, Higginson and Company secured subscriptions to what amount of bonds under the initial syndicate agreement, approximately? A. As I recall it, it

was approximately two million dollars. However, that can be checked.

Q. I believe you stated near the bottom of page 19 of Exhibit 26 that it was approximately $2,500,000.

THE WITNESS: May I have the question, please?

(Question read).

THE WITNESS: Yes, that is correct. My memory was in error when I said two million dollars.

• • •

[6710] Q. Incidentally, Mr. Lane became a director of McCall Ferry Power Company in August of 1905. Isn't that so? A. I believe that is correct.

Q. At the same time he was also selected a member of the executive committee of McCall Ferry. Is that right? A. I think that is also correct.

• • •

[6717] Q. Under the original syndicate plan how much cash was Hutchinson to receive for his holdings? A. $750,000.

Q. Did Hutchinson ultimately receive, under the contract which is part 19 of Exhibit 27, the $750,000 in cash and the common stock of McCall Ferry Power Company as provided for in connection with the initial financing before Harvey Fisk and Sons came into the picture?

THE WITNESS: May I have the question?

(Question read).

THE WITNESS: Yes, it is my understanding that Hutchinson did, that being 18,840 shares of common stock. The odd shares arise out of the fact that some of Hutchinson's stock appears to have been taken to satisfy other land acquisitions, namely, the Harlow and McGaw acquisition, and the Pullen acquisition.

• • •

[6718] By Mr. Hall:

Q. You referred, Mr. Gunn, to Hutchinson receiving 18,840 shares of common stock and not 48,840 shares? A. Yes, sir.

Q. After Harvey Fisk and Sons were brought into the financing arrangement and McCall Ferry Power Company was organized, didn't Hutchinson, in accordance with his contract with Susquehanna Contracting Company, transfer his property holdings to McCall Ferry Power Company? A. Yes, in the transfer they passed through Susquehanna Contracting Company and then to McCall Ferry Power Company.

Q. And those holdings included the lands and rights covered by Hutchinson's option on the York Furnace properties? A. Yes, sir.

Q. Didn't that transaction take place under the contract embraced in part 19, Exhibit 27?

The Witness: May I have the question, please?

(Question read).

The Witness: Yes, sir.

* * *

[6719] By Mr. Hall:

Q. Did Susquehanna Contracting Company and Hutchinson ever enter into an agreement which in any way amended or modified the contract embraced in part 19 of Exhibit 27?

* * *

[6720] The Witness: They entered into another agreement and it seems to me to have amended it.

By Mr. Hall:

Q. Which one is that, Mr. Gunn? A. Agreement shown on page 172 of Exhibit 27.

Q. Do you recall generally what that provides? A. Provides for Hutchinson indemnifying or guaranteeing the

titles of the property he had transferred under the previous exhibit.

Q. This agreement you are now referring to did not modify or amend in any way the consideration to be paid to Hutchinson for his property holdings? A. No, but it could have the effect of causing Hutchinson to spend some more of it in perfecting of the titles of the property he had transferred if the titles were not perfect.

[6721] Q. What consideration was called for in Hutchinson's contract with Susquehanna Contracting Company, which is Part 19 of Exhibit 27? A. There was to be passed to Hutchinson under that agreement 750 thousand dollars in cash, four thousand shares of preferred stock, and 48,840 shares of common stock.

Q. Doesn't the consideration called for in that contract bear out the fact that Hutchinson ultimately received what it was initially planned he would receive?

• • •

THE WITNESS: Yes, I think the agreement bears that out except in this respect: It bears it out that he could receive from that amount substantially the same number of shares of common stock. However, in the intervening transaction [6722] between the first underwriting and the second one the number of common shares had been increased, as I recall it, from 40,000 to 50,000. So in the first instance he was to receive a half of the equity in the company and in the second instance he was to receive two-fifths of the equity in the company.

By MR. HALL:

Q. Now, Mr. Gunn, this contract shows that Hutchinson received 48,840 shares of common stock rather than the 18,840 shares that you referred to a few minutes ago? A. Yes, sir, this agreement shows there passed through Hutchinson's hands 48,840 shares.

TRIAL EXAMINER: Where did you get the 18,840? Are you interpreting?

THE WITNESS: Not exactly interpreting, Mr. Examiner. I was taking Hutchinson's statement that he received for himself 18,840 shares, and I was also considering a very substantial amount of collateral evidence which shows that was a fact.

You will find that statement of Hutchinson's on page 6 of Exhibit 27 near the middle of the page where Hutchinson states that of the 50,000 shares of common stock the bankers were to receive 30,000 shares, which left only 20,000 shares for Hutchinson after 1,000 shares of that had been used to satisfy the purchase from Harlow-McGaw and 150 shares to satisfy the purchase from Pullen.

[6723] By MR. HALL:

Q. Mr. Gunn, so that we might have in one place in the record the distribution of the 50,000 shares, 48,840 shares were delivered to Hutchinson under Part 19 of Exhibit 27. Is that right? A. Yes, sir.

Q. Ten shares were incorporators' shares? A. Yes, sir.

Q. 150 shares were delivered to Pullen? A. Yes.

Q. And 1,000 shares were delivered to Harlow-McGaw? A. That is correct.

Q. Does that add up to 50,000 shares of common stock? A. Yes, sir.

Q. Fifty thousand shares of common stock represented the total issued and outstanding common stock of McCall Ferry Power Company? A. Yes, sir.

Q. If Hutchinson, as you indicated, was not to retain the 48,840 shares of common stock and the 4,000 shares of preferred stock, where is the agreement between the syndicate members which specified the distribution which was to be made of the stock? A. I don't know. I don't know that there ever was such an agreement. I attempted in the original cost study by every [6724] means I knew to find such an agreement, even to the extent of going to the only surviving member of Simpson, Thacher and Bartlett, who

had any connection with Harvey Fisk at the time this transaction took place, and asking his advice, Charles B. Eddy, asking his advice as to how or where I might look for such an agreement. It was his opinion that there may never have been a formal agreement reduced to writing which made that provision but rather that the division of the stock was carried out coincidental with the other transactions and didn't require an agreement.

Q. Then am I right in assuming that the only basis you have for saying that Hutchinson was not to retain all of the 46,840 shares of common stock, and the four thousand shares of preferred stock, is Hutchinson's statement in Part 1 of Exhibit 27?

* * * *

THE WITNESS: No, you are not correct in making that statement.

By MR. HALE:

Q. What is the other evidence you have, Mr. Gunn? A. A very considerable amount of it included in Exhibit [6725] 26, and it consists, for instance, of the evidence revealed by the stock ledgers and stock certificate books of McCall Ferry Power Company, both as regards preferred and common stock, the records of Bertron and Griscom Company where they recorded receipt of it, records of Lee, Higginson and Company where they recorded receipt of some common stock, 5,000 shares to be exact, Fisk's statement that he did receive it, and there is a whole host of evidence that Hutchinson did not keep it all.

Q. Did the evidence you have just referred to disclose the exact distribution of the fifty thousand shares of common stock as well as a distribution of the preferred stock of McCall Ferry Power Company? A. You mean the exact total distribution of it?

Q. That is correct. A. No, it didn't reveal the exact total distribution of it, but it revealed some pretty exact facts concerning the distribution of it. For instance, we

know that the March 1 underwriting agreement provided for a bonus of fifty per cent preferred stock to go with the bonds, that is in combination with the bonds, and that the underwriting agreement of Fisk provided for 45 per cent.

TRIAL EXAMINER: What is the date of that agreement?

THE WITNESS: March 25.

TRIAL EXAMINER: 1905?

[6726] THE WITNESS: Yes, sir.

TRIAL EXAMINER: All right.

THE WITNESS: And we can trace——

TRIAL EXAMINER: What did that agreement provide? 45 per cent of the preferred to go with the bonds?

THE WITNESS: Yes, sir.

* * *

* * * It is possible to trace, I believe, somewhere near 2,000 shares of that 4,000 shares to the original subscribers under the March 1 agreement in satisfaction of their difference between 45 per cent preferred stock and 50 per cent preferred stock given in combination with bonds.

Q. Did the evidence that you have referred to show the circumstances under which the people or firms you referred to came into possession of the common stock and preferred stocks?

THE WITNESS: May I have that question, please?

(Question read.)

THE WITNESS: It seems to me that it did. For instance, [6727] Lee, Higginson received 5,000 shares.

TRIAL EXAMINER: Of what?

THE WITNESS: Common stock, as their compensation for underwriting 2½ million dollars worth of bonds.

Is that the circumstance you refer to?

By Mr. Hall:

Q. What records substantiate what you have just said, Mr. Gunn? A. The fact Lee, Higginson received five thousand shares and the obvious fact Lee, Higginson obtained 2½ million dollars worth of bond subscriptions.

• • •

[6728] Q. Mr. Gunn, was the firm of Harvey Fisk and Sons invited to join the McCall Ferry project financing during the early part of March, 1905? A. As I understand it, they were requested to salvage it after the first attempt to finance it failed. Is that the invitation to which you refer?

Q. Are you saying anything different from what is contained in the bond and stock purchase agreement, Part 10 of Exhibit 27, specifically the paragraph at the top of page 82 where it is stated "Whereas, the bankers have been requested and are willing to aid in financing the said plant to the extent of taking agreement from the subscribers for the purchase of bonds and preferred stock of the power company, of acquiring the bonds and stocks for delivery under such purchase, and of making or procuring the loans herein mentioned;——?

• • •

[6729] The Witness: No.

By Mr. Hall:

Q. Under the original syndicate what amount of bonds, referring now to par value, did the initial syndicate secure subscriptions for? A. Approximately $4,000,000 par value bonds.

Q. Did Harvey Fisk and Sons come into the financing as bankers under the agreement which is Part 10 of Exhibit 27? A. Yes, sir.

Q. When the Fisk firm came into the financing who were the five largest interests in the McCall Ferry enterprise?

• • •

THE WITNESS: Mr. Hall, how do you want interest measured? In terms of bond subscriptions or what?

By MR. HALL:

Q. For the purpose of my question will you measure it in terms of common stockholders, or proposed holders? A. Read the question, please?

Q. Let me add to that question.

Who became the five largest interests in the McCall Ferry enterprise after its organization, that is the organization of McCall Ferry?

* * *

[6730] THE WITNESS: It is impossible to tell until the date on which the common stock was distributed and when the common stock was distributed——

By MR. HALL:

Q. What is the date you refer to, Mr. Gunn? A. I think it was about the middle of June, 1905. The distribution of common stock which resulted was the (sic) [to] Hutchinson, and whoever he may have given it to in his group, who had 18,840 shares. Harvey Fisk and Son had 17,537½ shares.

Bertron, Storrs and Griscom had 7,462½ shares.

Lee, Higginson had 5,000 shares.

Harlow-McGaw had 1,000 shares. Those were the five [6731] largest holders.

I didn't quite read that correctly. In addition to the amounts I read for Hutchinson there should be added four shares which were of the original qualifying ten shares, and of the amount stated for Harvey Fisk and Son should be added six shares, which were six of the original qualifying shares.

Q. What is the distribution based upon, that is what you just read? A. I read it from Exhibit 26.

Q. What is the basis for that distribution contained on Page 51 of Exhibit 26? A. Various bases for it. The stock certificates, the agreement with Harlow and McGaw

to deliver them 1,000 shares, the records of Lee, Higginson which show they received 5,000 shares, the records of Bertron, Griscom and Company which show they received 7,462-and-a-half shares, the stock certificate book which shows that two certificates were issued, one for 18,840 shares and one for 30,000 shares, the statement of Hutchinson that he received the certificate which called for 18,840 shares, and the statement of Harvey Fisk and Son that he received 17,537½ shares.

Q. To whom was the certificate for the 30,000 shares issued? A. To the Susquehanna Contracting Company.

Q. When did they receive the stock? [6732] A. About the middle of June.

Q. 1905? A. Yes, 1905, when the whole group of transactions which made the property transfers take place.

Q. When did they distribute those shares you referred to? Speaking now of Susquehanna Contracting Company, referring to the 30,000 shares. A. May I have the question?

(Question read.)

THE WITNESS: The only thing that I have in the shape of a record to indicate the date on which that took place are the records of Bertron, Griscom and Company which show that they received 12,462½ shares on November 21, 1906. That amount of shares represented their 7,462½ shares plus the 5,000 shares which were conveyed by them to Lee, Higginson.

By MR. HALL:

Q. How do you know that, Mr. Gunn, that is about the transfer to Lee, Higginson? A. Lee, Higginson's records show that they received it, and Bertron's records also show that they transferred it to Lee, Higginson.

* * *

[6733] By MR. HALL:

Q. Mr. Gunn, where does Fisk make the definite statement that Harvey Fisk and Sons received 17,543½ shares

of common stock? A. The statement which Mr. Fisk made occurs on Page 79 of Exhibit 27 under paragraph number 10 on that page.

Q. Where in that paragraph number 10 does he say that the Fisk firm received 17,543 shares of common stock, definitely received that? A. The paragraph states as follows, though not in exact shares: "Stock only; common stock, in my opinion at least as much as the 12,000-odd shares that went to Bertron, Storrs & Griscom and probably the difference between that amount and the 30,000 shares represented by one of the two largest [6734] certificates issued; also apparently the 1,800-odd shares of preferred stock that went to my firm."

Q. When Mr. Fisk referred to 12,000 odd shares was he referring to Bertron, Storrs and Griscom compensation? A. Yes, he was referring to Bertron, Storrs and Griscom's receipt of 12,462½ shares on behalf of Bertron, Storrs and Griscom and Lee, Higginson.

Q. How do you get that out of this paragraph, Mr. Gunn?

MR. KING: I object to the question. The paragraph speaks for itself.

TRIAL EXAMINER: I will sustain the objection.

MR. HALL: Mr. Examiner, the——

TRIAL EXAMINER: You can ask him where he gets it. It is apparent from the paragraph the figure is not there.

By MR. HALL:

Q. Mr. Fisk uses the words "in my opinion—apparently." What he says here is all guess work, isn't it? A. You can't characterize it as guesswork. When Mr. Fisk made this statement he had before him all of the information that we had in our possession which had a bearing on the stock distribution. I don't see why it should be characterized as guesswork on his part.

Q. None of that information told you definitely that Harvey Fisk and Sons received 17,543 shares of stock. Is that right?

[6735] MR. KING: You mean tells Mr. Gunn definitely or Mr. Fisk?

THE WITNESS: I think it very well may have told him by deduction without very much difficulty.

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[6736] Q. Were there any files of Harvey Fisk and Sons available at the time you contacted Mr. Fisk? A. No, sir, we never were able to find any of them.

Q. Then what Mr. Fisk says is based upon information you furnished him, but not obtained from files of Harvey Fisk and Sons? A. Yes, plus Mr. Fisk's recollection.

• • •

[6739] By MR. HALL:

Q. Part 10 of Exhibit 27 shows the arrangement between Fisk and the subscribers to that agreement. Is that right? A. Yes, sir.

Q. It does not show the arrangement between the syndicate members themselves? A. No.

Q. Do you have a copy of the agreement entered into between the syndicate members themselves? A. No.

Q. Have you ever seen a copy of any such agreement? A. No, sir, I have not.

[6740] Q. There is no reference in the agreement of March 25, 1905, to the distribution of common stock. Is that right? I mean the distribution to be made of the common stock.

THE WITNESS: May I have the question, please?

(Question read.)

THE WITNESS: Yes, there is a reference on page 81 of Exhibit 27 to the purpose for which all of the securities of McCall Ferry Power Company will be used. That reference is in the last paragraph on page 81.

By MR. HALL:

Q. That reference does not disclose the distribution to be made of the common stock. Right? A. By "distribution," I take it you mean the number of shares that will go to various individuals or firms?

Q. Yes. A. No, it does not disclose that.

Q. Among other things, this reference that you have just referred to provides that the common stock was to be issued among other things for "all profits in connection with bringing together and turning in of said properties"? A. Yes, and for compensation for financial assistance.

Q. There is likewise no reference in the March 25, 1905, agreement to the 4,000 shares of preferred stock issued to Hutchinson pursuant to his contract which is part 19 of Exhibit 27. Isn't that so? [6741] A. No, there is no mention except indirectly. The terms of the March 25 agreement under which the bonds were to be issued called for a one thousand dollar bond together with preferred stock of a par value of $450, which is the 45 per cent stock combination that we have spoken of.

Now, it was out of that change in the amount of stock to be issued with the bonds between the March 1 agreement and March 25 agreement which brought a part of the four thousand shares into the agreement with Hutchinson, as I understand it, it being necessary to make up the difference to the subscribers under the March 1 agreement in order for Fisk to hold those subscribers.

* * *

[6746] Q. Did the subscribers to the initial agreement, part 5 of Exhibit 27, become subscribers to the March 25, 1905, agreement or did Lee, Higginson and Company subscribe to the March 25, 1905, agreement on behalf of the subscribers to the initial agreement? A. It is my understanding that the initial subscribers under the March 1 agreement became subscribers under the March 25 agreement and Lee, Higginson was also required to endorse

their subscriptions. At least that is my understanding of it.

Q. You had two subscriptions covering the same amount of bonds. Is that what you are saying? A. Well, it is a subscription and an endorsement.

Q. What did the endorsement mean? A. As I understand it it was a guarantee of Lee, Higginson as a firm to be used in connection with the loans from Knickerbocker Trust Company in case the actual subscribers themselves didn't pay up.

Q. What is the basis for your understanding in that connection? A. May I have the question, please?

(Question read.)

THE WITNESS: The basis for my understanding of that is [6747] information that I obtained from the Irving Trust Company, who were successors to Knickerbocker Trust Company after the failure, that being data which Irving Trust Company had prepared in connection with final settlement with the deferred subscribers. I don't remember the details of that and if you wish details on it it will be necessary for me to look it up.

* * *

By MR. HALL:

Q. Had you finished your last statement, Mr. Gunn? A. May I have it read, please?

(Statement of witness read.)

THE WITNESS: Yes, sir, I had finished.

By MR. HALL:

Q. When did the final settlement to which you refer occur? A. I believe it was in 1908.

Q. What was the occasion for the settlement, Mr. Gunn? A. The occasion for the settlement was when the loan fell due on November 2, 1908.

Q. Let us fix that just a little more definitely, Mr. Gunn. Part of the bonds were non-deferred subscriptions

and part were deferred subscriptions? A. Yes, sir.

[6748] Q. And the Knickerbocker Trust Company loaned construction funds to McCall Ferry with the deferred subscriptions as collateral for the loan? A. That is correct.

Q. Is it in connection with settling the loan agreement that the final settlement you refer to occurred? A. Yes, sir, the loan agreement for which the deferred subscriptions were collateral.

Q. What type of information did the Irving Trust Company have in connection with the final settlement which showed an obligation on the part of Lee, Higginson and Company? A. The large tabulation of the bond subscribers which showed a certain group of bond subscribers, and, as I recall it, had written along by the side of it a notation to the effect that certain of the bond subscriptions were to be guaranteed by Lee, Higginson and Company.

Q. In other words, Mr. Gunn, there was an individual list of subscribers with a marginal notation to the effect you mentioned? A. Yes, as I recall it that is what it consisted of.

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[6750] By Mr. Hall:

Q. Did they do that to the extent of the subscriptions obtained under the March 1, 1905, agreement? A. That is my understanding.

Q. That was two and a half million dollars? A. Yes, about that amount.

Q. Did the other members to the March 1, 1905, agreement obtain bond subscriptions? A. Yes, there were additional bond subscriptions obtained.

Q. In approximately what amount? A. Well, the difference between about two and a half million and four million, I think.

Q. In other words, the other members obtained a million and a half and Lee, Higginson two and a half million, making a total of four million under the initial agreement? A. That is approximately the full amount.

Q. When I refer to the initial agreement I am referring to the March 1, 1905, agreement. A. That is what I understood you to be referring to.

Q. The original undertaking by its terms was not to become operative until subscriptions to six million principal amount of bonds had been obtained. Is that right? A. You are again referring to March 1?

Q. Correct. [6751] A. That is correct.

Q. The six million goal was never reached? A. That is my understanding of it.

Q. When it became evident that the original syndicate members were not going to be able to complete the financing did they invite Harvey Fisk and Sons to come into the financing picture? A. That is my understanding.

Q. And Harvey Fisk and Sons became bankers under the agreement which is incorporated as part 10 of Exhibit 27. Right? A. Yes, sir.

Q. Were the subscriptions already obtained under the March 1, 1905, plan retained under the subsequent plan of March 25, 1905? A. Yes, sir.

Q. Did the March 25, 1905, agreement provide for a 45 per cent bonus of preferred stock with the bonds? A. Yes, sir.

Q. What preferred stock bonus was provided under the commitments which had previously been obtained by Lee, Higginson and Company to its customers under the March 1, 1905, agreement? A. 50 per cent.

Q. Did Lee, Higginson Company customers who became [6752] subscribers to the March 1, 1905, agreement for $2,500,000 principal amount of bonds receive a 50 per cent bonus in preferred stock notwithstanding the fact that the March 25, 1905, agreement provided for only a 45 per cent bonus? A. Yes, that is my understanding.

• • •

[6753] Q. Was part of the 4,000 shares of preferred stock issued to Hutchinson under the contract which is part 19

of Exhibit 27 used to supply the additional 5 per cent to the original subscribers? A. Yes, sir.

* * *

[6756] By Mr. Hall:

Q. You have testified that under the initial financing agreement of March 1, 1905, Lee, Higginson and Company obtained subscriptions to 2½ million dollars principal amount of a total of four million dollars principal amount. Did the subscribers to the other $1,500,000 become subscribers to the agreement of March 25, 1905? A. I don't know. I believe they did, although I do not know as a fact.

Q. Did the subscribers to the $1,500,000 principal [6757] amount of bonds receive a 45 per cent stock bonus with bonds or a fifty per cent preferred stock bonus?

The Witness: May I have the question, please?

(Question read.)

The Witness: The records in the possession of the company indicate that 2,125 shares of preferred stock were used to supply five per cent bonus on bonds. That would indicate that a bonus was paid on slightly more than four million dollars of bonds, and it would also indicate to me that a bonus was paid on that many because of retaining subscribers other than those that Lee, Higginson had obtained.

By Mr. Hall:

Q. That would also indicate, wouldn't it, that the total subscriptions under the initial agreement of March 1, 1905, totaled $4,250,000 principal amount of bonds. Is that right? A. Yes, sir.

Q. Did they actually sell $4,250,000 principal amount of bonds under the initial agreement, procure subscriptions for the purchase of bonds in the amount of $4,250,000 principal amount? A. I don't know, but that figure would indicate that they obtained subscriptions for that amount.

Q. Well, how did you arrive at the figure of 2,125 shares of preferred stock shown in the tabulation on page 51, Exhibit 26? [6758] A. From various items of correspondence and from the stock certificate book.

Q. Did any of those documents state that 2,125 shares of stock were given to the subscribers to the original agreement as an additional 5 per cent bonus? A. I don't remember any single document which said 2,125 given for that purpose.

Q. How did you arrive at the figure? A. But there were documents which mentioned various other amounts as being given. For instance, the documents I referred to a moment ago, being Item 11 in Exhibit 27, the correspondence between Bertron, Storrs and Griscom, and Lee, Higginson.

Q. That merely indicates that Lee, Higginson and Company received a five per cent bonus only insofar as $2,500,000 principal amount of bonds are concerned. Is that right? A. Yes, sir, it indicates that.

Q. How do you make up the balance of 2,125 shares of preferred stock? A. That information was obtained from the stock certificate book and a distribution of that number of shares shown in the stock certificate book.

Q. Did the stock certificate book show the purpose for which the stock was issued? [6759] A. It shows the list of people to whom it went, and they were subscribers.

Q. But it doesn't show they got the preferred stock because it represented the additional five per cent bonus? A. Yes, I believe there is a list in there which pretty clearly shows that in the stock certificate book.

Q. Mr. Gunn, will you refer to page 191 of Exhibit 27? A. Yes, sir.

Q. Also the page number 186, last paragraph? A. Yes.

Q. According to pages 186 and 191 the stock books of Bertron, Storrs and Griscom show a recording of a total of 2,235 shares. Is that right? I refer to preferred stock. A. Let me check that.

Q. Yes. A. Yes, sir.

Q. And they show that a total of 2,075 were charged out? A. Yes, sir.

Q. Leaving 160 shares on the book? A. Yes.

Q. Who got the 160 shares? A. I don't know. As I recall it, however, Bertron kept it.

Q. Did Bertron, Storrs and Griscom sell any securities under the initial financing agreement? [6760] A. I believe they did.

Q. Can you state that to be a fact? A. Not without verifying it.

Q. Would you do that, and also determine what disposition was made of the 160 shares? A. I think I can determine what disposition was made of the 160 shares now.

Q. All right. A. I believe I will have to check that. This photostatic copy I have is so dim I can't read it.

Q. If you will, Mr. Gunn? A. Yes, sir.

THE WITNESS: May I have the last question, please?

(Question read.)

THE WITNESS: I state the disposition of 160 shares remained in the hands of Bertron, Storrs and Griscom and was written off of their books as having no value on December 22, 1908.

Q. But you are not in a position to say that the 160 shares of preferred stock represents bonus due Bertron, Storrs and Griscom for the sale of bonds under the initial agreement. Is that correct? A. No, I couldn't say that at the moment without checking further.

* * *

[6767] Q. Mr. Gunn, this morning we were discussing the consideration received by Hutchinson under the contract which is part 19 of Exhibit 27. Is it your contention that the purpose of the agreement of June 13, 1905, between Susquehanna Contracting Company and Hutchinson was to arrange for the distribution of the 48,840 shares of Mc-

Call Ferry common and 4,000 shares of its preferred stock among the syndicate participants? A. Will you read that question, please?

(Question read.)

THE WITNESS: You mean June 14, don't you?

By MR. HALL:

Q. Yes. A. It is my understanding that the 30,000 shares which went to the syndicate participants were included in the 48,840 shares which passed under the agreement to which you refer from the Susquehanna Contracting Company to Hutchinson.

Q. Was that block of stock included for the purpose of [6768] distributing it to the other syndicate members who ultimately received it?

* * *

THE WITNESS: The stock which was ultimately distributed to the syndicate members is included under the agreement which is Exhibit 19 and it was ultimately distributed to the syndicate members.

[6769] Now, why it was put in that particular instrument I do not know.

By MR. HALL:

Q. In other words, what you are saying is that the contract embraced in part 19 of Exhibit 27 constituted the vehicle for distributing 30,000 shares to the Fisk firm, Lee, Higginson and Company and the other members of the syndicate who received it? A. It seems to me it did.

* * *

[6770] Q. How did you determine, Mr. Gunn, the total amount of common stock which you say was transferred by Hutchinson to other syndicate members?

THE WITNESS: Determined from the stock certificate books, plus all the other bits of evidence that are included in Exhibit 26 and Exhibit 27.

By Mr. Hall:

Q. Are you saying that the stock certificate books show the distribution of a total of 48,840 shares? A. No, the stock certificate books as I recall it show two certificates—one for 18,840 and one for 30,000 shares.

Then, as we discussed it this morning we explained the various places where the total of the shares might have gone, and we found that Hutchinson says he received 18,840. That leaves 30,000 shares. We discovered that Bertron, Storrs & Griscom got 7,462½ shares, Lee, Higginson got 5,000 shares, and this afternoon we have discussed how and where the 4,000 shares went.

* * *

[6771] By Mr. Hall:

Q. You referred to two stock certificates, one for 18,840 shares and the other for 30,000 shares. Those two certificates, I believe, were issued to Susquehanna Contracting Company? A. Yes, as I understand it.

[6772] Q. Was the thirty thousand shares ever broken down? A. In the McCall Ferry Company stock certificate book?

Q. That is right. A. No, I don't think it was. The breakdown that would have been made of that would have been in the form of voting trust certificates issued by Harvey Fisk and Sons.

Q. Did you have the voting trust certificates? A. No, sir, we never had those.

Q. How did you break it down? A. The way I have described it, by finding out who wound up with it in their possession.

* * *

[6773] By Mr. Hall:

Q. In other words, you never have found an answer to why Part 19 of Exhibit 27 refers to the consideration received under that contract as land cost whereas it in fact, according to you, included stock for distribution in part to

the syndicate members other than Hutchinson. A. No, I never particularly tried. I may have been curious about it. It didn't seem to me to be very important.

Q. Didn't you think that that fact had a bearing on the cash value of the stock?

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[6774] THE WITNESS: It doesn't seem to me that what was or wasn't stated in the agreement, which is Item 19 in Exhibit 27, has any relationship at all to the valuation of the stock.

The only facts which have any relation to the valuation of the stock are a knowledge of those things for which those securities were ultimately used. And, as a matter of fact, we know that the consideration that passed in that agreement went for other things besides land. As a matter of fact, Hutchinson says it went to compensate him for several years of his effort where he advanced money which he used to [6775] hire engineers, hire lawyers, make surveys and lots of things of that nature.

By MR. HALL:

Q. The last part of your statement refers to the 18,840 shares retained by Hutchinson and not the 30,000 shares distributed to the other syndicate members? A. That is right, yes.

Q. Mr. Gunn, how much common and preferred stock did C. A. Coffin receive for his activities in connection with the Holtwood financing? A. He received 775 shares of preferred stock through Bertron, Griscom and Company.

Q. For what purpose? A. As five per cent of the amount of preferred stock that was to go with bonds subscribed to by himself and by people whose subscriptions he obtained.

Q. You mean he obtained subscriptions under the initial financing agreement which provided for a fifty per cent stock bonus? A. That is my understanding.

Q. And the 775 shares was the difference between fifty per cent and 45 per cent received under the second undertaking as to which the Fisk firm was banker? A. That is my understanding.

Q. How do you know that Coffin, Dimock and other [6776] syndicate members did not share in the stock which you have assigned to Harvey Fisk and Sons?

MR. KING: May we have the question?

(Question read.)

TRIAL EXAMINER: Is this preferred or common?

MR. HALL: To answer your question, Mr. Examiner, Harvey Fisk and Sons, according to Mr. Gunn, received both preferred and common stock. I had in mind how does he know that the individuals I named did not receive part of the preferred and common stock which he has assigned to Harvey Fisk and Sons.

THE WITNESS: I believe the principal evidence of that upon which I came to that conclusion for myself was Fisk's statement and Hutchinson's statement.

By MR. HALL:

Q. Isn't it a fact that you first determined the amount of stock which went to the syndicate members other than Harvey Fisk and Sons? A. That is one of the facts I determined.

Q. And didn't you assume that Harvey Fisk and Sons got all the stock which did not go to the other syndicate members? A. No, I don't think you can say that.

Q. Didn't you do that? A. No, sir. As I said before, I got together this [6777] information and gave it to Mr. Fisk and he's the man who drew that conclusion.

Q. At no place in this affidavit does he say, for instance, that Harvey Fisk and Sons received 17,000-plus shares of common stock. Isn't that so? A. We went over that this morning. The Fisk statement says what it says.

[6778] Q. He doesn't say his firm received 17,000-plus shares of common stock.

• • •

THE WITNESS: No, he expresses the opinion they probably did.

By MR. HALL:

Q. Then how did you arrive at the conclusion that they did receive 17,000-plus shares of common stock? A. On the basis of Fisk's opinion.

Q. Does Fisk anywhere in his affidavit, which is Part 9 [6779] of Exhibit 27, mention 17,000 shares of preferred stock in his answers to your questions? A. You mean common stock, don't you?

Q. Yes, common stock. A. Suppose I read what Fisk says? That is all there is to it.

Q. No, just answer my question, Mr. Gunn. A. Yes, he mentions he probably got 17,000 odd shares.

Q. Where is the figure 17,000 shown on Page 79 of Exhibit 27? A. It is the difference between 12,000 shares and 30,000 shares that Fisk talks about there.

Q. In other words, he gives you a minimum and maximum limitation? A. No, he says he probably received the difference between 12,000 and 30,000.

Q. Does "probably receive" mean to you that he actually received 17,000 shares of common? A. It means it is the only information I have on the subject.

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[6781] MR. KING: If your Honor please, I would like the record to show Messrs. Wetzel, Bortner, Eichhorn and Chase are in the room and available for cross-examination. They have been available since Tuesday and will continue to be during the duration of the cross-examination.

MR. GOLDBERG: Will someone explain to counsel for the Staff how a witness who never has taken the stand

is available for cross-examination, and, if so, on what subjects?

MR. KING: I would be delighted.

If your Honor please, in connection with the preparation of the original cost filing and reclassification, and in connection with the original cost testimony in this case in connection with Exhibits 25, 26 and 27, Mr. Eichhorn, Jr., who is a secretary and assistant treasurer of the company, assisted Mr. Gunn in connection with all accounting matters involved in those exhibits and in the reclassification.

Mr. Bortner, who is the right of way engineer and assistant secretary of the company, assisted Mr. Gunn on all matters relating to real estate.

I might say that subsequent to 1910, Mr. Gunn accepted Mr. Bortner's conclusion in connection with land matters.

Mr. Chase, who is civil engineer assigned to special studies, assisted Mr. Gunn in the determination of the date [6782] of beginning of commercial operation, in producing details in connection with the construction period, and on other problems involving engineering and technical decisions.

Mr. Wetzel, who is the budget engineer, assisted Mr. Gunn in connection with inventorying the property, compiling cost analysis, and reconciling those analyses with the inventory and similar matters.

Now, I might say that back at page 44 of the record Mr. Goldberg, for the first time, made the statement that with respect to the company's investment rate base it was the Staff's position that the gross investment for the rate base is, in round figures, $32,920,738.

He further stated that in round numbers this is $5,663,494 less than the company's book figure.

He then said, "The Staff proposes the elimination of the $5,663,494 because the Staff contends that such

amount does not represent actual cost and should be disallowed.

"The Staff's evidence will, of course, develop the details of the elimination and the reasons therefor."

Now, those reasons were not placed in the record until Mr. Goldberg introduced Exhibit 51. We say they are not fully contained in Exhibit 51, but certainly prior to the time of filing Exhibit 51 the reasons for recommending the elimination of these various items were not known to the respondent.

[6783] Now, under those circumstances there was nothing which respondent could do except to proceed in its direct case to put in Exhibits 25, 26 and 27, because they had no knowledge of the Staff's position in connection with these various items.

The Company proceeded and put in the exhibits which I have mentioned. Then, subsequently, Exhibit 51 was placed in the record during the Staff's case in chief. Since that exhibit has been placed in the record we, of course, have attempted to study it and prepare to put in on rebuttal, and we submit it is proper rebuttal, our position in connection with the items recommended for elimination in Exhibit 51.

We now, therefore, offer the four witnesses to whom I have referred in connection with Mr. Gunn's cross-examination in regard to Exhibits 25, 26 and 27 simply because they assisted Mr. Gunn in connection with the preparation of those exhibits and have the details of the exhibits in mind as well as they can.

Mr. Goldberg has asked Mr. Gunn a number of questions.

MR. GOLDBERG: Mr. Hall has asked.

MR. KING: Mr. Hall has asked Mr. Gunn a number of questions which involved in some instances conferences between Mr. Gunn and the gentlemen who assisted him. That is one reason why I offer them for cross.

I think Mr. Goldberg has a perfect right to examine anyone [6784] with whom Mr. Gunn confers openly on the stand.

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MR. GOLDBERG: I thought I could safely make that statement.

We have just been advised by counsel for the Respondents that there are four individuals in this hearing room who have assisted Mr. Gunn in the preparation of the original cost studies reflected in Exhibits 25, 26 and 27. The individuals referred to by Mr. King are as he indicated, Messrs. Eichhorn, Bortner, Chase and Wetzel.

There seems to be a confusion of ideas in Mr. King's statements. At one point we are told that they are available for rebuttal. At another point we are told they are available for cross-examination in connection with Exhibits 25, 26 and 27, and at another point we seem to be told they are available in combination with respect to support for Exhibits 25, 26 and 27, and in support of the inclusion in those exhibits certain exclusions proposed by Exhibit 51.

TRIAL EXAMINER: I don't think we need get into any discussion on that point.

[6785] MR. GOLDBERG: I am not going to get into any detailed discussion because I can probably go on for a long time if I did.

TRIAL EXAMINER: If you want to avail yourself of the offer of the Respondents' counsel you can. If you don't you don't have to so far as the Examiner is concerned.

MR. GOLDBERG: I am certainly delighted to have the Examiner state counsel for the Staff doesn't have to avail himself of the offer, because that statement means this:

Mr. Gunn, like other individuals, had assistance. Now, Mr. Gunn, despite that assistance, was the individual who was offered in this hearing as taking the ultimate responsibility for what he did.

Now, then, if Mr. Gunn is not in a position to take that ultimate responsibility, and we must turn to Messrs. Eichhorn, Bortner, Chase and Wetzel for the support in Exhibits 25, 26 and 27, then I say now, as I said the other day, that there has not been a proper foundation laid for the direct testimony of Mr. Gunn with respect to Exhibits 25, 26 and 27, and his testimony, if we are to avail ourselves of Messrs. Eichhorn, Bortner, Chase and Wetzel, must be stricken in its entirety, and the duty is incumbent upon the company to place——

TRIAL EXAMINER: This is no time for discussion of a motion to strike because counsel has gotten up and Respondents' [6786] counsel has stated Mr. Gunn had certain assistance.

Proceed with the examination of the witness.

MR. GOLDBERG: I think, Mr. Examiner, I am entitled to state on the record——

TRIAL EXAMINER: There is nothing at this point the Examiner wants to hear any discussion about.

* * *

[6789] By MR. HALL:

Q. Mr. Gunn, you indicated in your testimony yesterday afternoon that C. A. Coffin received 775 shares of preferred stock in connection with the sale of bonds. Did Mr. Coffin receive any of the 50,000 shares of common stock of McCall [6790] Ferry Power Company? A. Not so far as I know.

Q. Can you state it to be a fact that Mr. Coffin did not receive any part of the 50,000 shares of outstanding common stock of McCall Ferry Power Company? A. I

couldn't state that as a fact because he might have received some of Hutchinson's allotment of stock. I don't know.

Q. There is also a possibility, is there not, that he might have received part of the shares of stock that you have assigned to Harvey Fisk and Sons? A. Not in my opinion. I believe that went to Fisk, Bertron and Lee, Higginson.

Q. Isn't it possible that Mr. Coffin shared in the distribution of common stock to Lee, Higginson and Company as well as Bertron, Storrs & Griscom? A. I don't think it is. Bertron's records, at least, show he kept his common stock. I also believe Lee, Higginson's records show the same thing as regards their 5,000 shares.

Q. What definite piece of evidence can you point to which will conclusively rule out the possibility that C. A. Coffin did not receive a portion of the stock distributed to one or all of the three firms, Harvey Fisk and Sons, Lee, Higginson and Company, and Bertron, Storrs & Griscom?

* * *

[6791] THE WITNESS: As regards Bertron, Storrs and Griscom, the evidence on which I based my opinion, the principal evidence, respecting where the stock went is contained in Part 22 of Exhibit 27, and is the fact that the stock that Bertron had he retained until the McCall Ferry Power Company was reorganized.

By MR. HALL:

Q. How much common stock did Bertron, Storrs & Griscom have recorded on their books? A. 7,462½ shares.

Q. Referring to Page 191 of Exhibit 27, it seems an entry was made on December 28, 1908 with a note to charge out. What does that mean? A. I assume that at that date they realized it had no value and they wrote it off.

Q. That is just an assumption on your part? A. It seems to me to be a pretty good assumption because [6792] they put a zero after value of it.

Q. It could have been a distribution, couldn't it? A. Not at that date. I don't think anybody would have wanted it. The stock already had lost its value at that time obviously.

Q. You still have not given me an answer to my over-all question, Mr. Gunn. You have referred to the over-all shares Bertron, Storrs and Griscom entered on their books. But that doesn't answer my question as tc the evidence you can point to which will conclusively rule out the possibility that C. A. Coffin did not receive some portion of the common stock of McCall Ferry Power Company. A. You mean which Bertron had? Are you speaking now of this 7,642½ shares?

Q. That, and in addition I also have reference to the stock you have assigned to Harvey Fisk and Sons and Lee, Higginson and Company. A. Well, the evidence I have called your attention to is the evidence on which I relied in the case of Bertron, Storrs & Griscom. It is my understanding, it is my recollection, and we may have some evidence in the files on it although I am not sure, that the same situation existed with respect to Lee, Higginson, namely, that they kept their 5,000 shares themselves and distributed none of it.

Now, as regards Fisk, as I said, we never found Fisk's [6793] records.

Q. You mean that as Mr. Fisk states in his affidavit all of the Harvey Fisk and Sons' records were destroyed by fire? A. Yes, destroyed somehow as a result of his going out of the banking business. We never found his records and therefore the evidence, the only evidence I have, is the statement of Fisk plus the fact that Hutchinson says Fisk took over and dominated the proposition, and the statement of Fisk that he did take over and dominate it and that in his opinion he received the difference between the 30,000 shares certificate and the amount which went to Bertron, Storrs & Griscom for Bertron, Storrs & Griscom's own services and for the services of Lee, Higginson.

Q. Did Mr. Fisk, at the time of your conference with him, remember the number of shares of stock that were delivered to Bertron, Storrs & Griscom? Did you have to refresh Mr. Fisk's recollection by showing him some documents which were in the company's files? A. I think I probably showed him documents in the company's files. I didn't do it personally, but I supplied to Mr. Fisk's attorney, Mr. Cole, all of the information we had, that I had in my possession, from the company's files and other sources which had a bearing on Mr. Fisk's connection with the McCall Ferry enterprise.

[6794] Q. But Mr. Fisk had no independent recollection of the distribution of the common stock of McCall Ferry Power Company? A. That I can't say. I wasn't present when Mr. Cole discussed it with him.

Q. At least Mr. Fisk's statement shows that he did not contribute anything more than was already reflected in the documents in your possession? A. Oh, yes, he contributed a great deal more——

Q. I am speaking now only with respect to the distribution of the common stock. A. Nothing except his memory and opinion.

* * *

[6795] Q. Did Mr. Lee tell you that their records show that they received the 5,000 shares, received and retained the 5,000 shares of common stock of McCall Ferry Power Company? A. Mr. Lee told me this: That he received it, that it was their total compensation, and that when the company [6796] was reorganized they lost everything they had expected to receive for having obtained the subscriptions to the bonds. Now, from that I took it that he had kept the 5,000 shares of stock.

The correspondence between Bertron, Storrs & Griscom seems to me clearly to show that the 5,000 shares were going to Lee, Higginson for their services, and there is a distinction in the description of it made between the 5,000 shares of common stock and the shares of preferred stock

which were being transmitted to them for the purpose of making up the difference between 45 per cent of preferred stock and 50 per cent in the combination.

I might also say that part 11 of Exhibit 27 also pretty clearly indicates that there couldn't possibly have been any syndicate agreement, or whatever that agreement was we were talking about yesterday, because Lee, Higginson didn't even know how much stock they were going to get and had to write to Bertron and ask him.

It also pretty clearly indicates that Harvey Fisk was completely dominating the picture because Bertron couldn't give Lee, Higginson an answer and had to go to ask Harvey Fisk if they would give him some, which Harvey Fisk agreed to do.

* * *

[6798] By MR. HALL:

Q. Before going further with my present line of cross-examination, Mr. Gunn, do you have any list of common stockholders of McCall Ferry at any dates? A. Nothing more than stock certificate books and I believe a stock ledger or some sort of a record which was kept of it.

Q. But those records would not show you who the common [6799] stockholders were? A. No, I don't think they would.

Q. When do you say that the common stock was distributed to the bankers and the syndicate members? A. I have a little difficulty with that question, Mr. Hall. Are you making a distinction between the so-called bankers and syndicate members, or do you intend to put them both in there?

Q. I have reference to the distribution of the 30,000 shares. A. I see. I can't say precisely when the distribution was made. All I know is the date on which Bertron received their part of the 30,000 shares and the date on which they in turn gave Lee, Higginson their part.

As to when the stock may have gone into the possession of Fisk, I don't know. However, as I recall it the 30,000

shares were issued on a stock certificate to Susquehanna Contracting Company, which I take it had the effect of placing it in Fisk's hands. The stock certificate will show when that was. I think it can be looked up.

• • •

[6800] Q. Getting back now, Mr. Gunn, to my previous question with reference to the 4,000 shares of stock, preferred stock, which passed under the contract which is Part 19 of Exhibit 27, is it your statement that all but 1,875 of the 4,000 shares of preferred stock was used as additional bonus in connection with the sale of bonds? A. No, that is not my statement. I don't know.

Q. You don't know whether it was or not? A. No, I don't know any more than is given in Exhibit 27.

TRIAL EXAMINER: What page?

THE WITNESS: All through this, Mr. Examiner, in various sections.

TRIAL EXAMINER: Very well.

THE WITNESS: One of the things which causes the mystery about it, Mr. Hall, is this: Fisk says he got 1,875 shares, Bertron says he was entitled to 1,875 shares, and it appears that out of Bertron's 1,875 shares, plus, also, the shares to which Bertron was entitled for his firm's own subscription to bonds, that he supplied a certain amount of that to make up the five per cent to which the subscribers under the March 1st agreement were entitled. That is about the limit of my knowledge as to where that part of the preferred stock went.

[6801] By MR. HALL:

Q. Did you determine in your report, Mr. Gunn, that 1,875 shares of preferred stock were issued to Harvey Fisk and Sons for services? A. Yes, that is what Mr. Fisk says.

Q. Mr. Fisk's statement is the only basis you have for that? A. No. I believe we have the stock certificate

showing that. I believe the stock certificate book shows that.

Q. Are you saying that stock certificate book shows that there was issued to Harvey Fisk and Sons 1,875 shares of preferred stock? A. Yes, that is my recollection of what it shows.

Q. Does the stock certificate book indicate why the 1,875 shares of preferred stock were issued to Harvey Fisk and Sons? A. I don't think so. I wouldn't expect it to.

Q. Mr. Gunn, up to the time of the distribution of the common stock by Hutchinson for whom was it held? A. May I have the question, please?

(Question read.)

By Mr. Hall:

Q. I have reference, Mr. Gunn, to the total of 48,840 shares. A. I suppose it was held for the people who were [6802] ultimately to get it.

Q. I show you, Mr. Gunn, a copy of a letter dated January 20, 1906, bearing the initials "PGB/MMB" addressed to Cary T. Hutchinson, Esq., 60 Wall Street, New York City.

Mr. King: May we look at the letter?

Mr. Hall: Yes.

The Witness: May I read it, please?

Mr. Hall: Yes.

By Mr. Hall:

Q. Are you familiar with that letter, Mr. Gunn? A. Yes, sir, I believe I have seen it.

Q. The initials "PGB" stand for Phillip G. Bartlett? A. Yes, sir, I believe they do.

[6803] Mr. Hall: May we have this letter marked for identification as Exhibit No. 158?

Trial Examiner: Yes, the document may be marked.

(The document referred to was marked Exhibit No. 158 for Identification.)

* * *

[6804] By Mr. Hall:

Q. According to Mr. Bartlett's letter, Mr. Gunn,—incidentally, Mr. Bartlett is connected with the firm of Simpson, Thacher and Bartlett—— A. Yes, sir.

Q. —according to Mr. Bartlett's letter the stock, common stock of McCall Ferry Power Company, to the extent of 48,850 shares, was being held by Harvey Fisk and Sons for Mr. Hutchinson. Isn't that so? A. Yes, the letter so states. It is certainly evident Mr. Fisk had the stock in his possession.

The letter also states that Simpson, Thacher and Bartlett had furnished to Harvey Fisk and Sons "the list which you sent us for the distribution of your part of the common stock", which certainly indicates that all of the common stock was not for Hutchinson and that Hutchinson was not making the distribution of all of it.

[6805] Q. It definitely indicates that up until the date of this letter, January 20, 1906, Harvey Fisk and Sons were holding the 48,850 shares of common stock in safekeeping for Mr. Hutchinson? A. Yes, the letter states that.

Q. And the common stock was being held for Hutchinson by reason of the contract of June 14, 1905, between Hutchinson and Susquehanna Contracting Company. Right?

The Witness: May I have the question, please?

(Question read.)

The Witness: I don't know whether or not you could draw that conclusion. The letter says it was being held for Harvey Fisk and Sons.

By Mr. Hall:

Q. For Hutchinson? A. Yes, for Hutchinson, by Harvey Fisk and Sons, and there is a contract of June 14,

1905 between Hutchinson and Susquehanna Contracting Company.

Incidentally, that also indicates to me the Susquehanna Contracting Company and Harvey Fisk and Sons were pretty near one and the same thing.

Q. What indicates that in Exhibit No. 158? A. The fact that Harvey Fisk and Sons had the stock and were holding it, but the contract was between Hutchinson and Susquehanna Contracting Company.

[6806] Q. If they were holding it for Mr. Hutchinson pursuant to the contract which is Part 19 of Exhibit 27, what is there about that which indicates an identity between Susquehanna Contracting Company and Harvey Fisk and Sons? A. The fact that Harvey Fisk and Sons had the stock.

Q. Would you say the same thing if Hutchinson had been holding the stock, that is that there was an identity of interest between Hutchinson and Susquehanna Contracting Company? A. Well, I wouldn't necessarily say that.

Q. Why not? A. For this reason: The fact that we have just mentioned is only one of a large number of facts that indicates the identity between Susquehanna Contracting Company and Fisk, and there are no facts whatsoever that indicate any identity between Hutchinson and Susquehanna Contracting Company.

Mr. King: May we have Mr. Hall's question read back? I think he inadvertently referred to identity between Hutchinson and Company when he meant——

Mr. Hall: No, no.

Mr. King: You meant Hutchinson?

Mr. Hall: Yes.

By Mr. Hall:

Q. In reaching your conclusion as to identity of interest between Harvey Fisk and Sons and Susquehanna Contracting [6807] Company, had you relied in part upon the

letter which had been marked as Exhibit No. 158? A. That was unquestionably one of the facts. They were many, many facts, however, not the least of which was the fact that Susquehanna Contracting Company was run from Simpson, Thacher and Bartlett's office, and they were Fisk's attorneys.

Q. The Susquehanna— A. I don't know just what you mean by identity of interests, but I take it that you mean was substantially controlled by Hutchinson. If that is what you mean then my answer is correct.

MR. GOLDBERG: Did you mean "Hutchinson" in your last answer?

THE WITNESS: No, I meant Fisk, Harvey Fisk and Sons.

By MR. HALL:

Q. What do you mean by substantially controlled, Mr. Gunn? A. Just that. In other words, that the actions of Susquehanna Contracting Company would be subject to Fisk's dictation.

* * *

[6808] By MR. HALL:

Q. Mr. Gunn, the Susquehanna Contracting Company contract which we have been discussing, Part 19 of Exhibit 27, called not only for the 48,840 shares of common stock to [6809] be delivered to Hutchinson but also for the delivery of 4,000 shares of preferred stock and 750 thousand dollars in cash. Is that right? A. Yes, sir.

Q. Isn't it clear from Exhibit No. 158 that if there was a distribution of the common stock it occurred subsequent to January 20, 1906? A. Yes, I believe Exhibit 158 indicates that, at least.

Q. I notice that the letter, Exhibit 158, refers to 48,850 shares, making ten shares difference.

Now, the ten shares represents the incorporators' shares. Is that right? A. I would assume that it does, although I don't know, of course.

Q. And according to Exhibit 158 the incorporators' shares were delivered to Hutchinson, or were being held for Hutchinson? A. No. Well, Exhibit 158 is a little ambiguous on that point. The first paragraph indicates to me that Hutchinson had previous to this letter sent to Simpson, Thacher and Bartlett, and they had in turn delivered to Harvey Fisk and Sons, a list of people to whom he was going to distribute his share only of the 48,850 shares, and the second paragraph of the letter says that the whole 48,850 shares was being held for Hutchinson, so it seems to me that [6810] the Exhibit 158 is clearly ambiguous on the face of it.

Q. I don't have as much difficulty with that letter as you seem to have, Mr. Gunn.

Was the entire 48,850 shares of common stock placed in a voting trust? A. It was supposed to be, and I assume it was.

Q. Do you know it to be a fact that it was? A. No, I never did find the voting trust records.

Q. In other words, you don't know how many shares of stock were actually placed in the voting trust? A. No, I assume they all were, but I don't recall I have any positive proof of it for the reason I couldn't find the voting trust records. As a matter of fact, I don't know of any other way they could have distributed the stock, and I don't know of any other reason for writing this letter at this time contemplating a distribution except in the form of voting trust certificates.

Q. Does this letter, Exhibit No. 158, refer to voting trust or voting trust certificates? A. No, but it refers to a distribution of the stock and it was not distributed through McCall Ferry certificates so far as I know, so it must have been distributed through voting trust certificates.

Q. That is purely and simply an assumption on your part? [6811] A. I think it is a lot more than an assumption. It seems to me it is. It seems to me to be more than——

Q. Was there a voting trust created? A. It is my understanding that there was.

Q. What is the date of that voting trust? A. The date of the stock deposit agreement in the voting trust was January 20, 1906.

Q. Is that voting trust agreement Part 20 of Exhibit 27? A. Yes, sir.

Q. I believe you have indicated you do not know what stockholders became parties to the voting trust agreement. A. I assume they all did. I have no reason for supposing they didn't.

Q. Can you state it to be a fact they all did become parties to the voting trust agreement?

THE WITNESS: May I have the question, please?

(Question read.)

THE WITNESS: No, I cannot state it to be a fact from the information I have before me now.

By MR. HALL:

Q. Who were the voting trustees under the voting trust agreement, Mr. Gunn? A. Mr. Henry F. Dimock, Mr. William F. Barnum, and Mr. S. Reading Bertron.

[6812] Q. To whom were the voting trust certificates issued? A. I suppose to the beneficial owners of the stock ultimately.

Q. You do not know who deposited their stock in the first place? A. No.

Q. Accordingly you do not know to whom voting trust certificates were issued. Is that right? A. No.

Q. In other words, you agree with my last statement? A. Yes, I agree with your last statement.

Q. It appears from Bertron, Storrs and Griscom Company Incorporated letter dated May 27, 1938, which is included in part 22 of Exhibit 27, that that firm did not record the receipt of either preferred or common stock until November 21, 1906. Is that right?

THE WITNESS: May I have the question, please?

(Question read.)

THE WITNESS: That is correct. It so appears from that letter.

By MR. HALL:

Q. In other words, the stock was recorded in the books of that firm approximately ten months after the voting trust was created? A. Yes, it so appears.

[6813] Q. Did the other syndicate participants receive their stock on the same date, that is November 21, 1906? A. We haven't discovered yet who the other syndicate participants are. Lee, Higginson received theirs at a somewhat later date. We don't know when Harvey Fisk and Sons received theirs.

Q. Who were the members of the syndicate after Fisk came into the financing picture about the middle of March, 1905, Mr. Gunn? A. Mr. Hall, you have to tell me what "the syndicate" is.

Q. Do you know? A. No. I know who the syndicate managers were.

Q. Is that all you know about who composed the syndicate? A. I think I might know more if you tell me what you mean by "syndicate."

Q. I mean the members who associated themselves together for the purpose of financing the project in connection with Harvey Fisk and Sons' participation. A. Well, Harvey Fisk and Sons were the bankers, and Mr. Fisk says that Bertron, Storrs and Griscom were in joint account with him as a banker, or joint banker, I guess you would call it. Lee, Higginson was acting apparently under Bertron, Storrs and Griscom.

You might call those the syndicate, I believe are the words [6814] you used, or you might call the syndicate anybody that bought any bonds. I don't know what you mean. I really don't know what you mean by syndicate.

Q. Mr. Gunn, will you refer to the bottom of page 21 and the top of page 22 of Exhibit 26? A. Yes, sir.

Q. You there state, "This estimate was based upon Harvey Fisk and Sons acting as syndicate managers and actually selling approximately one-half of the eight million dollars bond issue."

What did you mean when you referred to "syndicate managers"? A. That is taken from Mr. Fisk's statement.

Q. What did Mr. Fisk mean? A. I don't know. I would assume he probably meant—well, I just don't know what he meant and never have known. No use guessing at it.

Q. Did you ever ask Mr. Fisk what he meant by that statement? A. No, sir.

Q. With reference to this matter? A. No, sir. As I told you, the information was secured from Mr. Fisk by Mr. Fisk's counsel at my request. I didn't have an extended discussion with Mr. Fisk except on one occasion.

[6815] Q. Mr. Gunn, what did you refer to at the top of page 21, Exhibit 26, when you said "New syndicate"?

THE WITNESS: May I have the question, please?

(Question read.)

THE WITNESS: That statement was taken verbatim from Part 1 in Exhibit 27 and they are the words Mr. Hutchinson used to describe the Fisk arrangement for the new financing.

By MR. HALL:

Q. What page are you now referring to in Exhibit 27? A. Page 6. I am referring to about the fifth or sixth line down from the top.

Q. Who was, or who were the new syndicate members that Hutchinson referred to? A. I don't know.

Q. Did you ever ask Hutchinson the names of the individuals comprising the new syndicate? A. I don't recall whether or not I did. I think this is probably the reason why I may not have: The work that I had done, which ultimately became Exhibit 26, prior to the time I first saw Hutchinson I had supposed, and I had arrived at that con-

clusion from a study of the documents in Exhibit 27 without the benefit of these people who were involved in it, I had arrived at the conclusion that the financing or the development of McCall Ferry was being done more or less in a cooperative manner by a group of people. However, [6816] the first time I saw Hutchinson he explained to me that that was not the case at all, that under the first attempt to underwrite the agreement that he had understood that he would have control of it, that when that underwriting failed Harvey Fisk and Sons took control from him, and after that he said that Harvey Fisk and Sons ruled the corporation in their own fashion without too much help from him.

Q. What has that to do with who made up the individuals who composed the new syndicate? A. I understood that Harvey Fisk had done the whole thing.

Q. You know that isn't so, though, don't you, Mr. Gunn? A. I know it now to be sure, yes.

Q. In other words, what Mr. Hutchinson was telling you was not exactly in accord with the facts? A. Oh, yes it was. What Mr. Hutchinson told me was that Fisk took control of the enterprise from him, and it certainly to me is obvious that Fisk did.

Q. Who are the members of the new syndicate referred to by Mr. Hutchinson? A. I don't know.

Q. You never asked him? A. Not that I recall.

Q. Mr. Gunn, as shown in lines 17 through 22 of the [6817] transcript on page 6583, you stated that you submitted a portion of Exhibit 26 to Fisk, Hutchinson and Hopkins. Do you still have the portions of Exhibit 26 that you submitted to those individuals? A. Yes, I told you that on preliminary cross-examination, and that they were available if you wanted to look at them.

Q. Will you please make them available at the first opportunity? A. They have been available for six months.

Q. Where? A. In the company's files, and you have had auditors there who have had time to look at them if they wished.

Q. Do you think you could have the portions to which I referred here on Monday? A. Yes, sir, I think I could.

Q. Do you know why the distribution of the stock of McCall Ferry Power Company was deferred to November, 1906?

TRIAL EXAMINER: Read that question, please.

(Question read.)

THE WITNESS: No, I do not.

By MR. HALL:

Q. Who held the stock prior to its distribution in November of 1906? A. I don't know; at least I don't recall now.

* * *

[6818] By MR. HALL:

Q. Mr. Gunn, you have referred to Messrs. Dimock, Barnum and Bertron as being the trustees under the voting trust agreement? A. Yes.

Q. Barnum was Fisk's partner. Is that right? A. Yes, sir.

Q. Bertron was Dimock's banker associate? A. Not that I know of.

Q. Bertron, Dimock, maybe one or two others, were associated together in connection with the initial financing before Harvey Fisk came into the picture?

THE WITNESS: May I have that question, please?

(Question read.)

THE WITNESS: They were both in it. I don't know how they were associated. But Dimock was Hutchinson's father-in-law, and Bertron, as I understand it, was the man to whom Dimock took the proposition to get it financed.

[6819] By MR. HALL:

Q. Bertron, Hutchinson and Dimock were all associated together in connection with the initial financing? A. They were all there. I don't know what the association was.

Q. And participated in the initial financing, at least in the attempt to finance the project? A. I don't know about that. I don't know of any participating in it that Hutchinson did. You mean by "participating" that they were all out attempting to obtain subscribers? Is that what you are referring to?

Q. They were all engaged in the financing of the project? A. I don't know what Hutchinson had to do with the financing of it.

Q. I am referring to Dimock, Mr. Gunn. A. I still don't know precisely what part Dimock played in the financing.

Q. He was one of the syndicate members. Is that right? Mr. Dimock was one of the syndicate managers under the original financing as reflected in part 5 of Exhibit 27? A. Yes, sir, he was.

Q. And was associated with Bertron in that financing attempt? A. In that capacity he was associated apparently.

[6820] Q. As a matter of fact, Mr. Gunn, in your report, particularly on page 19 of Exhibit 26, you refer to the failure of the "Dimock, Bertron, Barney underwriting"? A. What I meant by that was that that was simply a terminology used to distinguish it from Fisk, and relating it to the fact those three men were——

Q. Managers under the initial agreement? A. Yes, were managers under the initial agreement.

Q. How long did the voting trust continue in effect? A. You are speaking now of Harvey Fisk and Sons' voting trust?

Q. I am speaking now of the voting trust agreement that was created on January 20, 1906, and referred to in the agreement which is part 20 of Exhibit 27. A. According to the stock deposit agreement on which the voting trust was created it was to continue in effect until November 1, 1908, or until the plant of McCall Ferry Power Company should be completed and put into actual operation if prior to that date.

Q. How long did it actually continue in effect? A. I don't know what became of it. I don't suppose there was any use for its continuing after the reorganization of the company.

Q. When did that occur? A. I am not lawyer enough to say which one of these [6821] dates it occurred on.

The bondholders committee sent out a notice of the impending default on December 7, 1908. McCall Ferry actually defaulted on December 15, 1908. The suit for foreclosure instituted by Knickerbocker Trust Company was on July 13, 1909.

Aldred was appointed Receiver on the 17th.

McCall Ferry Power Company was reorganized into Pennsylvania Water and Power Company on January 13, 1910. I don't know which one of those you would call the particular date on which you referred to.

Q. Do I correctly understand you to say that you have no information which will definitely fix the date of termination of the voting trust agreement? A. That is correct.

Q. Did an executive committee carry on the active direction of McCall Ferry affairs from August 8, 1905, to 1909?

THE WITNESS: May I have the question, please?

(Question read.)

THE WITNESS: I don't believe I understand what you mean by active direction, Mr. Hall.

By MR. HALL:

Q. Who carried on—withdraw that.

McCall Ferry Power Company had an executive committee? [6822] A. I understand they did, yes.

Q. Which committee exercised most of the functions of the board of directors between meetings of the board of directors? A. Yes, it is my understanding that was its function.

Q. Who were the members of that executive committee?

* * *

THE WITNESS: H. F. Dimock, C. A. Coffin, Gardiner M. Lane, William M. Barnum, William Barclay Parsons.

By MR. HALL:

Q. Did Mr. Bertron replace Mr. Lane in September, 1905, on the executive committee? A. I don't have the information before me which would indicate whether he did or not.

[6823] Q. Mr. Gunn, my information is that Gardiner M. Lane resigned on September 20, 1905, and that he was replaced on the same date by Mr. Bertron. Will you check that information, please? A. Yes, sir.

Q. Mr. Parsons was Mr. Hutchinson's consulting engineer. Is that right? A. Mr. Parsons was a consulting engineer and had previously done some work in association with Hutchinson.

Q. Didn't Mr. Hutchinson bring Parsons in as his consulting engineer after Mr. Morison's death? A. As I recall he did. He came in some time prior to the date——

Q. January 13, 1905? A. Yes, date of the prospectus, which is—may I have the question again, please?

(Question read.)

THE WITNESS: Yes, Parsons was employed by Hutchinson some time prior to January 13, 1905, which is the date of Parson's report which became a part of the prospectus.

By MR. HALL:

Q. And he was employed by Hutchinson as his consulting engineer? A. That is my understanding.

Q. Mr. Coffin was associated with Mr. Hutchinson as [6824] arly as 1903. Is that right? A. He may have been. I don't recall offhand.

Q. So far as you know? A. So far as I know he may well have been.

Q. Wasn't Hutchinson at one time connected with General Electric Company? A. Yes, sir, Mr. Hutchinson says in his affidavit he was once connected with General Electric Company. That is shown at the bottom of Page 3.

Q. Was Mr. Coffin also connected with General Electric during the period from 1903 to 1905? A. Yes, sir, I think so.

Q. There is no question about that, is there? A. I don't think so.

Q. Is it reasonable to assume that is how the project came to Coffin's attention, through Hutchinson? A. No, I wouldn't say that would be a reasonable assumption.

Q. They were both in the same company and the record shows they were both interested in the construction of the project? A. Yes, but there were other people interested in the development of hydro-electric power on the Susquehanna River long before Hutchinson was, and some of them may very well have called Coffin's attention to it.

[6825] Q. Who do you refer to now? A. James H. Harlow for one.

Q. Was Mr. Harlow connected with General Electric? A. Certainly not, but General Electric Company was well-aware, and kept well-abreast, of all hydro-electric potentialities at that time.

Q. And it is reasonable to assume C. A. Coffin came into contact with Mr. Hutchinson in that connection? A. He may very well have. I have no idea when Mr. Coffin first came into contact with Hutchinson. It may well have been long before 1903 so far as I know, and it probably was.

Q. In Exhibit 26 you state that with the advent of Harvey Fisk and Sons in the picture control passed from Hutchinson to the Fisk firm. What basis do you have for that statement? A. The fact that Mr. Hutchinson says that is what happened, that up to his death he was very bitter over it, and the fact that Fisk says that is what happened, plus all of the direct and indirect indications of that included in Exhibit 26 and Exhibit 27.

Q. Can you be more specific about the direct and indirect evidence that you refer to, Mr. Gunn? A. I don't know whether I can or not. One of the pieces of evidence

I had in mind was the fact that when Harvey [6826] Fisk and Sons came into the picture they kicked out the former law firm that had been doing the company's work, and Harvey Fisk's domination of the firm was so well-known that when Harlow-McGaw wanted to get out from under their water power rights they knew they had to go to Harvey Fisk and Sons to do it. Those are a couple of the items. There are undoubtedly others.

Q. Isn't the reason Harlow-McGaw went to Fisk that Fisk was named in the prospectus as bankers? A. That is also another indication that Harvey Fisk and Sons dominated it.

Q. Isn't it reasonable to assume that because they were named as bankers that is the reason they went to Fisk? A. No, not necessarily. If Hutchinson was such an important figure in it, Harlow and McGaw both personally knew Hutchinson well. It looks to me like they more likely would have gone to Hutchinson.

Q. And Harlow-McGaw had had differences with Hutchinson. Isn't that so? A. Oh, but they had been composed.

Q. What did they do that indicated that their differences had been composed? A. The fact that Harlow and McGaw withdrew their opposition to Hutchinson in McCall Ferry Power Company and entered into an agreement with him.

Q. Mr. Gunn, before you conferred with Pliny Fisk had [6827] you concluded that there was this control by the Fisk firm? A. May I have the question, please?

(Question read.)

THE WITNESS: I don't remember, Mr. Hall, and my difficulty is this: The statement I obtained from Hutchinson was dated January 14, 1939, and the statement I obtained from Fisk was dated December 29, 1938.

Now, I had had discussions with Hutchinson, as I recall, over a period of something like a year, and it was dur-

ing the first discussion that I had with Hutchinson that he told me that Fisk had deprived him of control of the McCall project.

Now, the one discussion I did have with Mr. Fisk personally took place some considerable period of time before December 29, 1938, and I don't recall whether that conversation with Fisk was before my first conversation with Hutchinson or not. My first knowledge of that situation came with either Fisk or Hutchinson, whichever I talked to first.

By Mr. Hall:

Q. Prior to your first discussion with Hutchinson had you reached the conclusion that Harvey Fisk and Sons had deprived Hutchinson of control? A. I had Hutchinson's statement to that effect.

Q. Prior to Hutchinson's statement had you reached that same conclusion? A. No, not unless I had talked to Fisk first. I think [6828] I can answer the question perhaps clearly this way: Prior to the time I talked to Fisk or Hutchinson I did not know of that control situation.

Q. So that no evidence in your possession prior to your discussion with Fisk and Hutchinson enabled you to reach the conclusion that Fisk had deprived Hutchinson of control about the middle of March, 1905? A. May I have that question, please?

(Question read.)

[6829] The Witness: No, that is not a correct conclusion for this reason, Mr. Hall: I had a lot of information in my possession which served the sole purpose of confusing me and making it impossible for me to put the various pieces together so as to make a consistent story.

After I talked to Fisk and Hutchinson and found out of this arrangement I could then put together the pieces of information I had and they then fitted into the pattern that Fisk and Hutchinson had given me in their statements, and for the first time made it possible for me to come to

what seemed to me to be a reasonably rational conclusion as to what was the story of the development of McCall Ferry.

By Mr. Hall:

Q. Mr. Gunn, will you specify the pieces of information that enabled you to conclude finally that Harvey Fisk and Sons did deprive Hutchinson of control in March of 1905? A. I can't specify them in any more detail than simply to say that they are all the pertinent parts of Exhibits 26 and 27.

Q. Will you specify the pieces of evidence which enabled you to confirm the statements which Fisk and Hutchinson made to you—— A. I mentioned——

Q. —that you had had prior to your conferences with Hutchinson and Fisk?

[6830] The Witness: May I have that, please?

(Question read.)

The Witness: One piece I can think of offhand is the March 25 underwriting agreement.

By Mr. Hall:

Q. Is that the only one? A. No, I don't think so.

Q. What other? A. I can't recall it all. They are included in Exhibits 26 and 27.

Q. Name some others. A. Well, I think prior to that conversation I had known that Harlow-McGaw approached Fisk for the sale of their property. I think also I had known that Simpson, Thacher and Bartlett had replaced Coudert Brothers as lawyers. I can think of those matters offhand.

However, I will say this: That just those three items standing alone are not all that there is to offer that confirmation. The whole of Exhibit 26 and Exhibit 27 seems to me to bear that out.

Q. Every bit of them? A. All the pertinent parts.

Q. What are the pertinent parts as to this question of

control by the Fisk firm? A. The history of the development of the property.

[6831] Q. Be specific. A. I can't do it. It is obvious from Exhibit 26 that I can't go through and put in categories each and every statement contained there. Exhibit 26 is a description of the historical development of the project.

Q. Will you take the first ten pages and be specific? A. I can't be specific.

Q. Is there any part of the first ten pages of Exhibit 26 that bears on your conclusions as to control? A. I can't be specific about it. If you want me to sit here and read it and study it I will be glad to do it.

Q. Do you have to read it and study it, Mr. Gunn? A. I certainly do. That exhibit was prepared by me eight years ago.

Q. Look at page 1. What is there on page 1 to indicate that Fisk acquired control from Hutchinson?

MR. KING: Your Honor, I object.

TRIAL EXAMINER: The witness said he couldn't do it without reading the exhibit. The Examiner will not delay the hearing while the witness reads the exhibit.

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[6832] By MR. HALL:

Q. What is there contained in the March 25, 1905, underwriting agreement about control passing from Hutchinson to Harvey Fisk and Sons? A. The fact that their name was mentioned and they were the bankers. There may be other things that indicate it but that is what I had in mind when I mentioned it.

[6833] Q. What other things, Mr. Gunn? A. I don't know. I said there may be. If you want me to study it I will be glad to undertake it.

Q. There is nothing in part 10 of Exhibit 27 which says that control passed from Hutchinson to Harvey Fisk and Sons. Isn't that so? A. Nothing except the fact

that Harvey Fisk and Sons were amongst the most powerful bankers in New York, and he is named as banker in that.

Q. A man could be banker and still not acquire control from Hutchinson. Isn't that so, Mr. Gunn? A. I doubt whether Harvey Fisk would do it or not.

Q. But they could do it? A. Sure, they could do anything if they were foolish enough.

Q. What is there about the Harlow-McGaw's sale of property, to which contract Harvey Fisk and Sons were a party, which indicates control passed from Hutchinson to Harvey Fisk and Sons? A. The fact Harlow-McGaw went to Harvey Fisk and Sons to sell their property.

TRIAL EXAMINER: What part of Exhibit 27 shows that? Do you know? 14 and 15?

THE WITNESS: Yes, sir.

[6834] By MR. HALL:

Q. How do you know the reason Harlow-McGaw went to the Fisk firm was not merely because they were named as bankers in this underwriting agreement? A. The reason I assume that was not the reason particularly was because Harlow-McGaw knew that the people who were named in a document such as the Fisk underwriting generally control the enterprise. They knew Hutchinson personally, knew very well they could go to him. Hutchinson would have been the logical man for them to approach on the sale of property. It just seems to me it was so well known that Harvey Fisk was running the McCall Ferry project that it was just obvious to them he was the man to go to. Or, indeed, Harlow-McGaw may have asked Hutchinson and Hutchinson may have said, "You will have to see Fisk."

* * *

By MR. HALL:

Q. What concrete evidence enables you to look into the minds of Harlow-McGaw and make the statements such as

you [6835] have just done? A. Nothing, Mr. Hall. You and I are just speculating on what might have happened.

TRIAL EXAMINER: Let's not speculate any further.

THE WITNESS: He asked a question and I was trying to answer.

MR. HALL: I am not speculating. You are the one that is speculating. Isn't that so?

TRIAL EXAMINER: I will rule out that question.

By MR. HALL:

Q. Will you refer, Mr. Gunn, to part 14 of Exhibit 27? A. Yes, sir.

Q. Specifically the first paragraph on page 116 of Exhibit 27.

According to that first paragraph doesn't it appear that Mr. Houseman states that he approached Harvey Fisk and Sons because the Fisk firm was named in the March 25, 1905, underwriting agreement? A. I can't draw that conclusion without reading further.

Q. Go ahead.

[6836] THE WITNESS: May I have the question, please?

(Question read.)

By MR. HALL:

Q. I mean named as bankers. A. I do not think you can draw that conclusion for the reason that the second paragraph states that at least one of the purposes of addressing the letter to Harvey Fisk and Sons was to explain about the fact Harvey Fisk and Sons were using Harlow-McGaw's Company name and wanted them to change it. It was perfectly proper he ought to go to whoever's name was on the document for such a purpose as that.

Q. So far as you know that is the only reason Harlow-McGaw went to the Fisk firm? A. I don't think that conclusion can be drawn. I don't know. It may very well have been that Houseman was using that as a pretext to

approach Fisk for the proposed merger of their interests shown on the second page of the letter. I just don't know.

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[6838] By Mr. Hall:

Q. Mr. Gunn, yesterday you stated that Mr. C. A. Coffin had received 775 shares of preferred stock, representing the 5 per cent additional bonus for subscriptions obtained by Mr. Coffin in connection with the initial financing. Is that so? You will find your testimony on page 6775 of yesterday's transcript. A. Yes, that is correct.

Q. That would mean, would it not, that Coffin had secured subscriptions in the principal amount of 1½ million dollars of bonds? A. Yes, it would mean that if you make the assumption that Mr. Coffin had secured all the subscriptions of which this represents five per cent. That we don't know except from the notation in Bertron, Griscom's books, which notation was to C. A. Coffin interest. I don't know what that word [6839] "interest" may have been. I don't know whether that word "interest" can be interpreted as meaning that all of the subscriptions of which the 775 shares or 5 per cent were subscriptions obtained by Coffin. I don't know that conclusion could be drawn.

Q. That could be reasonably interpreted to mean Coffin and those associated with him and selling that amount of bonds? A. Yes. The difficulty of it is I don't know who sold the bonds. That doesn't indicate who did the selling.

Q. Do you think that the million and a half is part of the 2½ million for which Lee, Higginson secured subscriptions? A. No, I wouldn't think that it was.

Q. You think it is in addition to the 2½ million subscriptions secured by Lee, Higginson? A. Yes, the notation indicates that that is true. The only point I am attempting to explain is that I don't know whether Coffin secured the subscriptions of which 775 shares are five per cent.

Q. Who could have secured them, Mr. Gunn? A. That I don't know. For instance, if I may try to explain a little further, Mr. Coffin may have subscribed to some personally and his associates in General Electric Company or other associates of his may have also subscribed [6840] to some. I don't know that the relationship between him and the other people is such that it would be proper to say that Coffin obtained the subscriptions. That is the only point I am attempting to clarify.

Q. Do you think that it was part of the million and a half dollars principal amount of bonds subscribed for under the March 1, 1905, agreement which represented the difference between the total subscriptions of 4 million dollars and Lee, Higginson's subscription of 2½ million dollars?

THE WITNESS: Will you read that back, please?

(Question read.)

THE WITNESS: I don't believe I understand that question, Mr. Hall. Could you simplify it a little? I can't follow it.

By MR. HALL:

Q. You have mentioned, Mr. Gunn, a figure of four million principal amount of bonds being sold under the initial agreement of March 1, 1905. A. Yes, that is a deduction. We think there were about four million dollars subscribed.

Q. Of that four million principal amount of bonds you have stated that Lee, Higginson obtained subscriptions for approximately 2½ million dollars? A. That is correct.

Q. That leaves us with 1 million 5 hundred thousand dollars principal amount of bonds for which subscriptions were [6841] secured? A. That is correct.

Q. Do you know whether or not the million and a half secured by Coffin and represented by the 775 shares is the million and a half not secured by Lee, Higginson and Company?

MR. KING: May we have that question read, please?

(Question read.)

THE WITNESS: No, I don't know.

By MR. HALL:

Q. Do we add Coffin's one million and a half to the total of four million secured or is Coffin's million and a half included in the four million? A. I think in my opinion it is undoubtedly included in the four million. The thing that is giving me the difficulty is your repeated statement that Coffin obtained them. I don't know whether or not he did. With that qualification in my opinion the amount of bonds of which 775 shares would be the bonus was included in the four million dollars worth of bonds I estimated that the first syndicate obtained subscriptions for, and was in addition to the bonds subscribed to by Lee, Higginson.

Q. What amount of subscriptions did Bertron, Storrs and Griscom obtain under the initial financing? A. I don't know.

TRIAL EXAMINER: What is the question, please?

[6842] (Question read.)

By MR. HALL:

Q. Do you know that Bertron, Storrs and Griscom procured any bond subscriptions at all under the initial financing? A. Well, at one time or another the firm, I believe, subscribed to $80,000 worth as a firm.

Q. Was that under the initial—— A. There is no way of telling. We know what the total subscriptions were but there is no way of being certain when those subscriptions came in or by whom they were obtained. The only thing we can do is to make an implication out of the fact this five per cent bonus went, simply a conclusion drawn from that fact.

Q. Don't you know this, Mr. Gunn: That those subscriptions to which the additional five per cent bonus at-

tached were obtained under the initial financing agreement? A. Yes, sir, and that is the way we draw the conclusion that about four million dollars of bonds were obtained under the original underwriting, that is the underwriting agreement of March 1, 1905.

Q. Then, so far as you know, Mr. Gunn, you could account for subscriptions only by Coffin and Lee, Higginson and Company under the initial financing agreement?

THE WITNESS: May I have that question, please?

(Question read.)

[6843] THE WITNESS: No, that is not quite right. I could account for subscriptions by Lee, Higginson and I know there were other subscriptions, but I don't know who obtained them.

By MR. HALL:

Q. The only evidence you have seems to indicate, does it not, that Coffin obtained the subscriptions not obtained by Lee, Higginson and Company? A. No, that doesn't seem to me to be a reasonable conclusion for two reasons: First, Bertron was a banker and was the man who was heading the financing syndicate. It certainly seems to me he must have gotten, his firm must have gotten, some subscriptions. In addition to that, if you look at page 186 of Exhibit 27, you will find a notation down at the bottom of the page which reads "Owe," and then in brackets there are four names listed—Henry F. Dimock, Sanderson and Porte , and then an initial M. W. D. and then the H. McKittrick, and then opposite that group of names in another bracket, outside of which it states, "Not delivered," in an amount listing shares there are 275 shares listed. I have not been able to understand what that was but that might indicate some more.

Q. What do the initials M. W. D. stand for? A. I don't recall.

Q. Did you say you didn't know—— A. I said I did not recall what the initials are.

[6844] Q. What do the 275 shares of preferred stock represent? A. Represents 275 shares of preferred stock is all I know.

Q. For what purpose was it issued? A. I don't know.

Q. What does the notation "Not delivered" mean to you? A. Well, it simply means to me, at least at the time this notation was made, either Bertron had not delivered it to the people who were entitled to have it, or that it had not been delivered to Bertron. I don't know which it means.

Q. You notice that the 775, 1,025, and 275 totals 2,075 shares? A. Yes.

[6845] Q. Then there is a subtraction of 1,875 shares with the note "Less our." What does that mean, Mr. Gunn? A. I don't know. I have speculated on that a great deal. But this may be significant: Fisk says that he and Bertron and Griscom were joint bankers in this financing. We know that Fisk got 1,875 shares, and that notation may mean that Bertron, being in joint account with Fisk, also got 1,875 shares.

Q. Are you saying each got 1,875 shares for the same purpose? A. Whatever purpose it was. However, it appears Bertron was forced to use his 1,875 shares, and perhaps more shares than he got with his own firm's bond subscriptions, to satisfy the five per cent owing to subscriptions that had been obtained under his March 1, 1905, underwriting.

Q. Did you say the Fisk firm and Bertron, Storrs & Griscom operated a joint account? A. That is what Fisk said.

Q. Is Fisk's statement the only support for that answer? A. I couldn't say that is true. I can say this, though: The first time I knew that was when Fisk told me. I would say——

Q. Up to that time you had not had any indication of that fact? [6846] A. Up to that time I had not been able to put any of this story together.

Q. Isn't it possible, Mr. Gunn, that the 1,875 shares means that that is the sum total for both Bertron, Storrs & Griscom and Harvey Fisk and Sons? A. Read that again, please.

(Question read.)

THE WITNESS: No, I don't think that is possible.

By MR. HALL:

Q. Why not? A. Because, as I recall it, there was a stock certificate for a like amount of stock issued to either Harvey Fisk and Sons or to Susquehanna Contracting Company. I think it was probably Harvey Fisk and Sons.

Q. Were there two stock certificates issued for 1,875 shares of preferred stock? A. May I have the question, please?

(Question read.)

THE WITNESS: No, there was one stock certificate issued in that amount to Fisk, and then there were several other stock certificates issued for varying amounts, but none of the amounts, none of those other certificates were in the amount of 1,875 shares.

By MR. HALL:

Q. After subtracting the 1,875 shares from the 2,075, [6847] as shown at the bottom of page 186 of Exhibit 27, we have a remainder of 200 shares. What do the 200 shares represent? A. I don't know, except that it represents the difference between 2,075 and 1,875.

Q. But you don't know who got the 200 shares? A. I don't know whether or not anybody got it. The answer is no.

MR. HALL: May I have the question and answer, please?

(Question and answer read.)

By MR. HALL:

Q. Do you have any documentary evidence which would disclose a joint account between Harvey Fisk and Sons and

Bertron, Storrs and Griscom, or a joint banking arrangement? A. Read that, please.

(Question read.)

THE WITNESS: Yes, we have Fisk's affidavit.

By MR. HALL:

Q. Other than the Fisk affidavit? A. I don't have any particular document in mind except that the inference may be drawn from such as we were just discussing, from this page 186.

Q. You mean that is the inference you have drawn? A. Yes, sir.

Q. Would you expect Mr. Coffin to subscribe through Lee, Higginson and Company or through Bertron, Storrs and [6848] Griscom, Mr. Gunn, if Mr. Coffin was making subscriptions through any bankers?

MR. KING: May we have that question?

TRIAL EXAMINER: Yes.

(Question read.)

THE WITNESS: I don't know which one he would subscribe through. I have no opinion on that. I know nothing about Mr. Coffin's connections.

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[6851] By MR. HALL:

Q. When you said this morning, Mr. Gunn, that Fisk and Sons displaced Hutchinson from control when Fisk and Sons came into the financing picture, do you mean that Fisk and Sons thereafter controlled the activities and affairs of McCall Ferry Power Company? A. That is my understanding.

Q. In other words, you are saying that McCall Ferry was dominated by, and its activities and affairs were subject to, the dictation and wishes of Fisk and Sons? A. Yes, that is my understanding.

Q. That would mean, would it not, that Fisk and Sons had the power to dictate who should be the officers of the company? A. Yes.

Q. Or who should be the directors? A. Yes, I should think it might even extend that far.

Q. Are you familiar with this letter of June 22, 1906, written by Cary T. Hutchinson to H. F. Dimock? The letter is copied from McCall Ferry Power Company file number 68. [6852] A. Yes, I am familiar with that.

MR. HALL: I pass the letter over to Mr. King for inspection.

By MR. HALL:

Q. Mr. Gunn, this letter reads as follows:

"Dear Mr. Dimock:

Mr. Eddy, of Simpson, Thacher and Bartlett, has just asked me what board of directors shall be elected at the annual meeting of the stockholders, which will be held in Lancaster next Tuesday; the stock will be voted entirely by proxy, and nobody need be there. I told Mr. Eddy to re-elect the present board of directors, with one possible exception, which is the substitution of Kirkland for somebody else; the trouble is to know whose place Kirkland should take. I do not see how it can be arranged at present; probably it will be better to let the board stand exactly as it is, and if you wish later to get someone to resign to make place for Kirkland this could be done very well if Kirkland will have a nominal residence in Pennsylvania, at the works, as we can then get one of the dummy directors to resign.

"Will you let me know certainly Monday morning what you wish done?

"Yours very sincerely,

"Cary T. Hutchinson."

Does that sound like Hutchinson had no voice in the [6853] direction of the affairs of McCall Ferry after Harvey

Fisk and Sons were in the picture? A. May I have the question, please?

(Question read.)

THE WITNESS: It sounds to me like he had very little voice and was being used as a messenger boy. You have to remember this: Mr. Eddy was a member of the firm of Simpson, Thacher and Bartlett but was not the member of the firm that ordinarily handled McCall Ferry's business. Mr. Dimock, President of McCall Ferry Power Company, was Mr. Hutchinson's father-in-law. I don't see that what is stated there indicates one way or the other about Hutchinson's influence.

By MR. HALL:

Q. Are you saying that Dimock was under the control and direction of Harvey Fisk and Sons? A. I certainly think he was.

Q. Even though he was Hutchinson's father-in-law? A. Yes, that didn't preclude Fisk from dominating him.

Q. You say that Fisk dominated McCall Ferry activities? A. That is my understanding.

Q. McCall Ferry activities, notwithstanding the fact that Hutchinson selected the board of directors? A. Yes, I say that because I don't believe Hutchinson selected the board of directors. If he did it would simply mean the board of directors didn't have too much influence.

[6854] Q. Is that your interpretation? A. Yes, that is my interpretation.

Q. Mr. Hutchinson was chief engineer of McCall Ferry among other things? A. Yes, sir.

Q. Do you think those are the duties of a chief engineer, to select members of a board of directors? A. No, but he might very well have discussed them with his father-in-law who was president, and particularly might that be true if there were somebody with a power superior to them.

Q. Is there any indication in Mr. Hutchinson's letter of a power superior? A. No, not in this particular letter

standing alone. I don't know what may have been the reply to this letter. I don't know what may have been the other associated correspondence.

Q. Doesn't Mr. Hutchinson's letter indicate that he had considerable influence in the affairs of McCall Ferry Power Company? A. No, it doesn't to me. All it indicates to me is that he is interceding with his father-in-law to get Kirkland, who was as I recall it vice-president of McCall Ferry Power Company, put on the board of directors perhaps in the place of one of the dummies who was on the board. That also does [6855] not speak too highly for the board's great power if it was filled with dummies.

Q. Apart from this intercession that you see in this letter, Mr. Gunn, it appears, does it not, that Hutchinson was asked to name the board of directors? A. No, sir, I don't think that follows from this letter.

Q. And you say that despite the fact, "Mr. Eddy, of Simpson, Thacher and Bartlett has just asked me what board of directors shall be elected at the annual meeting of the stockholders"? A. Certainly I say it in spite of that. Hutchinson didn't answer him when he asked him that, did he? He went to somebody else to ask them.

[6856] Q. What board of directors was elected, Mr. Gunn, at that meeting? A. I don't have anything before me which would indicate to me what the composition of the board which was then elected would be.

Q. How are you able to say they were dummies? A. The letter said so. I didn't say so. You just read it into the record yourself.

Q. I thought you characterized them as dummies. A. The letter characterizes them that way, Mr. Hall. You just read it into the record yourself.

Q. You didn't intend to so characterize the directors? A. I am repeating what the letter said. Certainly I know that at that time some of the directors weren't dummies by any manner of means.

Q. Such as? A. Pliny Fisk.

Q. He was a member of the board of directors? A. I think he was.

Q. Elected in June of 1906? A. I suspect he was. Let me look. I am not aware any substantial change took place in the board of directors of McCall Ferry after it was first constituted. The board on August 8, 1905, and there may have been some changes, but I don't think they were substantial, consisted of William M. [6857] Barnum. He was no dummy. A. C. Bedford. He wasn't either.

Q. Is that your opinion? A. That is my opinion. All these will be my opinion.

S. R. Bertron was not. E. J. Berwin was not.

Charles A. Coffin wasn't a dummy, I think.

Pliny Fisk wasn't.

Rodman E. Griscom wasn't. Gardiner M. Lane wasn't. William Barcley Parsons wasn't.

As to the rest of them, I don't know how you can classify them. I don't think you can call Dimock one appropriately.

Q. How many more are there? A. William F. Beyer. W. Merriott Canby, and J. J. Hope, and George B. Willson.

Those are the ones I am uncertain about.

Q. When you say you are uncertain about the last few individuals, what do you mean by that? A. I am uncertain as to how they would be classified in view of the fact that this letter that you just read into the record, dated June 22, 1906, refers to the board as having dummies on it. I was just looking down the list and speculating on which might be the dummies.

Q. Are you saying that Beyer, Canby, Hope and Willson might be referred to as dummy directors? A. We have to find a dummy somewhere to fit this letter. I thought it might be some of them.

[6858] Q. If, as you say, they were dummy directors, to whose direction were they subject? A. I don't know. I

don't even know they were the dummies Hutchinson referred to. I was just speculating on who they might be. Hutchinson in his letter to Dimock says he has some dummies and he is considering kicking one of them off the board. I was considering who the dummies might be.

Q. Do you think Hutchinson could have kicked them off the board of directors? A. No, I don't think he necessarily could, but I don't know who could have. I should think, however, that if Fisk, either through the majority of people on the board of directors or by some other means, had complete control of the company that he might be so gracious as to have Hutchinson have a director.

Q. Were all the directors you have named subject to Harvey Fisk and Sons' domination? A. In the sense that directors are dominated I suppose they were.

Q. Could they exercise independent judgments if Fisk didn't want them to? A. I don't know. I suppose they could. I don't know how long they would remain directors.

Q. In other words, you are saying that Fisk was in [6859] a position to impose his will on all those directors. A. In the matters of McCall Ferry Power Company that is my understanding of it. That is what Fisk said he could do.

Q. In other words, Fisk was in a position to impose his will on the president of General Electric Company, C. A. Coffin? A. No, I do not necessarily mean impose in that sense. I simply mean this: That if Mr. Fisk picked these individuals and put them on McCall Ferry board, and Mr. Fisk was primarily responsible for the success of the enterprise, I would expect the men who Mr. Fisk put on the board to support Mr. Fisk's policies.

Q. Did Mr. Fisk select and put those individuals on the board? A. I don't know.

Q. Mr. Eddy's request of Hutchinson is a natural one, isn't it, in view of the fact that Hutchinson was the owner of the largest block of stock? A. No, I don't think it is a

natural one because I don't believe Hutchinson was the owner of the largest block of stock.

Q. Who owned more than 18,840 shares, assuming that is all Hutchinson had? A. I don't know who owned more shares than that. I don't make the assumption Hutchinson had that many shares [6860] beneficially of his own.

Q. Can you state that to be a fact? A. Well, Hutchinson says he used approximately half of the 18,000 shares for the purpose of meeting the obligations he had created in developing the enterprise. So I assume that he had only about half that amount.

Q. You mean Hutchinson says that in Part 1, in his statement which is Part 1, of Exhibit 27? A. Yes.

Q. But that does not mean Hutchinson gave up his power to vote the stock that he gave up if he did? A. Well, he certainly gave up his power to vote some of it.

Q. Do you know to whom Hutchinson gave half of the 18,840 shares? A. No, but I know some of the people to whom he gave some of it.

Q. How much can you account for? A. Well, he gave one thousand shares to Coudert Brothers, one thousand shares to Thomas Newhall, and it seems to me he gave some lesser amounts to other people. Perhaps some engineers working for him, as I recall it.

Q. Was Ehle one of them? A. I believe Ehle got some shares.

Q. When were the two blocks of 1,000 shares delivered to [6861] Coudert Brothers and Newhall? A. I don't have anything before me that will indicate that.

Q. Mr. Gunn, according to page 17 of Exhibit 51, the Commission's accountant, Mr. Newlands, states that the certificates for the two 1,000 shares of stock that you have just referred to were issued in 1909.

My information is that certificate number 30 for 1,000 shares went to Newhall and No. 43, for 1,000 shares, went to Lorenzo Semple. Does that check with your information? A. Just a moment and I will see.

May I have that question, please?

(Question read.)

THE WITNESS: Not necessarily. May I ask this: Those certificates referred to there are McCall Ferry Power Company certificates, are they?

By MR. HALL:

Q. That is right. A. I don't think that has very much significance because this stock from the time it was first distributed was distributed, as I understand it, as voting trust certificates, and probably all this would mean here would be in exchange of voting trust certificates for McCall Ferry Power Company certificates.

Q. Then, in that case, Mr. Gunn, control depended upon [6862] the voting trust, didn't it? A. Yes, I would say that it did, or at least it was another agency which represented the stockholders, as I recall for the period of construction under Fisk financing arrangements.

I am not saying, however, that as an independent agency it has such control over the corporation. Don't misunderstand me.

Q. Who controlled the voting trustees under the voting trust agreement, Mr. Gunn? A. Undoubtedly, as I understand it, Fisk did.

Q. Why do you say "undoubtedly", Mr. Gunn? A. Because Mr. Fisk says he did and Mr. Hutchinson says Fisk did.

Q. And that is the basis of your statement, right? A. That plus all the other things we have talked about which relate to Fisk's control.

TRIAL EXAMINER: That voting trust agreement was as of what date?

MR. HALL: As I understand it it was created January, 1906.

THE WITNESS: As I recall it that is about the time.

MR. GOLDBERG: January 20th is the date I think we used this morning.

THE WITNESS: A moment ago, when I mentioned where [6863] Hutchinson's might have done, I missed one item. 1,000 shares also were given to Lorenzo Semple.

By MR. HALL:

Q. I think we had covered that. Those are the thousand shares that went to Coudert Brothers; isn't that right, Mr. Gunn? A. Yes.

Q. I believe you mentioned the fact that Mr. Dimock, Hutchinson's father-in-law, was president of McCall Ferry Power Company. A. Yes.

Q. During what period was he president? Wasn't it from August 8, 1905 until the bankruptcy? A. No, before that. He was president on August 8, 1905.

Q. Was he the only president that McCall Ferry ever had? A. As I recall it, he was.

Q. All right. A. Maybe we had better correct that last answer. Prior to August 8, 1905, when Dimock was elected president, there had been what I think I referred to as a dummy president prior to that.

Q. McCall Ferry was created in April, 1905, and this dummy president you referred to served up until what date? A. As my records show it, until August 8, 1905.

Q. When was Susquehanna Contracting Company [6864] incorporated? A. June 12, 1905.

Q. What was the purpose of its incorporation? A. First to acquire or construct hydro-electric developments along the Susquehanna River; second, to do a general contracting business—third, to purchase, lease, and so forth, rights and interests in respect to real estate and water—fourth, to acquire and sell machinery, supplies, merchandise, and so forth—fifth, to acquire, use, and dispose of rights in respect to construction, manufactured, and so forth. Sixth, to acquire, pledge, and sell securities of any

corporation and to issue in exchange therefor its own securities.

Q. Did you get that from the certificate of incorporation? A. Yes, sir, I believe that is where I got it.

Q. Was Susquehanna Contracting Company created in connection with the project? A. Yes.

Q. What was its particular function in connection with the project? A. It was the corporate medium through which the securities of McCall Ferry Power Company passed to the subscribers and other people who got them, and also through which the lands and water power rights passed from the people [6865] who owned them, to McCall Ferry Power Company.

Q. Those are two sides of the same purpose, right—in other words, the securities passed for the property? A. Yes, as I understand it—for the property, and, of course, the cash which was raised from the subscribers.

Q. In other words, it was acting as a vehicle in securing the property and distributing the securities? A. I suppose you could call it that. I don't know what the legal significance was.

Q. Why didn't Hutchinson and the others pass their property directly to McCall Ferry? A. I don't know.

Q. At the time Susquehanna Contracting Company was formed, all the bonds had been sold. Right? I mean bond subscriptions had been obtained. A. Yes, I believe they had been obtained.

Q. Do you know of any obstacle that existed which would prevent Hutchinson and the others from passing their property directly to McCall Ferry rather than going through Susquehanna Contracting Company? A. No, I personally don't know of any. I assume there must have been a reason for its creation or they wouldn't have created Susquehanna Contracting Company.

Q. Did you ask Hutchinson or anyone else what the reason was? [6866] A. I don't recall that I did.

Q. Weren't you ever interested in the reason for the creation of Susquehanna Contracting Company? A. As

a matter of curiosity I might have been. I noticed this about the study of the hydroelectric developments on the river: Apparently any time anybody got the idea that they wanted to develop a hydroelectric project they had Susquehanna Contracting Company or its equivalent in the picture. So I assume there must have been some reason for it. As you recall from Exhibit 26, Hutchinson had one, he didn't call it Susquehanna Contracting Company, when he was first planning the development under the Dimock, Bertron and Barney underwriting.

Q. Was that the contemplated company that Johnson had reference to in his letter which is part 4 of Exhibit 27? A. Do you have reference to the particular part of the letter?

MR. GOLDBERG: Let us have the pending question.

(Question read.)

By MR. HALL:

Q. What I mean, Mr. Gunn, is did they follow, in creating Susquehanna Contracting Company, the method contemplated by Mr. Johnson in his opinion? A. That is my understanding of it.

Q. May we properly refer to Susquehanna Contracting [6867] Company as a "paper company"?

MR. KING: May I ask what you mean by a "paper" company?

MR. HALL: What I have in mind, Mr. King, is what the company meant on page 3 of item "K" in this proceeding where in the first complete paragraph they said, "It" referring to Susquehanna Contracting Company "had a capital stock of only $500 and was a 'paper' company which did no construction work and derived no profit. It was dissolved in April, 1910."

THE WITNESS: In the sense it is described there you may refer to it as a paper company. My hesitancy was in describing it in this discussion, whether it might have had

some legal significance or purpose. I guess you could also call that paper.

By Mr. Hall:

Q. It is a fact, is it not, Mr. Gunn, that the temporary McCall Ferry Power Company bonds in the principal amount of $8,483,000 were first turned over to Susquehanna Contracting Company?

The Witness: Will you read that for me, please?

(Question read.)

The Witness: What do you mean by "temporary bonds", Mr. Hall? To what do they refer?

[6868] By Mr. Hall:

Q. What bonds did Susquehanna Contracting Company get from McCall Ferry Power Company under its contract with McCall Ferry under the contract which is Part 18 of Exhibit 27? In other words, were not temporary certificates delivered by McCall Ferry to Susquehanna Contracting Company under that agreement? A. Perhaps they were temporary but I always looked upon them as being the bonds of McCall Ferry Power Company.

Q. As of what date were the bonds turned over to Susquehanna Contracting Company? A. It is my understanding the bonds are dated June 15th. I have nothing before me to indicate that.

Q. My impression is that they were turned over to Susquehanna Contracting Company on August 8, 1905. Will you check that? A. Yes, I will.

Q. After the bonds were turned over to Susquehanna Contracting Company, it retained them until February 1908. Isn't that so, except, of course, for the bonds issued to Harlow-McGaw? A. I think that is correct.

Q. In February, 1908, part of them were issued for the first time to subscribers. Is that right? I am referring now to the non-deferred subscribers. [6869] A. Yes, I believe that is correct.

Q. And they had been held until February of 1908 because they were not to be issued to the subscribers until fully paid for? A. Yes, that is correct. They had been pledged under the loan arrangement with Knickerbocker Trust Company.

Q. There was no loan on the non-deferred subscribers? A. Yes, that is right. I was mistaken about that.

Q. The non-deferred subscribers, as I understand it, represented the principle amount of $1,895,000. A. That sounds correct. I can check it if you wish.

Q. The balance of the bonds to the deferred subscribers were not issued until November 1908 or later, being held by Knickerbocker Trust Company? A. Yes, that is correct.

Q. And they totaled $6,180,000 in principal amount? A. That is correct.

* * *

[6870] By Mr. Hall:

Q. Am I correct in saying, Mr. Gunn, that you have included in your original cost claim certain amounts as representing the cash value of common and preferred stock issued by McCall Ferry Power Company in 1905? A. Yes, I believe that is correct.

Q. What total amount have you included in Penn Water's original cost claim as the claimed cash value of those securities?

* * *

The Witness: There is included in the claimed cost to Pennsylvania Water and Power Company an amount of $471,000, which represents the 18,840 shares valued at $25 a share which was given to Hutchinson for his property.

By Mr. Hall:

Q. You mean the common stock was valued at $25 per share? A. Yes, sir.

There is also included $25,000 representing 1,000 shares of common stock at $25 a share which was given to Harlow and McGaw in the acquisition of their rights.

Did you want the bonds, also?

Q. If you would limit it to common and preferred stock [6871] right now I think it would keep the record straight. A. There was also included, I believe, an amount of $3,750 representing 150 shares of common stock at $25 which was given in acquisition of the Pullen option.

There is included also an amount of $199,570.31 which represents three-eighths of the total value of securities given to Harvey Fisk and Sons for their services. Those securities which Harvey Fisk and Sons received were 1,875 shares of preferred stock, which for this purpose was valued at $50, 17,537½ shares of common stock which was valued at $25 a share.

As I recall it, I believe that is all.

Q. What does that total, Mr. Gunn?

* * *

[6873] MR. HALL: My information is that the total figure was $1,031,273.46.

MR. KING: May I say we did some mathematics here and it indicates to us that that figure is approximately correct.

TRIAL EXAMINER: What is that figure, please?

(Amount read by reporter.)

THE WITNESS: Yes, that is approximately the figure.

By MR. HALL:

Q. What portion of the total figure that I have mentioned represents incorporators' shares? A. Ten shares, as I recall it.

Q. $250?

* * *

[6874] THE WITNESS: I think I can explain it, Mr. Examiner, if you will permit me.

TRIAL EXAMINER: All right.

THE WITNESS: The way I made up the figure was by taking the stock valuation item in number 1 of Page 53 of Exhibit 26.

TRIAL EXAMINER: All right.

THE WITNESS: Plus the common stock item in number 2 on that page, plus the common stock item in number 3 on that page, then I skipped to the bottom of the page and took the $199,570.31, and then from a different source I took an amount of $331,703.15 which is a calculation based upon the [6875] ratio of the exchange of bonds and stocks of Pennsylvania Water and Power Company related to the par value of the bonds of McCall Ferry Power Company which were outstanding, and the total comes out to be $1,031,273.46. But in order to make it that total I believe you have to add in ten of the qualifying shares which I did not mention and which are shown on Page 53.

MR. HALL: That agrees, Mr. Examiner, with my information.

TRIAL EXAMINER: How is it you didn't include the original cost to McCall Company so far as it related to preferred and common stock of McCall Company?

THE WITNESS: May I have the inquiry?

(Question read.)

THE WITNESS: I don't believe I quite understand the question, Mr. Examiner. I am sorry.

TRIAL EXAMINER: You were asked how much of the original cost reflects the valuation placed on the preferred and common stock of McCall Ferry Power Company?

THE WITNESS: Yes.

TRIAL EXAMINER: How much of that was included in the original cost statement of Pennsylvania Water and Power Company?

THE WITNESS: Yes, sir.

TRIAL EXAMINER: All right. Now, in Exhibit 26, Pages 53 [6876] and 54 you have the original cost to

McCall Company of its preferred and common stock. Then when you answered the question you went over that list and picked out certain items and excluded certain items.

Why did you make that selection in order to get your $1,031,000 figure?

THE WITNESS: I understand. The items I excluded were not proper elements of capital cost and were not included in our claim for original cost as it was prepared and filed.

TRIAL EXAMINER: Why is it with Penn Water and not with McCall? Why isn't it so far as Penn Water is concerned and why is it original cost to McCall?

MR. HALL: I believe during the course of cross-examination we will develop what you are now trying to ascertain.

TRIAL EXAMINER: All right.

MR. HALL: What I am saying, we will develop the calculations in detail.

MR. GOLDBERG: Do I understand the Examiner's inquiry to be this: The statement on Page 53 of Exhibit 26 is in part: "The original cost to McCall Company," and the Examiner wants to know why it should not be "The original cost to Penn Water Company"?

[6877] TRIAL EXAMINER: Well, to this extent: In determining the original cost to Penn Water the witness has used the original cost to McCall Company of certain blocks of these securities but not other blocks of the same types of securities.

THE WITNESS: The reason for that, Mr. Examiner, you are referring now to the items I excluded, the $332,617.19 shown at the bottom of page 53, and the other two items, the two other items on page 54. The reason why those were not claimed as a part of the original cost either of McCall Ferry Power Company or Pennsylvania Water and Power

Company is because they were financing charge costs and were not properly included as a part of the original cost except to the extent that they enter into the determination of that figure of $331,703.15.

TRIAL EXAMINER: Your heading is original cost to McCall Company for all those items.

THE WITNESS: Yes. Those items listed there are original cost to McCall Company, but the use of "original cost" there is not the same as the use and definition of original cost in the classification of accounts.

TRIAL EXAMINER: You do not make that clear, do you, in your Exhibit?

THE WITNESS: Not at this particular point, but it is made clear in the original cost filing.

[6878] By MR. HALL:

Q. Where is that mentioned in the original cost filing, Mr. Gunn? A. What do you mean by that?

MR. HALL: You said it was made clear in the original cost filing.

THE WITNESS: It is made clear in the original cost filing by the inclusion in Account 301, organization expense of the amount of $331,703.15.

By MR. HALL:

Q. Do you show a separate amount for each of the other items making up the total? A. Total of what?

Q. $1,031,273.46.

THE WITNESS: May I have the question, please?

(Question read.)

THE WITNESS: Yes, sir, they are shown on pages 53 and 54 of Exhibit 26.

By MR. HALL:

Q. Item "K", Mr. Gunn, is Penn Water's original cost claim filed in 1940. Is that right? A. Yes.

Q. Where in Item "K" do you show the breakdown of this total figure we have been talking about? A. You mean of the $1,031,273.46?

[6879] Q. Yes. A. No, that breakdown is not shown in the original cost filing, but the results of it are included in the original cost filing.

Q. As a matter of fact, Mr. Gunn, Item "K" doesn't indicate within its covers that cash value is claimed for common and preferred stock. Isn't that so? A. That very well may be true. Item "K" indicates what the Federal Power Commission requested that Item "K" should indicate. We had an elaborate set of specifications as to what should be put in Item "K".

• • •

[6881] TRIAL EXAMINER: Why didn't you pick up the $93,750, and the $438,437.50?

THE WITNESS: I did not for the reason that Fisk stated that three-eighths of the total amount of $532,187 was for management services, and under the classification of accounts management service is a proper capital cost.

He stated that five-eighths of that total figure was for banking service, and it is my understanding that the banking services were not proper capital items under the uniform system of accounts.

• • •

[6882] TRIAL EXAMINER: You have an item of $532,187.50 under number 4.

THE WITNESS: Yes, sir.

TRIAL EXAMINER: You have got it under original cost.

My question is why include the total figure if you say five-eighths of it is not includable?

THE WITNESS: Mr. Examiner, this tabulation on page 53 is not our claim for original cost. It is merely put there for the purpose of setting forth everything that McCall Ferry got in exchange of securities.

Now, one of those things they got was banking services. Banking services is not a proper part of original cost and the division is here made for the purpose of excluding it from the cost.

• • •

[6884] THE WITNESS: Are you asking me now the date of the issuance of the stock or the date of the commitment to issue it? Which are you asking?

By MR. HALL:

Q. Date of the issuance of the stock? A. I don't have that information before me.

Q. Give me the date of the commitment.

Mr. Gunn, is not the date of the transaction for all of the stock you have listed June, 1905? A. Yes, I think the commitments were made in that month.

Q. And that applies to the stock issued to Bertron, Storrs and Griscom and Lee, Higginson and Company shown at the top of page 54 of Exhibit 26? A. Yes, sir, I think that also applies to that.

• • •

[6886] Q. Mr. Gunn, have you indicated why 1,000 shares of common stock was given to Harlow-McGaw? A. It was part of the consideration which Harlow-McGaw received for his water power rights, lands, canals and other things of value he held on the river and turned over to Susquehanna Contracting Company through Harvey Fisk and Sons.

Q. Why did Pullen get 150 shares? A. That was, as I understand it, in purchase of the option that he held over Harlow-McGaw's property.

Q. That payment to Pullen was in the nature of a nuisance payment, wasn't it? A. I wouldn't say so, no, no more than a nuisance payment on anything else you buy that you want.

Q. It was to get Pullen out of the way so that they could proceed? A. It was to acquire Pullen's option

which he held on Harlow-McGaw's property. You can call it whatever you please. That is what it was.

• • •

[6887] Q. What do you say the purpose was for Harvey Fisk and Sons receiving 1,875 shares of preferred stock? A. That was part of their compensation for the management and banking services they rendered.

Q. And the basis for that statement is what? [6888] A. Fisk affidavit.

Q. Does that also apply to the 17,537½ shares of common stock which you assigned to Fisk? A. Yes, sir.

Q. What does the payment of 5,000 shares of common stock to Lee, Higginson and Company represent? A. Banking services and obtaining subscriptions to bonds and the underwriting.

Q. Did you include in your claim of original cost any cash value for the bonds which were issued by McCall Ferry? A. Yes, sir.

Q. In what total amount? Is it $225,000? A. Yes, sir, $225,000. That was issued in acquisition of the Harlow-McGaw properties.

Q. What does that amount to in terms of cash value per bond? A. $900 per bond.

Q. Did you attempt to determine the cash value of the common and preferred stock? A. McCall Ferry common and preferred stock?

Q. That is right. A. Yes, sir.

[6889] Q. In other words, you attempted to proceed in accordance with Electric Plant Account instruction 3-D? A. Yes, sir, I undertook to comply with that requirement.

Q. And you construed that as a requirement that the cash value of the securities be determined? A. Yes, if they could be determined.

Q. What do you understand by cash value of securities? A. I understand it to mean their cash value.

Q. It is, is it not, the amount of dollars that could be received from a willing purchaser at the time of the trans-

action in which the securities passed? A. Yes, I would say that is a definition of it.

Q. If no one is willing to pay cash for the security it has no cash value. Isn't that right? A. Yes, that would seem to follow.

Q. The cash value is not what may be secured at some time in the future. Is that right? A. May I have that question?

(Question read.)

THE WITNESS: You mean the cash value at a given time is not the cash value, the cash that could be received at some time in the future?

By MR. HALL:

Q. That is correct. [6890] A. I think it is correct that it is not.

* * *

By MR. HALL:

Q. Did you, during your original cost study, obtain affidavits from Cary T. Hutchinson, Pliny Fisk, George C. Lee, and James E. Hopkins for the purpose of assisting you in placing a value on the McCall Ferry Power Company common stock? A. Yes, that was one of the purposes for which those affidavits were secured.

Q. Do the affidavits to which I have just referred comprise parts 1, 9, 8, and 24 of Exhibit 27? [6891] A. Yes, sir.

Q. On Page 52 of Exhibit 26 I believe you point out that the individuals who signed these affidavits arrived at their valuation of the common stock in question, "by means of a valuation of services rendered." Is that correct? A. Where does that occur?

Q. Your exact statement at the bottom of Page 52 and top of Page 53 is as follows: "Inasmuch as the foregoing values for the stock were arrived at by means of a valuation of services rendered, it was necessary to establish one

value for the stock in order to determine the *cost* of these services to the company." A. Yes, sir, it so states.

* * *

[6894] By Mr. Hall:

Q. Mr. Gunn, will you refer to transcript pages 6890 and 6891? A. Yes, sir.

Q. As is there shown you have recognized that the method utilized by Fisk, Hutchinson and others in their affidavits is not proper for the purpose of arriving at the cash value of the common stock at the time of the transaction. Isn't that so?

Mr. King: May we have the question read, please?

(Question read.)

The Witness: No, sir, that is not correct.

By Mr. Hall:

Q. Didn't the individuals to whom I have referred value services rather than the stock? A. They valued services as the only means of arriving at the value of the stock under the circumstances which existed in that case.

Q. Didn't you recognize in that statement that [6895] Instruction 3-D required determination of cash value of stock and not services?

Mr. King: You mean the statement on page 6891?

Mr. Hall: That is correct.

The Witness: It was not my intention to take any such recognition of it. My understanding of Instruction 3-D as explained before yesterday, is that it was necessary—or I had better say, as I have already explained, too,—that there was some uncertainty in my mind about it.

Instruction 3-D seems to me to require obtaining a cash value for the stock at the time it was given.

Now, if it be freely traded in the market, and the market afforded a basis for valuing the stock directly, that

would have been one way of doing it. But that was not the situation in the case of McCall Ferry Power Company, and in order to value it it was necessary to value the thing for which the stock was exchanged, in this case, in the case of Lee, Higginson, at least, it was services.

In the case of Bertron it was services. In the case of Harvey Fisk and Sons it was services. In the case of Hutchinson it was both property and services.

By Mr. Hall:

Q. Generally, what kind of services did Bertron's firm render? A. Financial services in raising the money.

[6896] Q. In view of what you have just said what did you mean when you stated at the bottom of page 52 and at the top of page 53 in Exhibit 26 as follows:

> "Inasmuch as the foregoing different values for the stock were arrived at by means of a valuation of services rendered, it was necessary to establish one value for the stock in order to determine the *cost* of these services to the company"?

The Witness: Will you read that, please?

(Question read.)

The Witness: I meant precisely what I explained in my previous answer.

By Mr. Hall:

Q. Isn't it a fact that neither Hutchinson, Fisk, Lee, nor Hopkins at any place in their affidavits claim that the values they have assigned represent cash value of the common stock at the time of the transaction?

The Witness: May I have that question?

(Question read.)

The Witness: No, I don't think that is a fact.

By Mr. Hall:

Q. Will you refer to those affidavits and point out where they say that they are determining the cash value

of the common stock as used in Instruction 3-D, of Electric Plant Accounts? A. You cannot find those precise words used in there, but the affidavits obviously are doing that, taken as a whole.

[6897] For instance, in the Lee affidavit at one point he said that it was his opinion that if the firm of Lee, Higginson and Company, immediately following the time they received that stock, were going to add or eliminate a partner, thus necessitating a division of the assets, that they would have based that division upon $25. a share, or upon the stock having a value of $125,000 one or the other. That is what I mean by saying that the affidavit was determining the cash value of the services or the stock.

Q. Does that mean that Mr. Lee was saying that the stock could be sold to a willing purchaser for that amount of cash at the time of the transaction? A. That is what it means to me.

Q. Was any stock sold for cash at the time of the transaction?

MR. KING: At the time of what transaction?

MR. HALL: Transaction pursuant to which the common stock was issued.

THE WITNESS: You are speaking of common stock now, are you?

By MR. HALL:

Q. Yes. A. Not so far as I know. I could find no record of cash sale at that time. However, that doesn't prove it couldn't have been sold by any manner of means if they tried.

[6898] Q. Nor does it prove it could have been sold? A. That is right. The only reason I have for believing it could be sold at that price is the fact Mr. Lee states in his affidavit.

Q. How do you explain the fact that if the stock could have been sold for cash it was not? A. Because people who had it wanted to hold it and sell it for a bigger cash price. That is obvious.

Q. Why didn't McCall Ferry get cash from anybody at any time? A. Because they got services.

* * *

[6899] Q. Are you accepting the responsibility for the determination of the cash value of the securities here in issue? A. May I have that question, please?

(Question read.)

THE WITNESS: Yes, to the extent it was necessary to make a determination I had a part of the responsibility and Mr. O'Connor had the other.

I would like to explain what that responsibility consisted of.

By MR. HALL:

Q. Yes. [6900] A. It consisted of taking the evidences of value, which are mentioned in Exhibits 26 and 27, and selecting, based upon those, a figure at which the stock would be valued for the purpose of the original cost claim.

What I am seeking to explain is that I could not, myself, make a valuation of stock as a financial expert would do it.

Q. Did Mr. O'Connor make the valuation as an expert? A. No, I don't think he did. I think the people who actually made the valuations were Lee, Fisk, Hutchinson, and those people.

Q. What is the division of responsibility between you and O'Connor in so far as the determination is concerned? A. I don't know just how to describe it. Mr. O'Connor was my superior in the company at that time and he had considerable knowledge and experience in financial matters, and I discussed the evidences we had of value with Mr. O'Connor and also company counsel.

Q. What experience had Mr. O'Connor had in financial matters? A. He had been secretary of the company for a long number of years and had been largely responsible for the handling of the company's financial affairs.

Q. Did that involve the valuing of common stock or any stock? A. I don't know. It involved buying and selling stocks [6901] as investment for the company so I guess you could call that a valuation.

Q. It involved buying and selling as distinguished from valuation of stock? A. It seems to me when you buy something you value it, don't you?

TRIAL EXAMINER: Don't give argumentative answers.

THE WITNESS: I was trying to answer. I didn't mean to be arguing about it. What I was trying to indicate is that when a person makes up his mind to buy, and decides to buy, a share of stock it seems to me he is then and there valuing it.

By MR. HALL:

Q. Will you specify in detail, Mr. Gunn, just what Mr. O'Connor's responsibility was in connection with determining the cash value of the common stock of McCall Ferry Power Company? A. I don't know how to specify it. It was what I have described to you and the value was arrived at in the way I have described it.

Q. For instance, who determined that the cash value of the common stock was $25? A. It was determined jointly by Mr. O'Connor and myself and by company counsel.

Q. Now you have brought into the picture a third party. [6902] A. No, I mentioned a few moments ago that the discussions relating to the proper value of this stock was had between Mr. O'Connor, company counsel and I.

Q. Who selected the figure of $25? A. I suppose I had as much to do with it as anybody else.

Q. Does that mean that you selected the figure of $25? A. I think you can take it to mean that.

Q. Do you mean by your testimony that you checked your figure with Mr. O'Connor and company counsel? A.

I mean we all sat down and discussed it together numerous times. I can't say that I had absolute responsibility for it in that if I had picked a different figure that Mr. O'Connor couldn't have caused me to change it.

Q. But he didn't cause you to change it? A. No, he did not.

Q. Was $25 the only figure you ever picked?

MR. KING: You mean picked or considered, Mr. Hall?

MR. HALL: We will make it "considered."

THE WITNESS: No, it was not the only figure I considered. I considered figures up as high as $30 and $35.

By MR. HALL:

Q. And as low as what? A. I don't recall that I considered any any lower than $25.

[6903] Q. That means any figure you had lower than $25 you necessarily rejected? A. It also means any figure I had above $25 I rejected.

Q. When did you make your cash value determination of $25? A. I don't recall the date but shortly before the original cost study was completed.

Q. And that would be when? A. Probably early in 1940. I believe we filed the original cost study, as I recall it, in May of 1940.

Q. Mr. Gunn, I don't remember your stating in your qualifications and experience that you have had any experience in determining the cash value of securities. Will you please state what experience you had prior to this proceeding? A. You mean in valuing securities?

Q. Yes. A. None, practically none. I bought a few securities and I sold a few, but my knowledge of it is no more than just the knowledge of a layman.

Q. I believe you have indicated that in determining cash value of securities there were no market prices available to you at all? A. That is right. I couldn't find any.

MR. KING: You are talking about McCall securities?

MR. HALL: Yes.

[6904] THE WITNESS: And McCall common stock also?

MR. HALL: Yes.

THE WITNESS: All right.

By MR. HALL:

Q. Do you know why there were no market quotations available? A. No, except the people who held the common stock didn't want to sell it. That is the only reason I could give. That was certainly true of Harlow. He so testified.

Q. In other words, none of the securities ever reached the market? A. That is my understanding of it, if by "market" you mean a place where they are generally bought and sold.

Q. And that applies to both common and preferred stock? Right? A. So far as I could determine it applies to both.

Q. Did you determine the cash value of the bonds as well as the common stock? A. Well, to the same extent I determined the value of the common stock I determined the value of all of them.

Q. What was the cash value you assigned to the bonds? A. $900 per $1,000 bond.

* * *

[6906] Q. As of what date is $25 the cash value of McCall Ferry common stock? A. I would say at about the same date. Of course, it was the amount of it that was to go for the various services, the commitment for that was made early in March.

Q. 1905? A. Yes. Also, the prospectus on which the project would be built and financed was dated early in March. It would seem to me there would be no difference in the date of valuation between March and June.

Q. At what date did you fix it? A. I didn't have in mind any specific date. I simply had in mind about those dates we have been discussing. As a matter of fact, the only thing I did in fixing the value of a stock was simply to take the valuations fixed by other people and judge what appeared to me to be a reasonable figure based upon all those valuations. For that reason it was not necessary for me to have in mind any particular date other than the fact that I was valuing the stock at the beginning of the enterprise.

Q. In other words, you weighed the evidence available to you and arrived at the $25 valuation and the $90 valuation? A. That is right.

MR. KING: Did you say $90?

[6907] MR. HALL: $900.

THE WITNESS: And the $900 you speak of applies to the bonds.

By MR. HALL:

Q. Yes. In other words, the date for the common was between March and June of 1905? A. Yes, I would say that.

Q. As of what date is $50 the cash value of the McCall Ferry preferred stock? A. The same date.

Q. Would you say that the $900 received for the bonds is based upon the cash received for the bonds? A. May I have that question, please?

(Question read.)

By MR. HALL:

Q. In other words, would you say that it is based upon the evidence of the cash received for the bonds? A. In part, yes.

Q. What else was the $900 valuation based upon? A. Well, it was based upon the fact that Harvey Fisk had the right or the obligation, as Fisk described it, to repurchase the bonds at 900, and it was based upon Harlow's testi-

mony that while he didn't know whether he could sell the bonds for 900 that he would not sell them for less than 1,000, and based on the fact that Bertron, Storrs & Griscom, as I [6908] recall, when they entered them in their records entered them at 90.

Q. Do you know the date of Harlow's statement? A. The latter part of 1906, I believe, and it is also a fact that when Mr. Harlow gave that testimony, in which he made that statement, that he was testifying in a situation where it would be in his interest to have stated the minimum figure he could for those bonds.

Q. That is your own interpretation of the issues in the case. Is that right, Mr. Gunn? A. Well, it is my interpretation of it but it seems a rather obvious interpretation.

TRIAL EXAMINER: Where is that, Mr. Witness?

THE WITNESS: Beg your pardon?

TRIAL EXAMINER: Where is included Harlow's testimony?

MR. KING: Item 21 of Exhibit 27.

By MR. HALL:

Q. Referring to Exhibit 26, page 47, paragraph 2, isn't it a fact that Mr. Harlow indicated in his testimony that he couldn't get $90 cash for the bonds? A. He said he did not think he could.

[6909] Q. Nevertheless, he said he was not willing to part with it for less than $100, is that right? A. Less than one thousand.

Q. Because he was thinking in terms of its future worth to him? A. I don't know what he was thinking of.

Q. When you use 90 your reference is to $100 and when you refer to $900 the relationship is to $1,000. Is that right? A. Yes, always speaking of the bonds.

Q. In other words, bonds are usually recorded on the basis of $1,000 or $100 units? A. Yes.

Q. Isn't it a fact that when the bonds, preferred and common stocks were issued the cash received for the bonds was the only cash received for any of the McCall Ferry Power Company securities?

THE WITNESS: May I have that question, please?

(Question read.)

THE WITNESS: Yes, I believe that was the only cash received, but it was not the only thing of value received.

By MR. HALL:

Q. In your opinion? A. In my opinion, yes, sir.

Q. If, as you say, the preferred stock had a cash value [6910] of $50 can you explain why it was not sold at that price rather than being issued as bonus stock? A. Well, it seems to me there were several reasons.

Q. Such as? A. The people who had the money which was sought for the purpose of developing the property, when they subscribed to that bundle of securities, and I refer to the $1,000 bond and the $450 or $500 worth of preferred stock, they were doing two things:

They were parting with $900 in cash and they were then and there assuming a very substantial risk of losing it, and those two together seemed to me to be the reason why it was necessary to furnish preferred stock which did have a value with the bonds in order to make the transaction.

Q. The assumption of risk, Mr. Gunn, applied both to the bonds and stock? A. Yes, to be sure. It applied to everything. The risks applied to the enterprise.

Q. But the assumption of risk as to the bonds was of a lesser degree. Is that right? A. The assumption of risk as to the bonds was less than the risk on other securities.

Q. Do you know why that was so? A. By the preferences, I suppose.

Q. That was because it was secured by the property. Is [6911] that right?

MR. KING: You mean the bonds were secured by the property.

MR. HALL: Yes.

THE WITNESS: That is what I had in mind when I mentioned the preferences.

By MR. HALL:

Q. But there was nothing at all which would modify the risk of the preferred?

THE WITNESS: May I have that question?

(Question read.)

THE WITNESS: I don't believe I understand what you mean.

By MR. HALL:

Q. Well, there was no protection to the preferred stock as in the bonds? A. Not as much but there was the same protection to that preferred stock as there is to any other preferred stock.

TRIAL EXAMINER: As of the time the preferred was issued all property owned by the company in toto was not equal to the face value of the bonds. Is that true?

THE WITNESS: May I have that question?

(Examiner's question read.)

THE WITNESS: It seems to me, Mr. Examiner, McCall Ferry Power Company thought it was.

MR. HALL: What is that answer, please?

[6912] By MR. HALL:

Q. Then, Mr. Gunn, why is there a discount on the bonds involved? A. Because of the risk of the enterprise.

Q. But if the value of the property was the equivalent of par, they should have gotten par for the bonds. Is that right? A. I think there is some confusion here. The

Examiner asked me a question referring merely to the par value of the bonds. Now we seem to be discussing the value of the total securities outstanding.

Q. But if there was an equivalence between the bonds and the property they nevertheless should have gotten par for the bonds. Is that right?

THE WITNESS: May I have that question, please?

(Question read.)

THE WITNESS: I don't know, but I shouldn't think so.

By MR. HALL:

Q. What was the outstanding capitalization of McCall Ferry Power Company as of June, 1905, in toto?

MR. KING: Was that question the capitalization of the Company or the outstanding securities?

MR. HALL: Outstanding securities is what I had reference to, Mr. King.

THE WITNESS: It seems to have been between seventeen [6913] and eighteen million dollars.

TRIAL EXAMINER: Can you break that down into bonds and the two classes of stock?

THE WITNESS: Yes. There were $8,483,000 principal amount of bonds; $4,116,500 principal amount of preferred stock; $4,999,000 shares of common stock. I suppose that common stock should be five million dollars because the missing shares are the qualifying shares from the figure I gave you. That should be five million dollars.

By MR. HALL:

Q. The total of that is approximately $17,500,000.

A. Yes, sir.

TRIAL EXAMINER: Where did you get that data?

THE WITNESS: Page 41 from the agreement between McCall Ferry Power Company and Susquehanna Contracting Company at the top of the page.

By MR. HALL:

Q. Mr. Gunn, what property did McCall Ferry Power Company own at that time which could be used to satisfy claims totalling 17½ million dollars?

MR. KING: If your Honor please, I object to the form of the question. I think this witness has indicated he is not a lawyer. He can indicate what property they had, but the balance of the question calls for a legal conclusion.

TRIAL EXAMINER: Read the question, please.

[6914] (Question read.)

TRIAL EXAMINER: I think the witness can answer that question. Objection is overruled.

THE WITNESS: It seems rather obvious to me that they didn't own enough to satisfy any such claim as that.

By MR. HALL:

Q. How much do you think they owned, Mr. Gunn? A. I think they owned enough to support the valuation that I have placed on the bonds, the preferred, and the common stock.

Q. Are you saying that the property which passed to McCall Ferry Power Company had a valuation of seventeen million dollars? A. No, sir.

Q. How much did it have? A. I don't know [that] I valued it. But the value that I placed on the securities is what we have been discussing this morning, $900 for the bonds, $50 for the preferred stock and $25 for the common stock.

Q. And the value for the preferred and common is based upon the valuation of services and not property. Is that right? A. That was the means by which we arrived at the value of the shares, yes, in part. It was also, in part, on the property.

[6915] TRIAL EXAMINER: Mr. Witness, if you applied your valuation to the capitalization you gave a moment ago, what would your result be?

THE WITNESS: You would get nine-tenths of the bonds, one-half of the preferred stock, and a quarter of the common stock.

By MR. HALL:

Q. You are saying that the value of the securities is represented by services and not property. Is that right?

THE WITNESS: May I have the question, please?

(Question read.)

THE WITNESS: No, I don't think that is what I am saying.

By MR. HALL:

Q. What are you saying? A. I am simply saying that because of the peculiar circumstances here it was necessary in arriving at the dollar equivalent of the stock to value services exchanged in certain transactions because that was the only evidence of it. But it doesn't follow from that that the valuation so placed upon it arises out of the services, at least not totally out of the services.

Q. What property did Lee, Higginson and Company transfer to McCall Ferry for the securities they received? A. I don't think they transferred any property. They [6916] rendered services for the securities they received.

Q. How about Harvey Fisk and Sons? A. I think the same thing is true of Harvey Fisk and Sons, except in addition to financing services he rendered managing services.

Q. That is your contention? A. Yes, sir, that is what Mr. Fisk says.

Q. How about Bertron, Storrs and Griscom? A. I think they rendered largely financial services.

Q. What property did the bondholders who received the bonus preferred stock transfer to McCall Ferry Power Company?

THE WITNESS: May I have that, please?

(Question read.)

THE WITNESS: They transferred cash and assumed risks.

By MR. HALL:

Q. And that necessarily means they transferred no property? A. What do you call property?

Q. Except for the cash. A. Yes, I suppose the cash is the only tangible property they transferred, but they rendered a valuable service to the enterprise in the shape of assuming the risk in parting with their $900.

Q. It is a fact that the only two individuals who [6917] transferred property to McCall Ferry were Hutchinson and Harlow McGaw. Right? A. What do you mean by "property" in that question? I thought we decided a moment ago that money was property.

Q. With that qualification.

THE WITNESS: Now may I have the question?

TRIAL EXAMINER: Yes.

(Question read.)

MR. KING: You mean at the time of the early development and issuance of the securities?

MR. HALL: June, 1905.

THE WITNESS: Yes, as I recall all the property came in through those two individuals.

By MR. HALL:

Q. What do you claim, Mr. Gunn, is the total original cost of McCall Ferry as of June, 1905?

THE WITNESS: May I have that question, please?

(Question read.)

THE WITNESS: You mean cost of, or cost to?

By MR. HALL:

Q. What do you claim the total original cost of the McCall Ferry Power Company property is as of June 1905? A. You are speaking now of these two property transactions?

Q. No, I am speaking of all property which McCall [6918] Ferry Power Company had as of the date of June, 1905. A. I don't know. I never computed it. If you want to know what the claimed original cost of the Hutchinson and Harlow-McGaw transactions are, I can tell you that. I didn't make a determination as of 1905.

Q. Wasn't that one of the determinations you had to make in reaching your conclusion in this case? A. Not if I understand your question it was not.

Q. Just what did you understand my question to mean? A. I thought you were asking me what was the total original cost of McCall Ferry Power Company in June of 1905.

Q. Up to that date. That is what I was asking you. A. I told you that I had not computed the cost as of that date, or at least I do not have it before me now.

Q. Will you enumerate what property McCall Ferry Power Company had as of June, 1905, in general terms? A. What do you mean by "property"? Are you including the money in it now or not?

Q. Yes, I am including the money. A. Well, they had the property they obtained from Hutchinson. They had the property they obtained from Harlow-McGaw. They had $6,400,000, I believe it was, that had been raised to construct the project.

Q. That is the loan you are talking about from Knickerbocker Trust Company? [6919] A. No. They had available to them the proceeds of the bonds that had been subscribed to.

Q. All right. A. And they had a very great intangible element of property, shall we say, in the fact they had the financing assured and all the water power rights necessary to go ahead and complete the project.

Q. What original cost did you put on Hutchinson's properties at the time of their transfer to McCall Ferry Power Company?

THE WITNESS: May I have the question, please?

(Question read.)

THE WITNESS: $1,221,000.

By MR. HALL:

Q. What original cost did you put on the Harlow-McGaw properties at the time of their transfer to McCall Ferry Power Company? A. $450,432.

Q. What original cost, if any, did you put on the Pullen transaction? A. $13,772.22.

TRIAL EXAMINER: Where does that come in the list of things you gave a moment ago? Is that among the intangibles or is that something which was omitted?

THE WITNESS: I think that is something we missed a [6920] moment ago, but it should have been included, Mr. Examiner.

Do you want the other things of value they got?

MR. HALL: I beg your pardon?

THE WITNESS: Do you want the other things of value they got?

By MR. HALL:

Q. I will ask you the questions as we go along, Mr. Gunn.

What did 90 per cent of the bond subscriptions amount to dollarwise? The bond subscription according to my information, Mr. Gunn, was $8,075,000.

TRIAL EXAMINER: As of June, 1905?

MR. HALL: Yes.

TRIAL EXAMINER: Were there any deferred subscriptions still outstanding at that time?

MR. HALL: They were all sold at 90, Mr. Examiner, because of the loan arrangement which had been made with Knickerbocker Trust Company.

TRIAL EXAMINER: All right.

MR. HALL: In other words, Knickerbocker Trust Company advanced funds——

TRIAL EXAMINER: Against the deferred subscriptions?

MR. HALL: Yes.

TRIAL EXAMINER: On the basis of $100?

MR. HALL: On the basis of 90, less the initial [6921] advancement made by the subscribers themselves.

THE WITNESS: May I have the question, please?

(Question read.)

THE WITNESS: $7,267,500.

By MR. HALL:

Q. Mr. Gunn, by adding the amounts of $13,772, the $1,221,000, the $450,000, and the $7,267,000, we arrive at a total of $8,951,772, which represents all the physical property or cash available to McCall Ferry Power Company at June, 1905. Is that right?

THE WITNESS: May I have the question, please?

TRIAL EXAMINER: Yes.

(Question read.)

THE WITNESS: Yes, it represents it in the form of original cost, but that doesn't seem to me to represent all the assets of McCall Ferry Power Company.

By MR. HALL:

Q. What other assets, Mr. Gunn, do you have in mind which could be sold for cash? A. You mean McCall Ferry Power Company could sell for cash?

Q. That is right. A. Water power rights.

Q. The water rights you refer to are included in the Harlow-McGaw and Hutchinson properties. Is that right? [6922] A. Yes, but there is a vast difference in the value of water power rights sold as separate parcels or small groups of parcels than it is when you bring them together and have assured financing and an assured market. At least I am told there is a difference. I am not a water-rights expert, but at least that is my understanding of it.

* * *

[6923] By MR. HALL:

Q. Mr. Gunn, you were talking about selling the property in your last answer in connection with its being a successful enterprise at the time of sale. Is that right? A. Let's have the answer read. I am not aware I proposed to sell it.

TRIAL EXAMINER: Read the answer, please.

(Answer read.)

THE WITNESS: If you note there I was not suggesting a sale by McCall Ferry Power Company. The word "sale" used in [6924] that question refers to Hutchinson and Harlow and McGaw's sale to McCall Ferry Power Company.

By MR. HALL:

Q. In other words, you are talking in terms of value of a successful enterprise based upon prospective earnings?

MR. KING: You mean solely based upon prospective earnings, Mr. Hall? The question is a little ambiguous.

MR. HALL: Will you answer the question, Mr. Gunn?

TRIAL EXAMINER: Read the question, please.

(Question read.)

MR. KING: I object to the question on the ground it is ambiguous, if Your Honor please.

MR. GOLDBERG: To counsel?

MR. KING: Yes.

TRIAL EXAMINER: What is ambiguous about that?

THE WITNESS: The thing ambiguous to me is that in a successful enterprise the earnings are not prospective. That is one thing ambiguous about it.

By MR. HALL:

Q. And it is earnings that give it value? A. Beg your pardon?

Q. It is the earnings that give it the value? A. I don't know you could say it is the sole reason for its having a value. If it had no prospect of having any earnings then it wouldn't have very much value.

[6925] Q. Now, Mr. Gunn, what did the bondholders get in the foreclosure proceedings—strike that, please.

What was paid in the foreclosure proceedings for the McCall Ferry Power Company property?

MR. KING: I object to that question as being wholly irrelevant and immaterial.

TRIAL EXAMINER: On what grounds?

MR. KING: To establish the value in 1905.

TRIAL EXAMINER: When was this foreclosed? 1909?

MR. KING: A number of years later, 1909 or 1910. I don't recall the exact date.

TRIAL EXAMINER: The project then was still uncompleted?

MR. KING: Yes, sir.

TRIAL EXAMINER: The objection is overruled.

THE WITNESS: Will you read the question, please?

(Question read.)

THE WITNESS: $2,000,000, I think, was one of the payments. Then, of course, there was an exchange of securities. I don't know just which one of those things you would call payment in the foreclosure proceedings. I don't think that has any significance because when Barnum went in to bid the property, as I recall it, he was authorized by the bondholders' committee that if there was a competitive bid made to bid up to the face value of the bonds plus accrued interest plus all expenses that had been incurred up to that time.

[6926] By MR. HALL:

Q. How much is that? A. I don't know offhand.

Q. But the foreclosure price was $2,000,000, period? A. I understand that was the bid, $2,000,000, and nobody bid against them. Hutchinson later complained bitterly, and so did Sanderson and Porter, that McCall Ferry Power Committee moved so fast they wouldn't give them an opportunity to organize any opposition.

* * *

[6935] Q. But there were no earnings created by the financing itself? A. I don't quite follow your question. Are you saying this: That the mere act of financing standing alone did not create earnings? If that is what you are asking me the answer obviously is that it didn't, except to the extent they deposit the money in the bank and get some interest on it.

Q. Other than the interests there were no earnings. A. Not out of that item standing alone. The earnings would come out of the combination of all these things I mentioned.

Q. Were there any earnings out of the water power rights to which you have referred, Mr. Gunn? A. Not standing alone. Separate from the other items I mentioned I don't suppose there would be any earnings out of

it. They would be valuable water power rights that could be sold, of course, but undeveloped water power rights don't have any earnings ordinarily.

Q. There could be no earnings until the project was constructed and successfully operated? A. That is correct, there could be no actual earnings until that time.

Q. And that was, of course, all in the future in 1905.

[6936] A. You mean prospective completion?

Q. Yes. A. Yes, obviously.

Q. And the earnings as well. A. Yes. Yes, I think that is right.

Q. There was absolutely nothing available in 1905 to pay dividends on the stock. Is that correct? A. I don't think there was anything with which you could properly have paid dividends.

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[6976] Q. How did Pliny Fisk use Part 10 of Exhibit 27 in arriving at the cash value? A. I don't know. You will have to ask Mr. Fisk.

Q. Then the fact is that you do not know how Fisk, Hutchinson, Lee, and any others to whom you submitted the documents, used them in arriving at their conclusions as to cash values?

THE WITNESS: May I have the question, please?

(Question read.)

MR. KING: Mr. Hall, by the words "How they used them", you mean what weight they gave to particular documents?

MR. HALL: Simply how it entered into their conclusions as to cash value.

[6977] THE WITNESS: I obviously do not know. I couldn't look into their mental processes.

By MR. HALL:

Q. As a matter of fact, Mr. Gunn, you don't even know what documents entered into their considerations. Right? A. I do know what documents I gave them.

Q. But that is not the—— A. But I do not know what weight they gave to the various documents. Certainly I do not.

Q. Or whether they even used them in arriving at their values? A. No, I don't know that. As I have told you, I wasn't present when Mr. Fisk came to his conclusions. I wasn't present when Mr. Hutchinson came to his. As a matter of fact, I don't know as I was present when any of them came to their conclusions. So I can't tell you what the mental process was.

* * *

[6981] Q. I am merely asking you how much profit you considered the bankers got. A. I didn't have to consider any profit myself. I assumed that Fisk and Lee and these other people considered it when they made the valuation.

Q. Didn't you say that the profit the bankers got would have a bearing on the cash value? A. Yes, it seems to me it would. I made that [6982] speculation, yes.

Q. Didn't you also state that you applied an independent judgment as to the determination which Fisk and the others made? A. No, sir, I don't think I stated that. I didn't intend to.

Q. Didn't you say, for instance, that you had considered part 2 of Exhibit 27? A. I don't think so. What I was saying at that time is what would have to be considered to arrive at an appraisal of this stock. I told you earlier this morning, I think, that between Mr. O'Connor and counsel and myself we simply arrived at a valuation from the opinions that had been given by people who were present at the time and in that in confirmation of those, or in order to assure myself that they at least looked reasonable to me, I considered what would be the earnings of McCall Ferry Power Company.

Now, in order to consider that you have to have the facts included in other parts of Exhibit 27 than those parts which we mentioned.

* * *

[6986] Q. Is Mr. Lee, who signed part 8 of Exhibit 27, still alive? A. Yes, sir. He was according to the last account I had of him. I haven't heard of his dying.

Q. When was that, Mr. Gunn? A. Perhaps a year ago or some such time.

Q. How old is Mr. Lee? A. I can't say precisely. I can probably find out. I would say he is in his eighties. He was a rather old man whom I would judge to be well in the seventies when I obtained from him the affidavit which is Part 8 in Exhibit 27. That was some eight years ago. So he is rather advanced in years now.

Q. Mr. Gunn, upon which statement included in Exhibit 27 did you place the most reliance in reaching your conclusion [6987] as to cash value of common stock? A. May I have that question?

MR. KING: Of the McCall Company?

MR. HALL: Yes.

(Question read.)

THE WITNESS: I don't believe I could designate a single one. But I would say this: I placed considerable reliance in the statement of Mr. Lee, Mr. Fisk, and Mr. Hutchinson.

By MR. HALL:

Q. Did you consider that those three were all equally reliable? A. I don't think I ever graded them.

Q. What is that? A. I don't think I ever graded them as to their reliability.

Q. Did you use Hutchinson's determination of cash value of McCall Ferry common stock? A. Did I use it?

Q. Yes. A. I took it into consideration, yes.

Q. And then rejected it, right? A. No, I wouldn't say I rejected it. I wouldn't say any of them were rejected.

Q. What cash value did Mr. Hutchinson place on the common stock in his affidavit which is part 1 of Exhibit 27? [6988] A. May I have the question, please?

(Question read.)

THE WITNESS: He said he believed it was worth from 20 to $30 a share.

By MR. HALL:

Q. What did Mr. Lee say in his affidavit which is Part 8 of Exhibit 27? A. $25 per share.

Q. What cash value did Mr. Fisk arrive at in his statement which is Part 9 of Exhibit 27? A. For the common stock?

Q. Yes. A. He sets forth in that Exhibit figures from which it is possible to compute $18 a share for the common stock.

MR. HALL: Would you read back the last answer?

(Answer read.)

By MR. HALL:

Q. How did the $18 cash value assigned by Fisk to the common stock assist you in determining the $25 cash value which you used? A. In the same way the others did. It was a fact to be taken into consideration.

Q. Just how did you take it into account? A. I just considered all of the estimates of value I had and came to the conclusion that $25 a share was the proper [6989] figure.

Q. By what process did you get from $18 to $25 per share? A. By the process of considering what Hutchinson had said the value was, what Lee said the value was, what Fisk said the value was, what Hopkins said he thought the value was. I believe that is all of them.

Q. What did Mr. Hopkins say the cash value of the common stock was? A. Mr. Hopkins stated in Part 24 of Exhibit 27 an amount for the legal services of Coudert Bros., which was equivalent to a $30 per share value on the 1,000 shares of stock they received for their services.

Q. Didn't Mr. Hopkins also point out, "I am not qualified to place a value on that stock as such"? He makes

that statement, does he not, on page 201 of Exhibit 27? A. May I have the question, please?

(Question read.)

THE WITNESS: Yes, I think Mr. Hopkins felt the same about it as I do.

By MR. HALL:

Q. You mean by that you are not qualified to place cash value on the McCall Ferry common stock? A. Independently of my own ability? I certainly would not be qualified to do it.

[6990] Q. How were you able, Mr. Gunn, to apply any independent judgment to what Mr. Fisk, Lee and Hutchinson said when you just stated you didn't think you were qualified? A. In the same way anyone else would do it. In the same way the Commission would do it, I think. I considered the figures they gave me and picked the ones which in my judgment were most appropriate.

Q. Does that mean you don't think the Commission is qualified to pass on this determination? A. I was not saying that at all. I didn't understand the Commission were financial experts. That is the reason I thought it was necessary to bring financial experts down to testify for them once in a while.

Q. Mr. Gunn, who was the financial expert who assisted you in determining the $25 cash value for the common stock? A. Mr. O'Connor had some knowledge of financial matters. It was discussed with company counsel and among the three of us we arrived at that conclusion.

Q. When you used a $25 cash valuation for the common stock you necessarily rejected Fisk's valuation of $18 per share. Right? A. No, I don't so term it. There were three or four different values stated by different people and in taking them into consideration and arriving at a single value it automatically makes that value different from at least two [6991] of the others, but I don't think that constitutes rejecting them.

Q. If you thought that Fisk's $18 valuation was the correct figure you would have used that $18 figure. Isn't that right? A. Not necessarily. I don't think so. I think you assumed in that question that I had no other evidence but just Fisk's, haven't you, or are you still assuming I have these other people's opinions?

[6992] Q. Assuming you had the evidence but you concluded that Fisk was the best evidence of cash value of common stock, you would have agreed with Mr. Fisk. Is that right? A. Do you also include in that assumption that the others were worth less?

Q. No, just the thought that Fisk's statement was the best evidence. A. No, I think I would have considered them all. That is if I had not come to the conclusion that the others were worth less.

Q. How did Mr. Hutchinson's twenty to thirty dollar valuation assist you in arriving at a $25 cash valuation for the common stock? A. In the same manner in which the others did. It was one factor to be considered and weighed in reaching a conclusion.

Q. Can you explain how you considered Mr. Hutchinson's valuation? A. No, sir, I cannot. I can not describe my mental processes in reaching the conclusion.

Q. You cannot explain how you weighed it? A. No, sir.

Q. It is a fact, is it not, Mr. Gunn, that the determination of $25 that you did use coincided with Mr. Lee's determination? [6993] A. Yes, and it also fell within the range of Mr. Hutchinson's determination.

Q. It fell—— A. Right square in the middle of the range.

Q. Are you saying what you did was to take the average? A. I may have done some averaging. As I said, I can't describe my mental process of how I came to the conclusion of $25 a share. It just seemed to me that from a consideration of all the facts the $25 was a proper figure. I have to say again that I am not a financial expert.

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[7021] MR. KING: * * * Lastly at pages 6816 and 6817 we were requested, as we understand it, to produce so-called participation, which is a list of documents submitted to Hutchinson and Fisk. I now hand Mr. Hall copies of those two documents.

I would like to say in connection with the last documents I have handed to Mr. Hall that they are the only copy which we have. We would like to have them returned as soon as possible.

MR. HALL: Receipt is acknowledged of these documents, Mr. Examiner, and they will be returned intact.

* * *

By MR. HALL:

Q. Mr. Gunn, why didn't you use $18 as the cash value of the McCall Ferry common stock? A. Because I reached the conclusion that $25 was the proper value to use.

Q. Why didn't you consider the $18 cash valuation proper? A. Because I had several valuations and I considered them all and arrived at the conclusion that $25 was proper.

[7022] Now, as I recall, the valuations I have ranged from $18 to $30. It was necessary to pick a single valuation of the stock and it was therefore a mathematical result, and in picking any single valuation it would be different from the others that varied from it.

Q. Why didn't you pick the $30 valuation? A. For the same reason I didn't pick the $18 one.

MR. KING: Would you excuse me just a minute, Mr. Hall.

You asked for another bit of homework which I forgot to make a statement in connection with.

At Pages 6816 and 6817 I have stated that I have handed you participations of Hutchinson and Fisk in response to the request you made at those pages.

MR. HALL: Yes.

MR. KING: You will note from examining the pages that you also asked, in addition to the participations submitted to Hutchinson and Fisk, the ones submitted to Hopkins. I forgot to say that we do not have any participation submitted to Hopkins because the information in Hopkins' statement was limited to matters in his own firm's file.

MR. HALL: In other words, you did not submit any documents at all to Mr. Hopkins upon which he based his statement in part or in whole?

MR. KING: Correct, because he based his statement upon the documents in his own files.

[7023] MR. HALL: How about Mr. Lee?

MR. KING: You didn't ask us for Mr. Lee. We have a participation submitted to Mr. Lee.

MR. HALL: Will you submit those covering Mr. Lee's participation also?

MR. KING: Yes.

TRIAL EXAMINER: What is the meaning of the word "Participation"?

MR. KING: Simply means a list of the documents which were submitted to the affiants Hutchinson, Fisk, and Lee upon which they made up their minds and finally prepared and executed affidavits in connection with.

TRIAL EXAMINER: Are they the documents which were presented to each one of them for affidavits and upon which they based all of the material contained in each of the affidavits?

MR. KING: Would you like to look at them?

TRIAL EXAMINER: I am afraid I couldn't get much out of them if I looked at them right at this moment.

MR. KING: Those so-called participations, if Your Honor please, contained on top of them a summary nar-

rative of the facts; and, secondly, exhibits relating to the particular party's participation in the project. They do not contain all of the exhibits in the company's files, as Mr. Gunn heretofore has stated.

TRIAL EXAMINER: You used the word "participation" then, [7024] in connection with the project?

MR. KING: Correct.

MR. HALL: Serving as the basis for refreshing recollection, is that right, Mr. Gunn?

THE WITNESS: A part of the basis.

By MR. HALL:

Q. What is the other part you refer to? A. Well, for example, in the case of Lee, Higginson, they in their own files had some additional information in addition to what was supplied in the participation.

Q. What additional information did Hutchinson have other than that which you furnished him and which is contained in these documents Mr. King has turned over to me? A. In the case of Mr. Hutchinson he had access to a very considerable amount more than that because he worked with me off and on for a period of eight or ten months, I believe, during which we devoted several days to conferences and a considerable part of that time was spent in reviewing a large volume of information in the company's files, of which the portion in the participation appeared to be the more important items.

[7025] Q. I believe you have testified Mr. Hutchinson had no personal files relating to the early history of the McCall Ferry Power Company? A. That is correct.

Q. Then he relied solely upon the information in the company's files, right, plus his recollection? A. Plus his recollection; yes.

Q. All right. A. But what I am seeking to explain is that all of the information from the company's files which he reviewed is not in that participation.

MR. HALL: Mr. King, did I correctly understand you to say a few moments ago that Hopkins, in preparing his affidavit, which is Part 24 of Exhibit 27, relied solely upon his recollection and the information contained in the files of Coudert Brothers and was not submitted any participation in connection with the preparation of that exhibit?

MR. KING: That is my understanding.

By MR. HALL:

Q. Mr. Gunn, before these documents were submitted to the individuals we have been discussing, speaking of the participations, had it been ascertained whether they had documents of their own upon which they could rely? A. Yes, I think that had been ascertained.

Q. What did you ascertain in that connection? [7026] A. It varied from one to another. In the case of Mr. Lee I ascertained that he had a considerable amount of information in his own files. Just precisely how much and what the information consisted of I never knew except that he produced certain documents in support of his statement, gave me copies of them, and I think for the most part they are included in Exhibit 27, and also in the Lee, Higginson participation.

In the case of Hutchinson, he had no personal documents of his own. He attempted to secure from the successor to Continental Trust Company in New York, I believe, the records of his bank account through which the cash paid to him was disbursed in satisfaction of his obligation to other people, and advised me that it was impossible—that that bank long since had destroyed the records and he could not obtain that information. Therefore, the information which Hutchinson had available to him was what was supplied him from our company's files, a part only of which is included in the participation, and that was supplemented by his recollection.

Now, as regards Fisk, I don't know just what information he had before him, but I am sure he had more than I submitted to him. I believe that for this reason: He was represented by a personal counsel by the name of Wilton Cole, and he had a son who, working with Mr. Cole, undertook to find as much information as possible about the McCall Ferry participation, [7027] and it was my understanding that they found some information in the Pliny Fisk library at Princeton University. I don't know whether it was the same that I had made available to him or whether it was additional, but it was my understanding from Mr. Cole that it was not of primary importance.

Q. I don't understand your last statement there, Mr. Gunn, in view of the fact that Mr. Fisk, at the bottom of page 70 and top of page 71 of Exhibit 27, states, "Their search", referring to the search made by his son and Mr. Cole, "established the fact that all of the records of Harvey Fisk and Sons relating to the McCall Ferry Power Company deal had been destroyed." A. Well, I think that was in general true, but it was my understanding that there was some information in the Fisk library at Princeton.

Q. Are you in a position to state that it is a fact that Fisk relied upon information which you did not furnish him through Cole? A. No, I personally cannot state that as a fact that I know.

Now, as for Mr. Hopkins, I did not supply him any information because the total connection with his firm, about which I ever had any information, came from the files of Coudert Brothers, and he therefore had the information.

Q. Then no statement was submitted to Hopkins? [7028] A. No; that is right.

Q. Mr. Gunn, I find in the participations turned over to me by Mr. King, which were submitted to Fisk, pencil notation in the margin. Whose handwriting is that? A. I don't know. I have not looked at them in several years. May I look at them? I might be able to identify them.

Q. I refer you to these notations in the margin. A. I cannot state for certain, but they look like the handwriting of Mr. Wilton D. Cole. I can state for certain they are not mine.

* * *

[7036] By Mr. Hall:

Q. Can you answer the question, Mr. Gunn? A. I don't understand what you mean by "distillation", Mr. Hall.

Q. I mean the $25 cash valuation is the result of a composite consideration of the opinions of [7037] the four individuals to whom I have referred. A. It is primarily that, but it is also based upon such consideration as Mr. O'Connor and company counsel and myself could apply to those figures, and it is also obviously affected by the fact that at the time the stock was given the company seemed to have very good prospects of earnings in the future.

Q. Did you consider the four opinions of equal reliability? A. I don't know. I think perhaps I thought that the opinions of Lee and Hutchinson and Fisk were probably somewhat more reliable than Hopkins.

Q. Did you think that the opinions of Lee, Hutchinson and Fisk were of equal reliability? A. I think I probably did. I never recognized any substantial difference in their reliability.

* * *

[7038] By Mr. Hall:

Q. Did you contact persons other than Lee, Hutchinson, Hopkins and Fisk for the purpose of securing valuations of the common stock of McCall Ferry Power Company?

The Witness: May I have that question, please?

(Question read.)

The Witness: No.

By Mr. Hall:

Q. Did you contact other persons for the purpose of securing valuations on the preferred stock? [7039] A. No.

Q. Mr. Gunn, what association did Mr. Lee have with that portion of the McCall Ferry financing which was done by Lee, Higginson and Company? A. I don't know.

Q. Does Mr. Lee make any statement in his affidavit about that? A. You mean about his association?

Q. Yes. A. Nothing other than he gives a recitation of facts there which seem to indicate his familiarity with it.

Q. Have you located any documentary evidence showing direct participation by Mr. Lee in the McCall Ferry financing?

Mr. King: What do you mean by "participation", Mr. Hall?

Mr. Hall: Direct connection?

The Witness: Mr. Hall, that doesn't help me much. There are all sorts of evidence that the firm participated in it. He was a member of the firm.

By Mr. Hall:

Q. Did you find any correspondence addressed to Mr. Lee or written by Mr. Lee relating to the financing of the McCall Ferry deal? A. I don't recall that I did. I never examined Lee, Higginson's files. However, I do recall that Mr. Lee told me [7040] that he had been directly connected with it in the instance of the conference which we mentioned last week.

Q. Why isn't that last information that you referred to contained in Mr. Lee's affidavit, Part 8 of Exhibit 27? A. I suppose he didn't think it was necessary to put it in there. That is the only reason I know. After all, everything couldn't be put in the affidavit.

Q. Wouldn't that be a material fact which should be included in Mr. Lee's affidavit? A. I don't think so. I think from the affidavit it is obvious.

Q. How could you judge the weight of his statements without any such statement as to direct connection with McCall Ferry financing? A. Well, because he was a member of the firm, and the firm handled it, or handled a part of it.

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[7041] By Mr. Hall:

Q. Mr. Gunn, do you consider Lee's statement to you of direct participation a material fact? A. Prior to this cross-examination I didn't. But inasmuch as it has become of such acute interest to you it is beginning to look like it would have been desirable for it to be in there.

Q. Even prior to the cross-examination didn't you consider that it had a bearing on the weight to be attached to Mr. Lee's statement? A. No, I didn't think it had any bearing.

Q. What were Mr. Lee's duties and activities in connection with the McCall Ferry financing? A. I don't know.

Q. Does Mr. Lee refer to his duties and activities in connection with the McCall Ferry financing in his affidavit? A. I don't think so; not as I recall it.

[7042] Q. Isn't it a fact that Mr. Gardiner Lane represented Lee, Higginson and Company in handling the McCall Ferry affairs? A. As I understand it, Mr. Gardiner Lane was the partner particularly responsible for the McCall Ferry business. That doesn't seem to me, however, to preclude anybody else in the firm knowing anything about it.

Q. Is Mr. Lane dead? A. That is my information that he is.

Q. Do you know when he died? A. Some time prior to the time I went to Mr. Lee to get this statement, or I would unquestionably have gone to Mr. Lane.

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[7053] By Mr. Hall:

Q. Was July 10, 1939, the earliest date when you were aware of Mr. Lee's valuation of the common stock? A. Yes, I think it was at least that early. I think [7054] he mailed it to me and I received it a few days later as I recall.

Q. Was Mr. Lee's determination of the cash value of the McCall Ferry common stock made to assist you in determining the original cost of the McCall property? A. May I have that question?

(Question read.)

The Witness: Yes, sir, and I suppose for any other purpose we might need the cash value.

By Mr. Hall:

Q. Had Mr. Lee made any previous valuation of the McCall Ferry common or preferred stock? A. Not that I know of.

Q. Did you ask Mr. Lee if he had made any previous valuation of the McCall common or preferred stock? A. No, I don't recall that I did.

Q. Didn't you think a previous valuation of the stock made by Mr. Lee would be pertinent to your determination? A. Yes, but I had no reason to suspect he had ever been asked to make another one.

Q. Did you ask Mr. Lee to make sure he had never made such valuation? A. No, but I asked him to value it. I assumed if Mr. Lee had made a valuation I would have heard about it. I know Mr. Lee did make a very thorough study into other [7055] projects he financed about this time, and I certainly would assume that if he previously valued the securities of McCall Ferry Power Company they would have been a part of the thing he considered.

Q. Was the risk assumed and the sacrifices made in connection with the projects analyzed by Lee the same as the risk assumed and the sacrifices made in connection with the McCall Ferry project?

MR. KING: May we have that question again, please?

(Question read.)

THE WITNESS: I assume they were as nearly as he could find from his firm's records. It was my understanding he endeavored to pick the financings that were most nearly comparable to those of the type of McCall Ferry Power Company.

As I recall it, one of the company's——

By MR. HALL:

Q. But can you state——

MR. KING: Let him finish.

MR. HALL: I am sorry. I thought he was through.

THE WITNESS: As I recall it, most of the companies were water power companies. I recall Colorado River Power Company and Washington Water Power. Of my own knowledge I don't know how comparable it was.

By MR. HALL:

Q. Can you state it was the fact Mr. Lee even considered [7056] risk assumed and sacrifices made in arriving at his valuation of the common stock? A. No, I don't know what Mr. Lee's mental processes were. I can't state what he had in mind.

Q. And Mr. Lee's affidavit doesn't help us in that respect? Is that right?

MR. KING: I object to that question. It is pure argument.

TRIAL EXAMINER: Objection sustained.

By MR. HALL:

Q. So far as you know Mr. Lee never attempted to value the McCall common or preferred stock until you made your request for a valuation of the common stock in connection with your original cost determination? A. How did that question start?

(Question read.)

THE WITNESS: That is correct.

By MR. HALL:

Q. Did Mr. Lee, at the time he prepared his statement, know of any valuations of the McCall common or preferred stock made by his firm or anyone else? A. Not so far as I know or can recall.

Q. Did you ask Mr. Lee if he knew of any valuations of the McCall common or preferred stock made by anyone else? A. No, I don't think I asked him that question.

Q. Mr. Lee, then, had no knowledge of any contemporaneous [7057] valuation of the McCall common or preferred stock made in 1905 to 1907?

* * *

THE WITNESS: I don't know.

By MR. HALL:

Q. Did the records of Lee, Higginson and Company show any purchases or sales of McCall Ferry common stock at $25 a share? A. It is my understanding they did not. As I recall it Mr. Lee said they kept the 5,000 shares and realized a total loss on it.

Q. Did the records of Lee, Higginson and Company show any purchases or sales of McCall Ferry common or preferred [7058] stock at any price? A. Not so far as I know.

* * *

[7059] By MR. HALL:

Q. Mr. Lee's difficulty to place a value on the common stock was due to the fact he was attempting a determination 34 years after the transaction. Isn't that so?

* * *

THE WITNESS: No, I don't find that here. The second paragraph of Mr. Lee's affidavit on Page 66 states what his difficulty was, and reads as follows: "It is difficult for me to place a value on this stock because of the long lapse

of time since the transaction, and also because the enterprise passed through a receivership and the stock ultimately became worthless."

By MR. HALL:

Q. Doesn't that mean substantially what I said? A. 34 years is 34 years, but it doesn't so state.

Q. But Mr. Lee did not let the difficulties he [7060] encountered deter him from placing a value on the stock, although others confronted with the same difficulties declared their inability to do so. Isn't that so? A. May I have that question, please?

TRIAL EXAMINER: Yes.

(Question read.)

THE WITNESS: To whom do you have reference?

By MR. HALL:

Q. Mr. Griscom, for instance. A. Yes, Mr. Griscom said he couldn't, but I think that——

Q. Mr. Griscom was connected with the firm of Bertron, Storrs & Griscom in 1905, 1906 and 1907 and 1908? A. He managed the Philadelphia office of that firm and the McCall Ferry proposition was handled from the New York office by Mr. Bertron.

Q. Being a member of the firm didn't help matters. Is that it? A. Well, I shouldn't say——

MR. KING: I object. That is argumentative.

TRIAL EXAMINER: Sustained.

By MR. HALL:

Q. What records did Lee, Higginson and Company have with respect to the McCall Ferry development which had a bearing on the cash value of the common stock? A. I don't recall all the records they had, but some [7061] of them as I recall are in Exhibit 27.

Q. Are they all in Exhibit 27? A. I don't know whether they are or not. All of them we have are either

in Exhibit 27 or in the company's files which have been available to the Commission staff.

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[7063] Q. What records did Mr. Lee review which are not part of Exhibit 27? A. I don't know.

Q. Did Mr. Lee show you any of the records to support [7064] his valuation of the McCall Ferry common stock?

MR. KING: Do you mean any of his records that are not in Exhibit 27?

MR. HALL: That is right.

THE WITNESS: No. He didn't show me any of the records. As I said, he did show me, I believe, a substantial tabulation that had been made from his records for him, but as for seeing the documents or the records from which the results show on the tabulation came from, I don't recall seeing them.

By MR. HALL:

Q. What did the tabulation reflect? A. As I recall it it was a tabulation showing what Lee, Higginson, as a firm, had realized on other underwritings, I believe from 1900 to about 1910, in projects similar or as nearly similar as they had to McCall Ferry Power Company.

Q. How did that support any valuation for the McCall Ferry securities? A. I don't know any way that it supported it other than as Mr. Lee stated in his affidavit.

Q. Are you vouching for the similarity between McCall underwriting and the other underwritings? A. No, sir, I am simply stating the facts Mr. Lee told me.

Q. Do you have available a copy of the tabulation [7065] which Mr. Lee showed you? A. No, sir, he kept it himself. It was a long hand-written tabulation.

Q. What underwritings did Mr. Lee analyze? A. I don't recall. The only two I recall, and I am not too certain about those, were Colorado River Power Company and Washington Water Power. I do recall he had several others but I don't recall the names of them.

Q. What was the nature of the underwritings which he analyzed? A. I don't recall. As a matter of fact, I don't think I ever knew in detail.

Q. In other words, Mr. Gunn, you are in a position of not being prepared to be cross-examined on the reliability of the analysis made by Mr. Lee.

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THE WITNESS: That is certainly a fact. I don't think I ever had enough information to have undertaken cross-examination on them.

• • •

[7066] By MR. HALL:

Q. What is the basis for Mr. Lee's statement that his firm would not have participated in the McCall Ferry proposition unless they had believed the stock worth $25 per share? A. May I have that question, please?

(Question read.)

[7067] THE WITNESS: I don't know what his basis was. It would seem to me it was probably largely his judgment and recollection, plus his study of these other projects I have stated.

By MR. HALL:

Q. What other members of Lee, Higginson and Company did Mr. Lee consult at the time his affidavit was prepared? A. I don't know.

Q. What other members were alive at the time he prepared his affidavit? A. I don't know.

Q. If he did not consult, assuming he didn't, other members of Lee, Higginson and Company at the time he made his affidavit, how was he in a position to state what their belief in 1905 might have been?

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THE WITNESS: You are asking me to assume he didn't talk to any others. Is that your question?

[7068] By Mr. Hall:

Q. That is correct. A. I don't know. If you assume he didn't talk to any others then it would seem to me the statement is his own opinion.

Q. So far as you know that is all it is, Mr. Lee's opinion? A. I don't know whether it is or isn't, as I said, I don't know whether he talked to any other members of the firm. I don't know whether there are any more living or not.

Q. Was Mr. Lee an officer or director of McCall Ferry Power Company or Susquehanna Contracting Company? A. Well, he was not of Susquehanna Contracting Company. I am pretty sure of that. I don't recall he was of McCall Ferry Company. That can be checked.

Q. My information, Mr. Gunn, is that Mr. Lee was neither an officer or director of McCall Ferry Power Company or Susquehanna Contracting Company. A. That is my recollection, also.

Q. Did Mr. Lee ever attend as an observer any meetings of the board of directors or the executive committee of either McCall Ferry or Susquehanna Contracting Company? A. I haven't the remotest idea.

Q. Did the early records disclose that Mr. Lee was consulted by McCall Ferry on any of its problems? [7069] A. The early records of McCall Ferry?

Q. Yes. A. I never made an investigation to ascertain that.

Q. Wouldn't it be in the fifteen files you have referred to several times? A. Yes, it very well may have been. But the volume of those files is such that I cannot remember everything that is in them, and unless I had been looking for some specific thing I might well have passed over some indication of the question you have just asked me. Having no interest in it, I would have taken no note of it.

* * *

[7070] Q. Does Mr. Lee at any place in his statement refer to his valuation as being the cash value of the stock? A.

I don't know. Shall I read the statement? I don't recall it. Shall I read it?

Q. Do you understand Mr. Lee's valuation to have been made as representing the cash value of the common stock? A. That was my understanding of it.

Q. As used in Electric Plant account instruction 3-D? A. Yes, or at least the nearest approach to that which was available.

[7071] Q. Did you ever show Mr. Lee Electric Plant account instruction 3-D? A. I don't know whether I showed him the instruction or not. When I first asked him for his assistance I told him the purpose for which it was to be used and I am pretty sure I explained it to him.

Q. Did you explain Electric Plant Account instruction 3-D to Mr. Lee? A. I think I told him what the thing said and what our lawyers concluded it meant.

Q. What did you tell him? A. I don't recall the words I used, but I think I told him that the company was required by the Federal Power Commission to determine the original cost of its property and that in order to ascertain the original cost it was necessary to make an evaluation of the common stock, and that our lawyers had examined the facts as we knew them up to that time and thought it was desirable to obtain Mr. Lee's opinion as to what his services were worth, and from that a statement of the valuation of the common stock.

Q. You assumed that when Mr. Lee said "Stock worth $25 per share", he meant cash value as specified in Electric Plant account instruction 3-D? A. I assume he meant cash value from all the things he said in the affidavit about the value of the stock. You [7072] have taken a few words out of context. As I recall it, there are some more words in there.

Q. Isn't it a fact that stock may be worth to a person a certain amount but that it could not be sold for that amount? A. I don't know how that would exist. It might be worth to a person a certain amount and he might

not wish to sell it, and therefore it might not be sold for that amount.

Q. And he might not be able to sell it for cash. Right? A. I don't think so. That is not my understanding of the cash value.

Q. Do you think that it is synonymous to say that stock is worth a certain amount and that it can be sold for the same amount? A. That is my understanding if you undertook to sell it. I don't know how it could be otherwise. I thought we agreed several days ago that the two were synonymous.

Q. It is a fact that Mr. Lee does not specifically state that common stock of McCall Ferry could have been sold for $25 a share at the time of the transaction or at any time thereafter?

MR. KING: You mean states in the affidavit?

MR. HALL: That is right.

MR. KING: If that is what you mean I object to the [7073] question because the affidavit speaks for itself.

TRIAL EXAMINER: Read the question, please.

(Question read.)

TRIAL EXAMINER: Objection is overruled.

THE WITNESS: I don't believe Mr. Lee uses that particular terminology. However, I took it to be substantially the equivalent of that when he said that if partners were being admitted, or were leaving the firm, that in his opinion $25 would be the value at which the readjustment of the firm's membership would be made.

By MR. HALL:

Q. What is Mr. Lee's opinion based upon when he states that a division of the firm's assets immediately following acceptance of the stock would have been based on a value of not less than $25 a share? A. I don't know. I will speculate he based it on all of his study as to the value of the stock.

Q. What divisions of assets took place in the firm of Lee, Higginson and Company around 1905? A. I don't know.

Q. Or any year thereafter? A. I don't know.

Q. But it does not mean, does it, that valuation for the purposes of division of assets of a partnership is necessarily the same as cash value in the open market? [7074] A. No, it doesn't necessarily follow. If the partners chose to make it different they could have made it different.

Q. Did Mr. Lee make any studies of market conditions in the spring of 1905? A. I don't know whether or not he did, but he was pretty active in business there. It doesn't follow that if he didn't make studies he had no knowledge. I don't know.

Q. Did Mr. Lee find any valuation by Lee, Higginson and Company of their services to McCall Ferry? A. I don't know. I don't know what occasion there would have been to make such a valuation.

Q. Did you find any such valuation available—withdraw that.

Did you find any such valuation in the available records relating to the McCall Ferry project? A. Valuation of Lee, Higginson's services, do you mean?

Q. Yes. A. No.

Q. Have you found in the available records any agreement showing that McCall Ferry or Susquehanna Contracting Company had contracted to pay Lee, Higginson a specified amount for services? A. No, sir. I think it is obvious that nobody had contracted to, because when it comes time to pay Lee, Higginson off they were in the situation of having to write a [7075] letter to Bertron and telling him how much they got. If it was a contract or agreement they obviously would know how much they were supposed to get.

Q. The fact is, is it not, that McCall Ferry never paid anything either in cash or in securities to Lee, Higginson and Company or to any of the other bankers?

MR. KING: May I have that question again, Mr. Examiner?

TRIAL EXAMINER: Yes.

(Question read.)

THE WITNESS: Are you making a distinction between McCall Ferry paying directly and those securities passing through Susquehanna Contracting Company?

By MR. HALL:

Q. Yes, that is the distinction. A. McCall Ferry delivered their securities to Susquehanna Contracting Company, and then, in accordance with understandings, as I believe, the securities passed on to those people who were supposed to get them.

Q. These understandings that you referred to are not supported by the written documents covering the transfer to Huchinson. Right? A. No, the distribution of stock is not given in the transfer to Hutchinson, the document which is the agreement between Susquehanna Contracting Company and Hutchinson.

Q. What you are saying is that Hutchinson got all of [7076] the securities which subsequently wound up in the hands of the bankers as their compensation? A. Yes, sir. They passed under that agreement to Hutchinson, and then we also have other evidence, of course, which showed up in the records of Lee, Higginson and Bertron we have already discussed in detail.

Q. None of the documents covering the transfer of the securities to Hutchinson support a conclusion that McCall Ferry paid anything to the bankers?

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[7077] THE WITNESS: I don't know whether they do or not. It would seem to me that they are certainly a part of the support. Whether they standing alone would support it or not I don't know.

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[7132] TRIAL EXAMINER: How was this affidavit prepared? Did Mr. Lee's attorney prepare it, or an attorney?

THE WITNESS: No, Mr. Lee was submitted the participation similar to the one I have already described. He then, together with Mr. Glidden, who was Secretary and Treasurer of Lee, Higginson, worked out a draft of it. Some time after the draft was worked out I was in Boston and Mr. Lee showed it to me and asked me if it covered the scope that I thought it ought to. I had previously described the scope I would like for him to cover. I did that in connection with [7133] describing the purpose for which we wanted the affidavit. He showed me a draft of the scope. As I recall it I made some suggestions to points which had not been covered, and then he and Glidden, so far as I know, I don't know whether his lawyer participated or not, but I know primarily he and Mr. Glidden, that is my understanding, completed the affidavit in the form in which you now find it.

TRIAL EXAMINER: Was Mr. Glidden an attorney?

THE WITNESS: He was Secretary and Treasurer of Lee, Higginson and Company. I don't know what his training was. Of course, I can't say that either one or both of them didn't discuss it with the lawyers of Lee, Higginson and Company. They didn't do it, however, in my presence.

By MR. HALL:

Q. Of what did your suggestions to Mr. Lee consist? A. I don't recall. I don't recall the detailed suggestions, but there were several points, as I recall, that are now in the affidavit that Mr. Lee had not included in his original draft.

Q. Do you recall those points? A. No, I do not. I simply read hastily over it when he showed it to me and suggested whatever they were that they be covered. He said he would do it. I don't remember the details of it.

Q. Was Mr. Lee aware of the fact that the lower the [7134] valuation the less assistance his statement would be to you? A. I don't know whether he was or not. If so he drew it as a conclusion. I didn't so advise him.

Q. Wasn't he in a position to draw that conclusion since you had told him the purpose of the statement? A. Yes, I think he very well may have drawn that conclusion.

Q. Why did you use Mr. Fisk's determination of $50 a share for the preferred stock, Mr. Gunn? A. As I recall it is the only one I had and it didn't appear to me to be unreasonable.

Q. Did you consider Mr. Fisk's $50 valuation reliable? A. I evidently considered it as reliable as anything I could get. I at least used it.

Q. That necessarily means that you considered it reliable evidence as to the cash value of the preferred stock? A. I considered it the most reliable evidence I had. I don't know whether that is reliable or not. I considered it further than that, as I recall, about the only evidence I had.

Q. Do you think Mr. Fisk was in a better position to value the preferred stock than he was to value the common stock? A. No.

Q. Why didn't you use the $18 valuation he placed on [7135] the common stock? A. Because I had other evidence as to the value of the common stock and I thought it was appropriate to consider all of the evidence.

Q. In other words, if you had other evidence of the cash value of the preferred stock you might have used that also? A. If I considered it reliable, yes, I would have used it, at least taken it into consideration.

Q. Since you didn't accept the $18 valuation for the common stock fixed by Fisk because of the existence of other evidence, isn't it reasonable to conclude that had you had other evidence it would have caused you to use a cash value other than $50 for the preferred stock?

* * *

THE WITNESS: No, I don't think that conclusion would follow, Mr. Hall, for two reasons: First, other evidence might have confirmed Mr. Fisk's opinion. Second, the other evidence may not have been of sufficient value to justify varying from the Fisk estimate.

[7136] By MR. HALL:

Q. The other evidence you had on the common didn't confirm Fisk's valuation. Isn't that so? A. Within a reasonable range I wouldn't say it was too bad as a confirmation.

Q. Isn't it a fact that the $18 per share as to the common is derived by Mr. Fisk only after giving effect to the $50 per share for the preferred stock? A. Yes, sir.

Q. Doesn't that of necessity require you to accept the $18 for the common stock since you used the $50 for the preferred stock? A. No, sir, it obviously doesn't because the $50 for the preferred stock was the only evidence I had of the preferred stock value, and I had other evidence than the Fisk $18 figure for the common stock.

TRIAL EXAMINER: What figures do you divide to get your $18 from Mr. Fisk's affidavit?

MR. HALL: May I have the Examiner's question, please?

(Examiner's question read.)

MR. KING: Page 79.

THE WITNESS: $305,000 shown on paragraph 11, page 79 of Exhibit 27 was divided, I believe, by 17,000-some-odd shares to give the $18 per share.

[7137] By MR. HALL:

Q. Was it divided by the 17,537 and a half shares shown on Page 53 of Exhibit 26, Mr. Gunn? A. I believe it was, although I have not computed it exactly. I can if you wish.

Q. Will you do that? A. $305,000 divided by 17,537 appears to be about 17-and-a-half dollars a share, and I believe that was simply rounded off to $18 a share.

MR. KING: May we have that read?

(Answer read.)

By MR. HALL:

Q. Mr. Gunn, isn't it a fact that by using $50 per share of the preferred stock, which is based upon a valuation of Fisk's services, you have attributed a value to all the preferred stock based upon a valuation of services, despite the fact that the balance of the preferred stock so valued was not issued for services? A. May I have that question, please?

(Question read.)

THE WITNESS: It is awfully complicated, but I think the answer is no. We have, it is true, arrived at the $50 per share, rather Mr. Fisk did, through a valuation of his services. That is the one evidence we have, and it is the only means which occurred to me of valuing the preferred [7138] stock. Then the value having been established in that transaction it is quite true it could be assumed that the entire issue of that particular stock had the same value. It is also true that the other stock, the remainder of the issue, was not issued for the same sort of services, at least, that Harvey Fisk and Sons rendered.

By MR. HALL:

Q. Since you are valuing services rather than stock it can not be assumed that all of the stock has the same cash value. Isn't that so? A. No, I don't see how you can make that assumption. I don't see how you can assume that the particular 1,875 shares that Fisk received had a value different from the remainder of the shares of the same issue in the same company that other people received. It seems to me an assumption to that effect would be irrational.

MR. HALL: May I have that answer, please?

(Answer read.)

By Mr. Hall:

Q. Those determinations by Mr. Fisk were made some 33 years after the transaction. Right? A. Yes, sir.

Q. And they were made at your request? A. Yes, and my request was made necessary by the theory of original cost.

[7139] Q. And when Mr. Fisk made them he knew you wanted them to support your original cost claim. Isn't that so? A. I think I most assuredly explained the necessity for my coming to him at that late date and bothering him with a thing like this.

* * *

[7140] By Mr. Hall:

Q. As a matter of fact, Mr. Gunn, by using $25 a share for the common stock you are placing a greater value on the services alleged to have been rendered by the Fisk firm than did Mr. Fisk himself. Isn't that so? A. Yes, I believe that is the result. It was necessary for me to arrive at a value for the common stock, and since several people had stated the value differently, my selecting a single value implied a different computed amount of dollars for all the services of those people who did [7141] not conclude that the stock was worth $25 a share.

In the case of some it made the services more and in the case of others it made the services less.

Q. What did Mr. Fisk value his services at? $400,000, wasn't it? A. Yes, $400,000 total.

Q. What have you included for those same services? In other words, what have you valued those services at? A. I valued them at $532,187.

Q. By using the $25 valuation for the common stock whose valuation did you lower, Mr. Gunn? A. I think it could be said that I lowered Hutchinson's, perhaps, and I lowered Hopkins. I believe that is all.

Q. Is there any valuation included in your original cost for Hopkins services? A. Not directly. Hopkins serv-

ices were services to Hutchinson, and they were paid for, as I see it, by Hutchinson. That is the reason I must say they are not directly in there. They are in there indirectly.

Q. But they are not included in your original cost claims as Hopkins' services? A. No.

Q. Or Lorenzo Semple? A. Yes, I think they are included in the original cost claim in the amount which was paid to Hutchinson, because [7142] Lorenzo Semple's compensation was one of the obligations that Hutchinson was required to meet out of his part of the cash and stock which he received in exchange for the properties. They are not identified as such, if that is your question.

Q. How can you say that you lowered Hutchinson's determination when he used a valuation range from $20 to $30? A. Well, to the extent he had $30 in his range it was lowered. It was that to which I referred.

Q. To the extent he had $20 in that range you raised it? A. Yes, sir.

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[7144] Q. Did Penn Water pay Mr. Cole for his services in connection with Mr. Fisk's affidavit? A. Yes, sir, I believe they did.

Q. Did Penn Water reimburse Mr. Fisk for his services? A. Mr. Pliny Fisk, Jr., was paid for his services. I don't recall whether there was any payment to Mr. Pliny Fisk, Sr., or not.

Q. Was anybody else in the Fisk family reimbursed for their services in connection with obtaining Mr. Fisk's statement? A. I am pretty sure they weren't. There was nobody else who assisted him, assisted in the investigation which led up to Mr. Fisk's affidavit.

Q. Since Mr. Fisk states in his affidavit that his recollection of the transactions were dim, are we to understand that you are responsible for refreshing it? A. No, sir. You are to understand it was refreshed by [7145] such information as I furnished to his lawyer and by Mr. Cole.

Q. Do you know whether Mr. Fisk had any independent recollection of the McCall Ferry activity upon which he was able to draw? A. Yes, sir, I know that he did. In the very first conversation I had with him he recalled a great many facts.

Q. What cash value did he recall, Mr. Gunn? A. I didn't discuss any cash value with him the first time I saw him. He recalled the fact that Barnum was, aside from himself, the partner who had the largest interest in the Fisk firm, and he recalled, I believe, that he and Bertron were what he described as joint accounts in the underwriting, and he recalled that the underwriting had been brought to him in a condition of failure, and he recalled many other more or less minor things that I don't remember offhand.

Q. How many conferences did you have with Mr. Fisk after you obtained his statement? A. After I obtained his statement?

Q. Yes. A. I didn't have any. I had only one or two conferences with Mr. Fisk at all, and that was when he was first approached. When I first approached Mr. Fisk I had one discussion of several hours, and I may have had another, although I am not sure. After that Mr. Pliny Fisk, Sr. told me I would have to take up the matter with his counsel, who [7146] was a Mr. Wilton D. Cole, and who was general counsel for Union Bag and Paper Company, I believe, and in any event his offices were in the Woolworth Building. I never saw Mr. Pliny Fisk, Sr. again after the time he gave me those instructions.

Q. In view of the fact that Mr. Fisk admits that he took very little active interest in the management or supervision of McCall Ferry, how was he in a position 33 years after the event to determine the value of the common stock and preferred stock? A. I don't know, but it didn't seem to me his statement that he didn't actually do the managing of the firm but turned it over to Barnum, it didn't seem to me that that statement supports the con-

clusion he knew nothing about it, because as I recall it somewhere in his statement he says it was a custom of their firm to have weekly meetings of the partners and discuss all of the firm's activities, at least once a week.

Q. Would you say that a determination of cash value or expression of opinion as to cash value made contemporaneously with a transaction would be relevant to the determination of cash value?

THE WITNESS: May I have that question?

(Question read.)

THE WITNESS: Do you mean by that, Mr. Hall, that a [7147] determination of cash value or an expression of opinion, or are you using one the same as the other in that question?

By MR. HALL:

Q. Either. A. Well, I would say that a valid determination of a cash value made contemporaneously should be given very considerable weight. An expression of opinion would depend upon the circumstances or any other indication of the value would depend upon the circumstances under which it was made, the purpose for which it was made, and all the things which might enter into it.

Q. In other words, you would want to consider all of them and decide what weight should be attached to them? A. Yes, I should think so; certainly.

Q. Did you ask Mr. Fisk if he had made any previous valuation of either the McCall common or preferred stock? A. No, I don't recall that I did because, as I said, I saw Mr. Fisk only once or twice, and the discussions at that time were not devoted to the valuation of the stock but rather to my ascertaining just precisely what had happened in the financing of this firm and what part his firm took.

Q. Didn't you think that a previous valuation of the McCall stock made by Fisk would be pertinent to your determination of the cash value of that stock? [7148]

A. Yes, if the previous valuation were an attempt to determine the cash value I would think it would be pertinent. If it was made for some other purpose it might or might not be pertinent.

Q. But as I understand it, you did not make any inquiry as to whether or not he had made a previous determination? A. No, I never had discussed any stock value with Mr. Fisk previously. However, I do know that in his investigation which he had Mr. Cole make he made an extensive effort to find the records of his firm in which Mr. Cole thought, at least, there might be evidence of what they thought the cash value was.

Q. Those efforts by Mr. Cole to locate the records were of no avail. Is that right? A. They were substantially unsuccessful except for some few pieces, I think, they found at the Pliny Fisk library.

Q. So far as you know Mr. Fisk never attempted to value the McCall common or preferred stock until you made your request for a valuation of the stock in connection with your original cost determination. Is that right? A. That is correct.

Q. Did Mr. Fisk know of any valuations of the McCall common or preferred stock made by his firm or anyone else? A. I don't know. I didn't ask him. I certainly assumed [7149] that if Mr. Fisk did know of any he took them into consideration in expressing his opinion as to the value at a later date.

Q. Then, so far as you know, Mr. Fisk had no knowledge of any contemporary valuation of the McCall common or preferred stock made during the years 1905 to 1907? A. So far as I know he didn't.

Q. Did Mr. Fisk have any records showing actual purchases or sale of McCall common or preferred stock at the time he made his affidavit? A. None that I know of. I am sure if he had any I would have been able to obtain it.

Q. Did Mr. Fisk place a valuation on the risks assumed and the sacrifices made by the bond subscribers?

A. I think you could say that indirectly he did, at least. I don't think he was requested to make a separate determination of it.

Q. What risks assumed and what sacrifices made, did Mr. Fisk consider? A. I assume he considered them all.

Q. What were they? A. I don't know. I can't enumerate them all any more than we previously discussed them.

Q. You don't know whether Mr. Fisk knew of any, either, or thought of any. Is that right? [7150] A. It seems to me that he certainly did. As a matter of fact, he must have weighed those pretty carefully before he undertook to get the bond subscriptions.

Q. Did Mr. Fisk ever discuss with you the risk assumed and the sacrifices made by the bond subscribers? A. No, not with me personally.

Q. Did Mr. Fisk inform you that his stock valuations included an amount for the risk assumed and the sacrifices made by the bond subscriber? A. No, Mr. Fisk didn't inform me of anything other than what you see in Part 9 in Exhibit 27, and discussions that I gained from Mr. Cole as a result of his conferences with Fisk. But I don't remember there was any discussion of such a valuation except as it took place indirectly through Fisk's knowledge of the risks and his consideration of them in his valuation of the securities.

Q. Then you cannot tell us what amount, if any, Fisk included to cover the risk assumed and the sacrifices made by the bond subscribers? A. No, I can't tell you what amount he allotted to that item.

Q. And you cannot state as a fact that Fisk even considered risk assumed and sacrifices made by the bond subscribers in arriving at his valuation of the McCall Ferry securities? [7151] A. I can only draw that as a deduction. I cannot state it as a positive fact. I don't know what Mr. Fisk's precise mental processes were.

Q. Did Mr. Fisk make a study of the security market conditions as they existed in the spring of 1905 in connec-

tion with his valuation of the McCall stock? Can you say that he did? A. I believe he did. I believe it was done by Mr. Cole and by Mr. Pliny Fisk, Jr.

Q. I wasn't referring to either one of those. I am referring only to Mr. Fisk himself. A. Well, I was attempting to explain I believe they gathered some information on that for him.

Q. What information? A. I don't know what would be the scope of it.

Q. What was Mr. Cole's qualification as a financial analyst? A. Well, Mr. Cole was a lawyer, and it is my understanding that he had been connected with a considerable amount of financing.

Q. What, for instance? What do you mean when you refer to a considerable amount of financing? A. Well, financing in connection with Union Bag and Paper Company, and I believe that he was at one time or another counsel in several underwritings.

[7152] Q. Which ones? A. I don't know. I can ask Mr. Cole what his qualifications are if you wish, but I don't know offhand.

Q. Were any of them hydroelectric projects? A. Union Bag and Paper Company has a lot of hydroelectric projects.

Q. When were they financed? A. Oh, in various years. I don't recall now.

Q. Which were financed in 1905? A. I don't know whether or not any of them were. There may have been some but I just don't know. In any event I don't think Mr. Cole would have been counsel on them in 1905 because I don't think he was big enough.

Q. By "big enough," you mean old enough? A. That is what I mean. In other words, he is about as old as you and I, and we weren't doing anything.

Q. Did you ask Mr. Fisk if he had made a study of the security market conditions as they existed in the spring of 1905 in connection with his valuation of the McCall

stock? A. No, sir, I did not. I did not talk to Mr. Fisk after he arrived at his conclusion as to that.

[7153] Q. Did you ask Mr. Cole? A. It seems to me that during the several months that Mr. Cole was attempting to find records and was discussing this matter off and on with Mr. Fisk that he did mention information concerning the market had been given to Mr. Fisk. However, that is simply a recollection.

Q. What cash value had Mr. Cole decided upon? A. I don't know. I don't know whether he decided upon any or not. It is my understanding Mr. Fisk made the decision as to the cash value.

Q. Mr. Gunn, I am a little confused. I think you have stated at page 430 of the transcript you saw Mr. Pliny Fisk, Sr., two or three times? A. That is my recollection.

Q. What is the fact? Did you see Mr. Pliny Fisk, Sr., two or three times or just once? A. My recollection is that I saw him twice, that I did see him two or three times. However, I note that Mr. Fisk states in one of these documents that he saw me only once. Mr. Fisk made this statement at the conclusion of his investigation into the valuation of stock and his recollection is probably more creditable than mine because I am attempting to remember how many times I saw him eight years ago, and I was seeing a large number of people at that time. It can be said that perhaps my recollection is not as good as was Mr. Fisk's at the time he made the statement.

[7154] Q. When you refer to Mr. Fisk's statement you are referring to the statement made at the bottom of page 70 of Exhibit 27. Is that right? A. Yes, sir.

Q. Mr. Fisk there states among other things that you came to see him in June of 1938 and at that time, "I told Mr. Gunn that I would be very glad to have my son, Pliny Fisk, Jr., and my personal attorney, W. D. Cole, make a search for these records. That was the only occasion upon which I spoke to Mr. Gunn." A. Yes, that is right. I

recall distinctly at that time there was a discussion of several hours I had with Mr. Fisk. When I testified at page 430 that I had seen him two or three times I then thought that I remembered I had seen him on one or two occasions after that, but perhaps my recollection was defective.

Q. Did Mr. Fisk show you any previous valuation of the services of the Fisk firm to McCall Ferry? A. No, sir.

Q. Did you ask Mr. Fisk if he was aware of any previous valuation of his firm's services to the McCall Ferry? A. No, sir. On the occasion I talked with Mr. Fisk we didn't discuss valuation of either services or stock.

Q. Then so far as you know there never was a previous valuation of services of the Fisk firm? [7155] A. That is right.

* * *

[7158] By Mr. Hall:

Q. Mr. Gunn, when Mr. Fisk states in his affidavit that his firm arranged for the sale of approximately $8,000,000 principal amount of bonds, and the preferred stock, he has forgotten, has he not, that $2,620,000 of the subscriptions were obtained by Lee, Higginson and Company? A. Where do you find that statement, Mr. Hall, on page 72?

Q. Yes, near the top of the second answer. A. May I have the question, please?

(Question read.)

The Witness: No, I don't think he has forgotten, Mr. Hall. He doesn't say his firm sold $8,000,000 of bonds. It says they simply arranged for the sale of it. Now, as I understood it, his firm did arrange to retain the Lee, Higginson subscription, and it is to that that he is referring there.

By Mr. Hall:

Q. The fact is that Lee, Higginson Company did obtain subscriptions to $2,620,000 principal amount of bonds.

Right? A. Yes, some such amount as that as I recall it.

Q. And the fact is that the Coffin interests obtained bond subscriptions in the principal amount of $1,550,000. Is that right? [7159] A. I don't know what you mean by "Coffin interests."

Q. I thought we had discussed Coffin interests in the record to some extent already. A. We have, if it is that discussion to which you refer. Then it is my understanding that Coffin and some other people that might be imputed to association with him had raised certain bond subscriptions. I don't remember just what they were.

Q. And adding the $2,620,000 plus the $1,550,000 principal amount to which I referred, we arrive at a total of $4,170,000? A. Yes, sir, those two figures add up to that amount.

Q. And subtracting the $4,170,000 figure from the total of $8,075,000 principal amount procured leaves $3,905,000? A. Yes, sir, roughly $4,000,000.

Q. That means that the Fisk firm participated in the procuring of a part of the bond subscriptions represented by the figure of $3,905,000? A. Will you read that, please?

(Question read.)

THE WITNESS: Yes, it means they did what you stated in that question, and also they arranged to retain all of the other subscriptions that had previously been gotten by Lee, Higginson and others.

[7160] By MR. HALL:

Q. And if Bertron, Storrs & Griscom obtained any subscriptions the subscriptions they obtained came out of the amount of $3,905,000 principal amount? A. I don't recall the facts well enough to say whether or not that is true. As I recall, from the records we examined and which are included in Exhibit 27 of Bertron, it was impossible to actually trace who had obtained what particular subscriptions.

Q. If Bertron, Storrs & Griscom sold any subscriptions they necessarily had to sell part of the $3,905,000 amount that I referred to? A. Well, no. I don't think that follows. It might have been a part of what has been ascribed, the Bertron subscriptions may have been a part of those subscriptions which have been assigned to Coffin.

Q. But you don't know that is a fact? A. No, I don't know either way. It is impossible to trace who obtained what subscriptions.

* * *

[7167] By Mr. Hall:

Q. The earliest valuation appearing in the records of Bertron, Storrs and Griscom is November 21, 1906, more than a year after the date the stock was issued by McCall Ferry. Isn't that so? A. Yes, sir, that appears to be correct.

Q. Construction had not begun at the time of the transaction but was well under way in November of 1906. Isn't that so? That is the transaction which resulted in the issuance of the stock? A. I believe that is correct. I can check it if you wish.

Q. Yes, will you check it? Didn't construction begin in October, 1905? [7168] A. Yes, as I understand, it did.

Q. The dates of completion of the project and realization of earnings were a year nearer in November of 1906. Isn't that right? A. Yes, sir, I think that is correct.

Q. Wouldn't you—— A. At least they thought it was. Let's put it that way.

Q. At that time they thought it was? A. Yes, that is right.

Q. And we must consider these records only prospectively? A. I think that is correct.

Q. In the sense in which they were making them? A. Yes, I believe that is correct.

Q. Wouldn't you expect the stock, if it in fact had a value, to be worth more in 1906 than in the spring of 1905? A. Yes, I would think it would be worth more.

Q. But even at the date of November, 1906, Bertron, Storrs and Griscom placed a book value of only $1.00 a share on the common stock and $10 a share on the preferred stock. Isn't that so?

THE WITNESS: May I have that question, please?

(Question read.)

THE WITNESS: They recorded those two stocks at the values you mention in their books. I don't consider they represent a valuation of the stock.

[7169] Q. The changes Bertron, Storrs and Griscom later made in these valuations were obviously an effort to anticipate the approaching completion of the project. Isn't that so? A. I don't know whether or not they were. It is not obvious to me.

Q. They could have been? A. I don't know.

Q. Bertron, Storrs and Griscom never sold any shares at those valuations or any valuation. Isn't that right? A. Not so far as I know.

* * *

[7170] By MR. HALL:

Q. Isn't it a fact, Mr. Gunn, that as the project approached completion of construction the values reflected on the books of Bertron, Storrs and Griscom increased? A. Yes, I believe up to a certain point they did increase, and then they decreased.

Q. The changes reflected on the records of Bertron, Storrs and Griscom for the common stock are reflected on page 48 of Exhibit 26. Is that right? A. Yes, sir, they are. I might mention in that connection, Mr. Hall, that because of the peculiarity of the change it was largely those facts stated there which caused me to consider that the entries on Bertron's books weren't worth very much as evidence of cash value.

Q. To what peculiarity do you refer? A. Well, on November 21, 1906 they recorded $1.00. On December 11th, they doubled it and called it $2.00. On December 31,

they raised it from $2.00 to $10.00. Certainly there was nothing in construction during that period of time, nor the nearness to completion, which would have justified any such gyrations as that in the value of stock, or at least nothing I can imagine.

Q. Do you consider an $8.00 increase between November 21, 1906 and December 31, 1906, a gyration in the stock? A. It certainly is in my language when it lies between [7171] $2.00 and $10.

Q. Is that increase an unjustified gyration?

* * *

THE WITNESS: I don't know. It is just a gyration.

By MR. HALL:

Q. Did you consider that it was an unjustified increase? A. No, I just considered I didn't know what it was for, and because of those gyrations I referred to I didn't think any of them were worth very much as evidence of the value of the stock.

Q. Do you have a record of the values placed on the books of Bertron, Storrs and Griscom for the preferred stock? A. Yes, sir, I believe that is given on page 47 of Exhibit 28. It seems to have been similarly gyrating, except one of them was left out. If you will notice on November 21 they had it at $10. a share and on December 31, which was about four or five weeks later, they raised it to $40 a share. Next April they raised it to $50. I just [7172] don't know what they were doing to those valuations. They don't look like valid valuations to me, though.

Q. When did the McCall Ferry financial difficulties begin? Just before December 31, 1907, right? A. Yes, in the latter part of 1907 they began to realize they were in difficulty.

Q. And on December 28, 1908, what was the situation financially?

THE WITNESS: May I have the question, please?

(Question read.)

THE WITNESS: McCall Ferry Power Company had defaulted on its bond interest.

By MR. HALL:

Q. Mr. Gunn, the only shares that Bertron, Storrs and Griscom ever purchased were the 150 shares of common stock they had promised to Pullen in 1905 in connection with the acquisition of Pullen's option. Isn't that so?

MR. KING: May I have that question, please?

(Question read).

THE WITNESS: That is all I know of.

TRIAL EXAMINER: 1905 or 1907?

MR. HALL: They had promised to Pullen in 1905, Mr. Examiner. The purchase was made in 1907 by Bertron, Storrs and Griscom.

THE WITNESS: May I have the question and answer again, [7173] please?

(Question and answer read.)

THE WITNESS: Yes, that is the only purchase I know of.

By MR. HALL:

Q. Was that a cash purchase? A. I don't know whether or not it was. I presume it was.

Q. Will you refer to page 190 of Exhibit 27? Is that page from a cash book? A. It appears to be.

Q. And since the Pullen purchase appears there we may draw the reasonable inference that cash was paid? A. Yes, I think you may.

Q. That purchase by Bertron, Storrs and Griscom was made on August 9, 1907, when the plant was nearing completion. Is that right? A. That is correct. It was also made at a time when Bertron had stated in his account a ten dollar value for stock. It seems to me that he bought an imaginary bargain.

Q. That purchase was made over two years later than the date of issuance of the stock. Isn't that so? A. Yes, sir.

Q. In the summer of 1907 the officers were making rather confident predictions of selling power by June, 1908. Is that right? [7174] A. June, 1908?

Q. Yes. A. I don't recall whether or not that is a fact. Perhaps I can verify it if you wish.

* * *

[7178] By Mr. Hall:

Q. The Bertron, Storrs & Griscom records were the only contemporaneous records, is that right? A. The only contemporaneous records but there is no possible way for us to know whether Bertron had some sort of an arrangement with Pullen whereby he had agreed to take that stock from them at $5 a share at the time the Pullen option was secured. I am not saying he did do it, but I am saying that very well may have accounted for it.

Q. Do you think that Bertron, Storrs & Griscom were [7179] fulfilling an obligation to Pullen? A. I think they might have been.

Q. And that obligation was being fulfilled by Bertron, Storrs & Griscom at $5 a share. Is that right? A. It was being fulfilled at $5 a share and for that reason I do not think it could be construed to represent a sale establishing value at all.

* * *

[7206] By Mr. Hall:

Q. Mr. Gunn, will you refer to page 8 of Exhibit 27? A. Yes, sir, I have it before me.

Q. Doesn't it there appear that the value of 20 to 30 dollars per share referred to by Mr. Hutchinson was determined by earnings alone?

The Witness: May I have the question, please?

(Question read.)

THE WITNESS: He says his conclusion was based upon earnings alone. Those are the precise words.

By MR. HALL:

Q. You have no reason to doubt that? A. No.

Q. Hutchinson does not say in his affidavit that that value could have been secured from a willing buyer at the time of the transaction for cash. Isn't that so? A. He does not say he could. He does not say he couldn't. He just doesn't say.

Q. And isn't it a fact that the twenty to thirty dollars per share valuation used by Mr. Hutchinson could have had reference only to earnings in the future? A. I don't know whether that would be true or not. That very well may have been Mr. Hutchinson's manner of expressing it. Mr. Hutchinson had been asked to state what he thought [7207] the value was at the time the securities were received by him and I take that statement to mean he thought they were worth from 20 to 30 dollars a share.

Q. In terms of earnings alone? A. He has those words in there. I don't know what they mean. I think if you are going to take any implication out of those words it might be that if other things were considered he thought the stock had a greater value.

* * *

[7208] MR. GOLDBERG: Questions have been asked to elicit from the witness what use he made of these affidavits and what there is in them to support the use he made of them. These people are not here. They are not made available for cross-examination. We have no means of knowing what weight or how the exhibits are to be approached except the exhibit itself and some attempt to find out from the only man we have made available to us who had anything to do with the preparation of these exhibits, or who has had contact with the individuals involved, what in the world these vague and indefinite statements in the affidavits mean.

Personally we are of the opinion they are worthless.

TRIAL EXAMINER: Very well.

Proceed.

MR. KING: If your Honor please, I move to strike the last phrase "We are of the opinion they are worthless." It contributes nothing to the record and is proper comment, if proper at all, in the brief.

TRIAL EXAMINER: Motion to strike is denied.

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[7209] By MR. HALL:

Q. In view of the fact that the valuation of 20 to 30 dollars was to be as of a date prior to the realization of earnings, the earnings that he has reference to necessarily were prospective earnings. Isn't that so?

MR. KING: Your Honor, there again it calls for speculation.

TRIAL EXAMINER: He doesn't have to speculate. If he doesn't know he says so. If he does, based upon what other information he may have, he may answer.

MR. KING: The question is not pitched that way. To [7210] answer at all it requires speculation. I object to the question.

TRIAL EXAMINER: Objection overruled.

THE WITNESS: May I have the question, please?

(Question read.)

THE WITNESS: Yes, I think that is right. I think they were prospective earnings of the initial project probably, not the ultimate project.

By MR. HALL:

Q. And that is borne out, Mr. Gunn, by the fact that Mr. Hutchinson based the 20 to 30 dollars on a dividend of from two to three per cent of its par value of the common stock. Is that right?

THE WITNESS: May I have the question, please?

(Question read.)

THE WITNESS: Yes, I would say that is correct. Whether that is all Mr. Hutchinson had in mind in reaching the conclusion I don't know.

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[7215] TRIAL EXAMINER: How did he get from two to three per cent return on par value to a valuation of $20 to $30 per share?

THE WITNESS: I don't know. That is just what I was trying to explain, Mr. Examiner.

The two to three per cent, as I understood it, relates to the initial project. Then after 1, 2, 3, or maybe 4 years it was contemplated the project would be considerably extended and would very materially increase the earnings from the common stock based upon the initial project alone, and it is the consideration that Hutchinson gave to that of which [7216] I am not aware.

TRIAL EXAMINER: How did he capitalize the two or three per cent returns and get $20 to $30?

THE WITNESS: I don't know. I don't know whether he based that on a simple capitalization or not. If you are going to assume that it is a simple capitalization then it would seem to me he capitalized it at about ten per cent.

By MR. HALL:

Q. Mr. Gunn, do you know the persons who fully concurred in the opinion as to the $20 to $30 per share valuation used by Mr. Hutchinson? A. No, I do not. Mr. Hutchinson there referred to the people who were associated with the McCall Ferry enterprise, and I don't know which ones he had in mind. I presume he had in mind generally the people who were closely associated with him. It might have been the board of directors, for example.

Q. Did you ask Mr. Hutchinson whom he had in mind? A. No, I did not. I assume he had in mind people connected with the McCall Ferry Power Company.

Q. Do you know whether Hutchinson investigated the market conditions in 1905 to determine the reasonableness of his conclusions with respect to the cash value of the securities of McCall Ferry? A. May I have that question again, please?

[7217] (Question read.)

THE WITNESS: I don't know whether he investigated the stock market conditions but he investigated very thoroughly the power market conditions. I assume since he lived during that period he certainly had some knowledge of what the money market conditions were.

By MR. HALL:

Q. What experience did Mr. Hutchinson have in financial matters, if you know? A. I do not know. I know he had been connected with several enterprises, but just precisely the capacity in which he was connected I do not know.

Q. Had Mr. Hutchinson ever made any valuation of stock that you know of? A. No, not except as he would have evaluated stock in buying and selling it for his own use or for whomever he may have bought it.

Q. Had McCall Ferry continued in business on the basis of the original capitalization plus the additional funds needed to complete the project, it would have been a very long time, wouldn't it, before any surplus would have been available as dividends to the common stockholders? A. I haven't made any computation of that but I assume it would have been a considerable period of years.

Q. Mr. Hutchinson made his valuation solely for your [7218] use in connection with the original cost studies? A. Well, that was the occasion for my asking him to make it. I presume he made it for any and every use for which it might be needed.

Q. And it was made about 34 years after the event? A. Some such period of years. The date of the affidavit shows it.

Q. You are claiming a cash value of $25 for the common and $50 for the preferred stock in the spring of 1905. Right? A. Yes, sir.

Q. Had any construction been started at that time? A. No, sir.

Q. The fact is that the plans for the project at that time had not been fully completed. Right? A. That is correct, they had not been fully perfected.

Q. And further the site and location of the dam had not been definitely settled? A. That is right, it had not.

Q. Isn't it also a fact that no construction bids had been called for or received in the spring of 1905? A. Yes, sir.

Q. And it had not been determined who was to construct the project. Isn't that so? A. What is the question, please?

[7219] (Question read.)

THE WITNESS: That is correct, except that McCall Ferry Power Company would. I take it you mean by that question it had not been determined what contractor would construct it. Is that it?

By MR. HALL:

Q. That is right. A. That is right, the contractor had not been selected.

Q. What was the date of the construction contract? [7220] A. Cooper's contract was dated October 18, 1905. That is shown on page 58 of Exhibit 26.

Q. I believe you have indicated in the spring of 1905 it had not been decided whether McCall Ferry would build a project itself or let someone else do it. Is that right? A. No. What I was attempting to indicate at that point, what I was attempting to ascertain, was what your question meant.

Q. Yes. A. You simply asked me if it had been decided who would build the project. My answer was that it had been decided that McCall Ferry, as a corporation, would build it or have it built, and that the contractor had not actually been selected.

Q. Was that in the spring of 1905? A. I think we are all tangled up now. In the spring of 1905 it was determined that a project would be built by McCall Ferry Power Company, but the contractor for the actual construction of the project had not then been selected.

Q. And bids were not called for until August. Is that right? A. I believe that is correct.

Q. In other words, in the spring of 1905 the McCall Ferry Company did not know whether they would construct the project themselves or let someone else do it for them?

[7221] MR. SPARKS: May I object to that part of the question, letting someone else do it for them, unless you specify who it means?

MR. HALL: Obtaining a contractor.

THE WITNESS: I don't think McCall Ferry Power Company ever considered constructing the project without obtaining a contractor in one way or the other.

Does that answer your question?

By MR. HALL:

Q. Yes.

The total construction cost of the project had not been determined in the spring of 1905. Isn't that so? A. Well, an estimate had been prepared but it was on a project different in scope from the project actually built, and therefore the ultimate cost was different.

Q. It was not based upon the completed plans at that time either. Is that right? A. What does "It" refer to?

Q. The company had not finally determined what the plans would be? A. No, not in final detail.

Q. Do you think that an estimated dividend rate of two to three per cent fixes any specific value on stock?

THE WITNESS: May I have the question?

(Question read.)

[7222] THE WITNESS: That standing alone, I don't know whether it would or not. However, I think Hutchinson had much more information at his disposal than that figure standing alone.

By MR. HALL:

Q. Will you refer at this time to page 49 of Exhibit 26, Mr. Gunn? A. Page 49?

Q. Of Exhibit 26. You there indicate the prospectus which is part 5 of Exhibit 27, shows estimated earnings equal to seven per cent on the proposed issue of four million dollars par value common stock. Right?

THE WITNESS: May I have the question?

(Question read.)

THE WITNESS: Yes, that is what is there shown. However, the actual issue was five million dollars.

By MR. HALL:

Q. Referring to that estimate and all the other information that you had, you nevertheless stated "An estimated return of seven per cent on the common stock does not fix any specific value on that stock." A. That is my opinion of it. I couldn't fix the value standing on that alone.

Q. And that is the same sort of information Hutchinson was using on page 8 of Exhibit 27. Right? A. Yes, plus all other things he knew about the project. [7223] He used that sort of information plus all other knowledge he had of the project and its development.

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[7311] GEORGE W. SPAULDING

* * *

RE-DIRECT EXAMINATION.

By MR. SPARKS:

* * *

[7316] Q. Did Safe Harbor agree to the termination of the contract identified as Exhibit 71 and the exclusion of Safe Harbor as a party to the new contract, Exhibit 72? A. Yes.

* * *

[7317] Q. Mr. Spaulding, are these letters which have just been identified as Exhibits 160 and 161 the correspondence between Penn Water and Safe Harbor regarding the termination of the contract identified as Exhibit 71 and the execution of the contract identified as Exhibit 72? A. They are.

* * *

[7321] Q. Will you briefly illustrate the process of determining the savings from a single interchange transaction for a single hour? A. I previously stated in my testimony that an interchange transaction really involves three stages. The first a scheduling stage, second, an operating stage, and third, an accounting stage.

In considering the "savings" we are concerned only with the accounting procedure. Suppose, then, that based on a scheduled interchange transaction the load dispatchers have arranged for the supply of interchange energy and capacity from Penn Water and Safe Harbor to one of their Pennsylvania customers. Some time after the actual operations have occurred the customer who received such interchange supply will advise Penn Water of its estimate of the additional operating costs that would have been incurred by them had the interchange supply from Penn Water and Safe Harbor not been received. Such estimated costs will include that customers cost in boiler operations, of starting units, of savings in fuel, and any reduced cost allowance for incremental labor and for maintenance. For

this same period of the interchange transaction, Baltimore Company will similarly estimate their actual increased cost of operation, resulting possibly from the operation of additional boilers or units, their cost of [7322] additional fuel burned, the cost of any additional labor where needed, and any allowance for incremental maintenance, these being costs which they would not have incurred in the absence of this interchange transaction.

Baltimore Company's additional operating costs will, of course, be less than the reduction in operating expenses of Penn Water's and Safe Harbor's customers. Otherwise no interchange transaction would have been scheduled. The difference between Baltimore Company's additional operating costs and the Pennsylvania customer's reduced operating costs is the savings which are divided between the suppliers and their Pennsylvania customer, the receivers.

Q. How is this division of savings accomplished? A. To accomplish this division of the "savings" and it is usually on a 50-50 basis, Penn Water bills the Pennsylvania customer in connection with this transaction as a part of its interchange bill for that month an amount computed at one-half of the sum of the reduced operating costs of the customer and the increased operating costs incurred by Baltimore Company.

The actual savings on the transaction do not appear on the bills as rendered. Only the billing costs and revenues are recorded in the operating accounts of Penn Water.

TRIAL EXAMINER: May I have the last sentence, please?

(Answer read.)

[7323] By MR. GOLDBERG:

Q. After Penn Water has received the revenues for such interchange——

TRIAL EXAMINER: Just a minute. That part of that answer is not understandable by me. Do you expect the witness to develop it?

MR. SPARKS: I can ask him to do it right now, if your Honor please.

By MR. SPARKS:

Q. Mr. Spaulding, would you explain the last clause in your last answer?

MR. GOLDBERG: Let's have that last clause.

By MR. SPARKS:

Q. Which reads "Only the billing costs and revenues are recorded in the operating accounts of Penn Water"? A. I am trying to distinguish, Mr. Examiner, between the recording on operating accounts of what was frequently referred to as "savings" on these interchange transactions and the actual billing which is recorded as revenue on the operating accounts of Penn Water.

The revenue so received will, of course, include the actual costs incurred plus an increment equal to one-half of the total savings, and they are the revenues that are recorded on operating accounts and not the savings as was frequently referred to both by myself and by Commission Staff [7324] counsel in that cross-examination.

TRIAL EXAMINER: As I understand it, you do not show in Penn Water's books the incremental cost that would be incurred by the Pennsylvania receiver, nor do you show the incremental costs that will be incurred by Consolidated.

All that your books show would be the revenues that Penn Water receives from the Pennsylvania receiver or customer?

THE WITNESS: May I have that last question?

(Trial Examiner's question read.)

THE WITNESS: That is correct.

TRIAL EXAMINER: The billing costs that you referred to which would be reflected in the books would consist of what?

THE WITNESS: The billing costs, as used here, in contradistinction to revenues, were the payments that Penn Water might make to that customer for a purchase rather than a sale.

MR. GOLDBERG: How about using some figures and letting us see how it works? Take six mills as what it would have cost the Pennsylvania customer, four mills as what it would have cost Consolidated. Then what do you do?

THE WITNESS: You would, as I have explained, add the sum of those two costs together, and divide by two, and would bill the Pennsylvania customer at the rate of five mills per kilowatt hour if energy alone is involved.

MR. GOLDBERG: And then the money involved at the rate of [7325] five mills per kilowatt hour received from the Pennsylvania customer is recorded on Penn Water's books as revenue?

THE WITNESS: That is correct.

Then if during another transaction energy is purchased from the Pennsylvania customer as interchange, then there is a cost incurred by Penn Water which is then set up as an expense, and that is the billing costs that I referred to in contradistinction from the billing revenues. It is not in the same transaction but in another transaction in our assumptions here.

MR. GOLDBERG: I wonder if we could follow through that reverse procedure, that is where Penn Water is purchasing?

Let's assume it costs Baltimore six mills and it costs the Pennsylvania customer four mills. What is the procedure then in a purchase by Penn Water?

THE WITNESS: Again, the cost to Penn Water would be five mills, computed in the same manner if there was a 50-50 split as we have assumed. Penn Water would set

up that five mills as part of its operating expenses, or part of its purchased power, and that would be the end of Penn Water's accounts so far as that transaction is concerned.

MR. GOLDBERG: Thank you very much.

By MR. SPARKS:

Q. Mr. Spaulding, after Penn Water has received the revenues for such interchange services, how does Baltimore Company receive the benefit of the savings from such [7326] transactions? A. Regardless of whether Penn Water, Safe Harbor, or some other system plant actually supplied the electric services that entered into such interchange transaction, and it is usually impossible to determine exactly from which plant the service is supplied, Penn Water will receive additional revenue from interchange as the result of such transaction, and these additional revenues reduce the payment which Consolidated will make under the contracts identified as Items H and I.

Q. Will you refer to Exhibit 18 and explain how the revenues from interchange transactions enter into the computation of those bills? A. Referring to Exhibit 18, the additional revenue received by Penn Water will increase the amounts to be recorded in (e) 5, 6 or 7, as the case may be. The resultant reduction in the payment to Penn Water by Baltimore Company is in turn a reduction in Baltimore Company's own operating expenses. Such reduction in the latter's operating expenses will more than offset the increase in its operating expenses incurred at the time of the interchange transaction, and in such manner Baltimore Company receives the full benefit of all operating savings resulting from interchange transactions between Penn Water, Safe Harbor, and their northern customers.

[7327] Q. Mr. Spaulding, in the discussion of "savings" at pages 2884 to 2899, you were asked about "savings" and "economies" resulting from firm power arrangements and coordinated operations.

Did you have any difficulty in understanding these questions, the answers to which appear at transcript page 2887, line 8, page 2896, line 24, and page 2898, line 1? A. Yes, I did.

Q. Why? A. I did not understand what "savings" or "economies" were referred to in connection with these firm power contracts.

Q. Are there savings involved in the Pennsylvania firm power contracts? A. Yes, in my opinion there are.

Q. Are there savings involved in the contracts with Baltimore identified in this proceeding as Items E, F, and G, and H and I?

* * * *

[7328] THE WITNESS: Baltimore Company recently stated that it could not obtain or produce the same services now received from Penn Water and Safe Harbor more economically from any other source. Furthermore, in answering Commission counsel's question it seemed to me that I would have to consider the "value of service" rather than "cost of service", and I have no ready answers at this time relating to value of service.

By MR. SPARKS:

Q. Where were the statements made by Baltimore Company to which you have just referred? [7329] A. They are included in the answer of Consolidated Gas Electric Light and Power Company of Baltimore to the Public Service Commission of Maryland in the matter of the investigation of the rates of Baltimore Company. This answer was executed under oath June 5, 1944, by Mr. Cohn, the then president of Baltimore Company. The proceedings before the Public Service Commission of Maryland were known as Cases 4649 and 4661.

* * *

[7336] Q. Mr. Spaulding, several times during your cross-examination you referred to the impossibility of painting kilowatt hours. Do you mean that it is at all times impos-

sible on the interconnected system of Penn Water and Safe Harbor to trace the kilowatt hours from a generating source of such energy to the customers' load centers? A. No, it is not always impossible. For example, where there may be only a single source of energy generation supplying a section of the system load there would be no trouble in tracing the kilowatt hours from the source of generation to that load center.

Q. Does this situation ever exist on the Penn Water-Safe Harbor system? A. Yes, it does on certain sections of this system from time to time.

Q. Will you please give an example? A. Under most operating circumstances we have no difficulty in separating the identity of the 25-cycle electric services, including energy, transmitted from the Holtwood Power Development. For example, the Holtwood frequency changers [7337] connecting the 25-cycle and 60-cycle systems at that plant are very frequently shut down. Under such conditions we can be certain that all of the 25-cycle energy sent out from Holtwood is Penn Water's own generated energy. We can, therefore, trace these kilowatt hours from Holtwood to Baltimore and to Lancaster. The character of these 25-cycle services are so distinctive that we have no trouble in tracing or identifying them.

Q. Can you similarly trace or identify the use made of the 25-cycle single phase energy generation at the Safe Harbor plant? A. Yes, but to a more limited extent, because frequently operating conditions require the conversion of power from 60-cycle three phase to 25-cycle single phase by means of the frequency changer at Safe Harbor.

Furthermore, we cannot always trace the energy on the high tension 25-cycle single phase transmission system to the trolley system of the railroad and identify it as being energy generated at Safe Harbor because of its mixture with the electric services flowing into this section of the transmission system from the other sources of supply at Philadelphia and Washington.

Q. You have referred to the conversion of power from 60-cycles to 25-cycles at Holtwood and at Safe Harbor through frequency changer units. Will you please describe such [7338] conversion? A. The frequency changer units installed at Holtwood and at Safe Harbor consist, for each unit, of two large rotating machines directly connected to a single shaft, each machine being designed to operate from time to time as either a synchronous motor or a synchronous generator, depending upon the operating service requirements.

The machine on one end of the frequency changing unit is designed for operation at 60-cycles and the one at the other end at 25-cycles.

If power is being converted from 60-cycles to 25-cycles, the 60-cycle machine will be operated as a motor, driving the 25-cycle machine as a generator by the mechanical power transmitted through its direct connected shaft, and, similarly, when power is converted from 25-cycle to 60-cycle the 25-cycle machine will be acting as the motor and the 60-cycle machine as the generator.

The direction of power flow, and the amount of conversion, may be controlled at Safe Harbor by mechanically varying the relative position of a stator, thus changing the electrical phase angle.

[7339] Q. Can you normally trace and identify the 60-cycle energy supplied at Holtwood or Safe Harbor to the load centers of Penn Water and Safe Harbor's customers? A. Not normally, because there is usually a co-mingling of the energy and other electric service attributes generated at Holtwood and at Safe Harbor, and frequently a further co-mingling with backfeed from one of their Pennsylvania customers or from Baltimore.

Q. Does it ever happen that all of the electric services originate at the Baltimore and Washington Steam Plants? A. No, such operation does not occur.

Q. If all the energy were generated in Baltimore and Washington, would you then be able to trace this energy

to your Pennsylvania customers? A. If at such time we were not receiving any interchange energy over Penn Water and Safe Harbor's interconnections with their Pennsylvania customers, there could be little doubt but that such energy supply would be traceable from its generating source in Baltimore and Washington to Penn Water and Safe Harbor's customers and to the Pennsylvania Railroad through Safe Harbor. Even under such operating circumstances Penn Water and Safe Harbor would be contributing certain essential attributes of the electric service being supplied in Pennsylvania. The energy so supplied by Baltimore to Penn Water and Safe Harbor would necessarily be changed [7340] in voltage and perhaps in frequency, would be mixed with reactive or wattless energy, and would be backed up by the spinning reserve capacity supplied by the hydro units operating as condensers, so that although we might be able to trace the energy from the generating source to the load centers we would find such resulting electric services would be considerably altered in their essential characteristics.

* * *

[7343] By MR. SPARKS:

Q. Mr. Spaulding, was parallel operation of Metropolitan Edison Company system and Penn Water system continuous from December 6, 1931? A. No. Regular parallel operation was not possible until the end of January, 1932.

Q. Had Penn Water made the necessary changes in its equipment at Holtwood prior to January, 1932?

TRIAL EXAMINER: Will you read that?

(Question read.)

THE WITNESS: Yes, in October, 1931, Penn Water rearranged its transformer units at Holtwood to provide additional capacity for its York circuits. These changes were made coincident with other changes required in its transformers and circuits to provide for the operation of the

tie circuits between the Holtwood and the Safe Harbor plants.

By Mr. Sparks:

Q. When parallel operation with Metropolitan Edison [7344] was established in January, 1932, was the tie circuit between Holtwood and Safe Harbor then in operation? A. Yes. The Safe Harbor-Holtwood tie circuits went into service a few weeks prior to the parallel operation with Metropolitan Edison.

Q. Then, in January of 1932, both the tie lines from Penn Water to Metropolitan Edison and the tie lines from Holtwood to Safe Harbor were in operation and electric services from Safe Harbor could have been used by Penn Water for supply to Metropolitan Edison? A. That is correct. However, it was recognized that in such operation Safe Harbor might be acting beyond its authority received from the Pennsylvania Public Service Commission, which did not include permission to sell or dispose of Safe Harbor's services directly or indirectly to Metropolitan Edison.

Q. How was this situation corrected? A. The situation was immediately corrected by separating various amounts of Holtwood generating capacity from the rest of the Penn Water system and connecting it only to the York circuits for the supply of electric services to the Edison Light and Power Company and to the Metropolitan Edison Company, under the contracts identified as Exhibits 138 and 139. Such operation, however, was not as economical nor as reliable as would result from this supply being paralleled [7345] with the main power system of Penn Water and Safe Harbor.

Q. How long did this segregated method of operation of the York supply continue? A. About one year. On January 10, 1933, Safe Harbor obtained additional authority, granted by order of the Public Service Commission, permitting it to sell or dispose of its services to Metropolitan Edison Company among others.

Q. Mr. Spaulding, I show you a document entitled "Copy—Application of the Safe Harbor Water Power Corporation for a Certificate of Public Convenience, evidencing the Commission's approval of the modification of the order of the Public Service Commission issued to the Safe Harbor Water Power Corporation on the 31st day of March, A. D. 1930," consisting of an application and a report and order of the Pennsylvania Public Service Commission, and I ask you if that is a true copy of the application and order filed in January of 1933? A. It is.

Q. Mr. Spaulding, does the application show that it was executed on the 29th day of March, 1932? A. It does.

Q. And is the date of filing which I mentioned, of January, 1933, incorrect? I am referring to the filing of the application. A. The application was filed in March of 1932.

[7346] Q. And is the order of the Commission as of January 10, 1933? A. That is correct.

MR. SPARKS: I ask, Mr. Examiner, that this document be marked for identification as Exhibit 163.

TRIAL EXAMINER: The document handed the reporter may be marked Exhibit 163 for Identification.

(The document referred to was marked Exhibit No. 163 for Identification.)

By MR. SPARKS:

Q. Mr. Spaulding, does this document contain the application and order which you identified for the record at transcript pages 3454 and 3455? A. It does.

Q. Will you please indicate the dates on which parallel operation directly between Penn Water or Safe Harbor's generating plants and the main system of Pennsylvania Power and Light Company was begun? A. The hydroelectric plants of Penn Water and Safe Harbor were first paralleled directly with the main system of Pennsylvania Power and Light on October 8, 1935. Such parallel

operation was specifically contemplated under the contract identified as Exhibit 76 and this parallel operation was made possible upon the completion by Pennsylvania Power and Light of its 66 K. V. transmission circuit between its [7347] Harrisburg sub-station and its Donegal sub-station northwest of the city of Lancaster where a connection was made to an existing 66 K. V. circuit extending from Safe Harbor to this Donegal sub-station, a distribution center of Pennsylvania Power and Light Company. These interconnection facilities, including those provided by Penn Water and Safe Harbor at Safe Harbor and Manor sub-station, were used more or less continuously until November 1939 and this interconnection of Penn Water and Safe Harbor with P. P. & L. has been used continuously since that date.

Q. When were the facilities of Penn Water and Safe Harbor first paralleled directly with the Philadelphia Electric Company's main system? A. Parallel operation of Safe Harbor and Penn Water's system with that of the main system of Philadelphia Electric Company resulted from the continuous parallel operation of the Pennsylvania Railroad's extensive transmission system in the manner contemplated under the provisions of the contracts identified as Exhibits 134 and 135.

Such parallel operation of the single phase power supply facilities of Penn Water, Safe Harbor and Philadelphia Electric Company was tested out on October 30, 1934, was operated more or less continuously until June, 1938, and since 1938 all of the railroad's power supply sources, other than that from New York City, have been operated in parallel.

[7348] TRIAL EXAMINER: What do you mean by "Parallel operation"?

THE WITNESS: By parallel operation is meant the operation of two systems, or sources of power supply, in synchronism as a result of an electrical connection between

those two systems, and as a result of that electrical connection those two systems are electrically tied together.

TRIAL EXAMINER: What is the difference between calling it a parallel operation and just saying the systems were connected as of a certain date and remained so over a period of time?

THE WITNESS: I don't think there is any distinction, as long as the expression "tied together" means electrically tied together.

TRIAL EXAMINER: Is that the full significance of the term as it appears in the contracts insofar as an engineering interpretation of those contracts is concerned?

THE WITNESS: Yes, sir, I think it is, remembering, of course, that when you refer to tying together two systems it may imply tying together parts of two systems, and that is the reason I used the expression "the main system of" because by "main" I meant to include all of the electrical transmission system and the sources of supply available to that particular company and operated together as a system.

TRIAL EXAMINER: Does "parallel operation" connote cooperation of any kind?

[7349] THE WITNESS: No, sir. Parallel operation as I use it, and as I know of its use, means only the actual operation.

TRIAL EXAMINER: It doesn't signify in addition power factor cooperation?

THE WITNESS: No, sir, it does not signify that.

Of course there must be that result but it does not signify anything other than just the technical fact you tie two circuits together electrically.

TRIAL EXAMINER: All right, Mr. Sparks.

By Mr. Sparks:

Q. At pages 3615 and 3616 Mr. Goldberg was questioning the justification for your allocation of the entire cost of the two—220 K. V. Safe Harbor-Baltimore-Washington transmission lines to Baltimore Company in Exhibit 35, was he not? A. That is right.

Q. You did assign the entire cost of those lines to Baltimore Company in Exhibit 35, did you not? A. Yes, sir. In my opinion the total cost of those lines should be allocated 100 per cent to Baltimore Company.

Q. Are those transmission lines used at times for backfeed? A. Yes, practically all of the backfeed from Baltimore and Washington to Safe Harbor and Penn Water is transmitted over those lines.

[7350] Q. Do you consider the transmission of such backfeed to Safe Harbor and Penn Water a service that Penn Water renders to Baltimore Company? A. Yes, I do.

Q. Will you briefly state for what general purpose backfeed is supplied from Baltimore and Washington to Safe Harbor and Penn Water over these facilities? A. Generally, the backfeed is so supplied to accomplish the maximum overall economy of system operations. More specifically, such backfeed is supplied by Baltimore Company to Penn Water and Safe Harbor for three different purposes:

First, as electric services supplied to the hydro companies in connection with interchange transactions between these two hydro companies and their northern customers.

Second, as electric services to supplement the power resources of Penn Water and Safe Harbor in meeting their operating responsibilities to their firm power customers, and

Third, for conversion by Safe Harbor and supply to the Pennsylvania Railroad through the facilities of Penn Water and Safe Harbor, because Baltimore Company has

no facilities of its own for the supply of electric services to the Pennsylvania Railroad to meet Baltimore Company's operating responsibilities under the railroad power supply contract, identified as Exhibit 10.

[7351] Q. Considering now these three different purposes for backfeed separately, will you indicate why, in your opinion, any costs relating to, or that might be allocated to such backfeed for interchange transactions, should be considered a cost to Baltimore Company? A. As I have frequently testified, the savings on interchange transactions are equitably divided between Penn Water and the northern customers. All of such savings allocated to Penn Water are ultimately a benefit to Baltimore Company. There are necessarily certain costs incurred in providing for such interchange transactions and the savings or benefits derived go in part to compensate for such costs. When Penn Water or Safe Harbor use backfeed from Baltimore in connection with such transactions, Penn Water and Safe Harbor do not retain any of these benefits or savings, but, because Baltimore Company does receive Penn Water's and Safe Harbor's share of the benefit and savings, Baltimore Company should bear any costs incurred by Penn Water and Safe Harbor in connection with such transactions.

Q. Do the customers in Pennsylvania make any investment or incur costs for facilities for interchange? A. Yes. These customers have themselves provided quite extensive transmission systems of their own which are used in this connection and, in addition, the costs of Penn Water's lines serving them would also be properly considered [7352] a cost to be allocated to such customer. These transmission systems in Pennsylvania are just as essential in such interchange transactions as are the lines from Safe Harbor to Baltimore.

None of the costs of transmission to the north of the hydro plants were allocated to Baltimore and there is no reason why the customers in Pennsylvania should be allo-

cated any of the costs for transmission between the hydro plants and Baltimore.

Q. Now, will you state why, in your opinion, any costs relating to or that might be allocated to such backfeed, used by Penn Water and Safe Harbor to supplement their own electric services rendered to their firm power customers, should be considered a cost to Baltimore Company? A. The operations of the hydro plants of Penn Water and Safe Harbor are carried out to obtain maximum economy of operations, the benefits of which wholly accrue to Baltimore Company. As one example of such operation, Baltimore Company obtains hydro services at a time when it can replace the highest cost service on Baltimore's own system. To obtain the maximum benefits the hydro companies are operated on the peak of the load curve, as was explained in connection with Exhibit Number 8. With this method of operation, Baltimore Company sends Penn Water and Safe Harbor as backfeed electric services in the off-peak hours when they can [7353] be supplied by Baltimore Company at a minimum cost to itself. Inasmuch as Baltimore Company receives the full benefit from the economies of such operation, it is only proper that Baltimore Company be allocated any costs incurred in connection with the backfeed necessary for the procurement of these economies, and I believe we properly considered that Penn Water was rendering transmission services to Baltimore Company when it transmitted backfeed from Baltimore Company for such purpose.

TRIAL EXAMINER: Would you read that last, please?

(Answer read.)

By MR. SPARKS:

Q. Will you also state why, in your opinion, any costs relating to, or that might be allocated to, such backfeed from Baltimore for conversion by Safe Harbor and supply to the Pennsylvania Railroad through the facilities of Penn

Water and Safe Harbor should be considered a cost to Baltimore Company? A. To the extent that such backfeed supplied to the railroad is the operating responsibility of Baltimore Company, it is again only proper that any transmission costs relating to such backfeed be allocated to Baltimore Company, for a transmission service is thus rendered by Penn Water to Baltimore Company.

Q. Will you briefly state the several reasons why the [7354] entire cost of the Safe Harbor-Baltimore-Washington Lines should be allocated to Baltimore? A. In the first place, considering the part of these circuits between Ellicott Sub-station and the connection with the Washington Company, this line, together with Ellicott Sub-station is clearly provided in connection with Baltimore Company's contract with Potomac Electric Power Company to which Penn Water is not a party.

With respect to the circuits between Safe Harbor and Baltimore, there are a number of important uses in addition to that of providing capacity and energy services, and all for Baltimore's use in meeting its own system obligations. The second of the two circuits between Safe Harbor and Baltimore, installed about 1937, was provided for Baltimore Company alone, and only to assure electric stability and reliability of service.

Q. What are these uses other than for capacity and energy services? A. One very important use is in connection with power factor cooperation. To permit Baltimore to operate its modern and efficient steam plants at maximum loads it is necessary that such plants carry near 100 per cent power factor. The hydro plants at Holtwood and Safe Harbor provide the required wattless power, often by operating hydro units as condensers.

Another use is in connection with the maintenance of [7355] satisfactory system frequency. The Baltimore system load, principally because of the Bethelehem Steel Company load, is subject to very heavy and rapid load fluctuations. In the absence of the tie-lines through Safe Harbor

to the north, these load fluctuations would create a serious problem of frequency and load regulation. About 75 per cent of these load fluctuations are carried by these tie-lines and absorbed in the several large inter-connected systems in Pennsylvania and New Jersey. It might be mentioned that the existence of the fluctuating load in the Baltimore system, and the need for carrying a considerable part of these fluctuations on the tie-lines, limits the capacity use of these tie-lines to the north and is a use of these lines by Baltimore Company, not compensated by any similar use by other customers, but for which use no cost was allocated against Baltimore Company.

TRIAL EXAMINER: In what sense do you use "capacity" in connection with those tie-lines?

THE WITNESS: The capacity of a tie-line may be limited by the size of the conductor, or it may be limited by the connected transformers at one end or the other. From a consideration of those two principal factors it can be determined what the maximum load carrying capacity of those tie-lines is.

If, for instance, it would be possible to continuously [7356] carry a steady load of 50,000 kilowatts on a transmission line with its connected transformers, and then for reasons of outside influence the power and energy flowing over those lines were widely fluctuating, perhaps to the extent of 20 or 30,000 kilowatts, then you can see that the continuous rating of those lines may be only half what it was before, because there is an upper limit to what you can carry on those lines, and if you have a widely fluctuating load the integration of the steady load must necessarily be much less than its rating would otherwise be.

Other factors that have to be considered in that is one of stability, one of voltage regulation between the two ends of the line, and one of the relay settings of that line in order that such relay settings may be coordinated with the other safety protection relays on the system.

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[7378] Q. In your testimony you have referred to three methods of recording energy. You have referred to gross amounts, to net amounts, and to net hourly amounts. Will you please explain these terms more specifically? A. I will do so by example. If we were to add up the sum of all the energy registered on ratcheted meters, measuring the amount of power flowing toward Baltimore from Holtwood and Safe Harbor for one hour, a day or a year, we would obtain a gross figure.

As I have already stated, such a gross amount is not practical for operating purposes because we know that frequently power may be flowing in two different directions on the same circuit within a single clock hour, and again that power may be flowing north on one of our Baltimore circuits while flowing south on another Baltimore circuit, perhaps even at the same instant.

Nevertheless, gross amounts are recorded and are generally used only in connection with the records shown in Exhibit 143, and in our Commission reports wherever requested.

For most operating purposes we determine and record the net power flow on these several circuits for each hour. The separate totals of the "net hourly" flows in each direction are what we refer to as "net hourly" records.

"Net" records can be obtained either by taking the difference between the gross records or the algebraic sum of the [7379] "net hourly" records. However, we frequently find that the "net" of the north and south gross figures is so small that we get no indication of the large amount of actual energy services rendered in each direction. It is for this reason, in my opinion, that we must consider the "net hourly" figures for any practical analyses or for cost of service purposes, and we have, therefore, used these "net hourly" deliveries and receipts in connection with our analyses of energy transactions in Exhibit 35.

* * *

[7381] Q. Is a substantial part of the electric energy generated by Safe Harbor consumed at points in the state of

Pennsylvania? A. Yes. Using the statistics compiled by the company in the manner shown in Exhibit 143 for the years 1944, 1945, and for the first ten months of 1946, and expressing the sum of Item 1 plus Item 15 as a percentage of Item 10, we obtain a maximum percentage of 55 per cent for 1944, 58 per cent for 1945, and 51 per cent for the first ten months of 1946.

Not only is Item 1 greater in amount than should properly be used in any such accurate determination of the energy generated at Safe Harbor and consumed in states other than Pennsylvania, but Item 15 is also greater in amount than should properly be used by reason of the fact that a large but undetermined portion of Item 15 is in part backfeed received from Baltimore, and included in the amount shown [7382] in Item 2 of Exhibit 143, and in part interchange received from Philadelphia Electric Company at Perryville. These above percentages, subject to the inaccuracies stated, show that of the energy generated at Safe Harbor less than 58 per cent is transmitted to states other than Pennsylvania, and therefore the balance, which is a substantial part of such energy generated at Safe Harbor, is consumed in the state of Pennsylvania.

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[7383] Q. Can you conclude from these statistics that Baltimore did not receive two-thirds of Safe Harbor's output, Mr. Spaulding? A. Yes, I can, but it must be understood that such computation of energy proportions, while clearly indicating that Baltimore did not receive two-thirds of the energy generated at Safe Harbor, do not represent nor measure the proportion of the electrical services rendered, nor the proportion of the electrical services supplied by Safe Harbor to Baltimore Company, for electric energy is not a measure of the electric services rendered nor a measure of the services available.

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[7397] Q. Mr. Spaulding, do I understand that Pennsylvania Power and Light Company required supplemental

services to meet the firm power obligations on their own system? A. Yes, they did.

Q. Do these interconnected companies frequently depend on such interchange services to supplement their own power resources in meeting their system requirements? A: Yes.

* * *

[7402] J. RHOADS FOSTER.

* * *

[7404] RE-DIRECT EXAMINATION.

By MR. SPARKS:

Q. Dr. Foster, at page 700 of the transcript, lines 15 and 16, you were asked, "Did you have in mind the use of a credit to consumers in connection with the depreciated rate base?"

You answered "Yes."

Did you misunderstand the question? A. Yes. The answer should have been "No."

Q. At pages 5656 to 5659 of the transcript you illustrated the use of a depreciated and an undepreciated rate base. For this purpose you assumed utility plant accounts in an aggregate amount of $5,300,000, and made related assumptions.

In this connection have you prepared an exhibit having [7405] the title "Illustrations of different methods of treating depreciation within the rate making formula."? A. I have.

Q. Dr. Foster, I hand you a document entitled "Illustrations of different methods of treating depreciation within the rate making formula," and ask you if that one sheet document is the document to which you have just referred? A. It is.

Q. Was that document prepared by you or under your supervision? A. It was.

MR. SPARKS: Mr. Examiner, may this document be marked for Identification as Exhibit No. 165?

TRIAL EXAMINER: The document handed the reporter will be so marked.

(Thereupon, the document referred to was marked Exhibit No. 165 for Identification.)

By MR. SPARKS:

Q. Do the hypothetical data appearing on Exhibit 165 show variations of the two methods, namely, use of a depreciated and undepreciated rate base? A. They do.

Q. Is this exhibit the source of the figures which you mentioned at page 5656 of the transcript? A. It is.

[7406] Q. In the first and second lines of the exhibit have you shown the original cost of utility plant and the depreciation reserve balance which you have assumed to exist in a hypothetical situation? A. I have.

Q. What are the assumptions which you have made as to alternative treatments of depreciation in rate regulation? A. Cases 1 and 2 assume the use of an undepreciated rate base. The rate base is assumed to be $5,300,000, the amount of original investment.

Cases 3 and 4 each assume the use of a depreciated rate base. In case 3 the assumed rate base is $5,031,000 and in case 4 it is $4,600,000.

Q. In each case have you assumed that the fair rate of return is 6.5 per cent and that the regulatory authority has allowed this 6.5 per cent as the fair and reasonable rate of return? A. Yes. This rate is shown in line 5 of the exhibit.

Q. Have you shown on line 6 for each case the product of the rate of return times the rate base? A. I have. The product of the rate of return applied to the rate base is $344,500 in cases 1 and 2, $327,000 in case 3, and $299,000 in case 4.

Q. Have you carried to line 14, utility operating income, the amount of this return allowed by the regulatory

authority? [7407] A. I have. The amounts on line 14 are the same as the amounts on line 6.

Q. Have you for the illustrative purposes in cases 1 and 2 included a deduction representing what is assumed to be credits to consumers for the earning capacity of depreciation funds? A. Yes. The credit is shown on line 20 among the income deductions. In case 1 the deduction is at a rate of 2½ per cent, and in case 2 it is at the rate of 6½ per cent on the depreciation reserve balance.

Q. Is the credit to consumers shown on line 20 as $17,500 in case 1 and $45,500 in case 2, an operating expense? A. No, it is considered to be compensation for the use of funds other than the capital funds provided by stockholders. Therefore, the amount of the credit must be deducted from income before income is available for payment of dividends.

Q. Is the amount of the credit applied to reduce the annual provision for depreciation which is charged as an operating revenue deduction? A. It is.

Q. So that the operating revenue is correspondingly less than the amount which otherwise would be required to yield the return allowed by the regulatory authority? [7408] A. That is correct.

Q. In connection with the use of a depreciated rate base is there such a credit to consumers? A. No. In cases 3 and 4 there is no deduction on line 20 representing a credit to consumers.

[7409] Q. What have you assumed as the annual provision for depreciation? A. $106,000.

Q. In cases 3 and 4 does the recognition of depreciation take the form of a deduction from the rate base? A. It does. In case 4 the assumed deduction is an amount equivalent to the depreciation reserve. In case 3 the assumed deduction is five-thirteenths of the depreciation reserve corresponding to the ratio of the credit to the consumers shown in line 20 for case 2.

Q. Is this distinction the reason for your statement at page 704 of the transcript that the "use of a depreci-

ated rate base provides indirectly the credit which is provided directly by the adjustment of the fair return where the mode of treatment is the use of an undepreciated rate base"? A. That is right.

Q. Is the assumed fair rate of return of 6.5 per cent the same in each of the four cases illustrating different methods of regulatory treatment of depreciation in rate making? A. Yes.

Q. Is the effective return, that is the dollars actually available to investors, the same in each of the four cases? [7410] A. No; in cases 1 and 3 it is the same and in cases 2 and 4 it is the same.

Q. Is the effective rate of return which investors would earn on their investment the same in each of the four cases? A. No. In cases 1 and 3 it is the same and in cases 2 and 4 it is the same.

Q. At page 5669 of the transcript, lines 14-16, you said, "The results of the determination which follow from applying the six per cent rate of return to an original cost rate base are consistent with the first test, that of equitableness." Was that a complete statement? A. No. The experienced cost rate of six per cent was determined subject to the definition of experienced cost of capital at page 515, lines 6-11 of the transcript in this proceeding. Therefore, the application of six per cent rate to an original cost rate base is consistent with the test of equitableness only to the extent that the components of that rate represent return on debt and preferred stock capital.

Q. At page 5691 of the transcript, lines 10 to 23, you said that you know of no feasible procedure by which it is possible, "to directly determine the dollars of the fair return requirement so far as equity capital is concerned."

You then said that in this proceeding the certain number of dollars, not less than $2,450,000, were not determined [7411] before you "turned your attention to the question of fair rate of return."

Do you feel it necessary to clarify those statements? A. Yes. In the answer at lines 22 and 23 and in the answer

to the preceding question, I had reference to the general question of whether or not the fair annual return to a regulated enterprise, expressed in dollars, may be estimated directly, without consideration of either rate base or rate of return.

The desire for administrative simplicity sometimes has raised the question as to whether or not the fair annual return might be determined directly without the use of either a rate of return or rate base.

I was referring to this general question when I said that I know of no feasible procedure by which it is possible to determine directly the fair return on equity capital. A rate of return or percentage cost must be estimated for equity capital and can be given expression as an annual return only by multiplication of some base.

The amounts of 2,430,000 to 3,160,000, shown by Schedule 11 of Exhibit 30——

MR. GOLDBERG: Just a minute, Dr. Foster. May I refer to those schedules?

Is that the beginning of a long answer about Schedule 11 or is that one sentence you have there?

[7412] MR. SPARKS: About one paragraph, Mr. Goldberg.

THE WITNESS: Three or four sentences.

MR. GOLDBERG: Mr. Examiner, I object to any testimony on Schedule 11 in so far as it relates to II(a) through IV(b).

MR. SPARKS: May I say this, Mr. Examiner: There was reference during the cross-examination to Schedule 11, one, in Dr. Foster's answer to a question of Mr. Goldberg's, and also there was reference in some of Mr. Goldberg's questions to the replacement cost of capital.

In order to clear up this question of the determination of the dollars of fair return and of the rate of return and of the rate base we have to have this oppor-

tunity to state what Dr. Foster did in determining the fair rate of return.

That is a perfectly proper matter on redirect examination.

TRIAL EXAMINER: What Dr. Foster did in determining the fair rate of return, so far as his direct testimony was concerned, counsel stated was based upon a part of that schedule 11 which the Examiner excluded.

MR. SPARKS: That is right.

TRIAL EXAMINER: Are you taking the position that that ruling has to be modified?

MR. SPARKS: No, sir.

Don't let that last statement of mine be any qualification of our position that schedule 11 ought to be in the [7413] record. But at this time all we are doing is relating this redirect testimony to matters involved in the cross-examination.

TRIAL EXAMINER: Can you point to the place in the record where that is referred to?

MR. SPARKS: Yes, sir.

TRIAL EXAMINER: May I have the question and the answer as far as the witness has gone, please?

(Question and answer read.)

MR. SPARKS: Let me point out to Your Honor the figure of $2,450,000 mentioned in Mr. Goldberg's question at line 19, Page 5691 was taken by Dr. Foster, or derived from Schedule 11.

TRIAL EXAMINER: Let me see the transcript, please.

MR. SPARKS: Yes, sir.

TRIAL EXAMINER: Where else does that amount come from?

MR. GOLDBERG: It is not in the record, Mr. Examiner.

TRIAL EXAMINER: Where were you referring to it?

MR. GOLDBERG: Dr. Foster used that figure, didn't he?

MR. SPARKS: Yes.

TRIAL EXAMINER: On cross-examination?

MR. GOLDBERG: On direct examination.

MR. SPARKS: That is right.

MR. GOLDBERG: That was the amount of dollars, not less than that amount of dollars.

[7414] MR. SPARKS: That is right. That is the amount of fair return.

MR. GOLDBERG: The only cross-examination which related to the excluded part of Exhibit 11 had nothing to do with replacement cost of capital which, incidentally, is not Exhibit 11——

MR. SPARKS: I didn't say it was.

MR. GOLDBERG: The only question which was asked was to the effect "Could you have reached your conclusion in this case without the excluded portions of Schedule 11 of Exhibit 30?" All we wanted to know was what is the basis for his 6.5 answer. We did not go into the question of the use of the excluded portion. That is what they are trying to do now.

Suppose a witness decided that reproduction cost is the only means of determining fair rates, and he came in with testimony on that basis? But the Commission before whom he appears has long ago decided that that is not a competent basis and they won't listen to it?

TRIAL EXAMINER (Interposing): Let me have the answer of the witness where he refers to Schedule 11.

MR. SPARKS: You mean at a prior place in the transcript?

TRIAL EXAMINER: No, right here.

MR. SPARKS: We have not finished the answer, Your Honor.

MR. GOLDBERG: I interposed.

[7415] TRIAL EXAMINER: Let the reporter read what he has.

(The following answer of the witness was read by the reporter:

"A. Yes. In the answer at lines 22 and 23 and in the answer to the preceding question, I had reference to the general question of whether or not the fair annual return to a regulated enterprise, expressed in dollars, may be estimated directly, without consideration of either rate base or rate of return.

"The desire for administrative simplicity sometimes has raised the question as to whether or not the fair annual return might be determined directly without the use of either a rate of return or rate base.

"I was referring to this general question when I said that I know of no feasible procedure by which it is possible to determine directly the fair return on equity capital. A rate of return or percentage cost must be estimated for equity capital and can be given expression as an annual return only by multiplication of some base.

"The amounts of 2,430,000 to 3,160,000, shown by Schedule 11 of Exhibit 30——")

TRIAL EXAMINER: May I have the question now, please?

(The following question asked the witness previous to the above-mentioned answer was read by the reporter:

[7416] "Q. At Page 5691 of the transcript, lines 10 to 23, you said that you know of no feasible procedure by which it is possible, 'to directly determine the dollars of the fair return requirement so far as equity capital is concerned.'

"You then said that in this proceeding the certain number of dollars, not less than $2,450,000, were not determined before you 'turned your attention to the question of fair rate of return.'

"Do you feel it necessary to clarify those statements?")

TRIAL EXAMINER: When you asked the witness if he thinks it necessary to clarify the statement you are coming right back to the type of question the Examiner criticized this morning.

MR. SPARKS: May I state the purpose of that question, if Your Honor Please?

TRIAL EXAMINER: Yes.

MR. SPARKS: There is the implication, we feel, which should be corrected at this time, or the answer of Dr. Foster should be clarified in order that there may be no implication of inconsistency between what he said at 5691, in answer to Mr. Goldberg's question, and the method which he used in determining his rate of return. That is the purpose of the question and the answer. In the part of the answer which has [7417] not been completed Dr. Foster will attempt to show that the answer to the question which I pointed out to Your Honor on 5691 should have been amplified so as to show exactly what he did there so that there will be no implication left in the record as the result of his answer to Mr. Goldberg's question——

MR. GOLDBERG: Mr. Examiner?

MR. SPARKS: —of inconsistency.

TRIAL EXAMINER: You are asking the Trial Examiner to resign his function of ruling on the relevancy and materiality of questions to the witness.

MR. SPARKS: No, sir. I am only submitting my views to you.

TRIAL EXAMINER: Your question is in such form that the Examiner can only permit the witness to answer by resigning to the witness the function of determining relevancy and materiality.

MR. SPARKS: Mr. Examiner, counsel and the witness for the Respondent have to make the determination for themselves. That, then, is submitted to you for your consideration. If we didn't first make the determination for ourselves we never would have anything to present here.

MR. GOLDBERG: I am entitled to the protection, Mr. Examiner, of a proper question. There wasn't the slightest suggestion that that question would bring forth an answer [7418] bearing on the material to which I have objected and which the Examiner stated he was going to exclude.

MR. SPARKS: Yes.

MR. GOLDBERG: It was only when he started that sentence, that was the first time I had any notice that he was going into objectionable material, and that is the only time when I was able to interrupt and stop him.

TRIAL EXAMINER: The question is whether the witness wishes to clarify his previous answer?

MR. SPARKS: Yes, sir.

TRIAL EXAMINER: The witness has answered yes. Is that not right?

MR. SPARKS: Yes, sir.

TRIAL EXAMINER: Is that the way the answer starts?

MR. SPARKS: Yes. It starts "Yes." Then he proceeds to clarify.

TRIAL EXAMINER: Everything after "Yes" is stricken.

MR. SPARKS: We take an exception, if Your Honor please.

TRIAL EXAMINER: Let it be understood that this ruling is on a parity with the ruling which came up in a similar instance this morning in connection with the re-direct examination of the witness Spaulding. No evidence is being excluded. It is a question of putting proper questions to the witness.

MR. GOLDBERG: At least up to this time no evidence is [7419] being excluded, Mr. Examiner, because I will make an objection to any reference in any answer to those portions of Schedule 11 that I objected to.

TRIAL EXAMINER: All right.

MR. SPARKS: Recognizing the Examiner's ruling without acceding to it:

By MR. SPARKS:

Q. Dr. Foster, will you state in what respects you feel it necessary to clarify those statements to which you have referred at page 5691 of the transcript?

MR. GOLDBERG: I object to the form of the question. The witness ought to be asked first why he thinks any clarification is necessary.

MR. SPARKS: I don't think so. That is foolish, if Your Honor please.

MR. GOLDBERG: Why is it foolish?

MR. SPARKS: Ridiculous.

MR. GOLDBERG: We have heard statements about implications.

TRIAL EXAMINER: Read the question.

(Question read.)

TRIAL EXAMINER: The witness is to observe the import of the Examiner's ruling in giving his answer to this question.

MR. SPARKS: Yes, sir.

[7420] TRIAL EXAMINER: And is not immediately to proceed to give the same answer that he did in response to the previous question.

MR. SPARKS: Well, if Your Honor please, I thought that Mr. Goldberg's objection to the previous answer was only to the last incompleted sentence which Dr. Foster had testified to. He did not object to that portion of the answer preceding the incomplete sentence.

MR. GOLDBERG: Is the witness in his answer going to stop just before the reference to Schedule 11 of Exhibit 30?

MR. SPARKS: I don't think he is.

If Your Honor please, let me say this: If any portion of his answer is objectionable I recognize Your Honor's right and duty to exclude it if it properly should be excluded. But we have a portion of an answer here which was not objected to, and which I think Your Honor would not take objection to, certainly down to the sentence which was incompleted.

TRIAL EXAMINER: Read the question, please.

(The following question was read by the reporter:

"Q. Dr. Foster, will you state in what respects you feel it necessary to clarify those statements to which you have referred at page 5691 of the transcript?")

TRIAL EXAMINER: Having in mind the statements that have been made by counsel for the Respondents, particularly in indicating the witness' going to launch forth into a long [7421] answer, with respect to which this question is a mere type, the Examiner will rule that the witness may not answer the question in its present form. That is made for the same reason and on the same grounds as the previous ruling in connection with striking the previous question.

MR. SPARKS: I take exception to Your Honor's ruling on the basis we are being deprived of the right to a fair hearing by not being permitted to present proper re-direct testimony.

MR. GOLDBERG: Proper re-direct testimony based upon implications of inconsistency?

MR. SPARKS: Based upon cross-examination which counsel for the Commission launched into while this witness was on the stand under cross-examination.

MR. GOLDBERG: Point out where counsel for the staff went into how the witness used that portion of Schedule 11 of Exhibit 30 that he has objected to.

TRIAL EXAMINER: Very well. We will come to that in due course.

You can put a question to the witness which will elicit from the witness whatever he wishes to clarify in regard to cross-examination in an orderly way.

MR. SPARKS: I am not quite clear, if Your Honor please, as to whether the witness' answer in the affirmative to the question as to whether he felt it necessary to clarify those [7422] statements has been left in the record.

TRIAL EXAMINER: It has been.

MR. SPARKS: It has been?

TRIAL EXAMINER: Yes.

MR. SPARKS: Very well, sir.

By MR. SPARKS:

Q. Doctor, in your answer at lines 22 and 23, and in your answer to the preceding question, did you have reference to the general question of whether or not the fair annual return to a regulated enterprise expressed as dollars may be estimated directly without consideration of either rate base or rate of return?

MR. GOLDBERG: Where is this general question that counsel has reference to?

MR. SPARKS: I am asking Dr. Foster——

TRIAL EXAMINER: Let me have the question, please.

(Question read.)

TRIAL EXAMINER: I see no reason why he can't answer that question.

MR. GOLDBERG: I want to be sure, Mr. Examiner, that they are or are not referring to some general question about the subject that I asked during cross-examination. I don't know.

TRIAL EXAMINER: I think if you want to object to the question on specific grounds you may do so. If you want to inquire as to what relation this particular testimony has to [7423] the previous cross I think that comes up under cross properly.

MR. GOLDBERG: I could object to the question, of course, because it is vague and indefinite. But to avoid that I first wanted to ask whether they are referring in that question to some general question I asked on the subject.

MR. SPARKS: We are referring that to your question at page 5691 of the transcript, lines 10 to 23.

MR. GOLDBERG: Let me have that question again, please.

(The following question was read by the reporter: "Q. Doctor, in your answer at lines 22 and 23,

and in your answer to the preceding question, did you have reference to the general question of whether or not the fair annual return to a regulated enterprise expressed as dollars may be estimated directly without consideration of either rate base or rate of return?")

MR. GOLDBERG: I object, Mr. Examiner. The question was "Do you believe that you must first determine the dollars required for fair return before reaching a conclusion as to fair rate of return?" The answer was "I do not." Anything that came after that had nothing to do with the response to the question I had asked.

TRIAL EXAMINER: Objection is overruled.

MR. SPARKS: May we have the question, please?

(The question was again read by the reporter.)

THE WITNESS: I did.

[7424] By MR. SPARKS:

Q. Doctor, must a rate of return or percentage cost be estimated for equity capital?

• • •

[7425] THE WITNESS: In the process of fair return determination I know of no feasible procedure by which the fair return for equity capital can be determined without consideration and use of a percentage rate appropriately reflecting the cost of equity capital to be applied to some base.

• • •

[7426] Q. At page 5643, lines 21 to 23 of the transcript, you said that the margin of .869 per cent, subtracted from Penn Water's price ratios for the period since September, 1944, provides the adjusted earnings-price ratios. Is that a correct statement?

MR. GOLDBERG: What line is that?

MR. SPARKS: Lines 21 to 23.

THE WITNESS: No, that statement was in error with respect to the mechanics of the adjustment. The adjustment procedure was correctly described on the following page, 5744, and on page 6023.

The average was determined for the group of six for the period from August 1939 to August 1944, inclusive. It was assumed that during the period from September 1944 to January, 1946, inclusive, the Penn Water earnings-price ratios maintained the same relative position as had previously existed in relation to the average for the group of six. Therefore, the .869 per cent differential was added to the averages for the group of six in order to determine the adjusted earnings-ratios for Penn Water——

MR. GOLDBERG: Did you mean the medial four of six?

[7427] THE WITNESS: Added to the average of the medial four of six, yes. Those adjusted earnings-price ratios for Penn Water were used instead of the actual and higher earnings-price ratios in determining the 8.51 per cent.

By MR. SPARKS:

Q. At page 5744 of the transcript a reference was made to a study of a group of 11 earnings-price ratios and to its purpose. What are the facts which determined the availability of the group of six and the group of 11 earnings-price ratios for the purpose of the study? A. Prices or quotations were reported for 82 electric or electric-combination operating utility common stocks in the bank and quotation record for January 9, 1946. However, the number of operating utility common stocks traded in the securities markets has been extremely small until recent years because of holding company ownership.

In 1938 the rate and research department of the Federal Communications Commission found only 40 public utility common stocks for which market quotations were available, and some of those were traded so rarely or under such restricted conditions that weight could not reasonably be given to the bid quotations.

The total of 40, moreover, included seven telephone, six manufactured gas, and seven holding company common stocks, leaving only 20 electric and electric-gas operating [7428] company common stocks.

The list of twenty common stocks included those already identified as belonging to the group of eleven. The remaining nine are the common stocks of Pennsylvania Water and Power Company, Philadelphia Electric Company, Southern California Edison Company, Tampa Electric Company, Long Island Lighting Company, two others for which only over-the-counter quotations were available, and the then outstanding issues of three operating companies which were subsequently acquired by or merged into other companies.

In the case of Philadelphia Electric Company the proportion of the outstanding common stock held by United Gas Improvement Company was about 97 per cent prior to disposition during 1943. I excluded the Long Island Lighting common stock because of the non-payment of common dividends and the Tampa stock because of the comparative investor disfavor.

I also had determined the identity of common stocks listed on Securities Exchanges as of January 1, 1946, for which monthly market prices or quotations were available for a long period of years. Ten common stocks are included in this list.

All of the group of six are represented, plus Central Hudson Gas and Electric, Philadelphia Electric, Southern California Edison, and Pennsylvania Water and Power, Hartford Electric, Connecticut Power, Cleveland Electric [7429] Illuminating, and Duke Power were not included.

In this connection I determined for the common stock of each company the volume of trading over the entire period for which prices were available on a securities exchange.

The turnover of the Penn Water common stock had been generally equal to the turnover of the six most actively traded utility common stocks.

Q. At page 5799, lines 8 to 15 of the transcript, you were asked a question based on certain assumptions.

In giving your answer at line 16, did you understand that the question contained the assumption that all participants agree that the regulatory treatment of depreciation, including the use of a depreciated rate base, is fair and reasonable? A. I did.

Q. At page 5819, lines 8 to 14 of the transcript, you said that the increase in the earnings-ratios for the Penn Water common stock from November, 1939, to the end of 1941 was accompanied by similar movements of the earnings-price ratios for other common stocks, and that the movement of the Penn Water earnings-price ratios is not to be explained by the issuance of the license order of November, 1939.

At page 5828, lines 5 to 7 of the transcript, you said that as a general proposition selectivity in the market is greater in times of relative low prices.

[7430] Have you prepared a statement showing the comparative fluctuations of the Penn Water earnings-price ratios and of the earnings-price ratios of certain other common stocks? A. I have.

Q. I show you a one-page document entitled, "Comparative fluctuations of the two lowest and the two highest earnings-price ratios included in the group of 11, together with the Penn Water earnings-price ratios, within phases of cycles," and I ask you whether you can identify that document? A. I can.

Q. Was it prepared by you or under your supervision? A. It was.

MR. SPARKS: May this document as described by the witness be marked exhibit for Identification, No. 166?

TRIAL EXAMINER: It may be marked Exhibit 166 for Identification.

(Thereupon, the document referred to was marked Exhibit No. 166 for Identification.)

By Mr. Sparks:

Q. Will you please describe this exhibit, Doctor? A. The months in which the greatest variations exist among the earnings-price ratios are June 1932, March 1938, and April 1942. I have identified the two common stocks among the group of eleven which had the lowest earnings-price ratios for these three months and the two which had the highest [7431] earnings-price ratios for these three months.

The two common stocks appraised most favorably were those of Hartford Electric and Connecticut Power. The two appraised least favorably were Consolidated Edison and Pacific Gas and Electric.

For these two extremes within the group of 11 and for Penn Water I have shown the average earnings-price ratios at the end of each phase of each cycle. Those terminal months are the months identified on Exhibit 166. Thus prices were high and earnings-price ratios were at their lowest level in August 1929.

Prices were low and earnings-price ratios were at their highest level in June of 1932.

The alternate low and high positions were reached in August of 1936, March 1938, July 1939, April 1942, and January 1946.

I then determined the increase or decrease of the earnings-price ratios from the previous high or low position. Thus in July of 1939, the average for the two lowest earnings-price ratios, those for Hartford Electric and Connecticut Power, was 4.98 per cent.

In April 1942, the average for the same two earnings-price ratios was 7.79 per cent, an increase of 2.81. The increase of 2.81 was an increase of 56 per cent from the level of 4.98 per cent.

[7432] Q. Had you finished your answer to that question, Doctor? A. Yes.

Q. At page 5830, lines 14 to 19 of the transcript, you said that the earnings-price ratios of common stocks appraised by investors as having a greater degree of risk

tend to fluctuate more widely than the earnings-price ratios of common stocks appraised as having a lesser degree of risk.

Do the data shown in Exhibit 166 illustrate the behavior to which you refer? A. Yes. The Hartford Electric and Connecticut Power common stocks on the average have been purchased on a lower yield basis than any other among the eleven.

The Consolidated Edison and Pacific Gas and Electric common stocks on the average have been purchased on a higher yield basis than any other among the 11.

The changes in the earnings-price ratios from one phase to another of a cycle have been greater for the latter two common stocks, in amount and relatively, than in the case of Hartford Electric and Connecticut Power.

Q. How do the fluctuations of the Penn Water earnings-price ratios compare with those of the Hartford Electric and Connecticut Power earnings-price ratios? A. The Penn Water earnings-price ratios were higher during periods of relatively high prices and much higher during [7433] periods of relatively low market prices.

Q. How did the Penn Water earnings-price ratios compare with those of Consolidated Edison and Pacific Gas and Electric? A. The Penn Water earnings-price ratios were higher for August 1929 and for June 1932. They were lower for August 1936, March 1938, July 1939, and April 1942, and higher for January 1946.

The change in comparative position between April 1942 and January 1946 may be explained by the pendency of the rate proceeding.

Q. Did the fluctuations of the Penn Water earnings-price ratios within the intervals between the months shown in Exhibit 166 correspond more closely to the fluctuations characteristic of the two lowest earnings-price ratios or the two highest earnings-price ratios in the group of 11? A. The two highest.

Q. What was the increase in the Penn Water earnings-price ratio from November 1939 to April 1942? A. From 7.10 to 11.94 per cent, or 4.84.

Q. What was the increase in the average for Consolidated Edison and Pacific Gas and Electric during the same period? A. From 7.96 per cent to 14.26 per cent, or 6.30.

Q. What are these increases expressed as percentages [7434] of the earnings-price ratios for November 1939? A. Sixty-eight per cent for the Penn Water earnings-price ratios and 79 per cent for the average of the earnings-price ratios of the Consolidated Edison and Pacific Gas and Electric common stocks.

Q. What is your conclusion from these data? A. The increase in the Penn Water earnings-price ratios from July 1939 or November 1939 to December 1941, or to April 1942, conformed to the behavior which would be expected if considered in the light of the fluctuations of the earnings-price ratios of other common stocks.

No evidence is available to support a conclusion that the increase in the Penn Water earnings-price ratios during this period was accounted for by the license proceeding.

Q. If the order of November 3, 1939, directing the company to file with the Federal Power Commission an application for a license had an adverse effect on investors appraisals of the Penn Water common stock, would you expect that influence to be evident in the earnings-price ratios of the period immediately following the date of the order? A. I would. However, examination of schedules 1 and 3 of Exhibit 29 shows that from October 1939 to January 1940, the Penn Water earnings-price ratio increased from 7.18 to 7.26, and that the average for the group of six other common stocks, the mean of the medial four, decreased from 7.01 to [7435] 6.94. These movements in opposite directions are each of the magnitude of about one per cent. If the comparative behavior is in fact

accounted for by the license order a composite reappraisal resulting in readjustment to the extent of 1/50th of the previous appraisal in October can scarcely be described as significant.

Q. Doctor, does your answer at page 5857, lines 14 and 15 of the transcript, to the question asked by Mr. Goldberg which appears on the same page at lines 2 to 9, inclusive, require clarification? A. Yes.

MR. GOLDBERG: What is the answer?

(Answer read.)

THE WITNESS: I should have added that such a fact would not necessarily be evidence that the Commission's proceeding challenging the right of Penn Water to maintain a project without a license had a significant effect on Penn Water's earnings-price ratios.

By MR. SPARKS:

Q. At page 4900, lines 11 to 13 of the transcript, Mr. Goldberg asked this question:

> "Isn't it really a fact that the cycle you used began in June 1936 rather than August 1939, or August or September 1936?"

At lines 20 to 24 on the same page you characterized the [7436] movement, "From about August of 1936 to August of 1939, as being distinct and appropriately identified as a movement or fluctuation independent of, and not significantly related to, the movements reflected in the behavior at the later dates."

What were your reasons for that statement? A. It is reasonable to conclude that the cycle of earnings-price ratio movement from about September 1936 to about August 1939, was related to general business cycle conditions. The Federal Reserve Board index of industrial production moved upward from a low of 91 in February of 1936 to a high of 123 per cent in May of 1937.

The United States Bureau of Labor Statistics index of wholesale prices also moved gradually upward from

78.6 in May of 1936 to a maximum of 88 per cent in April of 1937.

The market prices of utility common stocks and the movement toward lower earnings-price ratios anticipated this level of increased production and higher commodity prices by some months.

Thereafter the index of industrial production fell with some rapidity from 123 per cent in May of 1937 to a low of 81 per cent in May of 1938.

The index of wholesale commodity prices also fell from 88 in April of 1937 to 78.7 per cent in April of 1938.

The decline in the stock market during the months of [7437] September, October and November 1937, can only be described as a collapse.

Barron's 50-stocks average moved from 136 in January of 1937 to 78 in December of that year.

The decline in market prices of utility common stocks and the corresponding rise in earnings-price ratios shown by Chart 1 of Exhibit 29 probably were closely related to the general business conditions and the loss of business confidence.

The rise of market prices and the decline of the earnings-price ratios during the latter part of 1938 and the first part of 1939 probably was related to the recovery from the depression of 1938.

Q. Were the fluctuations of the earnings-price ratios during the cycle extending from about September 1939 to about January 1946, the apparent result of different causes? A. Yes. The fluctuations during this period scarcely could have been the result of variations of industrial production. The Federal Reserve index of industrial production, which was at 107 per cent in August of 1939, rose steadily until it reached a maximum of 249 in October 1943, and was maintained at nearly that level until May of 1945.

Two special influences were present which did not exist in the period September 1936 to August 1939. The

first was the war and the second was more significant tax changes.

[7438] The stock market was influenced by adverse military needs and, after the swing to offensive operations, the growth of confidence in an early termination of the war.

Another influence on earnings-price ratios was the increase in Federal income tax rates from 19 per cent in 1939 to the high income and excess profits tax rates established by the Revenue Act of 1942, and the tax reduction which became effective at the beginning of 1946.

Diverse influences were present during the period September 1939 to January 1946. High and low extremes of business confidence were present and had an offsetting influence on the earnings-price ratios. I believe that the average offers a satisfactory representation.

Q. Doctor, at page 5924, lines 16 to 20 of the transcript, Mr. Goldberg asked whether the earnings-price ratios for the period beginning February 1946 appeared to be following the trend of the earnings-price ratios of the cycle which began August 1936 and ended September 1939.

You said that may be true as far as the shape of the curve is concerned, and at page 5925, lines 7 to 9 of the transcript, you said that the behavior during the recent period is largely the result of tax influences. Will you explain those statements? A. The earnings-price ratios is merely a ratio between past earnings as reported or as adjusted and the current market [7439] prices. In preparation of the earnings-price ratios shown by Chart 1 of Exhibit 29, and the earnings-price ratios for the month of January to the month of September 1946, which were read into the report at page 5742, no adjustments were made for the effect of tax changes which were anticipated during 1945 and became effective January 1, 1946.

The prospect of tax reductions resulted in reappraisals of the shares being traded. The market prices reflected the anticipated increases in net income as a result of the

tax change, particularly elimination of the excess profits tax.

The earnings-price ratios which determined the shape of the curve for the first months of 1946 are heavily weighted by 1945 earnings determined without adjustment for the prospective tax change.

The anticipated tax reductions and corresponding increases in net income are in considerable part reflected in the interim statements for the 12 months ended June or July of 1946.

The average market price of the six common stocks continued to rise during the first six months of 1946. The highest market price level was reached in June.

Nevertheless, when based on reported earnings which reflect in increasing degree the realization of the effect of the tax reductions, the earnings-price ratios moved upward beginning in February.

[7440] In January of 1946 the earnings-price ratios were below the true capitalization rate and the upward movement experienced during the first months of 1946 was in the nature of at least a partial corrective so far as the influence of the tax revision is concerned.

Q. At page 6007, lines 9 to 13, of the transcript, in making a distinction between rate of return and return on common stock capital represented in the rate base, you said, "In the case of a utility with only common stock equity there is no difference as a result of that distinction."

Is that a correct statement? A. No. In the case of a utility with only common stock capital the distinction between return and rate of return is, of course, significant. I intended merely to indicate that if there is only common stock capital in the capitalization the distinction is not complicated by the leverage resulting from representation of other kinds of capital in the capitalization.

Q. At page 6024, lines 19 to 25, and at page 6024, lines 1 to 16 of the transcript, the Examiner suggested that the revised earnings-price ratios for the period September 1944

to December 1945, inclusive, be supplied for the record. Have you prepared a schedule showing these revisions? A. I have.

Q. I show you, Doctor, a one-page document entitled [7441] "Changes in earnings-price ratios for the Penn Water common stock and for the medial four of six common stocks to reflect earnings data becoming available after the preparation of Exhibit 29."

Was that document prepared under your supervision? A. It was.

MR. SPARKS: May that document be marked Exhibit No. 167 for identification, Mr. Examiner?

TRIAL EXAMINER: Yes, the reporter will mark the document Exhibit 167 for identification.

(Thereupon the document referred to was marked Exhibit No. 167 for Identification).

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By MR. SPARKS:

Q. Doctor, at page 6040 of the transcript, lines 22 to 25, Mr. Goldberg asked the following question:

"May I put briefly in the record the distinction I think you are making? You are saying that accounting costs are not economic costs, and those economic costs are the only ones you recognize as costs. Right?"

You answered in the affirmative.

Was that a complete answer? A. No, it was a response to the first part of the question.

[7442] MR. GOLDBERG: Just one moment, please.

I object to the question as not in accordance with the evidence and I move to strike the answer. The question was "You answered in the affirmative. Was that a complete statement?" or words to that effect.

The fact is that he agreed to the statement in the question and said "With the addition of one further point."

In other words, it was not merely an answer in the affirmative and stopping there. He went on to give all the reasons he thought necessary.

MR. SPARKS: No, he didn't, if your Honor please. That is just the purpose now of this further redirect.

MR. GOLDBERG: Who was restraining this witness?

TRIAL EXAMINER: Read the question, please.

(Question read).

TRIAL EXAMINER: May I have the answer too, please?

(Answer read).

MR. SPARKS: He has not completed this answer, Mr. Examiner.

TRIAL EXAMINER: I will sustain the motion to strike. We cannot stop and try now whether those answers were complete or not. He is entitled to answer the question correctly if it was answered incorrectly before.

MR. SPARKS: If your Honor please, this situation springs from the fact there were two questions in that question. Doctor [7443] Foster answered the first part of the question, namely, that accounting costs are not economic costs. He did not on cross-examination answer the second part of the question.

TRIAL EXAMINER: The form in which your question is put is properly objectionable.

MR. SPARKS: I don't understand why, if your Honor please. I have asked him if it was a complete answer. He said "No" in response to the first part of the question.

TRIAL EXAMINER: I do not think we can let the witness determine whether his answer was complete as of the time he gave it or not.

MR. SPARKS: Well, if your Honor please, I think the witness certainly must have some say as to whether he was completely answering the question. He said he did not completely answer it. I say he did not completely answer it.

I submit to your Honor that we ought to have an opportunity to complete the answer to that question. That seems to me to be the purpose of redirect examination.

TRIAL EXAMINER: Procedurally his answer was complete in that he was not interrupted.

MR. SPARKS: Will your Honor indulge just a moment?

MR. GOLDBERG: He went on to say he had one additional point to make. He made it.

MR. SPARKS: Obviously the answer was only to the first part of the question.

[7444] TRIAL EXAMINER: Objection is sustained and the motion to strike is granted.

MR. SPARKS: I take an exception.

By MR. SPARKS:

Q. Doctor, in your studies of the rate of return determination in this case have you disregarded accounted-for costs? A. I have not.

Q. Doctor, were schedules 4 and 5 of Exhibit 29 designed to show anything other than the actual experienced costs of debt and preferred stock capital and the costs as recorded in the accounts of Penn Water as at the time when incurred? A. They were not designed to show anything other than the costs which you have described.

Q. Are debt discount an expense and call premiums costs of supplying service?

MR. GOLDBERG: What does "service" mean?

MR. SPARKS: Service supplied by Penn Water.

MR. GOLDBERG: What service?

MR. SPARKS: Now, if your Honor please,——

TRIAL EXAMINER: Proceed with the witness.

MR. GOLDBERG: Mr. Examiner, you know, you speak of servicing debt, and this is financial cost we are talking about, as I understand it. We have heard the word "service" used in connection with the furnishing and selling of [7445] electric energy.

I am just trying to find out what these things mean.

TRIAL EXAMINER: Do you have any objection to stating whether it applied to debt service or not?

MR. SPARKS: It applies to services rendered by Pennsylvania Water and Power Company.

TRIAL EXAMINER: To its customers.

MR. SPARKS: To its customers.

TRIAL EXAMINER: All right.

THE WITNESS: I believe that at the time when incurred their status as costs is not questionable. An outstanding issue of bonds cannot be redeemed and onerous requirements of an existing debt contract——

MR. GOLDBERG: I move to strike the answer as given up to this point as unresponsive to the question.

TRIAL EXAMINER: Read the question, please.

(Question read.)

[7446] TRIAL EXAMINER: The answer, too, please.

(Answer read.)

MR. SPARKS: That is not a complete answer.

MR. GOLDBERG: I realize that. The reason I interrupted is because it was obvious it would not be responsive.

TRIAL EXAMINER: Finish the sentence.

THE WITNESS: —avoided without the payment of call premium.

TRIAL EXAMINER: Anything more to that answer?

MR. SPARKS: Yes, there is more. It is all responsive. I think Your Honor will recognize it.

TRIAL EXAMINER: Yes, but he gets right back to the same problem which has come up before in connection with permitting the witness to give lengthy answers in response to questions where really the first sentence the witness gives is an answer to the question.

MR. GOLDBERG: If you can call that an answer.

TRIAL EXAMINER: The question is usually in the form of something which requires a simple answer "Yes," and then the witness proceeds from there on on his own.

MR. SPARKS: To qualify and explain that categorical answer. It is perfectly proper.

TRIAL EXAMINER: It gives no one an opportunity to object. The question is retired with the first few words and then the witness is free.

[7447] Your answer to that question is "Yes," is it not?

THE WITNESS: Well,——

TRIAL EXAMINER: Isn't that a complete answer?

THE WITNESS: The question as put to me may be answered "Yes" which, however, provides no reason for an answer on a highly controversial subject.

TRIAL EXAMINER: Very well. All of the answer to the question other than "Yes" is stricken.

By MR. SPARKS:

Q. Can an outstanding issue of bonds be redeemed and onerous requirements of an existing debt contract avoided without the payment of call premiums? A. No.

Q. What is the measure of debt discount and expense or net premium? A. The measure is the difference between net proceeds to the company and the obligation at maturity of the fixed term contract.

Q. When an outstanding issue of bonds is refinanced is unamortized discount and expense related to that issue an unavoidable cost?

MR. GOLDBERG: May I have that question, please?

(Question read.)

MR. GOLDBERG: Is "that issue" the issue which is refunded or the new issue?

[7448] MR. SPARKS: The issue which is retired.

THE WITNESS: It is.

By MR. SPARKS:

Q. Must such costs be borne by someone, Doctor? A. They must be.

Q. What are the alternatives of treatment of these costs available to the Regulatory Commission for rate making purposes? A. Three alternative treatments of such costs of financing are available: First, these costs might be provided for among the operating expenses. This is an inappropriate alternative since they are not operating expenses.

Second, they may be recognized as part of the determined experienced cost of capital and accepted as evidence of the fair rate of return.

Third, such costs may be excluded from the determination of capital costs as well as the operating expenses.

Under this third alternative such costs absorb a part of what would otherwise be equity return. This third method imposes on the equity investment an additional hazard, the hazard of obsolescence of contracts for senior capital. Such an additional hazard, when recognized as such by investors, will become reflected in increased return requirements and subject to recognition in the allowance

for risk taking in determination of the fair rate of return. [7449] Q. Why do you say that under this third alternative such costs absorb a part of what would otherwise be equity return? A. I mean that such costs can not be avoided by the choice of accounting disposition. Expedited accounting disposition by write-off to surplus or by rapid amortization by charges against income conforms to the practice of conservatism in accounting. It represents an immediate or rapid absorption of the cost by the equity in exchange for the prospect of a corresponding increase in net income during future accounting periods. Disallowance as fair rate of return evidence on the ground that the cost has been written off to surplus has a double-barreled effect on computations such as are shown by Schedule 6 of Exhibit 29.

The cost of debt capital component of the over-all cost rate is reduced on the ground that the particular costs have been absorbed by the equity. The equity capital cost rate, however, is weighted by the proportion of equity capital in the total capitalization and that proportion is reduced by a write-off of such costs to surplus. Therefore the equity capital component of the over-all cost rate computed in the manner shown by Schedule 6 does not include any allowance to reflect the absorption of such cost by the equity.

Q. Are such costs subject to exclusion on the ground that they are imprudently incurred? [7450] A. I know of no evidence——

MR. GOLDBERG: Mr. Examiner, I must object to that. It seems to me it asks for a legal conclusion.

TRIAL EXAMINER: Objection is overruled.

THE WITNESS: I know of no evidence which suggests that such costs were imprudently incurred.

MR. GOLDBERG: Now may I have the question and the answer, please?

(Question and answer read.)

MR. GOLDBERG: I realize you have just indicated, Dr. Foster, that does not complete your answer, but

the answer you have already given raises in my mind the question that I would like to have counsel advise me on, and that is when he says "such costs" in his question is he referring his question specifically to costs that Penn Water has incurred or is it just a general question dealing with unamortized debt discount?

MR. SPARKS: We are talking about the costs Dr. Foster has reflected in his exhibits in this case.

MR. GOLDBERG: It is related, then, to Penn Water?

MR. SPARKS: Yes.

MR. GOLDBERG: All right.

THE WITNESS: In the words of Mr. Justice Brandeis the criterion of "Prudent" is applied "for the purpose of excluding what might be found to be dishonest or obviously [7451] wasteful" costs. The criterion should not be extended to exclude what may be found in the light of hindsight to be merely uneconomic. Such a criterion of exclusion on the ground that conditions have changed since the time when the costs were incurred would require, for example, that equity investors be penalized by disallowance of depreciation expense reflecting growing obsolescence.

By MR. SPARKS:

Q. Doctor, at Page 6054, lines 7 to 10 of the transcript the following question was asked:

"Assume that bonds are retired by using funds secured through the issuance of preferred stock. Is the unamortized discount and expense associated with the bonds a cost of the preferred stock?" You answered in the negative.

In the circumstance described is the unamortized debt discount and expense a cost of capital? A. Yes.

Q. Why? A. The character of the unamortized debt discount and expense as a cost of capital is not changed by the fact of the retirement of the bonds by use of proceeds from an issue of preferred stock instead of refunding bonds. Such unamortized costs are appropriately charged to sur-

plus at the time of the transaction, but their status as unavoidable costs is not changed by the accounting [7452] disposition, and they are appropriately recoverable by an allowance in the equity component of the rate of return.

The appropriate treatment of capital costs in the circumstance of substitution of preferred for debt capital is generally the same as where equity capital is substituted for debt capital.

In the case of Penn Water, equity capital was substituted for debt to the extent of $345,800 in the refinancing of the 5½ per cent series "A" and the six per cent Holtwood bonds by the 4½ per cent series "B" bonds issued in March, 1928. This is the difference between amounts shown by lines 16 and 17 of Schedule 4 of Exhibit 29.

The related unamortized debt discount and expense, which amounted to $38,700, the difference between the amounts shown by lines 15 and 19 of Schedule 4, was dropped from the computation of experienced cost of debt capital. That circumstance and the treatment for the purpose of Schedule 4 do not cause the item to cease to exist as a cost of capital. The item was not recognized in the determination of equity capital costs because it was relatively insignificant in amount. Its recognition as a cost assumed by the equity would have required surplus be adjusted to the extent of the amount involved for the purpose of the computation of the equity cost component shown by Schedule 6.

Q. Are the hypothetical replacement cost of capital [7453] rates shown by Schedule 10 of Exhibit 30 appropriate measures or evidence of the fair rate of return to Penn Water to be applied to an original cost rate basis? A. No.

Q. Why? A. Such replacement cost rates of 4.9 per cent, or 5.6 per cent, are not appropriate measures or evidence of a fair rate of return to be applied to an original cost rate base when its applicability is tested by either the equitable or the economic standards.

Q. During the course of your cross-examination Mr. Goldberg drew your attention to certain portions of the Federal Communications Commission rate of return study issued June 15, 1938. May I direct your attention to Page 20 of Chapter 2 of that study and to these statements:

"The price paid for capital, like many of the other costs which must be incurred to provide service, is largely determined by the forces of competition. Materials and supplies, and to some extent labor, as well as the funds necessary in the business must be secured in competitive markets. Regulation must provide the utility with sufficient revenues to enable it to purchase its materials, supplies and labor in competition with other businesses, and to the same end regulation must provide a return that will meet the demand of the capital market. If such return is not made [7454] available, capital funds will not be forthcoming.

"From this point of view, the primary purpose of permitting a utility to earn a 'return' is to enable it to pay the costs of its capital, and the amount of these costs should be the reasonable and proper measure of the return allowance."

I have skipped Note 1 and I shall read Note 2 at the bottom of Page 20.

"The necessary and useful distinction between 'expense' and 'economic cost', should be kept in mind. 'Expense' is an accounting term, and excludes many items properly considered as a part of 'economic cost.' The return may be an expense only in part or even not at all during a given accounting period."

Will you examine the portions which I have read, Doctor, and state whether or not you agree with those statements? A. I do agree with those statements.

Q. May I also direct your attention to Page 76 of Chapter 5 of the study which I have referred to in my previous question, and to these statements:

"While it is true that the prospects of a future rise or fall in the market price of stocks have their influence (and at times may even be controlling), it is believed that the financial and operating characteristics of the particular utility dominate the investing public's evaluation of [7455] its securities. In many cases this will not result unless the period used is long enough to even out the effect of market factors extraneous to the individual corporation's situation. In any event, however, it seems to be generally conceded that the long run average earnings-price ratio, more accurately than any other single factor, reflects the investor's composite evaluation of all fundamental influences effecting the corporation."

Do you agree with those statements as statements of the appropriate use of earnings-price ratios in the determination of the fair value of return? A. I do.

[7456] Q. At page 5691 of the transcript you gave certain answers to questions asked by Mr. Goldberg. Were the statements made by you on page 5691, lines 13 to 16, both inclusive, and lines 22 and 23 in any way inconsistent with the method which you used in this proceeding in arriving at the fair return of not less than $2,450,000 and the fair rate of return of not less than 6½%? A. They were not.

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[7458] RE-CROSS-EXAMINATION.

By MR. GOLDBERG:

Q. Referring to Exhibit 165, Dr. Foster, in presenting that exhibit are we to understand that you are undertaking to support a specific treatment of depreciation in this case? A. No, you are not to so understand.

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[7461] Q. What I am trying to find out is have you ever known of the use of depreciation expenses in rate making based upon the straight-line method of depreciation in as-

sociation with an undepreciated rate base? A. In a rate proceeding I cannot say that I have.

• • •

Q. In other words, depending upon your assumptions you can alter those results in Exhibit 165. Right? A. That is right. The only purpose of this exhibit was to attempt to supply an answer with respect to the meaning of the conclusion reached in the rate of return testimony. [7462] That is, there were numerous questions with respect to the meaning of the statement that the conclusion was prior to whatever might be the effect of the treatment of depreciation. In that connection it was said that the fair rate of return would not vary.

It was said also that the fair return defined as the amount reached by applying the rate of return to the rate base, depreciated or undepreciated depending upon the method, would vary.

This exhibit is intended to be no more than a mathematical illustration of what was meant in that connection.

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[7466] DONALD GUNN.

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CROSS-EXAMINATION (Continued).

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[7469] By MR. HALL:

Q. Did you ask Mr. Hutchinson what risk he had assumed and what sacrifices he had made in subscribing to the McCall Ferry bonds? A. No, I don't believe I asked him that question. I didn't consider Mr. Hutchinson a financial expert as such.

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[7470] Q. When did actual physical construction of the Holtwood project begin? A. The latter part of October 1905.

Q. October 24, 1905, is the exact date according to my information. A. Yes.

Q. At that time clearing of the reservoir began; right? A. I believe it was clearing of the reservoir and particularly clearing of a site for the construction site and construction labor camp.

Q. What source of income did McCall Ferry Power Company have in the spring of 1905?

MR. KING: May I inquire in what sense you refer to income?

MR. HALL: Income from operations.

THE WITNESS: None.

By MR. HALL:

Q. Or from any other source. A. The thing that is troubling me is this: I believe they did get some interest on bank deposits. I don't know whether or not you would call that income.

MR. KING: That is why I asked you the question.

By MR. HALL:

Q. Any other income? [7471] A. Well, they had a little income from operation of the construction camp.

Q. Very insignificant amount? A. Insignificant, yes.

Q. Had McCall Ferry consummated any power contracts for the sale of its project's output in the spring of 1905? A. They had not consummated any contracts as I recall it. Previous to that time there had been power surveys made of the potential market, and a market was known to be available, but no actual contracts had been consummated.

[7472] Q. No actual negotiations had begun in the spring of 1905. Is that right? A. That I don't know.

Q. Wasn't the first contract for power signed in March of 1907? A. I believe that is correct.

Q. When was work stopped on the project due to the exhaustion of available funds? A. About January, 1909. At that time construction practically came to a standstill. Previous to that time it had gone to a rather low ebb, during the months of February and March, 1908, but immediately following that there was a resumption of construction, and then the actual halting of work took place in January of 1909.

* * *

Q. The capacity and power output of the project had not been finally determined in the spring of 1905, right?

* * *

THE WITNESS: Well, in the spring of 1905 a capacity for the initial project had been decided upon which was substantially the same as the initial project actually installed. However, the plans for the project in the spring [7473] of 1905 called for a lower dam and a greater number of units without tailrace excavation, and the project as finally installed called for a higher dam, a fewer number of units, and tailrace improvement which increased the power from those units, so that at the end the initial project in each case was of substantially the same horsepower.

By MR. HALL:

Q. Wasn't the initial estimate based upon 50,000 horsepower? A. Yes.

Q. And that was increased to 100,000 a little later? A. There was a whole series of estimates which entered into the studies upon which the final plant was based. I don't recall what all the different horsepowers were, but the initial plant as actually installed consisted of five units, and they aggregated substantially 50,000 horsepower.

Q. When were bids called for on the dam of 185 foot elevation? A. On August 11, 1905.

Q. When was the final decision reached to construct the dam at 165 foot elevation? A. June 19, 1906. But previously, in the original financing in June, they had been

considering a dam at 155 foot elevation, which is still lower than the 165 and much [7474] lower than the 185.

Q. At the same time they were also turning over in their minds the 185 foot elevation, right? A. I don't know that they were. The 155 foot elevation first came into the picture in a substantial way in the Parsons Report on January 13, 1905. It was incorporated in the Fisk underwriting agreement and prospectus in March 25, 1905, and it appeared to be the prevailing plan, that is the plan to build to 155, down through the time the financing was completed.

Q. That financing was completed in May of 1905, right? A. The subscriptions were taken, I think, in March of 1905. The actual availability of money came about in June, I believe, or about the middle of June.

Now, apparently, the first variation or first serious consideration that was given to building a dam higher than elevation 155 was about June of 1905, and came about as a result of negotiation with Pennsylvania Railroad officials for raising the railroad. At that time the railroad company estimated that the railroad could be raised to Pennsylvania Railroad's satisfaction at a cost of about $577,500.

As soon as that estimate was made known to McCall Ferry Power Company, and the estimate was made by Pennsylvania Railroad, the advisory board of engineers immediately considered building a higher dam because that estimate of [7475] $577,000 was much less than they thought it would cost to raise the railroad track.

During the early part of August the advisory board recommended the construction of the dam to elevation 185, and on August 11 bids were called for for a construction of a dam to elevation 185. Then the bidders included in their bids up to $500,000 or $750,000 for risks of constructing the project in the Susquehanna River, that is risks from flood and also against the results of a penalty clause which McCall Ferry had included for completion. When McCall Ferry Power Company considered those bids they

came to the conclusion that if they accepted one of them they were accepting the worst contingency, and, therefore, the highest price that they could possibly be caused in the construction of the dam, and had no opportunity to have any advantage from the advantageous river flow conditions prevailing, and on the basis of that they rejected those bids and made an arrangement with Hugh L. Cooper, who at that time had a construction organization working on the hydro developments of Niagara Falls which were about complete, made an arrangement with him to construct the project at cost plus a stipulated fee, and signed the contract with him to that effect for a dam at 185. They also had a provision for building a dam at a lower elevation.

At about that time, or about December 6, 1905, Pennsylvania [7476] Railroad revised the estimate on the cost to relocate the railroad upward from $577,000 to $1,237,000, and certain landowners whose property would have to be bought in the relocation of the railroad, and also in the flooding at a higher elevation, made such exorbitant claims for the price of their land that McCall Ferry Power Company decided that they couldn't afford to build a project to elevation 185, and as a result on June 19, 1906, they settled upon the elevation for the dam at 165.

Q. From what you said, all the estimates of revenues in the Spring of 1905 were not final. Is that right? A. That is correct, none of the estimates were anything, as later events proved.

* * *

[7481] Q. Will you refer to Exhibit 159, Mr. Gunn? A. Yes, sir, I have it before me.

Q. Doesn't Mr. Dimock state in this exhibit that the [7482] contract which has been consummated is at $21.50 per horsepower? A. That is one of the things he states. I might suggest that has to be taken along with this fact: I believe the early expectations of McCall Ferry were to sell a certain category of their power to Consolidated Company in Baltimore, another category of it to United Railways. That is, that was their first expectation.

Later their plans changed to sell what may have been, and I believe was necessary, a different category of power to Consolidated, also a different category of power to United Railways, and to bring a third customer into the picture, that being the Lancaster Edison Company, as I believe it was known at that time.

What hydroelectric power is worth is determined wholly by the specifications for its use and delivery which are contained in the power contract, so it does not seem to me there is necessarily any inconsistency at all between the $21.50 Mr. Dimock mentioned to Mr. Higginson in Exhibit 159 and the figures stated on pages 45 and 46 of Exhibit 27.

I have not made a study and a comparison of those contracts, and I therefore am not in a position to state that as a fact other than just the general statements I have given you.

Q. Notwithstanding the absence of earnings in the [7483] Spring of 1905, the absence of contracts to insure any earnings in the future, the absence of any definitive arrangements for the construction of the project, you nevertheless contend that the McCall Ferry stock had a cash value at the time of the transaction in the Spring of 1905. Right? A. May I have that question, please?

(Question read.)

THE WITNESS: When you speak of a "definitive arrangement for the construction" to what are you referring? The absence of a contract executed with a contractor for building the project? Is that what you are referring to?

[7484] By MR. HALL:

Q. That plus the fact no definite plans had been agreed upon as indicated by the fact they went from a 155 elevation to a 185 elevation and back to a 165 elevation?

* * *

THE WITNESS: Yes, in my opinion the stock had a value. However, while the stock did not have actual earn-

ings then it had prospective earnings. It is also true there were no actual contracts then, which was normally to be expected. There was, however, available a market which had been thoroughly surveyed.

It is also true that there was no definitive plan for the project. However, there were plans which were perfectly practicable, and it is true that later several other plans were considered and rejected, and the final plan accepted was [7485] somewhat different from the original plan.

Q. Upon what contract were the prospective earnings that you referred to based? A. They had no actual contract. It was on the existence of an obvious market. That is what the prospective earnings were based upon.

Q. They thought that in the spring of 1905 they could get contracts for the output in the future. That is what you are saying? A. I think they knew that.

Q. How do you know that, Mr. Gunn? A. For the reason the markets were within practical transmission distance and they knew they could sell power against steam competition, and nothing short of an improvident management would fail to buy it under those circumstances, that is improvident management on the part of their customers.

Q. The McCall Ferry did not know the price at which they could or would sell the power output of the project? A. No, that lying in the future they could only estimate the price, which they did.

Q. And the estimates to which you refer were in excess of the contracts actually consummated; right? A. I wouldn't draw that conclusion. I have not made a study of them and I don't think we have anything before us now to support such a conclusion.

[7486] Q. Isn't that what Mr. Dimock says in his letter which is Exhibit No. 159? A. What part of that letter?

Q. In referring to $21.50 per horsepower? A. No, that doesn't necessarily follow for the reason I have already explained to you.

Q. Had Hutchinson always entertained the opinion shown in his affidavit as to the value of the stock? A. I don't know. I never knew Mr. Hutchinson before I met him about eighteen months, I think, prior to the date of that statement.

Q. He, like others you consulted, knew that you wanted the valuation for the purpose of supporting Penn Water's original cost claim, didn't he? A. Yes, for that purpose and any other purpose we might need it for. At least they could draw that as an inference or conclusion.

Q. Assuming he didn't know it, he could draw that conclusion, also. Isn't that right? A. Yes; surely. I believe I told him that was the purpose of it.

Q. And he could also draw the conclusion that it would be of no help for you if he said the stock had no cash value at the time of the transaction. Isn't that so?

* * * *

[7487] THE WITNESS: He could draw that conclusion, Mr. Hall, but there was every reason to expect that he would not act upon such a conclusion. Dr. Hutchinson felt all his life he had been mistreated very badly in the McCah Ferry project, and, as a matter of fact, there was a considerable amount of hesitancy in our company to even approach him and ask him for his help in this.

* * *

Q. At this point, Mr. Gunn, I would like to refer you to part 1 of Exhibit 27, and particularly to page 4 thereof. A. Yes, sir.

Q. Does not Hutchinson state there that when it was [7488] determined the financing was more than Bertron, Storrs and Griscom could complete then Harvey Fisk and Sons were approached in connection with the proposed financing of the project?

* * *

THE WITNESS: Yes, sir, it so states.

By Mr. Hall:

Q. Hutchinson there states that Fisk agreed to form a new syndicate and undertake to complete the financing. Isn't that so? A. That is correct. It so states.

Q. But according to Hutchinson's statement the Fisk firm insisted as consideration for its efforts a majority of the common stock of McCall Ferry. Is that right? A. It so states.

Q. According to Hutchinson, Harvey Fisk and Sons demanded [7489] that consideration to save the financing. Right? A. That is correct.

Q. Isn't it a fact that Hutchinson in no place in his affidavit states that Harvey Fisk and Sons rendered any services other than financing?

* * *

The Witness: I will have to read the affidavit if you wish me to answer that question.

By Mr. Hall:

Q. Do you recall that Hutchinson stated that the Fisk firm rendered any services other than financing services? A. I believe Hutchinson stated somewhere in his affidavit that Fisk deprived him of control of the enterprise, and that is the statement I will have to look for.

Q. Is it upon that statement that you would conclude that the Fisk firm rendered services other than financing? A. Well, that certainly would be one statement which would indicate they took the project over lock, stock and [7490] barrel, control, financing, management, and whatever else which went with domination of it.

Q. Do you recall any direct statement which Hutchinson made that the Fisk firm rendered services other than financing? A. I don't recall that Hutchinson attempted to enumerate the services which Fisk did render. I don't think he was either in a position or was asked to make such an enumeration, but it seems to me that all of Hutchinson's statement relating to Fisk, and Fisk taking the control, indicates that he did more than simply financing.

Q. Wasn't Hutchinson in a position to state who was managing the project? A. Yes, I think he was in a position to state it. My interpretation of his affidavit, and certainly of my considerations with him, was that Fisk did it and not him, as he had hoped to do.

The reason I can't answer specifically without reading the affidavit is that I can't be sure what I am remembering of what Hutchinson told me as separate from what may be stated in this affidavit.

Q. But nowhere in part 1 of Exhibit 27 does Hutchinson make any direct statement that the Fisk firm rendered services other than financing? A. That I don't know without reading the exhibit.

Q. All right. [7491] A. I haven't read the exhibit for a considerable length of time.

Q. When at the bottom of page 6 of Exhibit 27, Mr. Hutchinson refers to the ultimate consideration to affiant, what was his immediate consideration?

* * *

THE WITNESS: In that statement, Mr. Hutchinson was distinguishing between the amount of the consideration which passed to him under his agreement with Susquehanna Contracting Company and the part of that consideration which he was able to keep beneficially for himself and the people who had assisted him in developing the project to the stage it was developed when he turned it over to Susquehanna Contracting Company.

By MR. HALL:

Q. Why didn't you obtain from Hutchinson the details of the process by which he distributed, if he did, a portion of the common stock and the four thousand shares of preferred stock which constituted part of the consideration under the contract which is part 19 of Exhibit 27?

* * *

[7492] THE WITNESS: It seems to me that Part 1 of Exhibit 27 does state the details. It states that the bankers

would receive thirty thousand shares, that he was to receive 18,840, and that he was to receive the $750,000 cash. It seems to me that disposes of the whole of the consideration mentioned in part 19 of Exhibit 27.

By Mr. Hall:

Q. Mr. Hutchinson, according to your testimony, refers to the total consideration involved in part 19 of Exhibit 27? A. Yes, sir.

Q. But he does not describe in detail the terms of any agreement or relate the exact process by which he turned over or distributed a portion of the common stock and the preferred stock which he received under the Susquehanna contract. Isn't that so?

* * * * * * *

The Witness: It seems to me that he relates it in sufficient detail. I don't know what you mean by exact detail. He states in the affidavit, and I believe it was a fact from my attempts with him to locate his records, that he [7493] didn't have the records of that. However, he does state that he received 18,840 shares of the common stock, that the bankers received 30,000 shares of the common stock, and that accounts for all of the common stock.

By Mr. Hall:

Q. How were the 30,000 shares of stock distributed between the bankers? A. Hutchinson doesn't say, and I don't know whether he ever knew or not. I rather doubt he did.

Q. Mr. Gunn, would an investor be concerned with the adequacy of the proposed financing of the project? A. I think he should be, and I am very certain the investors in McCall Ferry wish they had been more concerned with it.

Q. Don't you think that would have a bearing on the cash value of the stock? A. Yes, I think it might. If at the time you were valuing the stock they knew that the financing was adequate it would have one effect. If they

knew it was inadequate I imagine it would have another effect. The mere fact their expectations at one time proved wrong at a later date wouldn't have any effect on the stock at a previous date.

Q. Mr. Gunn, have you ever found any evidence to indicate that the sale of common or preferred for cash in 1905 was believed possible or ever considered by McCall Ferry? [7494] A. I never have found any evidence either way. I have always believed that because the stock obviously had some value then that if an effort had been made to sell it it could have been sold.

Q. Do you know of any effort which was made? A. No, sir. On the contrary I don't believe any effort ever was made to sell it. I think the people who held it thought it was a good investment and wanted to keep it.

Q. How do you know that those who held the stock didn't want to sell it? A. Because I never found a scrap of evidence anywhere in the record of their attempting to sell it. If they wanted to sell it I assume they would have tried to sell it.

Q. That means they couldn't sell it. Isn't that so? A. No, I don't think so.

Q. Why not? A. It just doesn't to me.

* * *

Q. Do you know of any sales of McCall Ferry common [7495] or preferred stock for cash in the spring of 1905?

* * *

THE WITNESS: No.

By MR. HALL:

Q. Do you know of any—— A. Unless you want to, and perhaps it would be proper, to say that the acceptance of the stock by Hutchinson in exchange for his property was a sale. But I don't know of any market transaction in that.

Q. Do you have any record of any cash offer ever having been made for the McCall Ferry common and preferred stock?

• • •

[7496] THE WITNESS: You mean common or preferred.

By MR. HALL:

Q. Both. A. Nothing except the transaction between Bertron, Griscom Company and Pullen which related to purchase of 150 shares by Bertron, Storrs and Griscom from Pullen.

Q. Isn't it a fact that the initial syndicate found it difficult to sell even bonds and had to call in other bankers? A. I don't understand the question. My difficulty relates to who was the original syndicate.

Q. I am referring now to those involved in the March 1, 1905, plan? A. And I take that to mean Bertron, Storrs and Griscom, and Dimock and Barney.

Q. Lee, Higginson and Company. A. I thought they were the bankers you were referring to as having been called in.

Q. You are right.

THE WITNESS: All right. Now may I have the question?

[7497] (Question read.)

THE WITNESS: The original syndicate as we have defined it did call in other bankers. Whether that was because of the difficulty or indicated the difficulty of selling bonds, I don't know.

By MR. HALL:

Q. At any rate the initial syndicate under the March 1, 1905, plan, procured approximately subscriptions for four million dollars principal amount of bonds. Is that right? A. About that. My difficulty in answering the question relates, for example, to this fact: The Safe Harbor refinancing bonds were sold the other day, and they

sold for a very big premium. The First Boston Corporation was the successful bidder and they brought someone else with them. I don't know whether they brought them in because it was difficult to sell the Safe Harbor bonds or for some other reason. I have the same difficulty in answering your previous question.

• • •

[7498] By MR. HALL:

Q. Isn't it a fact that in the McCall Ferry reorganization of 1909 no value was allowed for the preferred and common stock of McCall Ferry? A. I have some difficulty with that. Perhaps I can answer it this way: It is a fact that in the reorganization the equity represented by the common and preferred stock was eliminated from the McCall Ferry Project.

Q. In other words, the common and preferred stock were wiped out completely in the reorganization process? [7499] A. Yes.

• • •

[7501] Q. Mr. Gunn, what cash value did McCall Ferry report for its capital stock to the state of Pennsylvania for the year 1905?

• • •

THE WITNESS: I don't know.

By MR. HALL:

Q. I show you at this time a photostatic copy of an excerpt from that report for the year 1905 which is dated July 13, 1906, and ask you if it is not a fact that the McCall Ferry representatives state that the stock had no cash value in 1905 and has had none since that time?

• • •

[7502] THE WITNESS: No, it doesn't seem to me that is what this letter states. It seems to me the letter states simply, at the beginning of the second paragraph, and particularly the final paragraph, after reciting all of the facts concerning the stock, "In view of what has been said the under-

signed have found themselves entirely unable to make any estimate and appraisal of the capital stock of said company for the purposes of taxation at the present time."

It just says they couldn't determine it.

By MR. HALL:

Q. Doesn't the second sentence in the second paragraph read,

"In the first place the stock did not have at that time," referring to 1905, "—nor has it had since, any market value, there having been no sales thereof according to [7503] our information and belief." A. That is correct. It seems to me there have not been sales and therefore from sales they could not determine the market value. Besides, this letter was talking about a valuation for taxation under Pennsylvania law. I have no idea as to what that legal requirement might be.

Q. Isn't it a fact they had that difficulty only six months after 1905? A. Yes, sir, I think it is. But, again, I don't even see the word "cash value" in the whole of this letter.

Q. Where is it mentioned in Hutchinson's affidavit? A. I don't remember whether it is in there or not.

Q. You know it to be a fact it is not in any of the affidavits? A. No, I don't know it to be a fact, but I don't recall it specifically having been called cash value. However, this is obviously a valuation for taxation purposes under Pennsylvania law. I don't know what may be the requirements of the Pennsylvania law for taxation. They might stipulate specific measure of value for taxation under Pennsylvania law for all I know.

Q. The difficulty of that was experienced only six months after 1905, isn't that so? A. That is what the letter would indicate. But it doesn't indicate the stock had no value to me.

[7504] Q. At that time they were closer to the facts than anyone 34 years after the event would be. Isn't that right? A. No doubt. They proved that.

* * *

(The document referred to was marked for Identification as Exhibit number 168.)

• • •

[7505] MR. HALL: Mr. Examiner, may we have marked for Identification as Exhibit 169 a photostatic copy of an excerpt from the capital stock report of McCall Ferry Power Company for the year 1906, which is dated January 31, 1907?

• • •

(Thereupon, the document referred to was marked Exhibit No. 169 for Identification.)

• • •

By MR. HALL:

Q. Mr. Gunn, do not the representatives of McCall Ferry Power Company make the same, or substantially the same representations in their report submitted in 1907 for the year 1906—by that I mean—they state that the McCall stock had [7506] no market value in 1906 and has had none since that time?

• • •

THE WITNESS: Yes, they make substantially the same representations as I have been able to determine from a rough comparison, it being, "In the first place, the stock did not have, at that time, nor has it had since, any market value, there having been no sales thereof, according to our information and belief."

By MR. HALL:

Q. And don't they say that no price or value is indicated or measured by net earnings or by the amount of profits made either declared in dividends or carried into surplus or sinking fund? A. Yes, they say that, Mr. Hall. Those latter words, beginning with "Indicated" and ending with "fund" is in quotes as though that were one of the stipulated measures of the Pennsylvania taxation law.

It is obvious they could not have had earnings during any of those years because the project was under construc-

tion, and it would appear from that that the Pennsylvania taxation laws provides only for the taxation of enterprises that have been completed and in operation.

Q. Do you know that to be a fact? [7507] A. No, but if our supposition that that quotation is from the Pennsylvania law is correct, then it would seem to me that would be the conclusion.

Q. Do you know whether or not McCall Ferry actually paid a tax? A. No, I don't know. It is a fact which could be ascertained, I suppose.

Q. Mr. Gunn, are we to understand that in reaching your conclusion as to the cash value of the McCall Ferry stock you did not consider exhibits numbered 168 and 169 for identification? A. I didn't consider them material evidence, no, and for the reason primarily stated in the last paragraph of each of those exhibits, which indicates definitely that the only thing the representatives of McCall Ferry Power Company were there stating was that they found themselves entirely unable to make any estimate and appraisal of the capital stock of McCall Ferry Power Company for the purposes of taxation at the present time. That doesn't indicate to me at all it might not have had a value for other purposes.

It just indicates they couldn't estimate how much the value was for taxation purposes.

Q. Did you, in making your study, consider exhibits numbered 168 and 169, and reject them? A. I don't follow just what you mean by rejecting [7508] them.

I considered them for what they were worth. I recall having looked at these tax returns.

Q. Did you reach the conclusion they were entitled to no consideration in arriving at the cash value of McCall Ferry stock? A. No, I don't think so. I would say that I reached the conclusion, because of the last paragraph, that they indicated the stock did have a value, McCall Ferry Power Company just couldn't estimate the form of value that the Pennsylvania tax law required them to estimate, or

perhaps in the way that the Pennsylvania tax law required them to estimate it.

Q. In other words, you believed that exhibits numbered 168 and 169 should have been weighed and considered? A. Should have been given some consideration, yes.

Q. Were Exhibits 168 and 169 submitted to Hutchinson, Lee, Fisk and Hopkins for the purpose of making their affidavits? A. I doubt it very much. I don't think it was necessary to submit them to any of them.

Q. In other words, you decided that for them. A. That they shouldn't be submitted?

Q. Yes. A. I suppose I did. I can't say that Hutchinson's and [7509] Fisk's lawyer may not have been shown this, but all I am saying is that as I recall this was not included among the exhibits finally submitted to them.

Q. By whom would exhibits 168 and 169 be shown to Fisk's lawyer and Hutchinson? A. By myself or Mr. Eichhorn or Mr. Chase.

Q. Do you recall showing these two exhibits to those people? A. I don't recall whether or not I did.

I showed those two parties a considerable volume of evidence, and I have no record of the total amount of it. I do have a record of the more important items of evidence which I have showed them in the end, and included in the participation which was made up for their final consideration.

Q. Do you recall whether Mr. Eichhorn and Mr. Chase showed Mr. Cole and Mr. Hutchinson exhibits numbered 168 and 169 for identification for their consideration? A. No, I don't recall whether they did or not.

Q. Mr. Gunn, didn't representatives of McCall Ferry make the same representations to the State auditor general of Pennsylvania for the years 1907, 1908, 1909, as they did in the years 1905 and 1906, as reflected in exhibits numbered 168 and 169? A. I don't know. I don't recall. They may have.

* * *

[7510] By Mr. Hall:

Q. Mr. Gunn, notwithstanding the report of the officers of McCall Ferry, you know, do you not, that the Auditor General and the Treasurer for the State of Pennsylvania nevertheless placed a value of one million dollars on the total preferred and common stock? A. I can't say that I recall that.

Q. Do you recall whether or not the company took an appeal to the Courts? A. I recall that there was some tax litigation, but I don't recall the details.

Q. Don't you recall that the Court involved was the Court of Common Pleas of Dauphin County?

* * *

[7511] The Witness: I imagine that is where the litigation would have been taken but I don't specifically recall it.

By Mr. Hall:

Q. What valuation finally was established as a result of the appeal to the Court? A. I don't recall.

Q. Would it help you if I said the valuation was reduced to $20,000? A. If that is the fact I will accept it. It doesn't help my recollection any, though.

* * *

[7513] By Mr. Hall:

Q. Mr. Gunn, will you assume that twenty thousand dollars is to be spread equally over 4,116,500 dollars par value preferred and five million par value of common stock outstanding? What total does that give you per share? A. Let me see if I understand your question.

You are asking me to assume that 4,116,000 par value of stock, plus five million dollars common stock is to be divided into $20,000. Is that your question? And how much that will be per share as a result of that arithmetical operation?

Q. That is right. A. What was it?

Q. 21 cents. A. It appears that if the total par value of McCall Ferry stock, both common and preferred, which is 9,116,000 dollars, is divided into——

Q. Number of shares represented by the par value? A. —twenty thousand dollars, then the results of that division would be 21 cents.

Q. Per share. A. Yes, 21 cents per share. I don't know what significance it would have, however.

Q. And if we were to assign to the preferred stock two times the amount we assigned to the common it would mean [7514] fourteen cents per share for the preferred and seven cents per share for the common. Right? A. Yes, I believe that that would be the result of allocating the 21 cents previously derived on the basis you have just stated.

• • •

TRIAL EXAMINER: Counsel is proceeding on the basis of an assumption. There is nothing to indicate the Court found it was twenty thousand dollars.

• • •

[7517] MR. HALL: Just one moment, Mr. Examiner, please.

Mr. Examiner, we have a letter dated June 10, 1907, copied from McCall Ferry Power Company file No. 13, signed by Olmstead and Stamm, to Messrs. Simpson, Thacher and Bartlett, and it appears that Olmstead and Stamm are lawyers located at 5 North Third Street, Harrisburg, Pennsylvania.

[7518] In that letter they refer to the appeal in the Court of Common Pleas of Dauphin County, and in referring to the verdict they state, "You will note that the tax of $100 is equal to five mills upon a valuation of $20,000 which is what we referred to in our letter of April 17."

TRIAL EXAMINER: That is all you know about the $20,000?

MR. HALL: The total judgment was paid in the amount of $105, $100 represented the tax, and in that

letter the tax of $100 is stated as equal to five mills upon a valuation of $20,000.

* * * *

[7519] By Mr. Hall:

Q. All of these valuations that we have just been considering, Mr. Gunn, were after the date of the transaction to which your cash values are related. Right?

Mr. King: I object to that because we have not established the valuations yet, sir.

* * *

By Mr. Hall:

Q. Will you refer specifically to Exhibits 168 and 169, Mr. Gunn? Those were the ones I had in mind. A. Those exhibits seem to me to show a lack of valuation. As a matter of fact, the last paragraph in each one of them said they couldn't estimate a value at that time. Then we later talked about a million dollars and now we are [7520] down talking about $20,000.

* * * *

Q. Mr. Gunn, were not the representations contained in Exhibits Numbers 168 and 169 for Identification made subsequent to the date of transaction to which your cash values relate?

* * * *

The Witness: Yes, sir, I believe that is right.

By Mr. Hall:

Q. Did Mr. Hutchinson ever purchase any of the McCall Ferry stock at his valuations? A. Yes, I think I would assume he purchased 18,840 shares at that valuation.

Q. For cash? A. No, not for cash but for things having a cash value.

[7521] Q. Did Mr. Hutchinson ever purchase any of McCall Ferry's stock for cash at any valuation? A. I don't know whether or not he did.

Q. Did he ever sell any of his stock for cash at any price? A. I don't know whether or not he did. I do know he gave some of it in lieu of cash. Whether that constitutes a sale for cash I don't know.

Q. You have previously testified that Mr. O'Connor participated in the determination of the cash value of the securities. Is Mr. O'Connor still alive? A. Mr. O'Connor is dead.

Q. When did he die? A. In July of 1944.

Q. What was his official capacity with Penn Water at the time of his death? A. He was Vice President and Secretary or Treasurer, I believe Secretary.

Q. When did Mr. O'Connor first become an officer of Penn Water and Power Company? A. I don't recall but I believe it was prior to 1930. I don't remember that date. It can be ascertained.

Q. What stock did Pennsylvania Water and Power Company buy since February 9, 1932, other than government bonds and the Safe Harbor stock?

• • •

[7522] THE WITNESS: I haven't the least idea. I have no knowledge of the company's investment portfolio, either as to what they bought or what they sold.

By MR. HALL:

Q. Haven't you previously testified, Mr. Gunn, that Mr. O'Connor had experiences in making investments for Penn Water? A. That is my understanding.

Q. But you don't know what those investments were, right? A. No.

Q. My information is that Mr. O'Connor was elected Assistant Treasurer as of February 19, 1932, and was elected Treasurer as of December, 1933. Will you verify that?

• • •

THE WITNESS: Yes, those two dates are correct.

• • •

[7523] By Mr. Hall:

Q. Mr. Gunn, did Hutchinson and Morison employ any assistants to aid them in their investigation of the hydro-electric possibilities on the Susquehanna River during the period from 1901 to 1905?

* * *

The Witness: Yes, it is obvious that in order to make the engineering investigation that Hutchinson and Morison did they would have had to hire engineering assistants and surveyors as well, and probably also personnel to assist on the stream gauging and the calibration of river sections [7524] in connection with stream gauging.

I think it is also clear from the record that during that period of time Hutchinson had retained Lorenzo Semple as a lawyer to assist him and advise him on the matter, and I believe that counsel by the name of John G. Johnson, in Philadelphia, had been frequently consulted during that period.

By Mr. Hall:

Q. Semple and Johnson were legal assistants? A. Legal advisers or assistants, yes.

Q. All right. A. As I recall, I believe it was during that period that Thomas Newhall, consulting engineer in Philadelphia, I believe, had assisted Hutchinson. Those are the ones of which I know. There may very well have been numerous others.

Q. What assistance did Newhall render? A. I believe Hutchinson told me that Newhall assisted him in his early negotiations with Pennsylvania Railroad in connection with the prospective relocation of Pennsylvania Railroad's tracks in connection with Hutchinson's contemplated development of McCall Ferry.

Mr. King: What was the period of time covered by your prior question?

Mr. Hall: 1901 to 1905.

MR. KING: I think the record shows Morison died before [7525] 1905. That is the reason I asked you the question. I think he died in 1903.

MR. HALL: That is probably true.

MR. KING: I just wanted to keep the record straight.

MR. HALL: So a part of the time it would be only Hutchinson.

MR. KING: Yes.

THE WITNESS: Then Hutchinson, I believe, had another assistant, or other assistants, it being William Barclay Parsons, because Parsons rendered a report in January of 1905, and it is obvious, in order to have made that report which he did on that date, it would have been necessary for him and numerous assistants of his to have done considerable work preparatory to the final report.

By MR. HALL:

Q. Were Newhall and Parsons engineers? A. Parsons certainly was. As I recall it, Newhall was, also.

Q. What other engineering assistants did Mr. Hutchinson have during the period I have indicated, or Mr. Morison or both? A. Boyd Ehle, and an engineer by the name of Anderson.

Q. Is this Boyd Ehle that you referred to the same one Hutchinson appointed as resident engineer on McCall Ferry? A. Yes, sir. Those are the only ones I have been able [7526] to find the names of. I don't think it necessarily should be assumed that that is all of the assistance that Hutchinson had. Of course, I guess he had assistance from his father-in-law, Dimock.

Q. Did Boyd Ehle render assistance to Hutchinson in connection with his investigation of the hydroelectric possibilities on the Susquehanna River during the period 1901 to 1905? A. Yes.

MR. HALL: Mr. Examiner, may we have marked for identification as Exhibit No. 170, a letter dated January 19, 1906, written by Cary T. Hutchinson to Boyd Ehle, Esquire, McCall Ferry, Pennsylvania?

TRIAL EXAMINER: The document described may be marked Exhibit 170 for Identification.

(Thereupon the document referred to was marked Exhibit 170 for Identification.)

By MR. HALL:

Q. Mr. Gunn, I show you the letter which has been marked as Exhibit 170 for identification written by Mr. Hutchinson to Boyd Ehle. Have you seen that letter before? A. Yes, sir; I believe I have.

Q. Is that the same Boyd Ehle that you referred to a few minutes ago? A. Yes, sir.

[7527] Q. Doesn't it appear from this letter that as late as January 19, 1906, which is a date subsequent to the June 1905 transaction which gave rise to the issuance of the securities, that Mr. Hutchinson was expressing the opinion that the stock of McCall Ferry was not worth anything? A. No, that is not the interpretation I would put on that letter. I would put the reverse interpretation on it. The first sentence in the letter reads as follows:

"I am enclosing form of stock deposit agreement for 100 shares of the common stock of this company, which I am putting in your name to give you an additional interest in the company."

If he thought the stock was worthless I don't see how he expected it to create an additional interest in the company.

I notice the last sentence in the letter reads as follows:

"Will you explain this to Anderson,"—the details of how the stock was being transferred to him—"and tell him that I hope the stock, before long, will be worth something."

I take that as simply a statement that he hopes in time it will have a substantial value.

Q. He says worth something; doesn't he? A. Yes, and also giving it to him for the purpose of its being worth something. If it was worth nothing I don't see how it would have been any incentive.

[7528] Q. Don't you think that you should read the phrase "Give you an additional interest in the company" in the light of "I hope the stock before long will be worth something"? A. No, I don't read it that way at all. I simply read the last sentence in the letter to mean that before long it may be freely traded and have a substantial exchange value in the market.

Q. And "worth something" means to you substantial exchange value. Is that it? A. That was my interpretation of it.

Q. Did you use Exhibit Number 170 for identification in reaching your conclusions as to cash value of the stock of McCall Ferry? A. I didn't consider it particularly important from that point of view. I may have given it some consideration. I considered it of most importance as a bit of evidence indicating where a part of the stock went which Mr. Hutchinson said he had given in satisfaction of obligations he had created in developing the enterprise to the point where it was turned over to McCall Ferry Power Company. That was the principal use I made of Exhibit 170.

Q. Did you show this letter to Mr. Hutchinson at any time? A. I believe I did.

[7529] Q. When did you first show it to Mr. Hutchinson? A. I don't recall the time but I believe I showed it to Mr. Hutchinson during the conferences in Baltimore shortly after I first approached him in connection with assisting the company in establishing the history of McCall Ferry Power Company.

Q. It is a fact, isn't it, that this letter is not included in the participation which you submitted to Hutchinson

for his consideration? A. I don't recall whether it is or not. That very well may be true.

Q. Would you check whatever records you have, Mr. Gunn, to ascertain whether or not you actually did submit this letter, Exhibit 170 for identification, to Mr. Hutchinson for his consideration? A. I have no records on that other than remembering myself or Mr. Chase or Mr. Eichhorn.

Q. Were you discussing cash value of the stock with Mr. Hutchinson when you showed him the letter? A. No. I think I was trying to find out if he recollected that these shares of stock referred to in this letter came from his 18,840 shares, or whether they might have come from some other block of the common stock of McCall Ferry Power Company.

Q. Did he recollect that in January of 1906 he had [7530] hoped the stock would be worth something before long? A. I don't believe I discussed that question with him at that time. He did recollect, when he saw this letter, that he had given those shares to Ehle and Anderson, and he told me they were given to Ehle and Anderson as part compensation for the work that they had done for him prior to the time the property was turned over to McCall Ferry Power Company.

Q. What do you mean by "part compensation," Mr. Gunn? A. I understood from him he also paid them some cash.

Q. Cash as a salary? A. Yes, surely.

Q. All along? A. That is my understanding of it. I am pretty sure the individual didn't work for him free.

Q. Who is this Mr. Anderson referred to in Exhibit 170 for identification in the next to the last line? A. The same Mr. Anderson, I take it, that is referred to in the fourth line.

Q. Who was this Mr. Anderson? A. An engineer that assisted Ehle and Hutchinson in their investigation of the river. I think both Mr. Ehle and Mr. Anderson

were subsequently connected with McCall Ferry Power Company in association with Hutchinson.

Q. Isn't it a fact that when Mr. Hutchinson wrote this [7531] letter of January 9, 1906, that he had no reason to be other than perfectly frank and honest about its worth? A. I think that is quite true.

* * * *

By Mr. Hall:

Q. Mr. Gunn, who was James H. Harlow? A. He was a hydro-electric engineer, or a hydraulic engineer, who in the middle 1890's began investigating the possibilities of power generation from the Susquehanna River and began acquiring properties, as I understand it, on his own behalf and on behalf of other people interested in the development of the river.

Q. Was Mr. Harlow familiar with the conditions and land values along the Susquehanna River? A. Yes, I would assume that he was.

Q. Had he attempted to secure financing for his project prior to 1907? A. It is my understanding that he had, he and people associated with him.

Q. What experience had he had with other hydro-electric [7532] projects? A. Other than his experience on the Susquehanna River?

Q. Yes. A. I really don't know. At least I don't recall. I did have some idea at one time but I don't recall now.

* * * *

By Mr. Hall:

Q. Did you consider Mr. Harlow's opinions of the cash value of the McCall Ferry stock? A. That was one of the evidences of the value of that stock that I considered.

Q. Did you think that because Harlow was testifying as a witness for those whose interest you say lay in placing a low value on McCall Ferry securities that he, while so testifying under oath, would not have told the truth? A.

No, I don't think that would have been the result. I do think this would have been the effect, however: In expressing judgment on a matter of that sort I should think that there would always be a leeway in a person's judgment since he doesn't know precisely what the answer is, [7533] and that there would be a tendency for him to state the value on the low side.

Q. He was under oath, wasn't he? A. Yes, I think so, but he didn't state his value in limits. He stated them in a precise figure.

Q. Part 21 of Exhibit 27 shows that Mr. Harlow was stating what he thought the stock was worth. Do you consider that this expression of value is synonymous with cash value at the time of the transaction? A. Which page does that occur on, Mr. Hall?

Q. 182.

* * *

THE WITNESS: I think it is synonymous with Harlow's opinion of the cash value. However, it appears to me from the whole tone of the cross-examination that Harlow may have been at that point, it would appear he was, expressing offhand opinions.

TRIAL EXAMINER: Is that cross-examination or direct so far as you know?

THE WITNESS: I suppose it is cross-examination, although I am not sure.

MR. KING: That is correct. The document indicates that it is direct examination because, on page 182 Mr. Williams, whom I assume to be one of the lawyers on the other side, says "Don't cross-examine."

[7534] By MR. HALL:

Q. Will you verify whether it was direct or cross, Mr. Gunn? A. Yes, sir. I think that can be done.

TRIAL EXAMINER: Do you know the nature of that proceeding?

THE WITNESS: Yes, sir, condemnation proceeding in which the interests represented by Mr. Harlow were attempting to condemn the property of McCall Ferry Power Company which lay below the McCall Ferry site. It was because of the fact that the proceeding was of that nature that it indicated to me Harlow, representing the buyer, was not overstating the value of the securities, if I may put it that way.

TRIAL EXAMINER: He was representing whom?

THE WITNESS: He was representing the interests which were attempting to condemn and take the property of McCall Ferry Power Company below the McCall Ferry development.

TRIAL EXAMINER: Is that the Susquehanna Power Company which was attempting to condemn the property of McCall Ferry Power Company?

THE WITNESS: I believe that was the company. There were two companies below that. Yes, I am sure it was the Susquehanna Power Company.

MR. KING: It states that, Mr. Examiner, on the title page preceding page 182 of Exhibit 27.

[7535] THE WITNESS: Yes, sir. It was the Susquehanna Power Company.

MR. KING: It gives the title of the case.

TRIAL EXAMINER: Why are the Proprietors of the Susquehanna Canal involved?

THE WITNESS: That was the name of the company which had developed the Susquehanna Canal in Maryland, and the corporate name in which I suppose the canal rights then stood.

TRIAL EXAMINER: In what state is Cecil County, Pennsylvania or Maryland?

THE WITNESS: Maryland.

TRIAL EXAMINER: Is that a reported case?

THE WITNESS: Yes, sir.

TRIAL EXAMINER: Do you have the citations?

MR. GOLDBERG: The Examiner does not mean whether there was a transcript. He wants to know whether there is a written opinion reported in some official report.

THE WITNESS: Oh, there was no opinion because the case was compromised before it ever came—I believe there may have been an opinion and a request for an appeal, and then while the appeal was pending I believe the case was compromised, and ultimately led to the agreement in which McCall Ferry Power Company, Susquehanna Power Company, and the company in which the Welch group was interested pooled their [7536] interests in a lower development, and taking their interest on the ratio of the head of the river that each one controlled.

TRIAL EXAMINER: This was before the Harlow interests and the Hutchinson interests had compromised, wasn't it?

THE WITNESS: No, this was a second one. The first time they got into trouble was in 1902 and 1903. That trouble related to the fact that Harlow owned this canal in Pennsylvania which passed up the west shore of Susquehanna River through the location where Hutchinson wanted to construct his projects.

If you will refer to Exhibit 26, Mr. Examiner, and to the map which is on the back of that exhibit, and to the west side of the river which is towards the bottom of the page, you will see there a dotted line which is colored green, which parallels the west shore of the river.

You will also note, just below Muddy Run which flows into the river from the East, just upstream from Muddy Run, you will notice a sketch there which is entitled "McCall Company or Holtwood dam."

The difficulty in 1902 and 1903 between Hutchinson and Harlow-McGaw arose over the canal rights which lay upstream from the site of the McCall Ferry project, and the compromise which took place in 1902 or 1903 related to, and gave, Hutchinson the right to flood the canal to such extent as it would be necessary to flood it by reason of the construction of his contemplated project at Holtwood.

[7537] That left in Harlow-McGaw's control all of the canal south of the McCall Ferry-Holtwood site and north of the backwater from a dam to be constructed there by Hutchinson.

Then when Harvey Fisk and Sons took control of the project——

TRIAL EXAMINER: Is this all in Exhibit 26?

THE WITNESS: Yes, sir, it is all there, but you won't find it all there in a single place. Exhibit 26 is set up primarily to show the development of McCall project.

I am now explaining the relationship of Harlow-McGaw which makes it necessary for me to collect together the bits that are included in Exhibit 27.

TRIAL EXAMINER: All right.

THE WITNESS: Will you read the last sentence again?

(Sentence read.)

THE WITNESS: —Harlow-McGaw interest approached Harvey Fisk's interests and sold to Harvey Fisk in its entirety all of Harlow-McGaw's holdings on the Susquehanna River from Wrightsville, Pennsylvania, which was the upstream terminus of the canal, to Havre de Grace, Maryland, which was the downstream terminus of the canal.

The section of that canal which is noted as Susquehanna and Tidewater Canal is the name for the canal which extends from Wrightsville to Havre de Grace, and the Proprietors of Susquehanna Canal lies in Maryland on the East shore [7538] of the Susquehanna River beginning at a point just north of the tract of land noted as Bell Farm,

and at a point designated as Ark Haven, and extends downstream to a point noted as Tidewater, which is just north of Rock Run.

TRIAL EXAMINER: The condemnation proceeding in which Harlow-McGaw was testifying when he gave this testimony to which we have previously referred was the condemnation proceeding by which Susquehanna Power Company sought to obtain from McCall Ferry Power Company the rights owned by the Proprietors of Susquehanna Canal. Harlow was then interested in the Susquehanna Power Company.

THE WITNESS: Yes, he was then interested in the Susquehanna Power Company.

Now, the thing which made Harlow's testimony in that proceeding relating to McCall Ferry bonds and common stock pertinent was the fact that he had previously sold these canal rights to Harvey Fisk and Sons, and accepted in exchange $200,000 cash, $250,000 par value of McCall bonds and I believe $100,000 par value of McCall common stock.

TRIAL EXAMINER: How did Harvey Fisk hold that —through McCall Ferry Power Company?

No, it would still be held by Proprietors of Susquehanna Canal.

THE WITNESS: It would be held through the ownership of a stock of Proprietors of Susquehanna Canal as I understand it. It was then in the possession of McCall Ferry Power Company.

[7539] Harvey Fisk and Sons didn't keep ownership to any of the lands or water power rights which they obtained from Harlow-McGaw in their early 1905 transaction, but conveyed all of that to McCall Ferry Power Company through the Susquehanna Contracting Company transaction.

TRIAL EXAMINER: Is the Susquehanna Power Company featured at all in your Exhibit 26?

THE WITNESS: Only to a limited extent to show the relationship between that development and the development of McCall Ferry Power Company as to the competition between them and as to the compromise of this attempt to condemn their canal property on the part of Susquehanna Power Company.

Susquehanna Power Company finally became the company which developed the Conowingo project, which is shown as a black line across the river just south of Amos Island, and labeled "Conowingo Dam", on the map which is a part of Exhibit 26.

TRIAL EXAMINER: Very well.

By MR. HALL:

Q. Mr. Gunn, isn't it a fact that in connection with Mr. Harlow's testimony there was a verdict which was appealed from, but while the case was pending the case was settled? A. That is my recollection.

Q. As you have already testified or indicated, you merely submitted excerpts of Mr. Harlow's testimony and included them in Part 21 of Exhibit 27? [7540] A. Yes, sir.

Mr. Harlow's testimony in that case as I recall it was very voluminous, and there was only a small part of it which related to his opinion as to the value of these securities.

Q. But that is not all of the testimony included in Part 21 of Exhibit 27, all of the testimony related to McCall Ferry Securities? A. No, I don't think that is all of it. That is the particular part of his testimony which contains the sense of his testimony as it relates to the valuation of the securities.

MR. KING: May I have the last question and answer, please?

(Question and answer read.)

MR. KING: I am a little confused by the question and answer the reporter just read. Did you mean

there any testimony contained on pages 182, 183 of Exhibit 27 which do not relate to the stock value?

MR. HALL: No. I meant to ask whether or not this was all of Mr. Harlow's testimony in that proceeding.

MR. KING: All right.

THE WITNESS: No, sir, it was not.

By MR. HALL:

Q. And it is not all of Mr. Harlow's testimony bearing [7541] on the question of the cash value of the securities. Isn't that so? A. Yes, I think that is right. This particular part that is included, this particular part of Mr. Harlow's testimony which is included, as Part 21 of Exhibit 27 is the part of his testimony which contains the sense of what he said in that case relating to the valuation of those securities.

Q. Do you know whether or not that testimony which is included in Part 21 took place on January 28, 1907?

• • •

THE WITNESS: I cannot state positively but I believe that is the date on which the testimony was taken.

MR. HALL: Mr. Examiner, may we have marked for identification as Exhibit 171, excerpt from the testimony of J. H. Harlow. This excerpt is taken from page 99 of the transcript, and the transcript is contained in the company's general file No. 40-B.

TRIAL EXAMINER: Is this in the same proceeding as Part 21 of Exhibit 27?

• • •

MR. HALL: Yes, sir.

• • •

[7542] (Thereupon the document referred to was marked Exhibit No. 171 for Identification.)

• • •

By Mr. Hall:

Q. Have you read that exhibit, Mr. Gunn? A. Yes, sir.

Q. Do you recognize this testimony of Mr. Harlow? A. I don't recognize it, but if you found it in our files it is all right.

Q. Isn't it part of the same testimony of which Part 21 of Exhibit 27 is a part? A. It appears to me to be a continuation of that line of testimony, with this limitation: It appears that the testimony in Part 21 of Exhibit 27 is probably direct testimony, and the testimony in Exhibit 171 gives me the impression, at least, it is probably cross-examination on the same [7543] subject.

Mr. King: May I point out to you, Mr. Examiner, that pages 182 and 183 of Exhibit 27 bear up in the right-hand corner pages 11 and 12, and exhibit for identification No. 171 bears page 99.

By Mr. Hall:

Q. Did you get your impression that Exhibit 171 covers cross-examination because of the fact that Willis and Homer represented McCall Ferry Power Company? A. No, just from the tone of the question.

* * *

[7544] Mr. Hall: Mr. Examiner, may we have marked for identification as Exhibit Number 172 an additional extract from the testimony of Mr. Harlow in the same proceeding? This extract was taken from pages 39 and 40 of Mr. Harlow's testimony.

* * *

(The document referred to was marked for identification as Exhibit Number 172.)

* * *

[7547] By Mr. Hall:

Q. In trying to ascertain the cash value of the stock, and to understand the method followed in issuing it, did

you consider the laws of Pennsylvania as they existed in 1905 with reference to the issuance of bonds? Did you consider that?

* * *

[7548] THE WITNESS: No, I don't think I specifically considered that law of Pennsylvania. In arriving at a conclusion as to the value of securities, as I said before, they were discussed with counsel and counsel were probably guided in their opinions as to the laws of Pennsylvania.

By MR. HALL:

Q. Did you consider Part 4 of Exhibit 27? A. Yes, I considered it for some things but I don't recall having considered it from the point of view of the Pennsylvania law in the issuance of securities.

Q. Did you consider what Johnson was saying about the requirements of the law in connection with the issuance of bonds? A. No, I can't say that I particularly did. The principal use I made of the Exhibit, of Part 4 of Exhibit 27, was the description of the plan which was proposed to Johnson and which I understood to be Hutchinson's original plan.

* * *

[7550] By MR. HALL:

Q. Mr. Gunn, have you included any amount in your original cost determination as compensation for services alleged to have been rendered to the McCall Ferry Power Company by Harvey Fisk and Sons? A. May I have the question?

(Question read.)

THE WITNESS: Yes, sir.

By MR. HALL:

Q. How much? A. $199,570.31.

Q. How did you arrive at that particular amount? A. The derivation of that amount is shown at the bottom of page 53 in Exhibit 26.

Do you want an explanation of what appears on that page?

Q. Yes. A. Mr. Pliny Fisk, or his firm, rather, received as their total compensation 1,875 shares of preferred stock which has been valued for the purpose of the original cost determination at $50 a share, and making an amount of $93,750.

He received, also, 17,537½ shares of common stock which has been valued at $25 per share, making an amount of $438,437.50.

The sum of those two amounts is $532,187.50.

In Mr. Fisk's affidavit and correspondence, which is [7551] Part 9 of Exhibit 27, Mr. Fisk has stated it as his opinion that the total compensation his firm received should be allocated three-eighths to management services and five-eighths to banking service. Three-eighths of $532,187.50 amounts to $199,570.31, which is the amount included in the original cost claim for the management services of the firm of Harvey Fisk and Sons.

Q. Did you include anything for the banking services of Harvey Fisk and Sons? A. Not directly, but that does come in indirectly.

Q. Are you saying that Harvey Fisk and Sons rendered to McCall Ferry management and banking services? A. Yes, sir.

Q. How was Harvey Fisk and Sons paid for their services? A. Through the issuance to them of 1,875 shares of preferred stock and 17,537½ shares of common stock, both being stocks of McCall Ferry Power Company.

* * *

[7552] By Mr. Hall:

Q. Did Harvey Fisk and Sons receive any specific amount of stock for banking services as distinguished from management services? A. No, sir.

Q. Will you describe the management services performed by Harvey Fisk and Company for McCall Ferry?

A. The records of Harvey Fisk and Sons were never found, and the only knowledge I have of the management services rendered by Harvey Fisk and Sons are those described by Mr. Fisk in the various parts of Part 9 of Exhibit 27.

Q. Over what period of time did the Fisk firm perform services? A. From the time they entered the picture in March, 1905, until the McCall Ferry Power encountered financial difficulty. Just what date during that later period their services could be said to be terminated I don't know, but perhaps with the receivership or with the appointment of the receiver.

Q. I take it you are now referring to management services? A. Yes, sir. Wasn't that your question?

Q. I think I left out the word "management", but I intended to have had it in my question. A. Yes, sir, I took it that you did.

[7553] Q. What management services did Harvey Fisk and Sons render at the time they came in as bankers in March of 1905? A. It is my understanding that they took over the management at that time in the sense that they completed the formation of the company, they purchased Harlow-McGaw's property, and arranged for the organization of the company and the selection of experts and other services of that sort. At least that is my understanding of it.

Q. Through whom were the management services rendered? A. William M. Barnum.

Q. All of them that you have been talking about? A. Well, at least in this sense: Mr. Fisk says that he turned over, says in Part 9 of Exhibit 27, that he turned over the principal functions of the management of the McCall Ferry enterprise to Mr. Barnum, and in giving you that answer I was relying upon that statement of Mr. Fisk's.

Of course, the legal services that were rendered were rendered by Simpson, Thacher and Bartlett, which I understand was the law firm selected by Fisk to replace the law firm which previously had handled Hutchinson's and McCall Ferry Power Company's attempt to develop power on the river.

Q. What were Mr. Barnum's duties with respect to the management of the McCall Ferry Power Company? A. I don't know what his duties were any more particularly than they are stated by Mr. Fisk in Part 9 of Exhibit [7554] 27. He was a member of the board of directors, he was a member of the executive committee, I believe, and he was a member of the voting trust committee, I believe. I don't recall whether those functions are stated in Part 9 of Exhibit 27 or not, but in any event he did serve in those capacities.

Q. When Mr. Fisk says that Barnum rendered management services does he say that he rendered them in the capacities you have just referred to? A. I don't recall just how he stated it. Do you wish me to check it.

Q. If you will just glance down the page?

THE WITNESS: May I have the question, please?

(Question read.)

THE WITNESS: No, in glancing at Mr. Fisk's statement I don't see that he enumerated those capacities. However, it is evident from McCall Ferry Power Company's records, and from Exhibit 26, and parts of 27 which support Exhibit 26, that Mr. Barnum held the three positions that I have spoken of, and I recall now that there was one other that I forgot to mention. He was Chairman of the bondholders committee when the project got into financial difficulties. I don't believe I previously mentioned that.

None of those capacities are enumerated as such in Mr. Fisk's statement, but they are clearly evident from all [7555] of the remainder of McCall Ferry's records.

Q. Was the Chairman of the bondholders committee a management function? A. I don't know what you would call it. Perhaps if it wasn't management it was what Fisk considered was necessary to discharge his obligation to the people who had bought bonds through his house. It is my understanding he considered such things as that an

obligation. Whether you would call it management of McCall Ferry Power Company, I really don't know.

Q. Are those services covered in the cash value determined by Mr. Fisk? A. What do you mean by "Those services"?

Q. Chairmanship of the bondholders committee. A. As I recall it, the bondholders committee received specific compensation, or at least a certain amount of specific compensation. Whether that is to be looked upon as total or not I really don't know. I don't recall what the amount of the compensation was that they received for acting as a bondholders committee.

* * *

[7569] By Mr. Hall:

Q. Mr. Gunn, did Pliny Fisk, Sr., show you any records or memoranda to substantiate his claim that Harvey Fisk and Sons rendered management services to McCall Ferry? A. No, sir, he showed me no memoranda. As a matter of fact, he didn't have an opportunity to, because, as I said, my connections with Fisk were carried on entirely through his lawyer. The only evidence I had directly from Fisk on that was Mr. Fisk's statement made to me on the occasion of my meeting with him.

Q. As a matter of fact, since the Fisk firm records were destroyed some time prior to your contact with him he would not have been in a position to show you any records. Isn't that so? A. That is correct. He wouldn't have had any firm records, at least, to show me.

Q. Did you show Pliny Fisk any records or memoranda to support the claim for management services? [7570] A. You mean by that did I personally and directly show them to him?

Q. Yes. A. No, sir.

Q. Did Mr. Cole, Pliny Fisk, Jr., or anybody else acting in behalf of Mr. Fisk, show you any records or memo-

randa to substantiate the claim that Harvey Fisk and Sons rendered management services?

* * *

THE WITNESS: I don't recall they showed me anything other than what I had already seen.

By MR. HALL:

Q. Did you show Pliny Fisk, Jr., or Mr. Cole any records or memoranda to substantiate the claim for management services by the Fisk firm? A. Well, I showed Mr. Cole all of the documents included in the Fisk participation, and, as I recall it from time to time during the six months he worked on the case, I showed him numerous other documents. I don't recall just what the others were. However, all of the documents shown to Mr. Cole are included in the company's files.

Q. Do you recall any documents included in the participation which support the claim for management services? [7571] A. Well, directly or indirectly it seems to me they all had a bearing on it.

Q. How? A. Either by showing that Fisk was the principal banker in the transaction or by indications of various sorts that he was in control of the enterprise.

MR. KING: Would you like to see the participation, Mr. Gunn?

MR. HALL: I don't have it with me, I am sorry. It is on my desk.

THE WITNESS: I think I recall in general what is in the participation.

By MR. HALL:

Q. Do you know whether Pliny Fisk, Sr., relied upon or resorted to any evidentiary material that you know of in making his claim? A. I don't believe I understand the question. The two things which give me trouble are what is meant by evidentiary material and what is meant by his claim.

Q. Well, any documentary evidence. A. He relied certainly upon what evidence was included in the participation, and any other documents from our files which I gave Mr. Cole.

Q. Did you give Mr. Cole any documents not contained in the participation? [7572] A. I am pretty sure I did, and at least I gave him a statement which is included in the participation which contains data drawn from other documents.

Q. Was that statement presented to Mr. Fisk prior to or after the date of his affidavit? A. As I recall the documents, it was included in the participation and a statement of the participation was given to Mr. Fisk by Mr. Cole during the months that Mr. Fisk worked intermittently on the problem. It is my recollection that the participation given to him at that time had errors in it which Mr. Cole pointed out Mr. Fisk had mentioned.

Then at about the time when the exchange of letters, the first of which is dated July 9, 1939, and is contained in part 9 of Exhibit 27, was sent to Mr. Cole, the participation we now have was also given to Mr. Cole in its final form containing the corrections which Mr. Fisk had suggested.

Q. Are you saying that prior to the date of Mr. Fisk's affidavit, which is December 29, 1938, you did not present to him through Cole the complete participation which Mr. King turned over to me a few days ago? A. No, I am saying the reverse of that, with this modification: A complete participation was presented to Mr. Cole, but it was not in exactly the form as the final participation for the reason that as I recall I had misinterpreted in some respects Fisk's connection with the McCall [7573] Ferry Company, and he suggested corrections which might be made to it.

[7574] Q. Do I have the final participation? A. The final participation.

Q. Where is the previous participation? A. Probably destroyed when we made the final.

Q. Are you sure it has been destroyed? A. Yes, it has been destroyed.

Q. What did you misconstrue in the first participation? A. I believe in one of the early ones, at least, I had attempted from the documents I had available to me then, at least I had drawn the conclusion, that there was no one dominating interest in the McCall Ferry enterprise under Fisk, but it was a joint endeavor of some sort. As soon as I showed that to Mr. Fisk he very quickly, as soon as Mr. Cole showed that to Mr. Fisk, rather, he very quickly pointed out that that was incorrect.

* * *

By Mr. Hall:

Q. Did you subsequently obtain any documents which confirmed Mr. Fisk's statement as to control? A. I can't answer that precisely, and for this reason: There were documents in Lee, Higginson's files which I obtained and which do, in my opinion, show Fisk control. The point upon which I am uncertain is whether I obtained those documents before I talked to Mr. Fisk or after.

[7575] Q. What Lee, Higginson records are you referring to? A. The correspondence between Lee, Higginson and Bertron, Storrs and Griscom relating to Lee, Higginson's compensation which are contained in Part 11 of Exhibit 27 and which are a letter dated March 25, 1905, from Bertron, Storrs & Griscom to Lee, Higginson & Company; another letter dated March 28, 1905, which is a letter to Lee, Higginson from Bertron, Storrs & Griscom; and another letter dated March 30, 1905, from Bertron, Storrs and Griscom to Lee, Higginson; another letter dated March 8, 1906 to Lee, Higginson from Bertron, Storrs & Griscom; another letter dated March 9, 1906, from Lee, Higginson to Bertron, Storrs & Griscom.

Q. And the letters embraced in Part 11 of Exhibit 27 are the ones which you relied upon to support or confirm Fisk's statement? A. A part of it, yes.

Q. What is the other part? A. I can't recall offhand but I think you will find inferences to that effect all through Exhibit 27 in numerous of the documents. At the moment I can't put my finger on them all.

Q. Will you point out one where we can find that inference? A. I am at a loss now. We are looking for evidence of Fisk's domination of the enterprise, are we not?

[7576] Q. Management? A. Yes. Another piece of evidence is the fact that Harlow-McGaw went to Harvey Fisk and Sons for the sale of their property. Another one is the fact that Simpson, Thacher and Bartlett, Fisk's attorneys, displaced Hutchinson's attorneys, who were Coudert Brothers.

Another one, of course, is Hutchinson's statement to the effect that Fisk deprived him of his interest of control of the enterprise. Those I can think of offhand.

Q. When was the destroyed participation submitted to Fisk or Cole? A. I don't know just what date it was. Some months prior to the date of his affidavit, however, which was December 29, 1938.

* * *

By Mr. Hall:

Q. Was the final participation submitted to Fisk or Cole with your letter of January 9, 1939, embraced in Part 9 of Exhibit 27, Pages 74 and 75?

* * *

The Witness: Yes, I believe it was. The letter so states in the first paragraph.

[7577] By Mr. Hall:

Q. What else, other than what you have already referred to, had you misconstrued in the participation which you initially submitted to Mr. Fisk? A. I don't recall

anything else in particular of importance. I think there may have been some details.

Q. Mr. Gunn, is the participation that I have the only one that was ever submitted to Mr. Hutchinson? A. The only one in so comprehensive a form as the one you have. There were several descriptions comparable to the descriptive part of that participation submitted to Mr. Hutchinson.

Q. Do I have the final one now? A. Yes, sir.

Q. How many were submitted to Mr. Hutchinson before the final one that I have? A. I don't recall, but I would say two, three or four.

Q. When was the final participation submitted to Mr. Hutchinson? A. Only a few days before the date of his affidavit.

Q. When was the first one submitted, Mr. Gunn? A. May I have the question, please?

(Question read.)

THE WITNESS: Ten or twelve months before the date of his affidavit.

[7578] By MR. HALL:

Q. Mr. Fisk, in his affidavit as shown at the top of page 71 in Exhibit 27, states, "I have examined the photostatic copies hereto attached and identified by my initials, which photostatic copies I believe were true and correct copies of the original documents or of the true and correct copies thereof."

Where are the photostatic copies initialed by Mr. Fisk? A. I believe they are included in the participation.

Q. I don't recall seeing Mr. Fisk's initials on those participations, on those documents contained in the participation. A. Then they must be in the company's files.

Q. This affidavit of Mr. Fisk's is not complete without the photostatic copies initialed by Mr. Fisk. Isn't that right, Mr. Gunn?

MR. KING: I object to that question, if Your Honor please, I think the record shows that copies are already in the file. Whether they are initialed by Mr. Fisk does not make a particle of difference, it seems to me.

MR. HALL: Until we get the ones which are initialed, Mr. Examiner, we apparently won't have the ones he relied upon.

TRIAL EXAMINER: Read the question, please.

(Question read.)

[7579] TRIAL EXAMINER: You may answer the question.

THE WITNESS: I believe it would be more complete if we had those documents. As a matter of fact, I have been under the impression they were in Exhibit 27.

By MR. HALL:

Q. Would you submit those documents bearing Mr. Fisk's initials? A. We will undertake to find them.

MR. KING: Mr. Examiner, may I inquire of Mr. Hall whether he is implying that the documents in Exhibit 27 are different from the documents bearing Mr. Fisk's signature?

MR. HALL: Mr. King, I don't intend to make any implication. I don't know. I am trying to make certain as to what documents Mr. Fisk actually relied upon when he prepared this affidavit.

I assume those documents would be attached to the original of Mr. Fisk's statement.

TRIAL EXAMINER: Are those documents included somewhere in Exhibit 27?

THE WITNESS: Yes, I believe they are, but not the ones, I believe, with Fisk's initials on them.

TRIAL EXAMINER: Very well.

By MR. HALL:

Q. Mr. Gunn, am I correct in assuming that the several participations submitted to Hutchinson were submitted during [7580] the period from about the middle of 1938 to the date of his affidavit, January 13, 1939? A. Generally that is true, although I believe the first one was submitted to him in February or March of 1938.

Q. Did McCall Ferry or Susquehanna Contracting Company enter into any contract with Harvey Fisk and Sons for management services? A. I don't know.

Q. None that you know of? A. I never found a contract covering that service.

* * *

[7587] By MR. HALL:

Q. Mr. Gunn, what corporate management services did the Fisk firm render? A. I can't describe them in any more particulars than I did several minutes ago and which I did several times in the last two or three days.

Q. What other documents embraced in Exhibit 27 disclose management services rendered by Harvey Fisk and Sons? A. I don't recall offhand but I am very sure there are several others that directly or indirectly bear upon and indicate he did manage the enterprise.

Q. Other than those you have already referred to what other documents contained in Exhibit 27 do you have in mind? [7588] A. I said I didn't recall the specific documents. If you wish I suppose we can go through all 68 of them one at a time, searching for such indications, if you wish, and I am sure we will find a large number of them.

Q. That is what you have to do, search for it; is that right? A. Certainly. I cannot recall or remember 600 pages in Exhibit 27. As a matter of fact, most of the pages are printed. I might also be able to go back to the 15 filing cases and find still more of them if you wish, but it would be an interminable job.

TRIAL EXAMINER: But the documents Mr. Fisk initialed would be all the documents you would expect to find. Isn't that true?

THE WITNESS: No, not at all, Mr. Examiner. They are only the important ones. To indicate that fact to you, when I compiled Exhibit 27, or when it was compiled under my supervision, I put in that exhibit the documents that I thought were important and had an important bearing on the determination of original costs with which we are here engaged.

In the last few days the Commission Staff has pulled out several other documents from the files we made available to them that they thought had a bearing on it. I am inclined to think some of them may have had a bearing on it one way or [7589] the other. I have no doubt they will pull out innumerable other documents from those files. I just couldn't make Exhibit 27 of a workable size without making a selection.

TRIAL EXAMINER: When you are able to identify the documents Pliny Fisk initialed, then those which appear in Exhibit 27 in some other place bearing his initials would be the ones you consider important on this subject?

THE WITNESS: Most important ones, yes, sir.

By MR. HALL:

Q. Did you mean to say to the Examiner the documents the Staff pulled out and showed you supported your position? A. I think in general they do together with the other documents we will probably produce in connection with it. Several of them, I am told, were taken out of context.

Q. Who told you that? A. Mr. Chase or Mr. Eichhorn or somebody. I asked them to look in the file and find out which one——

Q. Which ones? A. I don't recall which ones they were.

Q. Are you saying Exhibit 170, Mr. Hutchinson's letter to Boyd Ehle was taken out of context? A. I don't recall whether or not that is one of them.

Q. How about exhibits numbered 168 and 169—were they taken out of context? A. I don't recall.

[7590] Q. How about Exhibits 171 and 172; were they taken out of context? A. I don't recall, but I strongly suspect they were.

• • •

By Mr. Hall:

Q. Mr. Gunn, isn't it a fact that the March 25, 1905, plan, as shown at the top of page 82 of Exhibit 27, says only that Harvey Fisk and Sons was willing to aid in the financing of the project to the extent of taking agreements from the subscribers for the securities, acquiring securities, and making and procuring loans? A. The paragraph at the top of page 82 which Commission counsel has referred to reads as follows: "Whereas, the bankers have been requested and are willing to aid in financing the said plan to the extent of taking agreements from the subscribers for the purchase of bonds and preferred [7591] stock of the power company, of acquiring the bonds and stock for delivery under such purchase, and of making or procuring the loans hereinafter mentioned;".

Q. In other words, that is what Harvey Fisk and Sons were to do under this agreement? A. It says just what I read into the record.

• • •

[7595] By Mr. Hall:

Q. What experts, engineers, contractors, or other personnel were selected by the Fisk firm? A. It is my understanding they all were in the sense that Barnum had the right to accept or reject them. At least that is my understanding of it. That would include Sanderson and Porter, the rejection of the early bids which were taken for construction, the acceptance of Hugh L. Cooper's later bid for construction, the selection of the engineers that

were on the engineers' advisory board, and probably the selection of at least the contractors on the principal equipment.

[7596] Q. How did you reach the conclusion that Barnum could accept or reject personnel and contractors? A. Because Mr. Fisk said he controlled the McCall Ferry enterprise and Mr. Barnum was his representative. In those days bankers didn't seem to have any hesitancy in making selections of that sort that they wanted. As a matter of fact, it is my understanding it was in order to put a stop to that practice that the Securities and Exchange Commission was established.

TRIAL EXAMINER: You needn't speculate on that. If Barnum had the authority to accept and reject and merely exercised such authority who had the authority to appoint and to exercise that authority?

THE WITNESS: That seems to me to be the authority to appoint. If you have the authority to accept or reject it seems to me that is the authority to appoint. Barnum undoubtedly had the advice of perhaps numerous people as to who to consider.

TRIAL EXAMINER: Do you know whether he did?

THE WITNESS: No more than he was chairman of the executive committee and he was Fisk's representative, and Fisk controlled the enterprise. It just seems to me that is an inescapable conclusion.

TRIAL EXAMINER: Do you know what the executive committee did?

[7597] THE WITNESS: They met every so often and considered matters relating to the company's progress, and it is my understanding that their meetings were interim between the meetings of the board of directors and that perhaps the executive committee would perhaps expect to go into matters of greater detail.

TRIAL EXAMINER: Do you have records of the executive committee?

THE WITNESS: Yes, we have the executive committee minutes. They have been available to the Commission staff for two and a half years, Mr. Examiner.

TRIAL EXAMINER: Did those minutes show what was done by the committee with regard to these contractors and engineers?

THE WITNESS: Yes, the executive committee minutes, or the board minutes, show the approvals of these various selections.

TRIAL EXAMINER: Do they show who selected them or how they were selected?

THE WITNESS: No, I don't think you will find that. As I recall the minutes of both the executive committee and the board, they state nothing but the conclusions. They don't state the reasons.

TRIAL EXAMINER: Nowhere in your Exhibit 26 or Exhibit 27 do you have a historical resume of the activity of the [7598] board of directors of the McCall Ferry Power Company after its incorporation or executive committee prior thereto?

THE WITNESS: Not separately as such, Mr. Examiner, but Exhibit 26, which is supported primarily by Exhibit 27, takes recognition of the contents of those minutes.

TRIAL EXAMINER: To get the picture a little more precisely, how did the executive committee fit into this thing? Did it function prior to the organization of McCall Ferry Power Company?

THE WITNESS: No. The executive committee we are referring to is the executive committee of McCall Ferry Power Company.

If you will turn to page 44 of Exhibit 26, Mr. Examiner, you will find that the permanent board of directors, the executive committee to which we have just referred, and the permanent officers of the company were all elected on August 8, 1905.

TRIAL EXAMINER: Where is it indicated Mr. Barnum was Chairman of that executive committee?

THE WITNESS: May I have the question, please?

(Question read.)

THE WITNESS: There is no formal indication on page 44 of Exhibit 26. As I recall it that was a conclusion I drew from the fact Barnum in general was the one who stated the conclusions of the executive committee.

[7599] TRIAL EXAMINER: Where?

THE WITNESS: In the minutes.

TRIAL EXAMINER: That would be consistent with his acting as secretary of the executive committee, wouldn't it?

THE WITNESS: I don't think so. I would have to refer back to that to be certain. The executive committee so far as I know had no secretary. At least, Mr. Examiner, I have not referred to those minutes for almost eight years now, and to answer your question with any precision I would have to look back and see.

By MR. HALL:

Q. Isn't it a fact Barnum was not chairman of the McCall Ferry executive committee? A. You mean he was not formal chairman?

Q. He was not any kind of a chairman, he was not chairman in any sense of the word? A. I will have to refer back to the minutes. If he wasn't then it would seem to me they didn't have a chairman.

Q. Isn't it a fact that Mr. Barnum was not even the chief executive officer of McCall Ferry Power Company? A. That is a fact, yes. Mr. Barnum was sitting in the position where he could really control the thing. He was secretary and treasurer.

Q. Isn't it a fact Barnum did not even lead the [7600] discussion.

Strike that, please.

Mr. Gunn, aren't you mixed up as to the Barnum who was secretary and treasurer of McCall Ferry? A. Yes, sir, who as I recall it was Mr. William M. Barnum's son. I was referring to Mr. William H. Barnum, who is Mr. William M. Barnum's son as I recall it.

Q. Mr. Gunn, isn't it a fact that the minutes of McCall Ferry executive committee indicate Barnum did not even lead the discussions of the committee? A. I can't say that. As I said, if you want to go into the details of those committee minutes I will have to go back and read them because I have not seen them in eight years.

Q. Isn't it a fact that Mr. Dimock led the discussions of the executive committee? A. I can't answer that. As I said, I just do not recall.

TRIAL EXAMINER: Would you refer to page 44 of Exhibit 26? How many of the permanent directors do you identify as Fisk's representatives?

THE WITNESS: It is impossible to make the identification, Mr. Examiner. That is the attempt to which I referred this morning when I spoke of attempting to identify certain groups, or that this was a joint enterprise. I attempted to [7601] go through and classify this permanent board of directors. I always wound up with several directors and I couldn't tell who they represented. For example, A. C. Bedford was one of them who, as I remember it, was a high official of Standard Oil Company at that time.

E. J. Berwin was another who, as I recall it, was a rather important coal operator in Pennsylvania.

There are several others on there. I don't know who they were or what they were so it was impossible for me to classify them.

[7602] By MR. HALL:

Q. Mr. Gunn, isn't it a fact Mr. Bedford was the representative of Mr. C. M. Pratt? A. A representative of who?

Q. Mr. C. M. Pratt? A. I don't know. That is just exactly what my difficulty was. I couldn't classify them. As a matter of fact, I don't recall who Mr. Pratt was.

Q. Wasn't Mr. Pratt one of the large subscribers to the McCall Ferry bonds? A. He may have been. I recall the name. But the Examiner was asking me which of these people represented Fisk. That is where I got into difficulty. I said I didn't know.

Q. Isn't it a fact, Mr. Gunn, that during your study you always ended up with more than one group represented on the board of directors? A. I suppose I did, yes. I wound up with some people that I could certainly identify with Fisk, that being William M. Barnum and Pliny Fisk. I wound up with Cary T. Hutchinson and George B. Willson and H. F. Dimock, whom I could certainly identify with Hutchinson.

There were others in there. The rest of them, a considerable number of the rest of them, I didn't know who they were identified with.

[7603] Q. How did you identify Coffin? A. I didn't know what to do with him.

Q. How about Gardiner M. Lane? A. When I said I didn't know what to do with Coffin, I meant I didn't know what to do with him as respects classifying him on a board of directors. I knew he was president of General Electric Company. I knew Gardiner M. Lane was a member of the firm of Lee, Higginson.

Q. How did you classify Mr. Lane on the board? A. Just that way, as representing Lee, Higginson and Company.

TRIAL EXAMINER: You have your notes there. Haven't you covered this before more or less?

MR. HALL: Not in this way and not in this connection.

TRIAL EXAMINER: He classified Berwin, Beyer and Hope as dummies. Didn't he cover them all?

MR. KING: He did, Mr. Examiner, two or three days ago.

MR. HALL: The question is now, dummies for whom?

TRIAL EXAMINER: Wherever he testified as to the fact they were dummies, he testified on that matter.

MR. HALL: I don't recall be mentioned on whose behalf they were dummies.

TRIAL EXAMINER: We had better suspend questioning on this point until we can review the matter. I hesitate to have the whole matter reopened without doing that.

[7604] MR. HALL: Mr. Examiner, if the record does show any thing it shows a general statement heretofore that all of these fellows were under the thumb of Fisk.

THE WITNESS: Yes.

MR. GOLDBERG: But we now have the witness saying that prior to his statement from Fisk he had always ended up with the board of directors being classified as associated with one interest or another interest.

Now, the record does not show until this moment with what interests he was classifying these various directors. That is what we are trying to find out by dealing with page 44.

For example, he told us he was able to classify Dimock and Hutchinson together. He didn't know what or that he put Barnum with the Fisk firm. Certainly Pliny Fisk himself was put in with the Fisk firm. We are trying to find out what he did with the rest of them. If he didn't know we would like to know.

TRIAL EXAMINER: Let's find out what he said before on the subject.

MR. KING: 6856, 6857, 6858 and 6859.

* * *

[7605] By MR. HALL:

Q. Did you classify Beyer with the Hutchinson interests? A. I don't know just how to classify Beyer at this stage of the game. Beyer previously represented Hutchinson, but he continued on as counsel for McCall Ferry Power Company, I believe. I don't know just how to classify him.

Q. Do you think the fact Beyer continued as counsel for McCall Ferry would warrant your not classifying him with Hutchinson? A. It very certainly would, because I certainly imagine he was working with the sanction of Simpson, Thacher and Bartlett, being a lawyer.

Q. What do you mean by "sanction of Simpson, Thacher and [7606] Bartlett? A. I imagine Simpson, Thacher and Bartlett could have gotten another lawyer if they wanted.

However, this is all sheer speculation.

TRIAL EXAMINER: Let's not speculate.

THE WITNESS: The difficulty is that I just can't classify them.

By MR. HALL:

Q. Were you able to classify Parsons? A. No, I could not. Parsons is an engineer and I suppose he represented whoever controlled the project at the time he was working on it.

Q. How about Mr. Griscom? A. Griscom was a member of the firm of Bertron, Storrs and Griscom.

Q. How did you classify Bertron and Griscom? Were you able to do so?

* * *

THE WITNESS: What do you mean by "classify them"?

By MR. HALL:

Q. What interest did they represent? A. I thought they represented themselves. In the end they turned out to be joint bankers with Fisk, so I certainly assume they represented themslves.

[7607] Q. Who is J. J. Hope? A. I don't know.

Q. Who is W. M. Canby? A. I don't know that.

Q. Do you know whether or not Hope and Canby were from Philadelphia? A. No, I really can't say; probably I knew at one time but I don't recall now.

Q. Canby was a banker, wasn't he? A. I really don't know.

Q. Mr. Gunn, isn't it a fact that the entire key personnel of the McCall Ferry Power Company was appointed by the board of directors or the executive committee of the board at times with the advice of the board of advisory engineers? A. Those selections were passed upon by the board of directors and executive committee, as I recall it. However, it was my understanding from Mr. Fisk that Mr. Fisk controlled the firm and I therefore assumed he had veto power over the board and the executive committee. At least he so states in his affidavit, that his firm, that is he or Barnum, he in general acting through Barnum, made those selections.

[7608] Q. Selection of officers and key personnel is a customary function of the board of directors, is it not? A. Are you speaking of customary function at the present time or in 1905?

Q. 1905 as well as of the present time. A. I wouldn't say so. I would say selections back in those days were made by the persons who controlled the enterprise financially. I would extend that to include the board of directors and the executive committee, that is that selection.

Q. Even if we assume, as you do, that Fisk controlled McCall Ferry, the fact remains that the personnel was selected by the directors in their capacity as directors. Isn't that so? A. I don't think so, not as I understand the word "select," Mr. Hall. They passed upon the selections of these individuals that you refer to, but so long as Fisk had the right to accept or reject these individuals as an ultimate action it seems to me that it is he who in fact made the selection.

Q. McCall Ferry had its own officers, of course?

* * *

THE WITNESS: Oh, yes. Surely, I suppose it had to have them.

[7609] By MR. HALL:

Q. And the management of the company was in their hands? A. Except as Fisk managed it I suppose it was in their hands.

Q. Are you saying they had to keep clearing with Fisk? A. On the important items I most assuredly assume they did.

Q. You assume that? A. I assume it because of the statements Mr. Fisk and Mr. Hutchinson made in their affidavits. It is not so much an assumption as it is a conclusion.

Q. But you can not point to anything which cleared with the Fisk firm, right?

MR. KING: May we have that question again?

(Question read.)

By MR. HALL:

Q. I mean that the officers cleared with the Fisk firm?

MR. KING: Officers of the company?

MR. HALL: Yes.

THE WITNESS: No, we don't have enough records so we can do that. If we had succeeded in finding the Fisk record we might have been able to do that, although one of the officers of the McCall Ferry Power Company, and an important officer, if I may say, he being secretary and treasurer, was William H. [7610] Barnum. What he may have cleared with his father I have no means of knowing and I have no means of proving.

By MR. HALL:

Q. Isn't it a fact that Penn Water now has most of the correspondence relating to the activities of McCall

Ferry Power Company? A. Ordinary routine activities, yes, but activities of the character we are discussing I don't think we would necessarily ever have found in the files of McCall Ferry Power Company.

May I have the question and answer, please?

(Question and answer read.)

THE WITNESS: That is just for the reason we have been discussing, that Fisk did dominate the affairs of McCall Ferry Power Company.

By MR. HALL:

Q. Doesn't Penn Water now have the correspondence of McCall Ferry Power Company classified by officers of that company? A. Some of it I think we do have, but I have no means of knowing whether it is complete or not. I do know that it is the custom of companies to have a large number of files. Whether we have all the files or not I don't know. As a matter of fact, as I recall from my study of them there was reason to believe we didn't have them all.

[7611] Q. But the correspondence Penn Water now has of McCall Ferry Power Company is not limited to routine correspondence. Isn't that so? A. No, it is not strictly limited to that but there is no reason for assuming from a review of what we do have that that is complete.

Q. Do you know how many meetings the executive committee of McCall Ferry Power Company had? A. I don't recall. The minute books will show how many there were.

Q. My information is that there was a total of 109 meetings of the executive committee of that company.

Do you know Dimock attended all of those meetings? A. No, I don't know that he did, but I certainly would expect that he would attend most of them. In other words, I would expect him to have the lowest number of absentees.

Q. Why? A. Because he was president of the company and he had the detailed information with which it

might be necessary to answer questions which would come up before the executive committee.

Q. Isn't it the function of the officers of the company to manage the company? A. You mean at the present time or in 1905?

Q. 1905 as well as the present time. [7612] A. Not in the sense we have been discussing management it isn't, and particularly during the construction period.

Q. Are you saying that it was the function of the officers to manage the company but that the Fisk firm exercised that function for them? A. No, sir, that is not what I am saying. I am saying that the officers of the company performed certain managerial functions and that the Fisk firm performed the rest of them. Those which the Fisk firm performed were the important functions.

Q. As a result of your study, Mr. Gunn, don't you know that Dimock was often appointed to investigate particular management functions? A. I suppose he was. I don't recall any particular act that would lie in the field that you mentioned.

Q. Don't you know that Mr. Dimock led the discussions at the executive committee meetings? A. No, but I can very well imagine that he being the man who was closest to the construction progress of the project might have done most of the talking.

Q. And Mr. Dimock submitted reports from time to time, didn't he? A. I imagine he did. I suspect he submitted them rather often to Fisk.

[7613] Q. How about the executive committee? A. He may have submitted them to them. That may have been the same thing.

Q. You don't have to imagine Mr. Dimock submitted reports to the executive committee—it is in the records, isn't it? A. I don't know. As I stated I have not read the executive committee minutes for eight years. I don't recall what is in them.

Q. But with respect to the submission of reports by Dimock to Fisk you are unable to substantiate that, right?

A. That is right. Of course I can not substantiate it. I can not substantiate any of this. The whole thing is speculation.

TRIAL EXAMINER: Let's stop speculation and say you don't know.

[7614] By MR. HALL:

Q. You know, do you not, that Dimock actively exercised his duties as chief executive officer of McCall Ferry and participated in the management of the company? A. I think he did to the extent he was permitted.

TRIAL EXAMINER: Do you know whether or not he did?

THE WITNESS: It is impossible to answer that question, Mr. Examiner, because the Commission counsel has not described what he means by management functions. I think it is undoubtedly true that Mr. Dimock did perform certain management functions. I think it is also undoubtedly true that Fisk's firm did.

TRIAL EXAMINER: If counsel had specified would you have been able to answer?

THE WITNESS: I probably could have gone back to the correspondence and to the minutes of various meetings and ascertained an answer to his question.

TRIAL EXAMINER: From recollection or actually having knowledge?

THE WITNESS: I would have to do so. I couldn't do it from recollection.

By MR. HALL:

Q. Are you saying Mr. Dimock did not exercise all of the functions required of the president of the McCall Ferry Power Company?

[7615] MR. KING: If your Honor please, I object to that question because I think this is pure argument with the witness.

TRIAL EXAMINER: Can you answer the question? Is this question on any other basis than the other questions which have been addressed to you, that is you would have to refer to the minutes?

THE WITNESS: I would have to do more than that. I would have to know all the functions of the president of McCall Ferry Power Company in 1905. I don't know that.

TRIAL EXAMINER: Very well.

By MR. HALL:

Q. Aren't the duties of the president of McCall Ferry Power Company set forth in the articles of incorporation? A. In a general way, I suppose.

Q. And Mr. Dimock performed those duties as president of the company. Right? A. Some of them, I suppose.

TRIAL EXAMINER: What was that answer, please?

(Answer read.)

TRIAL EXAMINER: If you can't answer why don't you simply say so. I don't want supposition in the record.

THE WITNESS: The answer, then, is that I don't know.

[7616] By MR. HALL:

Q. Can you point to any matters that Mr. Barnum was instructed to investigate?

MR. KING: By whom, Mr. Hall—anybody?

MR. HALL: By the executive committee of McCall Ferry Power Company or the board of directors.

THE WITNESS: Not offhand I certainly can't. As I said I have not read those minutes for eight years and I don't have them in mind now.

By MR. HALL:

Q. Do you know of any matters Mr. Barnum did investigate? A. No, I have not read the minutes lately.

Q. Do you know of any matters Mr. Barnum introduced at any of the executive committee meetings?

MR. KING: If your Honor please, I object to that. The witness already answered that.

TRIAL EXAMINER: Objection overruled.

* * *

THE WITNESS: No, and for the reason I have not recently read the minutes.

By MR. HALL:

Q. Mr. Barnum was not even an officer of McCall Ferry Power Company—right? [7617] A. That appears to be correct.

Q. Mr. Hutchinson was chief engineer of McCall Ferry Power Company, isn't that so? A. Yes, sir.

Q. What were his duties as chief engineer? A. I suppose they were the same as any normal chief engineer's of any company which is under construction.

Q. I want to know if you know what Mr. Hutchinson's duties were, Mr. Gunn? A. General supervision over the construction contracts, general supervision over design, supervision over the quality, quantity and the sequence of construction. He had the right to make technical decisions within certain limits, I believe, subject to the advisory board of engineers. He was a member of the board of advisory engineers. He entered into negotiations for the relocation of the railroad and for power contracts. Surveys for potential power markets were made under his supervision. He made reports from time to time to the management of the company, and I suppose he selected the engineering personnel working under his direction on the construction of the project and for purposes of inspection of the construction work expediting the delivery of equipment, and other similar matters.

Q. What was Mr. Hutchinson's salary for what he did? A. I don't recall.

[7618] Q. Wasn't it fourteen thousand dollars a year? A. It may have been. I just don't recall.

Q. Will you check that, Mr. Gunn? A. Yes, sir.

Q. What do you mean by the general supervision performed by Mr. Hutchinson? A. In connection with what?

TRIAL EXAMINER: Why do you ask the witness to check that kind of a thing? If it is a part of your case and the Staff has had the files of the company and some member of the Staff knows, why can't you put that information in?

• • •

[7619] MR. GOLDBERG: We submit that the mere fact we may put on certain evidence, or the fact we had files available to us does not preclude a proper cross-examination. Where this witness comes in with claims as to management services and the like we are entitled to find out what goes into his consideration and what he did and what he didn't consider.

TRIAL EXAMINER: You are not entitled to ask the witness to come in and present a fact which he cannot remember. That is entirely voluntary on his part.

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[7620] TRIAL EXAMINER: I have observed there have been an unnecessary number of requests made for the witnesses to check and bring in additional data, particularly when the information apparently is in the possession of Commission Staff.

• • •

[7621] By MR. HALL:

Q. What did you mean, Mr. Gunn, when you stated that Mr. Hutchinson had general supervision over construction contracts? A. That it was his responsibility to inspect the work, make certain that the work was done in accordance with specifications, make certain that the quantities of work claimed by the contractor were correct,

that the plan submitted by the contractor for doing the work was efficient and would result in sound construction and at reasonable cost, that the progress the various contractors were making towards completion was adequate, and other such matters as [7622] that.

Q. When you referred to the fact Mr. Hutchinson had general supervision over design you referred to the same sort of thing? A. Yes, same general sort of thing, just what would be the ordinary responsibilities of supervision of a chief engineer.

Q. What were his duties in connection with the quantity and quality and so forth of the work? A. Just what I have described. I just mentioned that as one of the duties in connection with the construction.

Q. What was Mr. Hutchinson's limit to his right to make technical decisions? A. His rights were subject and subordinate to the board of advisory engineers, as I understand it. I should say they were subject to the veto of the board of advisory engineers, at least.

Q. And as chief engineer I take it that Mr. Hutchinson had primary overall responsibility for the entire construction program.

THE WITNESS: May I have that question?

(Question read.)

MR. KING: If your Honor please, I object to that question. I think the witness has given the facts in connection with Mr. Hutchinson's responsibility. This question [7623] is argumentative and attempts to summarize those facts.

MR. HALL: This question relates to the chief responsibility, Mr. Examiner.

TRIAL EXAMINER: Objection is overruled.

THE WITNESS: I don't know what you mean by "primary overall responsibility."

By Mr. Hall:

Q. Who had responsibility superior to that which rested on Mr. Hutchinson's shoulders? A. The board of supervisory engineers, the executive committee, the board of directors, and Fisk, and in some instances Mr. Cooper.

Q. Although Mr. Hutchinson was not a member he did attend meetings of the executive committee and participated in their discussions. Isn't that so? A. He may have. I don't recall.

Q. Didn't Hutchinson present frequent reports and recommendations to the executive committee and to Mr. Dimock? A. I don't recall, but I suppose he did. It would be expected that he would.

Q. And those reports and recommendations would be dealing with construction of the project, negotiations for power contracts, relocation of railroads, and so forth? A. Yes, I think in general that would be their scope.

Q. Wasn't Mr. Hutchinson often selected to investigate [7624] specific management problems? A. What do you classify as a management problem, Mr. Hall?

Q. Any management problem with which the company was confronted, such as power contracts or relocation of the railroad? A. He certainly had certain duties with respect to those. Whether he had ultimate responsibility or not is something else.

Q. Wasn't Mr. Hutchinson often selected to investigate such problems? A. Certain aspects of them, yes.

Q. Did you know that Mr. Hutchinson attended more executive committee meetings than Barnum did? A. No, I didn't know it. I may have at one time.

Q. Who was Hugh L. Cooper? A. He was the contractor for the structural hydraulic portions of the McCall Ferry project and a prominent construction engineer.

Q. Mr. Hutchinson, with the assistance of Mr. Cooper, negotiated the contracts for the purchase of the turbines and generators. Isn't that so? A. They both participated.

Q. Who was J. W. Kirkland?

[7625] THE WITNESS: May I have the question, please?

(Question read.)

THE WITNESS: He was an engineer who became vice-president of McCall Ferry Power Company in 1906.

By MR. HALL:

Q. Going back to my previous question just for the moment, Mr. Gunn, isn't it a fact that Hutchinson and Cooper actually negotiated the contract for the purchase of the turbines and generators? A. I don't think you can necessarily draw that conclusion.

Q. Why not? A. Because they undoubtedly negotiated the contracts as the contracts related to the size of the units, characteristics of the units, and the details of design. But who placed the contract or directed where the contract should be placed may very well have been another matter beyond any one of themselves' control.

Q. Who did that? A. I don't know. I assume Fisk did, with Mr. Coffin's help.

TRIAL EXAMINER: You need not assume. If you don't know you don't know.

By MR. HALL:

Q. What were the duties of Mr. Kirkland? [7626] A. I don't recall offhand. Shall I look up his title?

Q. If you will. Was he vice president and general manager? A. Yes, I already mentioned that.

Q. To whom did Mr. Kirkland report? A. I don't know.

Q. Do you know what Mr. Kirkland's salary was? A. No. I do not recall offhand.

Q. Would it help you any if I said it was $7500 a year? A. Well, I accept your figure if it is $7500 a year.

Q. Wasn't Mr. Kirkland active in the management of the McCall Ferry Power Company? A. Yes, I believe he was active. Whether he devoted his whole time to McCall Ferry Power Company matters I don't know.

Q. Mr. Hutchinson, with the assistance of Mr. Kirkland, also undertook the study of power markets and the negotiation of power contracts resulting in the signing of the power contract with Consolidated Gas Electric Light and Power Company of Baltimore and United Railways and Electric Company. Isn't that so? A. May I have that question, please?

(Question read.)

THE WITNESS: It is my recollection that they both participated. As to who was assisting who, however, I don't know.

[7627] By MR. HALL:

Q. Do you know of anyone else who participated in the signing of those contracts? A. Signing or negotiation?

Q. Both. A. May I have the question, please?

(Question read.)

THE WITNESS: It seems to me I found some evidence in the file that Boyd Ehle did.

By MR. HALL:

Q. He was one of Hutchinson's assistants, right? A. Yes. As for who signed the contracts I think we can find that out by referring to the contracts. I suppose it was the appropriate officers of McCall Ferry Power Company.

May I have the question, please?

(Question read.)

THE WITNESS: The contract between Consolidated [Gas] Electric Light and Power Company of Baltimore, which is Part 36 of Exhibit 27 was signed by Mr. J. W. Kirkland, Vice President, and Mr. Harold Pender.

I notice on that agreement on each page of it in the lower left-hand corner J. W. Kirkland's initials, and the initials of someone else whom I do not recognize.

Referring now to the contract of the United Railways [7628] and Electric Company of Baltimore dated June 28, 1907, that contract was signed by Henry F. Dimock as President of McCall Ferry Power Company and Harold Pender, Secretary of the McCall Ferry Power Company.

By MR. HALL:

Q. Mr. Hutchinson had as his assistants Boyd Ehle and R. H. Anderson as resident engineer and assistant resident engineer respectively stationed at the site of the project and J. W. Young, assistant engineer assisting him in New York. Isn't that so? A. All of the parties that you mentioned were assisting Hutchinson. As to their location, I am sure Ehle and Anderson were at the project. I don't know just how much time J. W. Young spent at the project.

Q. What were the duties of Ehle and Anderson? A. Assisting Hutchinson.

Q. In engineering matters? A. Yes. I suppose at least Ehle's duties were related to most of Hutchinson's responsibility that was to be discharged at the project.

Q. They were assisting Hutchinson in the supervision of the project? A. Yes.

Q. Mr. Hutchinson, Mr. Dimock and Mr. Cooper negotiated railroad relocation contract with Pennsylvania Railroad. [7629] Isn't that so? A. As I recall it they all participated in it, as well as Thomas Newhall. I don't know who else may have participated in it. As I understand the story the negotiations for that railroad relocation contract were rather difficult and several people participated in them.

Q. Were not all accounts for engineering and construction work subject to the approval of Hutchinson and all other accounts subject to the approval of the president, vice president or executive committee of McCall Ferry? A. May I have that question, please?

(Question read.)

THE WITNESS: What accounts would fall in your category of "other accounts," Mr. Hall? I am trying to find out how inclusive the construction accounts are.

By MR. HALL:

Q. I have in mind all construction accounts whether for the purchase of material or construction work itself, if I make myself clear. A. What do you include in that? Do you include in that, for instance, the cost of designing the project and the various expenses of that sort?

* * *

[7630] THE WITNESS: I assume the approvals were as you have stated but I do not recall the facts right at the moment.

By MR. HALL:

Q. Mr. Gunn, my question was based upon a resolution adopted September 27, 1905 by the executive committee. A. Did the resolution give the particulars?

Q. The exact words of the resolution were, "Resolved, that all accounts for engineering and construction work be subject to the approval of the chief engineer, and that all other accounts be subject to the approval of the president, [7631] vice president or executive committee." A. It sounds to me like a general division of the work. That is about the way it is today. Ordinarily when Penn Water and Power Company places a construction contract it is subject to the approval of the chief engineer.

* * *

[7632] By MR. HALL:

Q. Mr. Gunn, Mr. Hutchinson, had general supervision and final authority over the work of Mr. Hugh L. Cooper, the manager of hydraulic construction, and Sanderson and Porter, Superintendent of electrical construction, isn't that so?

* * *

THE WITNESS: No, sir, I don't think that is correct.

By Mr. Hall:

Q. What is your understanding? A. My understanding is that Hutchinson had certain authority over the quantity and quality of work which would be done, but his authority was not absolute at all, as is evidenced by McCall Ferry records in one and perhaps more than one instance where Hutchinson and Cooper got into [7633] a quarrel and it had to be arbitrated by the board of advisory engineers. I don't think Hutchinson had anything to say over the manner of executing the work, particularly in the case of Cooper. If he did it was very little.

Q. Wasn't the work subject to Hutchinson's approval? A. Only the end result as regards quantity and quality.

Q. McCall Ferry had its own Secretary and Treasurer who were on the McCall Ferry payroll. Isn't that so? A. Yes, I believe that is correct.

Q. McCall Ferry also had a board of advisory engineers to give advice on difficult engineering problems? A. Yes, sir.

Q. The board of advisory engineers was headed by Wm. B. Parsons, as Chairman? A. Yes, sir.

Q. Do you recall that Mr. Parsons salary was twelve thousand dollars a year as Chairman of the Board of Advisory Engineers? A. No, I don't recall that. As a matter of fact, I don't know whether they worked on a retainer or salary.

Q. My information, Mr. Gunn, is based on the minutes of the executive committee of McCall Ferry Power Company, dated September 27, 1905, in which the Chairman of the Board of Engineers is listed as having a salary of twelve thousand [7634] dollars a year, and the chief engineer, who was Hutchinson, is listed as fourteen thousand dollars a year.

* * *

[7635] The Witness: I have verified the amount paid to Mr. William Barclay Parsons and find it to have been twelve thousand dollars.

By Mr. Hall:

Q. Who were the other members of the board of advisory engineers in addition to Parsons? A. Mr. Charles T. Main, Mr. F. O. Blackwell, and Mr. Hugh L. Cooper was a member for a time until he resigned to take over the construction or to submit a proposition for the actual construction of the project. Mr. Cary T. Hutchinson was the other member.

Q. Do you know whether or not those individuals that you have just named received a salary or retainer from McCall Ferry Power Company? A. No, I do not. I do not know offhand how they were compensated.

Q. Did Mr. Hutchinson participate in the deliberations of the board of advisory engineers and sign their reports? [7636] A. I am sure he participated in the deliberations. I don't know who signed their reports. I don't recall.

Q. As indicated on page 212 of Exhibit 27, Mr. Hutchinson signed the Hutchinson and Parsons' engineering report of 2-12-1905 [August 7, 1905], and also the report of the board of advisory engineers dated September 11, 1905, as indicated on page 216 [218] of Exhibit 27?

* * *

The Witness: The report referred to as part 25 of Exhibit 26 [27] is not a report of the board of advisory engineers but it is rather a report to the board of directors signed by Cary T. Hutchinson as chief engineer of McCall Ferry Power Company. The report is made on the letterhead of Cary T. Hutchinson, consulting electrical engineer of New York City, and it is signed also by Wm. Barclay Parsons as consultant engineer and not as a member of the advisory committee.

The last paragraph of that letter states as follows, which indicates it is not an action of the advisory committee:

"Messrs. Hugh L. Cooper, F. O. Blackwell and Charles T. Main, and other members of your advisory

board, all of whom have been consulted either personally or by letter, concur in these recommendations."

That indicates to me it is not a report of the advisory board.

[7637] By Mr. Hall:

Q. Before you proceed further, isn't it a fact that in the first paragraph of the report as shown on page 206 of Exhibit 27, it is stated, "This report is intended to give a general statement of the present status of the affairs of your company; the statements made and recommendations have the approval of every member of your advisory board of engineers, although owing to the absence from the city of three members, it is signed only by your chief engineer and consulting engineer."? A. That is right. I take that to mean that he had an informal discussion with them, but it is not an action of the advisory board, obviously.

Q. Did you want to complete your previous answer now? A. Yes, sir.

Q. If you had the three signatures on the report we have just been discussing would you consider it the report of the advisory board of engineers?

* * *

The Witness: I have no special information. The signatures don't appear on there. I can speculate on what it might [7638] be if they did appear.

* * *

By Mr. Hall:

Q. Did you finish your previous answer? [7639] A. Referring now to part 26 of Exhibit 27, which was included in your previous question, that appears to be a report of the board of advisory engineers and is so headed, and it is a fact that it is signed by Wm. Barclay Parsons, Chairman, and signed also by Cary T. Hutchinson, Hugh L. Cooper, and F. O. Blackwell.

Q. Negotiations for the employment of the other members of the board of advisory engineers were conducted by Hutchinson long before they were elected. Isn't that so? A. I don't know whether or not they were. I don't recall at this date ever having seen any evidence that would indicate whether they were or weren't. They were undoubtedly all personal acquaintances of Hutchinson. They were four of the most prominent engineers in the United States and known to practically every engineer. But as to whether he entered into negotiations for their employment, I don't know.

[7640] Q. Did the McCall Ferry Power Company officers, or the board of advisory engineers address any of its reports to Harvey Fisk and Sons or to William M. Barnum? A. I don't know whether they did or not.

Q. Did you ever see a report addressed to Harvey Fisk and Sons or Barnum? A. No, I don't believe I ever saw any reports other than those that are in Exhibit 27. It seems to me those were all appropriately directed to the McCall Ferry Power Company.

Q. As a matter of fact, Mr. Gunn, the board of advisory engineers never reported to the Fisk firm but addressed their reports to Mr. Dimock or the executive committee, isn't that so? A. I don't know whether or not that is true. They may have made more reports than I have knowledge of.

Q. As to those about which you have knowledge isn't that the fact?

* * *

THE WITNESS: As to the pending question, yes, I think that is correct about those reports of which I have knowledge.

By MR. HALL:

Q. Wasn't it upon the recommendation of the board of advisory engineers that Hugh L. Cooper was selected to take [7641] charge of the hydraulic construction? A. I

believe perhaps so, although I don't exactly recall the procedure. What happened was this: When the bids were taken from the group of construction companies who had been asked to quote, the construction companies included in their bids such high contingencies against the risk of construction that the board of advisory engineers concluded that McCall Ferry Power Company ought not to accept any of the bids but ought to make an arrangement with some reliable contractor to undertake the project on a cost-plus-a-fixed fee basis. After that conclusion had been reached Hugh L. Cooper resigned from the board of advisory engineers and submitted a proposition to McCall Ferry Power Company.

Whether that proposition was passed upon by the board of advisory engineers or not I don't recall, and if it was I wouldn't know whether that was the final approval or not.

Q. Cooper became manager of construction. That was his title. Is that right? A. Yes, sir, hydraulic construction that is.

Q. And the contract was actually negotiated by Dimock and Coffin, isn't that so?

* * *

THE WITNESS: You are referring to the contract with [7642] Hugh L. Cooper now?

By MR. HALL:

Q. Yes. A. I really don't know whether or not it was. I don't recall Coffin having been involved in it.

Q. Is it your understanding that Mr. Dimock negotiated that contract with Cooper? A. I just don't recall who negotiated with Cooper, but I had never heard of Mr. Coffin being in the negotiation on the Cooper contract. I distinctly don't recall that.

Q. Do I understand that you analyzed the minutes of the executive committee of McCall Ferry? A. I did when I was preparing Exhibit 26 over seven or eight years ago, yes. But I don't recall everything that was in all of them.

Q. Under Cooper's contract, which is Part 28 of Exhibit 27, didn't he have complete charge and responsibility for hydraulic construction as "hydraulic engineer" and "manager of construction"?

• • •

THE WITNESS: Mr. Cooper's responsibility under his contract to McCall Ferry Power Company seems to be defined in general terms in paragraph 10, page 223 of Exhibit 27 and reads as follows:

[7643] "1. The company agrees to employ and hereby does employ Cooper as 'hydraulic engineer' and 'manager of construction,' of the work at McCall Ferry, and Cooper agrees to serve in this capacity under the company and its officers, for the term of this agreement."

Does that answer your question?

By MR. HALL:

Q. Yes. In other words, Mr. Cooper served in his capacity as hydraulic engineer and manager of construction "under the direction of its officers"? A. Yes, under the direction of the company and the company's officers.

Q. Did Mr. Cooper furnish Mr. Value as engineer-in-charge and have the right to select the rest of the construction personnel? A. Yes, sir, I think that is correct.

Q. And Mr. Cooper was paid $130,000 for his services, which included a completion bonus? A. The contract we have been discussing states the basis of Mr. Cooper's compensation on two alternative projects, one I believe at elevation 155 and the other, I believe, at elevation 185.

Neither one of those projects was actually built but rather a project to elevation 165 was constructed, and the original contract with Cooper did not contemplate tailrace [7644] excavation. Another complicating factor was that while Cooper did not completely finish the project as the contract called for at the date McCall Ferry got into financial difficulties, the work had progressed to a point where it was then obvious that he could have if there had been funds in time to earn the contract bonus.

At the termination of Cooper's services there was considerable squabbling, and I believe some threatened litigation, over the final settlement, and a compromise of all of those factors was reached. However, I don't know offhand what the total payment to Cooper was.

Q. Were not all plans and specifications and contracts for labor and material made by Cooper subject to the approval of Mr. Hutchinson whose decision was to be final? A. I believe that is what the contract states, although the events proved Mr. Hutchinson's decision was not always final.

Q. What events do you refer to, Mr. Gunn? A. I refer to the controversy that Cooper and Hutchinson had over the proper location for the dam which was finally arbitrated by the board of advisory engineers, at least, and I don't know who else, perhaps Fisk. Then there was another instance; I believe Cooper and Hutchinson got into a squabble over the quality of the concrete, and that also had to be arbitrated at least by the board of advisory [7645] engineers, I believe. It is my conclusion from a general study of the records of McCall Ferry Power Company that Hutchinson had a great deal of difficulty making any of his prerogatives stick with Mr. Cooper.

Q. Is there any suggestion in Cooper's contract, which is Part 28 of Exhibit 27, that his duties under that contract were in anywise subject to the supervision, approval or control of the Fisk firm or Barnum?

* * *

THE WITNESS: Yes, sir.

By MR. HALL:

Q. What is it? A. The fact that the contract is with McCall Ferry Power Company and Mr. Fisk controlled that enterprise.

Q. Do you know of any reports regarding the construction of the project Mr. Cooper ever submitted to the Fisk firm or to William M. Barnum? A. No, I do not. As a

matter of fact, I do not have, at least I don't recall having seen, very many reports by Cooper himself submitted to anybody.

Q. As a matter of fact, Cooper reported solely to the [7646] McCall Ferry officers and executive committee. Isn't that so? A. I don't know about that. The contract says he is working under their direction.

Q. Wasn't it on the recommendation of the board of advisory engineers that Sanderson and Porter were selected to take active charge of the electrical construction? A. I don't recall who made the final recommendation on the selection of Sanderson and Porter. It is a fact they did serve in the capacity of superintendent of electrical construction, and they also kept the books on a cost-plus basis, if I recall.

Q. The contract with Sanderson and Porter was negotiated by Dimock and Mr. Coffin. Isn't that so? A. I don't know. I never was aware Mr. Coffin was in the negotiations.

Q. Sanderson and Porter served as superintendent of electrical construction under the McCall Ferry Company and its officers, right? A. They served as superintendent of construction and——

Q. Electrical construction. A. —bookkeepers, as I understand it. Yes, I meant electrical construction.

Q. Under the agreement which Sanderson and Porter had which is Part 29 of Exhibit 27, everything that firm was to do and all of its duties assigned to it under the agreement [7647] were subject to the approval of McCall Ferry's chief engineer and were executed under his direction and his decision was to be final. Right? A. Yes, the agreement so states in Article 3 which appears on page 228 of Exhibit 27. However, I would rather doubt whether that was intended to extend to their bookkeeping function.

Q. How much were Sanderson and Porter to receive for their services under their contract? A. $50,000.

Q. Do you know of any reports regarding the construction work Sanderson and Porter ever addressed to

Harvey Fisk and Sons or William M. Barnum? A. No, I don't recall offhand having seen any sort of report from Sanderson and Porter to anybody.

Q. Did Mr. Barnum or Harvey Fisk and Sons pay for the services of any of the McCall Ferry officers or construction managers? A. Not so far as I know.

Q. How did Mr. Barnum exercise his management control? A. I don't know, unless it was through the prestige of the Fisk firm.

Q. How did Mr. Barnum communicate his orders? A. I don't know.

Q. Have you ever seen any orders or communications in [7648] connection with the management or construction of the McCall Ferry project issued by Harvey Fisk and Sons or Mr. Barnum to the McCall Ferry officers or construction managers? A. By that you mean formal instructions in writing, Mr. Hall?

Q. Yes. A. No, I can't say that I ever have. I have seen, as I recall it, we discussed some correspondence by Simpson, Thacher and Bartlett which appeared to be flowing from Fisk's firm. But as to direct orders I don't recall ever having seen any.

Q. Are you now referring to the inquiry of Simpson, Thacher and Bartlett to Mr. Hutchinson regarding the selection of the board of directors of McCall Ferry? A. That was one instance. I believe there was another instance of some instructions about the handling of stock. Those are the two that I recall offhand. I don't know whether there are any more in the files or not, but I don't recall them.

Q. Does your answer include informal orders or recommendations, also? A. No, sir.

Q. You say it does not? A. No, it does not. I don't know whether there were informal orders or recommendations or not, and I wouldn't [7649] expect to find any evidence of them. I take it now we are speaking of Fisk's management function only.

Q. That is right. A. Yes.

Q. Just what did Harvey Fisk and Sons and Mr. Barnum do to supervise the construction of the project as you claim? A. All I know specifically as to what they did is what Mr. Fisk states in his affidavit and such other scraps of evidence as are apparent from the records. I have no comprehensive catalog of what they did.

[7650] Q. What was the primary responsibility of Harvey Fisk and Sons for supervising the construction of the project, the selection of personnel, and the selection of experts, engineers, and contractors.

* * *

THE WITNESS: Primary responsibility, as far as I know, and I would take that to mean the final right to say we will or we will not select this man or that man or some other man.

By MR. HALL:

Q. Wouldn't final right be stated as the ultimate responsibility? A. I think that would be a proper expression of it.

Q. Then what does "primary responsibility" mean? A. Same thing as ultimate responsibility.

Q. What other electric companies had Mr. Barnum managed? A. I don't know all of them. I never attempted to find out. But Fisk's firm, as I understand it, while Barnum was connected with it, I believe were the originators of Electric Bond and Share, Electric Securities Corporation, the Hudson-Manhattan Transfer, which was an Electric Railroad, and a large number of industrial corporations. I think those are the ones with which they were connected as I recall it which were in the electrical field.

Q. Did any of the companies you have mentioned do [7651] electrical construction work while Fisk's firm was connected with them? A. Hudson and Manhattan did, unquestionably. I don't know how long Fisk's connection with Electric Bond and Share lasted, or whether at that time they actually did any construction or not.

Q. Mr. Gunn, isn't it your understanding that Electric Bond and Share Company was created by General Electric? A. Not if I understand your word "created."

Q. What did you understand my word to mean? A. Organize.

Q. That is what I meant. A. It is my understanding that Fisk's firm was one of the primary banking houses, at least, in its organization. I am relying on my recollection for that.

It was also my understanding that Fisk's firm was the primary banking house in the organization of Electric Securities Corporation.

I am aware, of course, that both of them were or became subsidiaries, or were affiliated with General Electric Company.

Q. They were owned by General Electric. Isn't that so? A. I think they may have been. At least they became owned by General Electric. I don't know just what the arrangement was in the beginning, but my recollection is that Mr. Fisk was in the picture in a big way.

[7652] Q. Did the Fisk firm supervise and manage any hydro-electric construction for the three firms which you mentioned? A. Not so far as I know.

Q. What part did Mr. Barnum play in connection with Fisk's relationship to those companies? A. I don't know except it is my understanding Mr. Barnum was a member of the Fisk firm at that time. I don't know just what his part was.

Q. What management problems were settled by Mr. Barnum? A. I suppose all the management problems were during Fisk's control of the McCall Ferry enterprise. I take it we are talking about McCall Ferry now.

Q. Yes. That is just a supposition upon your part, isn't it, Mr. Gunn? A. No, Mr. Fisk says he managed it and he managed it through Barnum.

Q. Do you know of any specific problem which was presented to Mr. Barnum for settlement? A. No, sir,

I was not there and never could find the records of the Fisk firm.

Q. Did Mr. Fisk name any? A. No specific problems other than the ones he enumerated on page 72 of Exhibit 27.

Q. Did Mr. Barnum negotiate any contracts for McCall Ferry? [7653] A. I don't believe I can answer that, Mr. Hall, without knowing just what the scope of your term "negotiate" is.

Q. Did he arrange for the execution of any contracts for McCall Ferry? A. I don't know whether he did or not.

Q. What persons did Mr. Barnum hire for the McCall project? A. I don't know other than Mr. Fisk says it was his responsibility for the selection of personnel, selection of experts, engineers, contractors, and so forth. That is all I know about it.

Q. Was Mr. Barnum an engineer? A. No, sir, Mr. Barnum was a banker and a lawyer as I understand it.

Q. What engineering problems were settled by Mr. Barnum? A. By whom?

Q. By Mr. Barnum? A. I don't know of any specific engineering problems settled by him.

Q. Did Mr. Barnum purchase any materials for the McCall project? A. I rather doubt that he did. I didn't understand him to be the purchasing agent, also.

Q. Did Mr. Barnum prepare any plans and specifications [7654] for the McCall Ferry project? A. I doubt that. I don't think he did.

Q. How much of Mr. Barnum's time was devoted to the management of the McCall Company? A. I don't know, other than what Mr. Fisk states in his affidavit on page 72 of Exhibit 27, which reads as follows:

> "Mr. William M. Barnum, one of my principal partners, as I have pointed out, devoted a very considerable portion of his time to this project and was, in fact, in active charge of and had full responsibility for the entire project."

Q. What did Mr. Fisk mean by "considerable time"? A. Considerable time, I suppose.

Q. Did you ask Mr. Fisk how much time Mr. Barnum spent in connection with the management of the McCall Ferry project? A. No, sir, because when he said "considerable," I assumed he lost his time cards with the rest of the Fisk records.

Q. How much time did Mr. Barnum spend at McCall Ferry? A. I don't know.

Q. Was Mr. Barnum ever there? A. I think he was probably, but I wasn't, so I don't know.

Q. When did Mr. Barnum leave Harvey Fisk and Sons? [7655] A. In July of 1908.

Q. Wasn't Barnum paid by Harvey Fisk and Sons for his services to that firm? A. What do you mean by "that firm"? Harvey Fisk and Sons or McCall Ferry?

Q. Fisk? A. Yes, he was a partner of the firm. Harvey Fisk says he had fifteen per cent interest in the firm.

Q. There were fourteen other directors of the McCall Ferry Power Company besides Barnum? Right? A. Yes, sir, there were fourteen other directors elected on August 8, 1905, at least.

Q. And there were four other members of the executive committee of the McCall Company in addition to Barnum. Isn't that so? A. Yes, sir.

Q. Isn't it a fact, Mr. Gunn, that Barnum had no more responsibility than any other member of the executive committee? A. I don't think that is a fact.

Q. Why not? A. Because Fisk says he managed the enterprise through Barnum.

Q. Did Mr. Barnum have more than one vote? A. I don't think he had more than one vote, but I never [7656] made the assumption Fisk controlled McCall Ferry project through the executive committee. But if he did control it through Barnum then obviously Barnum had more responsibility for the project than did the other members of the executive committee.

Q. Does Mr. Fisk say that the Fisk firm controlled McCall Ferry through Barnum or managed it through Barnum? A. I take that to be one and the same thing. I think he says at one place, I believe, that he controlled the project, and in another point he says he managed it through Barnum. I take that to be one and the same thing.

Q. Through what medium did the Fisk firm exercise their control over the McCall Ferry? A. I don't know, except through their prestige as bankers.

TRIAL EXAMINER: Could Mr. Fisk have in mind financial management rather than general overall management?

THE WITNESS: I don't think he could, Mr. Examiner, because it goes ahead and enumerates under the management the selection of personnel, the selection of experts, and selection of contractors, which would seem to me to be going beyond the mere function of management in connection with the raising of money.

By MR. HALL:

Q. Do you have any reason to believe that all the [7657] members of the executive committee of McCall Ferry or the board of directors did not take part in the discussion and formulation of policies?

* * *

THE WITNESS: No, I have no reason to believe they all did not take part in the discussions and in the management. I merely believe Fisk had control of the management of the McCall Ferry enterprise.

By MR. HALL:

Q. Do you have any reason to believe that the members of the executive committee or the board of directors did not vote their independent judgments with respect to management policies? A. I really don't know what they did. The only thing I know is what Mr. Fisk says, that

he controlled the project. How he controlled it I really do not know.

Q. Isn't it a fact that Mr. Barnum was seldom selected by the executive committee to look into any of the McCall Ferry Power Company's management problems? A. No, I don't know that that is a fact.

Q. Wasn't that indicated by your review of the correspondence and the minutes of the executive committee? A. No, I shouldn't say that it was. I might speculate on it but it didn't indicate that to me. As a matter of fact, [7658] with Mr. Barnum representing the control of the enterprise it wouldn't be expected he would be assigned to detail work. He merely passed judgment on what detail work other people did.

Q. Where is it indicated that Mr. Barnum actually passed judgment? A. In Mr. Fisk's statement that he controlled the enterprise through Mr. Barnum and in Hutchinson's statement that Fisk took control of the enterprise, and in the numerous other indications we have discussed in the past few days.

Q. Does Mr. Hutchinson say Barnum managed the enterprise? A. No, it says Fisk took control of it. Fisk says Barnum managed the enterprise.

Q. Didn't your study establish the fact that Mr. Dimock, the president, and his assistant, Mr. Kirkland, vice president and general manager, and Mr. Hutchinson, the chief engineer, actually managed the McCall Ferry Power Company? A. No, sir, it did not.

Q. Didn't the records indicate they were the ones who carried on the active management and made the decisions and so forth? A. No, sir. The record indicated they made certain decisions, but there was no indication in the record to me they made the decisions of the type Fisk says Barnum was responsible for.

[7659] Q. Isn't it a fact that the engineering problems were referred to Mr. Hutchinson and the board of advisory engineers? A. They considered them but I presume the

important ones went beyond them, the important problems went beyond those two agencies.

Q. Do you know of any important problems which went beyond Mr. Hutchinson or the board of advisory engineers? A. Well, I don't have any proof of the problem going beyond them but I would certainly expect the controversy between Hutchinson and Cooper over the location of the dam probably went beyond them. Certainly the purchase of Harlow-McGaw's property went beyond them direct to Fisk.

Q. How many directors meetings did McCall Ferry have? A. I don't recall.

Q. Was it about twelve? A. I really don't recall.

Q. But you do know that Barnum was hardly ever in attendance at those meetings, isn't that so? A. No, I don't know that. I don't recall that, either. If he did not attend directly it would seem to indicate the board of directors were not the medium of control for the enterprise.

Q. Would you say that about the executive committee meetings, also? A. I think it might be said about those as well.

[7660] Q. In other words, Mr. Barnum's attendance at the meetings of the executive committee is something which should be taken into account? A. Taken into account for what?

Q. In determining the exercise of management and the medium through which it was exercised by the Fisk firm. A. No, I don't think it would have any particular significance as to that whether he did or whether he did not.

Q. Did Barnum exercise his management as a member of the board of directors, executive committee, or what? A. I don't know.

Q. When Mr. Barnum didn't attend the meetings of the executive committee or the board of directors how did he exercise his managerial authority? A. I don't know.

It very well may be that the decision was agreed upon before the meeting. I have heard of such things being done.

Q. Do you know whether it was done in connection with the McCall Ferry project? A. No, sir, I do not.

Q. Can you point to the minutes of any of the executive committee meetings which show the exercise by Barnum of managerial discretion or authority? A. I don't recall the contents of all the minutes and therefore I do not recall whether there would be any showing [7661] of that to be found in the minutes or not. I have not reviewed them in seven or eight years.

Q. When was the Fisk firm paid for management services? A. About June of 1905 when the agreement was reached to give them the stock compensation that they received. I suppose that would be the date you refer to.

Q. Was the management fee supposed to cover the completion of the project? A. That is my understanding. It seems to me to be a proper conclusion.

Q. Is it customary to pay a fee years in advance of rendering the service as you claim was done in this case?

. . . .

[7662] A. I don't know. I am not an expert in that field. It is my understanding it was frequently done in the way it was done in the McCall Ferry project in those days. I don't know what the present custom is.

Q. What cost did Harvey Fisk and Sons incur in allegedly managing the McCall Ferry Power Company? A. I don't know.

Q. What costs did the Fisk firm incur in connection with financing services related to McCall Ferry Power Company? A. I don't know.

Q. As a matter of fact, I take it you have no evidence of any costs? A. I have no evidence of any costs whatever. We never found the Fisk records and therefore I just haven't the slightest idea as to what costs they incurred for either one of those functions.

TRIAL EXAMINER: Do you know the date when these records were destroyed?

THE WITNESS: I believe it was prior to 1924 which, as I recall it, was about the time of Mr. Fisk's retirement from the firm.

TRIAL EXAMINER: Were you given any details as to what occasioned the destruction of the firm records?

THE WITNESS: No, I wasn't. Mr. Fisk did not know. His assumption was that the occasion of it was the liquidation [7663] of his partnership to relieve themselves of any further storage expense. I might add to that that the records we are speaking of now are the detail records. Certain of the records relating to financing, that is such things as prospectae and underwriting agreements and things of that sort, and numerous other financial records, were given by Mr. Fisk to Princeton University and became the foundation data for the Pliny Fisk Library at Princeton.

* * *

[7664] By MR. HALL:

Q. How did Mr. Fisk determine the value of Barnum's management services? A. I don't believe I understand your question, Mr. Hall. Are you asking me how he reached the conclusion they were the amount as stated in Part 9 of Exhibit 27?

Q. Yes. A. I don't know other than to consider the facts he had before him and to consider the amount of Barnum's interest in his firm which he states to have been about 15 per cent and to have averaged $115,000 a year. I suppose he took all of those facts into consideration and arrived at the conclusion they were what he said they are. I certainly don't know what his mental process would have been.

[7665] Q. Do you think the value of Mr. Barnum's services, if he actually had been active manager for McCall Ferry, should be determined by the profits and income of

the Fisk firm from its banking business? A. I don't know. It would seem to me that would be one of the indications of Mr. Barnum's worth. I don't know just how it would be used to assist Mr. Fisk in reaching his conclusion. As I said, I don't know what the man's mental process was.

Q. Was Mr. Barnum's share of the profits of Harvey Fisk and Sons reduced by reason of his alleged management of the McCall Ferry Power Company? A. I don't know.

Q. How much did Mr. Fisk estimate his firm's alleged management services were worth? A. $150,000.

* * *

By Mr. Hall:

Q. How much have you claimed in your original cost determination for these alleged management services? A. The amount claimed for management services was [7666] $199,570.31 which was the result of the selection of $25 per share as the cash value of McCall Ferry Power Company common stock to be used in computing the value of all services. It is stated on page 53 of Exhibit 26.

Q. In other words, you claim approximately $49,000 more than Pliny Fisk estimated his firm's services to be worth, right? A. Yes, in the case of Fisk's services there was more claimed than in the case of others. The use of $25 a share resulted in reducing other claims as to the value of services.

Q. Do you have any evidence to show that Harvey Fisk and Sons actually received 17,537½ shares of common and 1875 shares of preferred stock? A. The only evidence I have is what we have discussed for the last several days.

Q. I am speaking now of management services.

* * *

The Witness: The evidence we have been discussing for the last several days was as to the total amount of

compensation Fisk received. The amounts of stock you mentioned, Mr. Hall, were received by Fisk for both management and [7667] banking services.

To answer more directly I have no evidence that the number of shares you mentioned were given to Fisk for management services alone. I don't believe they were.

By MR. HALL:

Q. And you have no evidence to show the split for the purposes of determining banking services and management services? A. I have the evidence contained in Mr. Fisk's affidavit.

Q. But even Pliny Fisk claims only that his firm received at least as many shares as Bertron, Storrs and Griscom. Isn't that so? A. No, that is not all he claims, as I recall it.

Q. Will you refer to page 79 of Exhibit 27, specifically to paragraph 10? A. Yes, sir. Paragraph 10 reads as follows——

MR. KING: Just a minute. If Your Honor please, I object to that question. I think, as a matter of fact, paragraph 10 has been read into the record verbatim at a prior time in this hearing.

• • •

[7668] MR. KING: I didn't object to reading it into the record. I objected to further questions relating to paragraph 10 on page 79 of Exhibit 27 as being repetitive.

TRIAL EXAMINER: Overruled.

• • •

THE WITNESS: Mr. Examiner, I can not state what Fisk says in paragraph 10 any more precisely than paragraph 10 states it.

TRIAL EXAMINER: Very well. That is your answer.

By MR. HALL:

Q. But on the basis of your information Bertron, Storrs & Griscom received only 7,462½ shares of common stock, right?

MR. KING: If Your Honor please, I object to that. We have been into that before many times.

• • •

[7669] TRIAL EXAMINER: Objection sustained.

By MR. HALL:

Q. Did you find any contract whereby the McCall Ferry Power Company or Susquehanna Contracting Company agreed to pay Harvey Fisk and Sons for banking services?

• • •

THE WITNESS: No, I don't recall having found any contract covering banking services.

[7670] Q. Did you find any evidence in the records that you examined that the payment of a cash commission for banking services was considered by McCall Ferry or Susquehanna Contracting Company? A. No, sir. I think the books of McCall Ferry Power Company, and Susquehanna Contracting Company account for the proceeds of the cash which came into McCall Ferry's hands without there being any available to pay banking services.

Was that an answer to your question?

Q. I think so.

Did you find in the records any valuation of Harvey Fisk and Sons' banking services? A. You mean in McCall Ferry Power Company or Susquehanna Contracting Company?

Q. Or any place. A. No, nothing except Mr. Fisk's statement in his affidavit.

Q. Did you find any evidence of negotiations with Harvey Fisk and Sons for the payment of their services? A.

Speaking now of banking or management or both? The answer will be the same, no, I didn't find any.

May I have that last question and answer read, please?

(Question and answer read.)

THE WITNESS: I think I will have to modify that. There was evidence, as we have already discussed, of the payment of [7671] banking services, in the exchange of correspondence between Bertron and Lee, Higginson.

Q. You are referring now to correspondence related to part 11 of Exhibit 27? A. Yes, sir.

Q. That refers only to compensation of Lee, Higginson and Company? A. That particular correspondence in part 11 refers only to the compensation of Lee, Higginson and Company. However, the records of Bertron, Storrs and Griscom, which are part 22 of Exhibit 27, show common stock which was compensation to Bertron, Storrs and Griscom for banking services.

Q. What functions were performed by those interested in the financing? A. They varied, depending upon the person to whom you refer as those interested in financing.

Q. The bankers who secured bond subscriptions? A. I think you will have to be a little more specific. Are you referring to Lee, Higginson?

Q. I am referring to all the bankers. A. I don't know who you are talking about, then. For example, do you count Lee, Higginson a banker?

Q. Yes. A. Well, services performed by Lee, Higginson, so far [7672] as I know, were those of raising the necessary funds to construct the project.

Q. What did Harvey Fisk and Sons' banking services consist of?

* * *

[7673] THE WITNESS: So far as I know they consisted of raising the necessary funds to construct the McCall Ferry project.

By Mr. Hall:

Q. Do you know anything about the time and money of Harvey Fisk and Sons which went into the banking services of that firm? A. No, sir. As I told you, we never found Harvey Fisk and Sons' records and there is no conceivable way for me to know what expense they incurred either for banking, management, or anything else in connection with McCall Ferry.

Q. Did you ask Fisk for that information? A. Certainly, I asked him for his records and he said they were long since destroyed.

Q. Did you ask Mr. Fisk what costs were incurred by the Fisk firm and what time was expended by that firm in connection with its banking services? A. I don't think I asked him that because I wouldn't expect a man to remember his cost books for that length of time, at least the contents of his cost books.

Q. Don't you think Mr. Fisk would have been able to tell you whether it took them a month or two months? A. Are you referring now to time or cost?

Q. I am referring now to time. A. As to how long —the time for what?

[7674] Q. The banking services. A. You mean by that the length of time that Fisk's firm required to obtain the subscriptions they did?

Q. Yes. A. No, I don't recall having asked him that specific question, but it seems to me that the records indicate, the records contained in Exhibit 27 give you, some indication of that.

Q. What indication did those records give you? A. They indicate to me that Fisk took control of the McCall Ferry enterprise some time between the 15th of March and the 25th, and by the latter part of June the necessary subscriptions had been obtained. So I would say that the banking services, as they related to raising the money, lay within those dates.

* * *

Q. Do you recall when the first 20 per cent call was made from the bond subscribers?

• • •

THE WITNESS: June 1, 1905.

By MR. HALL:

Q. Was that the first call made to the subscribers for [7675] the initial 20 per cent advance?

• • •

THE WITNESS: My answer should have been May 15, 1905.

By MR. HALL:

Q. As of that date or as of a date shortly prior thereto all of the bond subscriptions had been obtained; right? A. Yes, sir, that is correct.

• • •

[7681] MR. HALL: Mr. Examiner, I offer Exhibit Number 173 for identification. This exhibit consists of two pages, was written by Gardiner M. Lane, and appears to be a memorandum or letter addressed to prospective subscribers of Lee, Higginson and Company, and further appears to have been written subsequent to the time that Harvey Fisk and Sons came into the picture. This was taken from the McCall Ferry Power Company file number 112.

• • •

(The document referred to was marked Exhibit Number 173 for Identification.)

By MR. HALL:

Q. Mr. Gunn, are you familiar with this particular document? A. I think I recall having seen it some time in the past.

Q. Was this one of the documents you obtained from the files of Lee, Higginson and Company? A. It appears to have been. I believe that was my only [7682] source of it.

• • •

MR. HALL: * * * May we have marked for identification, Mr. Examiner, as Exhibit 174, a document dated July 19, [10] 1907, taken from the Lee, Higginson and Company file, otherwise identified as McCall Ferry Power Company file number 112?

* * *

(The document referred to was marked Exhibit Number 174 for Identification.)

By MR. HALL:

Q. Is this another one of the documents you obtained from the records of Lee, Higginson and Company, Mr. Gunn? A. Yes, sir, it appears to be. That would have been our only source of this document. It appears to me to be a letter written in an attempt to sell McCall Ferry financing to some of Lee, Higginson's prospective customers.

MR. KING: Respondent counsel acknowledges receipt of Exhibits 173 and 174.

MR. HALL: This Exhibit 174 for identification is not all of the letter but the parts pertinent to what we have been discussing this afternoon. In other words, this is an [7683] excerpt from the Lee, Higginson and Company letter.

MR. KING: May I have staff counsel's statement, please?

(Staff counsel's statement read.)

MR. KING: Mr. Hall, on page 2 of the exhibit for identification number 174, do the asterisks indicate the omissions?

MR. HALL: Yes, where omissions were made.

* * *

[7685] MR. KING: Mr. Examiner, some days ago Mr. Hall asked me to produce the Lee, Higginson and Com-

pany participation. I now hand it to him with the statement that that is the only copy we have and would like to get it back as soon as possible.

• • •

[7686] By MR. HALL:

Q. Mr. Gunn, was the Lee, Higginson and Company participation submitted to Mr. Lee prior to the date of his affidavit contained in part 8 of Exhibit 27? A. Yes, sir. The participation as you have it was submitted to him prior to the date of his statement and, as you notice, a considerable number of parts of the participation came from Lee, Higginson's file. Most, if not all, of the documents contained in the participation had at various times been made available to Mr. Lee before the participation in the form in which you now have it was formally prepared and given to him.

Q. Was this complete participation submitted to Lee [7687] prior to the date of his affidavit? A. Yes, sir.

Q. Is this the final participation? A. Yes, sir.

Q. Did you say there were other drafts submitted to Mr. Lee before this final draft was prepared? A. Yes, I believe that is correct. I believe the first time I saw Mr. Lee I submitted to him a preliminary draft for his comments, and the draft you now have is the final form incorporating his comments.

Q. Do you have the preliminary draft you submitted to Mr. Lee? A. No.

Q. What caused you to change the preliminary draft? A. Some minor suggestions Mr. Lee made. I don't recall what they were. That suggestion that he made plus, I believe, perhaps some of the information we found in his files later, at least which he made available to us from his files.

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Vol. III

TRANSCRIPT OF RECORD

(Pages 1051 to 1586)

Supreme Court of the United States

OCTOBER TERM, 1951

No. 428

PENNSYLVANIA WATER AND POWER COMPANY AND SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND, PETITIONERS,

vs.

FEDERAL POWER COMMISSION ET AL.

No. 429

PENNSYLVANIA PUBLIC UTILITY COMMISSION, PETITIONER,

vs.

FEDERAL POWER COMMISSION

ON WRITS OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

PETITIONS FOR CERTIORARI FILED NOVEMBER 16, 1951

CERTIORARI GRANTED FEBRUARY 4, 1952

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DONALD GUNN.

CROSS-EXAMINATION (Continued).

[7691] THE WITNESS: To the extent Fisk's services were involved.

By MR. HALL:

Q. What specific banking services did Bertron, Storrs & Griscom furnish to McCall Ferry? A. They made arrangements for the attempt at financing under March 1st underwriting agreement, as a result of which about $4,000,000 subscriptions of bonds were obtained, and they were subsequently joint bankers with Fisk in the March 25th underwriting.

I do not know the details of the banking services they rendered.

[7692] Q. Are you saying that Bertron, Storrs & Griscom were reimbursed under the March 25, 1905 plan for the services that it rendered under the March 1, 1905 plan? A. I don't think I could say with certainty what may have been in the minds of the people who worked out the compensation to Bertron. The facts are that he did render the services that I mentioned in connection with the March 1st underwriting agreement, and that he was compensated in the amount of 7,462½ shares as a result of the March 25th underwriting, having been successful in completing the financing of the project.

Q. Lee's documents indicate consideration being paid under the March 1, 1905, agreement. Isn't that so? A. To what Lee's documents do you refer?

Q. Those included in Part 11 of Exhibit 27, for instance. A. No, sir, I wouldn't say they indicate that because, if you will refer to Part 11 of Exhibit 27, Page 85, which is a letter from Bertron, Storrs & Griscom to Lee, Higginson and Company, Harvey Fisk are there named as bankers, and they were not in the picture as bankers until the March 25 agreement.

If you will look at page 86, which is another letter from Bertron, Storrs & Griscom to Lee, Higginson and Com-

pany, you will find Harvey Fisk again mentioned as having [7693] agreed to the compensation for Lee, Higginson.

Q. Agreed with whom? A. Agreed with Bertron, Storrs & Griscom. As I understand it, Bertron, Storrs & Griscom and Harvey Fisk and Sons were joint bankers under the March 25 agreement.

If you will look at Page 87 of Exhibit 27 there is a letter from S. R. Bertron to Lee, Higginson and Company which again mentions Harvey Fisk and Sons as being agreeable to Lee, Higginson's compensation.

The same reference is made on Page 88 which is another letter from Bertron, Storrs & Griscom to Lee, Higginson and Company. It seems to me it is perfectly clear from those references that the compensation they were receiving was coming as a result of the successful completion of the underwriting by Fisk, and was under the control of Fisk and it was necessary that the compensation be finally approved by Fisk before Lee, Higginson could be given any.

Those letters also indicate to me that there probably never was such a thing as a written agreement amongst the bankers as to what their respective compensation would be.

Q. Did Lee, Higginson and Company forego any compensation for the services rendered under the March 1, 1905 plan? A. I don't know what you are referring to, Mr. Hall. Are you referring to the fact that compensation was based [7694] on $2,000,000 and they got somewhat more subscriptions than $2,000,000?

Q. No. A. What are you referring to?

Q. What I am getting at, Mr. Gunn, is whether the compensation paid to Lee, Higginson and Company referred only to services rendered under the March 1, 1905 plan or the March 25, 1905 plan, or both?

* * *

THE WITNESS: I don't know just how you could assign the compensation to the services, but the facts relating to their compensation are as I stated them. It is true that

they rendered services under the March 1, 1905 plan and that those services were preserved and carried forward, and there probably were additional services under the March 25 plan. They received their compensation as a result of the successful completion of the financing under the March 25 plan.

You can assign that compensation, I suppose, to any one of those depending upon what assumptions you wish to make. However, those are the facts.

By Mr. Hall:

Q. But isn't it a fact that everything Mr. Lee indicates in his affidavit, all the documents he considered, bear out the fact that he was basing his valuation on services [7695] rendered under both underwriting plans? A. I believe that is true of Mr. Lee's affidavit. I don't recall he makes any distinction between the two underwriting plans.

Trial Examiner: In your previous answer, where you said compensation was received through success of the March 25th plan, who were you talking about, Bertron, Storrs & Griscom?

The Witness: No, compensation of Lee, Higginson. That was the subject of the whole line of discussion at that point, or I so understood it, at least.

By Mr. Hall:

Q. Since Mr. Lee's affidavit influenced your valuation of the stock, then you applied a valuation to the services of the bankers which covered both underwriting agreements. Right? A. No, I don't think you would necessarily draw that conclusion because the successful March 25th underwriting agreement utilized the subscriptions that Lee, Higginson had previously obtained, and those subscriptions became subscriptions under the March 25th underwriting, and it seems to me it was therefore appropriate for the compensation to come for them under the March 25th underwriting since the subscriptions were a part of that underwriting.

Q. Are you saying, Mr. Gunn, you can not segregate [7696] the services one from the other? A. No, I am saying that whatever was rendered under the March 1st underwriting was equally valuable and equally valid under the March 25th underwriting.

Q. In other words, the valuations applied to both underwritings? A. Well, it seems to me there was only one successful underwriting, and that was the March 25th underwriting. You can divide it up however you wish. You have all the facts.

Q. Isn't it a fact that your valuation would not be the same if you ignored the March 1, 1905 services? A. I don't know whether it would or not. I don't know what Mr. Lee would say about that. My difficulty would be this: It was necessary at one time or another to get those subscriptions. Now,——

Q. Are you now referring to subscriptions obtained by Lee, Higginson under the March 1, 1905 plan? A. I am referring to all the subscriptions obtained by Lee, Higginson. It was necessary to have the Lee, Higginson subscriptions to complete the underwriting, as I see it. The subscriptions were obtained by Lee, Higginson and were used in the March 25th underwriting. I don't see that it makes any difference at what particular day in the month of February or March the subscriptions were obtained. They were still equally useful under the March 25 plan. It just [7697] doesn't seem to me that the compensation would necessarily change. Indeed, I don't see why it should change at all, that is the compensation to Lee, Higginson should change at all, so long as Lee, Higginson obtained that number of subscriptions and they were used in the successful underwriting.

Q. What you are saying, Mr. Gunn, amounts to this: That you can not say what amount——

Strike that, please.

What you are saying is that you can not ignore the services rendered under the March 1, 1905 plan? A. No,

I am not saying that. I am saying just what I previously said.

* * *

By MR. HALL:

Q. Now, Mr. Gunn, if you had limited yourself to the services rendered under the March 25, 1905 plan, would you [7698] still have arrived at a valuation of $25 per share of the common stock?

* * *

THE WITNESS: Do you include in that question, Mr. Hall, the assumption that Lee, Higginson obtained, under the March 25th plan, the same number of subscriptions that they in fact turned in?

By MR. HALL:

Q. No. A. Then your question relates to the subscriptions, whatever the number may have been, that they finally did obtain directly under the March 25th underwriting?

Q. That is right. A. No, I don't think—stock value?

Q. Yes. A. Yes, stock value on a per-share basis may have been the same, although I don't think Lee, Higginson would have gotten 5,000 shares of stock for that little bit of service.

Q. Did Bertron, Storrs and Griscom undertake to sell a specific amount of bonds and to be liable themselves for [7699] any unsold balance? A. I don't know.

Q. Isn't it a fact that Bertron, Storrs & Griscom merely acted as agents to sell bonds with no liability to take any of the unsold bonds? A. I don't know what the liability of Bertron, Storrs & Griscom was under the March 25th underwriting, except what Fisk said, which was to the effect that Bertron was joint account with him. What the arrangement may have been for the sharing of the responsibility between Bertron, Storrs & Griscom and Lee, Higginson I do not know.

Q. Did you examine the books and records of Bertron, Storrs & Griscom? A. I believe I saw the records of

their purchase and sale of stocks. As I recall it those are the only books they had.

Q. Included in Exhibit 27? A. Those are included in Exhibit 27.

Q. Did the books and records of that firm show the nature and extent of the services performed? A. No, sir. As I recall it, I understand from Mr. Adams, the records which would have shown that previously had been destroyed.

Q. Did the records of Bertron, Storrs & Griscom show any valuation for its banking services? [7700] A. No, not that I ever saw.

Q. Did they reflect the cost of the banking services? A. No, not that I know of.

Q. Did the books and records of McCall Ferry or Susquehanna Contracting Company show the nature and extent of the services performed by Bertron, Storrs and Griscom? A. Not completely. They showed certain services, I believe, directly and indirectly.

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THE WITNESS: Are you speaking of banking services there, Mr. Hall?

By MR. HALL:

Q. Yes. I understood you to say those were the types of services Bertron, Storrs and Griscom rendered. A. I think they rendered some other services other than banking services. What I had in mind when I started the answer to that question was that Bertron, Storrs & Griscom, I believe, assisted Fisk in obtaining, I believe, the Pullen option and, as I recall it, also some of the securities that passed under the Harlow-McGaw transaction along with the land, and, of course, Bertron appears to have been active and interested in the project along with Fisk throughout the development period.

[7701] Q. But if they rendered any of this incidental service you referred to, isn't it a fact that the 7462½ shares were in no way related to anything other than banking services? In other words, you are claiming the 7,000-plus shares

as representing cost of underwriting bonds. A. I think it is primarily compensation for the cost of underwriting bonds. Now, it is a fact they rendered these other incidental services, and I, of course, don't know what was in the minds of Bertron and Fisk when they agreed to that amount of shares. It has been my conclusion that it was primarily for banking but with recognition of the fact there was certain incidental service rendered——

Q. Haven't you in your Exhibit 26 and in your claimed cost treated all of the 7,000-plus shares as compensation for banking services? A. Yes, sir, I have. But in Exhibit 26 I have also stated these incidental services which Bertron rendered. I didn't have any basis for making a division between those because I didn't know the extent of them. So as an alternative I have treated the total compensation to Bertron as banking services.

Q. You don't even know whether Bertron, Storrs and Griscom were to be compensated for those incidental services. Isn't that so? A. That is right. I can't say that their compensation [7702] was in specific recognition of any of those incidental services.

Q. You have never found any valuation of the services of Bertron, Storrs and Griscom. Isn't that right? A. That is correct.

Q. Do you know the costs to Bertron, Storrs and Griscom of the services they may have rendered? A. No, I do not except in purchasing the Pullen option for which they were reimbursed by Harvey Fisk and Sons.

Q. Was there any contract between McCall Ferry and Bertron, Storrs and Griscom making McCall Ferry liable for the payment of services? A. Not so far as I know.

Q. Have you found any evidence that McCall Ferry ever contemplated paying cash for any services to be rendered by Bertron, Storrs and Griscom? A. You mean as compensation to Bertron, Storrs and Griscom?

Q. Yes, for banking services. A. No.

Q. Your answer would have been the same if I had included Susquehanna Contracting Company along with McCall Ferry? A. Yes, sir.

* * *

[7703] By MR. HALL:

Q. Did you attempt to get a valuation of the banking services of Bertron, Storrs and Griscom from that firm or any of the surviving partners? A. Yes, sir.

Q. Whom did you contact? A. I contacted Mr. J. O. Adams, Secretary of the firm, and asked him to in turn contact Mr. Griscom.

Q. Did you contact any one prior to your contact with Mr. Adams? A. No, sir.

Q. When did you contact Mr. Storrs? A. It appears I contacted Mr. Storrs—I don't know what the date of the letter was. Page 188 of Exhibit 27 shows that I first contacted Mr. Storrs on July 18, and that is contained in the first line of Mr. Storrs' reply to the company, which reply is dated July 21, 1938.

Q. Was that prior to your contact with Mr. Adams? A. No, it was subsequent to it. I don't know just when the first contact with Mr. Adams was, but the first letter, I believe, shown in Exhibit 27 on page 184, it being a letter from the company to Messrs. Bertron, Griscom and Company, was dated May 23, 1938, and it is clear from the letter that I had previously written to and talked to Mr. Adams—that is [7704] previous to the date of May 23, 1938.

Q. What was the purpose for your contacting Mr. Adams? A. He was the Secretary and Treasurer of Bertron, Storrs and Griscom.

Q. Was Mr. Adams the go-between between you and Mr. Griscom, so to speak? A. What do you mean by "go-between"?

Q. In other words, you contacted Mr. Adams and he, in turn, contacted Mr. Griscom. A. Yes, sir, that is right. I had a little difficulty seeing Mr. Griscom, and more diffi-

culty getting him to do anything. I think he had previous experience in the Conowingo case.

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By Mr. Hall:

Q. The fact is that you failed to get any statement from either Mr. Storrs or Mr. Griscom covering the early history [7705] of the McCall Ferry project. Right? A. Yes, sir, that is correct. Mr. Storrs' reply to my inquiry in that respect is shown on page 188 of Exhibit 27 and the reply of Mr. Griscom is shown on page 193 of Exhibit 27.

Q. Did you and Mr. Adams prepare this statement for Mr. Griscom's signature as shown on pages 194 and 195 of Exhibit 27? A. Yes, sir.

Q. Why did you deem it necessary to prepare a statement for his signature? A. Because Mr. Adams said if we didn't do it we wouldn't have any chance of getting a statement from him. We prepared the statement and then didn't get any statement from him.

Q. One of the things you asked Mr. Griscom to say in his proposed statement was:

> "My firm commenced as head of the underwriting group but eventually took a position junior to that of Harvey Fisk and Sons who took over leadership of the financing."

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Mr. King: The document speaks for itself. I see no purpose in the question.

Trial Examiner: He has not finished.

Mr. King: I am sorry.

[7706] By Mr. Hall:

Q. Mr. Griscom wouldn't go along with you in that connection, would he, Mr. Gunn? A. I don't think that is a fair conclusion.

Q. He didn't sign the statement; isn't that right? A. That is quite true, but in failing to sign it he said he had

no quarrel with any part of the statement, and any part of the statement includes that. He simply said he didn't have a recollection, and I believe he told Mr. Adams he didn't want to be involved in any more of these things.

Q. Having no recollection, Mr. Griscom was unable to subscribe to any statements—right? A. Well, as I read his reply he said simply that he didn't have enough recollection to justify him in making the statement.

Q. Are there any other letters covering your attempt to get statements from Bertron, Storrs and Griscom not contained in Exhibit 27? A. I don't know whether or not there are, Mr. Hall. I would have to check the file.

Q. Did you submit a participation to Mr. Griscom or Mr. Storrs or Mr. Adams? A. I submitted all of the documents and facts relating to their participation to Adams. I don't recall whether I [7707] submitted a specific participation or not.

When I first went to the Bertron and Griscom Company to attempt to get a statement, as I recall it, it was my hope of getting a statement from Mr. Bertron, who then was alive. When I went there Mr. Bertron had been taken sick a few days earlier. I was instructed by Mr. Adams to come back in a month or six weeks or some such. Before I got a chance to go see him he died. It was Mr. Bertron who was active in, and who had handled, the McCall Ferry transaction from Bertron, Storrs and Griscom's New York office while Mr. Griscom had been handling the end of their business which was located in Philadelphia.

As I understood from Adams, he had a limited knowledge of the Susquehanna River transactions of Bertron, Storrs and Griscom.

I made several attempts to obtain from Mr. Adams first an opportunity to talk to Mr. Griscom, and he wasn't disposed to talk to me.

I asked Mr. Hutchinson, I believe on one occasion, to go to Mr. Griscom and intercede, and Mr. Hutchinson sent me back a cryptic report that Griscom said he wasn't going

to be involved in any more of these original cost determinations.

Then I made an attempt through Mr. Adams to see Mr. Griscom. That was not successful, but Mr. Adams thought Mr. Griscom, if he, that is Adams, would vouch for the [7708] authenticity of the facts submitted to Mr. Griscom, that Mr. Griscom would sign the statement which is shown on page 194. As I recall it Mr. Adams was prepared to present to Mr. Griscom and discuss with him all of the facts, although I don't recall we ever had those made up in participation form.

Q. Did you ask Bertron, Storrs and Griscom for a valuation of their banking services? A. Not directly as such. What I was seeking to obtain from Mr. Griscom was his opinion as to what the stock was worth at the time his firm accepted it.

It very well may be that he would have approached his estimate of the worth of the stock through banking services, but I didn't indicate to him how I wanted him to make the determination, and for the reasons I have indicated, because of his reluctance to do anything at all.

Q. How about Lee, Fisk, and the others? Did you indicate how they were to value their services? A. No, I don't believe I did. I believe they rather, in the case of Lee and Fisk,—well, I can't say, I don't know how the question of valuing their services came in. In the case of Lee I discussed our problem with him and explained to him my understanding of the intentions of the original cost requirements, and I don't know how he came to the conclusion that it was necessary to value it through his [7709] services, except I believe one of the things which influenced him is the fact that the stock ultimately had no value.

As to why Mr. Fisk approached it from that point of view I don't know. That was something which was handled directly with Mr. Fisk by Mr. Cole, and I never knew the details of how the valuation was arrived at.

Q. What valuation did you place on the services of Bertron, Storrs and Griscom? A. I didn't place any.

Q. What valuation do you claim in your original cost statement? A. As a result of having arrived at the conclusion that the common stock is worth $25. a share I valued the shares which were given in compensation at $186,562.50.

Q. In other words, you multiplied $25 times 7,462 and a half shares of common. A. That is correct.

Q. Why did you place a higher value on the services of Bertron, Storrs and Griscom than those of Lee, Higginson and Company? A. Because Bertron, Storrs and Griscom received a higher compensation for their services than did Lee, Higginson.

Q. In other words, that was merely the mathematical [7710] result of the number of shares which you say each received. A. That is correct.

Q. Didn't Lee, Higginson and Company sell several times as many bonds as Bertron, Storrs and Griscom did? A. I think it can appropriately be concluded they sold more than Bertron, Storrs and Griscom did. Whether it was several times or not I don't know because I never have been able to identify who actually sold all of the bonds.

* * *

By Mr. Hall:

Q. Isn't it your position that Lee, Higginson and Company took a greater risk than Bertron, Storrs and Griscom under the bond and stock agreement of March 25, 1905? A. As regards the guaranteeing of subscriptions to bonds that is correct. That is as regards the guaranteeing of them to Knickerbocker Trust Company, the guarantee under the deferred subscriptions, which were pledged with Knickerbocker Trust Company under the loan.

Q. Wouldn't that indicate that Bertron, Storrs and Griscom were entitled to much less than 5 points commission if that amount is supposed to measure the risk of Lee, Higginson and Company in connection with procuring bond subscriptions? [7711] A. Not necessarily.

Q. How do you arrive at that conclusion, Mr. Gunn? A. Because it seems to me that Bertron, Storrs and Griscom might have performed other banking services and might have had other risks and responsibilities, for example, as joint bankers with Fisk which Lee, Higginson and Company didn't have, and it is also my understanding that it is a banking practice, although I am not a banker, that people who originate transactions in the banking sense also are entitled to some compensation for that fact.

Q. What specific banking service did Lee, Higginson and Company furnish to McCall Ferry? A. I don't know in any more detail than is included in Exhibits 26 and 27.

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[7718] By Mr. Hall:

Q. Mr. Gunn, do you have any evidence which would indicate that Lee, Higginson and Company were ever called upon to make good under any guarantee in connection with the financing? A. I have the evidence in that respect which was included on the tabulation which I previously mentioned as having been obtained from Irving Trust Company and which was recently given to the staff and which is also included as a document in the Lee, Higginson participation. As I recall there, for the purpose of the Knickerbocker Loan, they were required to guarantee several subscribers to McCall Ferry bonds, which subscriptions were presumably obtained by Lee, Higginson and Company, and they were also subscribers in the amount, I believe, of $2,300,000 for the purpose of implementing the guarantee, or the security pledged under the Knickerbocker Trust Loan.

Does that answer your question?

Q. Not exactly, Mr. Gunn. My question was did they ever actually make good any guarantee under the transaction of which you have spoken or any other transaction.

[7719] A. You mean was the firm as such ever required to——

Q. Make payments under the so-called guarantee you referred to? A. I don't believe I quite understand. Is your question this: Did any of Lee, Higginson's subscribers default and were they for that reason required to assume the subscribers obligation? Is that your question?

Q. Yes. A. I don't know whether they were or not.

Q. Isn't it your understanding that the subscribers were going to save Lee, Higginson and Company harmless from liability under the subscription agreement? A. May I have it read?

(Question read.)

THE WITNESS: Mr. Hall, you will have to be a little more definite about that, and for this reason: As I understand it, Lee, Higginson became a subscriber as a firm under the Harvey Fisk and Sons underwriting agreement, and then Lee, Higginson in turn made an underwriting agreement of their own under which they obtained subscriptions, which I suppose you might term a subsidiary underwriting agreement now. Which one of those are you referring to in your question?

By MR. HALL:

Q. I show you part 4 of the participation submitted [7720] to Mr. Lee. To what does that document refer? A. This document appears to be a subscription form for bonds and preferred stock of McCall Ferry Power Company, although in the document it is called Susquehanna Power Company, and the Susquehanna Company was an early name for McCall Ferry Power Company. This document is the Lee, Higginson subscription form upon which they obtained subscriptions, as I understand it, after the Lee, Higginson firm had itself subscribed to the Fisk financing presumably on the Fisk underwriting form.

Q. This document bound the subscribers of Lee, Higginson and Company to the extent stated therein, right?

* * *

THE WITNESS: Yes, sir. I understand "the extent stated therein," to cover a relationship between Lee, Higginson and Lee, Higginson subscribers, which arose as a result of Lee, Higginson as a firm having subscribed to bonds in the Fisk underwriting, presumably under the Fisk subscription contract. Therefore, this document that you have shown me describes the relationship between Lee, Higginson and Lee, Higginson customers, but not the relationship between Lee, Higginson and Fisk or the relationship between Lee, Higginson and Knickerbocker Trust Company as respects those subscriptions obtained by Lee, Higginson, payment of which was [7721] deferred and which was pledged under the Knickerbocker loan arrangement.

By MR. HALL:

Q. In other words, you are saying that if Lee, Higginson and Company incurred any liability by reason of its relationship to Harvey Fisk and Sons, that liability could be passed on and assumed by the subscribers of Lee, Higginson and Company? A. Yes, I believe that is the theory. Of course, it is only a theory, and if the subscribers didn't make good Lee, Higginson still would be in trouble with the subscriptions. I take that to be the reason that Knickerbocker Trust Company, in working up their settlement computations, which are also included in the Lee, Higginson participation, required that as a condition precedent to an extension of the Knickerbocker Trust loan, Lee, Higginson, as a firm, guarantee to make good on the subscriptions that had been obtained by Lee, Higginson from Lee, Higginson's own customers.

Q. By that you mean that the customers of Lee, Higginson and Company, as well as Lee, Higginson and Company, were obligated to Knickerbocker Trust Company? Is that what you are saying? A. Not quite. What I am saying is this: That apparently Knickerbocker Trust Company took the position that they [7722] would look directly and solely to the firm of Lee, Higginson for se-

curity under the Knickerbocker Trust loan, thus leaving it up to Lee, Higginson as to what they might do with respect to the relationship between the firm of Lee, Higginson and Lee, Higginson subscribers. Maybe that is the same thing but it seems to me they are just slightly different.

[7723] Q. Did Lee, Higginson and Company, or any representative thereof, show you any valuation of the banking services of that firm? A. No, sir, nothing more than stated in Lee's affidavit.

Q. Did anyone show you the cost to that firm of its banking services? A. No, sir.

Q. Do you know what that cost was? A. No, sir.

Q. Did the books and records of McCall Ferry or Susquehanna Contracting Company show the nature and extent of the services performed by Lee, Higginson and Company? A. Only to the limited extent that is shown in Exhibit 27 and in the company's records which have been available to the Commission Staff.

Q. Did the McCall Ferry or Susquehanna Contracting Company show any valuation of the Lee, Higginson and Company banking services? A. No, sir, except to the extent that Lee, Higginson received the securities and compensation for them.

Q. Was there any contract between McCall Ferry or Susquehanna Contracting Company and Lee, Higginson and Company making McCall Ferry liable for the payment of banking services? A. Not so far as I know.

[7724] Q. Have you found any evidence that McCall Ferry or Susquehanna Contracting Company ever contemplated paying cash for any of the banking services to be rendered by Lee, Higginson and Company? A. No, sir.

* * *

[7742] By Mr Hall:

Q. Mr. Gunn, I believe you have selected July 15, 1905 in your computations as the time of the issuance of the bonds. Right? A. I think it was June 15.

Q. Yes, June 15. A. That is right; yes, sir.

Q. As of what date were the bonds actually issued to the subscribers? A. You are referring there to people beyond the bankers when you speak of "subscribers"?

Q. Yes.

• • •

THE WITNESS: The $250,000 par value of bonds which went to Harlow-McGaw in exchange for their property was issued [7743] in June, 1905. The bonds to the non-deferred subscribers were issued about February, 1908, and the bonds to the deferred subscribers were apparently issued about November, 1908.

MR. KING: By "issued", Mr. Hall, you mean mechanical passage of the certificates?

• • •

MR. HALL: I mean the time at which the bonds were turned over to the subscribers.

• • •

[7744] By MR. HALL:

Q. Mr. Gunn, why did you choose the date of June 15, 1905 to begin the amortization of bond discount expense, when the bonds were not issued until 1908? A. That is the date the bonds were issued by McCall Ferry Power Company I believe to Susquehanna Contracting Company, or at least as I recall it is the date on which interest on the bonds began accumulating.

• • •

By MR. HALL:

Q. When was interest first paid on bonds issued to subscribers? A. As I understand it, according to the underwriting agreement of March 25, they were to be credited, the subscribers I mean were to be credited, with interest from the date of their payments, the first payment of which was shortly after issue in the case of the deferred subscribers.

Q. Isn't it a fact, Mr. Gunn, that the subscribers were to be paid interest only on the advancements made? A.

Yes, I think that is right. That is all they were entitled to, I believe, under the underwriting agreement.

Q. It had nothing to do with bond intrest. [7745] A. It seems to me it did. It seems to me it was at the rate of bond interest.

Q. And that is the only relation it had?

* * *

THE WITNESS: The specific relation in the terms of the underwriting agreement are given on page 82 of Exhibit 27, and reads as follows:

"The price is $900, and accrued interest, if any, for each $1,000 bond, together with preferred stock of the par value of $450, and is payable to the bankers at their office No. 62 Cedar Street, New York City, in installments of not more than 20 per cent each, the first upon five days' notice on or after allotment, and the others upon call of the bankers on 20 days' notice. The subscribers are to be credited with interest at five per cent per annum on all installments from times of payment until delivery of bonds and stock."

If you will refer to the tabulation which was obtained from Irving Trust Company, successors to Knickerbocker Trust Company, you will find that in the settlement at the time of delivery of bonds that credit of interest was treated as bond interest, the latter being further evidence of the fact it was construed as bond interest.

TRIAL EXAMINER: The rate on the bonds was what?

[7746] THE WITNESS: Five per cent.

TRIAL EXAMINER: Same rate of interest, then, on both instances?

THE WITNESS: Yes, sir, and in the instance of the settlement by Knickerbocker Trust Company the interest that had been credited to these advances was offset against the coupons on the bonds, thus bringing the relationship of the two into what seems to me to be complete consonance.

TRIAL EXAMINER: The interest which accumulated on the deposit by the subscribers, payments by the subscribers on call, was not actually paid in cash but later on paid by bond coupons?

THE WITNESS: No, it was later on used to reduce the final payment of the bond subscribers.

I believe another fact, Mr. Examiner, that ties it in closely is the fact that while the people who advanced the money received a five per cent credit the cost to Susquehanna Contracting Company of the money obtained from Knickerbocker Trust Company was nominally six per cent, with a pre-payable bonus to Knickerbocker Trust Company which made the cost of that money about 6.9 per cent.

* * *

By MR. HALL:

Q. Mr. Gunn, isn't it a fact that in making the [7747] settlement Knickerbocker Trust Company calculated only the accrued bond interest from the date next preceding the date of settlement? A. I think that is correct. The exact calculation is shown on the tabulation which was obtained by me from Irving Trust Company, and is included as a part of the Lee, Higginson participation.

* * *

By MR. HALL:

Q. The amount upon which interest was credited was less than the face value of the bonds; right? A. Yes, to be sure. Interest was credited on the payments as they were made. In the case of deferred bond subscribers, the payments were made on 20 per cent calls.

Q. In other words, the subscribers did not receive the full coupon rate prior to the date of issuance of the bonds to the subscribers.

* * *

THE WITNESS: Certainly they did. They received the full five per cent. That is the coupon rate.

[7748] By Mr. Hall:

Q. The full five per cent on the face value of the bonds? A. No, full five per cent on the money they had advanced.

* * *

[7769] By Mr. Hall:

Q. Mr. Gunn, I believe you previously testified that Hillside Water and Power Company and Susquehanna Water and Power Company were paper companies with no funds and no assets; right?

* * *

The Witness: That is substantially correct. I believe probably the qualifying shares were paid for, but aside from that they had no assets that I know of.

By Mr. Hall:

Q. Since these companies were organized by Hutchinson, isn't it reasonable to conclude that Hutchinson supplied the funds required to create them?

* * *

[7770] The Witness: I don't know, but I think it is a reasonable conclusion for whatever that is worth.

By Mr. Hall:

Q. You have also assigned a cash value of $25 per share to the ten incorporators' shares, right? A. Yes, sir, I did that. I believe that is correct. I used $25 a share consistently for all valuation of McCall Ferry Power Company stock which entered into the determination of original cost.

Q. Have you included the $250 cash value for these shares in your original cost determination? A. Yes, sir.

Q. What do you claim the $250 represents?

Mr. King: $250?

Mr. Hall: Yes, ten incorporators' shares at $25. per share.

THE WITNESS: It represents the cash value of the stock.

By MR. HALL:

Q. How have you classified the $250 for the purposes of your claim? A. Included in organization expense.

Q. For what company does the $250 represent organization expense? A. Two companies which were merged to create McCall [7771] Ferry Power Company.

Q. Wasn't Hutchinson reimbursed for the expenditures in organizing those companies by the $750,000 cash? A. I don't know whether he was or not.

[7772] Q. Will you refer to Account 301 of the uniform system of accounts? A. Yes, sir.

Q. Doesn't Note "B" of Account 301 require you to exclude the cost of organizing predecessor companies when the cost of reorganization is included?

* * *

THE WITNESS: You don't mean cost of reorganization, do you, Mr. Hall? In this instance it was a consolidation, and I think that is what you refer to.

By MR. HALL:

Q. Isn't it a fact, Mr. Gunn, that Note "B" of Account 301 requires that the cost of organizing predecessor companies is to be excluded if the cost of reorganization is included in the plant account? A. The account states that and states also that mergers and consolidations must be excluded, but I don't think the words used in that account have any application whatever to the situation in McCall Ferry Power Company respecting the Hillside and the Susquehanna Companies. It seems to me it is wholly inapplicable.

Q. Why? A. Because, as I understand it, it was a legal necessity to create those two companies as a condition precedent [7773] to the creation of the McCall Ferry Power Company, and if that be true it clearly does not fall within the meaning of Note "B" so far as I can tell.

Q. Nevertheless, the $250 we have been discussing represents the cost of organizing predecessor companies? A. No, I don't think it represents that.

Q. What do you think it represents? A. It represents the market value of the qualifying shares in those companies at $25 a share.

Q. What is the basis for the claim for the market value of those shares? A. Because that is, as far as we know, the best measure of organization expense.

Q. Why do you include the cost of organizing those two companies in Penn Water's organization expense? A. Because they were a legal pre-requisite to the creation of both McCall Ferry Power Company and Pennsylvania Water and Power Company. Without the incurring of that expense neither corporation could have existed. That is my understanding of it, at least.

Q. Incurring of what expense? A. Incurring of the expense that I have imputed to the organization of the Hillside and the Susquehanna Company and as measured by the market value of the qualifying shares in those companies. Incidentally, I don't think that represents [7774] more than a small fraction of the cost of organizing the companies but at least that is all we have included in the original cost for it.

Q. In other words, you have included the amount of $250 in lieu of actual cost, right? A. I have included it as a part of the organization expense of subsidiary companies, being Hillside and Susquehanna Companies, which were necessary to be organized before either McCall Ferry Power Company or Pennsylvania Water and Power Company could be created, as I understand it. It was a legal matter and a legal requirement, as I understand it.

Q. Do you know the actual cost of organizing Hillside and Susquehanna? A. No.

TRIAL EXAMINER: Where did you get the figure of $25 a share?

THE WITNESS: It, Mr. Examiner, represents the general conclusion as to the value of McCall Ferry Power Company common stock which we have concluded was $25 a share and the shares we are now discussing are the qualifying shares which, for the want of a better figure, I also valued at $25 a share in the interest of consistency in the valuation of all of McCall Ferry's common stock.

By MR. HALL:

Q. Mr. Gunn, I believe you have indicated that it was [7775] decided to build a dam of 185 foot elevation about August 8, 1905? A. The recommendation for a dam at that elevation by the board of advisory engineers was on the date of August 7, 1905.

Q. And it was decided to build a dam of 165 foot elevation in June of 1906, right? A. Yes, sir, June 19, 1906.

• • •

By MR. HALL:

Q. So, Mr. Gunn, prior to August 8, 1905, the plans called for the construction of a dam of 155 foot elevation, right? A. Yes.

• • •

[7776] Q. Do you want to add something? A. Yes. Various elevations, I believe, had been considered prior to August 8 ——

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THE WITNESS: What is bothering me, Mr. Examiner, is that I have given a categorical answer that is not correct without qualification.

TRIAL EXAMINER: Very well.

THE WITNESS: The qualification would have to be this: At various times prior to August 8th various elevations had been considered, but at the time the financing was undertaken the elevation then in contemplation was 155.

By Mr. Hall:

Q. And financing was based on elevation 155, a dam with elevation 155? A. Yes, sir.

[7777] Q. Did Mr. Hutchinson, by reason of his option of April 14, 1903, with Harlow-McGaw, secure the right to flood the canal above McCall Ferry, above the McCall Ferry site?

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The Witness: Yes, sir, but there were several obligations attached to the securing of that right.

By Mr. Hall:

Q. As a result of that agreement isn't it then a fact there was then no barrier to Hutchinson's proposed development?

• • •

The Witness: That is correct, if the terms of that agreement were carried out, both as regards Harlow's obligations and Hutchinson's obligations, there would have been no barrier so far as Harlow-McGaw were concerned.

[7778] Q. Hutchinson's option still was in effect when the financing for the 155 foot dam was completed; right? A. Hutchinson's option with Harlow-McGaw?

Q. Yes. A. Yes, sir.

• • •

By Mr. Hall:

Q. Isn't it a fact, Mr. Gunn, that for the purpose of the development contemplated in March of 1905, Hutchinson's option covered all the properties necessary for that development, referring to the option with Harlow-McGaw?

• • •

The Witness: Yes, at least that appears to have been the conclusion of those who were involved in the transaction at that time.

• • •

[7779] I think I had better limit that answer to this extent to say that Hutchinson's option included all of the

property owned by Harlow-McGaw necessary to the project then contemplated.

By Mr. Hall:

Q. Then how can you explain the total purchase of the Harlow-McGaw properties by Fisk for McCall Ferry? A. There are several reasons for it.

Q. Will you indicate those reasons? A. Well, one of the reasons is that by the purchase of that McCall Ferry Power Company came into substantial control of the whole of the potentially valuable section of the Susquehanna River from Columbia to Tidewater, that is potentially valuable for water power developments.

In addition to that they escaped very large, or what may have become very large, costs to them in satisfying their obligations under the agreement with Harlow-McGaw.

Q. What are the large obligations to which you refer, Mr. Gunn? A. The construction, and I believe also the operation of locks through the Holtwood dam, the construction, and, as I recall it, the operation of locks at the head of the reservoir of the Holtwood dam reservoir for re-entrance into a canal, and the provision of alternative route for Harlow- [7780] McGaw's railroad, that is a route alternative to the canal towpath that he was then considering.

Q. Those expenditures would be necessary only if it were decided to make the river navigable and construct the railroad; right? In other words, Mr. Gunn, the expenditure could be deferred until that was decided upon. A. Mr. Hall, I have not read sufficiently recent the agreement, but it is my impression Harlow had the right to insist upon the performance of those conditions at will. If you wish I will read the agreement and ascertain if that is a fact.

Q. No, that is not necessary at this particular time, Mr. Gunn. But the expenditures to which you referred would be necessary only after Harlow-McGaw had indi-

cated the desire to carry out the canal and railroad plan; right?

• • •

THE WITNESS: No, that is not my recollection.

By MR. HALL:

Q. What is your recollection? A. My recollection is that Harlow-McGaw could insist [7781] upon compliance at any time.

As I said, to make certain of that I will have to read this agreement which is part 2 of Exhibit 27.

Q. What amount have you included in your original cost determination for the Harlow-McGaw lands?

• • •

[7782] THE WITNESS: $450,432.

By MR. HALD:

Q. Did you consider that the amount of $13,772.22 which you claim in connection with the Pullen option is a cost of the Harlow-McGaw lands? A. I don't know how I considered it. I considered it just as it is set forth on page 53 of Exhibit 26, namely, that it was a cost of the Pullen options. I had no occasion to connect it up with anything else.

Q. It is a fact that option was purchased in order [7783] to acquire the option of the Harlow-McGaw lands? A. I don't know. You will have to draw your own conclusion.

Q. Are you saying that the amount of $450,432——

Will you withdraw that last question, please?

Didn't you have to determine what the amount of $13,772.22, relating to the Pullen option purchase, represented in order to include it in your claim cost? A. Certainly I determined what it represented. It is fully explained in Exhibit 26.

Q. What does it represent? A. It represents cash of ten thousand dollars, interest of $22.22, and 150 shares

of common stock at $25, that being $3,750, making a total of $13,772.22.

Q. How did you classify the total amount of $13,772.22 in your original cost determination? A. As land cost.

Q. And what lands did you associate that amount with? A. None, I just put it in the lands account. It was not necessary to associate it with any land.

Q. What lands were acquired in return for the $13,772.22? A. The Pullen option.

Q. Is that land cost? A. Land right; cost of land right.

[7784] Q. What land does it cover? A. The option speaks for itself. It is in Exhibit 27. Do you want me to read it?

Q. Don't you know without reading it? A. No. If you want to know what it is I will read it into the record.

Q. Didn't you have to know what land it related to in order to determine your cost? A. Yes, sir, I knew exactly what was in the Pullen option seven or eight years ago but I don't remember now.

Q. Are you saying, Mr. Gunn, that you do not now know whether or not it is proper land cost? A. I certainly am not saying that. I am convinced that it is thoroughly proper land cost.

Q. Then, what land is it a proper cost of? A. It is a proper cost of the land rights which went into the creation of the McCall Ferry development.

Q. Which particular tract of land? A. I didn't associate it with any particular tract of land. But as I remember about a week ago I testified it was associated with an option over the Welsh properties, I believe, and an option over the Harlow-McGaw properties.

Q. In other words, you considered that amount to be part of the cost of the Harlow-McGaw properties? A. You may so construe it if you wish. All I did with [7785] it was to determine what the amount was and put it in McCall Ferry Power Company's land cost account.

Q. You don't have a copy of the option held by Pullen in your Exhibit 27, do you? A. No, I believe I was mistaken in referring to Exhibit 27. There is at least a summary of it in Exhibit 26.

Yes, Mr. Examiner, I find that the agreement itself is included beginning at page 94 of Exhibit 27.

TRIAL EXAMINER: In part 2 of Exhibit 27 is the acquisition by Hutchinson of an option on the Harlow-McGaw property. Is that correct?

THE WITNESS: Yes, sir. That is not exactly right, Mr. Examiner. It is the right to flood any of Harlow-McGaw's properties that would be flooded by Hutchinson's proposed dam at McCall Ferry, whatever that would be.

TRIAL EXAMINER: And that right is the right which is represented by your amount of 450,000-odd dollars on page 3 of Exhibit 26?

THE WITNESS: No, sir. That right is the right that is reflected by the necessity to build locks through the dam to provide Harlow with another railroad right of way and to provide entrance locks to a canal above, at the upper reaches, of the Holtwood reservoir.

TRIAL EXAMINER: What covers the Harlow-McGaw properties and rights?

[7786] THE WITNESS: Of what do they consist?

TRIAL EXAMINER: No, what document embraced in Exhibit 27 covers the acquisition of Harlow-McGaw's properties and rights?

THE WITNESS: Part 15 of Exhibit 27, which is page 125.

TRIAL EXAMINER: And the rights conferred by that agreement between McGaw, Harlow and Houseman on one hand and Harvey Fisk and Sons on the other, is what you have valued at 450,000-odd dollars?

THE WITNESS: Yes, sir, the 450,000-odd dollars being the consideration paid for those rights.

By Mr. Hall:

Q. Does the amount of $450,432 represent the market value of the Harlow-McGaw properties at the time of their acquisition? A. Mr. Hall, by "market value" are you referring back to the definition of market value you gave me several days ago, namely, a willing seller will accept and a willing buyer will pay if both were equally informed?

Q. I referred to that with reference to market value of securities, I believe. A. Does that definition still hold good here?

Q. Yes.

• • •

[7787] The Witness: In the light of your definition I would doubt very much if that represented the market value.

[7788] Q. What investigation did you make of the reasonable cost or market value of those properties? A. None. I think it is obvious under the condition of the sale that the market value as you have defined it would have been greater than what was there paid in that transaction.

Q. In other words, you are saying that the McCall Company acquired the property at less than market value? A. Yes, undoubtedly, under your definition of market value, because it is perfectly obvious that Harlow-McGaw were no longer free agents after Harvey Fisk and Sons succeeded in completing the financing.

Q. What do you mean by that? A. I mean simply this: That there was a limited power market within the reasonable reaches of the Susquehanna River and the McCall Ferry development was the most economical site to develop. When that site had been developed it was known by all who were familiar with the river at that time that it would be many, many years before another development could be justified. Subsequent events proved that it was 15 or 20 years before another development was in fact justified, and Harlow-McGaw were simply stuck with this property and they had either to sell it to Fisk or sit there

and hold it without any prospects for a long, long time of getting their money out of it.

[7789] TRIAL EXAMINER: The McCall Ferry Power Company, however, needed those rights, didn't they?

THE WITNESS: No, they didn't have to have them. The option Hutchinson had was adequate for them.

TRIAL EXAMINER: I thought at least some small part of it was necessary.

THE WITNESS: There may be some doubt about that to this extent, Mr. Examiner——

TRIAL EXAMINER: Those Harlow-McGaw rights covered rights to the Susquehanna and Tidewater Canal and Else Island, is that right?

* * * *

THE WITNESS: By "Those Harlow-McGaw rights" you are speaking now of the ones which came in by actual ownership through Harvey Fisk and Sons?

TRIAL EXAMINER: No, I am referring to the ones that are covered by the valuation of 450,000-some odd dollars.

THE WITNESS: That is the one which came in through Harvey Fisk and Sons?

TRIAL EXAMINER: Yes.

THE WITNESS: McCall Company didn't have any need for Else Island. The project map indicates that Else Island is in the Safe Harbor project.

TRIAL EXAMINER: But the lower part of the Island is beyond [7790] the Safe Harbor project?

THE WITNESS: Yes, but it is also above the backwater of the Holtwood project.

TRIAL EXAMINER: It is?

THE WITNESS: Yes.

TRIAL EXAMINER: What about the Susquehanna and Tidewater Canal?

THE WITNESS: Well, Hutchinson had obtained in his option from Harlow and McGaw the right to flood that canal in that 1903 option. I think it was dated April 14. We referred to it a few minutes ago.

By MR. HALL:

Q. That option never was exercised? A. No, but it was in force at the time Harvey Fisk and Sons bought the water power rights. It could have been exercised.

• • •

[7796] By MR. HALL:

Q. Will you refer to the map in the back of Exhibit No. 26 and point out the properties acquired from Harlow-McGaw? A. The properties acquired from Harlow-McGaw by Harvey Fisk and Sons are shown on that map in green.

They consist of the Susquehanna Tidewater Canal, the Proprietors of Susquehanna Canal, and numerous separate parcels lying along the shore and include islands in the Susquehanna River between Wrightsville and Columbia, Pennsylvania, at upstream limit and Havre de Grace, Maryland, at the downstream limit.

Q. Will you indicate what portions of those properties were required for the McCall Ferry project? A. The property which was required for the McCall Ferry project——

MR. KING: Excuse me, Mr. Gunn.

You mean at the elevation at which it was built or the elevation considered prior to that time?

MR. HALL: At which it was built, Mr. King.

THE WITNESS: May I ask one question? At which it was built and using flashboards the way they are now used?

By Mr. Hall:

Q. Yes. A. With that clarification, the property acquired from Harlow-McGaw by Harvey Fisk and Sons which was required for the [7797] Holtwood development as the Holtwood development was built and is now operated consisted of the section of canal, that is the Susquehanna and Tidewater canal, from a point about a mile below the Holtwood dam extending to a point upstream approximately to the present location of the Safe Harbor dam, as well as a flooding easement over Else Island, to the extent that that island lies downstream of the Safe Harbor dam.

That flooding easement is made necessary because, under certain particular flow conditions which occur at odd intervals of time, a part of the island is flooded.

• • •

Q. You mean flooded by the Holtwood dam backwater? A. Yes, sir.

Q. What portion of the properties acquired from Harlow-McGaw were useful for the Safe Harbor project? A. That part of the Susquehanna and Tidewater canal which extends from the Safe Harbor dam upstream to Wrightsville, or approximately to Wrightsville, together with the portion of Else Island which lies upstream from the downstream side of the Safe Harbor dam foundation.

Q. Aren't there six other small islands included in the Harlow-McGaw land necessary for the Safe Harbor project?

• • •

[7798] The Witness: Yes, sir, there were, and those other small islands were originally a part of Else Island and have since been broken off and acquired names. That is the reason why they are not shown separately on the map which is a part of Exhibit 26.

By Mr. Hall:

Q. In other words, they are included in Else Island on the map? A. That is correct.

Q. Using this map will you generally describe those lands and riparian rights acquired from Harlow-McGaw which lie below the McCall Ferry tailrace?

* * *

THE WITNESS: Yes, sir. In order to make that explanation I will have to make a slight amendment to the property I described as being necessary to the Holtwood project. The downstream extent of the Holtwood project would be marked by a line drawn across the river just upstream from the end of Bear Island.

[7799] If you will notice on the east side of the river there is shown two tracts of land in green just upstream from that line. The first tract was acquired as a tract of land separate from the canal by Harlow and thus acquired by Penn Water from Harlow in the transaction between Harlow-McGaw and Harvey Fisk and Sons.

TRIAL EXAMINER: The west side rather than the east?

MR. KING: That is what we think, Mr. Examiner.

THE WITNESS: Yes, sir, it is the west side of the river, Mr. Examiner. I was mistaken.

Just upstream from the tract I just described is another tract of land which was a part of the canal acquired from Harlow-McGaw and which is also used and useful by Penn Water in its Holtwood project.

Now, proceeding to answer your question directly, downstream——

MR. HALL: Is that the Kilgore tract you had reference to, Mr. Gunn?

THE WITNESS: The first one was the Kilgore tract, that is the tract of land laying nearest to the downstream boundary of the Holtwood project that I just described.

Proceeding now to the description of property in answer directly to your question: On the west side of the river there is the canal and canal rights extending from a point near the upstream end of Bear Island to Havre de

Grace, [7800] Maryland, which was a part of Harlow-McGaw and which was not used and useful in the Holtwood project.

Just opposite Bear Island are two separate parcels of land which were acquired in that transaction and which were not used and useful in the Holtwood project.

Continuing downstream to the point where there is indicated the Conowingo Bridge, just below the Pennsylvania-Maryland line, there is another tract of land which was acquired from Harlow-McGaw and which was not used and useful in the Holtwood project.

Continuing further downstream to a point just north of Roberts Island there are two tracts which were not used and useful in the Holtwood project.

Continuing further to the vicinity of Havre de Grace there is there shown another tract. All of the tracts I have just been explaining lie on the west side of the river and downstream from the Holtwood project.

Proceeding now to the east side of the river and downstream from the Holtwood project there are three tracts of land lying between Fishing Creek and a point opposite Johnson Island which were acquired in the Harlow-McGaw transaction and which were not used and useful in the Holtwood project.

Continuing further downstream there are two separate tracts just south of Peters Creek and just north of the [7801] Pennsylvania-Maryland line which were acquired in that transaction and were not used and useful in the Holtwood project.

Just south of the Pennsylvania-Maryland line, beginning at a point identified as Ark Haven, is the canal and canal rights of Proprietors of Susquehanna Canal which extends from Ark Haven to a point identified as Rock Run, which is the head of Tidewater in the Susquehanna River.

In that same area, aside from and in addition to the canal rights, a large tract of land identified as Bell Farm lying on each side of Conowingo Creek and it was acquired

from Harlow-McGaw. It was not used and useful in the Holtwood project.

Continuing further downstream to a point identified as Octoraro Creek and extending upstream is another tract of land acquired from Harlow-McGaw and not used and useful in the Holtwood project.

The property I have now just described lies on the east side of the river.

In addition there was acquired from Harlow-McGaw several islands lying downstream from the boundaries of the Holtwood project, these being Bear Island opposite Muddy Creek just downstream from the Holtwood project, Johnson Island, lying near the eastern bank of the river and located between Fishing Creek and Peters Creek, an unidentified island [7802] lying about the middle of the river and just downstream from the site of the old Conowingo Bridge, another island identified as Amos Island, lying near the western shore of the river and upstream from the point identified as the present site of the Conowingo Dam.

That, I believe, completes the description of the property acquired from Harlow-McGaw in the Harvey Fisk and Sons transaction and which is now not used and useful in the Holtwood project but located below the boundaries of the Holtwood project.

By Mr. Hall:

Q. Is that all, Mr. Gunn? A. I have just noticed that in describing the islands I missed one unidentified island which is located near the eastern shore of the river opposite a point on the east shore of the river, identified as Fites Eddy.

Q. Mr. Gunn, was the name of the second tract of land acquired from Harlow-McGaw which you mentioned as lying within the Holtwood line boundary the Cunningham tract? A. Yes, sir, that is correct.

Q. From your description I take it that there was much more land and riparian rights acquired below the

project boundary of McCall Ferry from Harlow-McGaw than above the project boundary.

* * *

[7803] THE WITNESS: In making my description of the property acquired from Harlow-McGaw by Fisk, and which is not now used and useful in the Holtwood project, I used the term "Holtwood project boundary" for the want of a better one and described it as being a line drawn across the river approximately at the upstream end of Bear Island.

Now, it is necessary to draw the line of demarkation between the Holtwood project and the downstream project at about that point because the construction of the Holtwood Dam disturbed the river flow, or at least the distribution [7804] of the river flow, down to that point and made it necessary for Holtwood Company to own the water power rights on both sides of the river down to approximately that point at least.

By MR. HALL:

Q. I take it just then, Mr. Gunn, you were answering the Examiner's question or clearing up the question he mentioned.

Now, will you answer the question as to whether or not there is much more land and riparian rights acquired below the McCall Ferry boundary as you have described it from Harlow-McGaw than above that boundary. A. By "much more" what do you mean? Footage, acreage, value, or how do you want that "much more" measured?

* * *

Q. River front footage and acreage. A. It is simply an inquiry as to whether there is more down than upstream?

Q. Yes. A. It appears evident that on a front footage or acreage basis a larger proportion of the property acquired from Harlow-McGaw lies downstream from the downstream boundary of the Holtwood project than lies upstream from that boundary.

[7805] Q. The properties below that boundary were those which Harlow-McGaw had intended using for the lower development. Right? A. What lower development, Mr. Hall?

Q. The lower development Mr. Harlow had in mind. A. He had several lower developments in mind.

Q. For any lower developments? A. Well, Mr. Harlow had contemplated a scheme of developing the river all the way from Wrightsville to Havre de Grace, utilizing primarily his canal which consisted of power house "A", so identified on the map, and lying just upstream from the Conowingo Bridge, another power house identified as power house "B", just upstream from the Maryland-Pennsylvania line, another power house identified as power house "C", adjacent to the downstream end of Bear Island. All of those power houses were at one time or another contemplated by Harlow-McGaw for development of that section of the river which is south of the present boundary of the Holtwood development, although power house identified as Harlow power house "C" at the downstream end of Bear Island would have flooded what is now the Holtwood Dam site.

Q. And those Harlow-McGaw properties below the boundary as you have described it now form the major part of the lands in the Conowingo development. Right?

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[7806] THE WITNESS: No, I don't think that would be at all true, Mr. Hall. I say that for this reason: If you will notice the map there are what offhand looks to me to be 50 or 100 islands in the river which were not acquired from Harlow-McGaw.

In addition to that, the canal rights which Harlow-McGaw had were at a low elevation and extensive land rights at a higher elevation than the canal rights, all along both shores had to be acquired in addition to what came from Harlow-McGaw, because the Conowingo development has a head in excess of 90 feet which flooded much more

land in all directions than were acquired from Harlow-McGaw.

[7807] Q. The lands lying below the Holtwood boundary as you have described it constituted a substantial part of the lands now comprising the Conowingo project? A. No, I wouldn't say that, Mr. Hall. Offhand I wouldn't say it was even a substantial part, though it would take a thorough investigation to determine that. I can say that what was acquired from Harlow-McGaw by Harvey Fisk and Sons, and was used in the Conowingo project, is all of Harlow-McGaw property that I have described which lies upstream of a point at the mouth of Octoraro Creek and downstream from the downstream boundary of the Holtwood project. I think that is about all you can say.

If I had to characterize it I would say it was not a very great proportion of the water power rights which were ultimately required for the Conowingo project.

Q. What lands did Susquehanna Power Company seek to acquire through condemnation in 1906?

* * *

THE WITNESS: As I understand it it was all of the lands lying in Maryland which were then owned by McCall Ferry Power Company and which had been acquired from Harlow-McGaw by Harvey Fisk and Sons.

By MR. HALL:

Q. Did McCall Ferry own any lands in Maryland not [7808] acquired from Harlow-McGaw? A. Not so far as I know. At least they didn't hold any along the river. They held some transmission line rights-of-way but that had nothing to do with the river.

Q. For what purpose did Susquehanna Power Company seek to acquire the land in Maryland? A. Hydro-electric power development as I recall it.

Q. I take it from what you said Susquehanna did not want all of the land below the McCall Ferry boundary but only the land lying within the State of Maryland? A. I

don't know that you could draw that conclusion, but the condemnation proceeding we previously talked about was a Maryland condemnation and obviously they couldn't condemn Pennsylvania property in a Maryland court. I wouldn't say it followed from that that they didn't want the property in Pennsylvania, because I think they did.

Q. Mr. Gunn, isn't it a fact that the proposed Susquehanna Power Company dam was proposed to be erected to elevation 65 and would flood only to the Pennsylvania line?

• • •

[7809-7810] Mr. Gunn, I was speaking of Harlow's plans at the time of condemnation. A. I know you were. I say that Harlow at one time or another considered several alternative ways of developing the river, and I can't recall which one he was contemplating at the time this condemnation was brought.

If you will refer to the map in Exhibit 26 you will see that Harlow's scheme "A" contemplated a powerhouse just above the Conowingo bridge.

Now, it may have been that he was contemplating the development of that site first, in which event he may have intended to flood back about to the Pennsylvania line with that project and then, following that, to develop what is identified as Harlow Powerhouse "B", just north of the Pennsylvania line, and with that development utilize the remainder of the rights which Harlow-McGaw had formerly owned which lay within the State of Pennsylvania. As I said, I cannot remember on what scheme for the development of the river Harlow was working in 1906 when they undertook that condemnation proceeding.

I do know this: That McCall Ferry had intentions of developing the reaches of the river below the McCall Ferry [7811] site, and when they negotiated the railroad relocation agreement you probably recall they had a provision in there relating to the rundown, that is the grade, of the relocated Pennsylvania track below the McCall Ferry dam which provided that an unduly or unacceptably steep grade

be used in that rundown pending the time, and I think there was a time limit on it, when McCall Ferry would develop another project downstream from Holtwood and at which time they would eliminate the undesirable grade left after the completion of the Holtwood project.

• • •

By Mr. Hall:

Q. Why was McCall Ferry unwilling to sell the lands which Susquehanna Power Company sought to condemn? A. I don't know, but I should think there would be several reasons why. I imagine one reason was they wanted to get more money than Harlow-McGaw or Susquehanna Power Company had offered. As I said, they also had plans for developing the lower reaches of the river themselves, and there may have been any number of reasons why they didn't want to sell them. I should think those would be two of the reasons.

Q. Mr. Gunn, did Susquehanna Power Company succeed in condemning the land? [7812] A. That is rather difficult to say. They succeeded in the lower courts, I believe, and then I believe McCall Ferry appealed the case, and while the appeal was pending mutually satisfactory settlement was worked out by all the interests on the river, they being what we referred to as the Welch interest on the lower reaches of the Susquehanna River, above Havre de Grace, and the Susquehanna Electric Power interests lying north of the Welch interest, and the McCall Ferry interests lying, as we have described them, as having been acquired from Harlow-McGaw.

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By Mr. Hall:

Q. As a result of the condemnation suit you know, do you not, that Bertron, Storrs and Griscom began secret negotiations to secure control of Susquehanna Power Company?

• • •

THE WITNESS: Yes, they began negotiations. Now as to the secret part of it, it was secret, I believe, so far as DeVictor, who represented Susquehanna Power Company, was concerned, but it was no secret so far as McCall Ferry Power Company was concerned.

By MR. HALL:

Q. In other words, you are saying—go ahead. [7813] A. The facts concerning that negotiation are set forth in considerable detail beginning at page 107 of Exhibit 26.

Q. In other words, you are saying Bertron, Storrs and Griscom in that transaction were acting in behalf of McCall Ferry Power Company, or acting in the interest of McCall Ferry Power Company? A. I don't know just how to describe it.

* * *

THE WITNESS: Bertron, Storrs and Griscom represented McCall Ferry interests in working out the agreement under which the three downriver interests, that is the Susquehanna Power Company, Susquehanna Electric Power Company, and McCall Ferry Power Company, were consolidated. However, it appears that in the acquisition of control of Susquehanna Electric Power Company, which Bertron, Storrs and Griscom had acquired, Bertron Storrs and Griscom appeared to have been acting in their own behalf because, respecting that transaction, they merely notified McCall Ferry Power Company that they had acquired that control.

All of the facts concerning that are set forth on page 107 of Exhibit 26.

[7814] By MR. HALL:

Q. While Bertron, Storrs and Griscom did not succeed in securing control of Susquehanna Power Company they did succeed in securing control of Susquehanna Electric Power Company, which was a competitor, for a lower river development. Right? A. Yes, sir.

Q. When was that control of Susquehanna Electric Power Company secured by Bertron, Storrs and Griscom? A. April, 1907.

Q. You have previously indicated there was a consolidation of interests insofar as McCall Ferry, Susquehanna Power Company, and Susquehanna Electric Power Company were concerned. Did that consolidation come about under the agreement which is part 67 of Exhibit 27? A. Yes, sir, and it was effected on February 20, 1908.

Q. In other words, the three lower interests agreed to pool their interests from that point on? A. Yes, to pool their holdings of water power and land rights.

Q. You are now referring to the land rights below Culley's Falls. Right? A. Yes, below the lower boundary of the Holtwood project.

Q. How was that pooling accomplished, Mr. Gunn? [7815] A. You mean how were the various interests decided?

Q. Yes. A. On the basis of the head in the Susquehanna River lying downstream from the downstream boundary of the Holtwood project and above Tidewater identified as being approximately at the mouth of Rock Run Creek on the map in Exhibit 26, and just below the island identified as Roberts Island.

[7816] The total amount of that head susceptible of development was 91 feet, and each party to the consolidation agreement was to receive an interest in the consolidation represented by the fraction in which the numerator would be the number of feet of head in the river that interest controlled divided by the total number of feet, which were 91 feet.

Q. You are referring to the number of feet controlled prior to the consolidation? A. Yes, at the time of the consolidation.

* * *

[7817] By Mr. Hall:

Q. Mr. Gunn, when was the consolidation agreement actually carried out? A. It was signed on February 20,

1908. I don't know whether I understand just what you mean by "carried out" any more than that.

Q. That is substantially what I meant. A. All right, sir.

* * *

[7852] Q. After adjusting for the properties transferred to Conowingo development and Safe Harbor, is the amount you are claiming for the Harlow-McGaw lands $285,555.40, which properties were retained by McCall Ferry?

* * *

THE WITNESS: I don't recognize the figure. I don't seem to be able to make it up. Could you give me the derivation of it?

By MR. HALL:

Q. Yes. As I understand it you are claiming $450,432 for the Harlow-McGaw lands? A. That is right.

Q. Plus $13,772.22 for the Pullen option, making a total of $464,204.22. If we subtract from that total of $464,000 a credit of $149,566.62 and the $29,082.80, giving a total deduction of $178,648.82, we get the resulting $285,555.40, right? A. Yes, if you make those mathematical computations you get that figure. However, I am not sure as to the propriety of including the Pullen option in there but I see no objection to it if you wish.

* * *

[7855] By MR. HALL:

Q. Mr. Gunn, was the purchase of the Pullen option necessary to the acquisition of the Harlow-McGaw purchase? A. No, I don't think it was. They were bought separately and as I recall the Harlow-McGaw purchase stood alone. However, it was desirable at the same time to buy the Pullen option in order to avoid an attempt on Pullen's part to exercise it.

Q. Did the Pullen option cover, among other things, the Harlow-McGaw properties? A. Yes, sir.

[7856] Q. In other words, it was necessary to acquire the Pullen option in order to get the Harlow-McGaw properties? A. You may draw that conclusion if you wish. The facts are all in the record.

* * *

[7858] Q. Isn't it a fact that you have included as cost of the McCall project the expenses incurred by the McCall Ferry in connection with the defense of the condemnation suit brought by Susquehanna Power Company? A. That may be correct, although I don't remember any identifiable expense. To the extent there was expense I suppose it is included somewhere.

* * *

[7859] By Mr. Hall:

Q. Were the expenses associated with the condemnation suit at least $20,000?

* * *

The Witness: I don't recall, Mr. Hall.

By Mr. Hall:

Q. Why should the McCall Ferry project be charged with the cost of the condemnation suit? A. Because the costs were incurred in defense of the company's ownership of its property.

Q. Ownership of what property, Mr. Gunn? A. The property sought to be condemned.

Q. Where was it located? A. In Maryland.

Q. It was not part of the project, was it, the Holtwood project? A. That is a little difficult to say, Mr. Hall. I would say that it was, and for this purpose and for this reason: Had McCall Ferry not defended their ownership of their property and defended themselves against the condemnation suits, they might have gotten a much less amount of money in the end to credit against the project cost and thus [7860] reduce the project cost. So it seems to me that that defense which acted to make a greater credit in reduc-

tion of the project cost ought certainly to be recognized as a part of the cost of the project.

* * *

By Mr. Hall:

Q. On the contrary they might have gotten much more. Isn't that so? A. No, I don't believe I can quite see under what circumstances they might have gotten more. At least I can't quite see it.

Q. The cost of the condemnation suit represents cost of protecting lands in Maryland; right? A. Yes, it represents that, but it also represents more than that.

Q. What is this "more" that you refer to? A. It represents the ultimate effect of that defense, brought about by a greater credit to the original cost of the McCall Ferry project, and thus had the effect of reducing the total original cost of the McCall Ferry project.

Q. I still don't understand how you conclude that it brought about a greater credit, that the condemnation proceedings brought about a greater credit. A. Well, I draw that conclusion from this fact, Mr. [7861] Hall: The Susquehanna Power Company was seeking to condemn and take the property of McCall Ferry Power Company in Maryland. McCall Ferry Power Company incurred these expenses in resisting the taking of their property and then ultimately reached an agreement with Susquehanna Power Company and the other lower development interests, out of which they received securities in exchange for their property. The securities were subsequently sold.

Now, it would certainly be my conclusion that if they had not resisted that condemnation suit they might have fared worse in the end than they did by resisting it, and that being a fact it seems to me that the cost of the condemnation suit resulted in there being a greater credit to McCall Ferry in reduction of McCall Ferry's original cost than there would have been otherwise.

Q. In other words, you have assumed that the supposition is a fact.

TRIAL EXAMINER: That is argument. He stated what he did.

By MR. HALL:

Q. Mr. Gunn, did the condemnation suit have any effect on market value? A. Market value of what and when?

Q. Of the properties involved in the credit.

MR. KING: May we have that question read, Mr. Examiner?

TRIAL EXAMINER: Yes.

[7862] (Question read).

THE WITNESS: I don't believe I understand, Mr. Hall. Are you asking me if the award in the condemnation suit was the market value? Is that your question?

By MR. HALL:

Q. No, Mr. Gunn. I have in mind whether the condemnation suit actually had any effect on the market value of the properties involved. A. I don't know whether it did or not.

Q. Mr. Gunn, did you know that at a directors meeting on July 14, 1908 of Susquehanna Power Company, Harlow certified that the value of the properties acquired under the consolidation agreement of February 20, 1908 was not less than 85 per cent of the par value of the $1,845,000 of bonds issued for the property?

THE WITNESS: Will you read that question, please?

(Question read).

MR. KING: I object to that question as being proper rebuttal and improper cross.

MR. HALL: I merely asked if he has knowledge of that fact, Mr. Examiner.

TRIAL EXAMINER: Objection is overruled.

THE WITNESS: Mr. Hall, you are referring in that question to the total amount of property that came into the consolidation and not just to the part that McCall turned in. [7863] Is that correct?

By MR. HALL:

Q. That is right, Mr. Gunn. A. No, sir, I didn't have any knowledge that Mr. Harlow made any such certification. I don't think it would have made any difference to me if I had had any knowledge.

Q. Did you consider Boyd Ehle's valuation of the property, of the lower river properties? A. Referring now to the properties which entered into the consolidation?

Q. Yes.

THE WITNESS: May I have the question?

(Question read).

By MR. HALL:

Q. Which he testified to in the Susquehanna Power Company condemnation suit? A. No, sir, I don't recall having seen his testimony in that case.

* * *

[7905] By MR. HALL:

Q. Mr. Gunn, as shown by Page 53 of Exhibit 26 you show the $1,221,000 to be made up of $750,000 cash and $471,000 claimed for the 18,840 shares of common stock of McCall Ferry.

Is it your position that the amount of $1,221,000 represents the actual reasonable cost of the Hutchinson lands at the time of their acquisition by McCall Ferry?

MR. KING: Did you say actual reasonable cost?

MR. HALL: Strike the word "actual." I meant "reasonable cost."

THE WITNESS: Yes, if we may make the assumption that the Federal Power Commission's requirements for determination of original cost are reasonable.

By Mr. Hall:

Q. Upon what evidence of cost of land to Hutchinson is that determination based? A. None so far as I know. That determination is based upon price that McCall Ferry Power Company paid Hutchinson for the lands, not upon the price that Hutchinson may have paid somebody else.

Q. In other words, the amount of $750,000 does not [7906] represent the cash paid by Hutchinson for the lands which he acquired and transferred to McCall Ferry? A. I can't be too sure of that, Mr. Hall, because all I know about that is what Hutchinson says in his affidavit, which is part 1 of Exhibit 27, and he does not state what was paid for lands separately from what was paid by him for engineering services, legal services, and other costs to him of bringing the development to the stage it was when he sold it to Harvey Fisk and Sons.

Q. In other words, you do not know the cost to Hutchinson of the lands he purchased and transferred to McCall Ferry? A. That is correct. I do know the price he paid for one of the acquisitions, that being the York Furnace acquisition, and the price he paid for that is a little bit hazy but we know it is not less than $201,000.

Q. Would you say the York Furnace lands constituted approximately half of the lands transferred by Hutchinson to McCall Ferry?

* * *

The Witness: I really don't know what the acreage would be but it doesn't seem to be of any significance to me.

The reason is this: When you buy lands for development for such as McCall Ferry, where the lands simply represent [7907] a certain shoreline distance, another part of them represents land standing approximately vertical at the side of a cliff, and some more represent level tablelands at the top of the cliff, it seems to me the acreage has no significance at all.

* * *

[7910] By Mr. Hall:

Q. How much of the $750,000 received by Hutchinson did he turn over to Beyer and Willson in payment for the York [7911] Furnace properties?

* * *

The Witness: As I recall he paid $155,000 to Beyer and Willson as the final payment in purchase of their property. He had, of course, previously paid other substantial amounts.

By Mr. Hall:

Q. What were the other substantial amounts? A. I believe somewhere around $45,500. He previously had paid at least $45,500. He may have paid more.

Q. Was that $45,000 paid for the right to extend the option on the York Furnace property? A. I don't recall all of it was paid for that. As a matter of fact, one of the early options, I believe the option of February 21, 1902, recited a series, or acknowledged a series of payments previously paid. I don't recall it stated specifically what those payments were for.

* * *

[7913] By Mr. Hall:

Q. Didn't McCall Ferry Power Company know, Mr. Gunn, that additional money would be required as soon as plans and activities were directed towards a larger dam than that of 50,000 horsepower with elevation 155 as contemplated in the Parson's report?

* * *

By Mr. Hall:

Q. I am referring, of course, to money in addition to that raised in the March, 1905 financing. A. They ultimately knew that more money would be required, but, as I recall it, they first hoped, based upon the lowest estimate, that Pennsylvania Railroad Company had given them for the railroad relocation, that they might be able to build a

higher development within the financing they had already done. However, when Pennsylvania Railroad revised the cost of relocating their line, and when elevation 165 was fixed as the height of the dam, and when the decision was made to excavate the tailrace, it became evident at some [7914] point along the progress of making those decisions that they would not have enough money.

Q. Are you saying—if they went forward and constructed the dam at 185 elevation with provision for 100,000 horsepower that they would not need more money than was raised in the March, 1905 financing? A. No, I am not saying that, Mr. Hall. I understood the point of your previous question to be what did McCall Ferry think they could do.

* * *

I mean without raising additional funds.

In other words, your most recent question, I understood to be, was what did I think they could have done with respect to building a project to 185 elevation without additional financing.

I am now explaining that I thought the question just previous to that one was what did McCall Ferry think they could do with respect to a higher project and with respect to the need or lack of need of additional financing.

[7915] By MR. HALL:

Q. Wouldn't any increase in capacity and elevation require more funds than were provided for in the March, 1905 financing? A. I don't think that necessarily follows, Mr. Hall. For example, in financing of that sort, and I suppose in the McCall Ferry financing, the estimates were supposed to be a liberal amount. It might very well be that more favorable construction conditions were encountered than which had been the basis for the estimate, and as a consequence it might be possible to build a larger development for the same amount of money which had been raised.

Q. It is also true that less favorable conditions could have been encountered; right? A. Yes, quite so.

Q. Isn't it a fact that less favorable conditions were actually encountered? A. Less favorable in what respect.

Q. Than they had originally contemplated? A. Less favorable in what respect?

Q. With respect to expenditures. A. Well, as a matter of fact they didn't ultimately build the project they contemplated in March of 1905, and the cost was different.

Q. Were not the McCall Ferry plans and activities [7916] directed toward the construction of 185 foot elevation dam with provision for 100,000 horsepower over a period of approximately a year?

THE WITNESS: May I have the question, please?

(Question read).

THE WITNESS: That is substantially correct.

The recommendation of the advisory engineers to build a dam to elevation 185 was dated August 7, 1905, and the decision to fix the crest at elevation 165 was dated June 19, 1906.

By MR. HALL:

Q. Prior to August 7, 1905 they, of course, were engaged in preparing whatever plans and specifications were necessary in order to ask for bids. Right? A. The August 7, 1905 date was the date upon which McCall Ferry Power Company board of advisory engineers recommended to the company that the dam be built to 185. Now, it was August 11, when bids were called for, August 11, 1905, when bids were called for, for the construction of a dam at 185.

As I recall it, the only particulars that had to be known were the estimated quantities, and those could be approximated with sufficient accuracy for taking bids without any particular amount of detailed plans being available.

Q. What was the nature—— [7917] A. There was undoubtedly engineering work done prior to August 7, when the advisory engineers recommended elevation 185, and a

very substantial amount of work to make the comparative estimates necessary to take into consideration in selecting a height. However, the decision actually to build to elevation 185, that is conclusions upon which the recommendation were based, I take it were reached on August 7, 1905.

Q. Do you know the details of the nature and extent of the plans and specifications made upon which the bids were called? A. No, I do not. I don't know what were the details of the plans or specifications, except as those details are set forth in the specifications upon which the bid was taken.

Q. Over what period of time were those specifications extended? A. I don't know.

Q. Didn't McCall Ferry know that additional funds over those already raised would be required for a 185 foot dam?

* * *

THE WITNESS: Yes, I think that is undoubtedly true.

By MR. HALL:

Q. Why didn't McCall Ferry arrange for additional [7918] funds as soon as it was decided to build a project of greater capacity? A. I don't know what may have been McCall Ferry's reason for not doing that other than the possibility that it may have been impossible to go out and raise additional funds after not having employed the funds they already had. It may have been undesirable to do so, and, as events proved, it seems to me it was lucky they didn't because if they had gone out and raised funds to build the project to elevation 185, and then found it necessary to cut it back to 165, they would have had a bunch of extra money on their hands and nothing to do with it.

Q. The fact is that no attempt was made to obtain additional financing in 1905 or 1906. Right?

* * *

THE WITNESS: I don't recall the details of that, Mr. Hall. It seems to me that some consideration was given to

the possibility of selling the roughly two million dollars treasury bonds that McCall still had at some future date. I don't recall that any attempt was made to sell them at the date they were first considering elevation 185 for the dam.

By Mr. Hall:

Q. Mr. Gunn, isn't it a fact that the possibility of selling the treasury bonds was not considered until the [7919] summer of 1907?

* * *

The Witness: No, I don't think that is correct, Mr. Hall, because McCall Ferry knew, when the dam elevation was fixed at 165, and the decision to increase the capacity of the plant by improving the tailrace was made, that additional financing would be needed. They did have the treasury bonds available, and I don't know of any reason for assuming that they did not then consider that as a means by which they would raise the money.

The actual attempt to raise money through the disposal of those bonds, as I recall, was during 1907.

* * *

By Mr. Hall:

Q. And no attempt had been made prior to that time to dispose of those bonds?

* * *

The Witness: I don't know whether there had been or not. I don't have any evidence, as I recall, of a specific attempt being made to sell those bonds, but the mortgage provision, which is set forth on page 44 of Exhibit 26, seems to me to indicate that that was the appropriate manner, that the sale of those treasury bonds was the appropriate manner, [7920] which McCall Ferry Power had open to them to obtain additional financing, and it is largely for that reason that I am unable to say it had not previously been considered for sale as a means of getting the necessary financing.

By Mr. Hall:

Q. Isn't it a fact it was not until June 5, 1907, that the executive committee of McCall Ferry authorized the sale of the bonds remaining in the treasury?

* * *

The Witness: Yes, sir, I think that is a fact, Mr. Hall. I don't know whether or not that represents their first consideration of the subject.

By Mr. Hall:

Q. Do you know of any prior consideration by the executive committee? A. Nothing other than the evidence we have that the McCall Ferry Power Company had knowledge of the fact they didn't have enough money to complete the project.

Q. By May of 1907, the company calculated that its cash would be exhausted in the fall of that year. Isn't that so? A. I think that is correct.

[7921] Q. But, notwithstanding the imminent exhaustion of its cash resources the McCall Ferry Power Company did not provide for additional funds for the project. Right? A. I think it is a fact that they did not provide them, and I think it is also a fact they tried and failed to provide them.

Q. All right. A. It is my understanding that the thing that got McCall Ferry Power in trouble was the financial panic which prevailed in the latter part of 1907, and every attempt they made to get additional money, including attempts, I believe, to get it in France and maybe in England, met with failure.

Q. What evidence do you have to support your statement that the McCall Ferry tried and failed to arrange for additional funds?

* * *

The Witness: I think the evidence is largely in the form of correspondence, some of which was obtained from Lee, Higginson and Company's files and some of which was in McCall Ferry's files, and I believe some more may have

been in Coudert Brothers' files. It related to attempts of various people to raise money, I believe in May and June of 1907. I am sure one of the attempts related to raising money in [7922] France. I believe that attempt was made by either Bertron or Lee, Higginson.

By Mr. Hall:

Q. Was the attempt to raise money in France made in 1908?

* * *

The Witness: There may have been an attempt made in 1908, but it is my recollection that there was certainly an attempt made in 1907.

By Mr. Hall:

Q. Isn't it a fact that discussions took place in the summer of 1907 for additional financing, but that these discussions never were consummated or carried out? A. That is rather difficult to answer. I think there were discussions, and I think they never succeeded in raising the money. But I also think that in addition to discussions they made every effort possible to raise the money and save the company from bankruptcy and failed to do it. I think perhaps all of those things are true.

Q. The subsequent suspension of construction by McCall Ferry was necessary because adequate funds had not been provided for the completion of the project. Isn't that so? A. Yes, up to that time they had not obtained adequate funds, and the reason why they had not was because this [7923] attempt to sell the additional bonds in 1907 had failed.

Q. Mr. Gunn, will you refer to page 72 of Exhibit 26? A. I have it before me.

Q. The last complete paragraph of that page? A. Yes, sir.

Q. What did you mean when you there stated, "Various plans were considered for selling the treasury bonds,

but apparently actual underwriting was to be delayed until available cash was exhausted."?

* * * *

THE WITNESS: I meant just what we have been discussing, that previous to the exhaustion of funds McCall Ferry Power Company had considered the plans I have just mentioned for raising funds, had I believe, tried, had failed, and the available funds became exhausted.

Is it the words "To be", Mr. Hall, that are giving you the trouble?

By MR. HALL:

Q. Yes. A. I would say that is perhaps a peculiarity of speech and that it might have been clearer if the words "to be" had been left out and it just stated "was delayed", because [7924] that is the fact. It is not my understanding that it was delayed by any deliberate plan to throw the company into bankruptcy.

Q. Mr. Gunn, do you know of any actual offerings made to the public of McCall Ferry bonds in the summer of 1907? A. What do you mean by offerings made to the public, Mr. Hall?

As I understand it, that was not the way they did financing in those days.

Q. Were offerings made to the group which McCall Ferry considered as financial agents?

I might rephrase the question: Do you know of any actual offerings by Lee, Higginson and Company, Harvey Fisk and Sons, or Bertron Storrs and Griscom to their customers of McCall Ferry bonds which were rejected by the customers? A. I will have to answer it this way: It is my recollection that some time in June of 1907 an offer was made, at least consideration was given, to previous subscribers to McCall Ferry bonds or to the bankers, that they purchase enough of McCall Ferry bonds to insure that McCall Ferry would have enough money to tide them over the end of 1907 when it was thought that additional bonds

could be sold. That is one of the facts that led me to the conclusion that because of the financial conditions in 1907 it was impossible at that time for McCall to raise money, and these people [7925] interested in the project recognized the impossibility, and were endeavoring to work out that temporary expedient to tide over McCall Ferry.

Q. Mr. Gunn, I believe at page 68 of Exhibit 27, the last sentences in paragraph 7 on that page, Mr. Lee states,

> "In the summer of 1907 it was decided to sell another half million of bonds, and it was suggested that my firm handle $100,000 par value of them. Before they were placed the financial market became unfavorable and it was followed by a panic in the fall of 1907."

A. I have read it.

Q. Do you agree with that statement? A. Yes, I agree that the statement appears on page 68 of Exhibit 27, and Mr. Lee is there referring to the effort on the part of McCall Ferry that I have just been describing.

Q. Mr. Gunn, I show you a letter dated April 20, 1908, which Mr. Hutchinson wrote to H. F. Dimock, Esquire, president of McCall Ferry Power Company.

Are you familiar with that letter? A. Shall I read it?

Q. No, just generally. A. I notice the letter came from the company's files and I undoubtedly was familiar with it at one time. It appears it came from company file No. 3951-3. That being the case [7926] I was undoubtedly familiar with it at one time.

* * *

[7928] (Thereupon, the document referred to was marked Exhibit No. 175 for Identification).

* * *

By Mr. Hall:

Q. Mr. Gunn, I believe Mr. Hutchinson in his affidavit, as shown at the bottom of page 8 of Exhibit 27, states

> "it was decided to increase the capacity from 50,000 h.p. to approximately 100,000 h.p., which required more

financing than had been originally provided and affiant so reported. Due to delays in arranging for additional finances, the money as originally provided became exhausted."

Does that agree with the facts as you found them to be during your original cost study? A. Partially but not completely. If you will add the next sentence other than the one you quoted I think then it would be completely.

The next sentence reads:

"This occurred at a time when the market had become [7929] unfavorable for the raising of money and resulted in a receivership and reorganization of the corporation."

With that addition it seems to me to be a fair statement of the situation.

Q. Did the financial panic of 1907 occur before or after the failure of the Knickerbocker Trust Company? A. I really don't know, but it has always been my understanding that it occurred coincident with. That understanding on my part comes from, I believe, some information I got out of an international monetary commission investigation of the panic of 1907 and out of various economic text books on economic history. I have no firsthand knowledge myself, of course.

Q. In other words, the first evidence of the 1907 panic was the failure of the Knickerbocker Trust Company, right? A. That I can't say. I don't know whether or not it was.

Q. McCall Ferry had no funds, no current funds on deposit with Knickerbocker Trust Company at that time. Isn't that so? A. What do you mean by "current funds"?

Q. Checking account funds.

* * *

[7930] THE WITNESS: I will have to answer that this way: At that time McCall Ferry had on deposit with Knicker-

bocker Trust Company $250,000 as an indemnity fund under the railroad relocation agreement, and there was earned interest of something like—no, that is wrong. There may have been some interest earnings on that amount available to them at the time, and in addition I understand there were $8500 on deposit with Knickerbocker Trust Company as a bond in connection with some lawsuit. I don't recall the details of that latter item.

By Mr. Hall:

Q. In view of the fact that both of those amounts were pledged as indemnities, neither of them were available for use for construction purposes by McCall Ferry.. Is that right? A. I believe that is right.

Q. McCall Ferry had made no request for an additional advance under the loan agreement prior to the closing of the bank under the Knickerbocker Trust Company loan agreement? A. I don't believe I understand what you are referring to there, Mr. Hall. May I have the question, please?

(Question read).

By Mr. Hall:

Q. I mean since the date of their last previous request. [7931] A. I think that question answers itself, Mr. Hall. Obviously they had not made any request since the date of their last previous request.

Q. Do you know when that last previous request was made? A. No, sir, I don't offhand.

Q. Do you know, Mr. Gunn, that subsequent to the request made on June 13, 1907, which was honored in the amount of $637,200, that no other request was made for an advance under the loan agreement with Knickerbocker Trust Company prior to the failure of the company? A. It is my understanding that that is true.

* * *

Trial Examiner: What could the subsequent request have amounted to?

THE WITNESS: I understand it could have amounted to some $300,000, and so far as I know the reason they didn't make a request prior to the failure of Knickerbocker Trust Company is probably because they had not spent all of the $637,000 that they had requested on June 13.

I have no reason for supposing that that is not the reason.

By MR. HALL:

Q. Isn't the balance due on the loan $345,000? [7932]
A. I believe that is precisely it, $345,000.

* * *

[7933] By MR. HALL:

Q. Just before the noon recess, Mr. Gunn, we had referred to the call for a loan from Knickerbocker Trust Company on June 13, 1907. Did you wish to clarify that any further? A. Yes, sir. It is correct that there was a call upon Knickerbocker Trust Company under the loan agreement on June 13, 1907, for $637,200.

It is also true, as I said previously, that on January 8, 1908, there was a balance obtained by McCall Ferry of $345,643.80.

Between those two dates, and on November 1, 1907, Knickerbocker Trust Company, on the account of interest due them on the loan arrangement, charged an amount against the advances due McCall Ferry of $208,752.20. The charging of that amount for interest by Knickerbocker Trust Company reduced the amount finally due McCall Ferry Power Company to [7934] $345,000 instead of $552,000 which it would have been other than for the interest transaction.

Q. No request was made to Knickerbocker Trust Company for an additional advance under the loan agreement for construction purposes until January 8, 1908. Right? A. I don't believe that is correct, Mr. Hall, because as I recall it it was necessary for McCall Ferry Power Com-

pany to request the advance they received on January 8, 1908, and the request had to be referred to the receivers of Knickerbocker Trust Company, and in return there was required some sort of court approval or some sort of court action of some kind. That having been the chain of events it seems to me obvious that the request must have been made some time substantially prior to January 8, 1908.

Q. Do you know when the request was actually made?

• • •

THE WITNESS: Information in our files in the form of correspondence, I believe, indicates the request was first made on October 25, renewed on November 1, and renewed again on November 5, all in 1907.

TRIAL EXAMINER: What was that amount?

THE WITNESS: The request for the remainder, which was $345,000 after it had been reduced by the interest due Knickerbocker Trust Company under the loan arrangement.

[7935] MR. HALL: May we have marked for identification as Exhibit 176 a letter dated December 10, 1907, written by Henry C. Ide, Receiver for Knickerbocker Trust Company, and addressed to H. F. Dimock, president of McCall Ferry Power Company, 60 Wall Street, New York?

This was copied from McCall Ferry Power Company File No. 31.

• • •

(Thereupon, the document referred to was marked Exhibit No. 176 for Identification.)

By MR. HALL:

Q. Was that one of the letters you considered in connection with your original cost study, Mr. Gunn?

• • •

THE WITNESS: I don't recall having specifically considered that letter, Mr. Hall, but it at least was not the

letter to which I had reference when I mentioned, several questions back, the dates on which requests for the final advance from Knickerbocker Trust Company had been made.

* * *

[7936] Q. Didn't McCall Ferry—the McCall Ferry call of October 25, 1907, refer to the $208,756.20 interest which was to be charged to the McCall loan account as of November 1, 1907?

THE WITNESS: May I have that question, please?

(Question read.)

THE WITNESS: That is not my recollection, Mr. Hall. The call may have referred to that amount but it is my recollection that it also referred to this final amount due under the loan arrangement, or at least it is my understanding that it did refer to the final amount due, and I don't know whether it referred to the interest which Knickerbocker Trust Company charged off against McCall Ferry's account or not.

By MR. HALL:

Q. On January 8, 1908, McCall Ferry received the balance of the loan amounting to $345,000. Right? A. Yes, sir.

Q. The available funds at that time were totally inadequate for the completion of the project. Isn't that so? A. They were inadequate.

Q. For the completion? A. Yes, for the completion of the project.

[7937] Q. As a matter of fact, they were not even sufficient to meet the liabilities already contracted for for machinery. Isn't that so? A. I don't have the amount of those contracts before me but I believe that would be the fact.

Q. Regardless of the failure of the Knickerbocker Trust Company, the project would have had to suspend

work due to the lack of funds. Isn't that so? A. I don't think you can quite draw that conclusion, Mr. Hall.

Q. Why not? A. For the reason, as I understand it, the failure of Knickerbocker Trust Company was a part of the general financial panic at that time, prevailing at that time, and a consequence in part of the financial panic. If it had not been for the monetary situation there probably would have been neither a failure of Knickerbocker Trust Company nor McCall Ferry Power Company.

* * *

[7938] By Mr. Hall:

Q. Without additional financing isn't it a fact that McCall Ferry Power Company would have had to suspend work within a few months after November 1, 1907? A. Yes, sir, I think that is correct.

* * *

By Mr. Hall:

Q. At the time the project closed down, even the sale of the entire balance of treasury funds would have been insufficient to complete the project. Isn't that so? A. Yes, I believe that is correct. However, I don't see that McCall Ferry's ability to raise money was at all limited to the million-and-a-half-or-so-dollars that [7939] remained out of the $10,000,000 authorized. It seems to me it would have been necessary only that they authorize some more, sell those, and there would have been enough money.

* * *

[7941] By Mr. Hall:

Q. Mr. Gunn, isn't it true that work on the water-wheels and electrical equipment was stopped a few days prior to November 1, 1907? A. I believe it is correct, Mr. Hall, that at about that date McCall Ferry Power Company notified I. P. Morris to suspend the manufacture of the water-wheels but I don't recall that the company's records contained any evidence that General Electric Com-

pany ever was notified to suspend manufacture of the generators. It is a fact that they did suspend manufacture, and it may very well be that because of Mr. Coffin's connection with the company, that is with McCall Ferry Power Company and with General Electric Company, that there was no need for any notice.

Q. You say it may very well be that General Electric did suspend work. You mean prior to November 1, 1907? A. No, I don't mean prior to November 1, 1907. I mean ultimately they did suspend work and I don't know when because the company's records, as I recall it, do not contain information showing the date on which they were given notice to suspend work.

Q. Mr. Coffin being a member of the executive committee of McCall Ferry would be familiar with the decision taken to suspend construction, right? A. Yes. I think it very well may be that that accounts [7942] for the fact we don't have any formal notice that McCall Ferry Power Company didn't leave any record of formal notice given to General Electric Company.

Q. What construction activities were carried on after November 1, 1907? A. During the month of November concrete to the extent of some 600 yards was poured in the power house superstructure, and probably some in the connecting bulkhead between the dam abutment and the power house. There was approximately 130 cubic yards of concrete placed in the skimmer wall.

Then in April of 1908 and continuing through October of 1908 there was a very extensive amount of tailrace excavation which was necessary in order to gain the additional 20,000 horsepower we have previously spoken of, and during that same period the deflection wall, which is in reality a wing dam extending from the main dam to Piney Island, the function of which is to separate the main channel of the river from the tailrace of the Holtwood plant and thus maintain the maximum net head on the

Holtwood plant, that deflection wall was built from elevation 116 to approximately elevation 128 for the northern part, that is the heavy section near the abutment of the main dam, and the southern end, that is the end abutting on Piney Island, was completed to its full height of elevation 151.

Q. Completed when, Mr. Gunn? [7943] A. During the period of months that we are now describing, which is from April, 1908 to October, 1908.

During that same period the concrete abutment at the end of the forebay ramp was constructed. There was work done on the excavation for the fishways and for the approach tunnel at the power house.

In addition there were substantial shipments of sand from the Charleston sandpit and crushed stone from the Conowingo Quarry during August and September of 1908, and that was for use in making the concrete for construction of the deflection wall.

From November, 1907, through October, 1908, Hugh L. Cooper, Sanderson and Porter, General Electric, and to a lesser extent Trowbridge and Ackerman were engaged on completion of the drawings relating mostly to power house and equipment.

The coordination of this drawing work between the different organizations was handled by J. W. Young who was connected with the McCall Ferry Power Company.

During August and September of 1908 final drawings were being approved for construction. During October, 1908, it was a period during which the final details on the drawings were cleaned up, I believe that work terminated.

* * *

[7944] By Mr. Hall:

Q. During the year 1907, and prior to November 1, 1907, didn't the number of men engaged in construction work range from 1,500 to 2,000? A. It may have, Mr. Hall. As I said, I don't have that. The information I

have is not in terms of number of [7945] personnel but dollars per month of personnel payroll. It is a fact that the information I have with respect to the monthly payrolls would indicate that if the maximum number of men during 1907 was 2,000, then the minimum number of men would have been, I believe, somewhere around 1,500.

Q. As shown by the last sentence in the first complete paragraph on page 73 of Exhibit 26, the construction force was reduced to approximately 100 men on November 1, 1907. Is that right?

* * * *

THE WITNESS: Yes, it is so stated on page 73 of Exhibit 26.

[7946] Q. The suspension of work was in accordance with the resolution of the McCall Ferry executive committee held on October 30, 1907, which ordered the work suspended in accordance with schedule "A" of a report to Dimock, signed by Kirkland and approved by Cooper?

* * * *

THE WITNESS: I believe that is correct.

By MR. HALL:

Q. Didn't the plan of the executive committee provide for a complete cessation of all construction work? A. When.

Q. November 1, 1907? A. It is my recollection that work would be curtailed as fast as it could be consistent with the protection of the company.

MR. HALL: Mr. Examiner, may we have marked for identification as Exhibit No. 177, the report to which I referred a moment ago as having been signed by Kirkland and approved by Mr. Hutchinson, which report is dated October 30, 1907, and was copied from the minutes of the executive committee of McCall Ferry Company?

* * *

[7947] (Thereupon, the document referred to was marked Exhibit No. 177 for Identification.)

• • •

MR. HALL: Before proceeding further, Mr. Examiner, may we also have marked for identification as Exhibit No. 178, a letter written by Mr. H. A. Hand, of I. P. Morris & Company to Mr. Kirkland, vice-president and general manager of McCall Ferry Power Company? The letter is dated January 11, 1908, and was copied from the minutes of the executive committee of McCall Ferry Power Company held on January 17, 1908.

• • •

(Thereupon, the document referred to was marked Exhibit No. 178 for Identification.)

• • •

[7948] By MR. HALL:

Q. Provision was made, Mr. Gunn, for the retention of certain salaried employees and for the costs to clean up and put away the plant at McCall Ferry in order to preserve it from damage during indefinite suspension of the work? A. Yes, I believe that was the plan, or at least one of the plans which was before the executive committee. If you refer to Exhibit No. 177 which you have just introduced you will find that Hutchinson there strongly recommended two plans—one which involved immediate shutdown as quickly as possible, and another which would retain a skeleton organization sufficient to permit McCall Ferry to resume work as quickly as possible, and that it was the latter plan which Hutchinson strongly recommended. I don't recall which one of these plans McCall Ferry executive committee actually adopted, but the facts are that beginning in November the construction [7949] payroll of McCall Ferry Power Company reduced from

$9,000 in the month of November down to a little more than $2,000 in the month of March. Then some time during that period McCall Ferry Power Company had succeeded in raising some more money, and beginning in March the construction payroll increased to a maximum in July and August of about $33,000 a month. So if they did adopt a plan in November to indefinitely shut down the project, there was a change in the plans some time prior to March, because in March they rapidly started resuming work and on an extensive scale.

Q. Mr. Gunn, you referred to $9,000 as representing the payroll for the month of November. Isn't it a fact that that payroll for that month was $60,000? I am speaking now of total payroll of McCall Ferry Power Company.

* * *

* * * Perhaps I am wrong about that, Mr. Gunn. The $60,000 refers to the payroll paid in November for the month of October. A. I don't have that figure before me but it sounds as though that might be the right amount.

Yes, the records I have indicate that the field payroll was 60-some odd thousand dollars for that month.

Q. Some of the supervisory and clerical employees of [7950] McCall Ferry were retained at half pay after November 1, isn't that so? A. I believe that is correct. There were some abnormal pay arrangements made. I don't know whether it was half pay or something else.

* * *

MR. HALL: Mr. Examiner, may we have marked for identification as Exhibit No. 179, a letter dated November 26, 1907, written by J. P. Allen, purchasing agent for McCall Ferry Company, to J. W. Kirkland, vice-president of McCall Ferry Power Company?

The letter was copied from file No. 3951-2, and it is dated November 26, 1907.

In connection with this letter, Mr. Examiner, I might say that paragraph 1 refers to a statement show-

ing the number of men at McCall Ferry employed each day during the month up to the 22d of November, 1907.

The statement which I desire to include with Exhibit 179 was not contained in the same file with the letter, but it was attached to McCall Ferry Voucher No. 195 dated December 1, 1907.

[7951] It definitely appears that this statement referred to in paragraph 1 of the letter is the same statement which I have attached to the letter and which was attached to McCall Ferry voucher No. 195.

TRIAL EXAMINER: The letter dated November 26, 1907, will be marked Exhibit 179 for Identification.

(The document referred to was marked Exhibit No. 179 for Identification.)

TRIAL EXAMINER: The statement of men employed —referred to by counsel—will be marked Exhibit 180 for identification.

(Thereupon, the document referred to was marked Exhibit No. 180 for Identification.)

* * *

[7952] By MR. HALL:

Q. Mr. Gunn, is the 730 yards of concrete referred to in the second paragraph of Exhibit 179 the same 730 yards of concrete to which you referred a few moments ago? A. Yes, sir, it appears to be. That was one source of my information as to the amount of concrete.

Q. What construction work was done during the month of December, 1907, and January, 1908? [7953] A. I don't have before me complete details of what may have been done but from what information I do have it indicates that during the months of December and January forms were stripped from the skimmerwall, and during the month of December the east protection cribs, which are a part of the skimmer wall, were filled, construction locomotives and

cars were repaired, derricks no longer needed where they were then located were taken down, the debris of construction was cleared away on the York County side of the river, and the boilers of some of the construction equipment was painted.

Q. In other words, during those two months the work consisted of cleanup and maintenance work? A. No, I wouldn't say so.

Q. What work would not fall in that category? A. It consisted of cleanup work necessary to any construction operation, and the work to which you have referred as maintenance is normally a continuing part of the work essential to the continuation of a construction project. In other words, every so often construction equipment must be painted. McCall Ferry construction equipment was painted at this particular time.

Q. But they don't shut down the job to paint the equipment? A. Oh, no. For example, at Safe Harbor we didn't shut [7954] down the job to paint the equipment. We waited until the job was finished and then charged it to cost of construction of the project.

• • •

[7955] By MR. HALL:

Q. Mr. Gunn, I show you a letter dated January 18, 1908, written by C. A. Coffin to Cary T. Hutchinson, McCall Ferry Power Company, 60 Wall Street, New York City. Are you familiar with that letter? The letter was copied from Company file number 35.

• • •

TRIAL EXAMINER: The reporter will incorporate the letter into the record as if read.

MR. HALL: The letter reads as follows:

"McCall Ferry Power Co.
"(Copied from Co. File #35)

"New York Office, 44 Broad St.
"January 18th, 1908.

[7956] "Mr. Cary T. Hutchinson,
"McCall Ferry Power Company,
"#60 Wall St., City.

"My Dear Dr. Hutchinson:—

"Will you please send by bearer figures covering expenditures on the McCall Ferry Power Company's property for November and December, and the weekly expenditures since January 1st, with an estimate of what will need to be spent from now on?

"In view of the long time which has elapsed since active work at McCall's Ferry was suspended, it would seem that things had reached a point where only two or three caretakers are necessary. Should not the foreman in charge be instructed to discharge all the laborers except just enough to serve as watchmen?

"Very truly yours,

"(S.) C. A. COFFIN,

B."

By MR. HALL:

Q. Are you familiar with that letter, Mr. Gunn? A. I believe I recall having seen it.

Q. That was one of the letters you considered during your original cost study? A. Yes, sir, I think that is probably correct.

Q. On Page 74 of Exhibit 26, Mr. Gunn, after mentioning [7957] the receipt of funds from Knickerbocker Trust Company you state, "With this money construction proceeded and transmission line rights of way were acquired."

When you say that construction proceeded, just what construction work are you referring to? A. Construction work that I described in an answer to a previous question. That is excavation of a tailrace, construction of the deflection wall, and completion of drawings, the latter by Cooper, Sanderson and Porter, General Electric Company, and Trowbridge and Ackerman during the months of April to October, 1908. There were some minor items of work but those were the major ones. The work on the drawings by the various firms I mentioned continued from November 1, 1907 through October, 1908.

Q. Mr. Gunn, didn't the executive committee of McCall Ferry on January 29, 1908, authorize the discharge of the entire force of McCall Ferry and Conowingo Quarry and the engaging of watchmen to protect the project?

* * * *

[7958] THE WITNESS: I don't recall. They may have.

By MR. HALL:

Q. I show you a letter dated January 27, 1908, written by J. W. Kirkland, vice-president of McCall Ferry Power Company to C. A. Coffin, General Electric Company, 44 Broad Street, New York City. This letter was copied from Company file No. 25.

* * *

MR. HALL: The purpose of this letter is to show the activities being carried on prior to the date of the letter, January 27, 1908, and subsequent to November 1, 1907.

* * *

TRIAL EXAMINER: The reporter will copy the letter into the transcript as though read.

(The letter referred to above is as follows):

McCall Ferry Power Co.,

(Copied from Co. File #35)

"January 27, 1908

[7959] "C. A. Coffin, Esq.,
General Electric Co., 44 Broad St., N. Y. City.

"Dear Mr. Coffin:—

"Answering your letter of January 21st., I enclose herewith a list of the staff and foremen at McCall Ferry and their rates of pay. In addition to these men of the foremen class there are about fifty laborers on full time at an average rate of about $0.22 per hour.

"Of the $1400. estimated weekly expenditure, $1350. is for payrolls and $50. is for expenses.

"These foremen and workmen have been usefully employed in cleaning up and repairing machinery which was worn or defective, and in taking up tracks and timber which were liable to damage and destruction by floods or neglect. The expenses incurred have been those which Cooper estimated as necessary to make the plant safe for an indefinite suspension, and you may recall that he stated this necessary expenditure to be $20,000. Instead of doing all that work by a big force in November and part of December, it has been done by a small force with the idea of conserving for as long a time as possible the working organization, so that the work could be promptly and economically resumed.

"Yours very truly,
Vice-President."

Enc. JWK/G.

* * *

[7960] By Mr. Hall:

Q. Do you know that the executive committee of McCall [7961] Ferry on February 5, 1908 authorized the retention of Cooper's force at McCall Ferry at half pay? A. At about that date some such arrangement was made for the retention of a certain part of Cooper's personnel, but I don't recall whether it was on February 5, 1908 or not.

* * *

Q. Wasn't the work done in the spring and summer of 1908 limited in extent and conditioned on the amount of money available at that time? A. Yes, I believe it was limited to some extent to the amount of money available.

Q. Do you know how much money then was available?

* * *

The Witness: Early in 1908 there became available to McCall Ferry Power Company the balance of the loan from Receivers of Knickerbocker Trust Company, which amounted to $345,000.

Later on in 1908 an arrangement was completed under which McCall Ferry Power Company borrowed $400,000 from several of the people, several of the firms who had been principally interested in the enterprise.

By Mr. Hall:

Q. Isn't it a fact that the $400,000 loan was not made [7962] until October, 1908? A. Yes, sir, I believe that is correct.

Q. At that time the work on the tailrace excavation had been completed. Right?

* * *

The Witness: No, I don't think that is correct, Mr. Hall.

By Mr. Hall:

Q. When was the $400,000 loan obtained? A. According to the information that I have before me it was early in October of 1908.

TRIAL EXAMINER: October 28?

THE WITNESS: That is correct. It was October 28, 1908.

It is also true that by the end of October, the work on the tailrace was very nearly complete because, in the month of September, the field payroll which at that time was substantially devoted to the tailrace excavation had been $27,400; during the month of October it was $19,800; during November, 1908, the payroll was $31,000, and then during December it dropped to $1100, and from there on it ranged just under $1,000.

By MR. HALL:

Q. Isn't it a fact Hutchinson reported to the executive committee of McCall Ferry on October 20, 1908, that work on Culley's cut was completed on October 15, 1908?

[7963] A. I really don't recall whether he did or not.

Q. Wasn't the tailrace work the same work which was supposed to have been completed by H. S. Kerbaugh, Inc., before January 1, 1907? A. Yes, it was the same work for which Kerbaugh had a contract, but due to the abnormal flow in the river during the period of time in which Kerbaugh would normally have done the greater part of this work, the dam was flooded and with it all of his equipment and there were several months when he could do no work at all. Then McCall Ferry became dissatisfied with the progress that Kerbaugh was making and took the contract away from Kerbaugh and arranged for Kerbaugh to turn his equipment over to Cooper, for Cooper to take over the tailrace excavation.

Q. Did McCall Ferry work on that excavation to some extent from April to July of 1907?

* * *

[7964] A. I have referred to Page 67 of Exhibit 26, the last full paragraph on that page, which states the substance of your question.

Q. Before the suspension of work on November 1, 1907, it had been planned to complete the excavation of the tailrace during the fall of 1907 while the rest of the construction was proceeding. Isn't that so? A. Yes, I believe that had been the plan. It was highly desirable that that be done.

* * *

[7965] By Mr. Hall:

Q. Look at Page 301 of Exhibit 27, Mr. Gunn. A. I don't believe you can quite make that broad a statement, Mr. Hall. It is true that in the early fall of 1907 the York County Coffer Dam was closed, and it was therefore necessary to pass the flow of the river through the tailrace.

It appears from Mr. Cary T. Hutchinson's letter of November 26, 1907, to Mr. Henry F. Dimock, President of McCall Ferry Power Company in the second paragraph that they expected to proceed with the work in the tailrace cut during the month of December and perhaps as far into the spring as the flow of the river would permit them.

However, I don't take that to mean that Hutchinson or anybody else expected that during that time and in that limited season they could complete the tailrace work.

* * *

[7966] The Witness: I think perhaps we had better add that the letter of November 26th from Cary T. Hutchinson to Henry F. Dimock appears beginning on Page 301 of Exhibit 27.

By Mr. Hall:

Q. Construction of the powerhouse itself and the main dam was not re-opened in 1908, was it? A. Not to any serious extent. However, during 1908 design work on drawings was continued.

Q. No steps were taken in 1908 to have the machinery contractors start work anew on the fabrication of the project machinery, right? A. Not so far as I know.

Q. The work on the tailrace excavation was authorized on April 20, 1908, by the executive committee of McCall Ferry, was it not? A. It was authorized, I presume, at some date near that. I don't recall the specific date. In any event, shortly after that date it did start.

Q. Some time would be necessary, however, to prepare for re-establishing the plant so actual work in connection with the tailrace would not begin until several weeks thereafter, right?

* * *

THE WITNESS: No, I don't think that necessarily follows [7967] at all.

By MR. HALL:

Q. Hadn't the construction plant been more or less put away at the time of the action of the executive committee? A. No, it had simply been left in the storage area and protected. There had been no construction plant in the tailrace prior to that date, so the operation on resumption of work in the tailrace would obviously have been necessary no matter when they started it, and obviously would be an appropriate part of the cost in the tailrace.

Q. But the preparation for the tailrace re-opening would have gone on while the other construction was in progress. Isn't that so? A. I don't believe I understand that question.

Q. Under normal course of events. A. You mean if there had not been a cessation of work?

Q. Yes. A. That preparation of the equipment and moving of the equipment into the tailrace cut would have gone on coincidental with the other work?

Q. Yes. A. Yes, I think that is true. We discussed the fact that that could have been done in some detail, and we also discussed the consequences expensewise if it had been done, [7968] that is that it would have caused confusion and increased expense of doing the work.

Q. Wouldn't the Coffer Dam have to be re-erected, still further postponing the actual excavation?

* * *

THE WITNESS: What Coffer Dam, Mr. Hall?

By MR. HALL:

Q. Wasn't a Coffer Dam required for the tailrace? A. Several of them were.

Q. Wasn't it necessary to re-erect the Coffer Dams in order to proceed with the work in 1908? A. No. The principal Coffer Dam which had been required for the tailrace excavation was the upstream Coffer Dam. It is my understanding that construction on the powerhouse had progressed to a point which made it unnecessary to ever re-erect that Coffer Dam. As a matter of fact, shortly thereafter, or perhaps during the tailrace excavation, that Coffer Dam was removed, what remained of it.

It may be, Mr. Hall, you are referring to rather small Coffer Dam at the lower end of the cut which prevented water backing up into the cut and which already had been wrecked by the flood which washed Kerbaugh out of the cut.

Q. Wasn't it necessary to re-erect that Coffer Dam? A. That one?

[7969] Q. Yes. A. To be sure, it was necessary to re-erect that after the flood no matter when you did it. But there was nothing especially peculiar about the re-erection at the time it was made.

Q. And work on the tailrace could not proceed until that Coffer Dam had been re-erected? A. Yes, that is the reason for several months' delay of any work at all on the tailrace by Kerbaugh after he was flooded out, and before Cooper took over for McCall Ferry and did what little work Cooper did in 1907.

MR. HALL: May we have marked as Exhibit Number 181 for Identification a letter dated April 13, 1908,

written by Hugh L. Cooper to Cary T. Hutchinson, Chief Engineer, McCall Ferry Power Company? The letter is copied from Company File 3951-3.

• • •

(The document referred to was marked as Exhibit Number 181 for Identification.)

• • •

[7970] By MR. HALL:

Q. Mr. Gunn, according to Exhibit Number 181 for Identification the total amount of money to be spent for the excavation work was relatively small, isn't that so, in comparison with total cost of that plant?

TRIAL EXAMINER: What does counsel mean? What are the amounts to which you refer?

THE WITNESS: I think, Mr. Examiner, he is referring to the amount used for Culley's Cut, and this letter, which is Exhibit 181, seems to be somewhat confusing to me. It states that about $150,000 will be needed for Culley's Cut. Then it recites two other items which will be needed, one of which is $4,000 that Cooper says is appropriately charged to Culley's Cut. Then the second item is $10,000.

However, the total estimate contained in the letter of April 13th is $194,000, and if you subtract $10,000 from that it looks like there would be $184,000 instead of $154,000 to apply to Culley's Cut. In any event that is the order of magnitude of the figures.

I don't recall what the actual cost was, but at least that was Hugh L. Cooper's estimate of what it would be on [7971] April 13, 1908.

• • •

[7974] Q. But the total cost of re-establishing the plant was ten thousand dollars; right? A. Cooper so states. I don't know what he meant by re-establishing the plant even for the other six thousand dollars. It may very well have been of the same character and a necessary expense whether there had been a cessation or not.

Q. On October 21, 1908, the McCall Ferry executive committee authorized the discharge on November 1, 1908, of the entire force at McCall Ferry, Conowingo Quarry, and New York with the exception of a few supervisory employees. Isn't that right? A. I think that very well may be true, in any event shortly after October 21, they were discharged.

Q. No further work was done until the receiver from McCall Ferry reopened the project in 1909. Isn't that so? A. That is correct. No work of any substantial volume was done between those dates.

Q. When did construction work get fully under way under the receiver? A. Well, it was begun in July, 1909.

Q. What work was done in July, Mr. Gunn? A. I don't have the details of it before me.

Q. Isn't it a fact that no work was done in July, 1909?

* * *

[7975] THE WITNESS: I don't know whether it is or not, Mr. Hall. I believe there was some preliminary work. It is a fact no significant volume of work was done in July of 1909, July of 1909 is simply time they were engaging in the preliminaries to get the work started.

By MR. HALL:

Q. Who engaged in the preliminaries? A. The Receiver, as I understand it.

Q. The Receiver's contract with Empire Engineering Corporation was dated August 16, 1909. A. I believe that is correct.

Q. Much work had to be done to get ready to start up construction again on the project. Isn't that so? A. No, I don't think so. No information that I have indicates that to be a fact.

Q. Had all the equipment and so forth been placed in storage? A. No, Mr. Hall. So far as I know the only thing which had been done was that part of the equipment had been placed on the construction area, painted, lubricated and left there, and the construction plant of the sort

they had at McCall Ferry certainly didn't require any sort of time or effort to get it started. It consisted of locomotives, [7976] locomotive cranes, dump cars, drilling equipment, all of which as a matter of practical fact could be started up in a few hours.

Q. Isn't it a fact that little work was done prior to September, 1909? A. I don't have any facts before me, Mr. Hall, which would indicate that.

• • • •

THE WITNESS: It is a fact the volume was not very great, Mr. Hall, because the total cost of it was only about ten thousand dollars prior to that date.

By MR. HALL:

Q. And that ten thousand dollars included the salaries of watchmen, supervisors, and so forth. Right? A. I suppose so. They were paid somehow.

Q. Mr. Gunn, I show you a letter dated September 21, 1909 signed by Wm. Barclay Parsons, and addressed to J. E. Aldred, Receiver, McCall Ferry Power Company. The letter was copied from Company file 3951-4.

Are you familiar with that letter? A. Yes, I am familiar with that letter.

• • • •

[7977] TRIAL EXAMINER: The reporter may incorporate the letter into the transcript as though read.

(The letter referred to above is as follows):

(Copy)

EMPIRE ENGINEERING CORPORATION,
New York,
September 21, 1909.

"Mr. J. E. Aldred, Receiver,
McCall Ferry Power Company,
24 Exchange Place, City.

"Dear Sir:

"The amount of work done by this Corporation at McCall's Ferry during the month of Au-

gust was comparatively so small as not to call for any special payment to us. By the end of September, however, a considerable amount of work will have been accomplished, and I think it would be well to establish between now and the end of the month a system of reports so that the amount expended for labor and materials, and other work, can be fixed, and the moneys due this [7978] corporation for services as engineers of construction be determined and adjusted. I will be very glad to take this matter up with you at your convenience."

"Very truly yours,

(S.) WM. BARCLAY PARSONS,
President."

• • •

[7979] Q. Mr. Gunn, I believe you testified that you have used six per cent as reasonable rate of interest in computing your interest during construction and have used a construction period beginning April 1, 1905, to October 1, 1911. Right? A. Yes, sir, I have so stated.

Q. I take it that in your opinion the six per cent method would be reasonable regardless of what construction period the Commission may use?

• • •

THE WITNESS: If you were to take that you would be making the biggest mistake you ever made.

By MR. HALL:

Q. What do you mean by that statement, Mr. Gunn? A. I mean you would be completely wrong, and without any doubt. The selection of six per cent as a method of interest is connected with and inseparably connected with the selection of the construction period.

Q. Assume that you used the same construction period utilized by the Staff. What effect would that have on the [7980] six per cent rate which you used in your computation

of interest during construction? A. I would think the selection of such a construction period, presumably on the basis it represents a realistic construction period, would necessarily carry with it the use of a realistic rate of interest during construction for the Holtwood project at the time the Holtwood project was constructed, and it most assuredly would not be six per cent but it would be very substantially greater.

Q. Why did you select six per cent for the purposes of your computation? A. Because six per cent, when taken together with the construction period actually incurred, seemed to me to result in a reasonable overall amount of interest during construction of this project.

Q. I believe you testified that you considered the six per cent rate to be a reasonable one in connection with the construction period you have used in making your original cost claim. Right? A. That is right.

Q. Is it your position that the interest rate varies with the varying lengths of construction period? A. No, not at all, but this is my position rather, Mr. Hall: There was an actual construction period at Holtwood. It extended from 1905 to October 1, 1911.

[7981] It is true that had the company not encountered financial difficulties the project might have been built in a shorter period of time.

It is also true that a proper rate of interest for a project entailing the risks of the Holtwood project at that time was obviously substantially greater than six per cent.

Now, you have several alternatives for arriving at a reasonable overall amount of interest during construction. You could take a realistic rate of interest, and, let us say, a construction period which might have been accomplished had there been no difficulties of any sort, and make a calculation, and you get a certain amount of interest during construction.

If you were to take the same high rate of interest and apply it to the construction period actually experienced,

you would get a much greater amount of interest during construction.

Now, it seemed to me that it was appropriate to take the actual construction period as experienced and apply to that such a rate of interest as would result in a reasonable overall amount of interest during construction and a six per cent rate appeared to accomplish that result.

That, of course, results in using the actual period of construction and what we may call a synthetic rate of interest for that project at that time. The other alternative was to [7982] use a synthetic construction period and the actual rate of interest during that time, and since one alternative had to be selected I selected the one I have used.

Q. You referred to actual construction period. By that you meant, I take, it, the construction period which you determined for the purposes of your original cost determination? A. Yes, sir.

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[7984] By Mr. Hall:

Q. Mr. Gunn, at transcript 7962 you referred to the McCall Ferry payroll in November of 1908 as totaling $31,000. Is that the correct figure for the month of November? A. No, sir. That should be $3100.

Q. What was the payroll in April, May and June of 1908? A. In April it was $4700; in May it was $12,400; in June it was $14,800.

These figures of which we are speaking are field construction payrolls.

Q. Do you have the payroll figure for the month of October, 1907? A. No, I do not. The first month I have before me is November of 1907.

The figure, I believe, for the month of October 1907 was slightly over $60,000.

Q. What amount did you determine to be Penn Water's claim for interest during construction to October, 1911? [7985] A. $2,489,026.01.

Q. Is that the reasonable overall amount of interest during construction you considered in determining your interest rate?

• • •

By Mr. Hall:

Q. I am limiting that, Mr. Gunn, to the period up to and including October 1, 1911. A. That is the amount of interest which I concluded was a reasonable overall amount of interest. Of course, I considered various amounts of interest by alternative plans of computing interest for that period, and as a result of the consideration of the various amounts and various methods of calculation, various rates and various construction periods, I concluded that this was a reasonable overall amount of interest.

Q. Are you saying that in connection with your computation of interest during construction you considered different [7986] construction periods and different rates of interest, and that different rates of interest applied to different construction periods? A. Yes.

Q. Did you, however, consider the same total overall interest claimed as being applicable to all periods? A. No, I can't say I went at it just that way, Mr. Hall. What I did was to make a series of calculations at different rates of interest using different construction periods, and I considered all of those, and their characteristics, and came to the conclusion that the actual construction period as incurred, taken together with a six per cent rate of interest, produced a reasonable overall amount of interest, and that figure is the figure I just mentioned, $2,489,026.01.

Q. Did your other calculations produce approximately the same overall amount of $2,489,026.01? A. That or more.

Q. Will you tell us what other construction periods you considered and the rates of interest you deemed applicable for those periods? A. I did not select a single rate of interest for the other construction periods. What I did for the other construction periods was to compute

a series of interest rates ranging from six to ten per cent. Having made a first [7987] calculation to determine the time form of the interest pattern it was simply a matter of computing the remainder of the interest calculations as a simple proportion. As a matter of fact it can very readily be computed and I did compute them graphically.

Q. What other construction periods did you consider? A. Well, I considered what would be the result if the dates December, 1907 to August 1909, were eliminated from the construction period. I considered another construction period which would eliminate the time from active construction December 1907, to April, 1908, inclusive, as well as November, 1908 to August, 1909, inclusive.

* * *

THE WITNESS: Still another construction period that was considered was one derived by eliminating from the period of active construction the time between November 1908 to August, 1909, inclusive.

* * *

THE WITNESS: Another calculation which was made was based upon the actual construction period as it occurred from 1905 to October, 1911, without any elimination at all.

* * *

[7988] Q. What rate of interest did you associate with the elimination of the period from December, 1907 to August 1909? A. I made calculations at rates of interest all the way from six per cent to ten per cent.

Q. Which interest rate did you consider to be more applicable to that period? A. I would say that the interest rate for that period ought to be somewhere between at least nine or ten per cent. The reason why I say that is that if you were to make that total elimination you would be deriving what I suppose you would describe as a realistic construction period, and departing from the construction period, which was actually incurred. In that event

it seems to me that you ought to use a realistic rate of interest which would be applicable to the risks and uncertainties in a project such as Holtwood was during the period of time we are discussing.

Q. Is it your opinion that a realistic rate of interest is something different from the actual interest costs incurred? A. That would go back, Mr. Hall, to what is the concept of interest during construction. I realize there are two of them. However, they are not far apart. I believe some people view the rate as the bare bones cost of money; others view it as income foregone, during the period of construction.

The difference between them would be whatever is appropriately allowed in the rate of return over and above the so-called [7989] bare bones cost of money. I don't know just how much that would be, but theoretically it is something.

[7990] Now, if you are going to view interest during construction as the bare bones cost of money, then it would be the cost of money if and when the cost of money is correctly computed.

Q. Which concept did you deem to be applicable for the purpose of your determination? A. Because of the method I have used it was not necessary to reduce it and identify it as either one.

Q. Did you? A. No. My inclination is to say that proper interest during construction is income that is foregone, rate of income foregone during period of construction.

Q. When you refer to rate of income foregone you are referring to income which would have been realized had the plant been in operation. Is that right? A. Yes, sir.

Q. That concept controlled your thinking in connection with your interest determination of the reasonable amount of interest, amounting to $2,489,026.01, right? A.

Well, it certainly influenced it. I don't know you could say it controlled it.

Q. In other words, your determination was not made on the bare bones cost of money? A. No, although, as I said, the two figures when properly determined would not be very far apart, and because [7991] of the method I have used I don't think you could say that it is inseparably and inflexibly tied to either one of the concepts.

Q. Mr. Gunn, what was the total amount of interest you arrived at by using rates ranging from nine to ten per cent and eliminating the period from December 1907 to August 1909? A. The interest computed for that period at nine per cent was about $2,650,000 and at ten per cent it was about $2,950,000.

Q. What was the least rate of interest you considered in connection with the elimination of the period from December 1907 to August 1909? A. I would say that I didn't give any serious consideration to anything below nine per cent.

Q. Didn't you testify a few minutes ago that you gave consideration to rates ranging from six to ten per cent for the period? A. I don't think I did. I believe at that time I was explaining the range over which I had made calculations. You are now asking me the range which influenced, or which had substantial influence, on my determination of interest during construction.

Q. Was six per cent the least rate at which you made a calculation for that period? [7992] A. Yes, six per cent was the lowest rate at which I made calculations for any period, and I made calculations at six per cent for all periods for the purpose of getting the time pattern of the interest of it.

Time pattern of the amount of interest and from which I interpolated the amount of interest at all other rates.

Q. What total amount did you arrive at for that period using six per cent? A. The total amount I computed for that period?

Q. Yes. A. $1,660,000.

Q. Mr. Gunn, does the nine per cent calculation amounting to $2,650,000 represent what you considered would be the net income from the plant had it been in operation?

* * *

THE WITNESS: By "net income" you are referring to a figure before bond interest, are you?

By MR. HALL:

Q. What did you have in mind as to income when you arrived at the amount of $2,650,000? A. I didn't have anything in mind. I had in mind determining the reasonable amount of interest during construction.

Q. Didn't you testify that that reasonable rate was [7993] based upon the income to be determined from project earnings? A. No, I testified that that was income foregone during construction, a rate of interest foregone, not a number of dollars of income, certainly.

Q. In other words, you figured that the project would be earning, for instance, nine per cent? A. I figured that the project, because of the risks entailed in the project at that time, was entitled to earn nine per cent.

Q. Was it entitled to earn nine per cent for any one of the construction periods that you have mentioned? A. Well, I think the project was entitled to earn nine per cent because of its risk at any time between 1905 and 1911. But in making the computation for interest during construction, which seems to me to lead to a reasonable overall allowance for interest, I thought it was appropriate to give recognition to the fact that because of the financial difficulties into which the project fell that a rate of interest less than that which it ought to have been entitled to earn should be used in the calculation, and I have used a lesser rate of interest purely out of recognition of the prolonged construction period, which construction period was prolonged because of factors wholly beyond the control of the company.

Q. What do you consider the project should be entitled [7994] to earn? A. Speaking now of a rate or total amount?

Q. Rate. A. I don't know. I haven't made any specific determination of it. It seems to me at that time it ought to have been entitled to at least nine per cent or perhaps more.

Q. Is your opinion that the project would earn nine per cent immediately upon completion? A. No. No hydro project can ever do that, but it is expected that the failure to earn the full entitlement in a rate of return immediately will be made up when the period during which the lag in earnings takes place by one of two methods: Either by including in the rate base the amount of the lag of earnings or by giving recognition to that factor in the rate of return allowed in the future after the plant has reached the economic position where it is economically able to earn it.

Q. Are you saying, Mr. Gunn, the project did not earn nine per cent for some years after completion? A. Yes, I think that is generally true of all hydro projects which make available a large block of power and which require a large expenditure of money initially, such as is entailed in low and medium head projects where long dams are required and extensive storage reservoirs do not result.

[7995] Q. But you believe that the rate of interest allowed during the construction period should be based upon the ultimate earnings realized from the project, right? A. No, that is not what I said. It seems to me that the rate of interest allowed for interest during construction ought to be based upon the rate of earnings which is required to attract capital to that enterprise in the face of the risks the enterprise entails.

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[7996] By Mr. Hall:

Q. Mr. Gunn, when you considered elimination of the periods from December 1907 to April 1908 and November

1908 to August 1909 what rates of interest did you consider in connection with that period? A. I made calculations for the construction period resulting from the elimination of those periods of time you just mentioned at rates of interest from six to ten per cent.

Q. Which rate within that range did you consider to be the most applicable to that period? A. I don't think I ever came to any specific conclusions as to what were the most applicable rates. I simply made the calculations to show what the range of interest during construction would be if those eliminations were made from the construction period and at the various rates of interest I have mentioned.

Q. Did those calculations enter into your consideration of the total reasonable amount of $2,489,000? A. Yes, I suppose they had some influence on it, but I don't know just how or how much.

[7997] Q. You don't know to what extent they did influence that? A. No, because my conclusions were based on the totals of all of these calculations. I couldn't break down each period and each total and say what separate parts of them contributed to the conclusion.

Q. If you had eliminated the periods from December 1907 to April of 1908 and November 1908 to August 1909, what interest rate would you have considered applicable? A. I would say an interest rate which, when taken together with the construction period resulting from the elimination you have just mentioned, would have made an interest claim about equal to the $2,489,000 that I have claimed as a reasonable amount of interest.

[7998] Q. What interest rate combined with that period would produce the figure of $2,489,000 approximately? A. Somewhere between six and seven per cent.

Q. If you eliminated the period from November 1908 to August, 1909 from consideration, what interest rate would you associate with that period?

* * *

THE WITNESS: That also would be between six and seven per cent.

By MR. HALL:

Q. Six and seven? A. Six and seven per cent. In other words, the elimination of the short period of time between December 1907 and April 1908 does not have a very material effect on the interest rate.

Q. What total amount of interest did you arrive at by using the six or seven per cent by the elimination of the period from November 1908 to August 1909?

* * *

THE WITNESS: Using six per cent the total amount of interest would be about $2,450,000. Using seven per cent the total amount of interest would be about $2,870,000.

By MR. HALL:

[7999] Q. What total amount of interest would have resulted through the elimination of the period from December, 1907, to April, 1908, and November, 1908, to August, 1909, by applying the rates ranging from six to ten per cent? A. Six to ten per cent?

Q. Six to seven per cent. A. At six per cent the total amount of interest would be $2,320,000, or thereabouts, and using seven percent the total amount of interest would be about $2,690,000.

MR. KING: May we have that answer read?

(Answer read).

By MR. HALL:

Q. What was the smallest amount of interest at which you arrived by your various calculations?

MR. KING: You mean on all the periods considered?

MR. HALL: Yes.

THE WITNESS: All of the periods considered and all the interest rates considered?

By Mr. Hall:

Q. That is right. A. About $1,760,000.

Q. What was the largest amount arrived at? A. Again, considering all of the periods and all of the rates?

Q. Yes. [8000] A. $4,200,000.

Q. Why did you reject the smallest amount of $1,760,000? A. Because I thought it was improper.

Q. Why? A. It just seemed to me to be ridiculous.

Q. Why was it ridiculous? A. Because in arriving at that amount of money it is necessary to create a purely fictitious construction period and then turn around and apply to that a wholly fictitious rate of interest, both of which are lower than actually should have prevailed. The two taken together just makes a ridiculous answer.

Q. You mean that they would have produced an amount lower than the return which would have been made had the project been in operation? A. Subject to all the explanation I previously have given of that term, yes.

Q. Why did you reject the maximum of $4,200,000? A. For exactly the opposite reason to why I rejected the minimum figure. It gave a ridiculously high figure. As a matter of fact, I think I ought to add that in making those calculations, those maximum and minimum figures merely resulted from the convenience of calculating, and it was obvious from the beginning they had no bearing on the problem.

[8001] Q. Mr. Gunn, why did you select the amount of $2,489,000? A. Because after considering all of the facts we have been discussing I came to the conclusion that that was a reasonable overall allowance for interest during construction upon this project at the time it was built and under the circumstances under which it was built.

Q. Mr. Gunn, did you select the figure of $2,480,000 because it represented a mean between $1,760,000 and $4,200,000? A. No, sir.

Q. Did that have any effect at all? A. No, I don't think it did. As I said before, those extremes were merely

the results of the convenience of calculation, and it was perfectly obvious that neither one of them had any appropriate bearing on the determination of interest during construction.

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[8003] By Mr. Hall:

Q. What consideration did you give at the time of that decision to the actual interest costs which had been incurred by McCall Ferry and Penn Water? A. I don't believe I gave any substantial consideration to it, Mr. Hall, because of the complications resulting from the receivership and all of the other abnormalities of the McCall Ferry Development. It seemed to me it was just a hopeless task to attempt to derive the cost of money. In the derivation of any such figure it would be necessary to just pile one assumption on top of another, and when you got through all you would have would be the product of a whole series of assumptions.

[8004] Q. Mr. Gunn, did you—— A. It seems to me in that connection, Mr. Hall, there is not more than one partial fragment of data which would give you any indication at all as to the interest, and that is the cost of the money borrowed from Knickerbocker Trust Company, which as I understand when correctly computed is approximately seven per cent, 6.9—something, I believe. The reason I described that as being only a fragmentary indication is because that represented only a small segment of the risk of the enterprise because of the guarantees that lay back of that loan as security.

* * *

[8008] Q. However, there was no dividend paid on either the McCall Ferry common or preferred during the period of construction. Right? A. That is correct.

* * *

[8013] Q. The interest on the Knickerbocker Trust Company loan was at the rate of six per cent with a commission of one-half per cent on the maximum amount of the loan. Isn't that so? A. Yes, sir, as I recall it that is correct.

Q. And the maximum amount of the loan secured from Knickerbocker Trust Company was $4,449,600? A. I believe that is correct.

Q. Did McCall Ferry Power Company secure any cash from any other source during the period from April 1905 to October 31, 1907?

* * *

THE WITNESS: The only other funds in cash that I know of which McCall Ferry received was interest that they earned on their deposits. Of course, there might have been a small amount of revenue from McCall Ferry Company.

By MR. HALL:

Q. Just how small would that amount have been? A. Pretty small, I think. It was not a very big [8014] operation. They had only one or two ferries.

Q. About $200 a year? A. I don't have the least idea what it was at that period but it was a small amount.

Q. The only bonds outstanding in the hands of the public prior to February 1, 1908 were the $250,000 bonds issued to Harlow-McGaw for properties? A. Yes, I believe that is correct. Prior to that time the subscribers simply had receipts for their funds which I suppose had all the characteristics of the bonds, but the bonds themselves, as I understand it, had not been issued except those we gave to Harlow-McGaw in exchange for their property.

* * *

Q. Did you make any determination of the average interest rate paid for that period? [8015] A. No, and for the reason I explained early this morning. It was too complicated to compute a rate of interest which could be reasonably described as the true cost of money, and an effort to do so simply would result in piling up a large number of assumptions, one on the other, until you had an answer which had no particular significance. But, as I recall it, the staff by some sort of a mixture of figures arrived at six per cent as a cost of money. It seems to me that the

rate paid to Knickerbocker Trust Company for a fractional part of the project risk proved that is wrong, obviously.

Q. Mr. Gunn, let us check that last statement you made. If we add the amount of $4,449,600 advanced by Knickerbocker Trust Company at six per cent and the $2,817,900 from subscribers at five per cent, we arrive at a total of $7,267,500, right? A. Yes, sir, that arithmetic appears to be correct.

[8016] Q. That being the total cash available for construction purposes. A. Yes, that seems to me to be about the proper amount.

Q. Six per cent on the $4,449,600 loan would result in an annual interest payment of $266,976. Right? A. That appears to be correct. I will accept your mathematics on it.

Q. The commission on a loan of one-half per cent would amount to $22,410 for a year. Right? A. Yes, sir.

Q. And five per cent on the advancements made by subscribers of $2,817,900 would produce an annual interest cost of $140,895. Right? A. I will accept that.

Q. Adding the $266,976, $22,410, and $140,895, we arrive at a total of $430,281. Right? A. I will accept your mathematics.

Q. If you compare the $430,281 annual interest cost with the total funds available of $7,267,500, we arrive at an interest rate of 5.92 per cent. Right? A. I will accept your mathematics on that, Mr. Hall, except I think you didn't mean compare but you meant if you divided the first figure by the second and multiplied by 100 you would get 5.92. Is that what you meant?

Q. Yes. [8017] A. Yes, the arithmetic seems to be correct on that so far as I know. I don't know what significance the figure has now that we have performed the arithmetic. It doesn't have any to me, certainly.

Q. Didn't the Knickerbocker Trust Company offer to extend the loan to any of the individual subscribers for an additional year beyond the three-year period at six per cent

upon payment of a second instalment of 20 per cent of the subscription price?

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THE WITNESS: Yes, I believe that is correct, Mr. Hall. At least they offered to extend them for a year and they did charge a rate of six per cent. Whether they charged the bonus or not I really don't recall. I should think they ought to have extended that loan for less than six per cent.

A payment of another 20 per cent certainly made the risk less of a fraction of the project risk than it previously was.

By MR. HALL:

Q. Are you suggesting that the subscribers did pay a bonus in addition to the interest rate? A. I am suggesting I don't remember whether or not they did.

TRIAL EXAMINER: Counsel has given the witness figures [8018] indicating total advances by Knickerbocker Trust Company and total subscriptions from the subscribers.

On Page 39 of Exhibit 51 those figures don't check.

MR. KING: Referring to page 39 of the text, Mr. Examiner?

TRIAL EXAMINER: Yes.

MR. HALL: Mr. Examiner, the figures on page 39 of Exhibit 51 apply only to the advances made up to November 1, 1907, whereas the figures used in Mr. Gunn's calculations, or my figures furnished to him, were derived from the appendix 3, page 73 of part 2 of Exhibit 51 and represent the total cash ultimately received from the bond subscribers.

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[8041] Q. And in the year 1930 Penn Water also resumed the charging of interest to plant account. Isn't that so?

A. Yes, sir, in 1930 Penn Water formulated a definite procedure for charging interest.

Q. What has been the company's policy with respect to the capitalization of interest since 1930? A. The practice with respect to interest during construction which Penn Water adopted beginning with 1930 was [8042] to charge interest at ½ per cent a month on construction expenditures on all jobs estimated to cost $2,000 and to require more than one month in construction.

They terminate interest under that practice at the end of the month during which the facilities are available for service.

In the case of large projects involving land, interest during construction is charged to both construction expenditures and land acquisition cost.

In the case of acquisitions of land such as the purchasing of flowage rights for the Holtwood development after the project is in operation, the company does not charge any interest during construction on the acquisition cost of such lands.

Q. Is the policy you have just outlined the same as that which has been pursued by the company since 1930? A. Yes, sir.

Q. That is on its books? A. What is that?

Q. The policy pursued on its books in capitalizing interest. A. Yes, sir.

Q. And that policy is in effect today, right? A. Yes, sir.

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[8043] Q. Has Penn Water paid as high a rate as six per cent since 1930 on any of its outstanding bonds? A. Not so far as I know.

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[8044] Q. Why has Penn Water used a six per cent rate in charging interest to construction when it does not pay that high a rate on borrowed money? A. One of the biggest

reasons I know of is that the Federal Power Commission approved six per cent in the Safe Harbor case.

Q. That approval, of course, applied only to Safe Harbor. It had nothing to do with Penn Water's rate of interest. Isn't that so? A. It is a fact that it was approval of Safe Harbor. I wouldn't say it had nothing to do with a proper rate of interest for Penn Water. It seems to me like it had a very great deal to do with it.

Q. How do you arrive at that conclusion? A. Because they approved it for Safe Harbor.

Q. Is that the reason you used six per cent in so far as your computation of interest is concerned? [8045] A. I take it, Mr. Hall, you are referring now to Penn Water's present practice in computing interest during construction, are you?

Q. Yes, since 1930, Mr. Gunn. A. Yes, I would say that was one of the biggest reasons. It seems to me that six per cent was an amount which commonly is used for interest during construction. As a matter of fact, in Safe Harbor we arrived at the interest in all sorts of ways. In the early part of Safe Harbor construction it was on short term borrowings, in which case the interest actually paid was put in, interest during construction. When the project was about half through a $21,000,000 bond issue was sold and part of the proceeds for that were used to repay the short term borrowing and the remainder was available for construction over a considerable time in the future, and as long as the residue of the bond money available for construction in the future lasted, Safe Harbor charged the total amount of interest on the outstanding bond issue, and when that money was gone, that is the residue of the bond issue, Safe Harbor stock was sold to Penn Water and to Consolidated Company, and the proceeds of that stock were treated as the company's own funds, and the Federal Power Commission found, in the Safe Harbor case, that six per cent was an appropriate rate to apply to those funds or to the proceeds of the sale of stock.

[8046] I think our conclusion in Holtwood to use six per cent since 1930 was probably more influenced by the opinion of the Federal Power Commission that six per cent was an appropriate amount to use on the company's own funds than by any other single factor.

* * *

[8086] MR. KING: If your Honor please, while he is looking for that, I just wanted to state for the record that Mr. Eichhorn, the Secretary, and Mr. Bortner, the assistant secretary of the company, will be forced to be out of the hearing room tomorrow and Thursday due to the fact the company is having a board of directors meeting in New York. I previously stated these gentlemen, plus Mr. Chase and Mr. Wetzel, would be here all during Mr. Gunn's cross examination.

* * *

[8308] Q. Did Penn Water incur expenses in connection with the issuance and sale of capital stock during the period from 1923 to 1935, inclusive? A. I don't recall whether they did or not.

Q. Is there any means available to you from which you can refresh your recollection at this time?

* * *

THE WITNESS: Yes, I believe they did, Mr. Hall.

By MR. HALL:

Q. Are those expenses included in your claimed cost? A. Yes, sir.

Q. Why were these expenses incurred? A. Because they were organization expenses under the provisions of the road and equipment accounts of the I. C. C.

Q. What is the total amount of those expenses which you have included in your claimed cost? A. Approximately $82,000.

Q. Do you claim the total of $82,000? A. Yes, sir.

[8309] Q. And there is no elimination at all? A. Well, the total figure was greater than $82,000. The total figure

was $82,963.12. Of that we are claiming $81,906.59, and $1,056.53 was eliminated in connection with the original cost study.

Q. Under what account have you classified your claim of $81,906.59? A. 301, I understand.

Q. Mr. Gunn, in view of the fact that these expenses were incurred during the years 1923 to 1935, how can they be classified as organization expenses of Penn Water? A. To me they are proper when consideration is given to the fact that the Interstate Commerce Commission Account No. 71 is a part of the uniform system of accounts.

Q. Doesn't that organization expense account No. 71 refer to organization expense at the time of the organization of the company? A. I don't think it is limited to that.

Q. What does "Organization" mean to you if it doesn't mean organization in that sense? A. That is one form of it.

Q. What is the other form you refer to? A. Issuance of additional stock, for example.

Q. Doesn't the account state, among other things, "This account shall include all fees paid to Government for [8310] the privilege of incorporation and office and other expenditures incident to organizing the corporation and putting it in readiness to do business"? A. It says that among other things. When you are increasing the capital stock of a company it seems to me you are increasing the scope of the corporation. In any event it was for that reason that I put it in this account.

* * *

[8312] By MR. HALL:

Q. Mr. Gunn, were any of the organization expenses amounting to $81,906.59 which you claimed incurred in connection with the organization of the corporation in 1910—— A. No, not so far as I know. They were incurred in connection with the issuance of stock between the years you mentioned in your previous question.

Q. It is in no way related to the organization of Penn Water in 1910. Isn't that right? A. It is the extension of the organization which was made in 1910.

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By Mr. Hall:

Q. Where does the phraseology contained in account 71 cover extension of organization expenses? A. The whole of the account covers it. That seems to me to be the sense and intent of the account.

Q. That is the way you interpret it? A. Yes. If I hadn't I wouldn't have put the money [8313] where it is.

Q. Did you have any accounting assistance in reaching the interpretation you did? A. I probably discussed it with Mr. Eichhorn. As I recall the principal reason why I so classified it was because company counsel advised me that was proper. It was more of a legal matter than it was an accounting matter. As I recall it it was a rather complicated determination.

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Q. Wasn't an account in about the year 1909 opened up covering reservoir surveys? A. I don't recall whether there was or not. Regarding all of the land costs or reservoir expense incurred after 1910 the company's original cost study was made under my supervision by Mr. Bortner. Mr. Bortner has been the company's land and right of way agent for twenty years and he is thoroughly familiar with those items. I relied on Mr. Bortner's judgment of those items and accepted his recommendations. I do not have before me any of the details of those land transactions.
[8314] Q. Did you reach an independent conclusion as to those items? A. I accepted Mr. Bortner's recommendations.

Q. That is unresponsive, Mr. Gunn.

Did you reach an independent conclusion as to those items? A. I don't know. I accepted Mr. Bortner's recommendations. You can call that whatever you please.

TRIAL EXAMINER: The question is what process did you go through after Mr. Bortner brought in his recommendations. Did you analyze it?

THE WITNESS: I reviewed them generally and accepted them. I don't know what that constitutes.

TRIAL EXAMINER: Did you check them? Did you check the details and processes by which he arrived at the conclusions?

THE WITNESS: I checked the principles he followed, but I didn't undertake to check the details. Those land accounts, Mr. Examiner, represent thousands of transactions which took place over a period of thirty years, and it is a vast amount of detail. It was just wholly and completely impossible for me to check the details or to have before me or in mind the details now. I don't have them.

• • •

[8323] Q. Mr. Gunn, has Penn Water built any of the storage reservoirs contemplated in the 1910 and 1911 investigations? A. No, sir.

Q. Do they contemplate building the storage reservoirs, building any storage reservoirs? A. They have no specific plans for it, I don't think you can properly say they don't contemplate it, but at least they have no specific plans for it.

• • •

[8327] Q. Have you included in Penn Water's original cost determination an amount representing the cost of study made in connection with the roller dam which the company at one time contemplated building? A. Yes, sir, I believe that is correct.

Q. What is the amount of the claim?

• • •

A. About $4800.

Q. What investigation was made in connection with the contemplated building of the roller dam? A. An engineering investigation to determine the feasibility of using

a roller dam to accomplish the same purpose that it was—that ultimately proved best accomplished by the flashboard system presently used by the company.

Q. Isn't it a fact Penn Water had flashboards before the initiation of this investigation? A. Yes, sir, but they were unsatisfactory and were [8328] causing the company a vast amount of trouble with the land owners adjoining the Holtwood project, and several law suits resulted. The Water and Power Resources Board was permitting them to operate their flashboards on temporary permits and requiring annual reports to see they did not infringe the public interest in the shape of the landowners, and it was just a generally unsatisfactory situation which the company was required to correct.

Q. What period did the investigation cover? A. You mean that part of it related to the roller dam?

Q. Yes. A. The years 1914 to 1916, inclusive.

[8329] Q. Did Penn Water expect to correct the unsatisfactory condition by the installation of roller dam? A. They made the investigation for the purpose of determining if they could correct it that way.

Q. Could not the roller dam aggravate the water situation? A. No.

Q. Aggravate it so far as the adjoining landowners were concerned? A. No, certainly not. If it had not been so expensive it would be an ideal solution for it.

Q. How high did Penn Water contemplate building the roller dam? A. I don't recall that detail but I suppose it was up to something like four, four-and-a-half feet.

Q. Wasn't it 15 to 20 feet?

* * *

THE WITNESS: I don't recall it was that high. They may have investigated up to 15 feet but I don't recall investigation going that high. However, they very well in connection with the investigation may have.

By Mr. Hall:

Q. Wouldn't a roller dam from 15 to 20 feet aggravate [8330] the situation with respect to the adjacent landowners? A. If they hadn't gone out and bought more land it might have aggravated the situation, that is if the company hadn't done that.

Q. That would be true even of a roller dam of 10 feet. Isn't that so, Mr. Gunn? A. It might. I don't have enough particulars concerning the boundaries of the company's land to determine that offhand.

Q. To what account was the cost of this investigation charged on the books?

* * *

A. I think it was charged to account known as flashboard account originally, and in the reclassification it was charged to the dam account.

Q. Originally wasn't it charged to Main Dam and Hydraulics, General Hydraulics? A. My records indicate, Mr. Hall, that $1695.09 of the $4819.02 was originally charged to general hydraulics. The remainder was originally charged to Main Dam Account.

[8331] Trial Examiner: That revises your statement about the flashboard account?

The Witness: Yes, sir, I think so. The flashboard account itself is a part of the Dam Account.

By Mr. Hall:

Q. Where did you put it in the reclassification? A. In the Main Dam account.

Trial Examiner: You kept it in the Main Dam account then in your reclassification?

The Witness: That is what happened in effect, yes.

By Mr. Hall:

Q. And the sub-account under the Main Dam account is Flashboards, right? A. Yes, sir.

Q. And it is in that account that you included the claim? A. Yes, sir.

Q. Does Penn Water propose building the roller dam? A. We have no specific plans for it at the moment. Penn Water might at some future time find it desirable to raise the Holtwood Dam, and in which event they might do it by building a roller dam.

Q. What type, Mr. Gunn? A. Roller dam.

Q. What type of roller dam? [8332] A. I don't know. As I said, we don't have any plans for it specifically.

Q. Have you included in Penn Water's original cost claim a contribution of $1,400 made by Penn Water to the building fund of the Holtwood Presbyterian Church in March of 1913? A. I think I have, Mr. Hall.

Do you want to know why?

Q. Yes. A. Yes, I included it there.

Q. That was a contribution, right? A. Yes, sir. I don't know—it is also sort of complicated. It was originally planned by the company to deed the land on which the church was built to the trustees provided upon cessation of its use as a church the property would revert to the company.

However, the church rules prevented the deeding of it to the trustees. They couldn't accept the property and the $1400 was used in the construction of the church, the title to which still belongs to Penn Water and Power Company.

Q. That amount of $1400 never had been included in the Plant account until you made your reclassification, right? A. That is correct.

Q. Where was it charged prior to that time? [8333] A. I think it was probably charged to Surplus back in the days when the original cost of the company's property was not so significant as it is now.

Q. What is the justification for capitalizing this contribution? A. Because it is a worthy expenditure for the House of God.

Q. Would you consider it a contribution made for the employees' benefit or welfare?

MR. KING: Contribution, did you say?

MR. HALL: Yes.

THE WITNESS: I should think that would depend, Mr. Hall, upon the quality of the church services rendered.

* * *

[8335] By MR. HALL:

Q. Mr. Gunn, did the original three-party agreement between Penn Water, Safe Harbor and Consolidated contemplate the construction of the Riverside and Perryville Transmission Lines?

* * *

THE WITNESS: I really don't know, Mr. Hall. I am not sufficiently familiar with the power contract to answer that question.

By MR. HALL:

Q. Can you obtain that information from one of your assistants? A. No, I don't believe there is anybody here who has any familiarity with it. The power contracts in the company are the responsibility of Mr. Spaulding. I really couldn't answer that question.

Q. Do you know when Penn Water began acquisitions for that line? A. Which line? I think you mentioned three or four [8336] of them, didn't you?

Q. Both of them, construction of the Riverside and Perryville Transmission Line.

In answering my question, Mr. Gunn, confine yourself to the Riverside Line. A. I am told the beginning of the acquisition of property on the Riverside Line was late in 1930.

Q. What customers were to be served by that line? A. Consolidated Gas Electric Light and Power Company of Baltimore.

Q. When was it originally expected that the Riverside Line would be built? A. It was originally expected that that line would be built immediately following completion of the Westport Line, perhaps in the latter part of 1931 and 1932.

Q. Why was it decided to defer construction of the line?

* * *

THE WITNESS: I think perhaps there were several contributing factors, one of which was the economic situation which caused a decline in the load in Baltimore, and the other was the unexpectedly good service which was received out of the Westport Line.

* * *

[8338] Q. Had a part of the rights-of-way for the lines been obtained when the decision to defer construction was made? A. Yes, sir.

Q. Why did Penn Water order the construction of seven tower foundations for the Riverside Line in 1932? A. Because at that time Consolidated Company was building tower foundations adjacent to Logan Field for a line of their own, and the construction of those foundations was quite complicated because of water conditions and required rather extensive construction plant. It was known that while Consolidated had their construction plant there for building their foundations that it would be cheaper at that time for them also to build Penn Water's foundations, which were in the water area, and along Logan Field.

* * *

Q. When was the work on the foundations started? A. They were built in 1932. I don't recall just what date.

Q. Completed them in the same year? A. Yes, they were relatively short jobs.

* * *

THE WITNESS: That is, Mr. Hall, they were completed as [8339] far as they were ever built. They were not complete foundations, as I understand it.

Q. Is it your understanding, Mr. Gunn, that five were completed, one partially completed, and one not constructed? A. Yes, I believe that is the fact.

Q. Why was the foundation work stopped?

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THE WITNESS: Because of complications which developed with the authorities concerning the use of Logan Field. Logan Field is an airport within Baltimore, its only airport.

By MR. HALL:

Q. What complications are you referring to now, Mr. Gunn? A. I don't have in mind all the details of it, but the City of Baltimore was using Logan Field as an airport. At the same time it was building another airport. The construction of the airport then in progress kept progressing slower and slower as it went on, thus forcing the City to continue using the Logan Field location.

The towers that the company had to construct in order to give sufficient ground clearance for the 230,000 volt transmission line conductors were such that they would obstruct the gliding angle of certain types of planes coming into and going out of Logan Field, and difficulty developed [8340] with the aviation authorities over that, and it led to the company's halting the construction they then had in progress.

Q. In 1937 when the Riverside line was finally built were all of the tower foundations built in 1932 used for the line? A. No, sir.

Q. How many were not so used? A. The records I have before me indicate that four of them were not used.

Q. How much did the unused foundations cost? A. About $3600.

Q. Have these foundations ever been used by Penn Water for its transmission line? A. No, sir. By "These" you mean the ones I just mentioned—the four?

Q. Yes. A. No, sir, they have never been used.

Q. Have those foundations been abandoned? A. I don't know what you mean by abandoned. They have not been used. They never were used. I don't understand quite what you mean by "abandoned."

Q. Does Penn Water have any plans for using those foundations? A. No, not so far as I know at the present time.

Q. Was the cost of these abandoned foundations ever [8341] removed from the plant account? A. Certainly not. They were part of the cost of the Riverside line and a justified part of it, I may add.

Q. They are not being used as part of the Riverside line. Isn't that so? A. It doesn't make any difference. It is still a justified part of the cost. Would you like to know why?

Q. Yes, why? A. For the same reason the Federal Power Commission withdrew its suit in the case of the quarry land and agreed to the settlement of that case which the company had appealed to the Third Circuit Court.

Q. Would you identify that case? A. That was the Safe Harbor Water Power Corporation's appeal from its original cost case in connection with some land which was bought for use as a quarry and was not actually used as a quarry.

Q. Can you refer us to any document which shows the reason why that appeal was withdrawn? A. I don't recall that there is any document, unless it would be in the Court record. However, I distinctly remember how it came about. It came about as a result of Mr. Milford Springer telling Commissioner Manley that it was impossible to defend the item, and Mr. Manley instructed counsel to get together with Safe Harbor's counsel and [8342] compromise the item and withdraw the suit. It was done. I participated in the conferences in which that was accomplished.

Q. Is the item to which you referred discussed in Opinion No. 18, or was it settled off the record? A. No. As

I recall it I believe the items certainly, when they were disallowed as cost, were discussed in the Commission's Opinions.

The settlement, however, was accomplished by some sort of a legal instrument which was drawn up between Mr. Hambright representing Safe Harbor Water Power Corporation and a member of the Commission's legal staff.

Q. At least in your opinion, Mr. Gunn, the reasoning used with reference to the quarry site allowance justifies your inclusion of the four abandoned foundations—right? A. Yes, sir.

• • •

[8343] By MR. HALL:

Q. Isn't it a fact, Mr. Gunn that the unused towers represented only a temporary location and special permission was secured from the Dundalk Company, in July 1932, to locate these towers temporarily on their lands until a more direct route could be taken?

MR. KING: When you say "towers" you mean tower foundations?

MR. HALL: Yes.

THE WITNESS: Yes, it is my understanding that is a a fact.

By MR. HALL:

Q. Do you know why Penn Water was temporarily unable to use the direct lines? A. Yes, because they obstructed the runway of the Logan Field airport.

• • •

Q. Didn't Penn Water expect conditions to change to allow it to build a more direct line and because of that fact secured only temporary permission? A. Yes, that was the explanation I gave you earlier when I said the City of Baltimore had under construction another airport and expected to abandon the use of Logan Field.

[8344] Q. Did Penn Water retain the crossing permit over Bull Neck Creek required for the more direct line?

• • •

THE WITNESS: It is my understanding, Mr. Hall, that we retained the permits but they had a date limitation in them and it was necessary later to extend them.

By MR. HALL:

Q. Did conditions change to enable Penn Water to use a more direct route? A. Yes, sir.

Q. Isn't it a fact that of the foundations planned for the Riverside line, Penn Water in 1932 built only those which it knew might become unnecessary?

• • •

THE WITNESS: No, I don't think that is a fact.

By MR. HALL:

Q. What other ones did they build?

• • •

A. Towers 271, 272 and 278, the foundations for which [8345] were built at that time, and subsequently actually were used in the line.

Q. But at the time they built those three additional ones they knew they might not be used. Isn't that so? A. No, they expected to use them temporarily. There is nothing unusual in the procedure. That may frequently happen.

• • •

[8377] Q. Why in your opinion should the project bear the cost of the financial reorganization as a cost of construction? A. Because it was unavoidable expense in the creation of the enterprise, each and every dime of it.

Q. Would you have treated it differently if it had been an avoidable expense?

• • •

THE WITNESS: I don't know what I would have done with it. I can't conceive of anything like that happening

if it were avoidable. People just don't put corporations through bankruptcy and lose their opportunity to be compensated for their work for fun.

By Mr. Hall:

Q. Why in your opinion should the project bear the cost [8378] of the foreclosure and sale? A. For the same reason I gave you in answer to the previous question.

[8379] Q. Mr. Gunn, in what sense did you use the word "unavoidable" a few moments ago? A. In this sense: That McCall Ferry was organized by thoroughly capable people in every department of its business. It was advised by the most eminent engineers in the country. It had capable people in every branch of it. The failure and the bankruptcy was, in my opinion, the result of the financial panic in 1907, and it was thus caused by something beyond the control of good management.

Q. Would McCall Ferry Power Company have had to worry about the financial panic if they had initially made proper financial arrangements? A. They did initially make proper financial arrangements.

Q. Did they make arrangements which were sufficient to carry out the construction? A. No, sir, because after the financial arrangements were made the plan for development of the project was changed so as to increase the output of the plant.

Q. Assume they knew that they needed more money to carry out their plans and made the arrangement then, would the financial panic have caused McCall Ferry any concern? A. If you assume also that they could have done it at that time, a fact which I doubt.

* * *

[8381] By Mr. Hall:

Q. Mr. Gunn, have you included in your original cost claim the overhead during the period of suspension from November 1, 1907, to September 1, 1909, as well as other

expenses incurred because of the work suspension? A. Yes, I computed all the costs incurred during that period. I don't agree that is the cessation period, of course.

Q. Why didn't you exclude the overheads applicable to that period? A. For the same reason I didn't exclude the reorganization expense.

Q. Did you make any investigation of these overheads to determine which, if any, were the direct result of construction activities? A. I don't recall that I did.

May I have the last question, please?

(Question read.)

THE WITNESS: I think I will have to modify the last answer. Of course, I knew the character of the expenses during that period, and I am aware that there were expenses of Hutchinson, Cooper, and Sanderson and Porter included in there. Of course, they would be related to construction. However, I didn't make a separation and treat one category of expenses in one way and another category another way. [8382] I treated all the expenses the same.

By MR. HALL:

Q. That is as construction costs? A. Yes, sir.

Q. You have capitalized all overheads prior to November 1, 1907, right? A. Yes, sir.

Q. And you have capitalized all overheads from September 1, 1909, to January 1, 1911, right?

* * *

THE WITNESS: You mean January 1, 1911, or October?

By MR. HALL:

Q. Will you give that explanation? A. Yes, and also we capitalized the overhead from January 1, 1911 to the date of beginning of commercial operation, which is October 1, 1911.

Q. In addition to what you have just stated you have capitalized overhead during the cessation period from November 1, 1907, to September 1, 1909, right? A. Yes,

that is correct, such overheads as were incurred during that period.

* * *

THE WITNESS: Capitalized overheads during that period, [8383] of course, Mr. Hall. I disagree with the characterization of the period.

By MR. HALL:

Q. Assume, Mr. Gunn, that Penn Water were to begin today to construct an additional hydro unit and stopped work when it was 80 per cent complete. Do you think that it would be proper to capitalize overhead until such time as the unit was finally completed? A. That would depend on the circumstances, what caused them to cease construction, how long construction ceased, and it would depend on all sorts of things you have not included in your question. I couldn't answer that question.

Q. What percentage of overheads does Penn Water use in making retirement on its books? A. For the period prior to 1924 the company uses 25 per cent, and since 1924, when the job order system came into effect, the company uses whatever amount the job order on which the property was installed shows.

* * *

[8384] By MR. HALL:

Q. When Penn Water retires property constructed prior to 1924, does Penn Water still use an overhead percentage of 25 per cent? A. I believe they do.

* * *

Q. Had the project been completed without suspension of work the overheads would have been paid during such shorter period. Isn't that so?

* * *

THE WITNESS: Yes, if by "overheads" you are referring to the whole list of periods that we have just previously discussed. I think that is rather obvious.

By Mr. Hall:

Q. Why did you capitalize the general office salaries and general office expenses paid during the period of cessation? A. For the same reason I gave you in connection with [8385] the bondholders' expense. It was a necessary and unavoidable expense of creating the enterprise.

Q. You don't mean creating, do you, Mr. Gunn? A. Well, it seems to me that is the proper description. Building the project, if that is better. I have used the word in a general sense.

Q. The general office of McCall Ferry and its employees were located in New York City, right? A. I believe that is correct, but not all of its employees by any manner of means. Most of McCall Ferry employees were, of course, located in Holtwood.

Q. That was the construction crew, right? A. Construction and some supervisory, I think.

Q. Is it your view that the retention of Mr. Barnum, the Treasurer, of Messrs. Foote, Hinton or Sillick, Accountants, who remained on the payroll after the project work was closed down, lessened the time necessary to complete the project when it was finally reopened at the end of August, 1909?

* * *

[8386] The Witness: Yes, I should assume it did if the bookkeepers were busy.

By Mr. Hall:

Q. How did their retention shorten the later construction period? A. To the extent that they did any work that much work was not necessary to be done later. Of course, you know Mr. Barnum was not the bookkeeper. He was a lawyer.

Q. He was the Treasurer; right? A. Yes, sir.

Q. What work did these individuals do which shortened the later construction period? A. I don't know.

Q. Will you describe any expenditure charged to general office salaries or expenses during the period from November 1, 1907 to July 17, 1909, which was made and represented direct construction costs?

* * *

THE WITNESS: Mr. Hall, in that question you are still referring to the three bookkeepers and the lawyer, are you?

By MR. HALL:

Q. Any expenditure charged to general office salaries or expenses? A. I would say that Mr. Hutchinson's efforts contributed [8387] to the construction of the project and I would say, also, that these three bookkeepers to the extent they were busy were either catching up on their past work related to construction or doing work which would otherwise have had to be done at some other time.

Q. To what extent were they busy? A. Well, I wasn't there, Mr. Hall. But with the company in the financial situation McCall Ferry was in I certainty don't assume they were wasting money on salaries for people not to do anything.

Q. To what extent was their work in arrears? A. I don't know.

Q. As a matter of fact, Mr. Gunn, you don't know that it was in arrears—right? A. No, I am just assuming that there was some reason for McCall Ferry keeping them on the payroll and, being bookkeepers there would have to be some sort of work of that sort for them to do.

Q. What did Mr. Kirkland, Mr. Pender, Mr. Deutzman, or the clerical help do in actual construction during the period of cessation?

* * *

THE WITNESS: I think Mr. Kirkland, and perhaps Mr. Pender, were working on the plans and designs and perfecting [8388] those which we discussed the other day, and certainly for a considerable part of that time, during the

tailrace work, the bookkeepers were probably keeping the books because there was a considerable volume of work which went on, if you recall. You have included that within your period. So I suppose everybody was engaged on that. If you recall, during that period of time, Mr. Hall, the payroll of McCall Ferry Power Company ran up to in excess of $30,000 a month.

By Mr. Hall:

Q. The three men I named, Mr. Gunn, were not directly engaged in construction work—right, during the period? A. I believe Mr. Kirkland certainly was. They were not actually out excavating the rock. Mr. Kirkland was an engineer and certainly active in the design of the plant. Mr. Pender was secretary and treasurer and also an electrical engineer.

Q. Those three individuals were not in direct supervision of the construction work—right? A. They certainly had responsibility in connection with the completion of the designs. There is no question about that.

Q. Inasmuch as those three individuals were located in New York how could they have been in direct supervision of the construction activities? A. I didn't say they were in direct supervision of the [8389] construction activities. I said they had duties in connection with them and they had duties in connection with the design. It is my understanding designing was actually done in New York.

Q. What was the nature of the duties of these three individuals? A. I imagine the ordinary duties of an engineer supervising design. I was located in Baltimore during the design and construction of Safe Harbor. I was working on it. It is not necessary you be sitting on top of the project to have something to do in connection with it.

Q. The fact is, Mr. Gunn, you don't know the specific nature of the duties these three individuals were performing during the period of cessation. Isn't that so? A. All I know about it is what is in the Exhibit 27 and Exhibit 26,

and the fifteen filing cases, all of which have been available to the Commission Staff for the last two and a half years.

Q. Did the retention of the three individuals on the payroll decrease the time necessary to complete the project when it was finally reopened at the end of August, 1909? A. I am very sure it did.

Q. How much time did it save? A. I don't know how much time quantitatively, but it obviously saved time. [8390] Q. What makes it so obvious that they did? A. Because they were completing the designs of the powerhouse and they had duties in connection with the tailrace excavation.

Q. I thought you stated a few moments ago that you did not know the exact nature of the duties performed by those three individuals? A. That is another matter. When you stick the word "Exact" in there I obviously must say I don't know. But I didn't say, and that doesn't mean, I had no knowledge at all.

Q. What designs were these three individuals completing?

* * *

THE WITNESS: Mr. Hall, I have before me a tabulation showing the details of work that was done between those dates which was in the nature of engineering design which is made up of several columns, one of which is headed with the word "By" and immediately below appears H. L. C., which refers to Hugh L. Cooper. That fact indicates that all of these drawings on the first 4 pages were started by Cooper's organization, and that column may be eliminated in copying this.

There is another column headed "Penn Water and Power Company" in which is contained Penn Water and Power Company's drawing numbers set opposite the drawing numbers of McCall. [8391] Ferry Power Company. I think the Penn Water and Power Company drawing numbers for this purpose is without significance and also may be eliminated.

MR. HALL: I suggest, Mr. Examiner, that with the elimination of the two columns referred to by the witness the schedule referred to, consisting of six pages, be copied into the record as if read.

* * *

(The pages referred to are as follows):

[8392] McCALL FERRY POWER COMPANY DRAWINGS

November 1, 1907 to December 31, 1909

Number Mc F. Co.	*Date*	*Title*	*Revision*
552	2-14-07	Details of ice chute.	7- 9-08
579	3-13-07	Details of recess for upper draft tube casting.	8-17-08
582	3-18-07	Details of recess for turbine thrust bearing.	7-13-08
586	3-18-07	Details of thrust bearing chamber showing castings in place drainage, etc.	8-14-08
630	4-25-07	Manhole between each of main units.	8- 3-08
632	5- 3-07	Cross sec. of substr. at M. U. showing spaces to be filled in when wheels are installed.	8-20-08
645	5-18-07	Detail P. H. substr. through exciter units.	
655	5-22-07	Plan and profile of tailrace.	7-18-08
656	5-23-07	Cross sec. of tailrace.	3-20-08 7- 7-08
660	5-28-07	Plan of center line of canal below weir.	7-18-08
661	5-27-07	Cross sec. at main power unit showing superstructure.	7-21-08
675	6- 1-07	P. N. Cross sec. of substr. at M. U. #1 to 7, Inc.	7-25-08

Number Mc F. Co.	*Date*	*Title*	*Revision*
676	5-28-07	Position of transf. with reference to tail water discharge and construction bridge.	7- 6-08
[8393]			
756	8-12-07	P. H. Super-Conc. out. and details of openings wall below gen. room and gate house.	7-15-08
765	8-20-07	P. H. super. detail of end walls river end.	7- 7-08
771	8-26-07	Details of main side walls, gate house.	7-20-08
773	8-26-07	Shore end of P. H. showing fishway location.	7-20-08
774	8-26-07	Details of east end of P. H. from center line of Unit #10.	7-20-08
779	9- 3-07	Details of south wall of gen. room from El. 130.00 to 191.50 between transf. house and shore end.	9-21-08
782	9-10-07	Details of stop log gallery and substr. of transf. house.	4-21-08 9-22-08
785	9-10-07	P. H. super. details of end walls (shore end).	6-18-08 7-18-08
786	8-11-07	P. H. super. detail of wall below El. 191.50 south side of gen. room transf. house to river end.	7-26-08
788	9-18-07	Details of coping river end of P. H.	7-20-08
794	9-19-07	Steel for window frames 1st and 2nd floors, transf. house.	7-21-08
796	9-23-07	Steel for frames shore and river ends.	7-21-08

Number Mc F. Co.	*Date*	*Title*	*Revision*
797	9-25-07	Details of coping shore end of P. H.	9-21-08
811	10- 4-07	Details upper end of fishway.	7-20-08
854 [8394]	10- 1-07	Details of windows.	7- 1-08
872	11-19-07	Sketch showing hook for 100 ton traveling crane.	7- 1-08
878	12-12-07	Longitudinal profiles under dam, showing rock bottom as prepared to receive concrete.	
904	1-28-08	Track crossing over permanent R. R. cut.	
905	1-24-08	Preliminary location of entrance R. R. into P. H.	
906	1-24-08	Profile and sections of proposed permanent line from P. H. to P. R. R.	
909	2- 7-08	River end wall of transf. house.	4- 1-08 6-18-08
915	2-19-08	Transf. house south wall river end.	Obsolete
918	2-21-08	Transf. house south wall (shore end). Super. by 259 A 2546	
919	2-24-08	Details of coping for river end of transf. house.	4- 1-08 6-18-08
944	4-10-08	Sketch plan concrete east of No. 10 unit.	
1011	5-23-08	Details of conc. piers on top of cribs—ice protection.	
1018	6-16-08	Cross sec. of M. U. showing opening in concrete for supporting ring brake arms and cylinders, conduit pipe for handling operating shaft.	8-15-08

Number Mc F. Co.	*Date*	*Title.*	*Revision*
1019	6-19-08	Ice protection, gen'l. details of boom.	Super. by 4287
1020	6-23-08	Sketch showing arrg't. of trolleys and tracks for tailbay stop log hoist.	
[8395]			
1030	7- 9-08	Details of ice chute tunnel and foot bridge at shore end of P. H.	Super. by 239 A 2470
1032	7-13-08	Details of stop logs for ice chutes at shore end of P. H.	Obsolete
1033	7-20-08	Sectional plan of P. H. at El. 138.50.	
1049	7-23-08	P. H. plan and El.	
1050	7-25-08	Steel for window frames 1st floor transf. house.	
1052	7-29-08	Drainage System of P. H.	
1057	8-22-08	Air line as constructed.	
1058	8-31-08	Sketch showing expansion joints and revised arches for deflecting dam.	
1059	9- 4-08	Sketch showing Reinf. of Deflecting Dam.	
1061	9- 3-08	Present contour of rock fill dam.	
1062	9- 3-08	Progress curves of work on Cully's cut. for June, July and August, 1908.	
1063	9-21-08	Progress Curves of work on Cully's cut. 1908 total organization.	
1066	10- 6-08	Gauging of Susquehanna River at McCalls Ferry.	

[8396] SANDERSON AND PORTER DRAWINGS

November 1, 1907 to December 31, 1909

Number Sanderson & Porter	*Date*	*Title*	*Revisions*
46 B 33	7-15-08	Plan of floor El. 151.0 and Rheo. Gallery shore end showing conduits.	3-14-08 6-15-08 10-24-08
46 B 37	1-25-08	Plan of Floor El. 151.0 and Rheo. Gallery River end showing conduits.	3-14-08 6-11-08 9-14-08 10-24-08
46 B 46	3-20-08	Transf. pocket oil drains, plan and details locker rm., H-1-H-2 & L Transf.	
46 A 24	4- 8-08	Cross section of transf. house, generating station	Obsolete
46 B 42	2-24-08	Detail of barriers for 11,000 V cables between 1st and 2nd floors.	Obsolete
—	1- 2-08	Arrg't. feeder panel for cranes	Tracing Missing
—		Diagram of connection of Sta. S & P circuits.	Super.
—	10-15-08	Switchboard for station light and power.	

[8397] EMPIRE ENGINEERING CORPORATION

November 1, 1907 to December 31, 1909

Number Empire Const. Company	*Date*	*Title*	*Revisions*
4	11- 4-09	Centers for wheel chambers.	
5	11- 6-09	Plan of east end of P. H.	
6	11-20-09	Concrete piers on top of center cribs, ice protection.	
7	11-25-09	Abutment main dam and P. H.	
8	12-20-09	Man hole for main unit.	
10	2-12-10	Windows transf. house.	
11	2-18-10	So. wall transf. house above El. 151.0.	
12	2-25-10	Plans of river and transf. house.	
3	10-28-09	York Co. abutment of main dam.	
—	1-29-10	South wall transf. house below El. 151.00.	Super. by 259 A 2545
—	1-15-10	South wall transf. house below El. 151.00.	Missing Jan., 1927
1	10-11-09	Plan & details of stoplog gallery.	
2	—	Side Elev. pressure and Pro. cableway Charlestown, Md.	

[8398] By MR. HALL:

Q. Mr. Gunn, isn't it a fact that all the drawings described in your answer represent drawings prepared by H. L. Cooper's organization in New York? A. Those on the first 4 pages were started by Hugh L. Cooper's organization, those on the 5th page were started by Sander-

son & Porter and those on the last page by Empire Engineering Corporation.

Q. And the revisions to Cooper's drawings were done by Cooper's organization as well? A. Yes, under the supervision of the individuals we have been talking about in McCall Ferry Power Company.

Q. Were Messrs. Kirkland, Pender and Deutzman in Cooper's New York office? A. No, sir. They were officials of McCall Ferry Power Company. In referring to their supervising and coordination of the completion of these drawings I am referring, of course, to Kirkland and Pender. This other name you mentioned, Deutzman, I don't recognize. I don't know whether or not he was even an engineer.

Q. What connection did Kirkland and Pender have? A. Cooper's New York office was doing the engineering work on McCall Ferry project and Kirkland was vice-president and general manager. Pender was secretary and treasurer.

Q. Did either of those gentlemen supervise Cooper's work? A. Depends on what you mean by supervision. In the sense I have used it they did.

[8399] Q. In what sense did you use the word "supervision"? A. That they exercised general approval over the results of engineering designs made by Cooper, just like the officer of any other corporation would exercise general approval over the work of a contractor he employed.

Q. What documentary evidence, Mr. Gunn, can you point to in order to substantiate the statement that Kirkland and Pender supervised Cooper's New York office? A. I haven't said they supervised Cooper's New York office, Mr. Hall.

Q. The design work of that office. A. I didn't say they supervised the design work of it. I have told you what they did. The documentary evidence is the fact that Kirk-

land was vice-president and general manager of McCall Ferry Power Company.

Q. And everything else that you have stated you infer from that? A. There might be some more evidence in the fifteen filing cases.

Q. You don't know of any that you can point to at this time, do you? A. I don't have any in mind at the moment. It would take a search of those records. I think it is obvious somebody had to do the job and we might be able to find some more evidence if it is that important.

[8400] Q. You thought these two individuals, Kirkland and Pender, did it? A. I thought they did it.

Q. Yes. A. Yes, sir. It is just a necessary function which must be performed. It never occurred to me to question whether or not they did.

* * *

By Mr. Hall:

Q. Wasn't Mr. Parsons the head of Cooper's New York organization? A. I don't know. There is no question—if this is what is troubling you—there is no conceivable question but what Mr. Cooper had a supervisor in his New York office. There is also no question in my mind but what the officers of McCall Ferry Power Company had a function to perform in connection with Cooper's design. These were the officers and the function is obvious. By "these" I mean Pender and Kirkland.

[8401] Q. Why is there no question in your mind that Kirkland and Pender had a function to perform in connection with the drawings prepared by Cooper's organization? A. Because I have been practicing engineering for 25 years and I know that such functions are necessary.

Q. And you have assumed that that was the case with Kirkland and Pender back in the period of cessation—right? A. I think it is more than an assumption. I am pretty sure the sun rose back in 1910, but I don't think that is an assumption. I can't prove it with any documentary evidence in the fifteen filing cases.

Q. Isn't it a fact that Kirkland left McCall Ferry Power Company in February of 1908 because there was nothing more for him to do? A. I believe it is a fact he left then. I don't know what the reason was.

Q. Mr. Gunn, did the retention of the engineering experts on the payroll decrease the time necessary to complete the project when it was finally re-opened at the end of August of 1909?

* * *

[8403] THE WITNESS: It is my opinion that it did.

By MR. HALL:

Q. How did their retention decrease the time necessary to complete the project? A. By reason of the work they performed which we have just been discussing.

Q. How much time was saved? A. I don't know.

Q. Isn't it a fact that Mr. Value, Mr. Cooper's representative, left the job and Mr. Goodwin was placed in charge of the tailrace excavation in 1908? A. I believe that is correct.

Q. And isn't it a fact Mr. Goodwin's salary was paid by McCall Ferry Power Company, whereas Mr. Value, if he had stayed, would have been paid by Cooper out of his personal fee as manager of the hydraulic construction?

* * *

THE WITNESS: I think we will have to break that down or have an explanation of it. It is true that Mr. Value, as long as he was needed at the project, was to be paid out of Mr. Cooper's fee. It is also true that Mr. Goodwin was always Mr. Value's assistant and always had been paid by McCall Ferry Power Company. When he did the tailrace work he continued to be paid by McCall Ferry Power Company.

[8404] By MR. HALL:

Q. But he performed the functions Mr. Value would have performed had he remained? A. No.

Q. What additional function did he perform? A. What additional function?

Q. What different function? A. Mr. Value was a man of such capability he was not needed for the tailrace work. Mr. Goodwin was perfectly capable of supervising it.

* * *

[8429] By Mr. Hall:

Q. Mr. Gunn, isn't it a fact that the hydraulic department of McCall Ferry had its own bookkeeper, timekeeper, storekeeper, clerks, engineers, draftsmen and foremen at McCall Ferry?

* * *

The Witness: It is a fact they had engineers, draftsmen and foremen, but it is my understanding that the books of accounts of McCall Ferry Power Company were kept by Sanderson and Porter under their contract, and they were compensated on a cost-plus basis for keeping the books. I believe you will find that in Sanderson and Porter's contract. It very well may be true that the hydraulic department, which was Cooper's organization, may also have had some bookkeepers and timekeepers. That detail I don't recall.

By Mr. Hall:

Q. As well as storekeepers and clerks? A. Yes, I should think they would have had to have some storekeepers and clerks to cover their part of the work.

Q. Isn't it a fact that the hydraulic department had its own New York office with a bookkeeper, purchasing agent, [8430] engineers, draftsmen, clerical and stenographic help? A. I don't quite understand your question, Mr. Hall. The hydraulic department was Hugh L. Cooper, as I understand it.

Q. Yes. A. Hugh L. Cooper did have a New York office. I don't understand that he had a separate New York office for the McCall Ferry Power Company project. It is

undoubtedly true that in his New York office he had some clerks and bookkeepers.

Q. Isn't it a fact that Mr. Goodwin's salary and expenses and the salary and expenses of his assistants are charged to the hydraulic department accounts? A. Yes, sir, that was in accordance with Cooper's contract for the construction of the project.

Q. Isn't it a fact that the preparatory work on the tailrace did not commence until May of 1908 and was finished on October 15, 1908?

* * * *

THE WITNESS: That is substantially correct, although I would say the preparatory work began sometime during the month of April and was finished about October 15.

Mr. Hall, in answering that previous question I understood you to be referring to the resumption of work on the tailrace. Of course, the tailrace work had been started by Kerbaugh [8431] earlier.

By MR. HALL:

Q. That is right. A. And the date you gave me in your question indicated you were referring to the resumption of work on the tailrace in 1908.

Q. That is correct.

So that the men were not engaged on construction work during the period of cessation prior to April, 1908 or after October 15, 1908. A. That depends upon what you refer to by construction work, Mr. Hall. I interpret the general term "construction work" when referred to a project to include all work on it, including the engineering design and all other functions in connection with it.

Now, if you are limiting your term of construction work merely to the work of laborers doing such things as excavation and pouring concrete, installation of machinery and work of that sort, if you so limit it then I believe that is substantially correct.

* * *

[8432] By Mr. Hall:

Q. Did the treasurer have a separate office in New York at 62 Cedar Street? A. I really don't know, Mr. Hall. I don't recall.

Q. Where was the treasurer's office? A. I don't recall.

Q. It was located in New York, wasn't it? A. I believe it was.

Q. Hutchinson and Dimock and their assistants had an office in New York at 60 Wall Street. Isn't that so? A. Hutchinson had an office in New York somewhere. I don't know whether it was at that address, and I don't understand that Hutchinson's office had anything to do with Dimock's office. Hutchinson was a consulting engineer in New York and had a consulting engineer's office there. I was never aware that it had any connection with Dimock or anybody else.

Q. Cooper and his assistants had an office in New York which was charged to the McCall Company. Isn't that so? A. No, I don't think that follows: It is true that Cooper did have, he and his assistants did have, an office in New York, but it is my understanding that their sole business at that time was not work they were doing on McCall Ferry project, and therefore I don't assume that all of Cooper's New York expense was charged to McCall Ferry project.

Q. Didn't the McCall Ferry Power Company pay the office [8433] rent for Cooper's New York Office? A. I don't know. They may have paid a part of it. I don't think it follows they necessarily paid it all. I think it would have been perfectly proper for them to pay a part of it, a proper part of it. They had to have some place to house the personnel in New York which Cooper was employing on the McCall Ferry project.

Q. Did I correctly understand you to say, Mr. Gunn, that Cooper had a New York office which was engaged on all Cooper's work? A. That was my understanding of it.

Cooper was a consulting engineer and maintained a permanent office in New York.

Q. Cooper also had a local hydraulic office at McCall Ferry which was charged to the project—right? A. He had some personnel there. I don't know whether you would call it an office or not. He had the men who were reporting to Mr. Value and to Mr. Goodwin. I would suspect he had several engineers there. A project of that magnitude would require the services of several engineers, a surveying corps, and numerous other technical personnel.

Q. Sanderson and Porter had an office in New York which made charges to the project. Isn't that so? A. I assume they did. I think their contract provides that they would have to cover their scope of the work as covered by their contract.

[8434] Q. As a matter of fact, until September 1, 1906, Sanderson and Porter acted as accounting managers and kept books of the McCall Ferry Power Company. Isn't that so? A. That is my understanding.

Q. What other offices did McCall Ferry project support? A. I don't quite understand that question, Mr. Hall.

Q. The same types of offices we have been discussing. A. I suppose they had any other offices they needed in connection with the project, but I don't recall offhand. As a matter of fact, I don't think it can properly be said they supported the ones we have been talking about, unless you are using "support" in the sense I have limited it in my answers.

Q. Did Cooper complete all the work he undertook in his contract with McCall Ferry Power Company? A. No.

Q. As a matter of fact, Empire Engineering Corporation completed the hydraulic construction started by Cooper and received a fee of $60,000 for so doing. Isn't that so? A. They completed what Cooper had not finished.

Q. Yet Cooper also received his full fee of $130,000 without deduction for the work he did not complete—right?

A. I believe that is correct, because he was able to demonstrate that he was in a position to fulfill the contract. McCall Ferry was not in a position to do it, and as I recall it Cooper threatened to sue them for it. In any event they [8435] felt it necessary to pay the man.

TRIAL EXAMINER: When did he threaten to sue? Do you remember?

THE WITNESS: It was after the project was in financial difficulties.

May I check that?

He threatened to file a suit in October, 1908. His claim was based upon this fact, Mr. Examiner: His contract called for certain payments if he would complete his work by a certain date, that is the part of the work covered by his contract. At the time McCall Ferry Power Company got into financial difficulties, Cooper's work was so far advanced it was perfectly obvious that he, on his part was capable of completing it. It was on that basis that they were forced to settle and make the payment to him.

By MR. HALL:

Q. Do you know how much of Cooper's fee is applicable to the work he did not complete? A. None, obviously.

Q. Isn't it a fact that Cooper's fee covered only his and Value's supervisory services with all salaries and expenses in connection with preparation of plans or construction work being paid by McCall Ferry?

* * *

[8436] THE WITNESS: Yes, I believe that is correct, Mr. Hall, if you interpret the word "salary" as being Cooper's total remuneration.

By MR. HALL:

Q. The cost of preparing plans is included in the hydraulic department expense, is it not? A. Yes, all of the costs of preparing plans except Cooper's and Value's supervision of it.

Q. Preparation of plans did not necessitate closing down the project? A. No.

Q. Did Sanderson and Porter complete the work they had contracted to do for their fee of fifty thousand dollars?

* * *

THE WITNESS: They completed the drawings, which was a part of their contract, but they did not complete the installation of machinery, which also was a part of the contract.

By MR. HALL:

Q. Isn't it a fact that the installation of the electrical work had not even begun when work was suspended on November 1, [8437] 1907? A. That is substantially correct.

Q. And a large part of the material and equipment had not even been ordered. Isn't that so? A. No, I don't think that is quite so. As a matter of fact, as I recall it, the majority items of equipment and material, which are the great bulk either dollarwise or any other way you want to compute it, had been ordered.

Q. None of the substation materials or transmission line materials had been ordered. Isn't that so? A. That is correct, but as a matter of purchasing and ordering that is a relatively minor operation. The equipment I had reference to was turbines, generators, transformers, I believe the switchboard as a unit had been ordered, and certainly as regards the power station that was by far the greater part of the materials and equipment.

Q. Isn't it a fact that the transmission line had not yet been surveyed or specifications drawn therefor? A. No, I don't think that is correct because McCall Ferry Power Company had advanced to their lands agents somewhere about $100,000. They were actually buying the right of way with it. It is perfectly obvious they couldn't have been buying right of way without knowing where they would locate the line.

Q. Well, Mr. Gunn, does the surveying and specifications [8438] precede the acquisition of right of way? A. Certainly. It must. Otherwise you wouldn't know where to buy the right of way, you wouldn't know where you wanted to locate the towers, you wouldn't know what clearances you were going to have in the line; in fact you would be just silly to start buying right of way without knowing the characteristics of the line and without knowing the route over which it would run. You might as well just start out buying miscellaneous farm lands.

Q. Isn't it a fact, Mr. Gunn, that the work which Sanderson and Porter were obligated to do was actually completed by Mr. Wails? A. Some of it was.

Q. What portion? A. The installation of machinery. That is the principal item, Mr. Hall.

Of course, of the work Sanderson and Porter were contracted to perform, by far the greater part of the responsibility under that contract was the design of the powerhouse and the specification of the equipment, and particularly the major equipment.

Q. Do you know what portion of the fee actually paid Sanderson and Porter represented work actually performed by them? A. All of it. That seems perfectly obvious to me, Mr. [8439] Hall, for the reason that with the financial condition McCall Ferry Power Company were in they certainly wouldn't have paid it unless they felt they had to pay it. I don't know that Sanderson and Porter undertook to sue them for it, but I have no doubt they would have if it had not been forthcoming.

Q. Do you have any means of determining the exact proportion of Sanderson and Porter's supervisory functions, which were completed? A. I have described them to you. I don't know how you would measure them except by description.

Q. Is insurance paid during the period of cessation a proper charge to construction? A. Certainly.

Q. Does that apply to fire insurance? A. Each and every dollar they spent for whatever they may have paid it so long as it was a justified and prudent expenditure.

Q. How do you justify that insurance as a proper construction charge? A. Because it was a proper and prudent thing to do, that is the taking of insurance. For example, if they had not taken insurance and they had a fire, done serious damage to the construction work already done, it would have cost much more to complete the powerhouse and they might have gone busted again.

* * *

[8440] By Mr. Hall:

Q. Did you consider, Mr. Gunn, the construction period was in any way affected by the payment of insurance charges? A. Not by the actual payment of the charge, Mr. Hall, but if there had been no insurance and there had been a serious [8441] fire, I think it very well may have been serious—it very seriously would have affected, indeed the project may never have been completed. In other words, it has the same effect that insurance against a risk which does not incur always has on every operation of every sort.

* * *

By Mr. Hall:

Q. Did you make any investigation of the insurance charges to determine how much applied to the period from November 1, 1907 to September 1, 1909? A. No, sir, that was of no significance to me.

Q. Did the general engineering expenses incurred during the period of cessation decrease the time necessary to complete the project after its reopening in August of 1909? A. Unquestionably they did.

Q. In what manner? A. By forwarding the engineering work in such manner that when they did reopen the project they were in a position to go ahead unhampered by the necessity of attempting to pursue construction and

design simultaneously. I think it not only shortened the construction period, but when a project is built that way—and by that way I mean attempting to pursue construction just one jump behind the plans—it is also much more expensive than it is if the plans are perfected [8442] and the construction can be planned far in advance.

* * *

Q. Mr. Gunn, isn't construction and design usually pursued virtually simultaneously? A. All too often it is, but it is highly undesirable.

Q. It was being done that way prior to November 1, 1907—right? A. No, I don't understand that to be a fact.

Q. You mean that the designs were ahead of construction? A. I understand that the designs were far enough ahead of construction until they were not hampering the construction work.

Q. What is that based on, Mr. Gunn? A. Based on several things. First, the fact that the work prior to the date we are now discussing, that is the so-called cessation period, had been largely on the dam in which a few simple plans provided a very great magnitude of work. For example, in designing the dam they needed only a plan and cross section, and with those two drawings and maybe a few detailed drawings they had a year and a half of work ahead of them.

But when you go into the powerhouse to design that and to construct that it becomes an altogether different matter [8443] and a very much more important matter that your drawings precede your actual installation by enough time to do several things: To organize and plan the work, to schedule the delivery of the equipment so that it would come in in the order in which it can be installed, and it will not involve a lot of rehandling, and it has many advantages which if they are not present result in excessive cost of the work.

Q. How much time was saved by the design work you have just referred to? A. I couldn't state precisely how much it saved. That would be pure speculation. I think it would be possible to go back over the details minutely and make some sort of an intelligent guess at it, but I don't think you could describe it as any more after it was done, other than to say it would result in a substantial saving. I don't know how to describe it other than that.

Q. Did you reach any conclusion as to the amount of time saved before you included the expenditures in question in your claim? A. No, sir, I just recognized it would be a substantial saving of time and also cost.

Q. What do you mean by a saving of substantial time? A. Just that.

Q. What is substantial time? A. It is substantial time. By that I mean it is not [8444] a trivial saving. Let's put it that way.

Q. Well, is it a month? A. I should think it would be more than a month.

Q. How much more? A. I don't know.

Q. Isn't it a fact that these expenses represent mainly miscellaneous expenses of the engineering experts? A. Which expenses are we talking about now, Mr. Hall?

Q. The expenses included in the account "General Engineering Expenses"? A. During what period?

Q. During the period of cessation.

• • •

[8445] A. Yes, the Account "General Engineering Expense" included that amount of money. However, you have characterized it as cessation period. Of course I disagree with that characterization. Commission staff's exhibit so shows that amount of money.

Q. Otherwise your answer is "Yes"? A. Otherwise my answer is "Yes."

[8446] Q. Why did you capitalize the expenses segregated on the books in the "Cessation Account" totaling

$36,445.21? A. I don't recognize the figure, Mr. Hall. Where is that to be found?

Q. Will you refer to Page 37, Part 2 of Exhibit 51? A. Yes, sir, I have that before me now.

Q. Do you see under the disallowed column the amount of $36,445.21 opposite the words "Cessation Expense"?

* * *

THE WITNESS: Yes, I see the figure, Mr. Hall. That is Caption D "Cessation Expense." Those expenses were capitalized because they were unavoidable costs to carry the McCall Company development to completion, and represent costs actually incurred.

May I have the answer, please?

(Answer read.)

THE WITNESS: I don't have the precise details of that account before me, but as I recall it it consists of unloading materials, particularly some ten or twelve carloads of roof tile, stripping forms from concrete which had been [8447] poured previous to cessation, maintenance and repair of the construction plant, and various other items of that nature.

By MR. HALL:

Q. Mr. Gunn, may we describe those expenditures generally as representing clean-up, putting away, and otherwise securing and protecting the plant to preserve it from damage during suspension plus other expenditures caused by cessation? A. You could describe only a small portion of it that way, Mr. Hall. For example, it is true that during that period they greased and did some repairs to the construction plant. Those repairs and that lubricating would have had to be done whether it was laid up or not. It is a fact it was a desirable thing to do it incidental to the laying up of the plant for the cessation period. So it is impossible, in the case even of that item, to classify it exclusively, and that would be the one most likely to be classifiable as you have characterized it. The sole result of having done it was not the cessation period.

Q. Did McCall Ferry have a separate account in which was included the expenditures for, repair and construction work and so forth? A. Referring now to the cessation account?

Q. Yes. A. Yes, they had a separate account. It was that account which contains the cost of unloading, for example, [8448] the roof tile which came into the powerhouse and stripping the concrete forms. Obviously that work had to be performed whether they had a cessation period or not.

• • •

[8449] By Mr. Hall:

Q. Mr. Gunn, did Albert S. Crane prepare a report dated September 10, 1908 on the McCall Ferry Power Company for Electric Bond and Share Company? A. I believe a report was prepared, it seems to me, by Albert S. Crane and working with Mr. S. D. Mortimer, I believe.

Q. Didn't he list in that report the cessation account as "Loss due to stoppage of work"? A. I don't remember what he had in that report, certainly not in that detail.

I haven't looked at the report, Mr. Hall, for seven or eight years.

• • •

Q. Have you excluded the expense of reopening the McCall plant in 1909 in your original cost claim? A. No, sir.

[8450] Q. Why not? A. Because it was a necessary and unavoidable expense in the creation of the enterprise under the circumstances which McCall Ferry and Penn Water encountered.

Q. This expense would not have occurred if construction had occurred without cessation to the completion of the project, isn't that so? A. That is correct.

• • •

Q. Do you have any records of the cost of reopening the McCall development in 1909? A. I don't recall there

were any separate records. Whatever they are, they have been available to the Commission Staff for the last two and a half years. I think there are records of the cost, Mr. Hall. The company has somewhat in excess of fifty thousand vouchers to represent the transactions of the company from its inception, and such costs as [8451] there are no doubt are among those fifty thousand vouchers. My difficulty is that I have not memorized them all.

MR. HALL: May we have marked for identification as Exhibit 205 the tabulation furnished by the company a few days ago and which is entitled "Nature of Interest, Approximate Area, and indicated Purchase Price of Property acquired by Hutchinson, including York Furnace Power Company Properties, Later Conveyed to McCall Ferry Power Company under Contract Identified as Part 19 of Exhibit 27"?

• • •

(The document referred to was marked Exhibit No. 205 for Identification.)

• • • •

By MR. HALL:

Q. Mr. Gunn, who prepared the schedule which has been marked for identification as Exhibit 205? A. Mr. Bortner prepared it at my request.

MR. KING: I might add in response to a request from the Staff.

MR. HALL: Yes.

By MR. HALL:

[8452] Q. Am I to understand that this document contains a complete list of all the prices paid for the land by York Furnace Power Company or Cary T. Hutchinson insofar as that information is available?

• • •

THE WITNESS: Yes, sir.

And I would like to call your attention to the last column, the heading of the last column, appearing on the second page. In your question you said "prices paid". Some of the prices, I think it would be proper to say, instead of prices paid that it contains all the evidence which indicates the price paid. The reason I must make that qualification is that the indications contained in that column come from various sources of information, some from correspondence in the file. Some of them deed consideration and some contracts of sale and some by word of mouth from individuals. It is impossible to say with certainty they are the total consideration.

MR. KING: I think the witness inadvertently referred to the heading on page 2 of that exhibit. It is the same heading on both pages, as I understand it.

TRIAL EXAMINER: Is that right?

THE WITNESS: Yes, that is correct. I thought I had referred to page 1. In any event the heading is the same on both pages, and the explanation I have given applies to both [8453] pages.

By MR. HALL:

Q. Am I to understand that Exhibit 205 for Identification embraces a complete list of the properties conveyed to McCall Ferry Power Company under the contract identified as Part 19 of Exhibit 27? A. Yes, so far as I know.

Q. How was the total price of $201,000 paid by Hutchinson for the York Furnace properties determined, which is noted at the bottom of Sheet 1 of Exhibit numbered 205 for Identification? A. It was determined from the fact that the final consideration paid by Hutchinson to Beyer was $155,500, and the additional fact that the agreement or the option obtained by Hutchinson and dated February 21, 1902 recited and acknowledged certain previous payments

by Hutchinson, which previous payments were added to the $155,500.

The previous payments were $3,500 acknowledged as being paid on October 1, 1901, $2,000 acknowledged as having been paid on January 9th of 1902, and $30,000 acknowledged as having been paid on October 21, 1902.

That agreement provided the option was to run until January 1, 1903 and could be extended to January 1, 1904 by the payment of an additional ten thousand dollars, and since the agreement was extended it is our belief that that ten thousand [8454] dollars was paid.

The total of those give an amount of $201,000, which I think is properly described as being at least the amount that was paid. I don't think it necessarily follows that was all that was paid.

Q. Did you find any evidence of any additional payments over and above the $201,000? A. No, we didn't find any evidence of any other payment, but I don't think we can assume that because we didn't find the evidence that that represented the complete payment. I think the most we can say is that the payment was not less than that amount.

Q. Mr. Gunn, since you mentioned Hutchinson's agreement dated February 21, 1902 I show it to you at this time.

* * *

(Thereupon, the document referred to was marked Exhibit No. 206 for Identification.)

* * *

By Mr. Hall:

Q. Do you recognize that as being the agreement of February 21, 1902 to which you referred, Mr. Gunn? [8455] A. Yes, sir.

Q. At this time, Mr. Gunn, I show you an agreement dated April 4, 1904. Is that the option agreement under which the properties were finally transferred, under which

the York Furnace properties were finally transferred to Hutchinson? A. Yes, sir.

MR. HALL: Mr. Examiner, may we have the agreement dated April 4, 1904, between Cary T. Hutchinson and George B. Willson and Wm. F. Beyer, marked for identification as Exhibit No. 207?

TRIAL EXAMINER: Yes, the document may be so marked.

(Thereupon, the document referred to was marked Exhibit No. 207 for Identification.)

• • •

[8457] Q. Mr. Gunn, I show you at this time an estimate of the cost of construction of McCall Ferry Power Company dated December 18, 1905, and prepared by Cary T. Hutchinson. Are you familiar with that document? A. Not at the moment. I believe I have seen it before. It was some years ago.

Q. This document was prepared after the transaction whereby Hutchinson transferred the lands to McCall Ferry through Susquehanna Power Company—right? A. Its date would indicate that.

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[8458] (Thereupon, the document referred to was marked Exhibit No. 208 for Identification.)

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[8460] By MR. HALL:

Q. Mr. Gunn, I show you a letter dated October 3, 1906, written by Cary T. Hutchinson, Chief Engineer, to J. W. Kirkland, Vice President and General Manager of McCall Ferry Power Company, and which letter was copied from file number 3951-12. Are you familiar with that letter? A. I can't tell you offhand without reading it, Mr. Hall. Do you wish me to read it?

I could say this much: It evidently having come from the company's files I was at one time familiar with it, I

believe. I can't state that is a fact without reading the letter, obviously.

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(The document referred to was marked as Exhibit Number 209 for Identification.)

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[8461] By Mr. Hall:

Q. Mr. Gunn, I show you at this time a letter signed by J. W. Kirkland, General Manager, and Cary T. Hutchinson, Chief Engineer, addressed to H. F. Dimock, President of McCall Ferry Power Company, which letter is dated May 8, 1907, and which was copied from company file number 3951-13. [8462] Did you consider that letter in connection with your original cost study?

• • •

The Witness: Yes, sir, I believe so. I believe that letter affords some of the support for statements made in Exhibit 26 which are not in Exhibit 27 but in the 15 filing cases.

By Mr. Hall:

Q. Mr. Gunn, in Exhibits 208 and 209 the Harlow-McGaw purchase is shown in an amount of $425,000, whereas in Exhibit 210 that purchase is shown in an amount of $435,000. What does the 10,000 difference represent, if you know? A. I don't know. As a matter of fact, neither of these exhibits seems to me to have very much significance because they are simply letters pulled out of context and the purpose for which they were written is not disclosed. We can only speculate as to what Hutchinson was asked for when he gave these letters.

Q. Doesn't the $10,000 difference that I referred to represent the $10,000 paid to Pullen? [8463] A. It may be. You can speculate that way, at least.

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(The document referred to was marked for identification as Exhibit Number 210.)

* * *

[8464] Q. Mr. Gunn, have you included in the original cost claim an amount of $130.99 representing the difference between the petty cash funds reported on the books of McCall Ferry at July 17, 1909, and the amount turned over to J. E. Aldred, Receiver, as of that date?

* * *

[8465] THE WITNESS: I recall we included an amount of $130 and some odd cents. I don't remember whether it was 99 cents or not.

By MR. HALL:

Q. Do you have a record of the expenditures made which comprise the total of $130.99? A. It is undoubtedly in the company's books which have been available to the Commission staff for the last two-and-a-half years, but I don't have it before me.

Q. Do you know over what period the money was spent? A. No, sir, I don't recall.

Q. Are you sure of that, Mr. Gunn, that the details of this amount are in the books? A. Well, I don't know. I assume they kept books. I assume there are some books somewhere or the Commission staff wouldn't have discovered it. At least there are figures in the books from which you derive the difference. That is, of course, what we are talking about. Presumably the $130 disappeared somewhere.

* * *

[8468] Q. Have you included in Penn Water's claimed original cost two amounts, one of $21,341.94, and the other of $6,535.01 representing loss of inventories?

MR. KING: Mr. Hall, one of the figures to which you referred in your question was $6,535.01. Is that right?

MR. HALL: Yes.

• • •

MR. KING: I would like to state that that is an item which, on advice of counsel, the company now agrees to eliminate.

MR. HALL: That statement, I take it, does not apply to the amount of $21,341.94?

MR. HALL: Mr. Gunn, please consider my question as now relating only to the $21,341.94.

THE WITNESS: Yes, sir. I am doing that.

• • •

THE WITNESS: It is my understanding, Mr. Hall, that we have not claimed that amount, but we have claimed approximately [8469] $13,000 of it. The difference between the two figures, as I understand it, is because of some accounting adjustment. The $13,000 we have claimed is made up of miscellaneous loss of materials and supplies, amounting to $4,062, and a write-down in the value of cement due to spoilage of $8,970. The total of those two is approximately $13,000.

By MR. HALL:

Q. Would you explain in just a little more detail, Mr. Gunn, what the two amounts of $4,062 and $8,970 represent?

• • •

[8470] THE WITNESS: • • • If I may attempt to clarify it this way, Mr. Hall: I do not recognize the figure of $21,341.94. However, the company did, in its original claim, have an amount of 19 thousand and some odd dollars, I believe. As company counsel just stated, the company was conceding $6,535.01, of that $19,635.01, which reduces the company's claim to about $13,000.

Now, the figures which make up the $13,000 are a miscellaneous loss of supplies unaccounted for in an inventory, details of which I don't have before me, amounting to

$4,062, together with an amount of $8,970 which represents the write-down in the value of cement due to spoilage.

By MR. HALL:

Q. Mr. Gunn, is this the fact: That the $21,341.94 represents the difference between the inventory of $35,019.16 on the McCall Ferry books at July 17, 1909, and the lesser amount of inventory subsequently entered on the books of the receiver and Penn Water after the receiver made the adjustments?

* * *

THE WITNESS: I can't answer, Mr. Hall, for the reason [8471] I don't know. It is my understanding that after Penn Water finally made all of their accounting adjustments incidental to this transaction that they wound up with an amount of about $13,000 with respect to this item, that amount being made up of the two items I described.

TRIAL EXAMINER: Where is counsel getting these figures?

MR. HALL: I got my figures from the working papers of the Commission's accountant, Mr. Examiner.

TRIAL EXAMINER: They can't be related to any——

MR. GOLDBERG: Can not be related to any document in evidence, if that is what you mean.

TRIAL EXAMINER: Or any document marked for identification.

MR. HALL: That is right.

MR. GOLDBERG: I might add this, for the sake of clarification, Mr. Examiner: Mr. Newlands' analysis is an analysis of the company's books. The figures we are discussing not being on the company's books would not be reflected in his analysis which is carried through in Exhibit '51. It is an amount which the company added on, and we would have to go into their

working papers to get the details. They didn't spread it out any place.

By Mr. HALL:

Q. Mr. Gunn, do you know the details of the amount of $4,062, which represents miscellaneous loss of supplies? [8472] A. I do not have that before me.

Q. Do you have any details concerning the amount of $8,970 to which you referred? A. There were no details back of that. It was just simply a loss of cement due to spoilage. I have no more details than are set forth, I believe, in Exhibit 51. At least I don't have any more before me at the moment.

Q. Do you have the details of the inventory comprising the amount of $35,019.16? A. Not before me, no.

Q. Are they available to you through any of your assistants? A. No, sir. All the details back of that item were in the company's records at Baltimore and I don't know offhand just what the nature of the detail is.

Q. Mr. Gunn, isn't it a fact there is no inventory of the McCall Ferry materials and supplies at July 17, 1909? A. As I said, I don't know. What information there is concerning that item is in the company's records and has been available to the Commission staff for the last two-and-a-half years, so presumably they know. I don't recall.

Q. I am advised, Mr. Gunn, there is none. Do you agree? A. I will have to, not knowing myself whether or not there are any.

[8473] Q. Mr. Gunn, is it your understanding that the loss in inventories which you have capitalized is entirely due to deterioration during the period of cessation? A. No. I think most of the cement spoilage may have been due to that, but the loss of inventory, I don't know when that occurred. Presumably that was an accumulative figure, that is the miscellaneous loss of inventory represented by the $4,062.

I could say this, Mr. Hall: For a project of that size, the total of the figure, whether it be 4,000, 6,000, 19,000,

21,000 or 36,000, is an astonishingly small loss for a project of that magnitude. I have been through several construction projects and I never have come through with as small a loss as that in my experience.

Q. Are you familiar with the inventory prepared by C. B. Vorce on December 31, 1908? A. No, I am not personally familiar with it. I don't recall ever having looked at it in detail.

Q. Do you know how many barrels of cement McCall Ferry had on hand on July 8, 1909? A. It seems to me it was around eight or nine thousand.

Q. Mr. Gunn, I show you a letter dated July 8, 1909, written by J. W. Young to J. E. Aldred, which was copied from J. E. Aldred, Receiver file number 9, and I refer you specifically to the third paragraph from the bottom of page 2.

[8474] Does that help to refresh your recollection as to the amount of cement on hand as of July 8, 1909?

* * *

THE WITNESS: Yes, it would appear from that paragraph on that date there were 30,000 barrels of cement on hand. I believe the figure of eight or nine thousand I mentioned was probably the part of that 30,000 barrels which had undergone deterioration, perhaps.

By MR. HALL:

Q. How many barrels of cement did the receiver set up on his records? A. I don't recall.

Q. My information is 7,851½ barrels of Giant and Atlas Cement.

Does that help you refresh your recollection? A. Yes, sir, I believe that is correct, Mr. Hall.

TRIAL EXAMINER: Upon what is your belief based?

THE WITNESS: Based upon Mr. Hall's question and upon a working paper shown to me by one of my assistants. The two figures agree, the one Mr. Hall used and the one shown me from the company's records.

TRIAL EXAMINER: When you say that letter of July 8, 1909, refreshed your recollection, is that the source of your previous information as to how many barrels were on hand?

[8475] THE WITNESS: One source of certain information, Mr. Examiner, but this situation about the cement as it came over from McCall Ferry to the receiver and on to Pennsylvania Water and Power Company is extremely confused. We have never been able to get together enough information to tell precisely what did happen to all the cement.

The question Mr. Hall asked me was did this letter refresh my recollection as to how much cement was on hand on July 8, 1909. The letter is a letter written by Mr. J. W. Young, who was Vice President of McCall Ferry Power Company to Mr. Aldred, and which states that there are at present approximately 30,000 barrels of cement made up of——

TRIAL EXAMINER: Actually your recollection was not refreshed at all. You are accepting the letter's statement; is that right?

THE WITNESS: I think that is correct, sir. As a matter of fact, that is all I can do with any of these things related to original cost, simply accept what can be deduced from the documents. I have no first-hand information on any of it, of which this document is one which enters into the cement confusion.

TRIAL EXAMINER: Well, the cement confusion is based upon the absence of accurate records and the existence of conflicting data as to the actual number of barrels on hand; isn't that so?

THE WITNESS: Yes, sir, I think that is a correct statement.

[8476] TRIAL EXAMINER: The number of barrels on hand as being 30,000, you do not know whether or not there were 30,000?

THE WITNESS: No, I don't know any more than what Mr. Young states.

TRIAL EXAMINER: You do know there are figures which conflict with the 30,000.

THE WITNESS: Yes, sir, I know that.

TRIAL EXAMINER: And those figures are to be found in other correspondence or records of McCall Ferry Power Company which Pennsylvania Water and Power Company now has.

THE WITNESS: Yes, sir. It is from those other records that the seven thousand-odd dollars entered on the Receiver's books were taken.

TRIAL EXAMINER: Do you remember whether you ever used the figure 30,000 for any purpose at all?

THE WITNESS: No, sir. I never used either one of the figures for any significant purpose. Whatever the cement cost was was reflected in the McCall Ferry cement cost and that was the end of it. I did not concern myself with how many barrels more or less there were.

By MR. HALL:

Q. Are we to understand you did not use the available data, Mr. Gunn, as to the amount of cement on hand in reaching the amount of $13,032 which you now claim? A. No, I believe I used the records of the Receiver in [8477] reaching that amount. It is true that in those records barrels of cement are mentioned, but as I recall it it is not 30,000 barrels mentioned but 7,000 barrels.

Q. What happened to the difference between the 7,851 and a half barrels of cement set up by the Receiver in his records and the 30,000 barrels of cement reported by Mr. Young in his letter? A. I have no idea.

Q. Didn't you try to account for that difference in reaching your conclusions as to the amount to be included in your claimed cost? A. No, there was no occasion for me to do that, Mr. Hall. I was not attempting to bring a

case against somebody having stolen the cement. I was just attempting to find the original cost, and therefore it was of no particular moment. If there were 30,000 barrels on hand, then those 30,000 barrels were reflected in McCall Ferry costs. If there weren't 30,000 barrels on hand then it didn't make any difference.

Q. Mr. Gunn, I show you a letter written by Mr. J. A. Walls, Chief Engineer, to Mr. C. E. F. Clark, Treasurer of Pennsylvania Water and Power Company, which is dated September 9, 1910?

Did you consider the information on the second page of that letter in arriving at your claimed cost? A. You mean that information relating to the barrels of [8478] cement?

Q. Yes. A. No, as I said, there was no necessity for my going into the barrels of cement other than as they were recorded on the books. Mr. Walls wrote this letter at a time when he knew what had been rec rded on the books, and I assumed he had all the facts. If you want me to read the letter and go into that I will be glad to.

* * *

[8479] By Mr. Hall:

Q. Isn't there a notation on the letter that the 7,000 should be 27,000? A. No, sir. There is a notation on the letter which states as follows:

"Apparently this should read 27,000." The initials appearing under that are R. W. C. and that note is dated October 3, 1944. That is a note of Mr. Chase.

Q. Do I understand you did not agree with Mr. Chase in that respect? A. I don't agree or disagree with him. I am simply saying that note you find on the piece of paper is not a note put there by Mr. Walls in 1910 but a note put there by Mr. Chase in 1944, and it is speculation of Mr. Chase's, as is evident from the beginning of the sentence with the word "apparently."

Q. Mr. Gunn, I show you at this time an eight-line letter which Mr. Walls wrote to C. E. F. Clarke, Treasurer

of Pennsylvania Water and Power Company, on September 8, 1910. Does that assist you in determining the amount of cement on hand as of that date?

* * *

[8482] By MR. HALL:

Q. Was any of that Union Cement, Mr. Gunn? A. I don't recall whether or not it was. I should say there were 75 or 100 thousand barrels bought during that time.

Q. Don't you know none of that was Union cement? A. No, I don't know what sort of cement it was.

MR. HALL: Mr. Examiner, may we have marked for identification as Exhibit 211, the letter dated September 8, 1910, written by Mr. J. A. Walls, Chief Engineer, to Mr. C. E. F. Clarke, Treasurer, Pennsylvania Water and Power Company?

TRIAL EXAMINER: Yes, the document may be so marked.

(Thereupon, the document referred to was marked Exhibit No. 211 for Identification.)

* * *

[8483] MR. HALL: Mr. Examiner, may we also have marked for identification as Exhibit No. 212 the letter dated September 9, 1910, written by Mr. J. A. Walls, Chief Engineer, to Mr. C. E. F. Clarke, Treasurer, Pennsylvania Water and Power Company?

TRIAL EXAMINER: Yes, the document may be so marked.

(Thereupon, the document referred to was marked Exhibit No. 212 for Identification.)

* * *

[8484] By MR. HALL:

Q. Was there any construction work going on at McCall Ferry during the period December 31, 1908, to July 8, 1909, which required the use of cement, Mr. Gunn? A. No.

Q. Was there any construction work going on during the period between July 8, 1909 and September, 1909, which required the use of cement? A. At the beginning or the end of September?

Q. The beginning. A. I can't state with certainty, Mr. Hall, but I suspect there was because Empire Engineering resumed construction about the middle of August 1909, and among their first work it required the placing of concrete and therefore the use of cement. Just how much they would have used during that period I couldn't say.

Q. Do you think they would have used as much as 23,000 barrels? A. No, I shouldn't think they would use that much.

Q. Just how much do you think they would have used? A. I don't know, but I wouldn't expect them to use that large an amount.

Q. Mr. Gunn, can you account for the 30,000 recorded by Mr. Young on July 8, 1909, and the 7,851-½ barrels set up by the receiver on September 29, 1909? [8485] A. I don't know whether I could or not. I never undertook to do that, Mr. Hall, because, as I said, it had no significance whatever in the determination of original cost.

* * *

[8518] MR. KING: May I interrupt you, Mr. Hall?

MR. HALL: Yes.

MR. KING: You asked me at the conclusion of yesterday's hearing at page 8516 as to the status of the request you had theretofore made at page 7579 of the transcript.

MR. HALL: Yes.

MR. KING: That request was for us to produce the documents attached to Mr. Fisk's affidavit and bearing his initials.

I herewith hand you those documents.

* * *

[8537] By Mr. Hall:

Q. Mr. Gunn, is the purpose of flashboards on the Holtwood dam to increase the head? A. Yes, sir, under certain circumstances, and decrease it under other circumstances.

Q. What benefit does Penn Water derive from the use of flashboards on the Holtwood dam? A. A greater head on the Holtwood dam.

Q. Will you explain what a greater head means in way of benefit to Penn Water? [8538] A. It makes it possible under certain circumstances for Penn Water to generate more power.

Q. And more power means more income to Penn Water—right? A. Depends on the contract under which Penn Water sells its output. Presently it means less.

Q. Will you describe the present flashboard arrangement on the Holtwood dam? A. The flashboard presently used on the Holtwood dam is supported by various combinations of single pipes and pipes within pipes for the purpose of creating under certain circumstances a maximum increase in head on a Holtwood plant of 4 foot 9 inches. The flashboards are made up in sections 3 feet high and one foot 9 inches high, and when there is a total height of 4 foot 9 inch flashboards on the dam, the combination of pins used to support them are such that they will collapse at a stream flow of about 70,000 cubic feet per second over the dam.

When it is possible to foresee a high flow coming it is the company's practice to remove the upper one foot 9 inches, thus leaving three-foot flashboards on the dam, and they collapse at a much greater flow over the dam. The reason for that maneuver is to save both the lower 3 foot of flashboards, the pins supporting them, and to gain the advantage for the maximum length of time of the 3 foot [8539] additional head created by those flashboards on the plant.

Q. So that the flashboards remain on the dam until destroyed—right? A. Except for the upper 1 foot 9 inches which are removed when it is possible to predict with sufficient accuracy increases of flood of a certain magnitude. That is one of the reasons why it is so necessary for the company to have the best available information on what the floods will be.

Q. How long has Penn Water utilized flashboards on the dam? A. You mean the present flashboards?

Q. No. A. Flashboards of any sort?

Q. Yes. Weren't they originally installed in 1911? A. Yes, sir, they began experimenting. As a matter of fact, they started in July of 1911 drilling holes for the flashboard sockets and that was on July 26. On July 31, one of the landowners on the reservoir got an injunction against the company against using flashboards and it was not until August 26 that that injunction was dissolved.

Then they put up some flashboards with solid pins under them and I believe in about 1914 or some time about then they got in trouble with another court proceeding and had to take the flashboard down again. There have been court [8540] proceedings and flashboards ever since.

Q. What was the cost of the initial flashboard installation in 1911? A. I don't recall.

Q. Do you know whether or not that initial expenditure was charged to the plant account on the books? A. I believe it was. It should have been, at least.

Q. Have any subseqnent expenditures in connection with flashboards been charged to the plant account on the books?

* * *

THE WITNESS: Yes, sir, a very substantial amount of experimentation has been charged since that date, including the investigation of the roller dam we discussed the other day and some rather extensive pioneering development work in developing the form of support for flashboards which would give a result equally satisfactory to the

landowners around the reservoir and the Pennsylvania Water and Power Resources Board.

Q. Pennsylvania Water and Power Resources Board? A. What I mean to say, Mr. Hall, was the Water and Power Resources Board of the State of Pennsylvania.

Q. Will you describe the support which was finally developed? A. The support which was finally developed varies with [8541] the combination of boards that are on the dam, but when 4 foot 9 inch boards are on, alternate supports, as I recall, are single seamless tubes, the specifications for which I don't recall offhand, that is the specification as to the size of wall thickness. Between each one of those single tubes is a support consisting of two tubes, one inside the other and welded together. I don't remember the precise specification for those tubes.

However, that is the combination which gives the most certain failure of the flashboards and thus lays the company liable to the least trouble with the landowners as a result of backwater in case of high flow.

The reason for using the tubes was the outcome of extensive investigations on the part of the company, and the establishment of the fact that a seamless tube, or a tube of any sort, when it fails will fail most completely of any other structural section, and thus will most completely relieve the crest of the dam from any obstruction to the continuing increase in the flow of the river.

Q. Is that the chief change made in the flashboards? A. You mean during this period of years?

Q. Yes. A. Well, in flashboards as such, I believe, but during that period of years the company tried flashboards supported by pins, they investigated the use of a roller dam [8542] on top of the present dam, they used what they call butterfly gates which were some flashboards hinged by the ends and supported on permanent pins, and then after that they used flashboards of the present collapsible type supported by solid steel pins which were machined at the point on the pin which rested at the top of the

sockets with the hope that that would bring about a predeterminable failure, and then in about 1921 the company finally developed the combination of seamless tube and pipe then available which would make practicable the present type of flashboards.

Q. So the principal change has been in the support used for the flashboards? A. No, I wouldn't say so, Mr. Hall.

First we attempted to use a collapsible type of flashboard. Then the company investigated the use of a roller dam. That was a very great change. From the roller dam they progressed to the idea of butterfly gates, which bears no similarity at all to present flashboards. Then from the butterfly gates they finally developed the present flashboard. So the change has been very radical and very wide.

Q. As far as the flashboards actually tried out, the principal change always has been in the support, in the type of support? A. What do you mean by "flashboards" in that question, Mr. Hall?

[8543] Q. The same thing which was initially installed. A. Does your definition of "flashboards" include the butterfly gates, for example?

Q. Did they install the butterfly gates? A. Certainly.

Q. Then it would include the butterfly gates.

THE WITNESS: Now may I have the question?

(Question read.)

THE WITNESS: The answer to that question is No.

By MR. HALL:

Q. Are the pins presently in use destroyed every time the flashboards go out? A. Only half-destroyed ordinarily. What happens is that the pins are about 6 or 6½ feet long, and there are about 12, 14 or 16 inches of them in the sockets. When the flashboards fail that 12, 14, or 16 inches bend to at least a 90 degree angle or more. Then

when the flashboards are reinstalled the other end of the pin is stuck in the socket and it bends again on the other end. So with each failure of the flashboards I guess you would say the pin is a half of the failure.

Q. In other words, the pins are used twice. A. Yes, sir.

Q. What other important improvements, other than the support, exists in the present flashboard over the flashboard [8544] installation made in 1911 and 1912? A. I don't recall precisely what the details of the 1911 and 1912 flashboards were, Mr. Hall. Therefore I couldn't answer that question.

Q. Have turbine units numbers 6 to 10 been designed to make use of the additional head obtained by the use of the flashboards? A. Yes, I think that is right. I think all the turbines have been designed to make use of it. In any event they are making use of it, designed or not designed.

Q. Were the first five units designed for the use of increased head through the use of flashboards? A. Certainly. We are using them, aren't we, for increased head? Therefore it proves they were designed for it, no matter what may have been in the mind of the designer. That is only of academic interest.

Q. Did you capitalize the renewal of flashboards during the year 1945? A. Not so far as I know. If we did it was an error.

Q. You charged them to operating expenses. A. Surely. It is my understanding we have charged them to operating expenses ever since 1921.

Q. How much did Penn Water spend for flashboard renewal made in 1945? A. I don't know offhand, Mr. Hall. The company's [8545] operating statement would show it but I don't have it before me.

Q. Mr. Gunn, would you please describe briefly the fish-ways which are constructed at Holtwood? A. Which fish-ways?

Q. Both shores, on the York shore and the one on the Lancaster shore. A. I take it you mean which were constructed.

Q. Yes. A. Well, the outstanding feature of the design is that none of them ever worked. But the one on the east shore was a winding concrete structure from the east shore bulkhead down to the tailrace which had wooden baffles in it, and to which water could be admitted so as to make in effect a series of steps, and it was supposed, by the fishermen and the Pennsylvania Fish Commission, that the shad would jump from one step to another, or, so to speak, they would jump up the stairs, but they didn't do it. Then the fishermen supposed we ought to have another fish ladder. We went to the remaining shore, the west shore, and cut a channel down through the rock over on the hillside and built a concrete wall between that and allowed water to flow from the upstream side of the dam down through this rough rock channel we cut, and again the fishermen and the Fish Commission thought the shad would walk up that, but they didn't. So that is about all there is to the fishway.

[8546] Incidentally, all the fishways were installed as a result of the injunction brought against McCall Ferry Power Company, the decision on which specified two things: 1, that the company should install fishways satisfactory to the Pennsylvania Fish Commission and fishways that the fish would use. The company installed fishways satisfactory to the Fish Commission but they never succeeded in making the fish use them.

Q. In other words, the fishways are not in use at the present time. A. The fishways never were in use by the fish at least. They only satisfied the Court order. That they did in complete fashion, I understand.

Q. And so far as you know they never will be used in the future—right? A. You mean for the fish?

Q. As fishways. A. No, Conowingo built a dam down below and cut the shad off. In lieu of building any

more of those fishways that the fish wouldn't use, Conowingo, and I know Safe Harbor, worked out an arrangement with the Pennsylvania Fish Commission whereby they would pay an annual amount each year in perpetuity for stocking the pond so that the fishermen would have fish.

MR. KING: May I point out to your Honor that the order of the Court the witness has just referred to is Part 35 of Exhibit 27?

[8547] By MR. HALL:

Q. Do you know the total cost of those fishways? A. I don't know.

Q. Was it $64,000? A. That sounds like about the right figure.

Q. In what account have you classified the $64,004.61?

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THE WITNESS: As I recall, Mr. Hall, it was classified in Account 302, but that was a rather difficult conclusion to reach because it seemed to me you could put it in 303 just as well.

By MR. HALL:

Q. How about 322, Reservoir, Dams and Waterways? A. No, I don't think you ought to put it there at all.

Q. Why not? A. The reason is that it was compliance with the Court order and was a condition precedent to permit us to build the dam. It is a franchise or intangible. It is nothing physical, certainly.

Q. Wasn't the entire dam in compliance with Court order? A. No. All the Court order specified was that as a condition precedent to building the dam we had to provide one of these things for the fish to walk over.

[8548] Q. So that the construction of the whole dam had to comply with the order of the Court—right? A. No, sir, the Court had nothing to do with the construction of the dam except to make the fishway a condition precedent to it.

Q. Will you refer to page 62 of the system of accounts, Mr. Gunn, particularly to Account 322? A. Yes, sir.

Q. Certain numbered items are there listed? A. Yes, sir.

Q. Do you know why those items are so listed? A. As indicative of the scope of the account, I suppose.

Q. Would you look at item number 3? A. Yes, sir.

Q. Do the fishways come under the word "Fish Ladders"? A. Not these fish ladders.

Q. Why not? A. Because these fishways are intangible and were installed as a condition precedent to building the dam under a franchise right, or of that character. They are certainly not physical property as that contemplates.

If the fishways had been used for the fish and the company was still maintaining them and they were performing as [8549] good a function as the fishways at Bonneville are said to perform, then you can put them in Account 322. But these are not that sort of fishways. The fish wouldn't use them and therefore they are intangible costs, costs made necessary to acquire the company's right to build the dam.

Q. Are you saying that they became intangible because of non-use by the fish? A. No, because of the Court order.

Q. Did the Court order the fish not to use those fishways? A. The Court ordered the fish to use it but the fish wouldn't do it.

* * *

By Mr. Hall:

Q. Do you have Exhibit 25 before you, Mr. Gunn? A. Yes, sir.

[8550] Q. Isn't the entire amount of the fishways shown in Account 302 in the amount of $64,004.61? A. Yes, sir, I understand that is correct. In other words, the only cost of the whole Holtwood project in the nature of franchises and consents was the fishway.

Q. Would you please identify Mr. Bushong for the record? A. Mr. Bushong was for many years Pennsylvania Water and Power Company's land agent or, I believe, Mr. Bortner's predecessor.

Q. What was Mr. Bushong by profession? A. I really don't know, Mr. Hall. I knew very little about Mr. Bushong. As a matter of fact, I don't recall that I ever met the gentleman.

Q. What had been Mr. Bushong's experience before joining Penn Water? A. I don't know.

Q. What were the exact duties of Mr. Bushong and his activities in connection with Penn Water? A. I don't know. All I know is that his duties were in connection with the acquisition of land.

Q. Where was Mr. Bushong located while in the employ of Penn Water? A. In Lancaster, or in the vicinity of Lancaster, I understand.

Q. What was the nature of the promotion work Mr. Bushong [8551] did for Holtwood Power Company? A. Mr. Bushong was given the responsibility of setting up a plan of procedure in respect to the corporate organization and status of the company to have the chartered powers of producing steam generated energy, it being understood that the company would be subsidiary to Pennsylvania Water and Power Company. This, I believe, was in the early part of 1924. Mr. Bushong, with the assistance of Mr. Malone and others, prepared such a plan and gave consideration to the type of contract which would be entered into between the new company and Penn Water. He followed through the organization of the company and obtained such approvals as were necessary from the Pennsylvania Public Service Commission.

Mr. Zimmerman assisted Mr. Bushong in Mr. Malone's place while Mr. Malone was absent from Lancaster.

Q. What is your last answer based upon, Mr. Gunn? A. Based upon information given to me by Mr. Bortner.

By Mr. Hall:

Q. What do you mean, Mr. Gunn, when you say Mr. Bushong obtained the approval from the Pennsylvania Commission? A. All the approvals that were necessary in connection with the setting up of Holtwood Power Company.

Q. Precisely what did he do? [8552] A. I can't enumerate all of the details of what he did. I don't have that information.

Q. Can't you give us some of the details?

* * *

The Witness: Well, for one thing they had to obtain from the State of Pennsylvania a charter for the company. Another thing, they had to obtain from the Public Service Commission of Pennsylvania what I believe they call a certificate of public convenience or something, in any event, the right for a public utility to do business in the State of Pennsylvania.

Q. Aren't those duties usually performed by attorneys? A. Well, Mr. Malone was an attorney and Mr. Zimmerman was an attorney, and they both worked with Mr. Bushong.

Q. What did Mr. Bushong do in connection with the obtaining of a certificate of convenience and necessity and the charter? A. Did just what I said he did, and that is about all I know about it.

Q. What do you mean when you say Mr. Bushong obtained a charter and the certificate of convenience and necessity? A. I mean that he, together with the lawyers, obtained it. That is all I know.

Q. By what process did Mr. Bushong obtain it? A. I don't know. The same way I would, I guess, if I [8553] undertook to do it—go up and ask them for it.

Q. What would you do in that connection? A. I would go up and tell the Public Service Commission what I wanted to do and ask them for a certificate.

Q. Did Bushong do that? A. I don't know. I suppose he did. They must have gotten that idea across to him somehow.

Q. Why didn't the lawyers, Mr. Malone and Mr. Zimmerman, do that? A. Don't ask me. I don't know.

Q. Had Mr. Bushong ever held any political office in Pennsylvania? A. I don't know.

Q. As a matter of fact, you don't know exactly what Mr. Bushong did do, isn't that so? A. That is what I told you when you started on this line of cross-examination.

Q. Did Mr. Bushong prepare the charter? A. I don't know.

Q. Did he prepare the application for a certificate of convenience and necessity? A. As a matter of fact, I don't know. I never saw either one of those documents. I assume he did, or assisted in it, certainly.

Q. When did Mr. Bushong first come into the employ of [8554] Penn Water? A. About 1912. At that time I believe he was more or less serving in a minor capacity performing certain functions in connection with the acquisition of lands.

If you recall, he first worked for a while, I believe, with Penn Water, and then when it was decided that the Lancaster Company would build a 25-cycle line from Holtwood to Lancaster I believe he worked for the Lancaster Company in connection with the acquisition of the right of way for that land. Then at some later date, I don't remember just when, he came back into the employ of Penn Water.

Q. Did Penn Water have an office in Lancaster? A. When?

Q. During the time Mr. Bushong was employed? A. Part of the time they did, I understand.

Q. Where was it located? Do you know? A. It was in the Woolworth Building for a considerable period of time.

Q. Was that office listed under the name of Penn Water? A. What do you mean by "listed," Mr. Hall?

Q. Was it listed in the telephone directory; was it listed on the door? A. I understand it was listed both ways, in the telephone directory as Pennsylvania Water and Power Company, and I [8555] think on the door Mr. Bushong's name appeared.

Q. How many employees did Penn Water have in Lancaster besides Bushong? A. I don't know.

Q. Did they have any? A. I think they did.

Q. Who were they? A. I think there was a stenographer or a clerk or so, or something like that. I really don't know very much about that, Mr. Hall.

Q. Did Mr. Bushong or Penn Water keep any record of Mr. Bushong's activities for the Holtwood Power Company, including the time spent and the services performed?

* * *

THE WITNESS: Well, so far as I know neither one of them ever kept a log of precisely how Mr. Bushong disposed of his time, but the records of Penn Water, of course, show the results of Mr. Bushong's work. It is my understanding that considerable information has been given to the Commission Staff in that connection by Mr. Bortner as compiled from the company's land records and from the company's files and from various other sources of information.

By MR. HALL:

Q. Over what period of time did Mr. Bushong perform his services for the Holtwood Power Company?

* * *

[8556] THE WITNESS: His services began in the latter part of 1923, I believe, and continued up through the organization of the company. I don't remember just what date that was.

By MR. HALL:

Q. What period of time did the charges cover? A. A period the duration of which I do not know, Mr. Hall. But as the company is now claiming the charges they were

all prior to August 16, 1925. If you will refer to Exhibit 204 and to Item 22 you will find that the company is now conceding, on advice of counsel, an amount of $5,267.41 which represents payments and costs in connection with Bushong's services on the steam station which were incurred after August 16, 1925.

Q. Do you know what the amount of $5,267.41 represents? A. It is my understanding that it represents Bushong's salary and his office expenses.

Q. When? A. After August 16, 1925.

Q. What activities was he performing as a result of which this $5,267.41 was incurred? A. I really don't know. It doesn't seem to me it is of very much significance. We are not including it in the cost.

* * *

[8569] Q. When did Malone first become associated with Penn Water? A. About 1912, I understand.

Q. Do you have any record of services performed by Mr. Malone for Penn Water prior to 1924? A. Well, we have the company's files in which there is correspondence which indicates the character of some of the services, but I don't have any catalog of them, if that is what you are asking.

Q. Did Malone render an itemized statement to Penn Water of the work performed? A. I really don't know whether or not he did. If he did it has been available to the Commission Staff, attached to the [8570] voucher—available to the Commission Staff and attached to the voucher probably.

Q. Who made the distribution of Malone's retainer fee to the various operating expense and plant accounts during the years he was associated with the company as counsel? A. I don't know.

Q. Prior to 1924. A. I don't know, but I imagine it must have varied from time to time. By that I mean the person who made the distribution must have been

different from time to time during those years. But I really don't know.

Q. Does Penn Water have any records showing the basis of the distribution of Mr. Malone's salary prior to 1924? A. I really don't know whether they do or not. What the company has has been available to the Commission Staff for two and a half years.

Q. Will you accept my statement that you don't have that information? A. Yes, sir, if that is a fact I will accept it.

Q. Do you know whether or not it is a fact, Mr. Gunn? A. No, sir, I don't know whether or not it is a fact.

Q. Does Penn Water have any records showing the properties purchased by Mr. Malone, if any, and his fees associated therewith?

• • •

[8571] By Mr. Hall:

Q. What services did Simpson, Thacher and Bartlett perform for the one thousand dollar fee charges to Flowage Basin Account in 1915 on voucher No. 6892?

• • •

[8572] The Witness: I don't know, Mr. Hall. That is one of the more than 50,000 vouchers I haven't memorized, or at least don't remember now.

• • •

Q. Mr. Gunn, I show you voucher which was copied from a letter attached to Penn Water voucher No. 6892, December, 1915. The voucher is dated December 20, 1915. Does that serve to refresh your recollection?

• • •

[8573] The Witness: No, I can't say that it helps me, Mr. Hall.

By Mr. Hall:

Q. Do you recall why the one thousand dollars was charged to the flowage basin account? A. No. Naturally

I don't recall because I was not present when it was done. The reason it was left there was because in my determination—left there in my determination of original cost was because of the fact I believed the people who put it there knew more about it than I did, and I considered it to be attached to the legal services rendered in connection with that Woelpper injunction suit, and that was rather a complicated litigation which the company ultimately had to settle in order to obtain the right to use their flashboards.

Q. Didn't a Mr. Hensel, a local attorney, represent Penn Water in that case? A. I believe he was connected with it in a legal capacity at one time. So was Simpson, Thacher and Bartlett at one time, according to that bill you refreshed my recollection with.

Q. What part did Simpson, Thacher and Bartlett play in connection with the suit? A. I don't know any more than you see on that document, which is voucher number——

* * *

[8583] Q. Mr. Gunn, was Mr. Bushong a full-time employee of Penn Water? A. When?

Q. During the period that his charges are accrued in that period we were discussing this morning. A. We discussed all sorts of periods this morning.

Q. During the period that his expenses were claimed as part of Holtwood Power Company cost? A. I believe he was.

Q. How about 1911 to 1924? Was Mr. Bushong a full-time employee of Penn Water? A. I really don't know. There was a part of that time when he was not an employee at all, of course, that [8584] being the time he was working for the Lancaster Company on the purchase of the right of way for that 25-cycle transmission line. I really don't know what his status and basis of employment was during that period. I have the impression it varied from time to time.

* * *

[8590] Q. What services did Simpson, Thacher and Bartlett render in connection with the charge of $3,975.53 to flowage basin in 1923?

• • •

[8591] THE WITNESS: I don't recall the transaction, Mr. Hall.

• • •

[8595] Q. Mr. Gunn, what was the nature of the river observations made by Penn Water during the period from 1911 to 1924 and charged to the flowage basin account? A. They were made in connection with the establishment of rating curves and water surface profiles for backwater data. These studies became basic original data useful in the acquisition of properties and also in the operation of the plant. The data required could be obtained only by checking up on the Susquehanna River and its tributaries in the Holtwood area under varying flow conditions. This probably led to the use of the title "River Observation" which, in my opinion, does not properly describe the work performed.

Q. What title did you use, Mr. Gunn? A. Did I use?

Q. Yes. A. I didn't have any occasion to use any title at all. I simply described what the work was.

Q. How would you describe the work? A. Just the way I finished describing it.

[8596] Q. What title would you substitute for river observations? A. If I would substitute one I would substitute the description I gave you. I don't see any reason for characterizing it so long as you know what it is.

Q. Does Penn Water have a record of the nature of each river observation, the date the observation was made, and the purpose of the observation? A. I really don't know. I haven't had any occasion to determine whether they have that record or not. They have the results of all the observations, but as to the date on which they were made and those details I don't know whether or not they have them.

Q. Do you have the costs associated with those river observations? A. Yes, sir.

Q. With each observation? A. No, certainly not. I have the total cost of them.

Q. How did the observations aid in the operation of the Holtwood plant? A. It gave the company knowledge of what would be the consequences of not doing enough experimenting to be able to predict with certainty the point at which the flashboards would fail, and thus avoid becoming entangled with the landowners and get more lawsuits on their hands. It goes back to the [8597] simple justification for doing the experimental work they did in connection with the flashboards we covered this morning.

Q. What was the nature of the work done by the persons whose time and expenses were charged to flowage basin sub-account 6, 6-E, and 6-L during the period from 1911 to 1924? A. Mr. Hall, are you referring to the Item 3 on Exhibit 204, or are you referring to something else?

Q. That is the item, Mr. Gunn. A. That item covers an allocation of engineering salaries and expense and the portion charged to the flowage basin account represents engineering work related to property acquisitions. I believe that in general it covers property survey, topographic surveys, setting of monuments on property corners, making of record drawings, studies for the relocation of roads and bridges, establishment of permanent bench marks, and other engineering field work.

Q. You stated that you believed it represented those various things. Do you know it to be a fact that the charge does represent those things? A. Yes, I believe it can be established with certainty.

Q. Do you know it to be a fact? A. Have I personally investigated it?

Q. Yes. A. No, sir. Mr. Bortner did that. I couldn't do everything personally, Mr. Hall.

[8598] Q. Do you have the cost associated with the various items you mentioned? A. No. As a matter of fact, it

would be impossible to keep the cost that way, even for an accountant to do it.

• • •

By Mr. Hall:

Q. Does Penn Water have time slips and other payroll data showing the amount of time spent by each of the persons whose salary is charged to the flowage basin sub-account 6 and 6-L, the nature of the work performed and the expenses [8599] associated therewith? A. No.

Q. Has the company been able to segregate any specific charges to sub-accounts 6, 6-E and 6-L, or the associated accounts 6-N, 6-O and 6-P, as representing the cost of surveying specific properties? A. No.

Q. Has the company made an investigation to determine when each property was first surveyed and the date and extent of the subsequent surveys?

• • •

The Witness: I don't believe I understand your question, Mr. Hall. Could you break it down into two pieces? I don't understand the first-surveyed and second-surveyed business you have in the question.

By Mr. Hall:

Q. Has the property been surveyed more than once? A. I really don't know. Mr. Bortner is responsible for that work and he would have to supply that detail.

Q. Mr. Gunn, when you mentioned a while ago topographical surveys what did that cover? A. Covered just that, topographical survey.

Trial Examiner: That is to determine the water levels at various stages, in other words, to determine what the outline [8600] of the basin would be at various stages.

The Witness: Yes.

• • •

By Mr. Hall:

Q. Mr. Gunn, did Penn Water bring suit against the Susquehanna Power Company in 1925 in connection with the plans of the Susquehanna Power Company to build a dam at Conowingo on the Susquehanna River? A. Well, there was a suit. I don't recall who brought it.

Q. What was the nature of the controversy between the two companies? A. The Conowingo Company was attempting to infringe Penn Water's water power rights.

Q. In what respect? A. By flooding them into the Penn Water's tailrace.

Q. How was that controversy settled? A. It was settled as a result of Penn Water's having established the validity of their water power rights, and as [8601] a result of that the litigation was set aside or held in abeyance or something and Penn Water entered—and Penn Water and Susquehanna Power Company entered into an agreement whereby Susquehanna Power Company would flood back into the Holtwood Company's tailrace to the elevation 108, I believe, 108.5.

Q. Did Penn Water give up any of its land or flowage rights or claim to land or flowage rights to Susquehanna Power Company or its associates in that settlement?

* * *

The Witness: No, I don't think you could properly say they gave up any. I think you might say they leased them to the Conowingo Company. I believe that would be a more proper description of the transaction.

By Mr. Hall:

Q. As far as claims for land is concerned, a status quo was maintained for the term of the contract—right?

* * *

[8602] The Witness: What do you mean by "status quo"? I don't understand the question in the first place.

By Mr. Hall:

Q. No one transferred any lands or no one gave up any rights? A. Penn Water did just what I said. They leased their water power rights to Conowingo Company. At least that is my understanding of the transaction.

Q. Did Penn Water incur any expense in connection with the controversy with Susquehanna Power Company? A. Yes, they incurred some expense in defending the [8603] validity of their ownership to the water power rights.

Q. What was the total amount of that expense? A. $39,301.46.

Q. Where was that amount charged on the books? A. Flowage basin account, I am told.

Q. In what account have you reclassified this expenditure in your original cost claim? A. It was reclassified in the original cost study to Account 303, miscellaneous intangibles.

Q. Why did you include the expenditure in Account 303? A. It was rather a hazy item and it seemed to me that it might as well be put there as any other place. I have no brief for it. It doesn't seem to me to make any difference whether you put it there or in some other account. My only concern is that you leave it in the capital investment.

* * *

[8607] By Mr. Hall:

Q. What was the character and scope of the work performed by Penn Water during the years 1929 to 1932 under your Job Order C-791, extension of triangulation system, Mr. Gunn?

* * *

The Witness: That work, that is the extension of the triangulation system, and that job to which you referred, Mr. Hall, was one of two jobs, the other being job order C-970, and being entitled "Property Ties to Triangulation System."

Mr. Bortner was sponsor engineer on these jobs and is familiar with the costs incurred. I have discussed these matters with him and have some knowledge of installing a permanent triangulation system and connecting thereto all of the isolated property surveys. It is common practice to establish a base network where property surveys of several [8608] properties are to be made over a large area. Such a system exists in the Safe Harbor development and is included as a part of the original cost of that project. The triangulation system established at Holtwood is a permanent system and the control points consist of brass plugs set in rock or pipes set in concrete. By connecting independent property surveys to the system the geographic relationship of independent property surveys is determined. This simplifies the plotting of maps, the replacement of missing property monuments, future defense of property ownership, and the making of additional property surveys. The existence of a permanent base network is also of value when surveys of river coal deposit are made from time to time. I have been informed by Mr. Bortner that in his opinion the existence of the triangulation system saved approximately 1100 man-days of field and office work in establishing the bearings and distances of the project boundary line required to be filed in connection with Exhibit K-1A and K-1C of the application for license filed by Penn Water.

By Mr. Hall:

Q. What was the extent of the territory covered by the work performed under job order C-791? A. Covered the flowage basin.

Q. How does this work tie in with the work done by the U. S. Geodetic Survey? [8609] A. The U. S. Geodetic Survey tied in to the company's triangulation point and used that, and beginning from that point, made their own extension beyond what the company had done.

Q. I think you referred to the territory being covered as the Holtwood flowage basin. Is that the same thing as

the Holtwood project? A. Flowage basin is part of the project.

Q. Did it cover only that part? A. Well, when I refer to the flowage basin, Mr. Hall, I am referring to all of the lands necessary and used and useful in the Holtwood project.

Q. What was the total cost of work under job order C-791? A. $3,338.25.

Q. How is that amount classified in your claimed cost? A. I don't recall how it is classified, Mr. Hall.

Q. Does that answer apply to the amount of $3,151.71 which was incurred under job order C-970? A. Yes, sir.

* * *

[8610] By MR. HALL:

Q. What were the duties and activities of the Lancaster office during the period from 1911 to 1923? A. Mr. Bushong and the Lancaster office from which he operated, and where the expenses were incurred, was real estate agent for the company for many years and it is my recollection that between 1912 and 1924 he acquired a total of 64 properties, some of the negotiations lasting over periods as long as nine years. I do not have any detailed information as to the identity or location of the properties acquired. In my opinion, based upon the facts submitted to me by Mr. Bortner, which facts I do not recall in detail, the salary of Mr. Bushong and the expense of the Lancaster office for the period from 1910 to 1924, were properly claimed as original cost of electric plant.

Q. Is it claimed in connection with purchases made of property? A. Yes, I believe that is correct.

Q. Did Mr. Bushong submit regular time reports covering his activities during the period from 1911 to 1924? [8611] A. I don't know whether or not he did. I haven't seen them if he did.

Q. Did Mr. Bushong submit periodical reports? A. I never have seen any such reports. I really don't know.

Q. Mr. Gunn, when you were just discussing Mr. Bushong's salary did you intend to include the entire Lancaster office? A. You mean expenses?

Q. Yes. A. Yes, sir. Those appear, Mr. Hall, as items 7 and 8, I believe, on Exhibit 204.

I beg your pardon. They are items 6 and 7 on Exhibit 204.

Q. Mr. Gunn, with respect to the amount claimed in item 17 of Exhibit No. 204, is that also claimed in connection with the purchase of land?

* * *

THE WITNESS: Yes, sir.

By MR. HALL:

Q. Mr. Gunn, isn't it a fact that you have included in Penn Water's original cost claims as plant items, amounts previously charged by Penn Water to operating expenses? A. Yes, sir.

[8612] Q. Did you ascertain whether the amounts you so restated had been charged to operating expenses in accordance with management's discretion pursuant to accounting practices it was then following? A. I determined they were not, that rather they were accounting errors and the amounts so claimed are, of course, representative of physical property.

Q. Did you determine that there were accounting errors or did someone else determine that for you? A. I think the conclusion was reached by me in conference with the company's accountants and lawyers.

Q. Is that determination based upon your present judgment as to the appropriate classification of such amounts?

* * *

THE WITNESS: By that determination you are referring back, are you, Mr. Hall, to the determination that these were accounting errors?

By Mr. Hall:

Q. To the restatement. A. Of course it was based upon my judgment in 1939 and 1940.

Q. And the discussion we have just had, Mr. Gunn, applies equally as well to the restatement of items from the [8613] depreciation reserve?

Mr. King: What do you mean "discussion you have just had", Mr. Hall? You mean the reasons the witness has given for claiming the amounts?

Mr. Hall: That is right.

The Witness: Yes, I would say it applied to those, also. It all goes back, of course, to the basic necessity of determining the original cost of the company's property.

By Mr. Hall:

Q. What in your opinion did you consider was an accounting error? A. Well, as I recall about 130 examples of it included in the company's claim for original cost.

Q. What is your definition for accounting error? A. I don't have any particular definition in mind. It is something accounted for incorrectly.

Q. Who decided that those items were accounted for incorrectly? A. I did, with the assistance of the company's accountants and lawyers.

Q. What standard did you apply in making that determination? A. Several standards. I applied the classification of accounts of Pennsylvania Commission in effect at the time the accounting was done, the fact that the company had or had not [8614] followed a consistent policy, and I found they had not, and I also considered the fact that some of the accounting errors were errors in the treatment of property replaced in kind, some of the other items involved betterments, some other items involved outright additions to property, and that they were all in violation of the system of accounts in effect at the time the accounting was done. That seemed to me to make them erroneous.

It seems to me that the instruction 2-B of the Federal Power Commission's classification of accounts requires they be corrected. In any event, whether it requires it or not, it most assuredly permits it.

Q. Mr. Gunn, I show you at this time the original affidavit signed by Pliny Fisk, Sr. which affidavit is part 9 of Exhibit 27. Do you recognize that document? A. Yes, sir.

Q. Attached to that affidavit are two documents. Is that right? A. Yes, sir.

Q. Each of them bears Mr. Fisk's initials? A. Yes, sir.

Q. Is the first document the prospectus and underwriting agreement of March 1, 1905, which was incorporated as part 5 of Exhibit 27? A. Yes, sir.

[8615] Q. Is the other document the bond and stock purchase agreement of March 25, 1905 which is incorporated as part 10 of Exhibit 27? A. Yes, sir.

* * *

By Mr. Hall:

Q. Mr. Gunn, in connection with obtaining Hutchinson's affidavit which is part 1 of Exhibit 27, how many times did you personally contact Hutchinson? A. That question gives me a little trouble, Mr. Hall, for this reason: I contacted Hutchinson, I would say, seven or eight times, perhaps, in the course of the period of time between my first contact with him when I asked his assistance in connection with the original cost study and the period when I last was in indirect contact with him through his lawyer at the time the affidavit was obtained.

I don't know whether you could say that all of those contacts were, to use your words, for the purpose of obtaining the affidavit. They were for the purpose of obtaining Hutchinson's assistance in connection with the original cost.

Q. Where was Mr. Hutchinson located at the times you conferred with him? A. Various places. I conferred with him first, I believe, [8616] in Miami, Florida.

Q. When?

• • •

THE WITNESS: I believe that was in January or February of 1938 that I conferred with him. That is as close as I can recall it.

By MR. HALL:

Q. Is that the only time you conferred with Mr. Hutchinson in Miami? [8617] A. That was the only time I conferred with him, but I went to Miami on the occasion of obtaining his affidavit a year later. I didn't confer with Mr. Hutchinson at that time but rather with his personal lawyer.

Q. Do you recall just exactly when you conferred with his lawyer? A. Well, I would say it was a couple of days prior to the 14th day of January, A. D. 1939.

Q. You have stated you saw Mr. Hutchinson in Miami. When did you next see him? A. I believe the next occasion was perhaps a month or six weeks later.

• • •

[8619] By MR. HALL:

Q. What conferences did you have with Hutchinson other than the one you referred to being held in Miami? A. As I recall in about six weeks or some such period. Mr. Hutchinson came to our Baltimore office at that time, I believe, and spent one or two days going over documents and discussing his recollections of McCall Ferry with us. I believe he came to the Baltimore office twice, but I don't remember the date of the second trip to Baltimore.

Then on one and perhaps two occasions I saw Mr. Hutchinson in New York at the University Club where he lived when he was in New York and discussed various aspects of the McCall Ferry history with him.

Q. Who was present at your conferences in Baltimore? A. In general Mr. Eichhorn and Mr. Chase, and for a part of some of the conferences Mr. Walls was present and I believe on one occasion Mr. Higgins was present.

Q. Who was present when you conferred with Hutchinson in New York? [8620] A. I don't believe there was anybody present at those conferences but myself.

Q. Who was present at your conferences with Mr. Hutchinson in Miami? A. Mr. Higgins.

Q. Was there any reason for waiting until January of 1939 to obtain Hutchinson's statement? A. Yes, a very good reason.

Q. What was that? A. I had no expectation but what Mr. Hutchinson would be alive and able to appear at the hearing when it came to the question of our original cost, and, as a matter of fact, I discovered his physical condition as a result of having written a letter to make another engagement with him to come to our Baltimore office for further assistance. The response to my letter to Mr. Hutchinson was a reply from his lawyer saying that he was in very bad health and that if we wanted any further help from him we had better get it immediately.

As I recall, I left Baltimore within one or two days and went by plane to Miami to see Hutchinson's lawyer after I learned of his condition.

Q. Was the first time you saw Rhinehart at the time you went to get the affidavit in January of 1939? A. Yes, sir.

Q. Rhinehart had no personal information as to the [8621] early history of the project nor the detailed data you possess as a result of your prolonged study. Isn't that so?

* * *

THE WITNESS: That is true. He didn't have any prior to the time I gave it to him.

By Mr. Hall:

Q. Did you go with Mr. Rhinehart when he conferred with Hutchinson with respect to the affidavit? A. No, sir.

Q. Did Rhinehart deem it inadvisable for you to accompany him? A. I don't remember why I didn't go.

Q. Was Hutchinson's physician present when he signed the affidavit which is Part 1 of Exhibit 27? A. Who do you mean by "he"? You mean when Hutchinson signed the affidavit?

Q. Yes. A. I really don't know. There is included in Part 1 of Exhibit 27 the physician's statement as to Hutchinson's condition.

Q. Hutchinson died on January 16, 1939, didn't he? A. About that date, I believe. He died a very few days after the affidavit was obtained from him.

Q. Mr. Gunn, will you refer to page 9 of Exhibit 27? What is the illegible and obscured scribbling which appears [8622] above the words "his" X mark? A. I understand it to represent Hutchinson's attempt to sign the document.

[8623] Q. Is that what you were told or is that merely an assumption on your part? A. That is an assumption on my part. I don't know I ever actually inquired.

Q. Did Mr. Hutchinson have assistance in making the "X" mark? A. I don't know. I would have to ask Mr. Rhinehart that question.

Q. Who was present at your conference with Pliny Fisk, Sr.? A. I don't believe anyone was. I think I saw him by myself.

Q. That conference took place in June of 1938, right? A. At about that date as I recall it.

Q. Was Mr. Fisk in the hospital at that time? A. No, sir.

Q. Where was he? A. At his home in New York.

Q. Fisk died March 30, 1939, right? A. That sounds to me about right, Mr. Hall. I don't recall.

Q. Was Mr. Fisk ill at the time you conferred with him? A. No, not that I knew of.

Q. How long a conference did you have with Mr. Fisk? A. I would say it was three or four hours.

[8624] Q. Were you just starting out seeking information when you conferred with Fisk? A. No, I had already done a considerable amount of groundwork in accumulating information. The situation with which I was confronted was this: I had a large number of documents and couldn't manage to put them together so that they made a story that sounded reasonable. So I went to Mr. Fisk primarily to get his memory or judgment as to how those documents fitted together to state the true facts concerning McCall Ferry's history.

Q. Did you participate in the search made by Pliny Fisk, Jr. and W. D. Cole for the records of Harvey Fisk and Sons? A. What do you mean by participate, Mr. Hall?

Q. Did you aid in their search for the records of Harvey Fisk and Sons?

MR. KING: You mean did he go with them?

MR. HALL: Yes.

THE WITNESS: No, I didn't accompany them.

By MR. HALL:

Q. Do you know where the search was made? A. Various places as I understand it.

Q. Where, for instance? A. I don't recall offhand other than one specific place I know of, the Pliny Fisk Financial Library at Princeton. [8625] It is my understanding that Mr. Cole or Pliny Fisk, Jr. communicated with a number of previous employees of the Fisk firm, but the names of them I don't recall at the moment.

Q. Do you know over what period of time that search extended? A. As I recall it it was six weeks or two months.

Q. Why didn't you go back and talk with Mr. Fisk subsequent to June, 1938 after you, as a result of your further consideration and study, had become more familiar with the history of the project? A. Because Mr. Fisk asked that I handle the matter through his personal lawyer and through his son.

Q. How old was Mr. Fisk when he died? A. I don't recall, Mr. Hall, but he was well advanced in years. He was over 75, maybe more.

Q. Do you know whether Mr. Fisk actually dictated the answers contained in his statement which comprises pages 70, 71, 72 and 73 of Exhibit 27? A. No, I do not. You will have to ask Mr. Cole that question. It could be ascertained, I think.

Q. Had you seen the statement of Mr. Fisk after it was prepared but before it was signed by Mr. Fisk? A. No, sir.

Q. Mr. Gunn, will you refer to the last paragraph on page 75 of Exhibit 27? [8626] A. Yes, sir.

* * *

By Mr. Hall:

Q. You there state "It is also desirable that he initial the exhibits." First, what exhibits did you have reference to? A. The exhibits which are referred to in the first paragraph on page 74 in the first sentence.

Q. Are those the exhibits included in the participation?

* * *

The Witness: I don't believe they are as I recall it, Mr. Hall. If you will notice, the question and answer statement of Mr. Fisk is dated December 29, 1938, and as I recall the documents which I identified this afternoon, and which were initialed by Mr. Fisk and attached to Fisk's original statement, were submitted to him in connection with that question and answer statement.

[8627] Then the question and answer statement did not contain all of the information we wanted and we prepared,

apparently, another document between that date and January 9th, together with a substantial volume of exhibits and sent those to Mr. Cole on January 9, 1939. Of course, at various times various of the parts of Exhibit 27 had been supplied to Mr. Cole and had been discussed by him with Mr. Fisk, but I can not now recall just what the list of documents was which were so supplied.

* * *

By MR. HALL:

Q. Why was it desirable for Mr. Fisk to initial the exhibits referred to in the last paragraph on page 75 of Exhibit 27? A. I think probably I got the idea from the fact Mr. Cole had him initial the first two exhibits submitted to him, although I have not been able to find initialed copies of those exhibits and I have a vague recollection that Mr. Cole forgot to ask him to initial them and he didn't do it.

Q. Mr. Gunn, will you refer to Transcript page 6921, line 4? A. Yes, sir.

Q. Isn't it a fact that in June of 1905 McCall had only $6,400,000 cash available from bond subscriptions [8628] rather than the $7,267,500 referred to at that point?

* * *

THE WITNESS: That depends, Mr. Hall, on how you interpret it. The figure referred to at that point of $7,267,500 is the total amount realized from the sale of bonds. That amount reduced by the cash payment to Hutchinson and the cash payment to Harlow-McGaw, which payments were made by Susquehanna Contracting Company, equals the $6,400,000 which Susquehanna Contracting Company was to turn over to McCall Ferry Power Company, or was holding available for McCall Ferry Power Company. So what in effect happened was that Susquehanna Contracting Company paid for the property of Harlow and McGaw out of the $7,267,500 and had $6,400,000 left for McCall Company to use in constructing its plant.

By Mr. Hall:

Q. In referring to the Harlow-McGaw and Hutchinson lands at that point in the transcript you included in those amounts the payments of cash by Susquehanna to Hutchinson and Harlow-McGaw?

• • •

The Witness: At what point?

[8629] Mr. Hall: Page 6921, line 4.

• • •

By Mr. Hall:

Q. Mr. Gunn, will you refer to page 6921 of the transcript, lines 6 and 7. Isn't it a fact that the amount of $13,772 and $1,221,000 and $450,000 includes the cash paid by Susquehanna Contracting Company to Hutchinson and Harlow-McGaw and Pullen? A. Yes, sir, that is correct.

Q. The remaining cash due from Susquehanna Contracting Company to McCall was the amount of $6,400,000? A. Yes, sir, that is correct.

[8630] Q. Then the $8,951,772 referred to in line 6, transcript 6921 should be $8,084,722. Right? A. Yes, sir, that is correct.

Q. That is correct, substituting the $6,400,000 for the $7,267,000. A. Yes, sir, that would make it correct.

• • •

[8638] Mr. King: Mr. Examiner, Mr. Goldberg's statement eliminates from discussion the question of the affidavits contained in Exhibit 27. As I understand it, he does not object to their admissibility, but his comments on them relate to their weight, which, of course, is for your Honor to decide at the conclusion of the case. So I think there need be no further discussion as to the affidavits.

[8639] Mr. Goldberg: I object to their admissibility but not on the ground they are ex parte statements and the persons who made the affidavits are not presented for cross-examination.

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[8680] GEORGE W. SPAULDING.

* * *

RE-CROSS-EXAMINATION.

By MR. GOLDBERG:

* * *

[8700] Q. What is wattless energy? A. What is it?

Q. That is right. A. I am trying to think of an answer which doesn't go too far into the textbook, Mr. Goldberg.

Q. Keep my head above water. A. Wattless energy may be produced by a synchronous condenser or by the operation of any other generator by adding or absorbing a magnetizing current in the circuit, and the introduction of magnetizing current changes the characteristic of the supply or of the service, as the case may be.

* * *

[8712] Q. These two—220 K. V. Safe Harbor-Baltimore-Washington transmission lines at times carry backfeed energy for purposes of interchange. Am I right so far? A. They do.

Q. And the interchange is between Penn Water and [8713] Pennsylvania customers, or the northern customers as they are referred to in the record? A. That is correct.

* * *

In some cases, of course, Safe Harbor is a party to those contracts.

Q. I don't want to get into that right now. A. I don't want to introduce it, either, but I wanted to be sure the record was clear.

* * *

Q. * * * Now, then, the interchange results from savings or benefits not only to Consolidated but to the Pennsylvania customers, right? A. That is correct.

Q. The two—220 K. V. Safe Harbor-Baltimore-Washington transmission lines are involved in bringing

about those benefits—right? A. Among other facilities which are required in addition to the lines between Holtwood and Safe Harbor and Baltimore.

Q. Right now I am talking about the two—220 K. V. Safe Harbor-Baltimore-Washington transmission lines, and what I have said is right as to those lines—right? A. That is correct.

Q. But the allocation you made of the costs of those [8714] two—220 K. V. Safe Harbor-Baltimore-Washington transmission lines is entirely to Consolidated—right? A. Properly so.

Q. It is entirely with Consolidated? A. That is correct.

* * *

[8719] Q. Are you saying that with your present contracts which you have with your customers to the north you could just [8720] as well get along without this backfeed from Consolidated for firm power purposes?

THE WITNESS: May I have the question again?

(Question read.)

THE WITNESS: Yes. Limited only by the fact that today and perhaps for the next few months the cost of generation is a little lower on the Baltimore-Washington system than it is in Pennsylvania, but if the cost of such energy was lower to the north, lower on the northern systems, the very same method of operation and the philosophy of our contracts would be such that we would purchase such supplemental energy from the north rather than from Baltimore, and we would then also be supplying Baltimore with interchange energy from the north rather than receiving backfeed from Baltimore Company.

* * *

[8743] STANLEY W. ROLAND.

* * *

[8746] CROSS-EXAMINATION (Continued).

By MR. MYSE:

Q. Mr. Roland, at various places in your direct testimony, you mentioned the Safe Harbor Water Power Corporation, and in order to get the record straight on it, I ask if Safe Harbor is a licensee under the Federal Power Act.

MR. GOLDBERG: Mr. Examiner, I object to that as a legal question.

TRIAL EXAMINER: I will permit it as a preliminary question.

THE WITNESS: That is my understanding that Safe Harbor is a licensee.

[8747] By MR. MYSE:

Q. Do you know what project number it has? A. No, I don't recall what the number of the project is.

MR. GOLDBERG: I am willing to stipulate that it is No. 1025.

MR. MYSE: All right.

* * *

[8748] Q. Well, is the power from Safe Harbor used to serve the Pennsylvania Railroad? A. In part, yes.

Q. Is it used to serve other public utilities who use it to serve the public?

MR. GOLDBERG: What do you mean by public utilities in that question?

MR. MYSE: Well, Pennsylvania Power and Light Company, for example.

THE WITNESS: Energy generated by Safe Harbor would be delivered to Pennsylvania Power and Light and sold by them to their customers, I presume.

[8749] Q. Now, will you turn to page 981 of the record, if you have the copy before you? Now, beginning at line 8 your counsel asked you the following question:

> "Do Holtwood and Susquehanna own and operate facilities for such transmission and sale at wholesale which are not used only for the transmission of electric energy which is not transmitted from any state and consumed at a point outside thereof."

You remember that question, do you not? A. Yes.

Q. And a little bit later on you say "Yes, that follows from one of my previous answers."

Do you remember that testimony? That is down at lines 20 and 21. A. Yes.

Q. Now, can you point out for me to which of your previous answers you are referring in that answer? A. Well, I expect it would take in quite a bit of my previous testimony in which I pointed out that these facilities were used for transmitting energy from one state to another.

Q. Now, just a minute. You say, "Yes, that follows from one of my previous answers." I would like to know which of your previous answers you are referring to there.

TRIAL EXAMINER: Look at 979.

[8750] THE WITNESS: Pardon?

TRIAL EXAMINER: Look at 979.

THE WITNESS: I don't find it right at the moment.

By MR. MYSE:

Q. Well, there are only two or three pages previous to that where you testified on that subject, isn't that so? A. Yes. It is one of those lawyer's kind of questions, I mean, which has so many double negatives in the darned thing that I—I don't find it right now.

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[8754] MR. MYSE: Will you check, Mr. Roland, and come back with an answer at some future time?

THE WITNESS: Yes, sir.

By MR. MYSE:

Q. By the way, your testimony was prepared testimony, was it not?

MR. GOLDBERG: What do you mean by prepared testimony?

MR. MYSE: Prepared in written question and answer form before you came into the hearing.

THE WITNESS: That is correct.

By MR. MYSE:

Q. And you spent some time in preparing that testimony? A. Yes.

Q. As well as this answer line 20 to 21, page 981? A. Well, it wasn't just an offhand answer, I gave [8755] it consideration, yes.

Q. Now, in the light of your answer at page 981, whatever it means, do you agree that the facilities of Penn Water, not used for generation, are not necessarily used for transmission and sale of energy at wholesale transmitted from a state and consumed at any point outside thereof? A. You are talking about facilities not used for generation, that is the first part of it?

Q. That is right. A. Are not used, did you say?

Q. Are not necessarily used. A. Are not necessarily used for the transmission or sale?

Q. Transmission and sale. A. At points outside of a state, I mean, is that added to it?

Q. If you want the question reread, the reporter will reread it to you I am sure.

TRIAL EXAMINER: Read the question again.

(Question reread.)

THE WITNESS: Does it mean exclusive use in your question. You mean used exclusively for transmission and sale, at points outside of the state?

MR. MYSE: I will accept that.

[8756] By MR. MYSE:

Q. Can you answer the question with that amendment? A. Well, I will agree that Penn Water owns and operates facilities which are not used exclusively for transmission and sale at points outside the state.

Q. Well, the fact that they are not used for generation, however, does not mean that they are used for transmission and sale of energy which crosses state lines, isn't that right? A. I am just trying to get in mind what facilities we are talking about when you say facilities not used for generation. Are we talking about the transmission facilities?

Q. We are talking about the facilities of Penn Water, the facilities that you were talking about starting at page 979, and through 981. A. Yes, but in your question now you are saying facilities not used for the generation of energy, that means we are talking about facilities used for the transmission. I want to know what you mean by it.

Q. I mean exactly what you meant when you were talking about facilities of Penn Water and Power. You are familiar with the facilities, are you not? A. Yes. But I still don't understand what you talked about—when you talk about facilities for generation of [8757] electric energy that are not used for transmission of electric energy just what you are talking about.

TRIAL EXAMINER: Just a moment. You do not have to speculate as to what counsel means. If you have any doubt you may preface your answer by stating what the question means to you.

THE WITNESS: When he speaks of facilities not used for the generation of electric energy in the Penn Water system I am then referring to facilities used for the transmission of electric energy.

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Q. Do I understand that you can't answer the question the way I put it? A. I don't understand it thoroughly enough.

Q. You just don't understand the question, is that it, Mr. Roland? A. It isn't completely clear in my mind, I mean, as to just what you have in mind.

Q. Now let us exclude from our mind for the moment all the facilities of Penn Water used for generation. It doesn't follow from that, does it, Mr. Roland, that all the remaining facilities are transmitting facilities, does it? A. That is true.

Q. Nor does it follow that all the remaining facilities [8758] are used for the transmission and sale of energy at wholesale transmitted from a state and consumed at any point outside thereof, does it? A. There would be some local distribution facilities that would not be involved in that kind of a transaction.

Q. Now, in the light of your answer at page 981, isn't it true that the facilities of Penn Water not used for local distribution, are not necessarily used for transmission and sale of energy at wholesale transmitted from a state and consumed at any point outside thereof?

* * *

[8759] THE WITNESS: Well, as I understand it now, we have eliminated the facilities for generation of electric energy and we have eliminated the facilities used for local distribution and you are asking me now if the balance of facilities are used for transmission and sale of electric energy at point outside the state; is that correct?

MR. MYSE: Well, that isn't quite correct, but I think it is substantially the way my question was except that I used a little bit different language.

THE WITNESS: Yes.

MR. GOLDBERG: Has the witness correctly understood your question so that if he answers your question it will be an answer?

MR. MYSE: I am willing to have him answer it with that understanding and if he answers it I will have a further question.

THE WITNESS: I would have to exclude a line that is leased to the Baltimore Company, for one thing, that is that 110 kv line that runs from Highlandtown Substation up to Gunpowder Substation, that is owned by Penn Water but I mean is not operated. It is leased to the Baltimore Company, that one.

By MR. MYSE:

Q. Why do you say that you would have to exclude that line? [8760] A. Well, that one certainly is not used for transmitting energy from one state to another, as I recall.

Q. Actually that line doesn't run to Highlandtown Substation, it runs to Philadelphia Road Substation? A. It is right across the street from that. There is no electrical connection, that is true. I said Highlandtown Substation is on one side of the street and Philadelphia Road is on the other.

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[8775] Q. Let's look at the generating facilities for a moment of Penn Water. How many main hydro units does Penn Water have? A. Ten.

Q. Then it is true, isn't it, that eight of those ten main hydro units at Holtwood were used to generate 25-cycle, three-phase service? A. That is right, sir.

MR. GOLDBERG: What does counsel in his last question mean by service, electric energy?

[8776] MR. MYSE: Electric service, including electric energy, isn't that what you understood that I mean, Mr. Roland?

THE WITNESS: Well, ordinarily you use generation of electric energy.

By Mr. Myse:

Q. But it does generate other attributes of electric energy, does it not? A. It generates electric energy at some particular voltage and certain frequency. If you want to call those attributes, all right.

Q. So that only two out of the ten main hydro units are used to generate 60-cycle three-phase electric service or energy if you would have it that way, isn't that right? A. Two of the units generate electric energy at 60-cycle.

Q. What are the steam units generating at? A. 60 cycles.

Q. In addition to that, there are two 5,000 kw frequency changers at Holtwood, are there not? A. I believe that is a nominal rating; there are two of them, I believe they are 6,250 kva rated frequency changers.

Q. Now, what are those frequency changers used for? A. To change the energy generated from 25 to 60 cycles or energy generated from 60 cycles to 25 cycles.

[8777] Q. Now, with respect to facilities used in local distribution, I think you mentioned or did you mention the Highlandtown Substation facilities? A. That is what I had in mind, that there might be something down there on the low-tension side at Highlandtown that might be considered local distribution.

Q. Well you, as an engineer, would consider them local distribution? A. Well, in my opinion, local distribution was a legal term, I would say that they are distribution facilities.

Q. You would say they are? A. There are certain parts of them that I think would certainly be classified as distribution facilities.

Q. And that is your opinion as an engineer wholly aside from any legal connotations? A. That is right.

Q. Now, what about the facilities used to serve the Holtwood Village, didn't you consider them distribution facilities? A. Yes, those would be distribution facilities.

Q. And they would be local distribution facilities in your opinion as an engineer, would they not? A. I don't know. As that word local is used in the Power Act, I should think that is a legal term used solely [8778] for retail sale and distribution.

Q. Now let me refer you to the question at the top of page 981: "Q. Do Holtwood and Susquehanna own and operate facilities for such transmission and sale at wholesale, which are not used in local distribution?" What did you mean when you answered that question "Yes" with an additional phrase? A. They are distribution facilities.

Q. What do you mean by the word "local"? What was your understanding? A. Well, there, of course, I stated with a possible exception, I wasn't being definite about those facilities as being used in local distribution. That is an expression of opinion there, I mean, I don't have any clear-cut opinion as to what is local distribution. Certain types of facilities, when you describe them, like the facilities for the Holtwood Village, I wouldn't hesitate to call those local distribution.

Q. You say you would hesitate? A. I would not hesitate to call those used in local distribution.

Q. You would not hesitate. You say you would hesitate, however, at least you have had some doubt about the Highlandtown Substation facilities. Is that right? A. Yes, I don't know just whether they would be in a [8779] legal sense, I mean whether this would be considered local distribution or not.

Q. Now just so we understand each other, Mr. Roland, I am not asking you for any legal conclusion or anything in the legal sense. A. Yes.

Q. Can you answer my question as an engineer? A. I don't know whether they would be or not.

Q. You are sure that they are distribution facilities? A. I would agree that they are distribution facilities.

Q. Were you aware of the Holtwood Village facilities when you gave your testimony back in April or May, whenever it was? A. Yes, I was aware of it.

Q. How would you class the facilities used to render service to the Pioneer Electric Light Company area adjacent to Holtwood?

MR. GOLDBERG: What service does counsel have reference to?

MR. MYSE: Well, I described that as the service to the Pioneer service area adjacent to Holtwood.

MR. GOLDBERG: What is the service?

MR. MYSE: I am asking him how he would classify it.

TRIAL EXAMINER: Can you classify it?

THE WITNESS: I believe that those were definitely [8779-A] distribution facilities. Whether or not they would be used in local distribution, I don't know. I didn't examine the facilities owned by the Pennsylvania Power and Light Company that were used, I mean in their area for distributing that energy. All I had in mind was that Penn Water owns the step-down transformers for serving that area.

MR. MYSE: And certainly there is no transmission of any length or of any kind, is there?

THE WITNESS: I don't believe so.

By MR. MYSE:

Q. So that if it is anything it is a distribution facility so far as Penn Water owns facilities? A. Well, Penn Water does not own the distribution lines. They furnish the transformers, I mean for stepping the voltage down to distribution voltage.

Q. But to the extent it does own the facilities they are distribution facilities, is that right? A. Yes, I think I

would call those transformers, small transformers, distribution transformers.

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[8780] Q. Mr. Roland, I think earlier this morning you mentioned the Gunpowder transmission facilities owned by Penn Water, and by that I mean Penn Water or Susquehanna Transmission Company? A. That is right.

Q. In this case that line is owned by Susquehanna. Is that right? A. That is correct.

Q. Now, you stated, as I remember it, that that line is not used to transmit energy across state lines. Is that right? A. I made no effort to determine whether it did or not, but that is my offhand opinion, I mean that it does not.

Q. Well, will you briefly describe that line, where it originates, where it runs to, and what use is made of it? A. Well, one of the terminal points is the Baltimore Company's Park Road substation.

Q. Philadelphia Road, I believe. A. Philadelphia Road substation. The other terminal point, I believe, is the Gunpowder substation, which is a substation on the 110 K. V. loop around the City of Baltimore.

Q. Now, that line has no direct connection with the so-called Highlandtown line running from Holtwood to [8781] the Baltimore Company, does it? A. Certainly not a direct connection, no. The 25-cycle system is tied in with the 60-cycle system, by means of frequency changers, and through that way it would be connected but there is no direct connection.

Q. There is no electrical connection between the 25-cycle and the 60, is there? A. At a frequency changer you break the electrical connection and have a mechanical connection.

Q. So there is no electrical connection between the two systems—right? A. In that sense that is correct.

Q. And as I understand your evidence, then, that Gunpowder transmission line is used as a part of the Baltimore

Company's distribution system in Maryland. Is that right? A. I don't know where to draw the line between distribution and transmission. If that 110 K. V. loop is considered distribution then it would be a part of the distribution system. If it is considered as a transmission system, then it is part of the transmission system.

Q. Well, at least you would agree it is used exclusively as a part of the Baltimore Company's system in Maryland whether we characterize it as distribution or transmission system? [8782] A. That is correct.

Q. To that extent then, it would be a facility used only for the transmission of electric energy not transmitted from a state and consumed at any point outside thereof? A. That is correct.

Q. I think at various places in your testimony, and you repeated this morning, you said that that line was leased to Baltimore. Am I right in so understanding your testimony?

MR. GOLDBERG: Will you point to the places where he said it was leased?

MR. MYSE: One is at page 909 of the transcript, line 5, and I think he repeated it this morning.

By MR. MYSE:

Q. Let me ask you first at transcript 909, line 5, you were referring to the Gunpowder line when you talked about the line leased to Baltimore? A. That is correct.

Q. Now, what did you mean by "leased to Baltimore Company"? A. Well, the line was built at the request of the Baltimore Company and for the use of the Baltimore Company. It was used exclusively for the Baltimore Company service.

MR. MYSE: May we have the answer, please?

(Answer read.)

By MR. MYSE:

[8783] Q. Well, does Baltimore operate and maintain the line? A. I don't believe so. I think that Susquehanna

maintains the line and maintains all the other lines because it is on the same right of way as the other transmission lines owned by Susquehanna.

Q. Does Baltimore make any compensation for this lease that you referred to? A. I don't know.

Q. Have you ever seen any document which looked like a lease of these facilities from Penn Water or Susquehanna to Baltimore Company? A. No.

Q. Isn't it a fact that the compensation that Penn Water receives for these facilities is included in the contract referred to in this proceeding as "H and I"? A. I don't know.

Q. Didn't you study that contract? A. I studied it but I don't recall now just how ten miles of line was handled.

Q. Well, are you familiar with H and I? A. Well, I couldn't precisely remember any details of it. I am generally familiar with it.

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[8785] By Mr. Myse:

Q. Is the Exhibit C of Item H what you had reference to when you are talking about a lease, leased facility from Penn Water to Susquehanna to Baltimore? A. Well, Exhibit C would indicate that it was not a lease, that Baltimore Company was paying a part of the average annual cost of the operation and maintenance of the line.

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[8787] By Mr. Myse:

Q. Now, can you summarize for me what facilities Penn Water or Susequehanna owns, either one, which are used for the transmission of electric energy not transmitted from a state and consumed at any point outside thereof?

The Witness: Will you read the last part of that?

(Question read.)

THE WITNESS: We are discussing now transmission facilities?

By MR. MYSE:

Q. That is right. A. Gunpowder line would be one. That is the only one I can think of now other than these facilities, which we have talked about as being distribution facilities.

Q. Well, isn't it a fact that the transmission line, let's take from Holtwood to York, is also a transmission line used for transmission of electric energy not transmitted from a state and consumed at any point outside thereof? A. No, that isn't; no.

Q. You mean there is no energy that goes on that line that is generated in Pennsylvania and consumed in Pennsylvania? A. Well, wait a minute. It is not used exclusively for either one.

MR. MYSE: Will you read back my previous question?

(Previous question read.)

[8788] By MR. MYSE:

Q. Do you want to change your answer? A. It does both. At times it transmits energy which is generated in Maryland. At other times it transmits energy which is generated in Pennsylvania.

Q. At times it transmits energy generated in Pennsylvania and consumed in Pennsylvania, and that is the only State in which that energy is generated.

MR. GOLDBERG: When?

MR. MYSE: At times.

THE WITNESS: There are times when the energy transmitted by the line to York is transmitting energy generated only in Pennsylvania.

By MR. MYSE:

Q. Now, that would also be true with the line that runs from Holtwood to Coatesville? A. That is right.

Q. Would it also be true with respect to the line that runs from Holtwood to Safe Harbor? A. That is correct.

Q. And that would also be true with respect to part of Conestoga sub-station? A. That is correct.

Q. And there may be times when the transmission line from Safe Harbor to Perryville, portions of it at least, are used for the transmission of energy generated solely in [8789] Pennsylvania. Is that right? A. That is correct.

Q. Now, that would also be true with respect to some of the facilities of Safe Harbor which conduct energy and other services from Safe Harbor to Conestoga, for example? A. This question was some questions back. Now, let's see—we are saying that there are times when the energy transmitted by Safe Harbor's facilities is energy which is generated in Pennsylvania only.

Q. And consumed in Pennsylvania. A. And consumed in Pennsylvania only. I am not so sure about that because the Safe Harbor generation would be going to Perryville most of the time, and that, of course, would then be consumed in Maryland.

Q. Well, isn't some of the Safe Harbor generation single phase, 25 cycle, used in Pennsylvania? A. Yes.

Q. It is used for railroad purposes in Pennsylvania. A. That is right.

Q. And it is conducted through the Conestoga substation. A. That is correct.

Q. It has to go that way. A. That is right.

Q. And there are times when the only energy on that [8790] line is energy generated in Pennsylvania. Isn't that right? A. That is correct.

Q. And it is consumed in Pennsylvania, too? A. Well, that is where I am not certain about it, because some of it necessarily goes to Perryville and the rest of it would then take you to Maryland and some of it is consumed in Pennsylvania.

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[8799] Q. Isn't it a fact, Mr. Roland, that under that contract, Exhibit No. 72, energy delivered to M. E. Company for peak use is never delivered at times of backfeed energy generated in Maryland? A. I don't know.

Q. You made no study to determine that, did you? A. No. I studied the flows as shown on Exhibit 42 and whatever they showed, that was it. I didn't study that in relation to the contracts.

Q. Well, if you studied the flows today, wouldn't it be the fact that energy delivered to M. E. Company, that is Metropolitan Edison Company, for peak use is never delivered at times of backfeed energy generated in Maryland? A. I don't know. I would have to go back and refresh my memory on the terms of the contract. Maybe that would be so, but there may be times when there is not peak use. There would still be energy sold.

Q. Well, if what I say is correct, however, that changes the situation materially from what existed in 1944 under the old contract identified as Exhibit 71, doesn't it? A. The contract would be quite a bit different, yes.

Q. And the flow of energy under the contract identified as Exhibit 72 would be quite different, wouldn't it? A. I don't know.

Q. You made no study to determine it? [8800] A. I did not. I studied the flows in 1944.

Q. Now, certainly you will agree, wouldn't you, Mr. Roland, that some energy delivered to the Pennsylvania customers is delivered at times when there is only generation at the Safe Harbor-Penn Water Plants?

MR. GOLDBERG: Let's have that question, please?

— (Question read.)

MR. GOLDBERG: What Pennsylvania customers do you have reference to?

MR. MYSE: Pennsylvania Power and Light, Metropolitan Edison Company, Philadelphia Electric Com-

pany at Coatesville, Pennsylvania Railroad Company in Pennsylvania.

MR. GOLDBERG: Now, I would like to have the question reread again.

(Question read.)

THE WITNESS: I don't understand that. Only generation at Safe Harbor and Penn Water? I don't follow you. There is generation all over the system, not necessarily only there.

By MR. MYSE:

Q. Well, let's change the question slightly and say that you must agree, Mr. Roland, that there are times when the energy delivered to the Pennsylvania customers we have named was generated in Pennsylvania? A. Yes.

Q. And that there are times when there is no mixture of [8801] energy generated from without the State of Pennsylvania. A. That is right.

TRIAL EXAMINER: You are referring there to generation in Pennsylvania by Safe Harbor and Holtwood?

By MR. MYSE:

Q. That could be, could it not, Mr. Roland? There could also be generation by some of the Pennsylvania customers at the same time deliveries are taking place? A. That is what I had in mind that you were talking about deliveries to Penn Water from its northern customers and also generation at Safe Harbor and at Holtwood.

Q. It is perfectly possible to have deliveries to Philadelphia Electric, for example, at Coatesville, Pennsylvania, at the same time that Penn Water or Safe Harbor or both are receiving energy from Pennsylvania Power and Light Company. Isn't that right? A. That is right.

Q. Do you have any idea as to the amount of such hours during which all of the energy delivered to the Pennsylvania customers we have named is generated in the State of Pennsylvania?

MR. GOLDBERG: What period of time; what year?

MR. MYSE: Well, let's take 1944, the year you were talking about.

THE WITNESS: Well, one could get some idea of it from [8802] the 20-days I selected, but I didn't attempt to go through and determine the number of hours that that would occur.

By MR. MYSE:

Q. Would you say that those hours are substantial in relation to the total number of hours in the year?

MR. GOLDBERG: What does counsel mean by "substantial"?

MR. MYSE: I think the witness knows. He hasn't protested.

MR. GOLDBERG: I ask what counsel means by "substantial"?

TRIAL EXAMINER: The witness may answer the question.

THE WITNESS: Let me get it. Are the number of hours substantial when the supply to the Pennsylvania customers is generated in the State of Pennsylvania?

By MR. MYSE:

Q. And no other place. A. And there is no comingling so to speak with energy generated in Maryland. Is that what you have in mind?

Q. That is right. A. I would say that the number of such hours would be substantial.

Q. Now, what do you mean by substantial—and I might refer you to line 17 of page 979 of your transcript as constituting your direct testimony? A. What line.

MR. GOLDBERG: Are you referring to that question that [8803] spoke about the amounts of electric energy rather than time?

MR. MYER: Yes, but he used the word "substantial" and I want to know whether he uses it now in the same sense he used it then and if so what does he mean by it.

THE WITNESS: Well, one cannot be too definitive about a word like substantial. I can't reduce it into terms of percentage. I don't know whether I can use a word that would convey what I have in mind any more adequately than the word substantial. It could be over quite a wide range and still be substantial.

By MR. MYER:

Q. Well, let's take the other side of it, then. Wouldn't it be a fact that only a small proportion of the kwh's of energy delivered to the Pennsylvania customers we have named are delivered at times when electric energy is transmitted from Maryland and received by Safe Harbor or Penn Water?

THE WITNESS: I will have to have that one again.

(Question read.)

MR. GOLDBERG: What does counsel mean by "small proportion", Mr. Examiner?

MR. MYER: I think if the witness can answer the question I would like to have the answer.

TRIAL EXAMINER: All right.

THE WITNESS: We are talking now over the period of a year [8804] or something like that?

By MR. MYER:

Q. Yes, the year that you took, 1944. A. There would certainly be fewer hours during the year when energy was coming up from Maryland to Safe Harbor and Penn Water for transmission to these Pennsylvania customers than there would be hours when all of it was generated in Pennsylvania.

Q. Now can you answer the question? A. Well, in order to give you something very definitive of course you would have to study the thing hour by hour for the entire year, but that would be my opinion that relatively the hours when you had energy coming from Maryland would be very much smaller than the number of hours during which it was generated in Pennsylvania.

Q. Well, maybe we can shorten this. You haven't made any such study? A. I haven't made any hour by hour study for the entire year, no.

Q. You just took selected days you testified to on direct. A. That is correct.

* * *

[8808] Q. Well, you have made an investigation of the flows of energy on the Penn Water and Safe Harbor system haven't you? A. Yes, but I didn't go into net hourly flows.

Q. What are your figures based on other than net hourly? A. Gross flows.

Q. Gross? A. Yes.

Q. Kwh? A. Yes, in most instances.

There were a few cases where I netted, where I got the net flows in some of the circuits for certain hours.

* * *

[8829] Q. Actually, Article II of Exhibit 10 provides that "the amount of power and energy, hereinafter referred to as 'contractual supply', which Railroad Company shall call for and which Electric Companies shall supply when called for by Railroad Company is defined", and then it goes on to define it, doesn't it? A. That is right.

Q. And what are "Electric Companies" as used in this contract, do you know? A. I suppose they are named in the beginning.

Q. Well, actually the Consolidated Gas Electric Light and Power Company of Baltimore, Pennsylvania Water and Power Company, and Safe Harbor Water Power Corpora-

tion are [8830] hereinafter jointly referred to as "Electric Companies." A. That is right.

Q. So that when it speaks of the supply to the railroad it speaks of the supply by all three, does it not?

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THE WITNESS: What Mr. Myse has stated is so stated in the contract.

By MR. MYSE:

Q. That is your interpretation of it, too, isn't it? A. Safe Harbor physically supplies energy to the [8831] railroad.

Q. And it is obligated to under the contract?

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TRIAL EXAMINER: You didn't use this contract in making your determination?

THE WITNESS: I did not.

TRIAL EXAMINER: You did not refer to the contracts in your preparation of your testimony on direct?

THE WITNESS: I did not refer to the contracts, as I recall, on direct; certainly not to the railroad contract. I believe I did mention contracts, that certain sales were made under certain contracts, the Penn Power and Light Company and Metropolitan Edison, and so forth, and I also mentioned that Pennsylvania Water and Power was selling——

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[8833] THE WITNESS: The question being, is Safe Harbor obligated to supply power to the Pennsylvania Railroad under Exhibit Ten, is that correct? I don't know.

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[8834] MR. MYSE: You did refer to sales to the railroad company by Baltimore, did you not?

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THE WITNESS: I did make such a reference. The sales in the state of Maryland are the obligation of the Baltimore Company and the sales in the state of Pennsylvania are the obligation of Penn Water Company.

By MR. MYSE:

Q. Now how do you determine what those obligations were? A. I was so advised by Mr. Spaulding. My discussions with him that the Pennsylvania Railroad requirements of—In the state of Pennsylvania are considered as being supplied by the Penn Water Company, and the requirements of the railroad company in Maryland are supplied by the Maryland Company. Now, physically that doesn't always take place.

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[8836] Q. As I understand it, then, your conclusion as evidenced by the testimony on page 914 with respect to the sales to the railroad company is not entirely your conclusion then, is that right? A. Of course it is my conclusion. It was a matter of discussing it with Mr. Spaulding, Mr. Davis, and other sources.

Q. I am trying to find out how you arrive at that conclusion. How did you arrive at the conclusion that the obligation of Baltimore was to sell to the railroad company only in Maryland? A. I didn't say that.

Q. Then I understand that it is not its obligation; is that right? What other obligation does it have to the railroad? A. It supplies power to the railroad but it doesn't necessarily all have to be consumed in Maryland.

[8837] Q. Well, can you answer my question? What other obligations does Baltimore have other than supplying energy to the railroad in Maryland? A. There are all kinds of obligations.

Q. What are they? A. Sells power in Baltimore to all its customers.

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THE WITNESS: They supply power in the city of Baltimore. They have got obligations of all kinds.

MR. MYSE: Let's confine ourselves to the Pennsylvania Railroad. What other obligations are there other than the obligation you mentioned of supplying the railroad service in Maryland?

MR. GOLDBERG: Mr. Examiner——

THE WITNESS: I didn't say that. I said that they supplied power to the railroad. Now this does not necessarily mean that it is all used in Maryland. They supply part of power requirements in Pennsylvania.

[8838] MR. MYSE: Excuse me——

THE WITNESS: Likewise Pennsylvania Water and Power Company, it supplies power to the railroad, it doesn't necessarily mean that it is all used in Pennsylvania.

By MR. MYSE:

Q. Then am I to understand that you mean the obligations of Penn Water and Baltimore respectively are not arbitrarily divided by the Pennsylvania-Maryland line? A. As far as requirements are concerned that is true. They just together supply the total requirements.

Q. Now, actually the energy supplied to the railroad is 25-cycle single-phase, is it not? A. That is correct.

Q. And that is a different kind of energy from 25-cycle, three-phase, is it? A. The frequency and the phase are different from the other.

Q. And it is different from 60-cycle, three-phase, is it not? A. 25-cycle is different from 60-cycle, yes. Single phase is different from three-phase.

Q. Now where is almost all or most of that 25-cycle single phase energy generated? A. Safe Harbor.

Q. Where else? [8839] A. At Benning, Washington.

Q. The amount generated at Benning is generated by PEPCO, is it not? A. That is right.

Q. What is the full name of PEPCO? A. Potomac Electric Power Company.

Q. And it is really generated in a converter at Benning, is it not?

MR. GOLDBERG: What do you mean by "really generated"?

MR. MYSE: Actually generated.

MR. GOLDBERG: What do you mean by actually generated?

MR. MYSE: If the witness knows I would like to have his answer.

THE WITNESS: The 25-cycle is generated by a frequency changer located at Benning Station.

By MR. MYSE:

Q. And the amount of such generation at Benning is relatively small, isn't it? A. As compared to the total, I believe that is correct.

Q. Now, isn't it also true that a substantial portion of the backfeed from Baltimore received at Safe Harbor is also converted at Safe Harbor from 60-cycle to 25-cycle and used for supply of the railroad? A. At times, some of the backfeed is converted to 25-cycle for use of the railroad.

[8840] Q. And if you refer to your Exhibit 44 again, perhaps we can trace that a little bit better. Now, that Exhibit 44 shows, as I understand it, and you correct me if I am wrong, 67,000 kilowatt-hours backfeed from Baltimore over the 220 kv circuits, is that right? A. I think it would be better if you said kilowatts. This is for one hour.

Q. All right. A. 67,000 kilowatts; other than that, it is all right.

Q. That is kilowatts for one hour. A. Well, it is kilowatts; it is kilowatt-hours for one hour.

Q. It is integrated kilowatt-hours for one hour. A. Well, the kilowatts are integrated over an hour, which gives you——

Q. (Interposing.) And you could integrate it for fifteen minutes or five minutes? A. Yes.

Q. It is frequently integrated over fifteen minutes? A. That is correct.

Q. What is it called when it is integrated over fifteen minutes? A. Well, that would be called a kilowatt demand integrated over a fifteen-minute period.

[8841] Q. Well, in any event, getting back to Exhibit 44, as I understand your correction to my question, there are 67,000 kilowatts transmitted from Baltimore over the 220 kv circuit, sixty cycles, during the hour shown on that exhibit. A. Yes.

Q. And that is received at Safe Harbor, is that correct? A. Yes.

Q. And there is no generation at Safe Harbor so there must be some 23,000 of those 67,000 kilowatts converted, is that right? A. That is correct.

Q. And after it is converted, where does it go? A. It all goes to the Conestoga substation.

Q. And from there it is used in the railroad service, is it not? A. That is correct.

Q. Now, in order that we may understand your Exhibit 44, the converter is shown by the sign of the two balls there, is it not? A. That is right.

Q. Shown connecting the two busbars at Safe Harbor, isn't that right? A. That is right.

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[8842] Q. Now, some of that backfeed converted at Safe Harbor may be used in Maryland again? A. Yes.

Q. And that may be the case especially when there is a good deal of backfeed and no generation at Safe Harbor, isn't that right? A. That is right.

Q. Will you refer to page 914 of the transcript again, please. Now, at lines 13 to 14 you testified that Holtwood

delivers energy to the railroad at Conowingo and Perryville, [8843] Maryland, "for the account of Baltimore Company."

Now, what did you mean by that phrase that I quoted? A. Well, the delivery to the railroad company at that point, that is at Perryville, for service south of Perryville, is considered a sale by the Baltimore Company to the railroad.

Q. Where did you—what evidence did you use in arriving at that conclusion? A. Oh, well, my recollection is that I discussed that with Mr. Von Eiff.

Q. When did you discuss it with Mr. Von Eiff? A. Oh, it would have been the last half of 1945.

Q. Did he write you a letter about it? A. No.

Q. Was that the only basis you had for using that phrase? A. I don't know whether anyone ever used that phrase; that is my own phrase. I think that is the one commonly used under similar circumstances, where you deliver energy at the point, and at that point the sale is actually made by somebody else, you make the delivery for the account of the person that does the selling.

Q. Now, you say that the sale is made by somebody else at Perryville, and Conowingo other than Holtwood. Who is that sale supposed to be made by? [8844] A. Baltimore.

Q. What led you to that conclusion, what evidence? A. Deliveries in Maryland; I mean deliveries to the railroad company, for use in the State of Maryland are treated as sales by Baltimore Company to the railroad.

Q. Let me understand what you mean by sale in that connection. Will you explain it for me? A. The energy in this case is delivered by Penn Water; the payments for that energy consumed in Maryland is made to Baltimore Company.

Q. You mean the payment by the railroad? A. Yes.

Q. Made to Baltimore? A. Yes.

Q. That is also true for the energy delivered to Pennsylvania, the payment is made by the railroad to Baltimore,

isn't it? A. Yes, knowing that Baltimore, I mean, is supposed to pay the other, the Penn Water Company share to Penn Water.

MR. MYSE: May I have the last part of the answer.

(The answer was read back.)

By MR. MYSE:

Q. How do you know that? A. I think I learned that from conversations with [8845] these same people that I have been talking to you about, Mr. Von Eiff, Mr. Spaulding; that is my recollection of that.

Q. Is that the only basis then that you have for making that statement? A. That the Baltimore Company collects the entire bill for railroad service, and then it, in turn, compensates the Penn Water Company for deliveries to the railroad in Pennsylvania?

Q. No, I was referring to your statement that it is supposed to pay part of the compensation received from the Pennsylvania Railroad Company to Penn Water. A. I don't know whether any actual check, I mean, is transferred from one to the other; but for billing purposes, I mean, the part that is sold in Maryland is considered a sale by Baltimore, and sales in Pennsylvania are considered a sale by Penn Water; the money paid by the railroad is split up accordingly.

Q. I don't believe that you have answered my question, although you can start over again.

As I understand you, you said that the sale by Baltimore in Maryland was a sale because energy was delivered and Baltimore received the payment therefor, is that right? A. Yes, but it is used by the railroad in Maryland, [8846] which is considered a sale by the Baltimore Company.

* * *

Q. Now, as I understand it, however, you say that there is a sale by Penn Water in Pennsylvania even though it doesn't receive payment from the Pennsylvania Railroad

Company. A. Not directly; it doesn't receive payment directly.

Q. So that when it receives what you call an indirect payment, that makes a sale, is that right? A. Well, the railroad company, I suppose, could make out two checks, give one to Baltimore Company, and one to the Penn Water directly. As I understand it, it compensates the Baltimore Company only, which in turn, compensates the Penn Water Company.

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[8847] TRIAL EXAMINER: Answer the question, Mr. Witness.

THE WITNESS: To be a sale there has got to be the compensation.

By MR. MYSE:

Q. But there is no compensation from the railroad to Penn Water, is there? A. Oh, well, that is a matter of convenience; there is compensation; I mean it is for some purposes, I mean, by the railroad company; the Baltimore Company is handled in that particular way; there is compensation.

Q. Well, you consider that a sale from Penn Water to the Pennsylvania Railroad even though there is no direct payment from the railroad to Penn Water? A. I consider it a sale because Penn Water makes deliveries and it receives compensation therefor.

Q. So, under your theory it makes no difference from whom they receive the compensation, is that right?

• • •

[8848] THE WITNESS: Compensation would be made by the purchaser. Now, you might make it directly or he might make it indirectly.

By MR. MYSE:

Q. What do you mean by compensation made indirectly by a purchaser? A. Well, as I stated, as a matter of

convenience instead of making out two checks they make out one, and in the way of billing arrangements as they are between Penn [8849] Water Company and Baltimore Company that seems to be a practical way of doing it.

Q. Mr. Roland, it is more than a mere matter of convenience; it is a provision in exhibit ten, the contract. A. Well, it is still a mere matter of convenience.

TRIAL EXAMINER: State your question again.

By MR. MYSE:

Q. There is a provision in the contract requiring that all payments be made to Consolidated Gas Electric L & P Company of Baltimore. Doesn't that provision say that? A. I don't recall that there is a provision like that in there or not. But even if it was in there it would be for the same reason, that it is a matter of convenience.

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[8850] MR. MYSE: As a matter of fact, the contract in Article XI requires that the payments be made to Consolidated Gas Electric L & P Company of Baltimore, doesn't it?

• • •

[8851] A. Is it required? Yes.

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[8855] Q. So there you spoke of the deliveries by Holtwood to the railroad as deliveries to the ultimate consumer. Is that right? A. The railroad company is an ultimate consumer and that is what I had in mind.

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[8858] Q. Mr. Roland, will you refer to page 911 of your direct testimony? The reference is line 13 through 19. There you spoke of sale of interchange power to Philadelphia Electric Company. Is that right? A. That is right.

Q. And again at page 929, you testified with respect to the deliveries, the interchange deliveries by Holtwood to Philadelphia Electric Company. Is that correct? A. Yes.

Q. And those deliveries are made actually to the Pennsylvania Railroad Company, are they not? A. To the facilities of the railroad company, yes.

MR. MYSE: May I have the answer, please?

(Answer read.)

By MR. MYSE:

Q. Well, the energy is used by the railroad company in running its trains up and down the line north and south of Perryville, is it not? A. That is my understanding. I don't know whether any of the energy supplied at that point gets up beyond the railroad and back into the Philadelphia Electric system or not.

* * *

[8868] By MR. MYSE:

Q. Now, at certain places in your direct testimony you testified with respect to electric energy receipts by Penn Water, and I refer to one place, to be specific, at lines 15 through 20 at page 906, if you care to look at that.

MR. GOLDBERG: May I have those pages again, please?

MR. MYSE: Lines 15 through 20, page 906.

Now, in addition to the companies that you listed there at page 906, does Safe Harbor receive energy from Potomac Electric Power Company?

MR. GOLDBERG: What was that question?

MR. MYSE: I meant P. W., rather.

MR. GOLDBERG: Instead of Safe Harbor the question should be Penn Water?

MR. MYSE: Yes.

THE WITNESS: Does Penn Water receive energy from PEPCO?

MR. MYSE: Yes.

THE WITNESS: There may be times when PEPCO is feeding into the railroad facility at Benning that it is more than enough to satisfy the railroad requirement between there and Perryville. Some of it may back up to Conestoga.

By MR. MYSE:

Q. Isn't it also true that at times there is energy [8869] received by Penn Water on the 220 kv circuits from PEPCO? A. Well, yes, if you talk of it being received directly from the facility of PEPCO, yes. What I had in mind there was that it was received from Consolidated because the purchase was made by Consolidated.

Q. Then you weren't talking about physical receipts in that testimony at page 906. Is that my understanding? Is that understanding correct? A. The question was from what companies do they receive it?

Q. That is right. Isn't it a fact that physically Penn Water receives energy from PEPCO at times? A. There is a transfer of energy from the facilities of PEPCO directly to Susquehanna.

Q. So your answer should be amended accordingly, shouldn't it? A. If we change the understanding of that, yes. If we are talking about the physical transfers from the facilities of one company to another, the answer should be amended to include PEPCO.

Q. Well, what did you mean when you used the words "receive electric energy"? A. I had in mind receiving from what company, and they do receive it from the Baltimore Company. The sale is made by PEPCO to Baltimore, and therefore I consider that [8870] as being received from Baltimore.

Q. Then do I understand your answer on page 906 to be limited to cases of receipt of electric energy when there is also a sale of that energy? Is that right? A. I think that my answer would so limit it, yes.

Q. It didn't show in your answer, and you want to amend it now to show that. Is that right? A. I think

that answer could be amended to include PEPCO. I think that would be perfectly proper.

Q. Then as I understand you you are making your answer mean that you are dealing with physical receipts of electric energy. Is that right? A. I am doing it now. From your questioning I think that it would be all right to add PEPCO there the way the question is stated on page 906.

Q. Now, as I understand your testimony over the last few minutes, then, the receipt of energy is not the same thing as the purchase of energy. Is that right? A. The receipt of energy doesn't necessarily have to be a purchase of energy, that is true.

Q. Now, the interchange energy which Penn Water received from, let us say, Pennsylvania Power and Light Company and Metropolitan Edison Company is available for use for any loads that Penn Water may have at the time, isn't it? [8871] A. Yes.

Q. And it can also be used to take care of any Baltimore load it may have at the time? A. Yes.

Q. And even if the energy so received never gets down to Baltimore, it makes available to Baltimore by the receipt of that energy a certain amount of additional energy to Baltimore. Is that right? A. If Holtwood has some definite requirement to meet in Pennsylvania and a part of it is supplied from a Pennsylvania customer, obviously there would be more left over for Baltimore.

* * *

[8873] By Mr. Myse:

Q. You don't know what a charge for service is? Is that your answer? A. A charge for service—I presume what you have in mind is so many mills per kilowatt hour or so many dollars per kilowatt of demand.

Q. Well, those things that you mentioned would be a rate for service, wouldn't they? The charges per unit? A. Well, it results in a charge. Q. That is you take the total units and multiply it by [8874] the rate and you come

out with a charge for service. Isn't that right? A. Isn't that what you had in mind?

Q. I am asking you is that what you mean? A. It results in the charge. If you apply the rate you get a charge.

Q. So if you apply a charge per unit, whether it be kwh or mkw, or kw, and multiply it by the number of units you get a charge for the service, a total charge. Is that right? A. Yes, that would result in a total bill or charge, whatever you want to call it.

Q. What is your understanding of electric demand?

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THE WITNESS: Well, demands are measured by the demand meter or a watt hour meter integrated over an hourly period.

The demand is the measure of the rate at which the energy is being delivered or sold, usually expressed in kilowatts or kilowatt hours per hour.

[8875] By MR. MYSE:

Q. Well, do you think it is fair to state that an electric demand is the load at the receiving terminals over a specified interval of time and that demand is expressed in kilowatts, kva, amperes, or other suitable units?

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THE WITNESS: Yes, you could measure the demand in kilowatts or kilovolt amperes.

By MR. MYSE:

Q. My question was, was that a fair definition of demand?

MR. GOLDBERG: Would you like to have it read again?

THE WITNESS: No, I think I understand it. The word "load" itself, of course, is demand in a sense.

MR. MYSE: Can't you answer my question, Mr. Roland?

THE WITNESS: I think that definition would be satisfactory.

By MR. MYSE:

Q. As a matter of fact, it appears in the Federal Power Commission's glossary of terms, does it not? A. I don't know. You were reading it.

[8876] Q. Isn't that correct on page 7? A. That is what I said I thought it was, a satisfactory definition.

Q. I don't think your answer was quite responsive. It does appear on page 7, does it not? A. I will take your word for that.

Q. Well, I don't want you to take my word for it.

TRIAL EXAMINER: Well, that would be a matter of official notice.

MR. MYSE: I am not so sure in this case, Mr. Examiner.

TRIAL EXAMINER: Well, you mention it to me, and I will take official note of it.

MR. MYSE: I am not so sure that other people might take official notice.

TRIAL EXAMINER: That is the ruling. You don't have to ask the witness what appears in the glossary of the Federal Power Commission.

MR. MYSE: Then do I understand that you will take notice of that specific reference at page 7 that I just read?

TRIAL EXAMINER: Yes.

MR. GOLDBERG: I think we had better have a definite description of the glossary so there will be no question of where it came from.

By MR. MYSE:

Q. Will you describe what I was reading from?

[8877] MR. GOLDBERG: You describe it. The witness doesn't have to describe it. I will accept your description of it.

MR. MYSE: I would like to have some testimony in the record.

TRIAL EXAMINER: Proceed.

MR. MYSE: As a matter of fact, the definition I read came from what is known as the Federal Power Commission glossary of important power and rate terms, abbreviations and units of measurement and was issued in the year 1936.

By MR. MYSE:

Q. Is that right, Mr. Roland? A. That is right.

Q. Now, I think you agreed with me, but I am not sure, that demand could be measured over different intervals of time. That is you could have demand integrated over one hour. Is that right? A. That is right.

Q. Over fifteen minutes? A. That is right.

Q. Generally speaking a fifteen-minute integrated demand might be higher than a one-hour integrated demand? A. It usually would be, yes.

Q. And if you had a five-minute integrated demand it might be higher? A. It would be higher than the fifteen minute demand.

[8878] Q. Why would a fifteen-minute demand, for example, normally be higher than a one-hour demand? A. Well, over a period of an hour you can get a lot of averaging out which you get by integration. During the first half of the hour it might be high and then during the last half of the hour it might be low, and you would average them out. If you take a five-minute period you don't have much time for averaging out. You catch a peak and that peak may be sustained for five minutes, so you don't have the averaging.

Q. If I can understand that answer as a poor layman, what that means is that in the fifte... minute demand you

are more apt to get the peaks weighted into your answer than you are in a one-hour demand. Is that it? A. The peaks are not so apt to be balanced out by something lower during the same interval of time.

MR. GOLDBERG: I think counsel is modest. That sounds like a technical understanding.

By MR. MYER:

Q. Is it fair to say that an electric capacity service is the service furnished by carrying an electric load equivalent to the demand plus whatever reserve is necessary?

THE WITNESS: Can I have that one?

(Question read.)

THE WITNESS: Does that state "Carrying the equivalent [8879] load"?

Q. Carrying the electric load equivalent to the demand. A. In capacity service you are not probably carrying any of that load. You have the capacity available to carry it, but you are not actually carrying it.

Q. That constitutes service, doesn't it, having capacity available? A. Under certain forms of contracts the supplier agrees to have the capacity available. Under those conditions that would be a part of the service which he would render to the buyer.

Q. Well, wouldn't the company which is taking care of a demand load at the service point be rendering capacity service as well? A. I don't understand that, I don't believe.

Q. Well, in any event capacity service and demand both are measured by kilowatts, kilovolt amperes, and sometimes hp, aren't they? A. Capacity is measured in terms of kilowatts or kilovolt amperes, and so is demand; yes.

Q. Now, a charge for electric capacity service is referred to either as a demand charge or as a capacity charge, and it is a charge based upon the capacity fur-

nished or the demand in terms of kw or kva without regard to the amount of [8880] energy consumed. Isn't that right? A. That is very often the case, yes.

Q. As a matter of fact, the glossary that I referred to a while back contains such a definition, does it not? A. I don't know.

Q. As a demand charge?

MR. GOLDBERG: Do you want the witness to read the definition into the record?

MR. MYSE: I can read it and ask him if that is correct.

By MR. MYSE:

Q. The glossary at page 7 defines a demand charge as "A component part of a rate schedule which provides for a charge based upon the customer's demand or equivalent, without regard to the consumption of energy." Is that right? A. That is correct.

Q. How do you define electric energy, Mr. Roland, as you used it in your direct testimony? A. Well, electric energy can be defined in qualitative terms. You can say it is something which has the ability to do work. That is a very common definition for energy in the qualitative sense. You can define it in the quantitative sense, the energy of a system is the amount of mechanical work that the system is capable of doing.

You can also define energy in the problem that we are dealing with here as a commodity, something which is bought, [8881] sold and interchanged. I think probably in my studies here that that is the concept that I had more than I did the definition in a quantitative sense or the one I described as being the more qualitative.

Q. Well, speaking of it as a commodity as you have just testified to it, is it something you can put your hands on? A. Some people claim they can. I have never been able to.

Q. Well, I want your opinion, not what some people claim. What do you think? It isn't a commodity in the ordinary sense like buying the table or a hat——

MR. SPARKS: Or Mr. Goldberg's tie.

MR. MYSE: Would you like the question read now?

TRIAL EXAMINER: Read the question.

(Question read.)

THE WITNESS: Certainly energy cannot be related to anything that we ordinarily think of.

By MR. MYSE:

Q. So it is not like the ordinary commodity, then? A. Physically it is not.

Q. Now, electric energy is measured commercially for billing purposes in kilowatt-hours, isn't it? A. Yes.

Q. As distinct from demand or capacity service which is measured commercially for billing purposes in kw or kilowatts. [8882] A. That is right.

Q. And sometimes measured in kilovolt amperes. A. That is correct.

Q. And sometimes measured in hp. A. Yes.

Q. I take it you would also agree that a charge for electric energy is a charge based upon the amount of kwh furnished. Is that correct? A. Yes.

Q. And again the Federal Power Commission in its glossary of 1936 defines an energy charge as a component part of a rate schedule that provides for a charge based upon the amount of energy consumed. A. That is correct.

Q. That is at page 9. A. That is right.

* * *

[8883] By MR. MYSE:

Q. I take it from our previous discussion you would also agree that a rate for electric energy is the price or charge per kwh furnished. Is that right? A. Rate for electric energy?

Q. A rate for electric energy, yes, an electric energy rate as distinguished from the charge. A. A charge per unit of energy?

Q. That is right, per kwh furnished, if that is the unit. Is that right? A. I think that usually is the case, yes.

Q. As a matter of fact, if you went to the Philadelphia Electric Coatesville contract you would find some examples of separate charges for demand, separate charges for capacity service furnished, separate charges for energy, and separate charges for transmission services, wouldn't you? A. I believe that is correct.

Q. Now, are there any such separate specified charges for the services rendered to Baltimore by Penn Water?

* * *

[8884] THE WITNESS: I don't believe there are. I don't recall now about separate transmission charges, but I know there are no energy charges or demand charges spelled out.

By MR. MYER:

Q. Can't you be a little more specific on that? You have examined the contract, have you not? A. Yes, I examined them some time ago for a specific purpose, not including what you were just talking about.

Q. As a matter of fact, it is clear from that contract that there are no such separate specified charges, separate for each of the different kinds of services I have been talking about.

* * *

[8885] THE WITNESS: I stated that my recollection was that there were no separate charges for energy or demand. Now, there was some question in my mind about the cost of these facilities, the 220 K. V. lines, but I am not sure about that.

* * *

Q. Now, Mr. Roland, I am sorry, but I am not satisfied with your recollection at this time because you made the

direct statement about sales in your direct testimony. I would like to have you be more positive if you can.

• • • •

[8886] TRIAL EXAMINER: Can you be more positive at this time?

THE WITNESS: I can be more positive about the energy and the demand charge. I am not so certain about the facilities.

By MR. MYSE:

Q. What do you mean by that? A. That there are no special separate provisions for energy charges and demand charges in that contract.

Q. As a matter of fact the charges are based upon expenses without regard to the amount of energy furnished? A. That is correct.

• • • •

[8890] MR. MYSE: Whatever charges are made under the presently effective contract after the year 1931 they appear in Article III of that contract, do they not, and that has been gone into extensively in the cross-examination of Mr. Spaulding?

MR. GOLDBERG: Which contract?

MR. MYSE: Items H and I, Article III, 1931 supplement.

THE WITNESS: Is that a question?

MR. MYSE: Yes, that is where whatever charges there are under the contract are specified. Isn't that correct.

THE WITNESS: I would have to look and see. I don't remember the Article numbers.

MR. MYSE: Will you do so?

MR. GOLDBERG: Article III on page 29 of Item H?

MR. MYSE: Yes.

MR. GOLDBERG: Now may we have the question, please?

(Question read.)

THE WITNESS: That Article covers the payment that should be made for electrical capacity and energy which Baltimore Company receives from Penn Water Company.

• • •

[8900] Q. Now, what is the difference between metering on a net hourly basis and metering on a net yearly basis? A. It seemed to me that on a net yearly basis what that would mean would be the difference between the gross transfer in one direction subtracted from the gross transfer in the opposite direction.

[8901] Q. Over a year period? A. Over a year period. Now, the net hourly basis would be the summation of the net transfers during any particular hour over a period of a year, which of course might differ from the net yearly basis. That is, during an hour you may have the flow in one direction for part of the hour and in the reverse direction for the remainder of the hour. The difference between the two would be the net hourly. If you add all those up for each hour of the year you would have the net hourly for the year. That is my understanding.

Q. And the net hourly for the year might be quite different from the net yearly? A. I expect it would, yes.

Q. And if you had a net daily basis, you might get a different figure? A. That is right.

Q. Do you know what is the normal way of accounting for energy for billing purposes, whether it is net hourly, net daily or net yearly?

MR. GOLDBERG: I object, Mr. Examiner, unless the question is confined to the company under study. The question talks about the normal basis. Normal basis for whom?

MR. MYSE: I will accept that amendment, the normal basis for transactions of all these companies we

have been [8902] talking about, that is the Pennsylvania customers, Penn Water, Safe Harbor, Baltimore.

MR. GOLDBERG: Now may we have the question?

(Question read.)

MR. GOLDBERG: Then that is confined to Penn Water?

MR. MYSE: No, it is not confined to Penn Water.

TRIAL EXAMINER: Answer the question.

MR. GOLDBERG: Mr. Examiner, I understood the amendment was——

TRIAL EXAMINER: The amendment wasn't that. The amendment was Penn Water and all involved with Penn Water in these transfers.

MR. GOLDBERG: In connection with Penn Water transactions?

TRIAL EXAMINER: That is right.

THE WITNESS: I believe it was on a net hourly basis.

By MR. MYSE:

Q. Actually, however, backfeed energy when it is billed for and accounted for is billed on a net daily basis, is it not, that is backfeed from Baltimore? A. I don't know.

Q. Well, didn't you examine "H" and "I" on that point? A. No, I did not, not for that point.

Q. Well, at page 912 you testified in your direct that you examined the billings under those contracts, didn't [8903] you? A. I examined the billings.

TRIAL EXAMINER: Before we go any further, explain for me the difference between net hourly, net daily and net yearly, why they differ?

THE WITNESS: Why they were different?

TRIAL EXAMINER: Yes.

THE WITNESS: Well, take Safe Harbor as an example. During part of the year energy during certain hours is transmitted from Maryland to Safe Harbor. Now, that meter, if you read it at the beginning of the year and at the end of the year, for example, you would get the gross amount transferred from Maryland to Safe Harbor. Now, there would be another meter in the circuit which would measure energy transmitted in the reverse direction. If you read that meter at the beginning of the year and the end of the year you would get the gross amount transferred in the opposite direction. If you subtract the two you would get the net yearly transfer.

MR. MYSE: That would be a net yearly figure for an amount of energy?

THE WITNESS: That is right. But if you read these meters at the end of each hour, you may have during one hour a certain amount transmitted towards Safe Harbor and during the balance of the hour it may be transmitted in the [8904] opposite direction. You would net that figure, and then you do that for each hour of the year, which might be quite different from the net yearly figure.

TRIAL EXAMINER: You mean you do it for each of the 24 hours times 365?

THE WITNESS: That is right.

By MR. MYSE:

Q. And if you added up all those net hourly figures for one year, you wouldn't get the same figure as the net yearly?

A. I don't believe you would, no.

TRIAL EXAMINER: Why not?

THE WITNESS: I would have to try to work out an example to try to illustrate it to you. I will try to do that for you after a while.

By Mr. Myse:

Q. Anyway, when you are talking about sales of energy it is important to know what the basis of the metering is, isn't it?

Mr. Goldberg: Important in what connection, Mr. Counsel?

The Witness: I don't believe it is necessarily important to determine whether or not it is a sale.

By Mr. Myse:

Q. Well, the amount of the sale would depend on how the metering figures are determined. [8905] A. The amount of the sale would depend on meter readings, but whether or not it is a sale you don't need to know all the details of how the billing or metering is done.

Q. But to determine the quantity of a sale you have to know, and it is important to know, the basis of the meter readings, isn't it? A. You would have to know how the meters are read and what they read, yes.

Q. And if one's receipts are not a net yearly basis, you may not get the same thing as if they are on a net hourly basis or a net daily basis, would you? A. That is right.

Q. Now, coming back to "H" and "I", isn't it true that in Article 6 of Item "H" the contract provides——

Mr. Goldberg: What page are you on?

Mr. Myse: Page 9.

By Mr. Myse:

Q. —the contract provides that billing for backfeed energy from Baltimore shall be on a net daily basis? A. It so states.

* * *

[8907] Q. Now, will you refer to Exhibits 38 and 40? We had better have both of them before us. Now, referring to those two exhibits, Mr. Roland, can you tell me what the effect would be or your figures on Exhibit 38 and the picture

on Exhibit 40 if you had included all of the transfers across the Pennsylvania-Maryland line? A. If I had included the transfers across the Maryland line over the 132 kv single phase circuits, it would have increased the amount transferred from Pennsylvania to Maryland, and that would have shown up both in the [8908] tabulation and in the bar chart.

Q. Well, then, as I understand that that would be that if you had shown all of the transfers instead of just part of them, there would be less relative flow shown from Maryland to Pennsylvania. Is that right? A. The flows from Maryland to Pennsylvania remain the same. The flows from Pennsylvania to Maryland would have increased.

Q. Which means that relatively speaking the flows from Maryland to Pennsylvania would be less. A. The flows from Maryland to Pennsylvania expressed as a ratio of the flows from Pennsylvania to Maryland would have decreased.

* * *

[8919] A. The question is under what conditions is energy transferred from Maryland to Pennsylvania?

Q. Yes, under what circumstances? A. Well, in operating a steam and hydro electric system where you have a run of river plant such as at Holtwood and Safe Harbor, in order to coordinate the operations of the steam and hydro, the hydro has to be supplemented by steam which usually occurs during off-peak hours. That accounts [8920] for some of the flow from Maryland to Pennsylvania where the hydros shut down during off-peak hours and the steam takes over and carries the load, which means that steam-generated energy from Maryland would be transmitted to Pennsylvania to supply Penn Water's northern customers. A part of the energy transmitted from Maryland to Pennsylvania would be for purposes of interchange with Pennsylvania customers. Under other conditions, emergency conditions to the north, energy may be transmitted from Maryland to Pennsylvania.

Q. Well, first of all the flow from Maryland to Pennsylvania isn't a continuous thing from hour to hour, is it? A. No. That is when you say "continuous" you mean day in and day out, hour by hour?

Q. That is right. A. That is true, it isn't that.

Q. It only occurs at certain definite periods during the day and during the year. Is that correct? A. I wouldn't say they were very definite. But they occur as required to get coordinated operation of a combined steam and hydro system.

Q. I think you would agree that generally speaking it is during low-flow months of the year that greater amounts of energy in the past, at least, have been transferred from Maryland to Pennsylvania. Is that right? A. That is correct.

[8921] Q. And during the high-flow periods relatively less amounts and sometimes none. Is that correct? A. That is right.

You didn't finish your statement, though, I don't believe, Mr. Myse.

MR. MYSE: Let's have the question and answer, then.

(Question and answer read.)

By MR. MYSE:

Q. I believe I did finish my statement. A. Relatively less amounts of what?

Q. Of energy. A. Doing what?

Q. Flowing from Maryland to Pennsylvania. A. O. K., now the statement is complete.

Q. Now, along that same line, Mr. Roland, you understood me when I referred to the low-flow and high-flow in those questions I was referring to river flow? A. Yes.

Q. Now, that variation may also take place during the day, during different hours of the day. Isn't that correct? A. Which variation?

Q. The variation of flow of energy from Maryland to Pennsylvania? A. They vary throughout the day?

Q. Yes. [8922] A. Certainly.

Q. And usually the greatest flow I think you said was on off-peak hours. Is that correct, the flow of energy, I am speaking of? A. Yes, that is right.

Q. And that is a flow of energy from Maryland to Pennsylvania, we are talking about? A. Yes.

Q. Do you know whether there is ever any backfeed from Baltimore at times of peak on the Holtwood or Safe Harbor system? A. At time of peak—you are referring to the system annual peak?

Q. No, daily peak. A. I only studied hourly flows for 20 days, so I couldn't tell you as to what may have occurred at other times during other days. That is not the plan of operation, however. It is for the hydros, of course, to produce a maximum during a time of peak, and ordinarily that would result in flows from Pennsylvania to Maryland.

Q. So there would be no flows from Maryland to Pennsylvania at the time of the daily peak. A. I can't say whether it has actually occurred, but the mode of operation, I mean, would indicate that it would be unlikely that the flow would be from Maryland to Pennsylvania [8923] during time of peak.

* * *

[8925] Q. Now, I don't know whether you mentioned it or not, but some of the circumstances surrounding the flow of energy from Maryland to Pennsylvania should include, should it not, the furnishing of service to the Pennsylvania Railroad? A. That is part of the load, yes.

Q. And the amount of the Pennsylvania Railroad taken care of by deliveries from Safe Harbor by Conestoga substation via Perryville, depends upon the load on the railroad in both Maryland and Pennsylvania, does it not? A. Yes.

* * *

[8927] Q. Now, I refer you to page 946 of the transcript, lines 5 through 8, where you stated that December 11, 1944, was designated because it was the day when the system peak load of the year occurred on the Safe Harbor-Holtwood-Baltimore power pool. Did you there have reference to the Area 6 system peak day? A. I believe that is correct. I would have to go back and check the Form 12 report.

Q. I think I have one here if you will use my photostat. Do you know where to look in it? A. Yes. I would want to see the report for the interconnected system.

Q. You mean the Consolidated Company power system statement, F. P. C. Form No. 12. Is that what you are looking at? A. The Form 12 report filed by the Baltimore Company for the combined Holtwood-Safe Harbor-Baltimore, Bethlehem Steel and Washington systems.

Q. Will you tell me, Mr. Roland, after referring to the Consolidated F. P. C. Form No. 12 for 1944, what the Area 6 system peak day and hour was? [8928] A. It was the hour ending 6 P. M. on December 11, 1944.

Q. Now, as I understand it, the Area 6 system means what? Let's have it for the record again so we are sure we know what we are talking about. A. The Area 6 systems include the Holtwood, Safe Harbor, Baltimore, Bethlehem Steel and Washington systems.

Q. Now, if you looked at the Holtwood-Safe Harbor system alone you might get a different day of peak or hour of peak, would you not? A. For the Holtwood-Safe Harbor system?

Q. Yes, alone. A. Yes.

Q. Can you tell me what that was for 1944 by referring to the Penn Water F. P. C. Form 12 for the year 1944? All I was asking for was the day and the hour. A. The date is April 19, 1944, and the hour is the hour ending 8 A. M.

MR. GOLDBERG: That is the same information that is on transcript 946, isn't it?

MR. MYSE: Yes, except for the hour.

By MR. MYSE:

Q. Isn't that correct, Mr. Roland? A. That is right.

Q. Now, referring to Exhibit 42 page 20 and the line showing the figures for the hour ending 6 P. M., which as I [8929] understand it now, is the Area 6 system peak hour for 1944, will you tell me the total amount of KWH delivered to Baltimore Company from Holtwood and Safe Harbor during that hour by reference to that line, if you can? A. During that hour 88,000 kilowatts was delivered to Maryland over the 220 K. V. circuit.

Q. And that is shown by what column? A. That is shown in column 7. During the same hour, 54,000 kilowatts was delivered to the Baltimore Company at Highlandtown, Maryland.

Q. That is shown by what column? A. That is shown in column 41.

Q. Now, let me interject a moment. The 88,000 kw is 60-cycle energy, is it not? A. That is correct.

Q. And the 54,000 kw is 25-cycle? A. That is right.

Q. Now, that makes a total, if my arithmetic is correct, of 142,000 kw furnished during the Area 6 system peak hour over those two lines or three lines, I believe. Is that right? A. The 142,000 is correct.

Q. Now, isn't it a fact that the kw available to Baltimore at the hour of Area 6 system peak in 1944 was greater than 142,000 kw?

[8930] TRIAL EXAMINER: Read the question.

(Question read.)

THE WITNESS: More could have been delivered to Baltimore of the 25-cycle power during that hour. I don't know what the 60-cycle generating capacity was available at that time at Safe Harbor during that hour. They were gen-

erating 146,000. I don't remember now just what the capacity available was.

By Mr. Myse:

Q. Well, isn't it a fact that the amount of interchange which may have been furnished to the Pennsylvania customers to the north during that hour was available to Baltimore if it needed it? A. Yes, the interchange could have ceased to the northern customers and gone to Baltimore if they needed it.

Q. Then to the extent there was interchange furnished during that hour, it was available to Baltimore in addition to the 142,000 kw we have found on our Exhibit 42?

Mr. Goldberg: What does counsel mean by "was available to Baltimore"? Do you mean Baltimore had a right to demand that it be sent to them?

Mr. Myse: The witness answered the question.

Mr. Goldberg: You have got that in your present question and I wonder what you meant by that phrase.

By Mr. Myse:

[8931] Q. What do you understand "interchange being available to Baltimore" to mean?

Mr. Goldberg: I would like to know what counsel meant?

Trial Examiner: Just a minute.

The Witness: Interchange is on a when, as and if basis, and if the supplier doesn't want to send it, he doesn't have to send it.

• • •

Q. What do you understand, Mr. Witness, by the term "Interchange being available to Baltimore"?

• • •

[8932] The Witness: If there is any real need during that hour, if there was a need for additional power in Baltimore, why that could be obtained by curtailing interchanges to Pennsylvania customers.

By Mr. Myse:

Q. You mean by that curtailing the interchange which either Safe Harbor or Penn Water or both were furnishing during that hour to Pennsylvania customers?

* * *

The Witness: If the Holtwood generating stations and the Safe Harbor generating stations were generating energy which was being transmitted to the northern customers on an interchange basis, such interchange could be stopped, and if the generation at Holtwood and Safe Harbor continued the [8933] same way, it would be delivered to Baltimore.

By Mr. Myse:

Q. Now, can you tell me how many kw of interchange were furnished to the Pennsylvania customers during that hour, and when I say "that hour", I am referring back now to the hour ending at 6 p.m. on December 11, 1944, Monday, which as I understand it is the Area 6 system peak hour for 1944? A. I believe I can tell you what the interchange was at Harrisburg, but I don't believe I have the hourly records for interchange with Philadelphia Electric Company through the railroad by hours.

Q. Let's have it for Harrisburg first, then.

Mr. Myse: I might say if we have a recess now he can look it up and answer after the recess.

Trial Examiner: I don't like to put the recess on the witness quite that way.

The Witness: During that hour, that is during the hour ending 6 p.m. on December 11, 1944, 5 megawatt hours were delivered to Pennsylvania Power and Light Company at Harrisburg, and during the same hour, 3 megawatt hours were delivered by Pennsylvania Power and Light Company to Penn Water.

By Mr. Myse:

Q. Let's translate that into layman's language. When you say 5 megawatts you mean 5,000 kilowatt hours. Is that right? [8934] A. That is right.

Trial Examiner: Where do you find that?

The Witness: That is not in any of the exhibits. This is from my work papers.

• • •

By Mr. Myse:

Q. Mr. Roland, do you have Table V-A of Exhibit 64 before you? A. Yes.

Q. Now, I see on line 20, a total of 24,000 kw listed by Mr. Davis as non-firm, whatever that means. I assume it means the non-firm demands of Pennsylvania customers on system peak Form 12 of—pool. Does that mean 24,000 kw interchange furnished to the Pennsylvania customers during the 6 p.m. December 11, 1944 hour?

Mr. Goldberg: I object to that, Mr. Examiner. The exhibit was presented by the witness Davis. The witness Davis [8935] will be available to explain the figure.

Trial Examiner: Was this exhibit prepared under your supervision?

The Witness: Very general supervision.

Trial Examiner: Can you answer the question?

The Witness: I don't know whether all of that was on interchange basis or not. It is stated that it is non-firm. That would be either interchange or emergency.

By Mr. Myse:

Q. Well, all of it would be available to Baltimore during that hour, if Penn Water or Safe Harbor or both chose not to deliver to the Pennsylvania customers?

• • •

[3936] THE WITNESS: The 24,000 kilowatts were being generated at that time and delivered on a non-firm basis, and presumably therefore, it could be diverted to Baltimore.

By MR. MYSE:

Q. That is what you understand? Strike that. That is what you understood when I say available to Baltimore? A. Yes.

MR. GOLDBERG: There are no legal implications involved in your question. Is that right?

MR. MYSE: I didn't intend any.

By MR. MYSE:

Q. Now, do you know whether or not the figure shown on Table V-A of Exhibit 64 on lines 15 to 20 inclusive, are figures for the time of this area 6 system peak demand for the hour ending 6 p.m. December 11, 1944? A. Might I have that Form 12 report for the combined systems?

(Report handed to witness).

THE WITNESS: The answer to your question is yes.

• • •

[9040] THE WITNESS: Mr. Examiner, there was a question asked me on page 8922 yesterday that I think should be cleared up somewhat. Line 21.

By MR. MYSE:

Q. 8922, answer beginning line 23? A. That is correct. I would like to ask Mr. Myse if he meant there one particular hour during the day where he stated daily peak?

Q. It is always one hour, isn't there during the day? It can't be two hours, unless it is by coincidence. A. If that is what you had in mind, I will want to modify my answer somewhat then in that I do find in Exhibit 42 hours during the daily peak when there was transfer from Maryland to Pennsylvania.

Q. Will you refer me to those hours, then? A. August 21, Monday, that is page 10.

Q. Which hour are you referring to? A. There were transfers from Maryland to Pennsylvania [9041] during every hour of the day. And one of those hours presumably was the peak hour that you had reference to in your question on line 2.

Q. All right. Now what other hours? A. What other days?

Q. Yes. A. I think that is true for the entire week of August 21, August 22, August 23, August 24, August 25. August 26 is a Saturday which I believe was ruled out as not being one of the peak days by your question.

• • •

[9043] TRIAL EXAMINER: I am not so certain that counsel shouldn't be confined in this respect. That we are now on a different line of inquiry. Your question as put to the witness requires that he go back and review in his mind the testimony of the last two days possibly if there is any matter of question of peak.

Now, in regard to the line of questioning that you are now engaging in since you initiated it I should think that you state the question.

MR. MYSE: Mr. Examiner I didn't initiate anything this morning.

MR. GOLDBERG: You initiated this line of questioning.

TRIAL EXAMINER: Let me inquire—did the witness start [9044] out by testifying as to peak?

MR. MYSE: You mean this morning?

TRIAL EXAMINER: Yes.

MR. MYSE: That was my understanding.

TRIAL EXAMINER: Well, he didn't.

MR. MYSE: He volunteered some information about the answer at 8922 that he wanted to clarify what he

meant by the answer in which the word daily peak was used.

Now, I am trying to find out what he meant by daily peak.

MR. GOLDBERG: You used it in the question.

TRIAL EXAMINER: I think that since you are putting a question to the witness in which that phrase is involved it is not quite fair to the witness to stop and ask him whether what he generally means by what he used insomuch as he used it in his testimony.

• • •

[9045] MR. MYSE: I didn't introduce it in the questioning.

Well, maybe I can clear this thing up. I move to strike all testimony of the witness up to this point this morning. It was not responsive to any question of mine.

TRIAL EXAMINER: The motion to strike is denied.

• • •

[9050] Q. Well, would you consider the hour of maximum generation equivalent to the hour of peak demand on the Holtwood-Safe Harbor system? A. That is one way of measuring peak demands, but you may not be interested in that.

Q. I am asking you as an engineer. A. It is the peak demand on the generating plants.

Q. But it wouldn't be the peak demand on the system? A. Ordinarily not. I don't know whether the Holtwood-Safe Harbor system so treats it or not. I don't recall at the moment. Ordinarily that would not be the peak demand on the system. You would have to take into account energy received and energy delivered to other utility companies which would not correspond to maximum demand on the generating station.

• • •

[9063] THE WITNESS: That is not so. The contracts played a very small part in my testimony on this subject.

By MR. MYER:

Q. Well, what part did they play? A. I was interested in knowing what kind of deliveries were being made at the various points, whether they were firm deliveries or interchange deliveries and whether the energy so delivered was paid for, just a general understanding of the contract. I didn't need to know all the details. It played no part in this study at all.

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[9066] Q. Now, if I understood your opening statement this morning, Mr. Roland, the one that was not in response to any question, do you recognize what I am referring to? A. I do, yes.

Q. You said there was a backfeed, as I recall it, during the hours of daily peak hour on the Holtwood-Safe Harbor system. Is that it? A. Yes.

Q. Now, in making that statement, did you take into account any circulating energy which may be transmitted from one side of the Baltimore system over the 220 kv line to Safe Harbor, and then transmitted south over the other 220 kv line to the other side of the Baltimore Company system? A. No such energy was circulating on August 21.

Q. I think you referred to August 25, however, didn't you? A. I started with August 21.

Q. I am sorry. Just a moment. You say August 21 there is no such circulating energy. Is that your answer? A. That is correct. There was some during three [9067] hours on August 22.

Q. How do you determine that? A. From Column 4 and Column 7, energy was being delivered from Maryland to Safe Harbor during that hour, and during the same hour energy was being delivered from Safe Harbor to Maryland.

Now, that may have been that it was coming up on one of the 220 kv circuits and going back on the other, or it may have reversed on both circuits during the hour, I don't know. I would have to go back and examine the daily log sheets to determine that.

Q. Well, that is a possibility at times though, is it not? A. Which?

Q. That you have circulating energy going up on one 220 circuit and coming back immediately on the other 220 circuit. A. But I wouldn't call it circulating energy.

Q. What would you call it? A. If Baltimore is attempting to feed to PEPCO, you have two parallel circuits, one 220 kv circuit that goes by way of Westport and Ellicott City and you have the other circuit by way of Riverside and Safe Harbor down, so the two circuits are in parallel and if you are putting energy from Baltimore to PEPCO you may have it going up on one and back on the other. If the process is reversed, [9068] where PEPCO is delivering to Baltimore, you may have it go up on one circuit to Safe Harbor and back to Riverside on the other.

Q. So that you may have a situation where PEPCO, that is Potomac Electric Power Company wants to deliver energy to Baltimore under its contract to Baltimore and in doing so the energy travels up one 220 circuit to Safe Harbor and down the other 220 circuit to Riverside in Maryland, is that right? A. That might result in this: Where energy is being transmitted to Safe Harbor over one of the circuits and simultaneously energy is being transmitted from Safe Harbor in the opposite direction over the other circuit, it doesn't necessarily follow that energy delivered by PEPCO goes to the Safe Harbor bus and then turns around and comes back out down to Baltimore.

Q. You say it doesn't necessarily follow? A. No. It doesn't necessarily follow.

Q. It is a possibility though. A. The energy delivered on one of the circuits would be co-mingled with energy

that would be generated at Safe Harbor or delivered to Safe Harbor at the same time from other sources of supply.

Q. If Safe Harbor were shut down there wouldn't be any co-mingling of energy, would there? [9069] A. If Safe Harbor were shut down and you had energy being delivered on one of the circuits, one of the two 220 kv circuits and out again on the other 220 kv circuit and there was no other energy coming into the 60-cycle bus then it would be Baltimore energy that would be sent from Baltimore to Safe Harbor and back to—

• • • Then it would be PEPCO energy that would be sent to Safe Harbor and back to Baltimore.

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[9078] Q. Now, with respect to the 110 kv loop, there are a great many taps on that loop, are there not? A. Well, I see two of them here between Riverside and Westport on this diagram, exhibit 216.

Q. Aren't there a good many more than shown on exhibit 216? A. I don't know.

Q. Aren't you familiar with that loop at all? A. I didn't study the Consolidated system.

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[9082] Q. What I mean is it possible that they may not have enough generating units to take care of the load of that side of the Baltimore system near Riverside, is that right? A. Such a situation may arise; I am not familiar with the Baltimore system.

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[9085] Q. Now, it could well be that the reverse could happen, there might be a deficiency in the Westport area and Riverside would be generating more than enough to take [9086] care of its area, and Safe Harbor shut down so that there would be a transfer from the Riverside area to the Westport area. A. I suppose that is possible, but I don't know anything about the Consolidated system, how it operates or what the relative loads are or what the relative generating capacities are.

Q. And you made no study to determine any of those things, did you? A. No, that was not involved in my study; I was studying the Safe Harbor-Holtwood system.

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[9087] Q. Now, Mr. Roland, I think we can summarize the questions and answers we have been having for the last fifteen or twenty minutes by saying isn't it true that where we have two or more parallel paths between Westport and Riverside, as we do, and one of them is via the Safe Harbor bus, that any transfer of energy between Westport and Riverside would mean that some of the backfeed energy metered at Safe Harbor is energy generated and consumed by Baltimore? • • •

[9088] A. Of course your question assumes that there is an exchange between Westport and Riverside.

Q. That is right. A. I don't know whether that occurs, but when it does occur it would divide in those parallel paths. What I have in mind is if there was a transfer from Westport to Riverside, that transfer would take place over the various parallel paths, one of which would be Safe Harbor circuits.

Q. Then is the answer to my question "Yes"? A. With those qualifications that I made, that would be true.

Q. Yesterday we were talking, near the time we ended at least, about the maximum demands during various hours in the Area 6 system and maximum demands on the Holtwood-Safe Harbor system, as I remember it, distinct from the Area 6 [9089] system.

Now, my question to you is as follows: Isn't it true that the maximum kwh furnished at the time of the PW-Safe Harbor system peak would not only be different in quantity, but different in time to the maximum kwh furnished from the Area 6 system at time of peak? A. It was different in 1944. They did occur at different times.

Q. It is different in time and quantity, is it not? A. Well, the area 6 peak is over a million kilowatts, that is the

annual system peak, and the Safe Harbor-Holtwood system peak being a part of that obviously would be less than for Area 6.

Q. It is also true that the maximum demand in kwh or kw over an hour, if you will, on the Baltimore system peak would come at a different time from either the Area 6 system peak or the PW-Safe Harbor system peak? A. It might. I don't know whether that was true in 1944 or not.

Q. Did you make any study of that situation? A. I remember looking at them at the time of the peak on Area 6 and the Baltimore system by itself and the Holtwood-Safe Harbor system by itself, but I don't recall now as to when the peak occurred on the Baltimore system.

Q. Likewise the maximum demand in Kwh or kw over an hour on the Penn Water system alone would be—would come at [9090] a different time, be different in amount than such maximum demands at time of peak on either the Area 6 system, the Penn Water-Safe Harbor system, or the Baltimore system. Isn't that true? A. I haven't investigated it, but it is quite likely that the peaks would not coincide.

Q. Now, isn't it also true that the peak demand on Penn Water's 25-cycle system alone might come at an entirely different time than the peak demand on the Area 6 system, the Penn Water-Safe Harbor system, the Baltimore system or the Penn Water system as a whole? A. The peak demand on the 25-cycle system would occur when you had maximum amount of generation, which would probably be during the high-flow months of the year, and that would not necessarily, or it is very unlikely that it would occur at the same time as the area's or the system's peak.

Q. Or any of these other system peaks that we were discussing? A. Well, it may not be so different from the system peak on the Penn Water-Safe Harbor system.

Q. Why do you say that? A. Well, because both of them are related to maximum generation, as I under-

stand the way they report system peaks for the Penn Water- Safe Harbor system.

Q. Isn't it because they are coordinated? [9091] A. The two hydro plants are on the same river and if there was high flow at one place there would be at the other so you would have maximum generation at both plants.

Q. It doesn't necessarily follow, does it, because at the one plant you have a steam plant generating in addition to hydro? Isn't that correct? A. That is true. I just discounted the steam because that usually runs along at full load anyway.

MR. MYSE: May I have that question back where I talked about coordination of the two plants and the answer to it?

(Question and answer read).

By MR. MYSE:

Q. Does that mean that the answer you just gave that was read, means "Yes" to my question? A. Your question being that the simultaneous occurrence of peaks at the Holtwood plant and the Safe Harbor plant is the result of coordinated operation? Is that what you have in mind?

Q. No, that isn't it exactly. I think I can restate it. Isn't it a fact that one of the reasons why the maximum demand on the Penn Water system might coincide with the Penn Water-Safe Harbor system is because the two plants are coordinated? A. Whether they were coordinated or not it would seem to me that both being on the same river you would necessarily [9092] have maximum generation at both plants at the same time.

From your question there I am of course assuming that flows are above the full discharge capacity of the plant, so that you would be spilling water; and in that case you would have maximum generation at both plants. Now, if the flows were less than that, then you would only get maximum generation simultaneously at the two plants by coordinating their operations.

Q. I think you said some place in your testimony, it may be your direct at page 932—at that page you pointed out, did you not, that the eight—25 cycle hydro generating units at Holtwood were used and useful principally for delivering energy to Baltimore Company at Highlandtown. Is that right?

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[9093] THE WITNESS: I stated that most of the energy generated by the eight—25 cycle generating units at the Holtwood hydro plant is delivered to the Baltimore Company at Highlandtown.

By MR. MYSE:

Q. Am I to understand by that answer that you mean that those eight units are used for service to Baltimore Company? A. Those units generate electric energy which is transmitted to Baltimore Company at Highlandtown, among other places.

Q. Can you answer my question directly, Mr. Roland?

MR. GOLDBERG: I object, Mr. Examiner. The question has been answered directly and responsively.

THE WITNESS: I stated the fact. As I understand it, you injected the word "service".

By MR. MYSE:

Q. No, used for service to Baltimore. A. You have the word "service" in there. I am saying these units generate electric energy which is transmitted to Baltimore.

Q. That means they are used for that purpose. Isn't that what you mean? A. Yes.

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[9095] Q. Well, can they be used for any other purpose other than service to Baltimore? A. I stated in my direct what they were used for. They were used to generate electric energy delivered to Baltimore Company at Highlandtown. They were also used to generate electric energy which is transmitted to PP and L Company at Lancaster,

and at times they are used to transfer energy to the 60-cycle bus at Holtwood.

Q. You say the 25-cycle hydro generators are used to transfer energy to the 60-cycle bus. That is what you just said. A. Through the frequency changer.

Q. But the generators themselves can't do that, can they? A. The energy is generated by the 25-cycle units, and converted to 60-cycle by means of the frequency changers.

Q. Well, other than the uses you just spoke about, that is in generating 25-cycle energy delivered to PP and L at Lancaster, and delivering 25-cycle energy to the converters at Holtwood, those 25-cycle generating units have no other use than to generate energy to be delivered to Baltimore? A. Those are the only three outlets for the energy generated by the 25-cycle units at Holtwood.

Q. And it follows, then, does it not, that they couldn't be used for anything else? [9096] A. Unless you include use as a synchronous condenser.

Q. How would they be used in that manner? A. They would be operated as a motor to supply reactive to the system.

Q. Where would the energy come from to operate those units? A. That would have to come through the frequency changer from the 60-cycle system.

Q. Do you know whether that happens frequently at Holtwood or not? A. I don't believe so.

Q. What would be the purpose of operating those eight units as synchronous condensers? A. Offhand I wouldn't see that there would be any purpose in doing it. I said they could be.

Q. As a matter of fact, it is true, isn't it, that only one of the eight could be used that way? A. I believe it is number 8 unit that is used at times or operated as a synchronous condenser. Whether or not the others can be, I am not sure. I believe that there is only one, however, that is used as a synchronous condenser.

Q. That use is a very small number of hours, if any, during any one year. Isn't that right? A. I don't know. [9097] Q. Will you refer to Exhibit 42 again, page 20? Will you refer me to the amount of energy delivered to Baltimore at Highlandtown during the Area 6 system peak hour in 1944? A. We discussed the hour a day or two ago, and as I recall that was the hour ending 6 p.m.

Q. Yes, that conforms to my recollection. A. In column 41, then, of Exhibit 42, page 20, 54,000 kilowatts were transmitted to Highlandtown sub-station during that hour.

Q. Do I understand that to mean that 54,000 kilowatts of demand on the Holtwood 25-cycle system by Baltimore during that hour?

THE WITNESS: May I have that question, please?

(Question read).

THE WITNESS: That question is somewhat confused.

MR. MYSE: It is garbled. Let's strike it out and start over.

By MR. MYSE:

Q. Will you tell me what that 54,000 means in terms of demand? A. It means that the 25-cycle units at the Holtwood hydro plant were supplying 54,000 kilowatts of 25-cycle demand in the Baltimore system.

Q. There would have to be that demand in the Baltimore system or they wouldn't be supplying it via Highland- [9098] town. Isn't that correct? A. Yes.

Q. And there is no question but that that is an actual metered delivery during that hour, is there? A. It is metered at Highlandtown.

Q. There might be a small amount of loss. Is that what you had reference to? A. No, not the way I answered your question. It means that Holtwood, to supply 54,000 at Highlandtown has to generate something more than 54,000.

Q. So that the demand on the Holtwood 25-cycle system, if I understand you, is slightly greater than 54,000 during that hour. A. You are talking now about the Holtwood 25-cycle system?

Q. Yes. Isn't that where the energy comes from? A. Yes. I think I understand what you mean, that the demand on the Holtwood 25-cycle system would be greater than 54,000, yes.

Q. I take it if we refer to page 4 of Exhibit 42, column 41, for the hour ending 8 a.m. we would find that 69,000 kwh were delivered during that hour to Highlandtown from the 25-cycle system at Holtwood. Is that right?

TRIAL EXAMINER: What page is that?

MR. MYSE: Page 4.

[9099] By MR. MYSE:

Q. And again that 69,000 figure means that the demand on the Holtwood 25-cycle system during that hour was something greater than 69,000? A. Well, the total demand on the Holtwood 25-cycle system as I understand it, was 81,000.

Q. Well, I meant the demand by Baltimore on the 25-cycle system at Holtwood. A. The demand of the Baltimore Company at Holtwood's 25-cycle system is the 69,000.

Q. Well, to take care of the losses, however, it would be something greater, would it not? A. But that is on Holtwood's own system, not on the Baltimore system.

Q. I mean on Holtwood's own system. The amount of capacity necessary to furnish that 69,000 to Baltimore would have to be greater than 69,000, would it not? A. As I said before, the generation at Holtwood would have to be in excess of 69,000 in order to deliver 69,000 at Highlandtown.

Q. To take care of the losses. A. That is right.

Q. Now, as I recollect that hour ending 8 a.m. on April 9, 1944, is the hour of peak demand on the Holtwood-

Safe Harbor system. Is that correct? [9100] A. Yes, as those two companies reported in their Form 12 report to the Commission for the year 1944.

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[9129] Q. Isn't it a fact, Mr. Roland, that when you connect a motor to an electrical circuit you thereby consume energy at that point if the motor is running and carrying a load? A. Yes.

Q. Now, when you are running a converter at Holtwood, for example, the electrical machine on the end of the shaft, which is taking in energy is being operated as a motor, is it not? A. Yes.

Q. So that that motor is consuming the energy put into the converter, is it not? A. Well, the energy supplied to the motor end of it is converted into mechanical energy; if that is what you mean by consuming, why, that is correct.

Q. Now, Mr. Roland, it is true, is it not, that if we were to connect a motor, electric motor, to any electrical circuit, and put a mechanical load on that motor, that motor would consume electric energy, would it not? A. That term is often used when you have a conversion of energy from one form to another; it is very often called a consumption of energy.

TRIAL EXAMINER: Just a moment. Now, this is not critical, but it should be said. The Examiner overheard a whispered conference at staff counsel's table just before [9130] the witness gave his answer, in which the very words that the witness used in his answer were said audibly enough for the Examiner to hear, and presumptively the witness could have heard.

Now, I think that all conferences and all statements that are made at staff counsel's table or any other counsel's table, should be said in such a tone that they should not carry beyond the table. It is unfair to

the witness, and it can be unfair to cross-examining counsel.

MR. GOLDBERG: Mr. Examiner, if we had been discussing anything at counsel's table, staff counsel's table, it has been a discussion only amongst ourselves, and if the Examiner has been able or was able to overhear the tone at staff counsel's table, then the Examiner has extremely sharp ears, and I say, Mr. Examiner—

TRIAL EXAMINER (Interposing): I don't think my statement needs to be argued about; I think it is something that I should be permitted to say without counsel's saying anything about it.

I stated at the beginning that it was not critical, but I am stating it so that it will not be repeated.

MR. GOLDBERG: We can hear counsel for the respondents at staff counsel's table, and I imagine the Examiner can hear those statements, too.

TRIAL EXAMINER: Proceed, Mr. Myse.

[9131] MR. MYSE: May I have the last answer?

MR. GOLDBERG: I think the Examiner should state the approximate distances of various tables, and of the counsel table, and the witness and the bench.

TRIAL EXAMINER: I think that remark is to be considered as an impudence to the Trial Examiner.

MR. GOLDBERG: It is not so intended, Mr. Examiner. It is intended to state the facts.

MR. MYSE: May I have the last question read, and if it has been answered, I would like to have the last answer.

TRIAL EXAMINER: Read it.

(Question and answer read.)

By Mr. Myse:

Q. Now, Mr. Roland, it is true, is it not, that if we were to connect a motor, electrical motor, to any electrical circuit, and put a mechanical load on that motor, that motor would consume electric energy, would it not? A. It is ordinarily considered as being consumption, I mean, you are converting energy from one form to another, which is ordinarily thought of as consuming energy at that point, yes.

Q. And if I use that motor to beat my eggs in the morning that would be converting electric energy to mechanical power for the purpose of beating eggs? A. That is right.

[9132] Q. And for that purpose, I consume electric energy, do I not? A. Yes.

Q. And I am billed for that consumption by the local utility company? A. Yes.

[9133] Q. Now, likewise, when we have a converter at Holtwood, and that converter is being operated so that energy is being fed into the sixty-cycle end of the converter, and energy is being transmitted away from the 25-cycle end of the converter, the 60-cycle end is acting as a motor, is it not? A. Yes.

Q. And that motor is consuming electric energy? A. Yes.

Q. Being converted to mechanical power, is it not? A. Yes.

Q. And that power is being transmitted along a shaft usually? A. Yes.

Q. It could be transmitted by any other mechanical means, could it not? A. I don't have any other mechanical means in mind.

Q. Well, a set of gears, a belt. A. Well, even that would require a shaft, I presume, but that is all right.

Q. And the 25-cycle end of that converter on the other end of the shaft is acting as a generator, is it not? A. Yes.

Q. The mechanical power transmitted along the shaft or by whatever other mechanical means there are, turns the [9134] electrical machine on the 25-cycle end and that generates 25-cycle energy? A. Yes.

Q. So that it is fair to say, is it not, that any 60-cycle energy that is fed into that converter at Holtwood is consumed at the converter at Holtwood?

MR. GOLDBERG: I object to that. We have gone over that and the witness has stated what he means by consumed.

TRIAL EXAMINER: Read the question.

(Question read.)

TRIAL EXAMINER: You may answer.

THE WITNESS: In the sense that the 60-cycle energy is converted into 25-cycle energy.

By MR. MYSE:

Q. And also in the sense that the 60-cycle energy is used to turn an electrical machine on the 60-cycle end of the converter as a motor, isn't that right? A. That is part of the process. The various steps that are gone through in making that 60-cycle energy come out on the other end as 25-cycle energy.

Q. Well, it isn't the same energy, is it? A. There is no other source.

Q. There is no electrical connection across the converter? A. There is no other source of electric energy which is supplied [9135] to the converter other than the 60-cycle energy that is supplied to it.

Q. A prime mover could be a steam engine, couldn't it? A. Yes, but then it wouldn't be a frequency converter.

Q. Simply because you have a steam engine instead of an electrical motor, is that the only reason? A. No, you would not be converting energy at one frequency to energy at some other frequency.

Q. Now you are using the word energy there; there isn't any path of electrical energy that runs through the converter, is it? A. Well, we stated that before. There is no electric circuit that is continuous from the 60-cycle side to the 25-cycle side.

Q. Well, I still would like to have an answer to my question awhile back, isn't it fair to state that the 60-cycle energy fed into that converter is consumed in the 60-cycle motor on the sixty-cycle end of the converter.

MR. GOLDBERG: I object. It has been answered at least three times.

TRIAL EXAMINER: Didn't the witness answer the question?

MR. MYSE: I don't think the witness answered it directly.

MR. GOLDBERG: Don't think he answered what directly?

[9136] TRIAL EXAMINER: Read the question.

(Question read.)

TRIAL EXAMINER: You may answer.

THE WITNESS: I can only answer it the way I did before, that you supply 60-cycle energy to the motor which is converted to mechanical energy and then back from mechanical energy to electric energy and then it comes out 25-cycle energy at the other end.

MR. MYSE: Can't you answer that question yes or no?

MR. GOLDBERG: I object. The witness can answer the question that way.

TRIAL EXAMINER: Can you answer.

THE WITNESS: I can answer, yes, but with the qualification of what I mean by consumption of energy which is so-stated in my last answer.

By Mr. Myse:

Q. Well, do you say yes with that qualification? A. With that understanding as to what is meant by the consumption of energy, yes.

Q. So that with that understanding of consumption of energy, any 60-cycle energy which may be generated at Safe Harbor and transmitted to Holtwood to the converters is so-consumed, is it not?

Mr. Goldberg: I object to that question. It has already been answered, Mr. Examiner, it has been answered [9137] at least four times.

Mr. Myse: Not this question.

Trial Examiner: What is the difference?

Mr. Myse: We are taking it back to the energy generated at Safe Harbor, 60-cycles.

Mr. Goldberg: What have you been talking about all along here?

Trial Examiner: You may answer the question.

The Witness: The 60-cycle energy which is transmitted from Safe Harbor to the 60-cycle end of frequency changer at Holtwood is converted to energy of 25-cycles.

By Mr. Myse:

Q. Well, you haven't answered my question. My question was is it consumed in the sense we were just talking about with the qualifications we were just talking about.

Mr. Goldberg: I object to that, Mr. Examiner; the witness has just stated his conception of consumption for the sixth time.

Trial Examiner: You may answer.

The Witness: It is consumed in the sense that the electric energy supplied from Safe Harbor at 60-cycles is converted into mechanical energy and from mechanical energy into electrical energy and then comes out of the 25-cycle end as 25-cycle energy.

[9138] By Mr. Myse:

Q. It is also the fact, is it not, that any 60-cycle energy generated by steam at Holtwood would be consumed in the same sense if it were fed to the converters at Holtwood; isn't that correct? A. Yes, it wouldn't matter what the source of the energy was; it is all 60-cycle energy.

Q. And that would be the only way energy—I am not saying whether it is electrical energy or mechanical energy—could get from the steam generators at Holtwood to the 25-cycle system at Holtwood. Isn't that correct? A. Yes, it has to go through a frequency changer some place.

Q. Now, if you will refer to the frequency changers at Safe Harbor, something else happens other than change in frequency, does it not? A. Yes, this change is also from three-phase to single-phase or vice versa.

Q. Can you explain that for the record in layman's language, from three-phase to single-phase energy? A. Well, a three-phase circuit is essentially three single-phase circuits with a time displacement of the voltages in each of those circuits. Those three single-phase circuits, of course, would not require six conductors. They usually are either three conductors or four conductors. [9139] But they are essentially three single-phase circuits with this time displacement that I have mentioned.

Q. What is there about the railroad load which would require single phase service instead of three-phase service? A. I believe it is because of the railroad use of a trolley—and wants to use single-phase motors.

Q. You can't feed three-phase energy into a single-phase motor and expect it to work. Is that the idea? A. I am sorry. I want to hear that again.

(Question read.)

The Witness: I don't see how that would be physically possible. I mean whether it would work or not. I don't see how you could do it. You could take one phase off the three phase circuit and operate a single-phase motor, but I

wouldn't know how you put three-phases into a single-phase motor.

By Mr. Myse:

Q. I don't know either and that is why I am asking you. Certainly you can't feed 25-cycle energy into a motor that uses 60-cycle energy and expect it to work either, can you? A. Not very well.

Q. Well, will it work at all? A. Your question was that you are supplying 25-cycle [9140] to a 60-cycle machine?

Q. Yes. 60-cycle electric motor. A. Offhand, I don't know whether that would operate or not. It certainly would not run at the rated speed, but whether it would run or not, I don't know.

Q. Well, you as an engineer would not advise anybody to hook up a 60-cycle motor to 25-cycle source. A. I would not.

Q. And you would not advise them to hook up a 25-cycle motor to a 60-cycle source of energy. A. I would not, no.

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[9145] Q. Exhibit 42 is, as I recall it, limited to the year 1944 and certain selected days, is that correct?

Mr. Goldberg: What year?

By Mr. Myse:

Q. 1944, I am sorry; and certain selected days. A. Yes.

Q. Now, if the circumstances have changed since 1944, those circumstances would no longer hold? A. Obviously.

Q. The circumstances as shown in exhibit 42 would no longer be true? A. Well, I can't answer that; I don't know what circumstances you are talking about now.

Q. Well, one circumstance, for example, is the change in character of the flows to Metropolitan Edison Company. A. It may or may not change it; I don't know.

Q. You have made no study to determine that, though? A. I made my study for 1944; I don't know what effect [9146] the new contract has had on that.

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[9152] Q. Now, at the bottom of Page 962, you were talking about co-mingling of energy. Is that right? A. Yes.

Q. And that co-mingling you were talking about takes place at both Safe Harbor and Holtwood when energy is supplied at those points simultaneously from more than one source? A. Yes.

Q. That means, does it not, Mr. Roland, that when there is energy being generated at Safe Harbor and being fed to the Safe Harbor 60-cycle bus or for that matter any other source of 60-cycle energy is coming into the bus through meter 8, and at the same time there is backfeed energy coming into the same bus via meters 5 and 6, that there is also a co-mingling of energy at Safe Harbor? A. That is true, but it couldn't be coming in on all the circuits at the same time. Something has to go out.

Q. It could be coming in on all those circuits that I mentioned at the same time, couldn't it? A. From the generators only. From the 69 kv circuits and Maryland, I don't believe so.

Q. Couldn't it be consumed in the 60-cycle end of the frequency changer at Safe Harbor? A. It isn't very likely. It is physically possible, [9153] but I mean the situation that you describe, I couldn't believe would warrant it to occur.

Q. Then, let's limit the question by saying when energy is being generated at Safe Harbor and fed to the 60-cycle bus via meter number 1 on Exhibit 39 and backfeed is coming into the same bus via meters number 5 and 6 on Exhibit 39, that then under those circumstances co-mingling of that energy takes place. A. Yes.

Q. And anything that leaves the 60-cycle Safe Harbor bus is what you might call co-mingled energy? A. That is right, sir.

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[9155] MR. SPARKS: Mr. Examiner, may I make a statement in regard to the matter which your Honor spoke about at the beginning of the afternoon session?

We understand that your Honor's position is that we should go forward with the cross examination of the witness Joseph tomorrow or Friday?

TRIAL EXAMINER: No, the Examiner's position is that the hearing should proceed tomorrow and Friday, and if the presence of the witness Joseph is necessary in order to enable the hearing to do so, then perhaps compulsory process, if necessary, can be used in order to produce the witness.

MR. SPARKS: Let me say this, if your Honor please: For reasons which I have mentioned before it will be impossible for Respondent to go ahead with the cross examination of anyone else but the witness Joseph, and since our cross examination of the witness Joseph tomorrow or Friday would be at the specific order of your Honor and over our objection, we would go forward if you order us to do so over our objection, and we will do so if the witness Joseph is present tomorrow or Friday.

TRIAL EXAMINER: Very well.

MR. GOLDBERG: I can state to the Examiner the witness Joseph will not be here tomorrow or Friday. As I stated weeks ago, it is impossible for him to be here during the month of December.

[9156] However, there is no reason in the world the hearing cannot go forward on Thursday and Friday with the cross examination of any of the other five witnesses who have testified on a number of subjects. I

confess that I am at a loss to understand this repeated protest about being required to go forward, this repeated statement that they are not prepared to go forward.

After all, they have only had 8½ months to prepare for cross examination. I just don't understand it when counsel for the Staff has almost continuously with the exception of one or two days gone through the cross examination of each and every one of these witnesses.

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[9157] MR. GOLDBERG: I suggest that counsel move to strike Mr. Joseph's testimony, and I will put on a rate of return witness on rebuttal and we will agree to strike Mr. Joseph's testimony if that is the only way they can go forward?

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[9166] By MR. MYSE:

Q. In any event, Mr. Roland, the 25-cycle capacity available to Baltimore from the 25-cycle system of Holtwood has not decreased since prior to June 1, 1931, has it? [9167] A. The amount of generating capacity available has not decreased.

Q. And as a matter of fact, one reason it hasn't decreased but has increased is because the amounts of 25-cycle delivered to Lancaster have decreased since prior to June 1, 1931. Isn't that correct? A. I believe that has decreased in the Lancaster area—25-cycle service.

Q. So if anything has happened since prior to June 1, 1931, there has been an increase in the 25-cycle capacity available to Baltimore from the Holtwood 25-cycle system. Isn't that right? A. Yes.

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[9172] THE WITNESS: I could have picked some other metering point other than the Little Inch, the South Manheim and South Akron. Those were distribution points on

the PP and L system in Lancaster. A considerable part of that energy is supplied by Holtwood and that in my opinion is a resale. It is not consumed on the PP and L system.

By Mr. Myse:

Q. Is that what you had in mind when you spoke of resales at line 18, page 835? A. I had in mind that the energy which Holtwood sold to these various customers was in turn sold by the company purchasing from Holtwood to its customers.

Q. All of it? A. All of what?

Q. All of the energy received from Holtwood. A. Not necessarily. Some would be used in line losses and station services. No, I wouldn't say all of it, because [9173] I don't know.

Q. Well, the extent to which it is used in line losses, station services or consumed in the motor ends of converters if they have any, it is not resold, is that it? A. Well, that which is consumed as a line loss is not resold.

Q. And that which is consumed in station losses is not resold? A. No.

Q. And that which is consumed in the motor ends of a converter is not resold, is it? A. Well, it is resold in the sense that it is first converted into a different frequency, and then it is resold.

Q. First converted to mechanical energy and then back to electrical energy and then you say it is resold. A. That is the customary way of describing the process. The energy is supplied by Holtwood, taking your case as an example, being supplied to a frequency changer and before it is resold it is converted to another frequency. It is still the energy that Holtwood supplies and sells at that point.

Q. Now, will you take the deliveries to York Edison or Metropolitan Edison Company for the year 1944 and will you tell me how you determined that all of the Holtwood energy or Penn Water energy received by those companies was resold? [9174] A. I don't say that all of the energy is resold, because obviously in operating a system

there has got to be loss and station use, and so on, which is not resold to the customer. That is a part of the operations which normally takes place. You can't avoid it.

Q. Well, could you determine what percentage was not resold? A. No. Ordinarily the system losses might run anywhere from five to twenty per cent; but I didn't make any effort to determine what the system losses were.

* * *

[9251] Q. Do you consider an emergency supply similar to that provided under Exhibit 73 which you examined, any different [9252] from a supply of interchange?

* * *

[9252] THE WITNESS: Yes.

By MR. MYSE:

Q. What does the difference consist of in your opinion? A. Well, as the name implies, emergency service is made under emergency conditions; under some special circumstances on the purchasing company's system the rates are usually different. The rate that the purchaser paid for emergency power is usually different than the one under an interchange arrangement, and usually there is an obligation on the part of the supplier for emergency service where there wouldn't be under interchange service.

Q. When you say there is an obligation on the part of the supplier for emergency service, would you tell me whether or not there is an obligation on the part of Penn Water or Safe Harbor to supply emergency service to Philadelphia Electric? A. There is such obligation by Hydro to supply.

Q. What does "Hydro" mean? Will you explain that for the record? A. That refers to Holtwood Company and Safe Harbor Water Power Corporation.

[9253] Q. And what is the obligation? A. "Hydro shall be obligated to supply through the Newlinville Substation the emergency requirements of PX," which means Philadelphia Electric Company, "in addition to the elec-

trical requirements of the territory stated in Section 1 of this Article, to the extent that Hydro may judge it has generating and transmission capacity available for such emergency supply without detriment to service to its other customers."

MR. GOLDBERG: You have been quoting, Mr. Roland?

THE WITNESS: I have been quoting from Section 2, Article II, of Exhibit 73.

By MR. MYSE:

Q. Now, am I to understand that the distinction you draw between the emergency service provided under that contract and interchange service is that there is an obligation here to the extent you read from Section 2 of Article II, of Exhibit 73, and that there is no obligation to furnish interchange service? A. I would have to read the sections also on interchange service, but ordinarily the obligation is not there on interchange service. There would be on emergency service.

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[9256] Q. Well, you couldn't say that the entire payment for the year 1944 made by Pennsylvania Power and Light to Holtwood was for firm power service, could you? A. Not if it wasn't for firm power service.

Q. Well, it wasn't. Isn't that the fact? A. There were interchange sales during 1944.

Q. Isn't it a fact, Mr. Roland, that the entire payment made by Pennsylvania Power and Light Company in 1944 to Holtwood was not a payment for firm power sales? A. That is right.

Q. Or firm power energy? A. That is right.

Q. Included in that payment there were payments for other types of service. Isn't that right?

• • •

THE WITNESS: It would include payments for interchange power. I don't know what else.

* * *

[9264] Q. Mr. Roland, have you had an opportunity to check the billings that we were referring to this morning? A. Yes.

Q. Now, can you tell me with respect to the payments made by Philadelphia Electric Company to Holtwood, under the contract identified in this record as Exhibit 73, 74, and 75, whether or not those payments covered payment only for energy and power or for other things as well? A. There is a special facility charge included in the payment by Philadelphia Electric Company.

[9265] Q. So the payment made covers something more than just power and energy? A. Yes.

Q. Now, with respect to the billings to Pennsylvania Power and Light under the contract identified in this record as Exhibit 76 and 77, what does the payment made by Pennsylvania Power and Light Company to Holtwood cover? A. That also includes a small special facility charge, in addition to charges for firm power and energy.

Q. It also covers the payment for service to the Pioneer Electric Light Company area does it not? A. That is also in Lancaster County, but I mean it is handled separately, but it is included in this bill.

Q. Now, what is the situation with respect to the payments made by Edison Light and Power Company in 1944 to Holtwood? A. That bill also includes a special facility charge, a small one.

* * *

[9270] Q. When you made reference to the sale of electric energy under Exhibit 73 did you give any consideration to the provision of Article VII, on Page 73? A. Did I give any consideration to that in determining whether or not it was a sale that was being made?

Q. Sale by Holtwood, yes, under this contract. A. No, in the sense that I was aware of Article VII, but also in this contract I believe Safe Harbor in effect is written out, in that Holtwood is supposed to act for and on behalf of Safe Harbor, as a result S. H. was not even a party to the contract.

Q. You say Safe Harbor is written out in effect? A. Well, in that Holtwood acts for Safe Harbor. It is in one of these contracts, I don't know which.

Q. Well, isn't it Article VII of Exhibit 73 that you have reference to? A. Yes, that is right.

Q. And doesn't it there speak of Holtwood acting as agent for Safe Harbor? A. Well, it says that Philadelphia Electric Company shall be entitled to deal with Holtwood Company in all respects as if Holtwood Company were the only party contracting with it hereunder. To me in effect it writes Safe Harbor out of the contract.

Q. That is what it means to you, is that right?

[9271] A. That Holtwood acts as though it was the only party other than Philadelphia Electric Company.

Q. And it also says, doesn't it, Mr. Roland, that Safe Harbor authorizes and empowers Holtwood Company to act as its agent. It is very clear language there, isn't it? A. It so states.

* * *

MR. MYSE: A similar provision appears in Exhibit 76, Article X, Page 13, does it not?

THE WITNESS: It appears that that Article, in Exhibit 76 is the same as the one that was in Exhibit 73, Article VII.

By MR. MYSE:

Q. And it was Exhibit 76 and 77 that you had reference to when you spoke about sales to Pennsylvania Power and Light Company at the bottom of Page 912 and top of Page 913, isn't that correct? A. Yes.

Q. And the same exhibit was referred to at Page 911, lines 3 to 7 or 8? I should say exhibits were referred to. The same exhibits were referred to? A. What line number was that?

Q. 3 to 8. [9272] A. Yes.

Q. And you find a very similar provision in Exhibit 71, Article XII, Page 15, do you not? If not similar, the same provision, the same words.

* * *

THE WITNESS: They appear to be the same.

* * *

Q. * * * When you were referring to the [9273] sales by Holtwood of electric energy to these companies, and particularly Metropolitan Edison Company at the bottom of Page 912 and the first nine lines of Page 913, were you speaking of sales in 1944 or in 1946? Or what period?

A. My study was for energy transfers in 1944 and it would necessarily have to relate to the sales made in 1944.

Q. Then I understand it your testimony at those pages relates to sales in 1944, isn't that right?

* * *

THE WITNESS: Well, the test period or the days that I selected were in 1944.

By MR. MYSE:

Q. Mr. Roland, you aren't talking about any test days here in 912 and 913; I am asking you what you were referring to at those pages. A. The statements that I made, that I made on those pages, was based on the studies that I made of the energy flows during the twenty days of 1944.

Q. Now, then, it must have been made, as I understand your direct testimony, you were there referring to sales under the contract identified as Exhibit 71, when you spoke of the sales by Holtwood to Metropolitan Edison Company, is that right? A. Yes.

[9274] Q. Now, actually there were no firm power sales to Metropolitan Edison Company under that contract, isn't

that true? A. Not during that time, the firm power sales were to Edison Light and Power Company.

Q. And there were no sales to Metropolitan Edison Company at all under that contract, isn't that right? A. I am confused now as to which contract we are talking about.

Q. Contract 71—Exhibit 71. A. There were no sales to Metropolitan Edison under that contract.

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[9285] Q. Now, as I understand your testimony up to this point, at least, with respect to sales to the three Pennsylvania customers we have been talking about, that is Penn Power and Light Company, Philadelphia Electric Company and Metropolitan Edison, you say they are sales by Holtwood because Holtwood renders service, or supplies energy to those or delivers energy to these three customers and gets paid by these three customers directly. Is that right?

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THE WITNESS: You have the word paid directly in there. I don't believe I added that as a qualification.

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[9291] Q. Mr. Roland, when you were referring to sales by Holtwood to the three customers we have been talking about, did you mean that there was a sale because there was a delivery of energy to each of those three customers and direct payment by each of these three customers to Holtwood? A. You are excluding the railroad. Is that correct?

Q. Yes, that is right. A. I don't know whether the payments were direct or not. Holtwood received payment therefor but whether or not they were direct, I don't know.

Q. Then the answer is, you don't know, isn't that it? A. Yes.

Q. Now, before we get too far away from the Metropolitan Edison Company, under the new contract, identified

in this record as Exhibit 72, there are no sales made to Edison Light and Power Company at all, are there? A. That is right.

Q. But all the firm power sales that there were under Exhibit 71 were made to Edison Light and Power Company. Isn't that right? [9292] A. Yes.

Q. Now, as a matter of fact, under Exhibit 71, Metropolitan Edison Company was one of the supplying companies. Isn't that right? A. Supplying companies to whom?

Q. To Edison Light and Power Company? A. Yes.

Q. And under exhibit 72, it is one of the receiving companies?

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THE WITNESS: Metropolitan Edison Company is one of the receiving companies.

By MR. MYSE:

Q. Yes, under Exhibit 72. Isn't that right? A. That is right, yes.

Q. Under Exhibit 71, Metropolitan Edison Company and Holtwood and Safe Harbor furnished the requirements of Edison Light and Power Company at York. Isn't that right?

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THE WITNESS: The requirements supplied by Penn Water came from the integrated system. I don't know where it all came from.

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[9293] Q. Now, Mr. Roland, if you look at Exhibit 71, page 5, isn't it a fact that Section 1 thereof provides that the requirements shall be furnished by Metropolitan, meaning Metropolitan Edison Company, and Hydro, meaning Safe Harbor Corporation, Safe Harbor Water Power Corporation, and Penn Water and Power Company? A. Well, the contract may so state. I thought you were asking about who supplied the power and energy.

Q. Well, isn't that the fact? A. The contract so states, yes.

Q. Who makes the sale to Potomac Electric Power Company via the line from Ellicott City? A. Baltimore Company.

Q. Does Baltimore Company deliver the energy to PEPCO? A. No, Susquehanna Transmission Company of Maryland delivers the energy.

Q. Does Susquehanna Transmission Company of Maryland receive any payment direct or indirectly for that energy delivery? A. I don't know.

Q. Does Penn Water receive any payment direct or indirect for that energy delivered to PEPCO? A. Well, they are paid for the use of the transmission [9294] lines.

Q. Well, are they paid for the energy that Penn Water delivers? A. To PEPCO?

Q. Or Susquehanna, if you want to put it that way. A. Energy delivered to PEPCO?

Q. Yes. A. Does Penn Water receive any payment for that energy?

Q. Yes, directly or indirectly? A. I don't believe so.

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[9295] Q. Where does that energy originate? A. I don't know.

Q. You have made no study to determine where the energy originates that is delivered to PEPCO, then? A. You mean by which particular generating unit, or what company, or what?

Q. Yes. A. Which?

Q. Which generating unit? A. I don't know.

MR. GOLDBERG: When?

THE WITNESS: That varies from hour to hour. I don't know where it comes from.

By MR. MYSE:

Q. Well, does it ever come from Safe Harbor, for instance? A. I suspect it would.

Q. Does Safe Harbor receive any compensation for the energy which Penn Water or Susquehanna delivers to PEPCO? A. Safe Harbor is only compensated by Penn Water and Baltimore Company and therefore it couldn't receive any from PEPCO.

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[9296] Q. Yes, energy which is generated at Safe Harbor and delivered by Penn Water or Susquehanna or both to Pepco is what I have reference to. A. And is Safe Harbor compensated by Pepco?

Q. I didn't say that. Is it compensated in any way? A. Not for any particular deliveries at any particular point that I know of. Safe Harbor is compensated by the two companies, Holtwood and Consolidated, and that covers all of what it does.

Q. Would you call that indirect compensation for the delivery of Safe Harbor energy to Pepco? [9297] A. One of the sources of the revenue to Consolidated would be its sales to PEPCO, and in that way, it might be considered as an indirect source of the revenue paid by Consolidated to Safe Harbor just the same as any other source of revenue to Consolidated would be available for payment to Safe Harbor.

Q. Do I understand you to mean by that answer that the answer to my question is yes?

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THE WITNESS: Yes, all sources of revenue to Consolidated and to Penn Water from their very many sources are available to compensate Safe Harbor, and in that sense they are indirect payments to Safe Harbor.

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[9309] MR. MYSE: Before I start with Mr. Roland, I direct a question to Mr. Goldberg. At page 8774, Mr. Goldberg said "I think, Mr. Examiner, there are probably more definite precise methods of proving that. If

you will give me an opportunity to check those dates I can go along on a stipulation of those."

The dates he referred to were the dates of the Safe Harbor license and the period over which it runs. I wonder if you had an opportunity to check those, Mr. Goldberg?

[9310] MR. GOLDBERG: The only information I have looked at indicates that the date of the Safe Harbor license is April 22, 1930, and that the expiration date is April 22, 1980.

MR. MYSE: That conforms with my recollection. Does that mean that you agree that is correct?

MR. GOLDBERG: Yes, unless I happen to get hold of the vault copy which I haven't seen yet which indicates otherwise.

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By MR. MYSE:

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[9311] Q. Do I understand then that you don't have time to report or you are not ready to report on this specific question, and the reason I ask that is because I had planned to go over your homework point-by-point and then integrate it with whatever remaining cross examination I had? A. I think possibly I can answer that one. This is at Page 8754, is that correct?

Q. That is where you agreed to check it, but it refers back to the answer on line 20, page 981. A. Well, my answer to your question is that at Page 981, lines 20 to 21 I had reference to my answer at Page 980, line 17, in which answer I stated that Holtwood and Susquehanna each own and operate facilities for such sales.

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[9317] Q. Will you refer to Page 8785 at the bottom of the page and the top of Page 8786? There you said you would have to go back and check the sources that you used

in connection with your statement that there was a lease of the Gunpowder line facilities. Have you had an opportunity [9318] to check those sources? A. Yes, if you will refer to Exhibit 37 you will note in the description of the Gunpowder line shown directly above the area designated "Baltimore" the words "One steel tower line, 110 kv, three-phase, 60-cycle, 9.63 miles (leased by Consolidated Gas Electric Light and Power Company)."

Exhibit 37 is a photostatic copy of an exhibit submitted to the Federal Power Commission by the Pennsylvania Water and Power Company in its annual Power System Statement, FPC form number 12 for 1944.

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[9331] By Mr. Mxse:

Q. The question is, do you have to determine whether there is a contract before you can tell whether or not Penn Water sold to Pepco? A. There is a contract, but Holtwood was not a party to it.

Q. Well, now, let's see if I can understand your answer.

If you determine after looking at all of Penn Water's contracts that it doesn't have a contract, it is not a party to any contract with respect to Pepco, you then decide that it is not a sale by Penn Water to Pepco. Is that correct? A. Yes, if there is no contract covering such a sale I would on the basis of that—it would indicate there would be no sale.

Q. So, in your view there must be a contract covering the transaction before you can call it a sale. Is that correct? A. Well, I presume a sale could be made without there being a formal written contract, but usually there would be a formal contract covering any sale.

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[9332] Trial Examiner: Answer the question.

The Witness: I don't believe I can answer it in any other way than I did. Usually there would be a formal con-

tract covering the sale, but I believe sales can be made without formal contracts.

TRIAL EXAMINER: But as far as your testimony in this proceeding is concerned, you didn't consider any sale that was not associated with a contract, did you?

THE WITNESS: No, I don't believe I took into consideration any sale that wasn't covered somehow by a contract.

TRIAL EXAMINER: I mean by one of the contracts that is an exhibit in this proceeding.

[9333] THE WITNESS: I believe they are all in evidence in this proceeding.

By MR. MYER:

Q. Well, now, just in order that I may understand this last answer, what contract is there covering the sale that you testified to at the last session, from Penn Water to Baltimore, for the account of Baltimore as you put it, to the railroad at Perryville? A. That would come under item H, Article II.

Q. You mean Article Roman II, or Arabic 2? A. Roman II.

Q. And that is at page what? A. 28 and 29.

Q. Where in that Article, Roman II, does it mention a sale by Penn Water to the railroad for the account of Baltimore at Perryville? A. Baltimore Company is entitled to all of the energy which is available to Holtwood and which is not disposed of in its area in Pennsylvania. Now, that can include sources from the Philadelphia Electric Company, through Thorndale and at Perryville. It can include generation at Safe Harbor and other purchases by Holtwood from its northern customers or its own generation and to the extent it is not used in Pennsylvania for Holtwood's customers, it is available to the Baltimore Company, and if any of that is delivered to Perryville, [9334] that would be sold to Baltimore Company.

Q. Where in Article II is there anything said about the Baltimore Company being entitled to receive everything left over after sales in Pennsylvania? A. Performance of its now existing contracts and its contracts are with those companies that are in Pennsylvania.

Q. Doesn't Penn Water have a contract with Pennsylvania Railroad Company identified as Exhibit No. 10 in this proceeding? A. Yes, but it makes its portion of the sales to the Pennsylvania Railroad in Pennsylvania.

Q. Will you point out in Exhibit 10 where it says anything of that kind? A. I don't believe it is in that exhibit. That is an agreement between the Baltimore Company and the Holtwood Company.

* * *

[9336] Q. In order that we may know what you are reading from it is the Form 12 report to the Federal Power Commission from the Holtwood-Safe Harbor system for the year ended December 31, 1944. Is that right? A. Yes.

Q. Schedule what? A. That has reference to Schedule 13, and there is a typewritten statement following schedule 13 which reads as follows:

> "The portion of the hourly load supplied to Pennsylvania Railroad *in Maryland*, by the respondent for the account of the Consolidated Gas Electric Light and Power Company is not included in this item as hourly load allocations are not measured. The total supply to the Pennsylvania Railroad *in both Maryland and Pennsylvania* is included in line 23 below."

Q. Line 23 shows the figure of 95,000 kilowatts at the time of system peak, and it is in response to an item called Item "E", "System peak load of the year (C minus D). This [9337] entry should agree with the peak load of the year as shown in schedules 14 and 15, using the same demand interval." Is that right? A. Yes.

Q. Now, there is also a note to Schedule 13—line 23, included in the report you referred to, is there not? A. Yes.

Q. Will you read that note? A. "This item includes the joint supply to the Pennsylvania Railroad by the respondent and the Consolidated Gas Electric Light and Power Company and also the Holtwood Safe Harbor System transmission losses and station uses."

Q. Now, is there any reference in Schedule 13 of the report you just referred to, or in the notes thereto to any contract of the kind we have been talking about? A. There is no reference to any contract in here. It shows the amount of power delivered to the Baltimore Company at the time of peak which is labeled power delivered to other systems for resale, and that appears on line 21 of Schedule 13. The amount delivered to the Baltimore Company at the time of peak was 174,000 kilowatts.

Q. Now, Mr. Roland, I don't want to unduly burden you nor do I want to protract this cross examination, but unless you agree with me there is no such contract for the sale of energy from Holtwood to Baltimore at Perryville, I would like [9338] to have you find it for me. A. There is no contract as I stated before which specifically designates Perryville as a delivery point. The sale however in my opinion is made under Article II of Item H.

Q. And that is the only contractual provision that you know of which you say covers the sale by Penn Water to Baltimore that we have been speaking about at Perryville? A. That is the only contractual provision that I know of, yes.

Q. Did you consider those provisions in Article II in arriving at your opinion in your direct testimony with respect to sales? A. Yes.

MR. GOLDBERG: Are you referring, Mr. Myse, to any particular portion of the direct testimony?

MR. MYSE: No, we have been talking generally about the Perryville sales.

THE WITNESS: I didn't have the Article number in mind at that time, but I was sufficiently familiar with the contract to know that was what was taking place, that the Baltimore Company was to receive all that was left over from Holtwood, and some of that was delivered to Perryville.

By MR. MYSE:

Q. At page 8867 you agreed to report on peak transfer [9339] energy, did you not? A. Yes. I have had a little bit of time to go into that. That is a very complicated arrangement between the Philadelphia Electric Company and the railroad.

Q. Are you ready to report on it? A. Well, I can give you an idea, I believe, as to what is involved. I certainly can't explain all the details of the arrangement.

Q. Well, let's hear what you think is involved, then.

TRIAL EXAMINER: Where is this—8867?

MR. MYSE: Yes.

MR. GOLDBERG: It begins at 8865, doesn't it?

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[9346] Q. Did you consider Article X of Exhibit 10, page 32, in connection with your description of peak transfer energy? A. That Article has to be taken into consideration in connection with the determination of peak transfer.

Q. Well, is the effect of that Article to impose a limitation on the contractual supply by "Electric Companies," which are Safe Harbor, Baltimore and Holtwood, during the hours of peak load on the railroad in relation to the flows of the Susquehanna River? A. Yes.

Q. Wouldn't you also have to consider comparable sections of the contract between Philadelphia Electric Company and the railroad? A. The interchange agreement is involved in this.

Q. No, I mean the contract between Philadelphia Electric Company and Pennsylvania Railroad, which is not in

this record, for service to the railroad roughly east of Thorndale and north of Perryville. A. I don't know. I haven't examined that contract, but I presume that to get a comprehensive understanding of peak transfer that should be taken into consideration.

Q. Well, did any of the persons under your direction examine that contract between Philadelphia Electric Company and [9347] the railroad? A. Not to my knowledge.

Q. Getting back to page 8867 again, will you take a look at that. You there said in referring to this peak transfer arrangement, that it was the number of kilowatt hours that were delivered and sold at that point, and by "at that point" I take it you meant Perryville. Is that right? That is at lines 3 and 4. A. I think that I had in mind there both Perryville and Thorndale.

Q. All right. Now, was everything that was delivered and sold at those points, or at Perryville, sold on a gross meter reading basis? A. Sold to whom?

Q. Well, to whomever you meant at that point on page 8867, line 4 of the transcript. A. I had reference to sales by Holtwood to Philadelphia Electric Company at Thorndale and at Perryville.

Q. Anyone else? Any other sales? A. Well, included in those sales would be or might be some of the energy which is sold to the railroad company under the peak transfer agreement arrangement.

Q. Sold to the railroad by whom in the case of peak transfer? A. Holtwood.

[9348] Q. Isn't it Holtwood, Safe Harbor and Baltimore? A. Well, I usually refer to the three of them in this connection as Holtwood.

Q. I think it is important, and don't you, Mr. Roland, in view of the confusion which may arise, to specify whether you mean Holtwood alone or Holtwood, Safe Harbor and Baltimore? In this case I take it you mean Holtwood, Safe

Harbor and Baltimore. • • •

[9349] A. The sales I had reference to were under the interchange arrangement between Holtwood and Philadelphia Electric Company through the facilities of the railroad.

Q. Are you referring to Exhibit 134 in that connection? A. Yes.

Q. That doesn't cover peak transfer energy? A. That doesn't cover peak transfer energy.

Q. Peak transfer energy is something that involves more than just Holtwood, isn't it? A. Peak transfer energy involves the Baltimore Company and Holtwood Company and Safe Harbor Company as well as Philadelphia Electric Company and the railroad.

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[9383] Q. Actually I think you agreed with me in the testimony at one place that there are different rates for the kinds of energy you were talking about, interchange or firm power delivery. A. That is right.

Q. And there also might be different costs involved in generating and furnishing that energy. Isn't that right, as between interchange and firm power? [9384] A. The differences in costs are certainly taken into consideration in determining what the rate shall be for different types of service, whether it is firm service or interchange.

Q. I haven't asked you whether it be taken into consideration. The question is: Are there differences in costs? A. Yes, there will be differences in costs.

• • •

[9404] Q. Now, in addition to all of the services we have been talking about with respect to service by Penn Water to Baltimore, they render capacity service to Baltimore, do they not? A. By "capacity service", I presume you mean generating capacity is on the line spinning available for use to the Baltimore Company when they need it?

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Q. That is right. What is the answer to my question with that understanding? A. I don't know the details of the method of operation, but I would certainly suspect that there was always more capacity on the line than was actually being used to generate power which would be available to Baltimore or anyone else if the demand should arise for it.

Q. That is a service rendered to Baltimore, isn't it? A. Yes, I think that is a service to Baltimore.

Q. How does Holtwood get paid for that service? A. They get paid for all of this under items H and I.

Q. For all the services we have been talking about? A. Yes.

Q. However, there is nothing in H and I which specifies which part of the revenues received are for each particular [9405] service, is there? A. No.

Q. Was there such specification prior to the amendment in 1931? A. You mean a sub-division?

Q. A sub-division of the total payments made as between charges for specific services. A. There were demand charges and energy charges prior to the 1931 contract.

Q. Were there other specific charges? A. Then there were charges for transmission lines.

Q. Spinning reserve? A. I believe so, but I don't recall at the moment. I believe there was.

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[9439] Q. Will you refer to Page 9254, please, lines 8 to 11, inclusive? You there stated that by examining the billings you were able to determine that certain deliveries to Pennsylvania Power and Light Company are firm requirements "because they are obligated to supply the Lancaster requirements." Is that right? A. Yes.

Q. Whom were you referring to when you say "they" in that quoted phrase? [9440] A. The Holtwood Company.

Q. Does that mean then you say Holtwood is obligated to supply the Lancaster requirements? A. Well, there are certain qualifications to that.

Q. What qualifications do you have in mind? A. There again I would have to go back and refer to the contract.

Q. Will you do so, please?

* * *

A. In Exhibit 76, Article IV, Page 5, Section 1, "Until Receiving Company—" which is in this case the Pennsylvania Power and Light Company "—shall connect its electric system in Lancaster County, Pennsylvania, with its main system, or with those of other utilities, Generating Companies shall be obligated to supply and Receiving Company shall be obligated to receive and pay for Receiving Company's Lancaster Load Requirements." And then it goes on to define what the "Lancaster Load Requirements" are.

* * *

[9441] Q. Well, do you know whether receiving company as referred to in Article IV has connected its electric system in Lancaster County since that was written? A. It has.

Q. Is that the provision you had reference to when you talked about the obligation of Holtwood at Page 9254? A. Not entirely. I stated that there were certain qualifications to that which appear later on in other agreements which followed this one here shown in Exhibit 76.

Q. Now, before we get to the qualifications, however, I think you described who the receiving company was in that quotation but I don't think you mentioned who the generating companies were. A. Generating companies, Pennsylvania Water and Power Company and Safe Harbor Water Power Corporation are referred to as the generating companies in this contract.

Q. Is there any distinction drawn between the two in the contract as generating companies?

* * *

TRIAL EXAMINER: Any distinction for what purpose?

MR. MYSE: For purposes of the obligations he has been referring to.

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[9442] TRIAL EXAMINER: I am not going to permit the witness to take time to go through that document for the purpose of answering a statement that can be made from the exhibit.

THE WITNESS: There is one statement I would like to make.

TRIAL EXAMINER: In response to this question?

THE WITNESS: Yes. In Article X there is a distinction in that the Holtwood Company acts as though it were the only party to the contract which is a very big distinction.

By MR. MYSE:

Q. Is that the only distinction you can find? A. That is the only one I have in mind which shows that Safe Harbor's part is a very nominal one.

Q. Well, now, the testimony you gave isn't in the contract in that form, is it? It doesn't say that, does it?

TRIAL EXAMINER: I am not going into a discussion of what is in the contract. I am going to strike that statement. The contract will have to speak for itself. The witness' statement is stricken.

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[9452] Q. In your studies of flow in Exhibits 42, 40 and 38, I believe, did you ever make any distinction between flow of energy for interchange purposes and flow of energy for firm power services?

MR. GOLDBERG: I object on the grounds it is repetitious. The record already shows a discussion of this subject.

TRIAL EXAMINER: Overruled.

THE WITNESS: Exhibit 42 makes no distinction between whether the energy delivered at certain points was interchange, whether it was emergency or whether it was firm. I have indicated under what particular contracts the energy was delivered at those points. At Coatesville it would be primarily all firm power, for example. At Lancaster it would be mostly firm power, that is in the Lancaster area, not necessarily up at Harrisburg—that would be interchange.

By MR. MYSE:

Q. You limited your answer just now to Exhibit 42. Does the same answer apply to the other exhibits you introduced in the record or testified to on direct relating to power flow? A. Which exhibit do you have in mind?

Q. Well, 38, for example, I believe is one of them. A. 38 merely shows the total electric energy transferred. [9453] Q. Does your answer with respect to the distinction between interchange flow and firm power flow apply to Exhibit 38? A. Exhibit 38 doesn't indicate what character it is, whether it is interchange or firm or emergency or backfeed or whatever other label you want to put on it.

Q. And the same is true of Exhibit 40. Is that right? A. Yes.

Q. And as a matter of fact, neither of those exhibits drew any distinction between circulating energy as distinct from the flow or firm power or interchange energy. Is that right? A. Circulating energy between what points are you referring to now?

Q. Circulating energy between the York area and the Pennsylvania Power and Light area. A. Exhibit 40 has nothing to do with the York area. This has transfers across the Maryland-Pennsylvania State line.

TRIAL EXAMINER: In your exhibits you just total all your energy and if there is such a thing as circulating energy on the system, it would affect the meter reading and would be reflected in your figures. Is that true?

THE WITNESS: I took meter readings, gross meter readings, which include the total amount of energy measured at that point. [9454] Now, if it included some circulating energy, it would be included in that meter reading.

TRIAL EXAMINER: And that is true of all your exhibits where you have used meter readings?

THE WITNESS: That is right.

By MR. MYSE:

Q. That would also be true of Exhibit 44 and 45 to the extent that they show energy flows thereon. Is that right? A. The energy flows shown thereon are gross meter readings in those circuits.

* * *

[9463] Q. Well, is all of the energy delivered at Violet Hill substation sold to Metropolitan Edison Company? A. Not if some of it is transmitted through the distribution network up to Pennsylvania Power and Light Company. Then it would be sold to Pennsylvania Power and Light Company, and not Metropolitan Edison Company.

Q. So under those circumstances, the delivery at Violet Hill substation means that some energy is sold not only to Pennsylvania Power and Light Company, but to Metropolitan Edison Company as well. Is that right?

* * *

THE WITNESS: Some energy—now, what do you mean by that? Some of the energy delivered to Metropolitan Edison [9464] Company's facilities at Violet Hill may not entirely be sold to Metropolitan Edison Company?

By MR. MYSE:

Q. That is right. Isn't that correct? A. That is my understanding of it, yes.

Q. And likewise, some of the energy delivered at the various metering points up in the Pennsylvania Power and Light area may actually be sold to Metropolitan Edison Company. Isn't that right? A. There is that possibility.

I don't know how much or if such a sale is made, but there is that possibility, yes.

MR. GOLDBERG: Are we talking on an annual basis in all these questions?

MR. MYSE: No; over any period.

By MR. MYSE:

Q. Isn't it a fact there is circulating energy between the facilities at Violet Hill and Harrisburg? A. It seems to me I have stated two or three times that that is my understanding, that there is such circulating energy.

Q. And if there is such circulating energy then some of the energy delivered at Harrisburg is actually sold to Metropolitan Edison Company. Is that right? A. It actually may be delivered to Metropolitan Edison Company. As to how they handle it as far as billing, I don't know.

[9465] Q. I am talking about energy delivered at Harrisburg to the facility of Pennsylvania Power and Light Company may be energy that is actually sold to Metropolitan Edison Company. Isn't that right? A. I am saying that energy may be delivered to Metropolitan Edison Company. As to how it is handled, beyond that I don't know.

Q. Do you call energy delivered to Harrisburg on the facilities of Pennsylvania Power and Light Company a delivery to Metropolitan Edison Company? A. No.

Q. Well, when there is such a delivery and there is circulating energy, some of that energy is sold to Metropolitan Edison Company. Is it not? A. I don't know.

Q. You don't know? A. I don't know.

Q. You didn't give any consideration to that factor in your determination of power flow. Is that right? A. I didn't give consideration to that circulating energy, no.

* * *

[9468] Q. Now will you refer to page 9089 of the transcript? There we were referring, if you recall, to the different times when the peaks occur on various systems.

My question to you today is, isn't it true that the maximum demands on the Penn Water-Safe Harbor system by the various companies who make demands on that system come at different times and in different quantities during the Penn Water-Safe Harbor system peak than during Area 6 system peak? Isn't that right? A. I will have to have that one read.

(Question read.)

THE WITNESS: I don't understand that.

By MR. MYSE:

Q. What is it about it that you don't understand? A. I don't understand any of it.

Q. Do you understand what Area 6 system peak is? A. At the moment I don't remember whether Area 6 system peak includes the deliveries by Holtwood to its Pennsylvania customers or not. I know what companies are included in Area 6, but whether or not it includes firm deliveries by Holtwood to its Pennsylvania customers, I don't recall. Its Pennsylvania customers are not in Area 6, they are in Area 5.

Q. Well, you can determine it very readily by looking at FPC Form 12, can you not? I hand you a photostat of FPC [9469] Form 12 for 1944, filed by Pennsylvania Water and Power Company. A. That wouldn't be for Area 6.

Q. Well, does the Form 12 that I handed you show the demand on the Penn Water-Safe Harbor system? A. Yes.

Q. But you would have to look at something else for the Area 6 system. Is that right? A. That is right.

Q. And that something else is FPC Form 12 for 1944 filed by Consolidated Gas Electric Light and Power Company of Baltimore? A. Yes, covering Holtwood, Safe Harbor, Baltimore, Bethlehem Steel and Washington systems.

Q. Now, will you tell me by reference to either one or both of these documents that I referred to what Area 6

system peak means? A. The system peak as reported here excludes Holtwood deliveries to the Pennsylvania customers.

MR. MYSE: May I have that answer?

(Answer read.)

By MR. MYSE:

Q. Well, will you tell me what Area 6 system peak is? A. It includes the combined peaks of the Washington system, Bethlehem Steel Company, the Baltimore Company, the Safe Harbor and Holtwood companies, exclusive of its deliveries [9470] to its northern customers.

Q. In other words, the amount of kilowatts shown as Area 6 system peak would be the demands on all of the systems that you named, exclusive of the demands up to Pennsylvania. Is that right? A. Of the demands in Pennsylvania as supplied by Holtwood, yes.

Q. Now, where in Form 12 does it so define Area 6 system peak? A. It doesn't define it that way. I am interpreting it from the figures reported here. On schedule 13 in which the 108,000 kilowatts representing the power delivered to the systems in Pennsylvania are deducted from the total demand on the system generating plants of those companies that I named.

Q. Now, that report you are referring to was filed by Consolidated Gas and Electric Company. Is that right? A. They prepared the report, I believe, yes.

Q. Does the data in that report conform to your idea of the data that should be reported in determining what the Area 6 system peak is? A. It corresponds to the definition as to how these figures are to be reported in the sales to other utilities who have their own generating facilities or buy power from others to be excluded from this system peak, and of course they are in a different area. The northern customers are in Area 5.

[9471] Q. Now, who determined what these areas are? A. The Commission.

Q. So that the Area 6 is determined by definition of the Commission. Is that right? A. Yes.

Q. Now, will you look at the verification in the form F2 filed by Consolidated for the year 1944 and tell me if there was any qualification on any of the figures contained in that report? A. I am sorry, but I don't believe I understand what you mean by that, "any qualification."

Q. Don't you know what a qualification is? A. Yes, but I am sorry, I don't understand what it is you want me to do.

TRIAL EXAMINER: Just a minute. Now, can you stand somewhere other than right at the corner of the bench looking over the witness' shoulder?

MR. MYSE: I will get another copy.

By MR. MYSE:

Q. Now, may I have an answer to the question? A. Are you referring to the attest on page 36?

Q. That is right. A. There is a footnote there to a statement.

Q. Well, it is short. Why don't you read the attest and the footnote? [9472] A. The attest is as follows: "I have examined the foregoing statement and certify that the answers to the inquiries therein are as full and complete as can be supplied from the records of Consolidated Gas Electric Light and Power Company of Baltimore," which is footnoted "And from data supplied from Pennsylvania Water & Power Company, Safe Harbor Water Power Corporation, Bethlehem Steel Company and Potomac Electric Power Company, and accepted without verification," and then continuing, "and that they are true and accurate, to the best of my knowledge and belief," signed by F. E. Ricketts, Vice President of Consolidated Company.

MR. GOLDBERG: How about the other attest? Don't you think we ought to have that in?

MR. MYSE: All right.

THE WITNESS: There is an attest which precedes the one I just read, which reads as follows:

"I have supervised the preparation of the foregoing statement and certify that it is based upon the records of the company, and is correct to the best of my knowledge and belief." Signed E. J. Knight.

By MR. MYSE:

Q. And there is an asterisk after the word "Company," which refers to the same footnote that you read. Is that correct? A. There is a little blotch over there underneath [9473] the word "preparation," yes, on that copy (indicating) it appears more distinctly and it is after the word "company."

Q. And the copy I just showed you was the original filed with the Federal Power Commission. Is that correct? A. Yes.

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Q. Well, Mr. Roland, regardless of whether or not the demands of the Pennsylvania customers in Pennsylvania are included in the maximum demand at the time of Area 6 system peak, as shown by the Form 12 filed with the Federal Power Commission by Consolidated Company, there are demands at the time of that system peak, are there not, by those customers? A. Yes.

Q. Now, the time of the maximum demands by each of those customers on the Penn Water-Safe Harbor system comes at a different time than the demands by those same customers at the time of Area 6 system peak. Isn't that correct? A. You mean, for example, that the maximum demand say of Holtwood's delivery to Coatesville during the year may not occur at the same hour as the maximum demand on Area 6 peak?

Q. That is right. [9474] A. I don't know, but it is quite likely that it would be at a different hour. I don't know.

Q. And likewise the maximum demands of the other Pennsylvania customers would not occur at the time of the maximum demand on Area 6 system peak? A. I don't know whether they actually did, but it certainly wouldn't necessarily follow that they would occur at that same hour.

Q. Or would the maximum demand on the Baltimore-Safe Harbor system be at the same time as the maximum demand on Area 6 system? A. Not necessarily, no.

Q. The fact is it does not. Is that right? A. I presume the maximum demand by Baltimore would occur at time of high flow, which would not correspond with the Area 6 system peak.

Q. And that time of high flow is usually in the spring? A. Yes.

Q. And the Area 6 peak usually occurs in the fall or winter. Isn't that correct? A. I think it usually occurs some time in December.

Q. Now, the time of the maximum demands by the Pennsylvania customers on the Penn Water system alone might or might not be different than the time of such maximum demands at the time of the Penn Water-Safe Harbor system peak. [9475] Isn't that correct? A. I believe that would be correct, because the Penn Water-Safe Harbor system peak probably would occur also during periods of high flow, which would not correspond with the maximum demands of the northern customers.

Q. And it is also true, is it not, that the maximum demand by Pennsylvania Power and Light Company on the 25-cycle system of Holtwood would occur at a different time than either the maximum demand period on the Penn Water-Safe Harbor system, the Penn Water system alone, or the Area 6 system? A. I don't know when it occurred, but it is quite likely it did not occur at the same hours you mentioned.

Q. Would the maximum demand by Baltimore on the 25-cycle system of Penn Water occur at a different time than the period of maximum demand on the Area 6 system?

A. The maximum demand by Baltimore on the 25-cycle system of Holtwood would again be governed by river flow, which would not necessarily correspond to the maximum demand on the system which you named.

Q. And that maximum 25-cycle demand by Baltimore would very likely occur in the spring. Is that right? A. Yes.

Q. What do you understand the Penn Water-Safe Harbor system to be? [9476] A. As they report in the Form 12, it includes the Holtwood Company and the Safe Harbor Company.

Q. And all of the demands on that system are the demands of all their customers. Is that right?

THE WITNESS: Let me have that question again, please.

(Question read.)

THE WITNESS: That isn't the way it is reported in Form 12 report, Mr. Myse.

By MR. MYSE:

Q. Well, what customers are excluded? A. Philadelphia Electric Company, Edison Light and Power—I am reading now from the 1944 report—Pennsylvania Power and Light Company, Metropolitan Edison Company, Consolidated Gas Electric Light and Power Company.

Q. What schedule are you looking at now? A. Schedule 13.

TRIAL EXAMINER: Did you say those were included or excluded?

THE WITNESS: Those were excluded from the system peak.

By MR. MYSE:

Q. The demand on the system generating plants doesn't exclude any of the demands of the Pennsylvania customers, does it? A. Well, it couldn't. The demand on its system generating plants is the demand on the system generating plants [9477] regardless of any other deliveries to anyone else.

Q. What was that maximum demand in 1944? A. 369,000 kilowatts.

Q. And that was on a sixty-minute basis? A. Yes.

Q. And that was April 19, 1944, 8:00 A. M. Is that right? A. Yes.

Q. Now, the exclusions that you referred to are the demands of various Pennsylvania customers which under Item D of Schedule 13 of the Form 12 report for 1944, are characterized as power delivered to other systems for resale. Is that right?

MR. GOLDBERG: Now, just a minute. That is not complete.

MR. MYSE: Well, let's have the witness' answer.

MR. GOLDBERG: I mean your question wasn't complete. I move to strike the answer, Mr. Examiner, and I object to the question as an incomplete question.

TRIAL EXAMINER: Do you have the report before you?

THE WITNESS: Yes, Mr. Myse read part of the statement for Item D.

TRIAL EXAMINER: Do you agree with what he read?

THE WITNESS: Well, he read it correctly as far as he read, yes.

TRIAL EXAMINER: Do you have anything to add to it?

[9478] THE WITNESS: If I want to complete the statement that is shown in Item D, it should include "Except those listed in Schedule 8, Part A."

By MR. MYSE:

Q. Well, what are included in Schedule 8, Part A? A. None.

Q. So then my statement was correct, wasn't it? A. May we start all over again and get it straight now?

Q. There was no exception, so there was no need to refer to the exception. Isn't that right? A. Well, after looking back at Schedule 8, I find there are no exceptions, so that would have no bearing on what is shown in Item D.

Q. While we are back on Schedule 13, Mr. Roland, at page 9337 of the transcript yesterday you quoted from one of the notes to that schedule starting at line 9 and the record reads, "This item includes the joint entry to the Pennsylvania Railroad", and actually the note reads "This item includes the joint supply to the Pennsylvania Railroad". Isn't that correct? A. That is correct.

Q. I believe you agreed with me, Mr. Roland, and if not you may correct me, that there is a difference between demands measured on a 60-minute or one-hour basis and demands measured [9479] on a 15-minute integrated basis. A. There can be a difference, yes.

Q. And there very probably is, if there are any swings? A. If there are swings there would be a difference, yes.

Q. And likewise there would be a difference between demands measured on a 30-minute basis and demands measured on a one-hour basis. Isn't that right? A. The shorter the demand interval, the greater the difference might be if there are swings.

Q. And the indicated demands on a 30-minute basis, if there are swings, would be higher than the indicated demands on a one-hour integrated basis. Isn't that right? A. That is correct. But I believe you should use the word integrated instead of indicated.

Q. With that amendment, my statement is correct? A. Yes.

Q. And likewise if you had a meter registering instantaneous demands, they would be very much higher relatively speaking than the same demands measured over an hour-integrated period? A. They could be if there are load swings.

Q. And there are usually load swings on most of these customers served by the Safe Harbor-Penn Water system,

are there not? A. I don't know, Mr. Myse. I haven't examined any [9480] information that would indicate to me what the magnitude of load swings would be. I presume there are some. There would be in systems of this kind.

Q. From your knowledge of the flow of power to the Pennsylvania Railroad, isn't it true there are considerable swings on the energy supplied to the Pennsylvania Railroad system? A. Well, without even having looked at any of that data, I would certainly expect there would be load swings on the railroad.

Q. Do you know anything about the steel plant operations in Baltimore? A. No, but usually you get swings on a steel plant.

Q. And to the extent that those steel plants are connected to the Baltimore system, they would create swings on the energy supplied to Baltimore. Is that right? A. Supplied to Baltimore from what? Its own generating sources?

Q. From the system of Penn Water and Safe Harbor. A. It would create a swing on the interconnected system which would include generating facilities of the Washington Company, Safe Harbor in its own plant, Bethlehem Steel and all the plants connected to the system.

[9481] Q. Well, under the method of operation of this interconnected system, who absorbs the swings? A. Well, usually where you have a big hydro system or hydro plant in the interconnected system you let the hydro units take swings.

Q. Well, if the hydro plant doesn't take or absorb the swings, who does? A. I don't know.

Q. And since Safe Harbor and Holtwood are hydro plants connected to the Baltimore system through the 220 lines at least, they take care of the swings as I understand your testimony. Is that right? A. Well, that would be my opinion that a good part of the swing at least would be handled by the hydro units at Safe Harbor and Holtwood.

Q. Well, did you in your study for the purposes of direct testimony study the nature of the flow of energy in connection with the swings we have been referring to? A. No, that was not at all essential to my study.

* * * *

[9489] Q. You there were describing Holtwood and Safe Harbor as run of river plants. Is that right? A. Yes.

Q. Now, actually you can regulate the operation of those plants over a period of more than a few hours, can't you? A. Yes.

Q. And that regulation is from storage at the site or above, isn't it? A. Storage in the Holtwood pond and the Safe Harbor pond.

Q. Is it at the site or above? A. It is at the site at Safe Harbor and above the site at Holtwood, I presume.

[9490] Q. Now, do you know what the definition of a run of river plant is in the Form 12 report prescribed by the Federal Power Commission? A. No, but I can look it up if it is in there.

Q. If you have it there you might look at Schedule 2, Paragraph 4, and tell me how the Federal Power Commission describes a run of river plant. A. " 'Run of river' refers to those plants whose operation cannot be regulated over a period of more than a few hours, either from storage at site or above, but whose operation is, in general, controlled by the volume of flow which must be utilized as it occurs or be wasted."

Q. I believe in your qualifications you said you had something to do with making up this report. Isn't that right? A. Yes, but I didn't make up the definitions which appear in this schedule that you referred to. They were made up at some time after I had ceased working on this form.

Q. Now, since you agree that the operations of both the Safe Harbor and Penn Water hydro plants can be regulated over a period of more than a few hours either from storage

at site or above, you can't say that these plants are run of river plants within the definition of the Federal Power Commission, can you?

* * * *

[9491] THE WITNESS: It is true it would not be a run of river plant as defined in that schedule of Form 12.

By MR. MYSE:

Q. So when you described those plants as run of river plants, you used a definition different from that used by the Federal Power Commission? A. Yes. It is a relative term. You describe plants as storage plants or run of river plants. It isn't a storage plant and it isn't strictly a run of river plant according to that definition there, but it is a relative term and in a good deal of literature prepared by the company they describe it as essentially a run of river plant.

Q. Over what period of time would you require storage operation to be conducted before you would cease to call a plant a run of river plant? A. I haven't any particular limitation in mind.

[9492] Q. One week? A. No. I think that a storage plant would be on a monthly or seasonal basis. It is a purely relative term. I don't believe there is any real limit set up as to when a plant is a run of river or when it is a storage plant. The term is used very loosely.

Q. Are you sufficiently familiar with the operations of these plants to determine whether or not they are ever operated on a seasonal or monthly basis? A. Well, the storage isn't available for a seasonal basis of operation, no.

[9493] Q. What do you mean by seasonal? A. Where you can store enough water in a reservoir to carry out your operations without any further inflow for a substantially long period of time.

Q. What do you mean by a substantially long period? A. Well, there are plants that store up for a period of six months to carry them over for a dry period of several

months in which there is very little inflow during that dry spell. Well, I would call that a storage plant. Certainly the Boulder project would be a storage plant.

Q. Now, actually the Federal Power Commission has a definition of storage plants, too, doesn't it? A. I believe there is one in there.

Q. Well, it is very short, one sentence. Will you read that in Paragraph 4 of Schedule 2 of FPC Form 12?

* * *

[9495] THE WITNESS: The instruction page of Schedule 2 of this Form 12 report defines storage as follows:

> "'Storage' refers to those plants whose operations can be varied as desired because of storage at site or above. This regulation may be weekly, monthly or seasonal."

By MR. MYSE:

Q. Now, it is a fact that both the Safe Harbor and Penn Water plants can be regulated on a weekly basis, at least, because of the storage at the site or above? A. Yes, but there you can see how loosely the term is used. Storage can be weekly, monthly or seasonal. It covers the entire range practically from a week up to a year or two years. It is a very broad term.

* * *

[9502] Q. In your view, does Baltimore have an obligation for the supply to the railroad in Pennsylvania? A. Well, the obligation is one which all three companies—I mean—take on as a whole.

Q. Is it Baltimore's obligation? A. There is no division in the obligation as between Baltimore and Holtwood as far as any part of the railroad load is concerned.

* * *

Q. Now, in your Exhibit 42, you took 20 days and showed the hourly data for those days. My question is, are those [9503] 20 days helpful in determining the average

amount of net backfeed over the year 1944? A. You say, would it be helpful?

Q. Yes. A. Sure, any information you had would be helpful.

Q. Would it give you any indication as to the relative amount of backfeed for the year 1944 if you just looked at those 20 days? A. Not if you just looked at that alone.

Q. What else would you have to look at? A. Well, if you want the real answer, you would have to look at all the days of the year, the hourly readings for all of the year.

Q. As a practical matter, the twenty days you took were largely days of low flow. Is that right? A. I believe most of them were for low flow.

Q. And when I say "low flow" I mean low river flow and that is what you understood, isn't it? A. Yes.

Q. And it is during the days of low river flow that you would expect to find greater amounts of backfeed from Baltimore. Isn't that right? A. Ordinarily that would be true, yes.

* * *

[9506] Q. Do you consider 1944 abnormal from the standpoint of energy flows on the system of the Penn Water-Safe Harbor system?

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THE WITNESS: 1944 was a war year.

* * *

Q. As I understand, that means that whatever abnormality there was arose out of war conditions. Is that right? A. There were some conditions that Mr. Von Eiff explained to me that I believe occurred during some weeks in 1944 that due to war conditions there was a shortage of oil for generation in Pennsylvania, and on occasions more energy was sent up to replace the oil generated energy in Pennsylvania and would not have taken place had it not been [9507] for the shortage of oil.

Q. When you say energy was sent up, you mean there was more backfeed than would have taken place if there had

been no shortage of oil during the war period? A. I don't know whether it would have meant more backfeed or less delivery to Baltimore.

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[9510] Q. Now, Mr. Roland, in addition to this oil shortage situation during the year 1944, it is a fact, is it not, that the war loads were what might be called loads with a flattened load shape because of overtime in industrial plants. Isn't that right? A. Where?

Q. All over the eastern sea coast. A. I don't know what happened all over the eastern sea coast.

Q. Well, how about the industrial plants connected to the systems of the customers of Penn Water and Safe Harbor? A. The load shape for the interconnected system was flatter during the war period than it was prior to the war.

Q. And that was the result of overtime in industrial [9511] plants, wasn't it, generally speaking? A. Yes, it would be the result of operating the manufacturing plants on a 24-hour or 18-hour basis.

Q. And those were all wartime conditions which you wouldn't expect now in peacetime. Isn't that correct A. Well, there would be more of it during the war period.

Q. And that would be an abnormality during the year 1944 as a result of the war, wouldn't it? A. No, I wouldn't say it is an abnormality. As I understand for 1946 the load shape is not so far different from what it was then and we are not in a period of a war now.

Q. Did you have any data for the year 1946 when you prepared your direct testimony? A. I did not.

Q. Where did you get this information about the load shape in the year 1946? A. From the discussions with the engineers of the Baltimore Company.

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[9517] Q. Do I understand you to say, then, Mr. Roland, that you considered neither Exhibit 228 for identification

nor Exhibit 229 for identification in coming to the conclusions you did come to with respect to power flow in your direct testimony in this case in connection with Exhibits 42, 38 and 40? A. As I stated to the Examiner, I didn't use them at all.

Q. You didn't consider them, then? A. I didn't consider them.

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[9534] Q. Now, at page 8834, line 11 through line 13, you stated that the sales in the State of Maryland are the obligation of Baltimore whereas the sales in the State of Pennsylvania are the obligation of Penn Water. What do you mean by obligation in that connection? A. It seems to me in my subsequent testimony there I modified that, or at least I gave my understanding of that.

Q. Well, I don't think I ever referred to this particular testimony before. What is your understanding of that now?

MR. GOLDBERG: Why don't you give the witness an opportunity to look at that testimony. Maybe he has explained it.

MR. MYSE: If he had explained it I don't believe I would ask the question. I don't think he has.

THE WITNESS: Well, at the bottom of page 8836 you asked the same question. What other obligations does it have to the railroad and I said "It supplies power to the railroad but it doesn't necessarily all have to be consumed in Maryland."

By MR. MYSE:

Q. That was going to be my next question, Mr. Roland. How does Baltimore supply the energy you referred to there to the railroad? Just how does it do it physically? A. At what point now are we talking about?

Q. Well, let's say any point on the railroad system. A. Baltimore Company's facilities do not tie in directly with the railroad.

[9535] Q. There is no connection of Baltimore's facilities to the railroad's facilities, is there? A. There is no direct connection of the facilities of Baltimore and the railroad.

Q. Now, in your view how does Baltimore supply energy to the Railroad? A. Over the facilities of the Holtwood Company, the Susquehanna Transmission Company of Maryland and through the facilities of Pepco.

Q. And it uses those facilities in order to make that supply. Is that right? A. Well, the energy is supplied over those facilities.

Q. Now, did you intend your answer at the bottom of 8836 to mean that Baltimore does have an obligation to the Pennsylvania Railroad in the State of Pennsylvania? A. The companies who are parties to the contract agreed to supply the total requirements.

Q. Does it have an obligation to supply the railroad in the State of Pennsylvania? A. It isn't so defined. It is merely defined that the total obligation is accepted by the three parties to the contract, the supplying companies.

Q. Well, then, as I understand your answer now, the obligation of Baltimore Company to the railroad is not confined to the supply of energy in the State of Maryland. Is [9536] that right? A. Its obligation is not defined other than that the three companies are obligated to supply the total railroad requirements.

Q. Is my statement correct, Mr. Roland? A. I don't know how I can answer that any other way than what I have.

MR. MYSE: Mr. Examiner, I think the question is clearly susceptible of a yes or no answer.

TRIAL EXAMINER: It seems to me it is susceptible to a more definite answer if the witness knows.

MR. MYSE: May I have that statement, please?

MR. GOLDBERG: The difficulty with the question is that it asks for a legal conclusion.

MR. MYSE: Do I understand the witness is directed to answer the question directly?

TRIAL EXAMINER: Answer the question.

MR. GOLDBERG: I understand the Examiner's direction is that he make a different answer if he is capable of making a different answer.

THE WITNESS: All I can state, Mr. Myse, is that the parties, supplying companies, agree to supply the total requirements of the railroad, and there is no particular area set aside for an obligation of either one of the companies. It is just a total requirement supplied by all the companies.

[9537] TRIAL EXAMINER: What you mean, then, is that it is not defined in such a way as to limit it to the state of Maryland.

THE WITNESS: It is not defined at all other than to supply the total requirements wherever they might be.

By MR. MYSE:

Q. Pennsylvania as well as Maryland. A. The railroad requirement in Pennsylvania as well as in Maryland is the obligation of the supplying companies.

Q. And that might be the obligation of Baltimore as one of the supplying companies. Is that correct? A. I stated it was the obligation of all the companies.

* * *

[9539] Q. Well, who sells the services or the energy, if you will, that is supplied to the railroad at Conestoga? A. That which is delivered at Conestoga and used in Pennsylvania is sold by Holtwood.

Q. Well, is it sold by anyone else at that point, at Conestoga? A. I don't know.

* * *

[9541] Q. Well, I understood your testimony to be that at least some of the energy which is delivered at Conestoga is sold by Holtwood to the railroad. Is that right? A. That part of it which is used in Pennsylvania would be sold by Holtwood. Now, whether that is considered the sale point, I don't know.

Q. Now, that part of it which you say is consumed by the railroad in Maryland you say is sold by the Baltimore Company? A. Yes.

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[9546] Q. Mr. Roland, is it your testimony that the compensation that Penn Water receives for its services rendered to the railroad in Pennsylvania is received by reason of the document identified in this record as Exhibit No. 11?

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[9548] Q. May I have an answer to my question, Mr. Roland? A. The compensation does not result from Exhibit 11. It results from the fact that power and energy is supplied to the railroad. The railroad pays for it.

Q. Does the railroad pay it to Holtwood? A. The check is made out to Baltimore Company, as I stated before, with the understanding that Holtwood shall receive a part of it. That is a matter of convenience, as I stated before.

Q. Now, isn't that understanding that you are referring to arrived at under the provisions of Exhibit No. 11? A. Exhibit No. 11 provides for the split-up of the money received from the railroad company.

• • •

[9563] Q. Can you tell me how much two-thirds of the daily energy available from the development at Safe Harbor was in 1944?

• • •

[9564] THE WITNESS: I don't believe I understand what you mean by the "daily energy available."

• • •

[9565] Q. Do you or do you not understand what the phrase means? A. Not as you are using it, no.

[9566] Q. So that you are unable to tell me the amount of the daily energy available in the development at Safe Harbor during the year 1944. Is that right? A. I do not know.

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[9577] MR. KING: Before we call Mr. Newlands I would like to report on the homework which the Staff requested of Mr. Gunn during his cross-examination on original cost.

In the first place, Mr. Gunn was requested to ascertain, in effect, whether there was an opinion of the Pennsylvania courts in connection with the litigation with the State of Pennsylvania concerning the amount of the Pennsylvania State Tax against McCall Ferry Power Company for the year ending 1905.

This request was made at pages 7514 to 7519 of the record.

We made the check and have ascertained that there is no opinion of the court in the company's files in connection with this case, and, further, our understanding is that the court rendered no reported opinion.

In the next place, Mr. Gunn was requested to determine whether the testimony of Mr. Harlow contained in Exhibits 171, 172 and part 21 of Exhibit 27 was an excerpt from his direct testimony or from his cross-examination.

We have checked the company's files and find that the excerpts contained in Exhibit 171 apparently were taken from [9578] pages 99 and 100 of the reported transcript in the case of Susquehanna Power Company v. the Proprietors of the Susquehanna Canal in the Circuit Court for Cecil County on January 28, 1907.

This portion of Mr. Harlow's testimony was covered while he was being cross-examined.

The excerpts contained in Exhibit 172 were apparently taken from pages 39 and 40 of the transcript of the testimony of Mr. Harlow on direct examination in the case of Susquehanna Power Company v. the Proprietors of the Susquehanna Canal, condemnation proceedings in Cecil County, dated September 4, 1906.

The excerpts of Mr. Harlow's testimony contained on part 21 of Exhibit 27 were taken from his direct testimony on pages 11 and 12 of the transcript of testimony in the case of Susquehanna Power Company v. the Proprietors of the Susquehanna Canal in the Circuit Court of Cecil County, on January 28, 1907.

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[9579] JOHN M. NEWLANDS.

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[DIRECT EXAMINATION (Continued).]

MR. GOLDBERG: Mr. Examiner, I suggest that before Mr. King begins with his cross-examination of Mr. Newlands that Mr. Newlands be permitted to point out certain typographical errors in the exhibit which he has discovered, and which I am sure Mr. King and everyone would like to know about.

MR. KING: You mean in Exhibit 51?

MR. GOLDBERG: Yes; in several other exhibits, also.

May the witness go ahead with those?

TRIAL EXAMINER: He may.

THE WITNESS: In Exhibit 51, page 23 of part 1, line 19, it reads: "Memorandum of understanding dated April 24, 1907."

[9580] It should read, "April 24, 1909."

MR. KING: Thank you. We have that, Mr. Newlands.

THE WITNESS: Exhibit 51, page 38, part 2, that is the schedules, the item of general office salaries, column 8 reads, "$10,255.94 (b)."

It should read $10,255.94 (a). In other words, the note should be changed from (b) to (a).

Exhibit 51, part 2, page 51, the item of printing stock certificates in columns 5 and 7 should read $1248 in each case instead of $1548.

MR. GOLDBERG: Does that change the total in the column?

THE WITNESS: No, because I have another change in the same exhibit.

MR. GOLDBERG: I see.

THE WITNESS: The item of miscellaneous expenses at the bottom of that exhibit should be increased by a like amount for the same years. In other words, column 5 should read $415.98 instead of $115.96, and column 7 should read $950.28 instead of $650.28.

In Exhibit 51, part 2, page 39, the total at the bottom of the page should read $35,832.15 instead of $25,832.15.

Exhibit 51, page 43, part 2, the item of Simpson, Thacher and Bartlett, legal services, under reorganization expenses, column 2 should read $23,287.21 instead of $23,827.21.

MR. KING: Does that change the sub-total?

[9581] THE WITNESS: No, the sub-totals are correct. It was just a typing error.

MR. KING: Very well.

THE WITNESS: Exhibit 51, page 53, part 2, the line for the year 1910 under column 3 should read $1,277.31 instead of $1,227.31, the total remaining unchanged.

Exhibit 51, page 37 of part 2, the second sub-total on that page, in other words, the sub-total which precedes the total, column 4, should have a reference mark (a) after the $166,087.42 figure.

Exhibit 52, sheet 2, the year 1917, column 9, should read——

MR. KING: Would you wait just one moment, Mr. Newlands?

THE WITNESS: Yes. (Short pause.)

Should read $21,051,748.19 instead of $21,051,758.19.

MR. KING: Figure 4 is the only thing changed?

THE WITNESS: That is right, changed at that point.

Exhibit 51, page 2 year 1918, column 9, should read $21,152,818.51 instead of $21,051,748.19.

MR. KING: As I understand it, the figure should read $21,152,818.51. Is that correct?

THE WITNESS: That is right.

Exhibit 54 is next.

There is an immaterial correction there. One-half of a bracket was left off of the item for transfer between reserve [9582] account at December 31, 1931.

MR. GOLDBERG: Column 3?

THE WITNESS: In column 3; that is right.

MR. GOLDBERG: You are supposed to close the bracket.

THE WITNESS: That is right.

MR. KING: Did you say that was a slightly immaterial correction?

THE WITNESS: I figured people would recognize the other part of the bracket belonged there.

TRIAL EXAMINER: Very well.

THE WITNESS: Next is Exhibit 55, the year 1914, column 12, and it should read $411,977.58 instead of $411,977.51.

Exhibit 57——

MR. KING: Does that change the total in that column?

THE WITNESS: No. That is a total. It adds across and does not change the total at the bottom.

Exhibit 57, the year 1923, column 5, should read $941,292.32 instead of $941,202.32.

MR. GOLDBERG: Would you read that last correction, please?

(Read.)

THE WITNESS: Exhibit 57, year 1918, column 7, it should read $13,204,623.12 instead of $13,204,523.12.

That completes the corrections.

CROSS-EXAMINATION (Continued).

By MR. KING:

[9583] Q. Do you have Exhibit 51 in front of you, Mr. Newlands? A. Yes, sir.

Q. You have heretofore testified, Mr. Newlands, on pages 1100 and 1101 of the transcript that you assumed full responsibility for the determination of your original cost study designated Exhibit 51 in this case. Is that correct? A. That is correct.

Q. Will you name the persons who assisted you in making your determinations, conclusions and recommendations made in this Exhibit? A. If you mean by that the people who worked for me—none of them assisted me in arriving at conclusions——

Q. I mean by that that I want you to name everyone who assisted you in connection with the preparation of Exhibit 51. A. Or in connection with the underlying details?

Q. Correct. A. Mr. T. S. Montgomery.

Q. Who is he? A. An accountant.

Q. All right. A. Mr. T. F. Keavlain.

Q. Is he also an accountant? A. Yes.

Mr. Jules Englander. He is also an accountant.
[9584] Mr. Lyons, also an accountant.

Mr. McGrath. He is an accountant.

You want only the persons who worked on Exhibit 51?

Q. Correct. A. Mr. Epperson.

Q. Who is he? A. He is an accountant.

Mr. Gagnon. He is an accountant.

Mr. Mark Welt. He is an accountant.

That is all I recall at the moment.

Q. Then as I understand it, Mr. Newlands, you had no engineering or legal assistance. Is that correct? A. I had engineering assistance. I accepted the date of commercial operation given by our engineers, but I had no engineering assistance in preparing Exhibit 51 other than that.

Q. As I understand it, then, you had no engineering assistance in connection with any of the conclusions or determinations in Exhibit 51. Is that correct? A. I may have discussed some of the facts with our engineers. How they affected my conclusions I am not able to say now.

Q. What engineers did you discuss the facts with? A. Mr. Howell was over at various times.

Q. Who else? [9585] A. I believe he was the only one I had most of the discussion with. I may have had short discussions with other people but Mr. Howell in chief.

Q. Did he make the determination in connection with the date of commercial operation which you testified you accepted? A. He made the determination and I agreed with it.

Q. You accepted it? A. I accepted it.

Q. Did you have the right, Mr. Newlands, to modify or change Mr. Howell's determination? A. No, I didn't have that right.

Q. As I understand it, Mr. Howell was the only engineer with whom you talked in connection with the preparation of Exhibit 51. A. No, that is not my statement. I said most of my conversations, if I had any, may have been

with Mr. Howell. I may have mentioned items to Mr. Stanley Roland, who was over on various occasions, but none of my discussions with him affected Exhibit 51, and I doubt any of my discussions with Mr. Howell affected Exhibit 51. They may have, but I don't think so.

Q. Did you or did you not have discussions with those gentlemen? A. I had discussions with all of the engineers who came over to Baltimore, but as to recalling just what I discussed, [9586] that is impossible at this time.

Q. Who were all the engineers who came over to Baltimore? A. Mr. Stanley Roland was one. Mr. Howell was another. Mr. Davis was another. Mr. Nelson was another. Mr. Bybuth was another.

Q. Is that all? A. There were one or two others but I don't recall their names at the present time.

Q. How about Mr. Jeffery? A. He was over there, yes.

Q. What was the nature of the discussions you had with those gentlemen? A. As I told you before, it is impossible to recall now.

Q. Do you recall the nature of any of the discussions you had? A. Well, I can recall two or three. I remember discussing flashboards with Mr. Howell, and I may have discussed them with Mr. Roland.

Q. Anything else you can remember? A. I discussed repairs at the toe of the dam with Mr. Howell.

I discussed various of the items claimed from operation and maintenance accounts or from the reserve accounts with Mr. Howell. Which ones specifically I don't remember.

[9587] Q. Does Exhibit 51 reflect any of the substance of any of those discussions with the engineers? A. No. Exhibit 51 is based on my conclusions.

Q. And your conclusions alone. Is that correct? A. That is right.

Q. Except the date of commercial operation. A. That is right.

Q. Did the accountants whom you have named all report directly to you? A. That is right.

Q. And you directed the work they were to perform in making the investigation. A. That is right.

Q. What was the scope of the authority of these accountants whom you have named in conducting the investigation? A. Are you asking me what is the scope of the authority of the accountants who assisted me?

Q. What is the scope of the authority of the accountants whom you have heretofore named and indicated assisted you in making their investigations? A. They did only what I asked them to do and reported to me.

Q. Did you give them directions in writing or orally? A. Orally.

Q. Did you have the right to reverse any conclusions or [9588] determinations made by them if you thought it proper to do so? A. That is right.

Q. Did you actually reverse any of their conclusions or determinations? A. No, because as I recall it they did not make any conclusions.

Q. Then what did they do? A. They abstracted the figures from the records, made analyses, made up statements as I directed them, and things of that nature.

Q. Can you make an analysis without coming to a conclusion? A. Certainly. You merely copy the figures down in a certain order.

Q. Can you make an analysis without exercising judgment? A. Yes, you can.

Q. And that is the kind of analysis they made? A. They made the analysis I directed.

Q. And without exercising any judgment. A. I directed them as to what they were to put down and how they were to do it.

Q. Therefore they exercised no judgment. Is that correct? A. Very limited. There might have been some judgment involved.

[9589] Q. I thought you said no judgment was necessary.

A. There would be judgment involved in following my instructions for one thing.

Q. You mean because they were unclear? A. No, because it involves interpreting them.

Q. Can you give us an example which would involve interpreting any of the instructions you gave those gentlemen? A. I might have asked one of my assistants to make an analysis segregating certain types of charges, or segregating charges to the account in a certain way, grouping them in a certain manner, in other words.

The actual segregation of those charges by those groups would involve some determination on the part of the persons doing the work.

Q. In that situation, then, your assistants would exercise to a limited extent, total judgment in some instances, wouldn't they? A. They might if no explanation were given of the items involved. Usually we had a description of the items so I could tell later on in examining the work whether they classified it properly.

[9590] Q. Did you have that description before the investigation began? A. I had no descriptions before the investigation began.

Q. You mean whatever descriptions you gave them resulted from the investigation? A. I was referring to the descriptions which the accountants might copy down on their working papers of the items they had taken off.

Q. Then all of the people who actually—— Strike that, please.

All of the employees, then, of the Federal Power Commission who assisted you other than Mr. Howell were directly under your supervision. Is that correct? A. That is right, all of the accountants were directly under my supervision.

Q. Didn't you just testify that the only engineer who assisted you was Mr. Howell? A. That is right. Your statement is correct. I merely wanted to make certain of it.

By the way, with regard to the last statement, Mr. Howell did not assist me. I merely discussed matters with him.

Q. Well, if you include some data with reference to date of beginning of commercial operation, and Mr. Howell [9591] concluded that, wouldn't you call that assistance? A. With that exception.

Q. Then as I understand it, the only assistance you received from the accountants working under you was of a detailed nature. In other words, they just took figures off the books and reported to you. Is that correct? A. That is right.

Q. Do you now occupy the same position with the Federal Power Commission that you occupied at the time of the investigation in this case? A. Do you mean at the time of the beginning of the investigation?

Q. And straight through. A. No.

Q. All right. What was your position at the beginning of the investigation? A. I was a Principal Examiner of Accounts at the beginning of the investigation.

Q. Has your status changed during the investigation? A. Yes.

Q. To what? A. I am now a Chief Examiner of Accounts.

Q. That is the only change made? A. That is correct.

MR. GOLDBERG: That represents advancement, if I may [9592] interpose.

THE WITNESS: Yes, that represents advancement.

By MR. KING:

Q. Who is your immediate superior in the Federal Power Commission? A. Mr. Edward L. Dunn.

Q. Was he your superior during all the time you conducted the investigation? A. That is correct.

Q. So that the change in your status has not changed your relation with Mr. Dunn. Is that right? A. That is true.

Q. Will you please describe in some detail the scope of your responsibilities in connection with the two positions you have just referred to? A. Either one of the positions would involve heading field parties to make studies of the books of licensees or public utilities for the purpose of determining original cost or securing information for rate cases, or any other purpose which the Commission desired me to undertake.

Q. That is the scope of both positions? A. That is true, except that the Chief Examiner of Accounts usually would undertake the larger utilities, but either rank would constitute heading a field party.

Q. What do you mean "undertake larger utilities"? [9593] You mean the work in connection with larger utilities? A. I mean utilities larger in size in total assets.

Q. Work on them would not come under you? A. No, that was not my statement.

Q. Will you explain? A. I am saying that a Chief Examiner of Accounts would ordinarily be assigned to the larger public utilities.

Q. And you would be assigned to the small ones? A. A Principal Examiner of Accounts would be usually assigned to the smaller public utilities, but there is no strict dividing line. The Commission can do what it likes.

Q. That means you are generally assigned to work on the cases involving smaller utilities? A. No, that is not true.

Q. You work on both? A. I work on both.

Q. You generally have responsibility for work on larger utilities? A. That is right.

Q. That is full responsibility in connection with the work on them as well as on the smaller utilities? A. I might have, yes. As a Principal Examiner of Accounts I could be assigned to a utility of any size.

Q. Have you ever been so assigned to the larger [9594] utilities? A. No, not in complete charge of the work.

Q. What is your understanding of the difference between a small and large utility—dollarwise or what? A. Total assets.

Q. Where is the dividing line so far as assets are concerned? A. I don't know. I never have heard that described.

Q. Who determines that? Somebody other than you? A. I imagine it would be the head of our particular division.

Q. How many persons in the Federal Power Commission are there who occupy superior positions in the accounting department over you, exclusive of members of the Commission?

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[9595] THE WITNESS: Are you referring merely to the accounting division that I happen to be in?

MR. KING: The accounting department of the Federal Power Commission.

THE WITNESS: The accounting department is divided into several divisions.

By MR. KING:

Q. How many divisions? A. There is a division of original cost.

Q. Is that your division? A. No, that is not.

Q. What is the next one? A. There is a division which takes care of rate cases and general accounting matters.

Q. Is that your division? A. Yes.

Q. All right. Will you confine my question to your [9596] division? A. I never have made a determination of the number of persons who had superior rank to me.

Q. You said Mr. Dunn did. Is that correct? A. Yes.

Q. Is there anybody else who has superior authority in your division? A. Yes.

Q. Who is it? A. Mr. Baker is the head of the division.

Q. Who else? A. By your question now do you mean persons who had authority to direct my work?

Q. Correct. A. Or change my conclusions?

Q. Correct. A. Mr. Smith, of course, was head of the Bureau of Accounts and Rates. He could do that.

Q. Is there anybody over you who has power to change your determinations or conclusions other than Mr. Smith, Mr. Baker and Mr. Dunn? A. There would be no others on this case.

Q. Did the gentlemen to whom you have referred reverse any of your determinations or conclusions in connection with this investigation? [9597] A. Not that I recall. We had discussions of problems, but there was no reversal of conclusions.

Q. Were those discussions before you reached your conclusions in Exhibit 51? A. Yes, that is right.

Q. You can not remember whether your conclusions were changed as a result of those discussions or not. Is that correct? A. No, they were just general discussions of the problem.

Q. Then your conclusions were not changed as a result of those discussions, is that correct? A. No, because I had not reached conclusions.

Q. Did you have any discussions after you had reached your determinations and conclusions in Exhibit 51 with the gentlemen you have just mentioned? A. I had no discussions which would be reflected in changing the conclusions I had reached. We may have discussed those things over again.

Q. Did the discussions which you had with Mr. Dunn, Mr. Baker and Mr. Smith prior to the completion of Exhibit 51 have any effect upon the preparation of the Exhibit? A. They may have, but I don't recall now.

Q. Can you give us an example of the type of discussions you had with those gentlemen? [9598] A. Well,

we discussed the determination of interest during construction, for instance.

Q. Anything else? A. We discussed the allowance of items claimed by the company from depreciation reserves or operating and maintenance in a general way.

Q. Anything else? A. We discussed the history of the development, that is, the transfer of properties to McCall Ferry Power Company and the issuance of stock, Aldred's activities, the reorganization of Pennsylvania Water and Power Company, and things of that sort.

Q. When you refer to the history of the company, do you refer to the material contained in Exhibits 26 and 27 in this case? A. No, we didn't discuss the companies exhibits as such. We discussed the facts relating to the history.

* * *

Q. Mr. Newlands, Mr. Baker and Mr. Smith, to whom you referred, are both accountants, is that right? [9599] A. That is right. Mr. Smith is also a lawyer, I believe.

Q. How did these discussions you had with Mr. Dunn, Mr. Smith and Mr. Baker originate? A. Well, Mr. Dunn made various visits over to Baltimore and at times stayed there to see how the work was progressing. At that time I would discuss matters with him.

Mr. Baker and Mr. Smith came over only occasionally, perhaps two or three times, and then it was merely a discussion of how the work was progressing, some of the main problems, and so forth.

Q. So that all of the discussions with these gentlemen occurred in Baltimore. Is that correct? A. That is correct.

Q. From what you have said is it a correct statement that you originated the discussions? A. Do you mean who spoke first?

Q. That is one test of who originated them. A. It was a matter of merely sitting around a table and discussing matters.

Q. Did you request—Excuse me. Go ahead. A. Mr. Smith or Mr. Dunn might have asked me to describe the history of the project or might have asked questions about certain parts of it. But there was no leader of the discussion. It was a general discussion.

[9600] Q. Did you request either one of the three gentlement to come to Baltimore at any time? A. No. I made no definite request for them to come.

Q. How about Mr. Howell? Did he come to Baltimore? A. Yes.

Q. Did you have any discussions with him in Baltimore? A. Yes.

Q. Were any of the discussions which you had in Baltimore with Messrs. Smith, Baker and Dunn reflected finally in Exhibit 51 when it was prepared? A. The discussions as such are not reflected, no.

Q. Is the effect of the discussions reflected in Exhibit 51? A. They may have been. Just what effect they had I would not be able to recall at this time.

Q. Did any of those gentlemen direct you to put any particular determination or conclusion in Exhibit 51? A. No.

Q. Did you ask any of the three gentlemen whether you could put any of your conclusions or recommendations or determinations in Exhibit 51? A. No, it would be generally understood that my conclusions would be reflected in Exhibit 51. That is an understood matter, and they would reflect the results of my discussions with any other person.

[9601] Q. But you assume full responsibility for those decisions, determinations and conclusions. Is that correct? A. That is right.

Q. Did you include any conclusions or determinations or recommendations in Exhibit 51 at their direction? A. No.

Q. Did they object to any of the conclusions or recommendations that you did include in Exhibit 51? A. No. I am afraid if they had objected they probably wouldn't have appeared there.

Q. Does that mean that they had full authority to review and reverse your decisions, conclusions and recommendations? A. That is right.

Q. But as I understand you, they did not reverse any of your conclusions and recommendations? A. That is right.

Q. Then the reason why you can assume full responsibility for Exhibit 51 is because they did not reverse any of your decisions. Is that correct? A. No, I would assume full responsibility in any case.

Q. Even though you did not agree with what they directed you to do? A. In that case it would still be my responsibility.

[9602] Q. To defend it? A. That is right.

Q. Whether you agreed with it or not? A. Of course, we are talking about a hypothetical instance now, but I assume that would be so, yes.

Q. Now, Mr. Newlands, if it were demonstrated to you satisfactorily that you had made an error, either in fact or in connection with your conclusions, recommendations and determinations in Exhibit 51, are you in a position now to admit the error, or do you first have to obtain authority from somebody else to do so? A. I could admit if there were any errors in Exhibit 51 that such was the case.

Q. Are you free to change your mind in connection with any of the determinations and conclusions in Exhibit 51 if you deem it proper to do so without consultation or authority from anybody else? A. If that were based on facts which would change my conclusions I would be free to change my mind.

Q. All of your conclusions and recommendations are based on facts, aren't they? A. That is right.

Q. Let us suppose you were convinced you drew erroneous conclusions from the facts. Are you free to change your mind without obtaining authority from anybody? [9603] A. Yes, I believe so.

Q. I notice, Mr. Newlands, that Exhibit 51 is signed by you and Mr. Edward L. Dunn. Will you please indicate the scope and limitations of Mr. Dunn's responsibility in connection with Exhibit 51? A. Mr. Dunn was the supervising accountant on the job and he had general power to direct me if he wished, he had general power to review the work I was doing and the conclusions I was drawing.

Q. Did he exercise any of those powers? A. I believe you will have to ask him that question.

Q. Don't you know? A. I don't know what goes on in Mr. Dunn's mind, no.

Q. You can judge what goes on by his actions, can't you? A. Not necessarily.

TRIAL EXAMINER: Don't argue about this now.

By MR. KING:

Q. Why did Mr. Dunn sign the report, do you know? A. Because he had general supervision over the work I was doing.

Q. Did he personally review any of the facts or conclusions developed by you? A. Yes, we discussed a great many of the facts and conclusions that are now in Exhibit 51.

[9604] Q. Why didn't the accountants whom you have heretofore named who worked under your direction sign Exhibit 51? A. Because they had almost no responsibility except to obtain the figures for me.

Q. Then as I understand it, the main reason Mr. Dunn signed the exhibit is because he has direct supervision over you. Is that correct? A. That is right.

* * *

[9610] Q. Mr. Newlands, did you personally dictate the contents of Exhibit 51 in its present form? A. That is right.

Q. I assume, of course, you had with you from time to time while dictating those contents either some or all of

the accountants who assisted you. Is that right? A. They were present while I was writing Exhibit 51.

• • •

[9612] By Mr. King:

Q. You also went to the files, didn't you, or your assistants did? A. That is right; we requested them from the company.

Q. Your assistants had to exercise judgment, did they not, as to what documents they thought necessary to get from the files? A. Usually my directions were explicit enough so that [9613] the documents which they were to secure would be known to any accountant.

Q. Is that true as to correspondence? A. Are you talking about the fifteen filing cases now specifically?

Q. Yes. A. I directed the examination of those files myself. No one did anything on them unless I told them exactly what to do.

Q. Then do I understand you to mean that you personally know all of the documents that were taken out of those fifteen filing cases? A. You mean all of the documents which were examined in the fifteen filing cases?

Q. Correct. A. Do you mean by that did I personally examine all of the documents which we requested from the fifteen filing cases?

Q. That is one thing I am inquiring about. A. No, I examined most of them but not all of them.

Q. I thought you said you were present when all the documents were taken from those filing cases. A. That is right. I always determined which files were to be secured. I determined then which ones I was to examine personally, which was most of them. I turned over a very few files to my assistants to look through where I thought there [9614] was nothing of any importance in them.

Q. How did you know which portion of those files was material unless you examined them all? A. Because they were classified, all of that correspondence was classified under various headings and subjects.

Q. And you could tell by looking at the heading of the subject whether the material in those files was material enough in your judgment? A. Yes, in most cases. In some cases I might have to look through a little bit to determine the exact nature of the files.

Q. But in some cases you didn't have to do that. Is that correct? A. Well, I believe in every case, as a measure of protection, I did take a look at what was contained in the file to make certain there was nothing important.

Q. What do you mean "a measure of protection"? A. To determine that the file was unimportant or contained unimportant material.

Q. Did you do that in every instance? A. That is right.

Q. Did you read all of the correspondence on the film upon which the company recorded correspondence? A. No, I did not read the full film.

Q. Did you read any of them? [9615] A. Yes.

Q. How did you know what you did not read was material or not if you didn't read it? A. The company extracted various letters from that film which they considered important, so that I saw a great deal of the material on that film as carbon copies of correspondence.

Q. Then you looked only through what you thought the company thought was important. Is that right? A. Plus the portion of the film I saw myself.

Q. And you assumed that the portion you did not see the company did not think was important. Is that correct? A. I didn't have to make any assumption in the matter. I considered that the documents I had secured were sufficient for my purpose.

Q. And you made that determination without looking at the balance of them. Is that correct? A. That is right.

Q. Do you consider that a sufficient study for your determination? A. I think it is.

• • • •

By Mr. King:

[9616] Q. Could you tell what the correspondence files contained by reading the summaries, the card summaries? A. That gave a general view of what was contained in the files, but as I understood it those index files were not complete, anyhow. But it did give a general bird's eye view of the material.

Q. A brief summary appeared on the card. A. Yes. As a matter of fact, those cards sometimes contained reference to the film, also.

Q. Could you give us some idea as to the number of files that you did not examine? A. No, I couldn't.

Q. Would you say you examined half of them?

• • •

The Witness: Based on the index I would say I had examined half of them. But the company had no list of those files, although I requested repeatedly whether they had such a list in order for me to determine which files were available and which ones I wanted to inspect.

By Mr. King:

[9617] Q. All the files were available to you, weren't they? A. They were available in the filing cabinets, but only as I requested the company for certain files. I had no list of them.

Q. You could have gone to the filing cases and ascertained what was there, could you not, or your assistants could have? A. It might have been possible to do that. They never offered to let me go through the fifteen filing cases.

Q. Did you ask to do it? A. No, I did not.

Q. They didn't say you couldn't, did they? A. No.

Q. Did they give any indication that they would object to your doing so? A. Not that I know of except that whenever we asked for information it was always secured by the company from the files. As a matter of fact, we were usually told it would take a certain time to get the

information. In some cases that meant several days, several weeks, or even several months.

• • •

[9628] Q. Mr. Newlands, was it necessary for you to seek or secure legal advice in connection with the preparation of your Exhibit 51? A. No.

Q. I believe you said Mr. Baker was a lawyer as well as an accountant? A. Mr. Smith.

Q. Mr. Smith—excuse me. A. Yes.

Q. Did you get any legal assistance from Mr. Smith? A. If he gave it to me he didn't call it legal assistance.

Q. You know the difference between legal assistance and accounting assistance, don't you? A. Not necessarily. There might be occasions where you could not draw a distinction, where the person receiving the knowledge or assistance might not know whether it was legal assistance or not.

Q. What would be an example of that? [9629] A. Regarding the period of cessation. I don't know whether any of our discussions regarding the period of cessation were such that Mr. Smith was using his legal knowledge or legal information or not. So far as I know he was using his accounting knowledge.

Q. Don't you know the difference between a legal determination of a so-called cessation period and any other kind of a determination, if there is any?

• • •

THE WITNESS: I think I might be able to tell you but I don't know what was in Mr. Smith's mind when he was talking to me. So far as I know he was talking from accounting considerations.

By MR. KING:

Q. What did Mr. Smith say to you in connection with the so-called cessation period? A. I can't recall his conversations so far back as that. As far as I know he didn't

give me any legal assistance. I am saying I don't know what was in his mind. He is a lawyer.

Q. If you can't remember what he told you how do you know what he told you related to accounting and not law? A. Because I can remember the general tenor of the discussion.

[9630] Q. What was it? A. What actually happened during the period.

Q. You mean you told him what happened or he told you? A. We discussed it.

[9631] Q. You told him what? A. I told him the history of the cessation period.

Q. What did you tell him? A. What work was going along, when it stopped, when it started up again, and so forth.

Q. What did he tell you? A. He agreed with me after discussing the items that that cessation period should be eliminated in the determination of the construction period.

* * *

[9632] Q. You are not an attorney, are you, Mr. Newlands? A. No, I am not.

Q. Then Exhibit 51 does not reflect any legal advice from any attorney. Is that correct? A. That is correct.

Q. Mr. Newlands, is the Ohio Fuel Gas Company investigation which you referred to in your direct testimony the only accounting investigation you have had complete charge of since your employment by the Federal Power Commission with the exception of this present case? A. Well, that would need qualification. In the Southern Carbon Case I had charge of the determination of original cost, although another man was supervising the whole job.

Q. Is that the only other one of which you had [9633] complete charge regarding original cost? A. Yes, I believe so.

* * *

Q. Mr. Newlands, is it your opinion as an accountant that the function of the art of accounting is to report facts? A. It records facts, but it also records the conclusion of the person who orders the recording. Its purpose is to record facts.

• • •

[9634] Q. Does an accountant have a right to change the facts? A. No, he doesn't.

• • •

[9640] Q. Do you think it is the function of an auditing [9641] accountant to modify the transactions he finds recorded?

• • •

THE WITNESS: It is the function of an examining auditor to examine the facts and determine how they should be handled according to correct accounting principles. If that involves modifying something on the books, that is making a statement different from what appears on the books, he should do that.

By MR. KING:

Q. Has he a right to modify the significance of those recorded transactions?

• • •

[9642] THE WITNESS: I don't see how anyone could modify the significance of something recorded. The significance remains the same whatever the examining auditor determines should be the proper accounting disposition of the items.

• • •

[9644] Q. Will you please turn to Schedule 1, page 1 of Exhibit 51? Do you have that schedule before you? A. Yes, I have.

Q. Does that schedule contain a consolidated balance sheet as of December 31, 1945, of Penn Water and Power Company? [9645] A. That is right. It does not include

a couple of small inactive subsidiaries, which would make no difference in the general picture.

Q. Page 1 of that schedule lists the assets and other debits of Penn Water and Power Company. Is that correct? A. That is right.

Q. The first group of assets is entitled "Electric Plant." Is that correct? A. Yes.

Q. Now, Mr. Newlands, does the listing of items of Electric Plant indicate to you that the company owns that property? A. Yes, that would usually be the case.

* * *

[9647] Q. Mr. Newlands, who determines the question of whether Penn Water owns the items listed under electric plant on page 1 of the schedule of Exhibit 51?

* * *

THE WITNESS: So far as I know it is a legal matter to determine whether Penn Water owns it or not.

By MR. KING:

Q. And not an accounting matter? A. So far as strict legal ownership is concerned that is true.

Q. Mr. Newlands, did you make an inventory of the property listed under electric plant on page 1 of the schedules [9648] in Exhibit 51 at the time you were making your investigation? A. No, I did not. I understand the company made an inventory.

Q. You did not? A. That is right.

Q. Did any of your assistants? A. No.

* * *

Q. Excuse me. Strike that question, please.

The next item appearing on page 1 of the schedule we are discussing is entitled "Investment and Fund Account." Is that right? A. That is right.

Q. Who determines the ownership of the items there listed? A. My answer to that would be the same as to the previous classification.

Q. The next listing on the page we are discussing is entitled "Current and Accrued Assets." Is that correct? A. That is right.

Q. Would your answer be the same as to the items listed under that heading? [9649] A. Yes.

Q. Mr. Newlands, the next listed item is entitled "Deferred Debits." Is that right? A. That is right.

Q. Would your answer be the same as to those items? A. Yes, so far as it is applicable. Some of those are merely delayed expenses.

Q. Turn to the next page, Mr. Newlands, page 2 of the schedule of Exhibit 51. That page lists liabilities and other credits of the Penn Water and Power Company as of December 1, 1945. Is that correct? A. That is correct.

Q. The first item on that page in the left-hand side is entitled "Capital Stock." Is that right? A. That is right.

Q. What do you mean by common stock listed under Capital Stock? A. That is the name which appeared on the certificate, I believe, and the name which appeared on the charter.

Q. Who determines the rights of common stockholders?

* * *

[9650] THE WITNESS: You would have to obtain legal advice because the rights would be determined by the law of the land.

By MR. KING:

[9651] Q. That is the same as to the preferred stockholders, is it not? A. That is right.

Q. The next item on page 2 of the schedule is entitled "Long Term Debt." Is that right? A. That is right.

Q. That includes mortgage bonds, isn't that correct? A. That is right.

Q. What is your understanding of the term "Mortgage Bond"? A. That generally means that the bonds have a lien on the assets of the company or certain property of the company.

Q. Rights of bondholders is determined by law, isn't that right? A. That is right, ultimate rights would have to be determined legally.

Q. In connection with the next to the last item, "Reserves," what do you understand to be the meaning of reserve for depreciation of electric plant?

• • •

THE WITNESS: It is an account set up on the books to [9652] measure as nearly as possible the expired service life of the company's property.

By MR. KING:

Q. Who determines what use the company may make of this reserve? A. I don't understand what you mean by that question

Q. What don't you understand about the question? A. The reserve account is a nominal account on the books. There is no specific asset back of it, so I don't know what you mean by your question, who determines what should be done with it. There are no assets involved to do anything with.

Q. Is the company subject to any control in connection with that item by anybody?

• • •

[9654] "Q. Is the company subject to any control in connection with that item by anybody?"

TRIAL EXAMINER: Objection is overruled.

THE WITNESS: Regulatory authorities in the case of public utilities have the authority to prescribe how depreciation reserves should be set up.

By MR. KING:

Q. And the regulatory authorities are limited by the law creating them, isn't that correct?

• • •

THE WITNESS: I don't know what the answer is from a legal standpoint, but from an accounting standpoint I would say that would seem to be a reasonable answer.

By MR. KING:

Q. I want it only from an accounting standpoint, Mr. Newlands.

Now, Mr. Newlands, is it a fair statement that the right, title, interest, or obligations of Penn Water and Power Company in connection with every item we have discussed on pages 1 and 2 of the schedules of Exhibit 51 are determined by law?

• • •

[9656] THE WITNESS: The rights, title and interest of a company in its property, the rights, title and interest of the common stockholders and bondholders, are determined as a matter of law.

By MR. KING:

Q. And that includes obligations, too, does it not, Mr. Newlands? A. That would include the right, title and interest of the company as opposed to the right, title and interest of the creditor, that is right.

• • •

[9657] By MR. KING:

Q. Have you had any experience in connection with financial matters, Mr. Newlands, in addition to accounting? A. I have worked on audits of financial firms, but that is the extent of my financial background.

Q. You do not consider yourself an expert in connection [9658] with financial matters? A. That is right.

Q. Other than in the situation you have just described. A. That is right.

Q. Have you ever testified in any court or administrative tribunal as an expert on financial matters? A. No, I have not.

Q. Have you ever testified in any administrative tribunal or court proceeding as an expert in connection with valuing stock of corporations, either preferred or common? A. No, I have not.

Q. Do you consider yourself individually or as an accountant an expert in connection with valuing corporate stock? A. No, I do not.

Q. Have you ever testified in any court or administrative proceeding in connection with valuing land? A. No.

Q. Do you consider yourself as an individual or as an accountant an expert in connection with land values? A. No.

Q. Have you ever testified in any administrative tribunal or court in connection with engineering matters? A. No.

Q. Do you consider yourself individually or as an [9659] accountant an expert in engineering? A. I do not consider myself an expert in engineering.

Q. I direct your attention to column 4, Mr. Newlands, Schedule 3, Sheet 1 of Exhibit 51. A. Column 4, Schedule 3, what sheet number?

Q. Sheet 1. I believe that is page 7 of the table. Do you have it in front of you? A. Yes.

Q. Will you identify in column 4 of page 7, the amount opposite 301, Franchises and Consents of $64,004.61? A. That is the amount the company classified as the cost of the fishways.

Q. Did you eliminate this item from the company's electric plant in service reclassified? A. No, I transferred it to Account 322, Reservoir, Dams, and Waterways.

Q. Who made the determination to transfer this item? A. I did.

Q. Did you have any assistance in connection with arriving at your conclusion and determination? A. No.

Q. That is to transfer this item? A. No, the conclusion was my own.

Q. Mr. Newlands, I show you photostatic copy of document entitled "Memorandum for Mr. Edgar C. Coffman, Chief [9660] Division of Rates and Certificates." It is dated September 10, 1945. This document is a photostat of working papers of the Staff. I ask you to examine it.

MR. GOLDBERG: Whose working papers?

THE WITNESS: This is all one document?

By MR. KING:

Q. Yes. Have you ever seen this before? It is signed by Mr. Roland and Mr. Howell. A. I have never seen the document.

MR. GOLDBERG: Whose working papers did you say?

MR. KING: Signed by Mr. Roland and Mr. Howell. I assume it came from the working papers of either one or both of those gentlemen.

MR. GOLDBERG: All right.

MR. KING: I think probably Mr. Roland.

• • •

[9661] Q. I show you page 5 of this document and refer you to the first full paragraph on that page which states, "When the hydraulic testing laboratory was built prior to the beginning of Safe Harbor plant, the use of the original ice chutes and the original fishway located on the Lancaster side was abandoned. A new fishway on the York side was built and is in operation though indifferently so. Oddly enough the company's books reflect the cost of these fishways as intangible assets and represent the cost of securing rights from public authority. Technically they are intangible and non-depreciable, but the accountants can be depended upon to apply a correct treatment of this item.

"The ice chutes were never replaced, but the opening beyond Number 10 intake and the log chute at the skimmerwall seemed to prove adequate."

MR. GOLDBERG: What is the question?

By MR. KING:

Q. I ask you to examine that paragraph, and state whether you are the accountant who could be depended upon to apply a correct treatment of this item?

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[9663] THE WITNESS: I don't know. I have never seen this memorandum, never had any knowledge of it, and don't agree with the contents of a large part of the paragraphs you read.

MR. KING: May I have the last answer, please?

(Answer read.)

By MR. KING:

Q. In what respect do you disagree with the contents of that paragraph? A. Where they stated that the cost of the fishways represented an intangible item and was reflected as an intangible item on the books. It is not reflected as an intangible item on the books. It is reflected in the construction plant account. I don't believe that is an intangible item, which is a conclusion drawn by the writer of this letter.

MR. GOLDBERG: That is what always happens to an engineer's view of accounting matters.

May I see that document, Mr. King?

MR. KING: Certainly.

By MR. KING:

Q. Then as I understand it, Mr. Newlands, you disagree with Mr. Howell's and Mr. Roland's determination that the item [9664] is an intangible and non-depreciable one, is that right? A. I disagree with that statement which appears there if that is Mr. Roland's or Mr. Howell's determination. I don't know whether it is or not.

Q. Upon what do you base your conclusion in connection with your disagreement with the statement of those two gentlemen, namely, Mr. Roland and Mr. Howell? A. I base my conclusion on my knowledge of the facts.

Q. What are the facts? A. The facts are that the company built fishways, a tangible item, capitalized them in their construction accounts and in their plant accounts, and they remain to this day on the books in the construction plant accounts.

Q. But they have been reclassified into the intangible account, is that correct? A. In the company's proposed reclassification they have reclassified them as intangibles.

Q. Have you ever seen the fishways there? A. I believe I saw the Lancaster side on a visit to Holtwood.

Q. Did you see the other side? A. No, I never was on the other side of the river.

Q. Do you think you would recognize the fishway on the other side if you saw it? A. I have seen pictures of it. I believe I would.

* * *

[9665] Q. Did you consider in arriving at your determination, Mr. Newlands, Part 35 of Exhibit 27, which is the Court order of the case of Commonwealth of Pennsylvania v. McCall Ferry Power Company?

MR. GOLDBERG: What determination is that?

MR. KING: Determination we are discussing concerning the fishways, that it was tangible property.

THE WITNESS: Yes, I considered that because the company called it to my attention.

By MR. KING:

Q. Did you consider that before or after you arrived at your conclusions and determinations as to this item in Exhibit 51? A. Before.

Q. And arrived at your conclusions with knowledge of that order and the contents of that order?

* * *

[9666] Q. You have already testified, have you not, that you made all of the determinations in connection with Exhibit 51 and received detailed help only from the accountants who worked under your direction? A. That is right.

* * *

[9672] Q. Mr. Newlands, assume that there is an agreement between Safe Harbor Water Power Corporation and the Board of Fish Commissioners in the Commonwealth of Pennsylvania providing that Safe Harbor Water Power

Corporation shall pay the Board of Fish Commissioners of the Commonwealth of Pennsylvania $4,000 a year in lieu of the construction of fishways. Would that fact have any bearing in your opinion in connection with your treatment of the item of fishways in Penn Water?

• • •

[9673] THE WITNESS: That hypothetical assumption will not change my determination.

• • •

[9674] By MR. KING:

Q. Before the completion of Exhibit 51, or since that date, did you have any information, either oral or written, which would indicate to you that Safe Harbor Water Power Corporation does pay the Board of Fish Commissioners of the Commonwealth of Pennsylvania $4,000 annually in lieu of construction of fishways? A. Only what I have been told by the company.

Q. What were you told by the company? A. I was told that Safe Harbor was making a payment to the Pennsylvania Commission.

Q. When were you told that? A. Probably in the latter part of 1945.

Q. Is that before or after you completed Exhibit 51? A. That was before the completion of Exhibit 51.

Q. Mr. Newlands, assume Penn Water had not constructed [9675] the fishways but was making, in lieu thereof, an annual payment to the Board of Fish Commissioners of the Commonwealth of Pennsylvania. Should that payment be treated as an operating expense? A. I think it should be.

Q. Mr. Newlands, I show you a document entitled "Agreement Between the Susequehanna Power Company, Philadelphia Electric Power Company, and the Conservation Department of Maryland, Board of Public Works of the State of Maryland, and Board of Fish Commissioners of the Commonwealth of Pennsylvania for Fish Stocking at Conowingo Pool," dated August 1, 1929.

I ask you to examine that and tell me whether you have ever seen that agreement or a copy of it before. A. No, I have never seen this agreement.

• • •

[9676] Q. Did anyone tell you—any representative of the company—that the so-called Conowingo Company paid $8,000 a year annually to the Board of Fish Commissioners of the Commonwealth of Pennsylvania and the Conservation Department of Maryland in lieu of the construction of fishways at Conowingo Dam? A. No one told me the exact amount of the payment being made. I have a recollection that at the time I was told of the Safe Harbor payment it was mentioned that Conowingo made a similar payment.

Q. Were you told that those payments were treated as operating expenses by those two companies, namely, Safe Harbor and the so-called Conowingo Company? A. No, I don't believe I was.

• • •

[9677] Q. Now, Mr. Newlands, if you knew about the existence of the payments made by Safe Harbor and the Conowingo Company to the representatives of the State of Pennsylvania and Maryland, why didn't you ascertain the facts concerning those payments before you completed your Exhibit 51 and made your determinations as to fishways? A. Because in my opinion the payment of those amounts had no bearing on the determination of whether the fishways should be classified as an intangible or as tangible property.

Q. So then you did take the facts as to the existence of these payments into account in your determination as to fishways in Exhibit 51? A That is right.

• • •

[9680] Q. Will you refer to page 60 of the Schedules in Exhibit 51, Mr. Newlands? A. Yes, sir.

Q. Do you have that page before you? A. Yes, I have.

Q. Do you not state there, Mr. Newlands, that the expenses listed on that page were all incurred by Pennsylvania Water and Power Company in connection with the negotiation of a contract with the Conowingo Company covering annual compensation to be paid Penn Water for loss of energy output and demand value due to the erection of a dam at Conowingo? A. That is right.

Q. Did you have any expert assistance, legal or otherwise, in connection with your making the determination or statement I have just referred to on page 60 of Exhibit 51? A. No, that is my own statement.

Q. In making that statement, Mr. Newlands, did you know as a matter of fact—strike that, please.

In making that statement, Mr. Newlands, did you take into consideration the bill of complaint filed by Pennsylvania Water and Power Company against Susquehanna Power Company in the U. S. Court for the District of Maryland, the answer of the Susquehanna Power Company in that same proceeding, the petition of the parties to the Court in that proceeding requesting ratification of an agreement of settlement, and [9681] the agreement of February 20, 1926 between the parties, also filed in the proceeding in the District Court?

* * *

THE WITNESS: Is the agreement of February 20, 1926, the one which settled the controversy? Is that the final agreement determining the amount of the backwater payments?

By MR. KING:

Q. I think you may characterize it that way. A. I have read that agreement. I have not read the other items you mentioned. Of course I secured information from the company as to what these expenses were and what they were for.

Q. From whom did you secure that information? A. From Mr. Wetzel.

Q. Did you know, Mr. Newlands, prior to completing Exhibit 51, of the existence of the suit that I have just referred to in the District Court for the District of Maryland? A. Yes. The agreement which settled the controversy refers to the suit.

Q. Despite that fact you did not make any investigation in connection with that suit. Is that correct? A. I did not read the suit itself or the briefs filed. I did ask Mr. Wetzel for further information concerning the controversy.

• • •

[9682] Q. Mr. Newlands, did you take legal advice in connection with your decision that it was unnecessary to examine the documents which I have heretofore referred to in the suit in the District Court for the District of Maryland? A. No, I did not.

Q. You determined individually that that was not necessary. Is that correct? A. I determined that from the facts I had studied, the information which had been given me by the company and the agreement I read that I had the facts necessary to make the determination I did.

Q. And you came to that determination without looking at any of the documents in that suit except the agreement you just mentioned. A. That is right.

Q. Mr. Newlands, I show you certified copy of the petition of the Pennsylvania Water and Power Company against [9683] the Susquehanna Power Company in equity filed in the U. S. District Court in the District of Maryland. I ask you whether you have ever seen that document or a copy of it before? A. No, I have not seen this document before.

• • •

Q. Mr. Newlands, I show you certified copy of the answer of the Susquehanna Power Company to the petitioner bill of complaint identified as Exhibit 232, filed in the District Court of the U. S. for the District of Maryland in equity and ask you if you have ever seen that document, or a copy of it? A. No, I have not seen it.

[9684] By Mr. King:

Q. Mr. Newlands, I show you certified copy of a document entitled "In the United States District Court for the District of Maryland, Pennsylvania Water and Power Company vs. Susquehanna Power Company in equity," which is a petition of the Pennsylvania Water and Power Company and the Susquehanna Power Company for Court approval of settlement of the litigation, and ask you if you have ever seen that document or a copy of it any place? A. No, I have not.

* * *

[9685] By Mr. King:

Q. Mr. Newlands, I show you a document entitled, "In the United States District Court for the District of Maryland, Pennsylvania Water and Power Company vs. Susquehanna Power Company, in equity," and entitled also "Exhibit Agreement."

This document has been certified and referred to the District Court. I ask you if you have ever seen that document or a copy of it at any time before? A. Yes, I have seen that.

* * *

By Mr. King:

Q. Mr. Newlands, what did Mr. Wetzel tell you in connection with the suit in the District Court for the District of [9686] Maryland? A. He told me that a suit had been instituted to determine the rights of the respective parties.

Q. To what? A. As regards the riparian rights existing below the tailrace of Penn Water and as to the right of the Conowingo Companies to build a dam at Conowingo which would flow back over Penn Water's tailrace.

He also told me the nature of the charges made to the lower development account on the books, Job C-283-8, and the nature of the engineers' services charged thereto.

* * *

[9688] By Mr. King:

Q. Will you turn to page 38 of Exhibit 51, Mr. Newlands? A. That is the text?

Q. Of the text, yes.

Who determined the so-called suspension period referred to by you on page 38 of Exhibit 51 which you recommend be eliminated from the construction period? A. I did.

[9689] Q. What facts did you take into consideration in connection with making that determination? A. The actual facts of what occurred during that period.

Q. Did anybody else in the Staff furnish you any help in connection with the determination of that question? A. They——

Q. Namely, the period of cessation. A. Other members of the Staff assisting me secured information which I could use in determining the period of cessation.

Q. To whom are you referring when you say "Other members of the Staff"—the accountants whom you directed? A. The accountants working for me.

Q. Did you receive any assistance in making your determination in connection with this matter that we are directing our attention to from Mr. Howell? A. No.

Q. Did you secure any assistance from any of the engineers on the Commission Staff? A. No.

Q. Mr. Newlands, I now refer you to that portion of page 38 of Exhibit 51, which reads as follows:

> "Interest during construction is an allowable addition to plant cost only during the period which contributes to the [9690] completion of the project through unretarded construction activity."

Is that your definition? A. That is my statement.

Q. Did you have any help in formulating that statement or definition? A. No, that is my own statement.

Q. What is your standard in determining whether or not there is unretarded construction activity? Is it the

number of men, the amount of concrete poured, the amount of excavation, the dollars spent, or what? A. All of the activities must be taken into consideration. You cannot exclude any.

Q. Did you take all of the activities into consideration? A. I did so far as I knew them.

Q. Have you ever applied your definition or statement to which I just referred in any other case? A. No, I have not.

* * *

[9691] Q. Is this the first time you ever considered that definition or statement, Mr. Newlands? A. No, it is not the first time I have considered it. It is the first time I have written one out and put it in a report.

Q. What was the occasion of your prior consideration of that statement or definition? A. Reading other decisions of the Commission.

Q. Can you give me the names of any of the decisions where you got this statement or definition? A. No, I cannot.

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By Mr. King:

Q. So that as I understand it, Mr. Newlands, you considered all of the facts that you could find of an engineering nature as well as any other kind in arriving at your definition. A. That is right.

Q. You are not a graduate engineer, are you, Mr. Newlands? A. No, I am not.

[9692] Q. Have you ever had any engineer experience? A. No, I have not.

Q. Why did you conclude that it was unnecessary for you to take engineering advice in that connection? A. Because the matter was so obvious. It was not necessary to have engineering advice.

Q. What do you mean by "so obvious"? A. I mean that nobody could reasonably determine that the construc-

tion period continued after November 1, 1907, in the face of the facts as we know them.

Q. Did you make a study in that connection to determine the amount and scope of work done during your so-called period of suspension or cessation?

* * *

THE WITNESS: Yes, I examined all the information that was available, or which the company turned over to us regarding the activity during that period. As a matter of fact, I requested Mr. Chase to furnish us with a list of the work done during that period.

By MR. KING:

Q. Did he do so? A. He said he didn't have any.

Q. Mr. Newlands, will you give us the duration of your so-called period of cessation? [9693] A. It extends from November 1, 1907, to September 1, 1909.

Q. By unretarded construction activity do you mean that in your opinion no construction went on during that period? A. No, that is not so and that is not what I said.

Q. Then you ascertained that some construction work did go on during that period? A. That is right.

Q. Did that construction work in your opinion contribute to the completion of the project? A. It contributed to the completion of the project, but it did not decrease the length of time necessary to complete the project when it was finally reopened.

Q. Did you make a study to determine how that activity could have fitted in with the other work? A. I know that the activity was fitted in with the other work during 1906 and 1907, and I know that it was planned that it would be fitted in with the other work during November and December, 1907, if the work hadn't stopped.

Q. Do you know, Mr. Newlands, how much concrete was poured between November, 1907 and September, 1909 on the skimmer wall connecting bulkhead and powerhouse

substructure? A. No, I don't have the exact amount of concrete poured. I considered I had enough information with the information I had been able to find.

[9694] Q. Did you have an approximate amount of concrete poured during that period? A. No, I don't believe I had.

Q. Did you consider that was unnecessary for your determination? A. I considered I had enough facts without that.

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THE WITNESS: I considered that it was unnecessary to determine the exact amount of concrete poured in the face of the other facts which I had discovered.

By MR. KING:

Q. What were those other facts to which you refer? A. A general description of the work going on during that period.

Q. What is that general description? Where did you get it from? A. Part of it came from Mr. Goodwin's construction diary, I believe. A large part of it came from letters that are in the records, or letters I found in the fifteen filing cabinets. Also part of it came from an examination of the [9695] construction accounts themselves, the accounting records.

Q. All right.

What did they show to you? What did those documents indicate to you? A. They indicated the amount of construction work going on during that period was relatively small.

Q. Did Goodwin's diary end in January, 1908? A. It may have, yes, but there were letters which continued after that date.

Q. Letters in the fifteen filing cases? A. That is right.

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THE WITNESS: Goodwin's diary stopped in January, 1908. That probably was the reason Mr. Chase said he

was unable to tell me what construction work was going on during the period of cessation.

By Mr. King:

Q. That is pure speculation on your part? A. Yes, that is pure speculation.

Q. Will you please tell me what the facts were you were able to develop to indicate to you what went on during that period where you could make no determination? [9696] A. Are you asking me now what went on during the period? Is that it?

Q. That is correct, which enabled you to make your determination. A. Well, I determined that as of November 1——

Q. What year? A. 1907—work had ceased on all the machinery contracts. As a matter of fact, there is a letter which indicates I. P. Morris was notified on October 24, 1907, to stop work on the machinery contract.

Q. What else? A. I also had a record of the amount of work done during the first 22 days of November, and a letter which indicated that I believe 620 cubic yards of concrete were poured during that period to complete various uncompleted concrete structures and to make the plant safe for suspension in the case of this extended cessation.

I also determined that some time in April a decision was made to continue with the tailrace work with the small amount of money which was available to the company, there not being enough to reopen the project entirely. I determined that some time in May work actually started, that is on tailrace excavation. I don't believe I mentioned the fact it was decided to do the tailrace excavation or complete it so far as possible.

[9697] The preliminary work on that may have started in April, that is getting the plant ready for operation, but the work actually didn't start until May, and I believe excavation itself did not start until June, but I am not certain of that.

There was a relatively small amount of work done during May and June. During two or three of the later months the payroll amounted to around $25,000 to $30,000.

Q. That is work on the tailrace you are now discussing? A. Yes, I am still discussing the work on the tailrace.

During October the work was completed and I believe Mr. Hutchinson reported to the board of directors that it was complete as of October 15, 1908. That is a summary of the work done during that period that I discussed.

Q. Does that include all the facts which you had in your mind when you made your determination? A. No, it does not. As a matter of fact, just now I recall that in connection with that tailrace work I think they added something to the height of the wing wall.

Q. You knew that, did you? A. That is right. And I believe they may have done something on the connecting bulkhead and on the deflection wall.

[9698] Q. Were you able to determine what that was? A. I was able to determine that it seemed to be more or less incidental work.

Q. How were you able to determine that? A. One of the letters indicated that because of floods the personnel had not been able to get at the excavation and during the intervening period they did this other work in order to keep the personnel busy.

Q. Did you make any investigation to determine the nature of the work done during that period other than what you have already indicated? A. Well, I previously said I examined all the correspondence, whatever construction diaries were available, and the accounting records. There was no other information available that I know of. If there had been Mr. Chase should have furnished it to me in response to my request.

Q. The information was all available to you in the 15 filing cases and the other material which was located at the company's office, isn't that correct?

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[9699] THE WITNESS: When I had exhausted all the methods which I knew of for determining what went on during that cessation period I asked Mr. Chase for information. In response to that request the Company is under an obligation to furnish any information they have. It is not an obligation on the part of the Examiner to continue his investigation after that point.

By MR. KING:

Q. The obligation you refer to is created solely in your opinion, isn't that correct? A. It is created by law.

Q. Where is it created by law? A. Either the system of accounts or the Federal [9700] Power Act states that the company must prove all of their contentions.

MR. KING: May I have that read back, please?

(Answer read.)

By MR. KING:

Q. What do you understand the words "prove all their contentions" to mean, Mr. Newlands? A. They must submit evidence to prove any fact which the Examiner has thrown out or disallowed or stated that he has not sufficient information on to allow as part of the original cost.

Q. In view of that understanding, in view of your understanding of what the Federal Power Commission Act means you arrived at the conclusion that it required Mr. Chase to furnish you with a list of material which you requested. Is that right? A. That is correct.

Q. Do you know whether the preliminary work to which you have just referred in the tailrace was done as a result of the so-called cessation? A. That would be the assumption, yes.

Q. That would be the assumption you made? A. That would be the assumption that anyone would make.

Q. I am not asking you about anyone, Mr. Newlands. [9701] I am asking if that is the assumption you made. A. That is an assumption that I made, yes.

Q. Does that answer mean that you made no investigation? A. No, it doesn't mean that. I have already described I examined everything that I knew of which would disclose the facts regarding that period.

Q. Why did you have to make an assumption as to the question I asked you a moment ago? A. Because the day-by-day work was not described anywhere. There was no construction diary, and in any case, even if the construction diary were kept, it might not say, probably wouldn't say, whether that work was done because of the cessation.

Q. I believe you testified yesterday that you did not examine all of the material in the way of correspondence in the 15 filing cases. A. That is right.

Q. Then how did you assure yourself that you had made an adequate investigation in connection with the facts concerning the cessation period? A. Because I examined all the files which I thought would throw light on the subject.

Q. How did you determine which files would throw light on the subject if you didn't examine them?

[9702] MR. GOLDBERG: Mr. Examiner, I object to that. We went over that yesterday afternoon.

TRIAL EXAMINER: I will permit it if he doesn't go too far.

THE WITNESS: By an examination of the index for one thing, and by——

By MR. KING:

Q. What else? A. And by the fact that there were several series of those files and I called for all the series which I thought would contain any information on it. There was one series for McCall Ferry Power Company, for instance. I called for every file in that series. There was one series of files for Pennsylvania Water and Power Company. I called for every file in that group.

There was another series of files for J. E. Aldred, Receiver. I called for every file in that series.

There was another series of files for Susquehanna Contracting Company. I called for every file in that series.

I also called for another set of files. There was another set of files which was classified by the company's present system of accounts, that is, there would be a file for work on flashboards, work on tailrace excavation, work on generators, transformers and so forth. I called for the [9703] files in that series which had reference to tailrace work.

Q. Did you read all of the contents of the files——

Strike that, please. Were you given the files in response to your request? A. So far as I know if any were held out I don't know, unless they were at the end of the series. In other words, if I had called for all of the files on tailrace excavation and the numbers went up to 12, I have no means of knowing whether there were any further files after that series.

Q. Are you saying that the company withheld files from you? A. No, I am not. I am merely saying I don't know. In that case I practically always called for the next succeeding number or two to make sure that I had them all and received complaints that I was asking for files which were not in the files.

Q. That would indicate to you, would it not, that the company had given you all the material they had? A. Yes, that would indicate that to me.

Q. Did you read all of the contents of the files which were given you? A. I didn't read every letter. I scanned every letter to determine the contents of it.

Q. And you believed that you had sufficient engineering [9704] ability to scan a letter and determine the amount of work done during that period. Is that correct? A. I had sufficient knowledge about construction activities.

Q. You thought you did? A. Yes.

Q. Where did you get that knowledge? A. In my work as an accountant.

Q. Since you have been with the Federal Power Commission? A. And prior.

Q. Give us what that experience was, please. A. A great many of the jobs that I was on prior to coming with the Federal Power Commission were concerned with construction activities for plants being built by companies——

Q. Hydroelectric plants? A. None of them were hydroelectric plants, no. Since coming with the Commission, of course, practically all of my work has been in connection with construction and plant accounts.

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By Mr. King:

Q. Did you ever have any responsibility, Mr. Newlands, [9705] for any decision which involved spending as much as $1 in connection with construction? A. Do you mean have I ever authorized the expenditure of any amounts for construction?

Q. That is not the question.

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The Witness: I don't understand the question. My question was put to determine what was wanted.

By Mr. King:

Q. You do not understand that question? A. That is right.

Q. Did you ever have any occasion to make any engineering determinations which involved the expenditure of as much as $1 for construction activity? A. I never had to make any engineering determinations involving payment of any amount for construction [9706] activities.

Q. Mr. Newlands, did you ever make a decision in connection with construction the result of which was to authorize the expenditure of any money for construction activities? A. No, I did not.

Q. Do you consider yourself competent to make a decision at this time with relation to the expenditure of money for construction, which decision involves engineering determinations? A. May I have that question, please?

(Question read.)

THE WITNESS: It would depend on the extent of the engineering determinations. If they were relatively slight the answer would be yes. If they were complicated the answer would be no.

By MR. KING:

Q. Can you give me what you mean by "relatively slight"? A. Well, if it was a question of whether a fence should be built around a piece of property I think I would be able to determine that that expenditure should or should not be made.

Q. What sort of property and what would the fence be for which you had in mind? [9707] A. It could be any sort of industrial plant, and the purpose of the fence depends on any hypothetical situation which might arise.

Q. Give me an example which you have in mind? A. As a purely hypothetical illustration, an industrial plant without a fence around its property might have been bothered by the neighborhood children overrunning the property and they determined to build a fence.

Q. Do you think that involves——

MR. GOLDBERG: Let him finish.

By MR. KING:

Q. Had you finished? A. I think I would be able to determine a fence should be required there.

Q. In that hypothetical situation is there any engineering knowledge necessary? A. There might be.

Q. What is the nature of it? A. The type of fence to put up?

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Q. Can you think of any more hypothetical situations which might illustrate your position? [9708] A. Not offhand.

Q. During the so-called period of cessation do you know how much concrete was poured on the superstructure and intake arches? A. I don't have the exact quantities, no.

Q. Can you give us approximate quantities?

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By Mr. King:

Q. Had you finished the answer? A. I knew that a slight amount had been poured, but I didn't know the exact amount.

Q. What is the slight amount? A. I mean by that that no important part of the structure was completed.

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[9710] Q. Do you know during the so-called period of cessation whether forms were stripped from all completed concrete work? A. I know forms were stripped from the concrete work. I have not seen anything that said all of them were stripped. But I would assume that was a fact unless they didn't want to use the forms any more.

Q. Did you examine the photographs in the possession of the company in connection with this matter? A. I examined quite a number of photographs which were available in the 15 filing cases and other places.

Q. You had the contents of all the 15 filing cases available to you, didn't you? A. I could have called for them if I had a list of files.

Q. Didn't Mr. Gunn tell you the contents of those filing cases were available to you and you could use them whenever you wanted? A. That is right, and I tried to use them.

Q. Do you know during the so-called period of cessation whether roof tile was unloaded on the project? [9711] A. Yes, I know that.

Q. Do you know how many cars were unloaded during that period? A. I believe it was ten.

Q. Do you think that is a necessary part of the cost of construction? A. Unloading roof tiles?

Q. Yes. A. Yes, and I believe it is in the construction costs.

MR. GOLDBERG: Let me understand that, please. By that last answer you meant you had not disallowed it?

THE WITNESS: That is right.

By MR. KING:

Q. Didn't you disallow the costs expended during the cessation period? A. No, not all of the costs. I disallowed only those which I considered to be overheads.

Q. Did you disallow the so-called cessation account? A. Yes.

Q. Wasn't the cost of unloading this tile charged to that account? A. My recollection is that it was charged to the superstucture account and not to the cessation account.

Q. If you learned now that the cost of unloading those ten cars was charged to the cessation account would [9712] you allow it? A. Yes, if I had other facts to go on.

Q. What other facts would you want? A. I would have to know whether the particular unloading they did during the cessation period required any further work in connection with distributing that tile when construction actually started which would not have occurred if the cessation had not taken place.

Q. Can you ascertain those facts? A. I don't believe it can be ascertained. There is nothing I have seen from which that could be ascertained.

Q. Do you know whether or not during that period repairs were made to cars and locomotives? A. Yes, I believe I have seen that to be a fact.

Q. Do you consider the costs of those repairs necessary and proper costs to construction? A. If the repairs were necessary to put the locomotives in efficient operating con-

dition for future work I would consider them as a proper part of plant costs.

Q. Did you make that determination—strike that.

Did you make a determination to ascertain whether that is true in this case or not? A. So far as I know there was not sufficient information available to determine exactly the nature of the repairs being done.

[9713] Q. Mr. Newlands, did you consider that there was some more work to be done at the project after these repairs had been made? A. I don't understand that question.

Q. I say, did you make an investigation to determine whether or not there was more work necessary to be done at the project after the time when repairs were made to the cars and locomotives? A. I determined that the project was not complete at the time those repairs were made and that further construction would be necessary to complete it. I believe that is what you are asking me.

Q. That is correct. Do you know whether these cars and locomotives were used after the date of these repairs on the project? A. I believe that some of them were. I don't have any knowledge that all of them were. I believe there was more than one locomotive involved.

[9714] Q. Did you make an investigation to determine whether all of them were subsequently used? A. No, and it was impossible to determine that so far as I know from information available to me, and it was impossible to determine whether the locomotives repaired were the ones which were used.

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Q. Then, as I understand it, Mr. Newlands, you knew that repairs had been made to cars and locomotives. Is that correct? A. Yes.

Q. And you knew that at least some of them were used for subsequent work. Isn't that correct?

[9715] Q. Why, under that set of facts, did you assume that the costs of those repairs were improper? A. I have not made any such assumption.

Q. You disallowed the cost, didn't you, or recommended it for disallowance? A. Not that I know of.

Q. Do you know whether those costs were charged to the cessation account? A. There is nothing to indicate the exact nature of the charges to the cessation account. Charges from the payroll were made to the cessation account, but I could not find any distribution of the workmens' time to find the exact nature of those charges. I assumed that because of the name of the account, which would be a proper accounting assumption, that the items charged to that account represented expenses incurred because of the cessation.

Q. Have you recommended for elimination any other costs on the assumptions you have just described? A. That assumption is related solely to cessation account.

Q. All right. Let's limit my question to costs during the cessation account. A. The assumption that I gave in my previous answer related only to my previous disallowances in the cessation account. They referred to no other disallowances.

[9716] Q. Is that the sole basis you had for disallowing the cost in the cessation account? A. No. For instance, the company had tool and construction accounts.

Q. What is that? A. Had construction tool accounts under its regular plant construction accounts. A subaccount under that provided for repairs, and it would be my assumption, and any accountant's assumption, that if repairs were made which contributed to the completion of the plant they would have been charged to that account.

Q. That is the basis upon which you proceeded, is that correct?

* * *

THE WITNESS: That is where they were charged while the construction was proceeding.

By Mr. King:

Q. That is the basis upon which you proceeded. Is that correct? A. That is one basis.

Q. All right. Give me any others. A. Also to make certain that I gave a generous allowance to the company for any construction costs or repair work during the cessation period I allowed the entire expenses [9717] of the local hydraulic department, including all foremen and clerks. There must have been perhaps fifty men involved during the months of November, December, January—November and December, 1907, and January, February and March and April of 1908.

Q. Are you finished? A. That is right.

Q. Is the fact you made a generous allowance in one place a basis for recommending elimination of proper costs in another place? A. That is not what I said.

Q. Will you answer my question?

The Witness: Will you read the question?

(Question read.)

The Witness: No, because I knew of no proper costs that had been eliminated any place. I merely made a generous allowance to cover any possible contingency. I knew it was impossible for me to determine everything that had happened during that period, and I wished to be generous to the company.

By Mr. King:

Q. What is your idea of being generous to the company? A. Making certain that I did not disallow any costs which were pure construction costs during that period. [9718] Q. And it was solely by the use of your accounting experience and background that you made certain that you had not disallowed any amounts you just referred to in the preceding answer? A. No, it was based on my examination of the facts so far as I could discover them.

Q. As an accountant. A. In any capacity.

Q. Did you examine the books of the company in any other capacity than as an accountant? A. No, I exam-

ined them in my capacity as an accountant to obtain an accounting determination.

Q. Did you make any determination to ascertain whether the tailrace excavation was resumed in the middle of April, 1908, continued to October, 1908, and that during this period the rock-filled ramp was constructed? A. Well, I previously described the work done on the tailrace excavation.

Q. You mean the work you understood was done in the tailrace excavation. Is that right? A. I believe I did find a reference to the fact that the rock ramp was constructed during that period. As a matter of fact, I think they used material from the tailrace to construct it. They had to deposit the material some place. The ramp was a good place to deposit it since they needed it.

[9719] Q. Wouldn't that work require the use of those cars and locomotives we used a little while ago? A. It would require the use of some of them. I don't know how many.

Q. Do you know whether it would require the work of all of them or some of them?

* * *

THE WITNESS: No, there was no information available to me which would show how many were required or how many were used.

By MR. KING:

Q. From the engineering knowledge which you have stated you possessed couldn't you have determined that? A. No, I don't believe anyone could determine it. You would have to have far more facts to determine that than those available to me. Even an engineer couldn't determine it from the facts I had.

Q. Do you know how many yards of rock were removed? A. No, but in addition to that you would have to know the period over which they were removed. You would have to know how much went into the ramp.

Q. Don't you know that period? A. No, not exactly.

Q. What do you mean by "not exactly"? [9720] A. You would have to determine how many days the excavation actually took.

Q. Couldn't you determine that? A. Not from the information available to me.

Q. Did you ask anybody in the company for that information? A. I asked Mr. Chase for all information available as to what was going on during that period.

Q. Did you ask him to make that determination for you? A. That determination you just spoke of, how much rock was removed?

Q. That is right. A. No, I asked him a general question for all information concerning that period.

Q. Do you know whether the information Mr. Chase gave you showed how much rock was removed? A. Mr. Chase did not give me any information in answer to my question. The other information I secured was information that I had secured from the files and by requesting certain documents like the construction diary and the letters and so forth.

Q. Did that information furnish you with enough material to make that determination we have been discussing? A. As I recall it it did not.

Q. Why didn't you ask some of the company engineers [9721] to make that determination for you? Did you think it was immaterial? A. Mr. Chase is a company engineer.

Q. You just said you did not ask him to make that specific determination. You just asked him for general information. Now I am asking you why you didn't ask him to make that specific determination for you? A. Because I expected Mr. Chase to produce all the facts which he considered necessary for me to review in order to determine what was going on during the cessation period. It was not my responsibility to point out to him exactly what information he should furnish to me. When I asked for information I meant all information.

Q. Were you ever refused any specific request for information which you made to the company at any time? A. There has never been a specific denial of information. There is a great deal of information which I never received.

Q. Why didn't you receive it? Because you didn't ask for it? A. I asked for it but it was never given to me. Sometimes I asked repeatedly.

Q. In what instances? A. Promotion expense account, for instance, flowage basin account.

[9722] Q. What were you told concerning your request in connection with promotion expense? A. I was told they didn't know exactly what was in that account.

Q. Do you consider that a refusal to produce information? A. It is not a refusal to produce information but I don't know whether the company has exhausted all its efforts to find the information. They told me there was additional material located in the test laboratory in Highlandtown. To my knowledge they never went over there to get this additional information on the promotion account, if it existed.

Q. Did you go there? A. No, I did not. I considered when I made the request of the company my responsibility in that regard was ended.

Q. You considered it was perfectly all right for you to make a determination, even though you knew there were facts not in your possession?

* * *

[9723] THE WITNESS: I did not state I knew of the existence of any further facts. I stated that I knew there was certain material filed. I don't know the nature of them. They were filed in Highlandtown in a test laboratory. They may have included additional facts. To my knowledge they were not investigated by the company to ascertain whether the promotion expense account, which happened to be the one we are talking about, whether there was any

additional information in there, which would reveal the nature of the promotion expense account.

By Mr. King:

Q. We are talking about the rockfill now. A. The last thing we were talking about was promotion expense account.

Q. My question related to whether or not you knew there was any information in those files about which you have just spoken which you did not determine which related to the rockfill in the ramp. A. I did not know whether there was any information in those records or not.

Q. You stated you did not ask any of the company engineers to make the specific determination as to the amount of rock removed. That is correct, isn't it? A. That is right.

[9724] Q. Did you ask any of the Power Commission Staff engineers to make that determination for you? A. No, I didn't consider it necessary.

Q. You knew, did you not, that Mr. Howell had made a rather detailed investigation in connection with the facts surrounding the excavation in the tailrace? A. No, I did not.

Q. You did not know that? A. I knew that he had done some work on it. I don't know how detailed his investigation was. I never discussed with him exactly what he did in that regard.

Q. Mr. Newlands, do you know whether there was any equipment removed from the tailrace, that is construction equipment, in 1907? A. At what time in 1907?

Q. Any time during the year 1907? A. Yes, there might have been two periods when equipment was removed —at the end of the work done by the subcontractor, after he had been flooded out, the equipment may have been moved at that time, probably was. Again after the work which the company had done during the spring and early summer of 1907, equipment probably was removed at that time.

Q. Had that removal anything to do with the cessation period?

[9725] Do you understand that question? A. I was trying to determine exactly what you meant.

Q. I will clear it up for you. What I meant was—did in your opinion the cessation period cause the removal of the equipment in the two instances you have cited? A. No.

Q. Mr. Newlands, now do you know whether or not the northern part of the deflection wall was completed from elevation 115 to approximately elevation 128 and the southern end was completed to the full height to elevation 151 in 1908? A. I knew that the deflection wall had been raised. I did not know the exact height to which it had been raised. I believe I did know that the southern section was completed. I don't remember knowing the exact height to which the northern section was raised.

Q. Did you make any investigation to determine that fact? A. I examined all the records which had been available to me. So far as I knew there were no records which disclosed it. If there had been they should have been given to me in response to my request of Mr. Chase.

Q. Did you make any specific request for this particular information from any of the engineers of the company while you were conducting your investigation? [9726] A. None other than the general request which I made to Mr. Chase for all information concerning this period.

Q. Did you request any of the Staff engineers, and by Staff I mean Staff of the Federal Power Commission, to make that investigation for you? A. No, because I knew that they didn't have any more information available to them than I had so far as I know.

Q. Did you ever ask them? A. No, I never asked them.

Q. Did you consider that the Staff engineers had any more capability in making this determination than you had?

* * *

THE WITNESS: Is your question applied only to the amount of work done on the deflection wall?

By MR. KING:

Q. For the time being, yes. A. No, I don't think that an engineer would have or would be more capable of determining how high the deflection wall had been built if that fact were actually available in the records somewhere.

Q. In other words, you don't think the Staff engineers would be any more able to determine that than you. Is that [9727] right? A. Not that particular fact if that fact were available. It is just a matter of reading it.

Q. Reading it where? Off of a drawing? A. In the records.

Q. What records? A. Any records. They might be correspondence records or a construction diary.

Q. Do you consider yourself qualified to interpret a construction diary? A. I think so.

Q. Do you consider yourself qualified to interpret a drawing? A. In some respects, not every detail.

Q. Have you ever—— A. That is I can determine from a drawing what the general nature of the work being done is, but I don't know all the engineering details.

Q. In what instances have you made a determination of a drawing? A. I secured drawings of the work done at the tailrace, or rather the toe of the dam, for instance. Mr. Wetzel also brought down some drawings showing the work done on some of the items which the company now is claiming for plant.

Q. And you interpreted those drawings? [9728] A. With Mr. Wetzel's assistance.

Q. Is Mr. Wetzel an engineer? A. He has done considerable engineering work. I don't know whether he holds an engineering degree.

Q. Mr. Newlands, can you take a drawing and determine from it how much work has been completed? A. To be more specific, if there were a drawing showing the heights to which the deflection wall had been completed I

believe I would be capable of reading that information off of the drawing.

Q. Did you ever see a drawing which would enable you to determine how much work had been done at any particular or given time? A. You mean in respect to Pennsylvania Water and Power Company's plant?

Q. Yes, or any other company so far as that is concerned.

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THE WITNESS: I have not seen any drawings which indicated the extent of completion of construction. As a matter of fact, they usually would not indicate that.

[9729] Q. Do you know, Mr. Newlands, whether concrete also was poured on the piers at the end of the ramp and some miscellaneous excavation was done for the fish ladders, powerhouse approach, railroad tunnel, and the spillway at the shore end of the powerhouse? A. Yes, I believe so.

Q. Did you make an investigation to determine how much work in this connection was done? A. As I have said repeatedly before, I examined all of the records which were available to me during that period to determine exactly what was done and asked for further information.

Q. Did you ask for any specific information in connection with this subject matter from any of the engineers connected with the company? A. No, my request was a general question for all information.

Q. Did you ask for any assistance in making your determination from the Staff engineer? A. As to what was done on this particular group of work?

Q. Yes. A. No.

Q. Mr. Newlands, will you turn to page 22 of Exhibit 51? At the bottom of the page you used the words, "Except for some excavation of the tailrace". Is the work which you and [9730] I have been discussing properly in your opinion described by the words that I quoted to you from your exhibit? A. Yes, I believe so.

Q. Did you know, Mr. Newlands, whether or not from November, 1907 to October 1908, Mr. Cooper and Mr. Sanderson and Mr. Porter and Mr. Hutchinson continued to work on drawings and completed them during that time? A. Are you referring to Mr. Cooper individually?

Q. Mr. Cooper or his firm. A. That is not a fact. Mr. Cooper was in China during part of that period, or in the Orient.

Q. You mean it is not a fact that Mr. Cooper's firm or Sanderson and Porter nor Mr. Hutchinson worked on the drawings and completed them from November, 1907 to October 1908? A. So far as I know neither Mr. Cooper nor Mr. Hutchinson personally worked on the drawings. I do know that Mr. Cooper's New York office and his staff of engineers worked on drawings during that period. I also know that Sanderson's and Porter's New York offices worked on drawings during that period. Those costs, by the way, have been allowed in my determination of original cost.

* * *

[9731] By Mr. King:

Q. Mr. Newlands, have you eliminated any amounts expended for supervision over the drawings we have been talking about? A. I have allowed actual direct supervision of the preparation of those drawings. It is possible that some of these drawings passed through Cooper's or Hutchinson's hands. I have disallowed all of Cooper's fee which would be applicable to the period of cessation as well as all of Hutchinson's salary applicable to the period of cessation.

Q. Wasn't all of the work of Cooper's firm done directly under his supervision? A. No, it certainly was not. The New York office which was drawing these plans was under the direct supervision of a Mr. Parsons.

Q. Mr. Cooper was not hired to devote all of his time to this project, was he? A. That is right.

Q. Neither were Sanderson and Porter? A. That is right.

Q. Now, Mr. Newlands, will you refer to page 22 of Exhibit 51? A. Yes, sir.

Q. Under the subdivision "Suspension of Work" on that page you state, do you not, that on November 1, 1907 "All [9732] construction work was halted except for maintenance and cleaning up work and placing of a small amount of concrete necessary to protect the existing plant." Is that correct? A. Yes.

Q. What do you mean by "small amount of work," Mr. Newlands? A. That term is a relative term. The amount of work done was small in comparison with the size of the project and the amount of work which had been going on previously to November 1, 1907.

Q. By the words "small amount of work" you intended to cover most of the items we have recently been discussing. Is that correct? A. That is right. This particular term "small amount of work" refers to the concrete which was placed during the one or two months immediately following November 1, not to the work which was done during the tailrace excavation period.

Q. What do you mean by "necessary to protect the project"? A. I believed it was considered necessary at that time to complete any work which was in a half-completed stage in order that floods would not damage it, and I believe to bring certain of the walls up to a certain height for the same reason.

[9733] Q. Was any work done of a nature that was not necessary to the completion of the project? A. During what period?

Q. The period we have just been discussing. A. Oh, yes.

Q. What? A. The work which was charged to the cessation account for one thing. The cost of cleaning up the plant did not contribute to the completion of the project.

Q. You mean by that that you never clean up the

ground or machinery at all during construction? A. No. I mean by that that the clean-up work which was done in order to prepare for cessation was of tremendously greater extent than would have been done while construction activities were in progress.

Q. What was the type of this clean-up work which you referred to? A. It would be necessary to strip all of the forms from the concrete and store them. It would be necessary to provide a safe and dry place for their storage. It would be necessary to take all the construction tools which were scattered at various places on the construction project, bring them to one place, grease them and otherwise prepare them to protect them against the elements, and to store them in a safe place if such a safe place were available, or [9734] even to construct a shed if it were possible to do so and it were economical to do so. It would mean cleaning up any obstructions around the place which might make the company liable to other persons who happened on the project while the cessation was in progress if the property were not properly patrolled.

Offhand that describes the work that I can think of now. There is other work in connection with cessation that I don't recall at the moment.

Q. What do you mean by storing forms? A. They would be piled up in some sort of order and they might be put under shelter.

Q. Does your answer contemplate an understanding that the company at that time intended to re-use those forms? A. Yes, some of them would naturally be re-used, I would say. The forms for the dam, for instance, I imagine could be shifted from one section to another, or at least part of them could. The dam had not been completed when construction stopped.

Q. Mr. Newlands, do you know whether or not the concrete work on the spillway was completed at the time the forms were removed except for the slots? A. Which spillway are you referring to—you mean the dam itself?

Q. The spillway. Do you know what a spillway is? [9735] A. Yes, there can be several spillways. The dam itself is a spillway.

Q. How many spillways are there? A. I believe there was another section of the dam where there was a spillway for ice conditions. It was called an ice chute but it is a spillway.

Q. Where is this ice chute which you call a spillway? A. It is not in existence today.

Q. What became of it? A. There are several ice chutes, by the way. Perhaps I should be more specific.

Q. Where are they? A. Some of them are through the powerhouse substructure. I was not referring to those. I was referring to the spillway between the powerhouse structure and the land, the shore on the Lancaster side. At one time they had made provision for a spillway to take care of icing conditions which might occur. The railroad tunnel ran under that spillway.

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[9738] By Mr. King:

Q. Now, Mr. Newlands, will you please refer to page 38 of Exhibit 51? A. Yes, sir.

Q. Do you have that page in front of you? A. Yes, I have.

Q. Was the interest rate shown there averaging somewhat less than six per cent determined by you after a study of the loans outstanding during the construction period? A. That is correct.

Q. Now, Mr. Newlands, assume that $1,000 is borrowed by Mr. "A" from a bank and that "A" agrees to pay to the bank interest at the rate of five per cent and a one per cent commission, and at the end of the year "A" pays the lending bank $1,060 in full payment of the loan, plus interest and commission. What in that assumption is the interest rate? A. It would be six per cent.

Q. I beg your pardon? A. Six per cent, that is the total interest rate including the commission.

Q. You mean by your answer that is the effective [9739] interest rate, the six per cent you referred to? A. Well, you don't usually speak of it as an effective interest rate in connection with that type of loan.

Q. Just interest rate? A. That is right.

Q. Now, Mr. Newlands, assume "A" borrows $1,000 from the bank at five per cent interest but a one per cent commission of $10 is deducted from the cash received by him at the time the loan is made, and he therefore receives cash of only $990. Assume further that at the end of a year "A" pays the bank $1,050 in full payment of the loan and interest. Is the interest rate in excess of six per cent in that assumption? A. It would usually be considered to be six per cent.

Q. I asked you if it would be in excess of six per cent. A. Well, you can make a calculation, reducing the principal amount, based on the $990 received by the person and that would give you an interest rate slightly in excess of six per cent.

Q. Mr. Newlands, I show you a one-page document entitled "Pennsylvania Water and Power Company Calculation of Average Cost of Money to Susquehanna Contracting Company for the period from April 14, 1905, to November 1, 1907." [9740] This is a photostatic copy of one of the working papers which you furnished us. I ask you to examine a copy and ascertain if that is correct? A. Yes, it appears to be a copy of the working paper which we supplied to the company.

MR. KING: May we have the document I just described marked for identification as Exhibit 236?

TRIAL EXAMINER: Yes, it may be so marked.

(The document referred to was marked for identification as Exhibit No. 236.)

MR. KING: I herewith hand Your Honor three copies and five copies to Mr. Goldberg.

By Mr. King:

Q. You said that was a photostatic copy of your work? A. Yes, that is right.

Q. Is Exhibit for Identification 236 the working paper which furnished the basis for your calculation of the weighted average interest rate of 5.98 per cent included in the narrative of page 40 of Exhibit 51? A. That is right.

Q. Does your method of computation as shown in Exhibit for Identification 236, Mr. Newlands, give any weight to the fact that the one-half per cent commission paid to Knickerbocker Trust Company was paid in advance? A. I did not deduct the amount of the commission [9741] from the principal amount of the loan in making this interest determination for several reasons: One is that the commission as such was not deducted from the principal of the loan. It was a separate payment.

Another reason is that the calculations would have resulted in only a very slight modification in the figures that show here. It wouldn't have amounted to even one-tenth of one per cent.

A third reason is that in determining effective interest rates you usually are talking about determining effective interest rate of bonds. The interest on bonds usually is paid semi-annually. In this case these interest payments were made annually. If you are going to determine an effective interest rate which is comparable to the effective interest rates which are usually determined for bonds you would have to take into consideration the fact that interest payments for the first six months were deferred until the end of the year. That would be an offset against the payment of the commission at the beginning of the period of the loan. It would more than offset it, I might say.

Q. But as I understand your answer, then, your calculation does not take into effect the fact that the commission was to be paid in advance. Is that right? A. No, I did not say that. I say I did not deduct the amount

of the commission from the principal of the loan [9742] in determining the interest rate.

Q. Did you or did you not give effect to the fact that commission was paid in advance in Exhibit for Identification No. 236? A. Oh, yes, I gave it consideration in effect, because I didn't adjust for the fact that the interest had been paid at the end of the year instead of semi-annually, which is what would usually be done in the case of bonds. That is the way the effective interest rate on bonds is calculated.

Q. In Exhibit for Identification 236, how did you give effect to what we have been discussing? A. I allowed one to offset the other.

Q. Point it out on the exhibit. Do you have one in front of you? A. I have one in front of me. It does not appear as a separate item on the exhibit.

Q. Then you give no effect to it in the exhibit for identification No. 236, is that right?

MR. GOLDBERG: I object to that question, Mr. Examiner, as contrary to what the witness has stated. He just answered the precise question.

MR. KING: It doesn't appear there.

MR. GOLDBERG: He has explained why if you will just listen to him.

[9743] TRIAL EXAMINER: Objection is overruled.

THE WITNESS: May I have the question, please?

(Question read.)

THE WITNESS: That is not so, as I have explained before.

By MR. KING:

Q. Just a minute. You say that is not so? A. That is right.

MR. GOLDBERG: Let him finish his answer, please.

TRIAL EXAMINER: Finish your answer.

THE WITNESS: That is not so because I offset the fact that the interest payment itself was made at the end of the year, which was a much larger amount than the commission, by the way, against the fact that the commission was paid at the beginning of the period.

By MR. KING:

Q. Will you point out on the Exhibit for Identification Number 236 in front of you just how you gave effect to the fact that the commission was paid in advance by columns. The exhibit has, as I understand it, five columns. Take the first column. That includes dates. Is that correct? A. That is right.

[9744] Q. Is it given effect in that column? A. No.

Q. Do you give effect to it in the next column? A. No.

Q. In the next one entitled, "Number of Days to November 1, 1907"? A. No.

Q. In the next column entitled, "Total Days"? A. No.

Q. In the last column entitled "Interest Paid for Period to November 1, 1907"? A. It is given effect by a combination of the figures shown in the last column and the total dollar days.

Q. How can it have effect in the last column if it does not appear in any of the others? A. Because I am saying I offset two opposing items. The figures are not there.

Q. That is what I want. The figures do not appear on Exhibit for Identification 236? A. That is right. I offset the two facts because I knew that one fact would more than counterbalance the other and make my interest rate smaller, if anything, rather than larger.

* * *

[9745] Q. I asked you to look at 169, Mr. Newlands, Exhibits 168 and 169. A. I had the wrong ones. What is the question now, please?

(Question read.)

By Mr. King:

Q. You were looking at the wrong exhibits, as I [9746] understand it. A. Yes.

Q. Now that you have the correct ones will you state whether you considered them in connection with your preparation of Exhibit 51? A. Yes, I did.

Q. Did you consider they had any material effect upon any of your determinations in Exhibit 51? A. They had some effect. I don't know just how material. I considered other facts besides these in that connection.

Q. Was the effect slight? A. Well, there was other evidence which I considered had equally as great weight, perhaps even greater weight.

Q. How much greater? A. I can't give you any exact percentage of weight.

Q. Fifty per cent greater weight; 25 per cent greater weight? A. I have never attempted to determine the exact weighting of each of the exhibits I examined and how they affected my determination. I know that these entered into my determination.

Q. How did you reach any conclusions if you didn't know how much weight you gave to different pieces of evidence? A. In this particular case the evidence was all to the same effect. It was not contrasting evidence. I didn't [9747] have to know the weighting to be given to each piece of evidence if it all bore on the same point and had the same tenor.

Q. You gave weight to Exhibits 168 and 169, however? A. Yes.

Q. And it was less weight than you gave to other exhibits which you considered. Is that correct? A. I say it may have been slightly less than I gave to other exhibits.

Q. Did you consider Commission's Exhibit 199? I believe you have that before you. A. No, I have not.

Q. That is did you consider it in connection with your preparation of Exhibit 51?

I hand you respondents' copy of that exhibit and ask you to look at it. A. Yes, I have looked at it.

Q. Did you consider that exhibit in connection with the preparation of Exhibit 51? A. Yes, I did.

Q. Did you give it any material effect in connection with your recommendations or conclusions of Exhibit 51? A. It was considered by me in connection with the determinations in Exhibit 51 and received weight in that regard.

[9748] Q. Did you give it the same weight you gave Exhibits 168 and 169? A. About the same, I would say. It is the same type of information.

Q. Did you take any expert advice, either legal or otherwise, in connection with your disposition or weighting of these exhibits we have been referring to? A. By "expert advice" what do you mean?

Q. Any legal advice? A. No.

Q. Any financial advice? A. No.

Q. Any engineering advice? A. No, certainly not.

Q. Now, Mr. Newlands, in connection with your consideration of the three exhibits, namely 168, 169 and 199, did you examine Sections 20 and 21 of the Act of June 7, 1879, as amended, of the Pennsylvania laws? A. No, I did not. I examined the capital stock tax returns themselves.

Q. Of the company? A. That is right. I don't remember whether they have an excerpt from the particular paragraphs you are mentioning on the tax return. They do describe, I believe, or at least give information as to how the values are to be determined.

[9749] Q. You read them, you say? A. Yes.

Q. What do you understand was the requirement at that time, namely 1905, 1906 and 1910, of the Pennsylvania laws for valuing corporate stock for tax purposes? A. Are you asking me for a legal opinion?

Q. You said you read the form. I am asking you what conclusion you came to from that reading in connection with what the Pennsylvania law required? A. Yes, but

I didn't state that I had read the Pennsylvania law. I said I had read what was on the form. If there was any excerpt on the form I read it. I am not certain whether I have read the Pennsylvania law or not.

Q. You said, as I understood it, that the excerpts gave some indication as to the effect of the Pennsylvania law. A. That is right.

Q. I am asking you your opinion as an accountant. What did the material which you read indicate to be the effect of the Pennsylvania law at the time in question, namely, in 1905, 1906 and 1910? A. The information on the tax returns plus other correspondence and memoranda which were in the file indicated to me that the company was supposed to declare a value on its capital stock equal to the actual value of the assets behind that capital stock at the date of the determination which, [9750] in the first period at least, was the first fifteen days of November of that particular year.

Q. And that is your understanding from reading the form as to what the Pennsylvania law required. Is that correct? A. That is right. There seemed to have been some question involved as to whether liabilities should be deducted before determining the cash value, but other than that my answer stands.

Q. It was with that understanding of the effect of the Pennsylvania law at the time in question that you considered the Exhibits 168, 169 and 199. Is that correct? A. That is right.

Q. What did the form show in connection with the deduction of liabilities, if it showed anything? A. It didn't show anything. I discovered that fact in the correspondence, that is except that the information on the tax return was so worded that it might indicate that liabilities should not be deducted. It didn't specifically state that liabilities should or should not be deducted.

Q. That was the conclusion you reached as a result of examining the form? A. That is right, yes.

Q. How did you finally construe the effect of the form, that it was proper to deduct the liabilities or not? A. I didn't construe the form.

[9751] Q. I thought you said you read it. A. I did.

Q. Took the understanding you derived from reading it into consideration in valuing and preparing the exhibits we are talking about? A. That is right; to some extent.

Q. You made no determination, then, as to whether in your opinion liabilities could be deducted? A. I am not certain whether the company, in filing this return, finally decided that liabilities should be deducted before determining cash value. The question was raised but I didn't find the answer.

Q. That is in your investigation you did not determine any answer. A. That is right.

Q. And you thought it was unnecessary to pursue the matter further to determine the answer. Is that correct? A. Since they declared there was no value I thought it was a fruitless search. The answer would have been the same in either case, unless you got a negative answer for the stock.

Q. So you concluded, as I understand it, you did not have to take any legal advice in connection with the Pennsylvania law in order to properly construe and give weight to Exhibits 168, 169 and 199. Is that right? [9752] A. I didn't have to give legal weight to determine what the purpose of the filing was.

Q. I didn't refer to legal weight. My question is did you or did you not consider it was necessary in your consideration of these exhibits that you take legal advice in connection with the effect of the Pennsylvania statutes? A. No, I did not think it was necessary.

Q. Assume that the effect of the Pennsylvania law, Mr. Newlands, to which I have referred in 1905, 1906 and 1910 was that only a nominal value would be placed upon corporate stock for tax purposes if the corporation had no net earnings and if the stock did not have an established

market value during the year. Under that assumption would capital stock taxes paid during those years have any effect upon your determination as to the value of the stock for any other purpose than taxation?

* * *

THE WITNESS: You are asking me to assume that that fact was actually known at the time these tax returns were filed?

By MR. KING:

Q. I am asking you to assume that that was the effect of the law of Pennsylvania at the time in question, namely 1905, 1906 and 1910. A. And that these returns were filed with knowledge of [9753] that assumption?

Q. That is correct. A. The weight I would give to it—I would give weight to it in my determination.

Q. What weight? A. I don't know the exact percentage.

Q. Then do you mean that you would have changed your determination in connection with your consideration of Exhibits 168, 169 and 199, if the law had been as I have asked you to assume it was? A. Do you mean, would I have given——

Q. Any different consideration than you did to those exhibits? A. No, I don't believe so.

Q. Then as I understand it you would have concluded that the exhibits were material in connection with indicating a value for all purposes on McCall Company stock, even though the law was as I have asked you to assume it?

* * *

[9754] THE WITNESS: Yes, because the exhibit itself contains statements by the officers and directors as to what information was available as to the value of the stock. That information is good no matter what the Pennsylvania law says you have got to declare.

* * *

[9757] By Mr. King:

Q. Let's assume in connection with the construction of the Holtwood project there had occurred a flood which lasted for a period of six months, and that because of the existence of that flood no construction activity could be carried on.

Would you exclude that six months' period from the construction period in computing interest during construction? A. No, I don't believe I would.

Q. You would allow that? A. That is right, if it were an engineering impossibility to continue to work during that period.

Q. Would you allow the overhead during that period? A. Yes, so long as it was intended to go right along with construction and there was no reason to assume that it would be stopped.

[9759] By Mr. King:

Q. Mr. Newlands, will you turn to page 45 of Exhibit 51? A. That is the text?

Q. Of the text, yes. You refer, do you not, on that page to an explanation furnished you by Mr. Bortner at your request? A. That is right.

Q. Did you not furnish Mr. Bortner a longhand list of ten questions which you desired answered during the investigation? A. That is one of the items furnished. I made other requests besides that list of questions.

Q. But you submitted those ten questions? A. At one time I did, yes.

Q. Did Mr. Bortner furnish you with written answers [9760] concerning these questions? A. He furnished me with written answers. Whether they covered everything in the questions I am not certain at the present moment.

Q. You read the material he furnished you, didn't you? A. Yes.

Q. Is the information which you indicate you got from Mr. Bortner on page 45 of Exhibit 51—strike that, please.

Did Mr. Bortner furnish you with a memorandum dated May 6, 1945—May 16th, 1945? A. I will have to look that up.

Q. In response to your request? A. It is over on this table. May I get it?

Q. Please do. A. Yes, I was furnished such a memorandum.

Q. I show you a copy of the memorandum I just referred to and ask you if you will look at it sufficiently to determine whether that is a copy of the one you have? A. It appears to be. I have not compared every item there item for item but it appears to be the same.

* * *

[9761] (Thereupon, the document referred to above, with schedule, was marked Exhibit No. 237 for Identification.)

* * *

By Mr. King:

Q. Mr. Newlands, you have stated, have you not, that to the extent that these expenses, namely, the ones we are talking about, represented first surveys of properties you would allow them. Is that correct? A. That is correct.

Q. Did you make any determination to ascertain which of the surveys represented first surveys? A. It was impossible to do that from the information [9762] which was available to me.

Q. Did you request anybody to make an investigation to determine that fact? A. I requested Mr. Bortner to produce all of the facts concerning the flowage basin which would support their inclusion in plant account.

Q. Did you specifically ask him to make a determination as to which of the surveys represented first surveys? A. No, if I asked for information for support it is up to the company representative to furnish all information which he considers important.

MR. KING: I move to strike all of the witness' answer after the word "No."

TRIAL EXAMINER: Motion to strike is granted.

* * *

[9765] By MR. KING:

Q. * * * What did you mean, Mr. Newlands, when you stated a moment ago that you had allowed the expenses representing first surveys of property? What did you understand the meaning of the word "survey" to be in that connection? A. I don't believe I made that exact statement.

The amounts I have allowed for surveying property might include inadvertently, because I didn't know, second or third surveys. But I presumed that they contained first surveys since they were charged to survey account in the books.

Q. That is not my question. What did you mean by the word "survey" used in that connection? A. As used in Exhibit 51?

Q. By you as used in Exhibit 51 or as you used it in your last answer. A. My use of the word "survey" in Exhibit 51 was [9766] confined particularly to property surveys.

Q. And confined to property surveys alone? A. That is right, if I remember my paragraph correctly.

Q. By "property surveys" do you mean surveys to ascertain boundaries? A. Yes, at the time that the property is purchased.

Q. Now, Mr. Newlands, have you ever developed or assisted in developing a water survey's profile or a rating curve? A. No, I have not.

Q. Mr. Newlands, is it or is it not a fact that all you know about the engineering salaries and expenses of 1911 to 1924, referred to on page 44 of Exhibit 51, was derived from the information received from Mr. Bortner in the

memorandum of May 16, 1945? That is Exhibit for Identification No. 237. A. Did you mean page 44 or 45?

Q. On page 44 of an item entitled "Engineering Salaries and Expenses," do you not, 1911 to 1924? A. That is right, yes.

Not quite all of the information I received came from Mr. Bortner. I examined, and my assistants examined, a great number of the vouchers. We also examined what payroll information we could find. We examined the analyses of the account on the books. There were slight bits of information in there.

[9767] Q. In where? A. In these various sources which, however, did not contain enough information to tell me the nature of the charges that were being charged to flowage basin account segregation of the charges between the various types of work, what work was being done, when it was being done, or what the purpose of it was.

Q. So that all the information, as I understand it, you have about this particular subject matter, other than what you were able to determine from the vouchers and analyses, came from Mr. Bortner. Is that correct? A. There was some supplementary information in the fifteen filing cabinets. There, again, it is impossible to relate exactly the information shown there with the actual charges on the books.

Q. Was there any supplementary information in the fifteen filing cases relating to the period after 1910? A. Yes.

Q. There was? A. Yes.

Q. Can you specify what that was? A. There were various letters to Bennett, for instance, whose salary and expenses are charged in flowage basin account, a portion of them, at least, during 1911 and 1912.

Q. Weren't those letters in connection with storage [9768] reservoirs and not engineering salaries and expenses? A. Not all of them, no.

Q. Can you give us the date of one letter which you found which does relate to engineering salaries and ex-

penses after 1910 from the fifteen filing cases? A. I cannot do that offhand, no.

Q. How much time would it take to do that? A. I probably would have to look through my files. It might take ten or fifteen minutes. Of course, that wouldn't exhaust the subject, however. I have not taken a copy of all the letters I saw in the files.

Q. Why? Because the ones you didn't copy were immaterial? A. No, because it was an impossibility. I copied only those which were most important.

Q. In your opinion? A. That is right.

Q. Why did you not include in Exhibit 51 all of the information furnished you by Mr. Bortner? A. It is not necessary for me to include in my report every bit of information I get from every source.

Q. Go ahead. A. It would require several volumes in an exhibit of this sort if I were to do that.

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[9769] By Mr. King:

Q. I asked you why you did not include that information, Mr. Newlands. A. Because the accounting report which we submit in these cases is intended primarily to describe the conclusions which we drew and give, perhaps, the main facts upon which they are based, not all of them.

Q. In drawing your conclusions did you have in mind all of the facts furnished you by Mr. Bortner? A. Certainly.

Q. Did you give effect in your conclusions to all the facts furnished you by Mr. Bortner? A. Yes.

Q. Do you refer any where in Exhibit 51, either at page 45 or elsewhere, to either Schedule "A" or Schedule "B" attached to the memorandum of May 16, 1945, Exhibit for Identification 237? A. No, I do not.

[9770] Q. Mr. Newlands, I refer you to page 46 of Exhibit 51. Do you have that before you? A. Yes.

[9771] Q. Can you tell me what investigation, if any, you made in connection with your recommendation that expenses

of the Lancaster office and Mr. Bushong's salary be disallowed from 1916 on? A. May I have that question, please?

(Question read.)

THE WITNESS: I investigated the properties purchased during the entire period from 1910 to 1935 or 1936, secured from Mr. Bortner a list of the properties purchased, also secured from the analyses of the accounts themselves, the flowage basin account, a list of the properties purchased. I examined the 15 filing cabinets for any indication of what Mr. Bushong or his assistants in the Lancaster office were doing at that time. I asked Mr. Bushong to furnish me with whatever additional information, any information, he could give me concerning the activity of the Lancaster office and Mr. Bushong during this entire period.

By MR. KING:

Q. Mr. Bushong is dead, isn't he? A. Yes.

MR. GOLDBERG: I think you said you asked Mr. Bushong.

THE WITNESS: I meant that I asked Mr. Bortner.

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[9772] By MR. KING:

Q. I show you copy of a memorandum dated March 29, 1945, entitled "Re, Lancaster Office Expense," together with a copy of schedules dated April 5 and April 14, 1945, and ask you to examine those documents. A. My other papers are in another volume. May I check those?

Q. Certainly. [9773] A. Yes, I was furnished with those schedules.

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(The documents referred to were marked for identification as Exhibit Number 238.)

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By Mr. King:

Q. Mr. Newlands, do you have in front of you at this time your set of Exhibit for Identification 238? A. Yes, I do.

Q. The schedule of April 5, 1945, indicates, does it not, Mr. Newlands, that property was acquired during the years 1921, 1922, 1923 and 1924. Isn't that correct? [9774] A. That is right. That is what the statement would indicate.

Q. Did you make any investigation to determine whether the properties mentioned in the Schedule of April 5, Exhibit for Identification 238, were actually acquired during those years? A. I compared the information given here with the information we had drawn off of the flowage basin accounts.

Q. Did you determine the properties listed in the Schedule of April 5 in the Exhibit for Identification 238 were acquired? A. During those years?

Q. Yes, during those years. A. And you are referring now only to the items included under "Deed Acquired"? That would represent the purchase of the property.

Q. That is right, Mr. Newlands? A. Yes, I determined that those properties had actually been acquired.

Q. Did you make an investigation for the purpose of determining, Mr. Newlands, whether or not Mr. Bushong, during the years 1916, to and including 1924, was active in connection with acquiring property shown on the Schedule we are discussing, that is the one of April 5, 1945, in the Exhibit for Identification 238? [9775] A. I examined all the information which was available to me concerning it and we examined a great number of the deeds. I believe Mr. Bortner was requested to furnish us any information as to which properties Mr. Bushong had purchased personally. I believe some were probably purchased by agents.

MR. KING: May we have the answer to that question read, Mr. Examiner?

(Question read.)

By MR. KING:

Q. You mean agents for the company? A. That is right.

Q. Other than Mr. Bushong? A. Well, they may have been acting for Mr. Bushong—they may have been acting for the company.

Q. Did your investigation enable you to determine to whom the agents you referred to reported to? A. No. In a good many cases I imagine they would report to Mr. Bushong.

Q. Do you know of any case in which they would not? A. Well, I don't know as a matter of fact whether any of the agents did not report to Mr. Bushong. I wasn't able to determine in some cases who they reported to.

Q. In your determination in connection with both the Lancaster office expense and Bushong's salary did you [9776] rely primarily upon information furnished you by Mr. Bortner? A. That was one of the items. It was not the primary consideration, no.

Q. What was the primary consideration? A. There wasn't any primary consideration. I considered all of the facts as I knew them.

Q. Where did you get the facts you speak of? A. Some of them came from the 15 filing cabinets, some came from the discussions I had with Mr. Bushong and Mr. Diehl, whom I believe was there at one of the conferences.

MR. GOLDBERG: You mean Mr. Bortner?

THE WITNESS: Yes, Mr. Bortner and Mr. Diehl. Some of it may have come from the analysis of the accounts themselves and the vouchers involved.

By MR. KING:

Q. Did you find any material in the 15 filing cases in connection with this item? A. I found material in the

15 filing cases which indicated that Bushong did a great deal more than buy property.

Q. I asked you, Mr. Newlands, if you found any information in the 15 filing cases in connection with the particular item we are now discussing. [9777] A. In connection with this purchase of property?

Q. Yes.

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THE WITNESS: I thought I was following your lead. I thought you were asking me whether I found anything in the 15 filing cabinets which showed Mr. Bushong's activities in connection with the purchase of these particular properties. Is that correct?

MR. KING: That is correct.

By MR. KING:

Q. Did you?

MR. GOLDBERG: "These particular properties". Is that the schedule in Exhibit 238?

THE WITNESS: Listed in Exhibit 238?

MR. GOLDBERG: Yes.

MR. KING: That is correct.

[9778] MR. GOLDBERG: Thank you.

By MR. KING:

Q. Go ahead. A. Yes, there was some evidence concerning the purchases of the earlier property, mostly of a general nature. In other words, I recall one letter which mentioned the fact that Mr. Bushong was to buy the properties along Conestoga Creek, and there are other letters of that nature.

Q. Did you find anything in relation to the properties acquired after 1916 in the 15 filing cases? A. Not including 1916, is that correct?

Q. Well, yes. A. Including 1916, from 1916 on?

Q. Say from 1917 on. A. Yes, I believe there were memoranda and correspondence in the files regarding flashboard cases which contained references, I believe, to the purchase of property in this later period. I believe that was so. I also found references in connection with the purchase of the property used for the river coal operations in various of the memoranda in the 15 filing cabinets.

Q. Do you now recollect the date of that correspondence to which you referred? A. No, I couldn't remember that detail.

[9779] Q. Is it not a fact, Mr. Newlands, that the schedule dated April 5, in the Exhibit for Identification 238, shows that 16 properties were acquired by the company from 1916 to and including 1924? A. That would seem to be a fact based on the statements given here.

Q. Well, is it or isn't it a fact? A. Well, I would have to check with my other working papers to determine that. I believe this is correct.

Q. Now, Mr. Newlands, what investigation, if any, did you make to determine facts concerning the Benjamin Davis mortgage which you referred to on page 46 of the text of Exhibit 51? A. I asked Mr. Wetzel to furnish me with the facts concerning the Benjamin Davis foreclosure.

Q. Mr. Wetzel, you say? A. Mr. Wetzel, that is right.

Q. Is that all? A. That is right, yes. I might add that of those properties purchased from 1920 to 1924, many of them were for the river coal recovery operations, which at that time was a proposition handled by Holtwood Coal Company as a commercial marketing operation. It had nothing to do with the hydro operation.

Q. Weren't those properties to which you referred [9780] also useful in the flowage basin? A. No, because the company had flowage rights over the same property. They acquired the lien at the time they decided to go into the river coal recovery operations in order to obtain a place for their riverside coal plant. They selected the site at

Shenks Ferry because the railroad happened to be located at an advantageous position for river coal recovery operations.

Q. Didn't title of the lands about which you are speaking, Mr. Newlands, go under the name of Penn Water? A. Title was taken to the land by Penn Water and leased to Holtwood Coal Company.

Q. Then the answer to my question is "yes," is that correct? A. That is right, yes.

Q. Mr. Newlands, do you know that as a matter of fact there were four separate actions filed in the lower courts of Lancaster County and two appeals in the upper court concerning the title to the Ben Davis property between the years 1913 and 1919? A. No, I did not.

Q. Did you ever make any investigation to determine that fact? A. No, I never knew it was necessary to make such an investigation. From the information I had received [9781] the company had originally purchased a mortgage on that property and in 1919 Mr. Wetzel informed me that the mortgage was foreclosed. He didn't tell me any of these other details you are now mentioning.

Q. In any event you didn't ask Mr. Bortner anything concerning the Benjamin Davis mortgage, did you? A. No, because I thought I had all the information available or necessary.

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[9783] By Mr. King:

Q. Mr. Newlands, I direct your attention to page 47 of Exhibit 51, with particular reference to the statement made at the top of the page, "Sundry Legal Fees." A. Yes, sir.

Q. Do you have that before you? A. That is right.

Q. Did not Mr. Bortner, in response to your request, furnish you with a memorandum dated August 6, 1945, in [9784] connection with the matter we are discussing? A. May I see your copy? I don't seem to have it here.

Q. You certainly may. A. Yes, I have not yet located them in my papers. Are you going to ask questions about it? I want to locate it.

Q. Is the copy I show you a copy of the one which you have in your file? A. It appears to be, without a direct comparison.

Q. Did you actually receive a document dated August 6, 1945, from Mr. Bortner in response to your request? A. I believe so.

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(The document referred to was marked for identification as Exhibit Number 239.)

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[9787] By Mr. King:

Q. Page 34 of the text of Exhibit 51. Do you have that in front of you, Mr. Newlands? A. Yes, I have that.

Q. On that page you have recommended that the Commission disallow portions of fees paid to Cooper, Sanderson and Porter and part of the salary paid to Hutchinson, have you not? A. That is right.

Q. Did you recommend the elimination of approximately thirty thousand dollars paid to Cooper as shown by your Schedules 12-B and 14 of Exhibit 51? A. Can you give me the page number for quick reference?

Q. Page 39, I believe. A. You mentioned another one.

Q. Page 39 of the schedule and page 43 of the schedule.

The Witness: May I have the question now, please?

(Question read.)

The Witness: That is correct.

Trial Examiner: What are the figures which add up to $30,000?

The Witness: The item under "Engineering Experts salaries to Hugh L. Cooper, hydraulic engineer, $14,107.21",

and on page 43 the first item under the top grouping of claims against McCall Ferry Power Company "Hugh L. Cooper, completion bonus, $15,819.06".

[9788] The slight discrepancy between the total of those two and the flat amount of thirty thousand dollars is due to an adjustment made with Cooper on his traveling expense account.

MR. KING: I believe I referred to the figure as approximate in my question, your Honor?

By MR. KING:

Q. Was your sole reason for recommending the disallowance, Mr. Newlands, of approximately thirty thousand dollars because Cooper did not complete the work in your opinion for which he had contracted? A. That is one of the reasons. The other reason that the company incurred an expense of sixty thousand dollars to complete the work. The sixty thousand dollars was paid to Empire Engineering Corporation to complete the work which Cooper had started.

Q. Do you know when Cooper ceased working on the project? A. I don't understand exactly what you want me to answer there.

Q. I want you to answer as to the fact.

MR. GOLDBERG: I think you understand what the witness means.

TRIAL EXAMINER: Proceed.

THE WITNESS: Cooper never did any actual work on the project. He supervised it. He was not at McCall Ferry all [9789] the time. There is no way for my telling or anyone telling exactly what time he spent there. His work in connection with the construction would, of course, have to stop with the cessation of the work.

Q. When was that? A. November 1, 1907.

Q. Do you know whether Cooper's firm or he individually was responsible for the work on the tailrace in

1908? A. Yes, that work came under the supervision of Cooper's department.

Q. Did you make any investigation, Mr. Newlands, to determine whether the services of Cooper or his organization were performed in return for any part of the thirty thousand dollars of Cooper's compensation you have recommended for elimination? A. I tried to determine it by reviewing all of the facts which were available to me.

Q. Did you determine it? A. I determined that Cooper had not completed his work for which the total fee would be payable to him.

Q. Did you determine, Mr. Newlands, whether Cooper performed, or his organization performed, work in return for any part of the approximately thirty thousand dollars which you have recommended for elimination? A. I determined that Mr. Cooper did not perform all of the work he should have in return for that thirty thousand [9790] compensation.

* * *

By Mr. King:

Q. I asked you, Mr. Newlands, if he performed any of it.

Mr. Goldberg: This was a completion bonus, wasn't it, we were talking about?

Mr. King: Talking about the thirty thousand dollars Mr. Newlands recommends for elimination.

Mr. Goldberg: Completion bonus.

The Witness: That is an extremely difficult question to answer because it involves spreading Cooper's fee over the work he did. It is impossible for anyone at this time to make that spread. Mr. Cooper himself was probably the only one who would have the information to do that.

By Mr. King:

Q. I asked you if you did it.

Mr. Goldberg: Let the witness finish.

TRIAL EXAMINER: Just a minute. You may finish.

THE WITNESS: No, because it was impossible from the information which was available to me.

[9791] Q. Did you consider part 28 of Exhibit 27 in connection with your determination with regard to this matter? A. Yes, I did.

Q. Did you read part 28 of Exhibit 27 in connection with your determination? A. Yes, I did.

Q. Mr. Newlands, I show you photostatic copy of a letter dated January 30, 1908 from Hugh L. Cooper to McCall Ferry Power Company, and ask you if you examined that letter or a copy in connection with making your determination?

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THE WITNESS: I believe I have seen this letter in the files.

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(Thereupon, the document referred to above was marked Exhibit No. 240 for identification.)

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MR. GOLDBERG: Who underscored certain of the sentences [9792] appearing on page 2 of the Exhibit, Mr. King?

MR. KING: I don't know who did that at this moment.

MR. GOLDBERG: Do you know whether the underscoring was done in 1908 or by someone recently going through the correspondence?

MR. KING: I assume it was by somebody recently.

MR. GOLDBERG: Someone connected with the company, you think?

MR. KING: Yes.

By MR. KING:

Q. Mr. Newlands, did you make the underscoring? A. No, I did not.

Q. Mr. Newlands, I show you a photostatic copy of a letter dated March 11, 1908 signed by Cary T. Hutchinson, and directed to Mr. H. F. Dimock, president of McCall Ferry Power Company. I ask you if you considered that letter in making your determinations in connection with Exhibit 51? A. Yes, I have seen that letter and considered it in making my determination.

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(Thereupon, the document referred to above, was marked Exhibit No. 241 for Identification.)

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[9793] By Mr. King:

Q. You say you considered that letter we have just referred to, Mr. Newlands? A. Yes.

Mr. Goldberg: Where is the attachment? I note the opening paragraph of Exhibit 241 says "I am attaching a copy of letter just received by Mr. Cooper."

Mr. King: In the files of the company.

Mr. Goldberg: This is not a complete letter without the attachment.

Mr. King: Well, we will be glad to furnish you copies.

Mr. Goldberg: I would like to have the attachment produced.

Mr. King: We will be glad to furnish that to you.

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By Mr. King:

Q. Mr. Newlands, in making your determination as to the elimination of the amount of approximately thirty thousand dollars paid Mr. Cooper, did you consider work performed by [9794] him or members of his organization on drawings during the year 1908? A. Yes, I did. Those costs have been allowed in my determination.

Q. But you made no allowance in connection with Mr. Cooper's supervision. Is that correct? A. That is cor-

rect, because an additional fee of sixty thousand dollars had been paid to Empire to complete Cooper's work. I was faced with the proposition of disallowing either the sixty thousand dollars or the thirty thousand dollars. I chose the smaller figure.

Q. Mr. Newlands, did you recommend for elimination approximately $9,200 paid to Sanderson and Porter in your Schedule 14 of Exhibit 51, page 43 of the schedule?

MR. GOLDBERG: May I have the question, please?

(Question read.)

THE WITNESS: That is right.

By MR. KING:

Q. Was your sole reason for making the recommendation to which you have referred that Sanderson and Porter did not complete the work contracted for by them? A. No, it was that fact plus the fact that Pennsylvania Water and Power Company and J. E. Aldred, Receiver, incurred expenses to complete the work which Sanderson and Porter should have done.

[9795] Q. Do you know when Sanderson and Porter ceased work? A. They never began the work on the installation of the machinery.

Q. Do you know when they ceased the work they did perform? A. I believe that some drawing work was going on during 1907 and 1908 in Sanderson's and Porter's New York office. Those expenses we have allowed. I don't know the exact date when that drawing work stopped, but that would be the only work which was going on during that period, during the period of cessation.

Q. Can you give us some idea as to the amount of the expenses which you say you allowed? A. Yes. On page 38 of the schedules——

Q. Would you wait just a moment until I find that page, Mr. Newlands? A. Yes, sir.

Q. All right. A. Under the title "Overheads, Administration", the last item in that group reads, "New

York Office of Sanderson and Porter". For the year 1908 there are expenses of $6,567.40 stated.

Q. Was that part of their fee? A. No, that was the cost of making the drawings to which you referred during this period of cessation.

Q. How much of the fifty thousand dollar fee have you [9796] allowed? A. How much have I allowed?

Q. If any? A. I don't seem to have all the figures here necessary to make that determination, but it was about $32,000.

Q. Then you have eliminated about eighteen thousand dollars, is that correct? A. No, I eliminated $9,210.52.

Q. Did you read the contract between Sanderson and Porter and McCall Ferry Power Company, Part 29 in Exhibit 27? A. Yes, I did.

Q. What did you do with the balance of the dollars representing the difference between $32,000, approximately, and the $9,200 you just mentioned? A. I didn't have to do anything with those dollars. They never were paid to Sanderson and Porter.

Q. Mr. Newlands, did you make any investigation to determine whether any part of the work performed by Sanderson and Porter was performed in return for any part of the approximately $9,200 you have recommended for elimination? A. It was impossible to spread the Sanderson and Porter fee over the work actually done and the work to be done on any information that I had.

Q. Did you endeavor to do it? A. I endeavored to determine all of the information [9797] which would enable me to do so if it could be done, but I decided that it could not be done, and I did not make such a determination.

* * *

By Mr. King:

Q. Mr. Newlands, during the recess were you able to check in connection with Exhibit for identification 239? A. I was not able to find my copy.

Q. Were you able to inform yourself sufficiently to say whether the Exhibit for identification 239 is a copy of the document which you were furnished? A. Yes, I believe this is a copy of the document furnished to me.

Q. Mr. Newlands, did you recommend on Schedule 12-B page 39 of the supplement of Exhibit 51, that the amount of $10,499.94 paid to Mr. Hutchinson for the period November, 1907 to July, 1908 be eliminated? A. That is right.

Q. Did you also recommend at page 33 of the text of Exhibit 51 that an additional five thousand dollars paid to Mr. [9798] Hutchinson be eliminated? A. That is right.

Q. Was your recommendation in connection with the elimination of these two amounts based solely on the ground that no work was done by Mr. Hutchinson after October 31, 1907? A. No, it was not.

Q. What else was it based upon? A. Based upon the fact that the payments made to Mr. Hutchinson would not have been necessary. If the project had continued to completion Mr. Hutchinson would have been paid during the time full construction was going on. The amounts paid to Mr. Hutchinson during this period represent an added cost, added overhead which would not have been incurred if the construction had proceeded to completion without the cessation.

Q. Is it your position that none of the work done by Mr. Hutchinson during this period contributed to the completion of the project? A. It did not deduct anything from the total construction period of the project.

Q. Did it contribute to the completion of the project? A. It may have, but it represented added expense which would not have been incurred if the cessation had not taken place.

[9799] Q. Did you consider Commission's Exhibits 175 and 181 in reaching your determination to recommend the elimination of these two amounts? Do you have copies of those before you, Mr. Newlands? A. I think I have.

MR. GOLDBERG: What were the numbers? 175 and 181?

MR. KING: That is correct.

THE WITNESS: May I have the question, please?

(Question read.)

THE WITNESS: Yes, I considered them.

By MR. KING:

Q. Those exhibits indicated to you that Mr. Hutchinson did perform work during 1908. Isn't that correct? A. Without reading it all the way through it indicates to me that Mr. Hutchinson made a report to Mr. Dimock of the situation in 1908 and that Mr. Cooper reported to him on April 13, 1908 as to the projected work from April to October, 1908.

Q. Does that mean the answer to my question is "Yes"?

THE WITNESS: I will have to have the question again.

(Question read.)

THE WITNESS: It indicated that Mr. Hutchinson did some work but not that the work contributed to the completion of the job.

By MR. KING:

Q. I didn't ask you that. I just asked you if it [9800] indicated to you that he performed work during the period we are discussing. The answer is "Yes", as I understand it. Is that correct? A. He performed work of some nature.

Q. Mr. Newlands, did you know who Boyd Ehle was? A. Yes.

Q. Who was he? A. He was Mr. Hutchinson's assistant. He was resident engineer at the job of McCall Ferry Power Company.

Q. Was he the only person who worked under or for Mr. Hutchinson? A. No, there were other persons.

Q. He was one of the ones who worked for Mr. Hutchinson? A. That is right.

Q. Mr. Newlands, I show you a file taken from the company's records, which file was obtained by your Staff during its investigation, and which contains approximately 70 letters to Hutchinson from Ehle and from Ehle to Hutchinson, during 1908. Did you or any member of your staff working under your direction consider that file?

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[9801] THE WITNESS: I cannot tell without looking at the particular file.

By MR. KING:

Q. Will you look at it, Mr. Newlands? A. Yes, I have seen this file in connection with my investigation.

Q. What consideration, if any, did you give to the letters in that file? A. I considered the facts as indicated by the letters.

Q. Have you considered those facts in arriving at your determination to recommend the elimination of the two amounts paid to Mr. Hutchinson? A. That is right.

Q. Do you know whether or not Mr. Hutchinson brought suit against McCall Ferry Power Company to collect an amount of $13,416.59? A. Yes, I believe so.

[9802] Q. Do you know that in addition to bringing suit he attached available property of McCall Ferry Power Company? A. Yes.

Q. Do you know that that suit was settled for less than the amount claimed by McCall Ferry Power Company? A. As I understand it it was settled by the payment of the $5,000 to which you have referred previously.

Q. Mr. Newlands, did the file which I have just exhibited to you, and which you said you considered in making your determination, indicate to you that Hutchinson did work during 1908? A. It indicated that he was engaged in some activity in connection with the project.

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[9806] By Mr. King:

Q. Do you have Commission Exhibit 158, Mr. Newlands, in front of you? A. Yes, I have.

Q. That is a letter from P. G. Bartlett of Simpson, Thacher and Bartlett to Mr. Cary T. Hutchinson, dated January 20, 1906. Is that correct? A. Yes.

Q. Did you take that letter into consideration in reaching your recommendations and conclusions and suggestions in Exhibit 51? A. Yes, I did.

Q. What consideration did you give paragraph 1 of that letter? A. Do you want to know how I used it?

Q. I want to know what the first paragraph means to you. A. It means that Harvey Fisk and Sons were to distribute a part of the common stock which was owned by Cary T. Hutchinson.

Q. You mean it indicates to you that Cary T. Hutchinson [9807] owned all of the stock? A. It indicates to me that at this time he did not own all of the stock.

Q. What does the second paragraph mean to you? A. It indicates to me that Harvey Fisk and Sons were acting as a trustee to keep the stock owned by Hutchinson in safe-keeping for him.

Q. You mean the part owned by him or all of the stock? A. It indicates to me all of the stock.

Q. And the first paragraph indicates to you that the writer of the letter was referring only to a part of the stock. Is that correct? A. That is right. There apparently seems to have been a change in the ownership of the stock.

Q. You mean during the time the letter was written? A. No, during the period in which it was held in safe-keeping by Harvey Fisk and Sons. That is a change in the ownership of part of the stock, of course.

Q. Now, I show you a photostatic copy dated January 18, 1906 from Cary T. Hutchinson to Simpson, Thacher and Bartlett and ask you if you examined that letter?

* * *

THE WITNESS: I have seen that letter.

* * *

[9810] Q. Mr. Newlands, will you turn to page 9 of the Schedule of Exhibit 51? Do you have that before you? A. Yes, I have.

Q. I direct your attention, Mr. Newlands, to Job Order No. C-2640 in the amount of $20,615. Do you find that item? A. That is right.

Q. Was not that job in service, Mr. Newlands, at the end of December, 1945? A. Not that I know of. It was not included in the power bill at that date.

Q. You deny that it was in service? A. I just don't know. So far as I know it was not.

Q. I call your attention to Job Order No. B-2694. Do you find that? It is further down the page from the one I just referred to. A. Yes, I have that.

Q. Was that in service at the end of December, 1945, if you know? [9811] A. Well, that is a credit item. It is a reduction of the costs which appear on the books. If this amount were closed to plant accounts the plant accounts would be reduced.

Q. Take the item "Job Order C-2740" in the amount of $207.82. A. Yes.

Q. Was that in service at the end of December, 1945? A. I will have to look in my work papers. I think I may have some information on that. I don't recall offhand.

Q. Will you refer to your work papers? A. No, I have no information as to whether that job was placed in service. It was not included in the power bill, however.

Q. How about the prior one that I inquired about, C-2640? Do your work papers throw any light or information throw any light on that? A. My work papers would indicate that that had not been placed in service.

Q. What is the date of those work papers? A. January 24, 1946. I believe I have stated previously that was not included in the power bill.

Q. Now, Mr. Newlands, take item Job Order B-2711. Was that in service at the end of December, 1945? A. Did you say B-2771?

Q. B-2711—$2,195. [9812] A. My work papers would indicate that that had not been placed in service and it was not included in the power bill.

Q. Now, take the next item, C-2722 in the amount of $1,071.13. Was not that in service at the end of December, 1945? A. Ordinarily items of that nature are in service immediately that they are purchased; that is calculating machines and furniture and so forth.

Q. Does that mean your statement is that that item was in service at the end of that time? A. That probably was in service at the end of 1945.

Q. Take the next item, C-2725, in the amount of $14,992.75. Was not that item in service at the end of December, 1945? A. This indicates it was not. The property was purchased from T. S. Martin by contract dated December 10, 1945. It was property used by Martin in recovering river coal from the river. By that date I believe river coal operations would have stopped and there would be no opportunity to put it in service until river coal operations began again in the spring. I understand that the equipment was pretty dilapidated in any case.

Q. Do you know what date the river coal operations stopped in 1945? A. No, I do not know the exact date.

Q. Then how do you draw the conclusion you just stated? [9813] A. It is my impression that river coal operations usually stop before this particular date.

Q. You mean that is an assumption on your part. Is that correct? A. It is an assumption based on things I have seen in the records, but I cannot put my finger on the exact information. That item also was not included in the power bill.

Q. Do you know whether or not that property represented by that job order was used to store the river coal

fleet over the winter? A. Whether the particular property which was acquired here did that?

Q. That is right. A. No, I don't know, but——

Q. That is all I asked you, Mr. Newlands, if you knew.

Turn to page 10 of the schedules, which is the next page to the one we have been discussing, and refer to the item represented by Job Order C-2642 in the amount of $463.20.

Was not the property represented by that item in service by the end of December, 1945? A. Yes, that was placed in service on December 14, 1945. That was not included in the power bill, either.

Q. Take the next item represented by Job Order C-2672 in the amount of $678.75. Was not that in service at the end of December, 1945? [9814] A. That item went into service on December 26, 1945, but was not included in the power bill for 1945.

Q. Take the next item, Job Order No. C-2701 in the amount of $886.51. Was not the property represented by that item in service at the end of December, 1945? A. That property went into service on December 7, 1945, but was not included in the 1945 power bill.

Q. Take the next item, C-2704 in the amount of $396.57. Was not the property represented in that item in service at the end of December 1945? A. That job was placed in service on December 22, 1945, but was not included in the power bill for 1945.

[9815] Q. Take the next item, Mr. Newlands, Job Order Number C-2707 in the amount of $800. Was not the property represented in that item in service at the end of December, 1945? A. My explanation for that item would be similar to the explanation for Job Order 2725, purchase of——

Q. 2725? A. That is correct, purchase of Thomas S. Martin and Pequea Fuel Company.

Q. That is on page 9, the job order you just referred to? Is that correct? A. That is right. It consists of coal barges in dilapidated condition purchased from Martin

Coal Company. So far as I know they were not in service at that date.

Q. Do you know whether that property was in service during December of 1945? A. I don't know definitely, but from the information I do have available I would say it was not in service. That item was not included in the power bill for 1945, either.

MR. KING: May we have the last question and answer read back, Mr. Examiner?

TRIAL EXAMINER: Yes.

(Question and answer read.)

[9816] By MR. KING:

Q. You mean the property was not being used? A. That is correct, by Pennsylvania Water and Power Company.

Q. Do you know that fact or are you guessing at it? A. No, I am drawing that conclusion from the facts that are available to me concerning this transaction.

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[9831] By MR. KING:

Q. Mr. Newlands, would you please turn to Exhibit 56? Do you have that in front of you, Mr. Newlands? A. Yes, I have that.

Q. Did you prepare that exhibit? A. Yes, I prepared this exhibit.

Q. Do you assume full responsibility for the exhibit? A. Yes, I do.

Q. Would you please give me the basis for the calculation of the amount of $4,495,500 in column 1 of this exhibit?

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[9832] THE WITNESS: That represents the amount of cash paid in, represents 60 per cent of the amount of cash paid in on the McCall Ferry bonds which were exchanged for Pennsylvania Water and Power Company securities.

By Mr. King:

Q. That represents, then, cash paid in on bonds. Is that right? A. Yes. I can clarify my explanation if you are uncertain as to what I mean.

Q. I think we understand what you mean, Mr. Newlands. Does that same basis apply, or rather does that same calculation apply to the amount of $4,495,500 from the years 1911 to 1945? A. To 1925, did you say?

Q. 1945. In other words, does that same basis apply in connection with all of the figures in column 1 on Exhibit 56? A. That is right. It is included all through there.

Q. Mr. Newlands, again referring to column 1 of Exhibit 56, the year 1915—that is the dollars opposite the year 1915—do not those dollars represent only the [9833] cash paid into the company on approximately 45,000 shares of common stock? A. It represents cash paid into the company on all the common stock that was outstanding at that time. I have forgotten whether that is the exact number of shares outstanding or not.

Q. How many shares were there? A. Well, the authorization was 50,000 shares originally.

Q. What I want to know, Mr. Newlands, is how many shares of Penn Water common stock does the amount of $4,495,500 apply to. A. What amount, what number of shares?

Q. Correct. A. It applies to 49,950 shares.

Q. Don't you mean 44,000 instead of 49,000? A. No, 49,950.

Q. Was it $100 par stock? A. Oh, that amount of cash paid in applies to all the stock outstanding at that time, not just the 49,950 I mentioned. The amount was 84,950.

Q. How many shares of stock went to the McCall bondholders? A. 49,950 shares should have gone to the McCall bondholders but a few of them were not exchanged. That is, [9834] J. E. Aldred bought $66,000 worth of bonds. However, I have included those bonds in this calculation.

Q. You mean the 49,000? A. That is right.

Q. Well, isn't it true that the only cash represented in the figure we are discussing represented those 49,000 shares? A. The amount of cash I have shown in column 1 represents the only cash that was paid in on any outstanding capital stock. The total capital stock outstanding was 84,950 shares.

Q. Well, Mr. Newlands, doesn't the $4,495,500 represent cash that was paid in by the McCall Company bondholders? Isn't that correct? A. That is right.

Q. And they received only the 49,000 shares that you have just mentioned. Is that correct? A. That is right, there was no cash paid in on the other shares.

Q. Now, will you refer to column 2 on that exhibit. Do not the dollars in column 2 opposite the year 1915 represent dividends paid on approximately 85,000 shares? A. That is right.

Q. Now, Mr. Newlands, would not the 7.6 per cent in column 3 opposite the year 1915 be substantially reduced [9835] if the dividends shown in column 2 were those paid only on the number of shares represented by the $4,495,500? A. If you make that assumption and make that calculation you would have a smaller percentage, but that is not what I was doing here.

Q. I am not asking what you did. I am asking you to answer my question. Will you please figure—Do you have some scratch paper in front of you? A. Yes.

Q. What percentage would be if you divided the amount in column 1 into the dividends which were paid to the stockholders who paid in the cash? A. Do you mean by that the capital stock which went to the McCall Ferry bondholders?

Q. That is right. A. You don't happen to have the amount of dividends that applied to that stock, do you?

Q. It was $4 a share, Mr. Newlands. A. It would be approximately 4.4 per cent.

Q. Would there be a similar reduction in each year if you made the same calculation for each year? A. If you

made a similar calculation based on your assumptions, you would obtain a similar reduction. I don't know what would be the exact percentage, but there would be some reduction. [9836] Q. It would be substantial, wouldn't it? A. Well, I haven't made the calculation for later years. I am not certain. It would amount to at least one or two per cent, I imagine, in any year.

Q. The one you just calculated amounted to approximately 45 per cent, didn't it? A. When I said one or two per cent, I meant one or two per cent as compared with 18 or 25 per cent. I wasn't referring to a proportion between the percentages shown here and the percentage I just calculated.

Q. I want the proportion. A. Let me make myself clear. When I arrived at my calculation I arrived at 4.4 per cent which represented the relationship of the dividend of $199,800 which would be payable on the shares originally given to the McCall Ferry bondholders.

Q. I am asking if you made that same assumption all down the line in column 3 would you not get a substantial reduction?

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[9837] A. I would obtain a reduction. It would be not 45 per cent which you mentioned, nor anywhere near that, but I don't know what it would be.

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[9935] SAMUEL JOSEPH

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CROSS-EXAMINATION.

By MR. SPARKS:

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[9956] Q. Do returns required by investors depend upon the investors' appraisals of the risks present in the investment?

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THE WITNESS: Yes.

[9958] Q. Does the cost of capital depend upon the investor's appraisal of the risks present in the investment? A. Yes.

[9964] Q. Is the ownership of Penn Water common stock widely distributed, Mr. Joseph? A. Sufficiently so to be traded.

[9965] Q. Mr. Joseph, can you name ten other electric utility common stocks which are more widely held than the Penn Water common stock?

THE WITNESS: I don't know that I can.

[9972] Q. Mr. Joseph, are you familiar with the Federal Communications Commission's study of the problem of the rate of return on public utility regulation dated June 15, 1938? A. Yes, I am.

[9973] Q. I call your attention, Mr. Joseph, to page 76 of that report and to the following words:

> "While it is true that the prospects of a future rise or fall in the market price of stocks have their influence (and at times may even be controlling), it is believed that the financial and operating characteristics of the particular utility eventually dominate the investing public's evaluation of its securities. In many cases this will not result unless the period used is long enough to even out the effect of market factors extraneous to the individual corporation's situation. In any event, however, it seems to be generally conceded that the long-run average earnings-price ratio, more accurately than any other single factor, reflects the investor's composite evaluation of all fundamental influences affecting the corporation."

Q. Do you agree with those statements?

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[9974] A. I do agree with the last sentence.

Q. And you are in substantial agreement with the other sentences that I have read. Is that correct? A. Yes.

Q. When you had in mind the Bluefield decision for the purpose of preparing Exhibit 46, what did you consider to be the meaning of the word "investments" which is contained in the clause "—investments in other business undertakings which are attended by corresponding risks and uncertainties"? A. Investments there I think means, or may be taken to mean, the outstanding securities of other similar enterprises.

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[9975] Q. In the preparation of the evidence of the fair rate of return which is contained in Exhibit 46, did you consider or assume the adoption by the Commission of any particular kind of rate base? A. I assumed that the Commission would allow a fair rate of return applied to a rate base which would be at least equal to the investor's investment in the property.

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[9984] Q. Now, Mr. Joseph, you have stated that Exhibit 46 would be an adequate sound basis for the determination of a fair rate of return for the Detroit Edison Company, and I assume that you would also state, would you not, that the Exhibit would be an adequate and sound basis for the determination of a fair rate of return for each of the other fourteen electric companies shown on page 38-A of the exhibit? A. It would be very helpful.

Q. Well, would it be adequate and sound basis for the determination of the fair rate of return? A. After I had made the check that I say I would like [9985] to make, I think I could then say that it would be for each of these fourteen companies an adequate and sound basis.

Q. In other words, you would say Yes to my question if your investigation of each of the companies disclosed no peculiarities which would indicate to you that different individual special treatment ought to be given to one of the companies. Is that correct? A. Exactly right; yes, sir.

* * *

[9988] Q. Now, Mr. Joseph, why did you exclude from Exhibit 46 any data with respect to cost to the company of debt capital experienced by Penn Water? A. Why did I not include it?

Q. Right. A. Because the information shown in my opinion was sufficient, having in mind that the Commission would have before it a complete detail concerning the cost of debt capital of the Pennsylvania Water and Power Company from another witness.

* * * *

[9993] Q. Just prior to the noon recess, Mr. Joseph, you referred [9994] to Exhibit 51 in this case which was Mr. Newlands' report for data showing the experienced costs of debt capital to Penn Water, did you not? A. Yes, I did.

Q. On what pages of that Exhibit are those costs shown? A. One reference is found on page 4.

Q. Are there any other pages on which those costs are shown? A. You might also refer to page 6, and I think that is the extent of it in Exhibit 51.

Q. Do you know of any other exhibit which contains that data? A. It may be contained in the balance sheet exhibit.

Q. Do you recall the number of that exhibit? A. No, I do not.

Q. Could you ascertain whether it is contained in the balance sheet exhibit? A. Yes, I will.

Q. Now, what does Exhibit 51 show to have been the experienced cost of debt capital to Penn Water, Mr. Joseph? A. It shows that in 1939 Penn Water issued

$10,900,000 face amount of 3¼ per cent bonds at 102. It shows that in 1940 Penn Water issued $10,962,000, 3½ per cent bonds at 103. The first series was due in 1964; the second series was due in 1970. You can conclude from that that the [9995] experienced cost of capital for these issues was in the neighborhood of 3¼ per cent.

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Q. Well, then, is it correct to say that Exhibit 51 provides data which enables you to determine the yield at the price to the public, but that it does not include data showing the experienced cost of capital, debt capital, to Penn Water? [9996] A. For that issue? For that issue, Exhibit 51 does not have all of the information sufficient to determine the precise cost of the capital on these bonds. However, the information is quite readily available, I am sure.

Q. Well, when you say it is quite readily available, Mr. Joseph, do you know whether it is available as evidence in this case? A. No, I do not.

Q. I understood you to say, I believe, before the noon recess, that such data should be considered by the Commission in its determination of fair return. Is that correct? A. Yes, it should. Of course you understand, Mr. Sparks, that we are talking about a very, very small item.

Q. In what connection do you make that observation, Mr. Joseph? A. Well, I mean that in the illustration that I gave where the bonds sold at par and the yield was 3¼ per cent, the cost to that capital to the company is not going to be very much over 3¼ per cent.

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[10028] Q. Isn't it true, Mr. Joseph, that in recent years the restrictions which we have mentioned provided in indenture provisions have resulted in all bonds being of higher quality? A. The tendency would certainly be that way, yes.

Q. And that is true, is it not, of the bonds [10029] represented in the indices on pages 1 to 19 of Exhibit 46? A. Generally I would say so, yes.

* * * *

Q. Well, isn't it true that the decline in yields as shown in your averages is for reasons other than the decline in the return expected by investors on bonds of identical quality? [10030] A. It contains the effect of what we have been discussing.

Q. Well, are you saying, then, that the decline as shown in your averages includes the decline brought about by these tightening of protective features in indentures and the consequent improvement in the quality of the bonds? A. Well, it includes the effect of that, yes.

Q. In other words, then, the decline in the average yield shown on page 5 of Exhibit 46 is due in part to a lessening of the risks assumed by bondholders? A. Well, it includes the effect of that element. If you were to say that a portion of this decline would have taken place, all other things being equal because of the better protection, that would probably be true. But the decline has not taken place because of the better protection. Am I clear on that?

Q. Well, I gathered from your previous answer that that was one reason for the decline. A. For a decline?

Q. For the decline reflected in your study, namely, the increase in protective features in the indentures. A. Well, perhaps I can explain my point by illustration: The investor, let us say, is satisfied today that he is getting better protection in the indenture than he was years ago. He probably is, and on that score he [10031] says, "I will accept less of a return than I would years ago."

But it does not follow that he today believes he is assuming less risk in the purchase of a utility bond than he did in 1920. Isn't that clear?

Q. Why not? A. Well, one reason that I might mention would be that many people believe that the regulatory authorities adopting the principles that the utility

shall be allowed a return only upon investment are setting about to wreck the utility, and it may be that some investors of that notion, that if they get a return only on their investment, that is not enough. We are assuming risks tremendously greater than we did in 1920 when we could expect that the regulatory authorities would allow us a return on just about what we asked for by way of reproduction cost, and so on.

Now, I am saying that the effect of what we have been discussing is included in these averages, but it does not follow that the decline has taken place because investors now believe that investment in utility bonds over-all are so much safer than they were in 1920, because of these indenture provisions.

* * *

[10033] Q. These tightened protective features which we have been referring to, Mr. Joseph, result in additional burdens being assumed by others than the bondholders, do they not? A. Yes, that is probably true. When the bondholder is better protected, the other investors are assuming certain additional burdens.

* * *

[10034] Q. Then you do not agree that the risk of which the bondholders are relieved are shifted to the common stockholders. Is that correct? A. There is a shifting, yes.

Q. To the common stockholder? [10035] A. To the other investors.

Q. Which would include the common stockholder? A. Which would include the common stockholders.

* * *

[10040] Q Assuming that all other factors are equal, is the cost of new money to an enterprise higher or lower than the cost of money for refinancing? A. Probably higher.

* * *

[10049] A. You asked me concerning the number of stockholders of Pennsylvania Water and Power Company.

I find in Moody's Manual of Investments that the number of stockholders, common stockholders as of December 15, 1945, is reported as 6528.

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[10056] Q. Is the cost of capital to a particular utility enterprise the measure of a fair rate of return to that utility enterprise? A. Not always, no.

Q. What are the exceptions in your opinion, Mr. Joseph? A. Well, you have certain costs of capital that [10057] may be changeable, and if they can be changed to benefit the utility and the public, that change should probably be considered in establishing the fair rate of return rather than the actual cost of the outstanding capital. I have in mind if outstanding bonds, for example, are at very high interest rates which can and should be refunded, then in establishing the fair rate of return the authorities might consider what could be done in such a refunding operation.

Q. Now, are there any other exceptions, Mr. Joseph, which you have in mind? A. The cost of capital that was incurred many years ago in connection with the issuance of other securities would likewise be superseded by allowing what is today a fair rate of return upon the remaining investment. I have in mind this: If 30 years ago the company that you spoke of issued stock at a cost to it of 15 per cent, and we are today considering what is the fair return for such a company, we would say that the fair return is what other similar investments today are yielding. I think maybe that would become more clear, Mr. Sparks, if we reversed the example that I gave. It seems to me that is usually clearer to utility representatives.

If some years ago the utility issued stock at a cost to it of two per cent and today similar investments are [10058] earning six per cent, the utilities are quick to realize that the allowance of only two per cent would be rather unfair.

Q. Are there any other exceptions, Mr. Joseph? A.

And so I say that in determining the fair rate of return, the attempt is to allow what is fair upon similar investments today, and the cost of capital, unless it is for some reason frozen, does not have a decisive effect upon the fair rate of return.

Q. Well, what you are saying, then, Mr. Joseph, is this, is it not? That today's cost of capital to the particular utility enterprise is the measure of the fair rate of return to that enterprise? A. Well, perhaps that means what I have said. The attempt is to allow the utility a fair rate of return based upon what other similar investments are yielding, subject, however, to the fact that if the particular utility under review is for some reason burdened with certain costs that it can't escape, that should be taken into consideration. I mean, for example, if the Pennsylvania Water and Power Company bonds had been issued at five per cent, let us say, with the approval of the Securities and Exchange Commission or the Federal Power Commission or some public authority, were not now refundable, these interest rates then were an inescapable cost to Penn Water and Power [10059] Company and I should think those costs would be allowed by the Regulatory Commission in the overall return.

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[10082] Q. Mr. Joseph, what would be the direction of the effect of these figures on page 44 if the fair rate of return were to be determined in say 1933? A. If we were determining a fair rate of return for a utility in 1933, I would say that the tendency of the [10083] direction which you are asking me about would be downward. It would be so not only because you would get it from this sheet, but because at the pit of the depression if you were charged with finding a fair rate of return for a utility, I think you would be disinclined to find that the rate should be very high.

You would be more inclined to feel that if the utility can get along with a certain low rate for a period of time while the nation is suffering from a very grave depressi n,

and if that low rate would be fair, you would be inclined to have the utility take some share of the effects of a depression.

Q. Well, then, Mr. Joseph, I take it from your answer that in periods of prosperity the direction of the effect or the tendency of the direction of the effect would be upward of the data on page 44? A. Well, I suppose you draw that conclusion because I have said that in a period of depression the direction or tendency might be downward.

I feel somewhat differently about it today in interpreting these figures today. If I were charged with the responsibility of finding a fair rate of return for Pennsylvania Water and Power, I would have this information before me. I would have other information before me. I would feel that a determination made from reviewing what investments of a similar [10084] nature of yielding would be a sound one. I would look at pages 41, 42, 43 and 44, and there I would find nothing that would indicate to me that Pennsylvania Water and Power is going to be in any serious jeopardy if I were to allow it a rate of return determined to be fair from a review of what other similar investments are today yielding.

Q. Does that mean, Mr. Joseph, that if you were determining the fair rate of return today, you would give less effect to the statistics shown on pages 41 to 44 of your exhibit than if you were determining the fair rate of return in 1933? A. Probably so, but I would say it somewhat differently.

In 1933 the country was faced with a situation which required a somewhat different consideration, but today the level of activity is such that we need not make that special sort of allowance or determination.

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[10088] Q. Mr. Joseph, will you turn, please, to pages 46 and 47 of your Exhibit 46. What is the significance and meaning of the data shown on those two pages of your ex-

hibit for the determination of the fair rate of return to Penn Water? A. These again are general economic statistics of the level of economic activity and are matters which I consider are of interest to those charged with the duty of determining fair rate of return for a public utility.

Q. Well, Mr. Joseph, was the basis of your selection of these data on pages 46 and 47 the fact that they may be of interest to the Commission? A. And helpful to the Commission in solving the problem of fair rate of return.

Q. In what way would they be helpful? A. Well, again, I say that if you are charged with the responsibility of determining a fair rate of return, you are interested in what the level of economic activity throughout the country is. To say otherwise, it seems to me, Mr. Sparks, would be to attempt to maintain the position that Penn Water and Power is in such a situation that [10089] it operates independently of the country as a whole. If it could be shown that Pennsylvania Water and Power's earnings were so safe and so secure that whatever happened to the country at large would have very little or any effect upon Pennsylvania Water and Power, then I would say that perhaps these indices and figures were superfluous. But if Pennsylvania Water and Power is a part of our general economy and is subject to those influences which affect our general economy, then in considering what is a fair return for that utility you would be interested to find out how the economy as a whole is getting along.

Courts and Commissions have reviewed statistics of a similar nature in their reviews of the problem of fair rate of return.

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[10166] CLIFTON H. HOWELL.

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CROSS-EXAMINATION (Continued).

By MR. MYSE:

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[10179] Q. Did you have discussions or did you confer with any of the customers of Penn Water in connection with the loads and operations on their system? A. Yes, I did.

Q. Which customers? A. Particularly Consolidated of Baltimore and the Pennsylvania Power and Light relative to the 25-cycle supply. I did not interrogate them at all on the 60-cycle supply.

Q. What did you learn from Baltimore in connection with the loads on the 25-cycle system? A. That the 25-cycle load was holding up pretty well.

Q. Did you go into anything more specific with respect to the load shape of Baltimore in connection with their demands on the 25-cycle system at Holtwood? A. No, I did not.

Q. What about the 25-cycle demands by Pennsylvania Power and Light Company on the Holtwood system? Did you go into any particulars with respect to their load shape? A. Yes, that had reduced considerably over the years. It was about 6,200 kilowatts at the time I made my inquiry to the Pennsylvania Power and Light, having at one time been about 15,000.

[10180] Q. Is that the conclusion from your investigation that the demands by Pennsylvania Power and Light Company on the 25-cycle system of Holtwood would continually decrease? A. Down to a point. They have one rather large customer there, and it seemed that that load would hold up fairly well. They were undertaking at that time to eliminate a number of small 25-cycle customers and replace them with 60-cycle service.

Q. Other than this one customer to which you referred, the 25-cycle demand by Pennsylvania Power and Light

Company on the Holtwood system will tend to decrease in the future. Is that right? A. I say down to a certain point. I couldn't see where one of their large customers would go below, very much below, its present demand.

Q. Did you investigate that one customer you speak of to determine whether or not they had any plans to change over to 60-cycle? A. No, I didn't. It seemed sufficient to spend no more time on it after having been advised by some of the engineers, the commercial engineers of the Pennsylvania Power and Light Company, as to the intentions of this company.

Q. When you say "this company" you mean this one company? [10181] A. The Crown Cork and Seal Company.

Q. It is really Armstrong Cork? A. Yes, Armstrong.

Q. What load would Armstrong Cork continue to take from the Holtwood system?

MR. GOLDBERG: You mean Pennsylvania Power and Light, don't you?

THE WITNESS: I don't believe I recall exactly what the Armstrong Cork load was. It was something less than 6,000.

By MR. MYSE:

Q. Did you investigate at the Pennsylvania Power and Light Company to determine whether or not any of their converters would be used in serving Armstrong Cork, that is converting 60-cycle energy to 25-cycle energy? A. No. I asked them what they expected to do with these converters, being so much larger than their present load. They said they were going to hold them in. They saw no reason to change them. But they did not lead me to believe at all that they would convert 60-cycle to 25 for the purpose of the Armstrong Cork.

Q. How much capacity in converters from 25- to 60-cycle, or the reverse, does P. P. and L. now have. A. 15,000 kilowatts to the best of my recollection.

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[10183] (The reporter read the following question:

"Q. At page 2 of Exhibit 47, paragraph 1, and again beginning at page 8 and continuing on to page 15 you discuss, as I understand it, the 25-cycle generating facilities at Holtwood. Is that right?")

THE WITNESS: That is correct.

By MR. MYSE:

Q. As I understand it, the purpose of operating the eight out of the ten main generating units is to supply 25-cycle service to certain customers. Isn't that correct? A. Well, the eight generators are to develop 25-cycle power. I wouldn't say certain customers.

Q. Who uses the power, as you put it, which is generated by the eight 25-cycle generators at Holtwood? A. The output is sold to Baltimore with the exception of that which is sold in Pennsylvania.

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[10195] Q. At page 16, paragraph 1, beginning at line 8 of Exhibit 47, didn't you there make some statements about the capacity supplied Pennsylvania Power and Light Company? A. Yes, I had previously said that this morning, that I found that they supplied approximately 6500 kw to the Pennsylvania Power and Light.

Q. How did you determine that fact? [10196] A. Conferences with the engineers and officials of the Pennsylvania Power and Light Company.

Q. Didn't those engineers tell you what the relative proportion of the supply to Baltimore was at the same time? A. No, we didn't discuss Baltimore.

Q. In terms of the 6500 kw capacity supplied, as you say, to Pennsylvania Power and Light Company in 1944,

roughly what proportion is that of the total capacity available from the 25-cycle system at Holtwood?

MR. GOLDBERG: May I have the question, please?

(Question read.)

THE WITNESS: It would be the ratio of 6500 to the 25-cycle capacity generating capacity at Holtwood, which I believe is 87,000.

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[10206] Q. As I understand your exhibit, Mr. Howell, you show in it that there are two hydro units and two steam units at Holtwood which provide 60-cycle service. Is that [10207] right? A. Yes.

Q. Where is the output of those units disposed? A. Through the 60-cycle transmission system of the Holtwood and Susquehanna Companies.

Q. How does any of that energy get on the facilities of Susquehanna? A. There are 60-cycle circuits running from Holtwood through Safe Harbor on the 220 k. v. to Baltimore. That is a possibility.

Q. Well, did you make any investigation to determine whether or not there ever was any such energy arriving on the 220 kv circuits from Safe Harbor to Baltimore? A. No, I did not.

Q. Then you can't say whether or not that actually happens, can you? A. No. There is also a 60-cycle circuit running into the Pennsylvania Power and Light system.

Q. From your knowledge of the operations as you testified at page 1009 as to the Holtwood property, can you tell me whether or not the 60-cycle generation at Holtwood is transmitted to and used almost entirely by Pennsylvania utilities to the north? A. No, I didn't make any investigation to determine the flow of power at any point. From an operating standpoint [10208] it would seem reasonable to expect that the major portion of this 60-cycle generation at Holtwood would go into Pennsylvania, to the Pennsylvania 60-cycle customers.

Q. You say the major portion of it. Other than this disposal you referred to a moment ago through the Safe Harbor system and the 220 kv lines system, which you said you did not study, how else could it be disposed of? A. I don't know of any other circuit except through the frequency changer.

Q. Did you make any examination or study to determine how much of the 60-cycle hydro and steam generated energy at Holtwood was converted from 60-cycle to 25-cycle energy? A. As I said before, the preparation of Exhibit 47 did not require such determination.

Q. The answer is you did not make such determination? A. No, I didn't.

Q. So you don't know what proportion of the 60-cycle generation was converted at Holtwood? A. No, I don't know. I didn't determine those figures at all.

Q. There is no electrical connection between the 60-cycle system and the 25-cycle system at Holtwood, is there, Mr. Howell? A. No, there is no electrical connection. There is a mechanical connection through the frequency changers.

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[10210] By Mr. Myse:

Q. Referring to the 25-cycle transformers at Holtwood Substation to which you referred in your Exhibit 47, as I understand your statements in that exhibit you say that seven out of nine of those transformers are used for Baltimore. Is that correct?

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[10211] The Witness: I am referring to page 16 of the Exhibit 47 under the title of "Holtwood Sub-station". I do not find where I have said that 7 out of 9 of the transformers are devoted to Baltimore service.

By Mr. Myse:

Q. Isn't that the fact? A. I don't recall that detail at the moment.

Q. Isn't that what you meant when you so stated at page 17 in the Table III, column 7? A. Yes, that is stated on page 17, Table III, main transformer data, which is a leaf which was taken out of the revised engineering data to which I have previously referred as provided by the Holtwood Company.

Q. Don't you agree with the statement? A. Yes, that is what it states, 7 transformers. Two of the nine are provided for Lancaster service.

Q. Those two which provide for Lancaster service, did you make any investigation to determine whether or not those two, in addition to being used for Lancaster service, are used for Baltimore at various times? [10212] A. No, I didn't investigate the bus connections there. It might be they could shift those. I don't know.

Q. If I told you it was a fact that in addition to the 7 transformers that you show on page 17 as used for Baltimore than the two transformers also shown on that page as used for Lancaster are in addition used for Baltimore at times, would you agree? A. Yes, they could readily be if that arrangement is made on the bus.

MR. GOLDBERG: You mean if it is the fact does he agree it is the fact. If it is the fact I will even agree to it.

By MR. MYER:

Q. Well, is it the fact? A. I said I did not investigate those transformer connections to the bus. I don't know what the arrangement is for transfer.

* * *

[10227] Q. At page 2 of Exhibit 47, paragraph 5, the last sentence, you have stated "This line—" referring to the Gunpowder line, I believe "—is leased to the Baltimore Company." Is that correct? A. Yes, sir.

Q. What evidence did you base that statement on? A. I took that from one of the transmission line drawings that I secured from the Pennsylvania Water and Power Company.

Q. Did you make any other investigation other than just taking the phrase off the drawing? A. I asked one of the officers, I believe it was Mr. Gunn, if the Baltimore Company owned this so-called Gunpowder Line or if the Pennsylvania Water and Power Company owned it. I was told that the ownership laid with the Susquehanna Transmission Company.

[10228] Q. Nevertheless you said it was leased by Baltimore? A. That was the best information I had, and it seemed a reasonable one, since the Baltimore Company was using the line, and it was owned by the Holtwood Company or its subsidiary. Obviously there would be some consideration paid by Baltimore for the use of the line.

Q. You say Baltimore is using the line. Do they actually operate the line? A. It connects with one of their substations and runs out to Gunpowder carrying their power.

Q. They don't furnish the labor to maintain it, do they? A. I can't answer that exactly in the affirmative. My impression is that it is maintained by the Holtwood organization.

Q. Did anyone ever refer you to a document or other paper or writing which might be called a lease covering the use of these facilities? A. No, nobody.

Q. Did you make any investigation to determine whether there was such a thing? A. In seeking information for this exhibit it seemed sufficient to me to read from one of your published documents that it was a leased line and to confirm from one of the important people of the company that the line was owned [10228-a] by the Holtwood Company or its subsidiary.

Q. Did you get that confirmation in writing? A. No, I got it verbally.

Q. Baltimore Company also uses another facility owned by Susquehanna known as the Highlandtown Substation, doesn't it? A. They only use pot head terminals to their cables so far as I know.

Q. Well, they use some facilities. A. Some portion of them, yes.

Q. Do you consider those facilities leased to Baltimore Company? A. If I remember correctly, the contract provides that space will be provided by Holtwood for the terminals of these cables, I mean the contract between the Holtwood Company and the Baltimore Company provided the space for these terminals to the cables.

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[10229] Q. This much is true, isn't it: That the Highlandtown facility is really a distribution facility. Isn't that correct? A. If I understand your question to mean that there are cables and pot heads that are located in the Highlandtown Substation to be a part of the distribution, I think that is correct.

Q. There would also be some other facilities in the [10230] substation in connection with those pot heads and cables which would be distribution facilities, would there not?

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THE WITNESS: The remaining part of the substation as I interpret it is the terminus of a transmission line and is a transmission substation.

• • •

[10314] SAMUEL JOSEPH.

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CROSS-EXAMINATION (Continued).

By MR. SPARKS:

Q. Referring to page 10,050, Mr. Joseph, and to the data which you gave on that page pertaining to the two bond issues of Penn Water, have you included in the per cent figure of 3.20 in line 10 and the per cent figure of 3.14 in line 15 any redemption costs associated with the refunded debt? A. I don't think those costs are included,

no. They are not generally included by the Securities and Exchange Commission.

Q. Have you included any part of debt discount and expense associated with the refunded debt in those two per cent figures? A. No, and I don't think it should be included.

Q. Why not, Mr. Joseph? A. Because that is not cost of this capital. That is cost of prior capital.

• • •

[10315] Q. Could Penn Water avoid the payment of redemption premiums in retiring old bonds in order to be able to take advantage of lower interest rates? A. No.

Q. If bonds are sold at a discount or at a premium, does not the discount or premium represent in effect adjustment of the nominal interest cost expressed by the coupon rate? A. Yes, it does, and therein lies the reason for my previous answers. As you have just said, the redeemed securities might well have been issued either at a discount or a premium, and the interest rate might well in either case be adjusted to the same figure. It is for that reason that the accident of the terms of the prior issue do not in my opinion affect the cost of capital of the existing issue.

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[10318] Q. Have you stated, Mr. Joseph, why you have omitted such costs from your exhibit? A. I think that is quite well explained, yes. I might summarize to say that there are such costs only by reason of the accident of the style or fashion of the previous financing, and that in my opinion the costs or the premium are not costs associated with the new financing.

• • •

[10354] Q. Is it correct to say that the basis of the selection of the ten companies was the availability of earnings reports, the availability of market prices of the common stocks, and the representativeness of the market prices? A. Yes, and the representativeness of the utility itself.

Q. Are these common stocks, Mr. Joseph, of more than average marketability? A. The common stocks of these ten companies are of more than average marketability compared to the common stocks of utility companies generally.

Q. Is that true also of the additional four common stocks? A. Yes, it is.

[10355] Q. Is it true that nearly all of the fourteen companies have plant accounts in excess of $100,000,000 and that the ownership of their common stocks is widely distributed? A. I think that is true.

Q. What is the total number of electric and electric gas utilities having common stocks outstanding in the hands of the public for which market prices and earnings information are available as at about the end of 1945; do you know? A. I don't know the exact number. I know that it is a good many more than fourteen.

Q. What would be your answer, Mr. Joseph, if I asked you the same question with respect to January, 1940?

Would you care to have the question read? A. There the answer would be that it is probably a good many more than ten.

Q. What has been the variation among the fourteen companies with respect to proportion of gross income available for the common stockholders? A. I don't have that figure in mind. There is probably a substantial variation.

Q. Would you think, Mr. Joseph, that that variation would range from about forty per cent to 100 per cent? A. It very well might.

Q. Have you determined the average relationship between leverage and earnings-price ratio? [10356] A. Not the precise relationship, no.

Q. Is there such a relationship? A. Yes, there is.

Q. Can you tell us what it is generally? A. The tendency would be for the company having more stock outstanding percentagewise in relation to total capital to have a lower earnings price ratio.

Q. What has been the variation among the fourteen companies with respect to proportion of equity income paid out as dividends? A. I don't know exactly. There has probably been a considerable variation.

Q. What has been the variation among these fourteen companies with respect to the existence of dividend restrictions?

MR. GOLDBERG: Imposed by a regulatory body?

MR. SPARKS: Yes. That would include indentures, as well.

THE WITNESS: I don't know the variations in the restrictions on payments of dividends of tnese various fourteen companies.

By MR. SPARKS:

Q. Have you determined average relationship between earnings-price ratio and the proportion of equity income paid out, Mr. Joseph? A. No, that is probably not determinable.

[10357] Q. Does the equity income paid out affect the earnings-price ratio? A. Yes, it does.

Q. And as I understand your previous answer, that is not measurable, the effect? A. There is no precise measurement of the effect, no.

Q. What is the variation among the fourteen companies with respect to size as measured by gross revenue? A. There is quite a variation.

Q. Would you say it is substantial? A. Yes, I would.

Q. Have you made any study to determine the average relationship between earnings price ratios and size? A. The earnings price ratio would tend to be lower for a larger company, all other things being equal.

Q. What is the variation among the fourteen companies with respect to proportions in non-electric business? A. Well, some are exclusively electric and some are not.

Q. Have you made any study to determine the comparative investor appraisals of investments in electric and gas or transport operations? A. Well, I have dealt with that problem. I think that the investor appraises the electric operations more highly than he does other utility operations.

Q. What is the meaning of the term "Earnings-price [10358] ratios," as you have used it in connection with page 38 and page 38-A of Exhibit 46? A. It is the relation of earnings to price. Generally the earnings are for the most recent period, the most recent that is to the date of the price that you are using.

Q. Have you finished your answer, Mr. Joseph? A. Yes.

Q. How are the earnings ascertained, Mr. Joseph? A. Generally they are published yearly.

Q. Mr. Joseph, would the return expected by equity investors be approximately 7.11 per cent for the purpose of this proceeding if the rate of return determination were to be made as of January, 1940?

THE WITNESS: May I have that question again, please?

TRIAL EXAMINER: Yes.

(Question read.)

THE WITNESS: No, not necessarily.

By MR. SPARKS:

Q. Would the return expected by equity investors be approximately 12.92 per cent for the purpose of this proceeding if the rate of return determination were to be made as of March, 1942? A. I would make the same answer there, Mr. Sparks.

Q. Is the return expected by equity investors approximately 4.88 per cent for the purpose of this rate of return [10359] determination as of the present time? A. As at March, 1946?

Q. Well, I am speaking of the present proceeding, Mr. Joseph. A. Well, to the extent that the data have changed, you might use later data. And the 4.88 is not necessarily identical with the return that is expected by investors because of the discounting factor that we have previously discussed.

Q. Would you say, Mr. Joseph, that the lower the earnings price ratio the better the quality of the common stock as viewed by investors, while the higher the earnings price ratio the lower the quality of the common stock as viewed by investors? A. There would be such a tendency, Mr. Sparks.

* * * *

[10410] Q. Mr. Joseph, do not investors' appraisals and investment choices determine and establish the market prices? A. Yes, they do.

Q. How, then, can the investor in this appraisal process start with the earnings-price ratio? A. He starts with an earnings-price ratio which he then adjusts.

* * * *

[10427] Q. Mr. Joseph, in which of the other instances shown on page 38 A have adjustments been made for non-recurring tax reductions in stating earnings for 1945? A. By me in no instances.

Q. Well, were they made by anyone? [10428] A. By the companies, do you mean?

Q. For instance? A. I don't know.

Q. Did you make no investigation of that when you took the figures for your earnings column on page 38-A? A. I made no such investigation.

Q. You just accepted figures from the source which you used. Is that correct? A. I accepted the published figures; yes, sir.

Q. You made no adjustments of any kind. Is that correct? A. Because I thought it would be improper to do so.

Q. And you accepted those figures without any question in your mind. Is that correct? A. That I was doing the right thing; yes, sir.

• • •

[10430] Q. Mr. Joseph, do the earnings which you have used in computing the earnings-price ratios on page 38 of Exhibit 46 for periods earlier than the calendar year 1945, exclude in all cases income resulting from non-recurring tax reductions? A. To the extent that the exclusion was made by the company in its published reports; yes, sir.

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[10438] Q. Mr. Joseph, yesterday we mentioned the $2,300,000 item in connection with Detroit Edison. I show you the Detroit Edison Company annual report to stockholders for 1941 and refer you to page 9, the paragraph at the bottom of the page which reads as follows:

> "In computing Federal income and excess profits taxes for 1941, we deducted from taxable income the five per cent call premium, $2,500,000, paid for redemption of series 'D' bonds on March 1, 1941, plus the unamortized bond discount and expense amounting to $700,000. We estimate that these non-recurring allowable deductions reduced our Federal income and excess profits taxes by $2,300,000."

Have I read that correctly? A. Yes, sir.

Q. Now, was net income adjusted by the company for that amount, Mr. Joseph? A. I take it that it was not.

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[10441] Q. Well, let me ask you, Mr. Joseph, didn't the $2,300,000 item have the effect of increasing the income account for the year 1941 or the net income for the year 1941? A. Yes, sir.

Q. And the $664,000 that you are talking about is the reduction in the income account for the year 1941. Is that correct? A. That results—may I see that statement

again, please? (Document handed to the witness.) That is correct, the 664 is a reduction.

Q. And you made no adjustments for either of those figures in your statement of the earnings for Detroit Edison for 1941. Is that correct? A. I made no adjustments, and I consider that any adjustment of such a nature would be improper.

• • •

[10469] Q. Well, you haven't, Mr. Joseph, informed yourself to any extent on adjustments that the investor would make in the earnings-price ratio with regard to any one of the companies shown on page 38-A, have you? A. I think I am generally pretty well informed on that subject.

Q. Well, you haven't indicated that information in your exhibit, have you? A. Because I believe it unnecessary to do so.

Q. Well, do you believe it unnecessary to do so because you go back to your first premise that the earnings-price ratio is sufficient evidence of the investor's appraisal? Is that correct? A. Well, there are grounds for that judgment, yes.

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[10471] Q. Mr. Joseph, the earnings-price ratios which you show on page 38 were all computed in the same manner that you computed the earnings-price ratios on page 38-A, were they not? A. Correct.

Q. So that in the computation of any of the earnings-price ratios on page 38, you made no adjustments of a character similar to those we have been mentioning today, have you? A. I did not adjust the published figures, no, sir.

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[10511] MR. MYSE: Mr. Examiner, we are prepared to initiate the cross-examination of the witness Davis this morning. How far we will get this week I am not sure, of course, but before I call the witness Davis back to the stand for cross-examination I would like

to direct your attention to Section VII of Exhibit 47 and point out that an examination of that section by me shows that it is entirely a characterization or interpretation of various contracts which are already in evidence in this proceeding by a witness who is not a lawyer and who is, as I understand, an engineer who has rushed in where normally lawyers and even judges have feared to tread.

For that reason, I object to the receipt in evidence of Section VII of Exhibit 47, and I suggest that it would be appropriate to have a ruling on that objection at this time, because if the objection is sustained it may save two to three days of cross-examination on that section.

MR. HALL: Will you read back that statement?

(Statement read.)

MR. HALL: Mr. Examiner——

TRIAL EXAMINER: There doesn't have to be any discussion on it. What the Examiner has in mind are two things: First of all a legal document is an attempt to put into writing something that a non-lawyer has conceived of at the beginning, and [10512] therefore while it would be quite appropriate to sustain motions to strike or objections to questions put to a witness who is not a lawyer as to the legal effect of a contract, however, the Examiner is not prepared to rule that a witness who understands the operations of an electric utility may not testify as to what operations are involved or called for or covered by the contract.

MR. MYSE: Well, Mr. Examiner, that may all be true, but I think if you will examine Section VII there is very little about operations in there, and it is entirely an interpretation of the contracts. It is pretty obvious to me that it is a legal interpretation of those contracts. There is nothing in there about operations.

TRIAL EXAMINER: The Examiner is not prepared to rule that that section does nothing other than interpret that contract in a legal sense, and the Examiner is not prepared to rule that it does even that.

Now, the other matter that the Examiner had in mind is this: This witness prepared an exhibit and testified as to allocation. He couldn't have done it without referring to the contracts, and Section VII may be necessary to consider in connection with a determination as to how the witness did consider those contracts.

MR. MYSE: Well, in answer to that, I think that is probably true, that in the witness' Exhibit 64, he had to make [10513] certain assumptions as to the interpretation of contracts, but that doesn't necessarily follow from that that a witness who is not a lawyer can come in here and introduce an exhibit which is an interpretation of the contracts. That is a legal matter which properly is argument in a brief, and no other place.

TRIAL EXAMINER: I don't see any legal argument in Section VII.

MR. HALL: Mr. Examiner, I think it is perfectly apparent to everyone——

TRIAL EXAMINER: Just a minute. I don't require any further discussion on the matter. The objection is overruled and the motion is denied.

MR. MYSE: I call Mr. Davis.

Thereupon

GEORGE H. DAVIS

resumed the stand, and having been previously duly sworn, was examined and testified further as follows:

CROSS-EXAMINATION (Continued).

By MR. MYSE:

Q. Mr. Davis, unless I specifically inform you otherwise, you may assume that as far as this morning is concerned my cross-examination is directed to your testimony and the statements appearing in Section VII of Exhibit 47.

Now, as I understand your testimony and the Exhibit 47 [10514] and the Section I have referred to, you included therein certain statements with respect to the contract between Penn Power and Light Company on the one hand and Safe Harbor and Holtwood on the other. Am I correct in that? A. That is right.

Q. Now, first of all at page 45 of Exhibit 47, paragraph 11, you state that that contract remains in force to October 31, 1946. Do I understand by that statement that the contract is no longer in force? A. No, it is an automatically renewable contract and at the time this was written so far as any notice of cancellation which is required 18 months prior to expiration, '46 was the earliest that it could be cancelled.

* * *

[10515] Q. Now, that contract as I understand your testimony obligates Holtwood and Safe Harbor jointly and severally as "Generating Companies" to supply certain requirements in the Lancaster and Harrisburg areas of the Pennsylvania Power and Light Company and the distribution area of the former Pioneer Electric Light Company adjacent to Holtwood. Isn't that correct? A. That is correct.

Q. Now, under that contract, Pennsylvania Water and Power Company is authorized to act as the agent for Safe Harbor. Isn't that right? A. That is true.

Q. Do you know whether or not that contract was entered into with the approval of Baltimore Company, and when I say Baltimore Company you can assume I mean the Consolidated Gas Electric Light and Power Company of Baltimore. A. As I understand it, all contracts since 1931 have to have the approval of Baltimore Company before they are entered into.

Q. Were they so approved? A. I assume they were.

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[10516] Q. Now, what would you say that the major amount of revenue paid by Pennsylvania Power and Light Company is for? A. You mean in the bill rendered by Holtwood?

Q. No, sir. I said revenues paid by Pennsylvania Power and Light Company.? A. They pay for firm power delivered to supply the Lancaster load requirements under this contract.

Q. As a matter of fact, they also make payments for interchange energy which is received from the Holtwood-Safe Harbor system. Isn't that correct? A. That is true.

Q. They may also pay for special facilities under that contract. Isn't that right? A. That is true. That is a matter of the delivery of the energy which they really pay for.

MR. MYSE: May I have that answer, please?

[10517] (Answer read.)

By MR. MYSE:

Q. Well, you agree, do you not, that the interchange transactions are separate and distinct from firm power transactions, don't you? A. They are billed at a different rate under different provisions of the contract.

Q. And they are measured separately, too, are they not? A. That is true.

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[10537] Q. Now, Mr. Davis, at page 44, the top paragraph of Exhibit 47, you made a statement, as I understand it, that under the contract the obligation of the generating companies may be reduced somewhat at their option during periods of low flow. Is that a fair summary of what your statement means? A. That was provided for in the original contract or in this contract.

Q. That is 76 you are referring to. Isn't that correct, Exhibit 76? A. That is right.

Q. Now, that means, does it not, that if during a period [10538] of low flow as defined in the contract, and I think you also made a note of it in your Exhibit 47, requirements of some other customer of Holtwood or Safe Harbor or both demands the use of some of the capacity or energy generated at Holtwood or Safe Harbor, the generating companies have the option of reducing the demand by Pennsylvania Power and Light Company and serving that other customer. Isn't that correct? A. I don't quite follow that.

Q. Well, is my statement correct or not?

THE WITNESS: Would you read that statement, please?

(Question read.)

THE WITNESS: I don't seem to recall any statement to that effect. The only modification that this paragraph provides for is that they may take the option of having the Lancaster load requirements on Holtwood reduced by 20 per cent during periods of low flow, and Pennsylvania Power and Light under that option could ask for 20 per cent excess during periods of high flow.

By MR. MYSE:

Q. Well, periods of low flow means, does it not, days on which the river flow at Holtwood is below 25,000 cfs. Isn't that correct? A. I believe that is the way they define it.

Q. Now, if you had a day of average river flow during a day at Holtwood of 20,000 cfs, as I understand that pro-

vision, and I want you to correct me if I am wrong, Holtwood would have [10539] the option of reducing the demands made by Pennsylvania Power and Light Company on the Holtwood-Safe Harbor system by any amount up to ten per cent on the peak. Is that correct? A. They would have that option if they accepted it under this contract.

Q. I am wrong. It was any amount up to twenty per cent. A. Twenty per cent on off-peak periods and ten on on-peak periods. You said it right. You said on-peak periods.

Q. It would be any amount up to twenty per cent during on-peak periods on low-flow days. Isn't that right? A. That is right.

* * *

[10546] Q. Now, referring to page 48 of Exhibit 47, you say that the contract involving supply to the Coatesville area of Philadelphia Electric Company continues until March 31, 1942. Am I to understand that is the time that contract terminated? A. That is automatically renewable for periods of three years unless an 18-months' notice is given to cancel it.

* * *

[10547] Q. The contract we have been referring to is identified in this record as Exhibits 73, 74 and 75. Is that correct? A. That is correct.

Q. Now, under that contract Hydro, as defined in that contract, is obligated to furnish the requirements of the Coatesville area. Isn't that correct? A. That is true.

Q. And how is Hydro defined in that contract? A. They call Holtwood and Safe Harbor "Hydro."

Q. That means that Safe Harbor as well as Pennsylvania Water and Power Company is obligated under that contract, does it not? A. It means it is a party to the contract.

Q. Doesn't it mean that it is obligated? A. The only obligation Safe Harbor has left is to reaffirm its oper-

ations under the other contract under which it sells its whole output.

MR. MYSE: I move to strike the answer, Mr. Examiner, [10548] as wholly unresponsive to my question.

TRIAL EXAMINER: The motion to strike is denied. What is the other contract that you referred to?

THE WITNESS: E, F and G.

MR. MYSE: We will get to that in due course, Mr. Examiner, but I would like to have an answer to my question as to whether or not Safe Harbor is obligated under this contract in his opinion?

MR. GOLDBERG: Mr. Examiner, it has been answered and the motion to strike it has been denied.

TRIAL EXAMINER: Do you have anything further to add to your previous answer?

THE WITNESS: As an engineering and operating matter, Safe Harbor has no physical ability to do anything under this contract.

By MR. MYSE:

Q. I didn't ask you about the physical ability. I asked you about the obligation. A. If it is a legal obligation, I don't know.

Q. Then if there is a legal obligation, you haven't considered it as one, have you? A. I have not.

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[10550] Q. Now, how are the demands measured under Exhibits 73, 74 and 75 for purposes of billing? A. That is a 30-minute integrated demand, as I recall.

Q. Now, do you agree that if the same service had been measured on an integrated hourly basis, the demand would have been less? A. It would have to be the same or less.

Q. It would probably be less, would it not? A. Very likely it would.

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[10551] Q. Mr. Davis, will you look at Article II, Section 1 of Exhibit 73? It is that Article II that spells out the obligations of the parties, does it not? A. Yes.

Q. And it indicates that Hydro shall be obligated to supply the requirements of Philadelphia Electric Company at Coatesville. Isn't that right? A. That is what it says.

Q. And the contract also says that Hydro means Safe Harbor and Penn Water. Isn't that correct? A. That is right.

Q. And there is no distinction drawn between Safe Harbor and Penn Water, is there? A. No, Safe Harbor is ignored entirely.

Q. Is there any distinction drawn between Penn Water and Safe Harbor? A. None whatever.

Q. You say Safe Harbor was ignored entirely. Was that your testimony? A. That is right.

Q. As I understand that, that means it is ignored by [10552] making itself a party and calling itself one of Hydro. Isn't that correct? A. The two names go under the title of Hydro in this contract.

Q. And that is true throughout the contract, isn't it?

MR. GOLDBERG: Let him finish.

By MR. MYSE:

Q. Had you finished? A. There are no operating acts specified to be performed by Safe Harbor.

Q. Are there any operating acts specified in the contract to be performed by Penn Water? A. No, they are specified to be performed by Hydro. Holtwood is the only company that has any ability to perform them.

MR. MYSE: I move to strike the answer with respect to the ability of Holtwood, Mr. Examiner, as not responsive to my question.

TRIAL EXAMINER: The motion to strike is denied

By Mr. Myse:

Q. But so far as the contract is concerned, there is no difference drawn between Penn Water or Holtwood as you call it and Safe Harbor. Am I correct in that? A. Holtwood and Safe Harbor are combined in the [10553] contract under the designation of Hydro.

Q. And there is no difference specified in the contract between the two. Is that correct? A. No.

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[10563] Q. Now, as I finderstand your Exhibit 47, pages 52 to 54, and the Tables 9, 10 and 11, which accompany those pages, you were there referring to the contract between Holtwood or Pennsylvania Water and Power Company, Safe Harbor, Baltimore Company, Pepco on the one hand, and The Pennsylvania Railroad on [10564] the other, identified in this proceeding as Exhibit No. 10. Is that right? A. That is right.

Q. Now, under that contract, the contract defined the word "Supplying Companies," does it not? A. Yes.

Q. Now, who are the Supplying Companies? A. Those are the four companies on the one hand as against the railroad company on the other, including Washington Company.

Q. When you say Washington Company, you mean Potomac Electric Power Company? A. That is right.

Q. Now, who are the "Electric Companies" as defined in that contract? A. They are the other three—Baltimore, Holtwood and Safe Harbor.

Q. What is the distinction between the Electric Companies and Supplying Companies in terms of obligations under that contract? A. Washington Company has no obligation to supply power unless it has it available. The total obligation for continuous service is placed on the Electric Companies.

Q. Now, can you refer me quickly to that provision of the contract identified as Exhibit No. 10, which you say [10565] relieves Pepco of the obligation to supply certain

services? A. Well, there is one reference to it in Section 2 of Article XII on page 22, but there is another one that is more specific than that.

Q. Section 2 of Article what? A. Article XII on page 22.

Q. Well, in Exhibit 10 there are different page numbers applicable, are there not? A. Oh, this is in the original contract, that page and article that I was referring to.

MR. GOLDBERG: Article XII, page 36 in the official exhibit.

By MR. MYSE:

Q. And that reference you made a moment ago to Section 2 of Article XII, actually appears on page 37. Is that right?

MR. GOLDBERG: He doesn't have the official copy before him.

THE WITNESS: The second paragraph on page 37, yes.

By MR. MYSE:

Q. Now, what other place in Exhibit 10 shows any reference to the relief for Washington Company or Pepco from the obligation to serve the railroad with certain services? A. That is the only one I recall. This is a little more than the one I referred to in the original contract.

[10566] Q. Now, under Article II, however, that provides, does it not, for the contractual supply as an obligation to the Railroad Company, as the obligation of Electric Companies? A. That is true.

Q. And Electric Companies is defined in the same contract as Safe Harbor and Penn Water without distinction. Isn't that correct? A. That is right. Safe Harbor, Penn Water and Baltimore without distinction.

Q. I stand corrected.

Who furnishes the special facilities for the railroad use under Exhibit 10? A. Certain lines and substations are furnished by Holtwood. Generating and converting facilities are supplied by Safe Harbor.

Q. Are any of the facilities listed on Table 9 of Exhibit 47 supplied or furnished by Baltimore Company? A. I believe not.

Q. Don't you know that they are not? A. I know they are not.

Q. As a matter of fact, they are all furnished by either PEPCO, Safe Harbor, or Penn Water. Isn't that correct? A. That is right.

[10567] Q. And to be entirely accurate, some of them are furnished by Susquehanna Transmission Company of Maryland, are they not? A. That is true. I have referred to Holtwood always in my study as including Susquehanna Transmission of Maryland.

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[10568] Q. Now, Mr. Davis, these special facilities shown on Table 9 of Exhibit 47 to the extent they are furnished by Safe Harbor, are used in furnishing service to the railroad both in Pennsylvania and Maryland, are they not? A. They are used in delivering service to Holtwood and Baltimore.

• • •

Q. Does that mean that none of the facilities shown on Table 9 owned by Safe Harbor are used for furnishing service to the railroad? [10569] A. They are used for furnishing service to Holtwood, who in turn furnishes it to the railroad and to Baltimore.

Q. So that the energy generated by means of those facilities is actually consumed by the railroad. Is that your answer? A. That is right.

Q. Now, when you say that the services are furnished to Holtwood who in turn furnishes it to Baltimore, what do you mean by that? A. I mean that Safe Harbor generation is all sold at the low tension side of the transformers at the Safe Harbor plant to Holtwood and to Baltimore.

Q. How did you arrive at the conclusion that it is all sold at those low tension transformers to Holtwood? A.

That was the operating arrangement described in the contract.

Q. Which contract do you now have reference to? A. The contract identified as E, F and G.

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[10570] Q. If I understand your testimony you say it is sold there because of the provisions contained in the contract identified as E, F and G. A. That is right.

Q. And that is the sole basis you have for that conclusion? A. That is right.

Q. Now, if I understand your testimony with respect to the services furnished to the railroad at both Thorndale and Perryville, those services originate at Safe Harbor, do they not? A. That is right.

Q. At least in large part? A. The energy is generated largely at Safe Harbor.

Q. Well, as a matter of fact, I don't think my statement was correct, Mr. Davis.

The services furnished to the railroad are furnished at Conestoga and Perryville. Isn't that correct? A. They are delivered to Holtwood's transmission system [10571] at Conestoga and Holtwood transmits to Thorndale and Perryville, or they are delivered to Holtwood's facilities at Safe Harbor, which is Conestoga. That is the same thing.

Q. You don't mean to say that Holtwood transmits to Thorndale, do you? A. They deliver to the railroad at Safe Harbor for Thorndale and deliver to Holtwood at Safe Harbor for Perryville.

Q. But there is no transmission facility owned by Holtwood or Safe Harbor between Conestoga and Thorndale, is there? A. Thorndale is just a metering point. That is the railroad's transmission line that goes from Safe Harbor to Thorndale.

Q. So the services delivered to the railroad west of Thorndale are delivered at Conestoga, are they not? A. That is right.

Q. And the services delivered to the railroad for use by the railroad south of Perryville are delivered at Perryville? A. That is right, delivered to Baltimore at Perryville.

Q. We will get to that in due course, but they are actually delivered to the facilities of the railroad at Perryville, are they not? A. To the facilities of the railroad, that is right.

[10572] Q. Now, the energy which you say is delivered to the railroad for railroad use west of Thorndale and south of Perryville is all 25-cycle single phase energy, is it not? A. That is right.

Q. Some of it may be converted from 60-cycle three phase energy at Safe Harbor. Isn't that right? A. That is true.

Q. Some energy may also be converted from 60-cycle three phase and furnished to the railroad at Benning in the District of Columbia. A. That is right.

Q. Now, as I understand it, all of the 25-cycle energy generated at Safe Harbor is transmitted through the Conestoga sub-station. Is that right? A. That is the way I understand it, yes.

Q. But not all of that energy is transmitted over the Perryville line, is it? A. No.

Q. Only that portion used from taps off the Perryville line is transmitted over the Perryville line. Isn't that correct? A. There are four circuits on the Perryville line. Two of them normally operate to deliver energy south from Perryville, and the other two north from Perryville, and there are two taps on the south lines, one at Fishing Creek and one at Conowingo.

[10573] Q. Fishing Creek is in Pennsylvania, isn't it? A. Yes.

Q. And Conowingo is in Maryland. A. Right.

* * *

[10578] Q. Isn't it a fact that some of the energy that is ultimately transmitted through Conestoga sub-station is

energy received at Safe Harbor from Baltimore Company? A. That is right.

Q. That is what is known as backfeed from Baltimore. A. I think so, yes.

Q. Do you know whether the amount of backfeed received [10579] at Safe Harbor and ultimately transmitted through Conestoga sub-station is substantial in amount? A. A substantial amount of backfeed reaches Safe Harbor. How much of it goes to the railroad company, I don't know.

Q. Did you make any study to determine the relative proportions of the backfeed which ultimately goes to the railroad? A. The proportion of backfeed used for firm power is the only proportion that I used or determined. Whether it was firm power delivered to the railroad or to some other customer, I didn't distinguish.

Q. You know that there was some amount of that backfeed, however, that did go to the railroad? A. I think so, yes.

Q. I think you testified just a moment ago that the energy furnished to the railroad via Conestoga sub-station was sold by Holtwood Company, as I remember the testimony. A. Some of that energy might be Baltimore's entitlement from Safe Harbor, and some Holtwood's entitlement. Any part of it that was made up of Holtwood's entitlement was sold by Holtwood.

Q. So when you were talking in terms of sales in that connection, you are referring back to the contract E, F and G when you are talking about entitlements, are you not? A. That is right.

[10580] Q. Now, is there anything in Exhibit 10 which specifies as to who sells the services to the railroad at various points? A. I don't think it is in Exhibit 10, no.

Q. You say you don't think. Will you tell me whether it is or not? A. There is nothing in Exhibit 10 which specifies any particular amount to be furnished by any particular party.

[10581] Q. And there is nothing in that Exhibit 10 which specifies that the energy delivered in Pennsylvania to the railroad is a sale by Holtwood and the energy delivered in Maryland to the railroad is a sale by Baltimore, is there? A. I don't think so. I haven't seen it.

Q. You say you don't think so. Don't you know there isn't? A. I never found it.

Q. Well, you studied it—— A. I am pretty well convinced it is not there.

Q. The fact is it isn't there. Is that right? A. I will take your word for it.

Q. I don't want you to take my word for it. Isn't it true? A. I will confirm it.

* * *

[10583] Q. Is there anything in Exhibit 10 which specified that Holtwood's service area is in Pennsylvania and Baltimore's service area is in Maryland? A. No.

* * *

[10590] Q. And as a matter of fact all bills rendered to the railroad company are rendered by Consolidated Gas Electric Light and Power Company of Baltimore? A. That is right.

Q. So that what those dollars represent in the last column of Table 9 and in column 4 of Table 11 for the various years, and what those kwh represent in the second to the last column of Table 10, and in the column 3 for the various years on Table 11 are an arbitrary division of the kwh delivered to the railroad in Pennsylvania as compared to the kwh delivered to the railroad in Maryland, together with an arbitrary division of the dollars received by Baltimore based on those kwh delivered in the respective areas. Isn't that right? A. The dollars are divided on the ratio of kilowatt hours, but I wouldn't say the kilowatt hours was an arbitrary division. It is an actual measurement.

Q. It is a measurement of the kilowatt hours delivered in each area. A. That is right.

Q. There is nothing in Exhibit 10 of the Pennsylvania [10591] Railroad contract which specifies those respective geographic areas, is there? A. Nothing.

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[10601] Q. How is Safe Harbor compensated for the 25-cycle single phase energy which is ultimately used by the railroad in Pennsylvania and Maryland? A. It is compensated for all of its energy by Holtwood and Baltimore.

Q. I didn't ask you about all of its energy, Mr. Davis. I asked you about this portion of the 25-cycle single phase energy ultimately used by the railroad in Pennsylvania and Maryland. How is it compensated for that? [10602] A. That is included in all of it.

Q. Specifically how does it get its compensation? A. From Holtwood and Baltimore for its total output.

Q. Now, what contract if any does it get that compensation under? A. The E, F and G.

Q. Does it get any under H and I? A. Safe Harbor?

Q. Yes. A. It gets nothing under H and I.

Q. How is Safe Harbor compensated for the energy furnished to the railroad in Pennsylvania?

MR. GOLDBERG: I object to that, Mr. Examiner. It has been answered.

TRIAL EXAMINER: I will permit it.

THE WITNESS: Safe Harbor gets compensation for everything it produces at the——

By MR. MYSE:

Q. I haven't asked you about everything it produces. A. Anything you want to name is included in "anything it produces", and the answer will be the same.

Q. I would like a specific answer as to how it is compensated for the 25-cycle single phase energy used by the railroad in Pennsylvania.

MR. GOLDBERG: That has been answered twice.

[10603] TRIAL EXAMINER: Do you have any doubt about what he has said?

MR. MYSE: Yes, I think he is clearly evasive on the point.

TRIAL EXAMINER: Now, can you answer the question directly?

THE WITNESS: There is no specific item of energy set out for any compensation. It is all compensated for in one block at the Safe Harbor low tension transformer terminals.

By MR. MYSE:

Q. Under what contract? A. E, F and G.

Q. Do I understand, then, that Safe Harbor is compensated for the 25-cycle energy ultimately used by the railroad in Pennsylvania under E, F and G?

* * *

THE WITNESS: It doesn't make any difference where any energy that is generated at Safe Harbor is used. It is all [10604] compensated for at the terminals of the transformers in the Safe Harbor plant.

* * *

Q. Well, how is Penn Water compensated for the energy that is consumed by the railroad in Maryland?

MR. GOLDBERG: Which energy?

MR. MYSE: The 25-cycle single phase energy.

MR. GOLDBERG: You mean which Penn Water sells?

THE WITNESS: Any energy that Holtwood is entitled to from Safe Harbor that goes into Maryland is sold by Holtwood to Baltimore Company.

By MR. MYSE:

Q. How does it get its compensation from the Baltimore Company for that energy? A. It gets its compensation through H and I.

Q. How does Safe Harbor get its compensation for the special facilities it provided to the railroad under the contract identified in this proceeding as Exhibit 10? [10605] A. Under the contract E, F and G.

Q. There is no doubt in your mind that those special facilities provided by Safe Harbor were provided solely for the use of the railroad? A. That was the cause of their being installed.

Q. Well, now, how is Penn Water or Holtwood as you call it compensated for those facilities which it installed for the use of the railroad, namely the Conestoga substation and Perryville line? A. It gets compensation from Baltimore by the portion of the bill that is remitted to Holtwood.

Q. What about that portion of the Perryville line that lies in Maryland? How does Holtwood get its compensation from Baltimore for that portion? A. It would get it the same way.

Q. Through F and I? A. It would get what it does not get from the railroad through H and I.

Q. Well, does the amount which Baltimore pays Penn Water, and as I understand that, on Table 10, the last column shows the amount, compensate Penn Water for special facilities provided for the railroad? A. That is right.

Q. All of the special facilities provided for the railroad? [10606] A. Well, it is the same proportion of the special facilities that it is of the energy, and if Holtwood supplies more or less of those special facilities than it gets compensation for in this bill, that is washed out under the terms of H and I. It would get any difference there.

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[10607] Q. Do you know what proportion of the special facilities provided by Penn Water to the railroad are provided for use in Pennsylvania as distinct from use in Maryland? A. Penn Water provides very little special facilities for use in Maryland.

Q. Well, they provide part of the Perryville line, don't they? A. That is right. The Perryville line and Conestoga substation is supplied entirely by Holtwood——

Q. Well—— A. —for delivery to Perryville, Fishing Creek and Conowingo.

* * * *

Q. Well, now, insofar as the delivery to the railroad at Fishing Creek is concerned, that is a very small percentage of the total delivered over the Perryville line. Isn't that right? A. I think so. Yes.

Q. So you can say substantially all of the use of the Perryville line is for service to the railroad in Maryland. Isn't that correct? A. The only other outlet is through the trolley meter [10608] at Perryville. Otherwise, that would be delivered to the railroad at Perryville in Maryland.

Q. Can't you answer my question directly, Mr. Davis?

* * *

THE WITNESS: Well, only half of the Perryville line is connected so that it can supply anything in Maryland except through the trolley. The other half is for the supply or for connection with Philadelphia Electric Company.

By MR. MYSE:

Q. Well, at least to that extent that you have half of the line serving the railroad, substantially all of that half is used for service to the railroad in Maryland? A. A large portion of that half is supplied to the railroad in Maryland.

Q. And similarly a large proportion of Penn Water's investment in Conestoga substation is used for service to the Perryville line which in turn is largely a service to the railroad in Maryland. Isn't that right? A. The same proportion of the substation as the line.

Q. Now, with respect to these other two circuits you spoke of, are they used solely for interchange, as you call it, with P. E.? A. They deliver power to the railroad lines

at Perryville [10609] which supply service north of Perryville, and that is interchange with Philadelphia Electric Company.

Q. Both of them? A. Both.

Q. The two circuits? A. That is right.

Q. Is that the only use made of those lines? A. There is no use except to deliver power to the Philadelphia Electric Company's area, to the railroad in the Philadelphia Electric Company's area.

Q. Now, what you mean by that I take it is that you don't have any doubt that the energy which is transmitted over those two circuits to Perryville is not used for the railroad, do you? A. Oh, no. It is all used for the railroad.

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[10634] Q. And when you say the Philadelphia Electric Company's [10635] area, I take it you refer to a contractual area under some contract which is not in evidence in this proceeding. Is that right? A. It is my impression that in the interchange contract it specifies north of Perryville and east of Thorndale as Philadelphia Electric Company's area, and west of Thorndale and south of Perryville as the electric companies' area.

MR. GOLDBERG: May we have the exhibit number reference of the agreement you just referred to?

THE WITNESS: That is Exhibit Number 134.

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TRIAL EXAMINER: Electric companies?

THE WITNESS: That means Holtwood, Safe Harbor and Baltimore, according to the contract. I find that in the interchange agreement.

By MR. MYSE:

Q. You do find it? A. Yes.

Q. What Section? A. That is Section 1.

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[10651] MR. MYSE: I would like to know now, Mr. Examiner—it is a very simple question—whether or not when he used the phrase "Holtwood sales" he meant that Holtwood was acting as agent for itself and Safe Harbor. I don't know what his answer is, and I would like an answer to that question.

MR. GOLDBERG: You mean, did he consider that Holtwood sells it alone?

MR. MYSE: No, sir, that isn't the question.

TRIAL EXAMINER: He may answer the question, but you are not called upon to construe the contract any further than you construed it in preparing the exhibit and your testimony.

THE WITNESS: I construed it in my exhibit as Holtwood dealing with Philadelphia Electric Company and with Pennsylvania [10652] Power and Light Company for the sale of firm power just as if Safe Harbor had never been mentioned in the contract.

By MR. MYSE:

Q. Do I understand that answer to mean you did not consider that Holtwood was acting as agent for Safe Harbor? A. I didn't consider that word "agent" at all.

Q. Well, did you consider that Holtwood was acting as agent for Safe Harbor when you said Holtwood made the sales to the three Pennsylvania customers that I referred to on Table 4? A. I considered that Holtwood was making those sales itself.

Q. Does that last answer mean that you did not consider Holtwood as agent for Safe Harbor? A. Holtwood was selling the power——

TRIAL EXAMINER: Just a minute, Mr. Witness.

Answer the question as directly as you can.

THE WITNESS: I haven't answered as directly as I might because I don't know just what he is putting into

that word "agent"; whether he has some legal concept I don't understand or not.

TRIAL EXAMINER: You are not called upon to guess what counsel is trying to eventually arrive at through his questions. You just answer his questions as put to you and if on re-direct examination your counsel still decides there is something [10653] that should be covered, he may bring that out.

THE WITNESS: I considered in all the study I have made that Holtwood was acting alone.

By MR. MYSE:

Q. That it was not acting as "agent" for Safe Harbor? A. No.

Q. Now, the amount of "Holtwood sales of energy" shown on Table 4 of Exhibit 47 for Pennsylvania Railroad Company in the year 1944 is actually the amount of energy delivered to the railroad in Pennsylvania. Isn't that correct? A. That is true.

Q. Now, who collected the money for that delivery? A. Baltimore collected the entire amount from the railroad company, and Holtwood collected for this 194 million from Baltimore.

Q. You say Holtwood collected for the 194 million from Baltimore. Actually what happened was that the total amount collected by Baltimore was divided up on the basis of the ratio of 194,082,000 kwh to the total amount of energy furnished the railroad in the year 1944. Isn't that right? A. That is right. That is the way they handled the bill.

Q. Now, Holtwood didn't actually render a bill to the Pennsylvania Railroad, did it? A. No, the railroad didn't care which one the power came [10654] from.

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[10657] Q. Now, Table 5 of Exhibit Number 47, you show what is labeled Pennsylvania Water and Power Company monthly revenues and payment for interchange power over

northern ties, and you include what you label "Purchases and Sales, Pennsylvania Power and Light Company," do you not? A. That is right.

Q. Now, actually the purchases and sales of interchange to Pennsylvania Power and Light Company are made [10658] by Generating Companies as defined in that contract. Isn't that correct? A. That is what the contract says.

Q. And "Generating Companies" again includes Safe Harbor as well as Pennsylvania Water and Power Company. Isn't that right? A. That is also stated.

TRIAL EXAMINER: What contract was that?

* * *

Q. And the agreement we just mentioned a moment ago [10659] is the one covering the purchases and sales to Pennsylvania Power and Light Company, as you label it, which has been identified in this record as Exhibit Number 76 and 77. Isn't that right? A. That is right.

* * *

[10660] Q. While we are on homework, at 10523 you agreed to make a check to determine what part of the supply to the Lancaster area was from Safe Harbor, did you not? A. I said I didn't remember whether I had ever done that, and you asked me to check up and see if I had and I found I had never figured out a percentage, although you asked me if a large portion of the delivery did not come from Safe Harbor, and I find that it did.

* * *

[10662] Q. Is there anything in Item H beginning with page 25 of the supplemental agreement, page 27, the supplemental agreement as of June 1, 1931, which specifies the transmission services or facilities furnished to Baltimore by Holtwood? A. The provision for the transmission from Safe Harbor to Baltimore is not included in this contract, that is from Safe Harbor to Baltimore. From Holtwood to Baltimore is what is provided here.

Q. Is there anything provided in either H or I concerning the provision of transmission services or facilities from Ellicott City to Takoma Park? A. No.

Q. Where do you have to go to find anything in any contract covering those services or facilities? A. You find those in E, F and G.

[10663] Q. Can you be more specific to the article in E, F and G involved, or articles? A. Article VII on page 9 is the description of the transmission services.

Q. That however, covers only the 220 volt transmission services between Safe Harbor and Baltimore and does not cover the 220 transmission line between Ellicott City and Takoma Park, does it? A. No, that is in a supplement, I believe.

Q. Well, let's see if we can specify which supplement and which paragraph. My understanding is that it is Item "F" consisting of the supplemental agreement as of August 1, 1932. Isn't that correct? A. That is right.

Q. So it can be said that in so far as transmission services and facilities are concerned, P. W. furnished service to Baltimore under E, F and G. Isn't that correct? A. That is right.

* * *

[10685] Q. Well, are you saying that Unit Number 2 of the 25-cycle single-phase generating units was provided in the initial development of Safe Harbor? A. The general provision is in the railroad contract for Electric Companies, so-called, to provide all the necessary generating, transmission and switching equipment.

Q. It doesn't say that the generating facilities to be provided by Electric Companies under Exhibit Number 10 shall be provided by either Penn Water or Safe Harbor, does it? A. It says Electric Companies.

Q. It doesn't specify who shall provide the facility, does it? A. I don't find anything except "Electric Companies shall provide——"

Q. So the answer is it doesn't specify. Isn't that right? A. That is right.

Q. Now, was the Number 2 Unit at Safe Harbor—that [10686] is, the 25-cycle single-phase unit we have been referring to—provided under the terms of E, F and G or Exhibit Number 10 which you have just referred to? A. That was provided for under the provisions of Exhibit Number 10.

Q. Now, how about the frequency changer at Safe Harbor? Is that also a facility provided under Exhibit 10, or is it a facility provided under Article V of Item E, page 8, that we referred to? A. That seems to be provided for under Article III of Exhibit 10 also included in the statement "All Generating Transmission Switching Equipment."

Q. Then as I understand your answer, it was not provided under Item E. A. That is right, I believe it was not.

Q. And again Exhibit Number 10 does not specify which of the Electric Companies was to provide the converter equipment at Safe Harbor or any other place, does it? A. It does not.

Q. With respect to these cable circuits that you made reference to as having been provided under Article V of Exhibit E, those weren't just ordinary cable circuits, were they? A. They were cable circuits similar to the shorter run of cable between generator and bus, only this happened [10687] to be a long run.

Q. There was an abnormality in their location, however. Isn't that correct? A. That is true.

Q. That abnormality that I have reference to is a tunnel that was required through a hill back of Safe Harbor hydro plant. Isn't that correct? A. So I understand.

Q. And that tunnel involved some pretty costly work, did it not? A. I believe so.

Q. There was also an elevator involved to the top of the hill. Isn't that right? A. There might be. I never saw it.

[10688] Q. And all those costs were incurred by Safe Harbor, were they not? A. That is right.

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[10694] Q. Well, now, does Penn Water or Susquehanna furnish any energy or capacity services via the Gunpowder line? A. No.

Q. Merely furnishes the facility. Isn't that correct? A. That is all.

Q. And there is no furnishing of energy in connection with the furnishing of those facilities. A. No.

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[10700] Q. Now, I understand your testimony to be in the last few answers, that Exhibit 11 did not change the obligations, whatever they were, under Exhibit 10. Is that correct? [10701] A. I believe you are right.

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[10703] Q. Now, at page 55 of Exhibit 47 in the second paragraph under the heading "Introduction" you say that under H and I Baltimore Company purchases all power and energy available to Holtwood in excess of that delivered in Pennsylvania for the above requirements, and as I understand your statement at [10704] page 55 when you say in excess of that delivered in Pennsylvania for the above requirements, you were referring to the requirements specified in the immediately preceding paragraph. Is that right? A. That is right.

Q. Now, the requirements that you specify in the immediately preceding paragraph are limited to firm power requirements, are they not? A. Yes.

Q. So that your statement as you have it on page 55 in the second paragraph under the heading "Introduction" means, as I understand it, that under H and I Baltimore Company purchases all power and energy available to Holtwood Company in excess of the firm power requirements delivered in Pennsylvania. Is that right? A. Yes.

Q. Now, will you point out to me in what provision of H and I it limits the amount available by reference to the firm power requirements? A. The words used are "In excess of that required to supply other customers", and my interpretation was that only the firm power is a requirement.

Q. Will you refer me to the Article in H and I that you relied upon for that construction? A. That is stated in Article 4, on page 6.

[10705] Q. Well, now, just a moment. Have you finished your answer? A. I was looking for another place, but I haven't found it.

Q. Will you do so, please? A. I don't find any other place right now.

Q. Article 4 on page 6 in Item H is in the contract agreement dated December 31, 1927, is it not? A. That is true.

Q. Now, in your opinion hasn't Article 4 been superseded by the supplement dated June 1, 1931, also included in Item H? A. That is true.

Q. So that Article 4 is no longer applicable. Isn't that right, Mr. Davis? A. I don't know that that is superseded by any other statement of entitlements. I think that still holds that all energy available in excess of requirements of other customers, is the entitlement of Baltimore.

Q. Is it your testimony that Article 4 in Item H is not superseded by Article II of Item H, page 28? A. That is what I was looking for. That seems to be the latest agreement, although——

Q. Well, do you agree with me that Article II, page 28 of Item H has superseded Article 4 on page 6? [10706] A. I believe that is right.

Q. Now, is there anything in Article II, page 28 or 29 which says what you say at page 55 of Exhibit 47? A. This says, "Not otherwise disposed of in performance of now existing contracts".

Q. And that would include energy disposed of under existing contracts for interchange purposes, would it not? A. My interpretation is that anything in excess of requirements which are obligations of contracts for firm power is at the disposal of Baltimore Company, and is disposed of in these other contracts in accordance with Baltimore's request or approval.

Q. You make that construction in the light of the language in Article II, page 28 and 29 of Exhibit H. Is that right? A. Well, that is part of it.

Q. Well, what other language, then, and when I say "language" I am referring to language in the contract, Item H, now in effect? A. Well, I would make that interpretation also in connection with the statement on page 28 in the middle of the top paragraph.

Q. That is a "Whereas" clause you are referring to, is that right? A. That is right.

[10707] Q. Now, what particular statement in that paragraph do you have reference to now? A. That is in regard to "coordination can be attained and greater economies effected by the sale to Electric of all Power's electric power and energy (including that to be purchased from Safe Harbor) available for such sale,".

Q. Well, if the energy is sold to P. P. and L. for example, it isn't available to Baltimore, is it? A. It is sold to P. P. and L. when it can be sold more economically there than it can be used in Baltimore or some other place on the system.

Q. When it is so sold, it isn't available to Baltimore, is it? A. No, that is sold because Baltimore can get more advantage out of it by selling it there than by having it delivered down to the city.

Q. You say Baltimore sells that energy? A. It is sold for the account of Baltimore.

Q. Are you saying that the sales of interchange energy shown on your Table 6, for example, which you label inter-

change transactions by Holtwood, are all transactions for the account of Baltimore?

TRIAL EXAMINER: What table is that?

MR. MYSE: 6, for example, or table 5.

THE WITNESS: Yes, that is what I am saying; that is a sale of Baltimore's entitlements.

[10708] By MR. MYSE:

Q. That isn't what my question was. My question was, are you saying that those sales you show on Table Number 5 and Table Number 6 of Exhibit 47 as Sales by Holtwood or transactions by Holtwood are all transactions for the account of Baltimore? Now, will you answer that question, please? A. Yes.

Q. That is your statement, is it? A. That is right.

Q. Where in these cases are the deliveries made for the account of Baltimore? A. They are made over the northern connections of Holtwood with the northern companies.

Q. Those deliveries are made in Pennsylvania for the account of Baltimore, I take it. A. That is right.

TRIAL EXAMINER: What are you talking about now, these Pennsylvania Water sales to Metropolitan Edison, Pennsylvania Power and Light?

THE WITNESS: Interchange power, yes, not firm.

By MR. MYSE:

Q. Those deliveries are made by whom in each case? A. Those deliveries are made by Holtwood.

Q. And they are made off the facilities of Holtwood [10709] to the facilities of the various Pennsylvania utilities we have been referring to? A. That is right.

Q. In your opinion do the sales take place at that point? A. Yes.

Q. Who collects the revenues for such sales? A. Holtwood collects it in the first instance.

Q. Who renders the bills for such sales? A. Holtwood renders the bills.

Q. Those sales are all—that is the amount of the sales I take it are all metered in Pennsylvania. A. That is right.

Q. Does Baltimore Company report those sales in its FPC Form 1——

MR. GOLDBERG: Would that be decisive?

MR. MYSE: I am just asking him the question. He seemed to think it was decisive in other connections.

TRIAL EXAMINER: All right.

THE WITNESS: Did you ask a question?

MR. MYSE: Yes. Will you read it back, please?

(Question read.)

By MR. MYSE:

Q. —report for the year 1944? A. No, I believe not. [10710] Q. Now, you are not saying, are you, that Baltimore is a party to the interchange contracts with the Pennsylvania customers, are you? A. No.

Q. Have you ever found any document any place, anywhere, in which either Penn Water or Baltimore made such a statement—that is, that the sales to the Pennsylvania customers we have been referring to are made for the account of Baltimore? A. I don't know of any.

Q. What did you base your opinion on? A. I based that on the general conditions of contract H and I under which Baltimore pays for all the costs of that energy and outside of the firm obligations that Holtwood has in Pennsylvania, Baltimore has the direction of what shall be done with it, as to where it can be disposed of to the greatest advantage of Baltimore.

Q. Now, in what provision of Item H and I do you find any specification of the authority to Baltimore to make a direction for the disposition of Holtwood or Safe Harbor

energy for that matter? A. Safe Harbor energy is not included in that.

Q. Let's confine it to Holtwood energy then. A. Holtwood energy and its entitlement from Safe Harbor.

[10711] Q. You point out to me, if you can, and I am telling you in advance there is no such provision, but I would like to have you point it out if you can, or whatever provision you relied on in making that statement.

MR. GOLDBERG: You mean you think there isn't, Mr. Myse?

MR. MYSE: I am sorry I was interrupted. May I have the question.

TRIAL EXAMINER: Read the question.

(Question read.)

THE WITNESS: I relied on the condition in contract H and I which places Baltimore in the economic position of being benefited by anything that is done with interchange energy in excess of firm power, and being damaged by anything that is done to decrease the revenue received from it. In other words, it is based on the economic position of the old adage of "Who pays the fiddler has a right to call the tune."

By MR. MYSE:

Q. But I am asking you, Mr. Davis, which specific article are you now referring to when you make those statements? A. The provision of Baltimore paying the entire costs of Holtwood generation plus its power bill from Safe Harbor.

Q. Are you referring to Article III, page 29 of "H" [10712] when you make that statement? A. That is where it starts to specify——

Q. Well, where else? A. Just a continuation of that which specifies all the payments to be made.

Q. Is there anything in Article III that says Baltimore has the authority to direct the disposition of Holtwood

energy? A. No, I get that from the general operating arrangement and conversation with the operating committee.

Q. Who in the operating committee? A. Well, I have talked with Mr. Spaulding and Mr. Greer. That particular information didn't come from Mr. Spaulding.

Q. Did it come from Mr. Greer? A. Mr. Greer in general conversation said that that energy is placed where it will be of the greatest economic advantage to Baltimore Company.

Q. Did Mr. Greer ever tell you that Baltimore had the authority to direct the disposition of Holtwood energy? A. No, that is my translation of it.

Q. Now, where did you get that translation from, other than the statements that you received from Mr. Greer? A. This situation that is presented here in Article III of Contract "H."

[10713] Q. And is that the only article you have reference to in the contract? A. The article which provides for Baltimore Company standing responsible for all the costs of Holtwood Company.

Q. Well, is Article III the only one you have reference to in making that statement? A. I don't have any other in mind right now.

Q. Well, look through the contract and tell me. I think it is very important to find out what you were referring to when you arrived at that conclusion. A. Well, we will let it stand on that article.

Q. That is the only one you had reference to? A. That is all I have in mind at the present time.

Q. Now, Mr. Greer is an employee of Consolidated Gas Electric Light and Power Company of Baltimore, is he not? A. I understand so.

Q. Don't you know? A. I never saw his pay check. I understand he is an officer of Safe Harbor Water Power Corporation and is a member of the organization of Consolidated.

Q. When you say "a member of the organization," you mean an employee? A. That is right.

Q. Well, as a member of the operating committee he represents Baltimore, does he not? [10714] A. I think so.

Q. Don't you know that? A. It is my understanding that he does.

Q. Don't you know it?

MR. GOLDBERG: Mr. Examiner, I submit if the witness states that is his understanding, that is his answer.

THE WITNESS: I have seen his signature on operating committee statements.

By MR. MYSE:

Q. Do you know that signature is as a member of the operating committee on behalf of Baltimore? A. That is the way I understand it.

Q. He certainly doesn't sign any documents presented by the operating committee as an officer of Safe Harbor, does he? A. That title is not attached, no.

Q. In having these conversations with either Mr. Greer or Mr. Spaulding, did either one or both of those gentlemen tell you who did make the operating arrangements for interchange sales? A. I think the direct negotiations are made by Holtwood; that is, the contract with the northern companies is with members of the Holtwood organization.

Q. And Holtwood carries out the arrangement, too, don't they? [10715] A. That is right.

Q. Who actually makes the decision as to what energy will be sold as interchange? A. I think the Holtwood organization does what you might call the determination of when it can be interchanged advantageously one way or the other.

Q. Where does all this energy originate that is sold as interchange to the Pennsylvania customers, do you know?

A. Holtwood and Safe Harbor. Sometimes some will come up from Baltimore.

Q. Do you know how much that latter amount is? A. It is a very small amount. I don't recall.

Q. What do you understand by the following, what do you understand the meaning to be of the following phrase:

"Electric shall be entitled at all times to all the electrical capacity and energy from time to time available to Power . . . and not otherwise disposed of in performance of now existing contracts, . . ."

A. That was what I had in mind when I said requirements that are obligations of Holtwood to supply power and not voluntary when-as-and-if arrangements of interchange.

MR. MYSE: Let's have the answer, please.

TRIAL EXAMINER: Read the answer.

[10716] (Answer read.)

THE WITNESS: I should add I mean in excess of those firm obligations and not including the interchange.

By MR. MYSE:

Q. Well, as I understand your testimony, then, you construe the phrase "—not otherwise disposed of in performance of now existing contracts" to mean not otherwise disposed of in performance of firm power obligations under now existing contracts. Is that right? A. That is the way I interpreted it.

Q. And you have so interpreted that language in all your studies in this record. Is that right? A. I have used it in that way in the studies.

Q. Now, did you recognize the language I used in my question as the language appearing in Article II of Exhibit "H"? A. That is right.

MR. GOLDBERG: That is not exactly as it appeared in Article II. Is that right, Mr. Myse?

MR. MYSE: You had made the same construction; however, of the language that does appear in Article II of Exhibit "H." Isn't that right?

THE WITNESS: That is correct.

By MR. MYSE:

Q. Now, if you will refer to page 56 of Exhibit 47 [10717] under the heading "Service to be Performed," sub-paragraph (d) you say "After satisfying its firm power commitments to Pennsylvania Company, Philadelphia Company, York Company and Railroad Company, to place the balance of its available power and energy at the disposal of Baltimore Company," do you not? A. That is right.

Q. And I take it that that language in Exhibit 47 is the result of your construction of Article II of Exhibit "H", page 28 and 29. A. That is the same statement I just made to you as what I interpreted (d) to be.

Q. Now, will you look at page 41, please, of Exhibit 47? Under paragraph (c) you say that the available output of Holtwood is disposed of under a contract for the sale of all the balance of available power and energy to Consolidated, do you not? A. That is right. That is another statement of the same idea.

Q. However, immediately preceding that you pointed out that part of the available output of Holtwood hydro is disposed of under certain interchange contracts. Isn't that right? A. That is right.

Q. Do I understand you to mean now that you would [10718] like to change the statement at page 41, sub-paragraph (c)? A. That balance should include the interchange, that is true.

Q. Then your statement as it appears on page 41 is not correct in your view. Is that right? A. That misconstrues a bit the basis on which I have proceeded, that the interchange is a part of the excess to which Baltimore is entitled.

Q. At least it is inconsistent with the statements I have referred to on page 55 and 56. Isn't that right? A. That statement there should include the interchange in that balance available to Baltimore.

[10719] Q. Now, if as you say, Baltimore is entitled to the balance of energy and capacity available from Holtwood only after firm power commitments in Pennsylvania have been taken care of, that means it is entitled to the balance of all of the energy no matter what the river flow conditions there are. Isn't that right? A. That is true.

Q. So that it isn't just entitled to the balance of the energy under average riverflow conditions? A. It is entitled to the balance as it comes.

Q. Well, my statement is correct, that it is not entitled to only the balance under average riverflow conditions, is it not? A. Oh, it is entitled to the balance each year whatever the flow produces.

Q. And if the riverflow for a particular year is in excess of average over a thirty-year period, they are entitled, as I understand your testimony, to the energy which is the balance available even though that amount of energy is in excess of the energy which would be produced under average riverflow conditions. Isn't that right? A. Yes.

Q. And the same thing is true with respect to capacity available after firm commitments have been met up in Pennsylvania if you are right in your construction. Isn't that right? [10720] A. That is right.

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[10724] Q. Yesterday I asked you certain questions with respect to 73, 74 and 75, which is the Coatesville contract, and at page 10548, lines 13 to 15 in response to a question by the Trial Examiner you stated that "As an engineering and operating matter, Safe Harbor has no physical ability to do anything under this contract", and I take it you were referring to the contract identified in these proceedings as Exhibit 73, 74 and 75. Is that right? A. Yes.

Q. Now, as a matter of fact, Holtwood has substantial generating facilities, does it not? A. Yes.

Q. And Safe Harbor has substantial generating facilities? A. That is true.

Q. From which facilities are available a substantial amount of energy and capacity and other services. Isn't that correct? A. That is true.

Q. And there is a transmission line connecting the Safe Harbor plant with the bus bar facilities at the Holtwood plant, is there not? [10725] A. That is right.

Q. And there is another transmission line running from the bus bar in the Holtwood plant to the Philadelphia Electric Company area at Coatesville, Pennsylvania, is there not? A. That is right.

Q. Now, given those generating facilities at Safe Harbor connected to the area of the Philadelphia Electric Company system at Coatesville, Pennsylvania, by a transmission line, do you still say that Safe Harbor has no physical ability to generate energy and have that energy delivered to Philadelphia Electric Company at Coatesville?

MR. GOLDBERG: Is this a hypothetical question you are putting to the witness?

MR. MYSE: No.

THE WITNESS: Certainly it has physical ability to generate energy, but that is all.

By MR. MYSE:

Q. Does it have physical ability to generate that energy and have it delivered to Coatesville? A. No.

Q. It has no physical ability. Why do you say that? A. Because it has no transmission line to get it there.

Q. So, as I understand your testimony, Safe Harbor has no physical ability to do anything under contracts 73, 74 [10726] and 75 because it has no transmission line which it owns to get the energy there. Is that it?

MR. GOLDBERG: Just a minute.

Is that question asking him if that is what he meant by his answer at lines 13 to 15 of transcript 10548?

MR. MYSE: Read the question. I think you misconstrued it.

TRIAL EXAMINER: Read the question.

(Question read.)

MR. GOLDBERG: In other words, the question as I understand it, Mr. Examiner, refers to the questions and answers just had this afternoon and not to the answer given on transcript 10548.

MR. MYSE: Well, Mr. Goldberg can construe it any way he wants. I think my question is clear.

TRIAL EXAMINER: All right. You may answer the question, Mr. Witness.

THE WITNESS: As an engineering and operating matter, Safe Harbor has no physical ability to do anything under the Coatesville contract because, first, it has no transmission line, and second, it has no energy after it leaves the plant to deliver. It is sold before it goes through the transformers at Safe Harbor.

By MR. MYSE:

Q. Well, the amount of energy that it has left after [10727] whatever sales you had reference to has nothing to do with physical ability, does it?

TRIAL EXAMINER: I think you are arguing with the witness now.

MR. MYSE: I would like to understand what he meant by physical ability.

TRIAL EXAMINER: I think it is clear. I will rule the question out.

* * *

Q. Now, what provision of the contracts in these proceedings if any do you base that latter statement on, that is namely, it has no energy to be sold after it leaves the transformers at Safe Harbor?

MR. GOLDBERG: I think it is repetitious, Mr. Examiner. All we have got to do is look at transcript 10548, and the preceding answer at the bottom of 10547 which precedes that answer on 10548.

MR. MYSE: I don't see any place where I asked this question.

MR. GOLDBERG: It is the same subject matter.

MR. MYSE: That may be true, but this is a different question.

[10728] MR. GOLDBERG: You use new words——

TRIAL EXAMINER: Just a minute.

MR. GOLDBERG: That doesn't make it less repetitious.

The answer I refer to begins at line 22 on page 10547.

MR. MYSE: Mr. Examiner, I must object to that kind of interjection by Commission counsel. I think it is highly unwarranted in the middle of my cross-examination.

TRIAL EXAMINER: All right.

Just let me have a chance to read it, please.

Read the question.

(Question read.)

TRIAL EXAMINER: I don't agree counsel is repetitious on the basis of what has been said on pages 10547 and 10548, but I do think it is repetitious on the basis of all the testimony.

MR. MYSE: I haven't even begun to ask him about the Safe Harbor contract if that is what he had reference to.

TRIAL EXAMINER: The question taken in its present place in the cross-examination is ruled out.

By MR. MYSE:

Q. Mr. Davis, did you have any reference to the contract E, F and G, Article II or Article III in making the

statements you made this afternoon with respect to the ability of Safe Harbor to perform physical operations in connection with the contract, Exhibits 73, 74 and 75?

[10729] MR. GOLDBERG: Roman II and III of "E". Is that it?

THE WITNESS: Did you name another Article—besides Article II in E——

MR. MYSE: II and III.

THE WITNESS: Well, those are the articles that I rely on for saying that Safe Harbor has no energy after it leaves the plant. As soon as it strikes the transformers, it belongs to Holtwood, and Holtwood has the transmission line. It belongs to either Holtwood or Baltimore, and Holtwood has the only means of delivering it from Safe Harbor to Coatesville.

TRIAL EXAMINER: Now, I think the fact that counsel—just a minute.

Read me the first part of the answer.

(Answer read.)

TRIAL EXAMINER: I think the fact that counsel was able to name the provisions which he appeared to be confident the witness would affirm as those upon which he would base his answer to that question, sustains the Examiner's previous ruling. The question could only lead to repetitious testimony.

MR. MYSE: I want to say to the Examiner that I wasn't confident and I am still not confident that those are the only provisions, and I want to pin him down to that.

TRIAL EXAMINER: You may not be confident, counsel, but the Examiner is.

By MR. MYSE:

[10730] Q. Now, the construction of Article II of Exhibit —or Item E that you have just referred to—is basic to all your studies in this record, is it not? A. That is right.

[10738] Q. Well, you may correct any statement you made immediately prior to the recess as far as I am concerned. A. You asked me under what contract the energy from Baltimore to Safe Harbor over the 220 kv lines was sold to Holtwood. I answered wrongly, E, F and G. It has nothing to do with that contract. It is sold under H and I.

Q. As a matter of fact, you answered E, F and G twice in your answer, did you not? A. I might have, but H and I is the right answer.

Q. Now, what provision under H and I do you now have reference to? A. Article 6 provides for supply of backfeed.

Q. That is Article 6 of Item "H"? A. That is right.

Q. Now, is there any other Article in any of the contracts that you know of which covers the purchase by either Holtwood or Safe Harbor of backfeed or any other energy from Baltimore? A. There is no provision for any purchase of anything by Safe Harbor. I have nothing in mind about another provision for the purchase by Holtwood from Baltimore.

Q. You say you have nothing in mind. The fact is, there isn't any. [10739] A. I don't know of anything.

Q. Now, Article 6 of Item "H", page 9, is also included in the contract dated December 31, 1927. Is that right? A. Article 6 is in the 1927 contract.

Q. And do I understand your testimony to be that you are of the opinion that Article 6 is still in effect? A. Yes, that is my opinion.

Q. Now, Article 6, however, provides only for the purchase of steam-generated energy, does it not? A. That is right.

Q. And it provides for the purchase of such steam-generated energy from Baltimore on a daily net basis, does it not? A. That is right.

* * *

[10781] Q. Now, at page 1170 of the transcript of the direct testimony——1170 through 1172—you testified with respect to certain sources of basic data, instructions as to method in presenting your Exhibit Number 64, did you not? A. Is that the transcript for yesterday?

Q. No, sir, that is back under your direct testimony, a long, long time ago. A. Oh, 1170, not 11,000. Did you ask a question?

Q. Yes, will you read it, please?

(Question was read.)

THE WITNESS: That is generally my statement of the sources of my information.

By MR. MYSE:

Q. Well, do I understand from your testimony at those pages that you assume no responsibility for the accuracy of the basic data? [10782] A. That is right.

* * *

[10783] Q. Now, also at 1171 you stated that you consulted Mr. R. T. Greer of the Baltimore Company. A. That is right.

Q. And then you go on to say that he is in charge of the operations of the interconnected system. Now, what [10784] interconnected system did you there have reference to? A. Baltimore, Holtwood and Safe Harbor.

Q. Do you mean to say that Mr. Greer is in charge of the operations of Holtwood Company? A. He is a member of the committee that handled the interconnection, and for his company he is in charge, as I understand it, of the interconnection arrangements.

Q. Well, does that mean to you that Mr. Greer is in charge of the operations of Holtwood Company? A. No.

* * *

[10785] Q. Is that the only subject matter that you conferred with employees of Baltimore Company on in connection with your Exhibit 64? A. I believe that is right.

Q. What other employees other than Mr. Greer did you confer with? A. None other than Mr. Greer before the preparation of Exhibit 64.

Q. How about after the preparation of Exhibit 64? A. My conferences after that, Mr. Gibbs, Mr. Thomas and Mr. Greer.

Q. When you say Mr. Thomas, you mean Mr. Ralph L. Thomas? A. That is right.

Q. Were the subjects of those conferences related solely to capacity value or dependable capacity? A. Oh, the general subject of handling the energy in excess of the firm power requirements came into the conversation.

* * *

[10787] Q. Did you use any data from the 1944 Form 12 report filed with the Federal Power Commission by Consolidated Gas Electric Light and Power Company of Baltimore? A. We used the peak loads of the Pennsylvania customers at the time of the system peak. That was the only place we found those reported.

Q. Is that the only place you found that data and relied upon it for your Exhibit 64? A. Yes. The peaks of the Holtwood-Safe Harbor system peak were at another time, and were not used.

* * *

[10804] Q. Now, as I understand your testimony at page 1170, lines 5 to 9 inclusive, you there attempted to state the general purpose of your Exhibit 64. Is that right? A. That is right.

Q. And as I understand that testimony, that purpose is to determine all costs associated with the rendering of a particular service or group of services to a particular customer to compare those allocated costs with the charges collected for the service or services which are involved. [10805] Isn't that right? A. I don't find those words in that answer.

Q. Well, will you tell me whether that is your purpose and my understanding of your testimony? A. The purpose was to make an analysis of capital costs, operating expenses, all other costs of Holtwood and Susquehanna Companies, and to allocate those to the service furnished to various customers.

Q. Well, my question is, however, is my statement of your purpose correct or not, and I assume you would like to have it read back now. Would you? A. Yes.

TRIAL EXAMINER: Read the question.

(Question read.)

By MR. MYSE:

Q. Isn't that a correct statement, Mr. Davis? A. May I ask what you mean by a group of services?

Q. Well, for example, in the case of Edison Light and Power Company there were a number of different kinds of services involved, and that is what I had reference to when I said "group of services." A. If I recall those kinds of services, they were merely conditions of the delivery of electric power and energy. I did not segregate any of those conditions. I did not separate the cost to apply it to any of those conditions. [10806] My cost analysis was based on the amount of power and energy delivered, and the costs include all such things as facilities for the delivery, facilities for furnishing reactive current whenever it was furnished, and furnish other conditions necessary to deliver power and energy in the form the customer required to put to beneficial use.

Q. Now, with that understanding of the meaning of group of services, will you now tell me whether my statement of your purpose is correct or not, and if you would like to have it read back, I assume the Examiner will allow it. A. No. The group of services that you speak of are not separated in any allocation that I have made except where isolated costs for a transmission line, or some facility that is isolated, there is no other separation of any

group of services. The rest of it is delivery of power and energy.

Q. All right, Mr. Davis, but with that understanding will you tell me whether my statement of your purpose is correct or not? A. If you consider my statement equal to yours, it is, but I can't translate it into your terms.

Q. When you say your statement is equal to mine, you mean your statement defines group of services as I used it. Is that what you mean? A. Well, if you think my statement does apply to [10807] group of services as you used it, then your statement is correct.

* * *

Q. From your knowledge of the operations of the Safe Harbor and Holtwood developments, would you say that they are operated as a unit? A. They are operated like two power plants in the system.

Q. Well, wouldn't you say that the way these particular power plants are operated that they are operated as a unit? A. You mean as if they were all in one location and building?

Q. Yes. A. They are operated that way so far as the operation of the plants go.

Q. That is all I asked you about, Mr. Davis. Isn't that right? A. As far as the operation of the plants go.

* * *

[10813] Q. Mr. Davis, as I understand the purpose of your exhibit 64, it was to determine only the cost incurred by Penn Water in rendering whatever services it rendered to its several customers. Is that right? A. That is right.

Q. So that there are no costs included in your Exhibit 64 incurred by Safe Harbor except those costs which may be covered by the payment that Penn Water makes to Safe Harbor under item E, F and G. Isn't that right? A. That is right, one-third of Safe Harbor's total costs.

Q. Now, as I understand it, that payment by Penn Water to Safe Harbor we have just referred to was neither

intended to nor does it cover any of the costs of Safe Harbor incurred by Safe Harbor for any of the services rendered to the railroad [10814] in Maryland. Isn't that right? A. I have so treated it.

Q. Well, isn't my statement correct? A. I think so.

Q. However, you have included in your exhibit 64, have you not, certain costs incurred by Baltimore Company in connection with the rendering of backfeed service under the contract identified in this exhibit as item H and I. Isn't that right? A. That is right.

* * *

[10846] Q. So that the maximum steam capacity required on the Holtwood Safe Harbor system occurs throughout the year. Isn't that right? A. That is not a clear way to put it.

Q. Well, is my statement correct or not? A. Not exactly. Maximum steam requirement to carry the [10847] load is what I defined as the critical period. Holtwood-Safe Harbor system turns out what it can, and any excess goes into another system, and they have no peak for which they are specifically responsible.

Q. You mean they have no firm power obligations. A. Yes, they have some firm power obligations, but they don't stand alone responsible for them.

Q. Well, who else is responsible for supplying the peaks under those firm power obligations? A. Baltimore Company is standing back of the peaks on those firm power obligations.

Q. And you say that despite the fact that Baltimore isn't obligated at all under the contracts which created those peaks. Is that right? A. That statement is based on the relative economic condition that is the result of the application of contract identified as H and I, under which in effect the entire output of the Holtwood system is sold for the account of Baltimore. Baltimore gets all of the revenue from it, pays all of the costs, and in effect its

economic effect is the same as if Baltimore were leasing that plant.

Q. Did I understand you to say, Mr. Davis, that you are now saying that all of the output of Holtwood and Safe Harbor is sold for the account of Baltimore? A. Practically, in economic effect, and the coming back [10848] to the responsibility for the peak loads of the Pennsylvania customers, if those loads are defaulted on, and the service is not supplied, it makes no difference to Holtwood's income or financial position. It makes no difference to the financial position of any other company, but Baltimore is the only one that is hurt, and it would be just as damaging for Baltimore to allow those loads to be defaulted on as any other load in the Baltimore area, down in the city of Baltimore.

Q. Mr. Davis, will you point specifically to any provisions in item H or I upon which you rely for making the statement you have just made with respect to the sale of all of the Holtwood and Safe Harbor output for the account of Baltimore? I would like to have you be more specific if you can with respect to the provisions in the contract. A. I think you understood what I said, that the general economic position in which Holtwood and Baltimore are placed by the application of all the provisions of the contract identified as H and I, wherein Baltimore pays all the costs, gets all the revenue from all of the power that is sold, and in economic effect all of the output is sold for Baltimore's account and so credited.

Q. Well, then, do I understand your answer to be that you cannot be more specific other than to point to the entire contents of the contract? Is that right?

* * *

[10849] THE WITNESS: That is right.

* * *

[10858] Q. Now, of course the water storage at the Holtwood and Safe Harbor sites may be regulated on a greater

than a weekly cycle. Isn't that correct? A. That is done in case of emergency, and that is the extra capacity that is figured for additional draw-down. Dependable capacity is first figured on the regular weekly recovery schedule.

Q. Well, isn't it a fact that the operation of those hydro plants at those two sites may be operated on a seasonal [10859] draw-down basis? A. You don't have seasonal storage.

Q. Well, are you saying that they can't be operated on a seasonal drawn-down basis? A. They are not what you call storage plants on a seasonal basis. They are run-of-river plants. They can operate on storage for a period of a week, probably.

Q. Now, as I understood it, you said normal operation was on a weekly re-fill basis. Is that right? A. That is right.

Q. Is there any reason why they can't be operated on the basis of draw-down in a series of weeks? A. Oh, they would be in case of emergency. That is how the pondage is used. If they had a serious outage at some other place, they can draw the pond down to a point beyond any possibility of refilling at the beginning of the next week, but sooner or later they have to back off, and the storage capacity or the dependable capacity that has been figured on a weekly refill will not be there unless the river flow comes up.

Q. Well, do you know whether or not the riverflow conditions on the Susquehanna are such that the Holtwood and Safe Harbor hydro plants can be operated on a weekly cycle with a series of draw-downs, and then gradually bringing the water level up again? [10860] A. That probably is done, taking the chance that the riverflow will increase. If it doesn't you have got to back off and carry the load with steam.

Q. In order to do that, you have to know the probabilities of riverflow, do you not? A. Well, that is true. You take a chance on it.

Q. Do you know whether or not there is any increased generation at the Conowingo hydro plant which is available to the Penn Water and Safe Harbor system when you have increased draw-down at Safe Harbor and Holtwood? A. Of course any increase in the draw-down delivers that much more water to the Conowingo plant.

Q. I understand that, but if that water is used for the generation of energy, is it available to Penn Water and Safe Harbor system? A. On a "When, as and if" basis, it might be. There is no commitment to supply it except the general agreement to furnish emergency service and to coordinate.

Q. But under those conditions, it would be available to the Penn Water-Safe Harbor system? A. It would be available if they had it to spare.

Q. You might plan it that way. Isn't that right? A. As far as system planning, if you mean installing additional capacity, as I understand it those plans are for the requirements of their own system and they do nothing that [10861] gives any assurance that they are going to have it available for Holtwood, Safe Harbor or Baltimore. If they have it, they are willing to furnish it.

Q. Are you saying that Safe Harbor, Holtwood and Philadelphia Electric, at its Conowingo plant, never plan to utilize the energy in coordinated operation between the systems which arises out of increased draw-down at the Safe Harbor and Holtwood orperations?

MR. GOLDBERG: May I have that, please?

THE WITNESS: I didn't say that.

TRIAL EXAMINER: Yes.

(Question read).

By MR. MYSE:

Q. Do you know whether or not they do make such plans? A. No, I don't know.

Q. Do you think that this is a fair statement, Mr. Davis: A run-of-river-plant refers to those plants whose

operations can't be regulated over a period of more than a few hours, either from storage at site or above, but whose operation is in general controlled by the volume of flow which must be utilized as it occurs or be wasted?

MR. GOLDBERG: A fair statement as a general definition or applied specially?

MR. MYSE: As a general definition.

THE WITNESS: As that term is generally used, a period of [10862] a few hours is much more restrictive than you would ordinarily find.

Q. You don't agree with that statement, then. A. That is rather narrowly confined, more so than the term is generally used. I don't agree with that as a general use of the term.

Q. Now, it is a fact, however, that the operation of the Safe Harbor and Holtwood plants can be regulated over a period of more than a few hours. Isn't that right? A. That is true.

Q. And their operation is not in general controlled by the volume of flow in the Susquehanna River which must be utilized as it occurs or be wasted? A. Pretty close to that. In March, April and May they would probably like to use more of it, but they can't, so it is wasted.

Q. That is during the high-flow months. A. That is right.

* * *

[10863] Q. Do you mean to say by that that if the load that the Holtwood-Safe Harbor plants actually serve is a sharp load that it would not have more dependable capacity available from their operations than if it was a flat load, so to speak? A. Oh, surely, but that is what I gave you in my previous answer, that there is no load that is specifically a Holtwood-Safe Harbor load. It is theirs when they can carry it. It is someone else's when they can't.

Q. Certainly they have a load commitment to the Pennsylvania customers, do they not? A. They have a com-

mitment, but they couldn't keep the [10864] commitment if they didn't have help.

Q. They could get that help from the Pennsylvania customers themselves, could they not? A. They could if they had it to spare, but they don't do anything to assure that they will have it.

* * *

[10865] Q. Are you saying that if there were no interchange contracts with the Pennsylvania customers, that that would have no effect on a determination of dependable capacity for the Holtwood and Safe Harbor systems? A. It might be given some consideration, but I don't believe so because it would simply mean that while off-peak capacity in Baltimore is there already, it might be cheaper to get it from Pennsylvania, and it would be gotten there. If it was more expensive than the energy from Baltimore, then Baltimore would furnish it under the present method of operation.

* * *

[10870] Q. As I understand your Exhibit 64, you used what is termed non-coincident peak method of allocating demand costs. Isn't that right? A. That is right.

Q. There are other methods of allocating demand costs. Isn't that true? A. Yes, there are a number of methods of allocating demand costs.

Q. Well, one other method is the coincident peak method, or what is commonly referred to as the peak responsibility method. Isn't that right? A. That is another method, yes.

Q. Now, the non-coincident peak method which you used requires the determination of the maximum non-coincident demands of all the customers. A. That is right.

Q. And it assumes that the costs associated with the different demands of each customer are in proportion to the ratios of the maximum demands of each customer to the [10871] total of the non-coincident maximum demands of all the customers. A. That is right.

Q. And that is an assumption, isn't it? A. Well, that is the way they are allocated in Exhibit 64.

Q. But that is an assumption, isn't it? A. That they are proportionate?

Q. Yes. A. That is right.

Q. Have you made any study in this case for the purpose of Exhibit 64 or otherwise to determine whether or not the costs of Holtwood do vary in proportion to ratios of the maximum demands of each customer to the total of the non-coincident demands of all the customers? A. No, I have made no special study on that.

* * *

[10874] Q. Now, isn't it true, Mr. Davis, in using the non-coincident peak method as you have in Exhibit 64, the peak demands of the various customers that are used in that method should be on the same basis? Isn't that right? That is, they should be measured on the same basis. A. Oh, you mean whether they are one hour or thirty minutes?

Q. That is right. A. Surely, that is true.

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[10924] SAMUEL JOSEPH

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CROSS EXAMINATION (continued)

By MR. SPARKS:

* * *

[10954] Q. What is the significance and meaning of the earnings-price ratios shown in the last column of page 40 of Exhibit 46 for the purpose of the determination of the fair rate of return to Penn Water? A. Here we have a list of all of the common stocks of electric operating utilities offered to the public during the period 1935 to 1945. The last column shows the earnings-price ratio as at the time of the offer. Looking at that column and having in mind a certain cost that the utility bears, you have a view of cost of capital on common stocks to these utilities.

This, then, combined with the information [10955] shown at pages 38 and 38-A would give you an idea of what rate should be allowed on the equity of Pennsylvania Water and Power in a rate proceeding.

Q. How would you get an idea of what should be allowed, Mr. Joseph, in that respect by examining the earnings offering price ratio shown in the last column of page 40? A. Well, your own mental processes would determine that. You are interested in finding out what is fair to allow for Penn Water. Well, you say, in accordance with the Bluefield case and in accordance with the theory generally, "We will allow what investors seem to be requiring." You look at page 40 and pages 38 and 38-A, make up your mind as best you can what that requirement is.

* * *

[10960] Q. What companies on page 40 of Exhibit 46 are companies comparable to Penn Water so far as risks and uncertainties are concerned as that latter term is used in the Bluefield case? A. All of them.

Q. Didn't I just ask you a few minutes ago if all of the companies on page 40 are comparable to Penn Water so far as risks and uncertainties are concerned, and didn't you say [10961] "No"? A. Well, if I did, I should have changed that answer. We are dealing with this problem: You have to select data from amongst all of the data available on companies whose risks are comparable to Penn Water. You do that by dealing with operating electric utility companies. That is my understanding of one way of selecting companies of comparable risks.

Now, having selected companies of comparable risks your question is, are these companies within that selection very close to, or have the same characteristic of Penn Water. I say there are differences, certainly. Penn Water is a hydro company. Perhaps none of these companies has a major operation as a hydro-electric company.

Q. All right. Now— A. I hope that explains the apparent inconsistency. You can't say these companies are

similar or dissimilar, however you approach the problem. They are similar in my view under the definition of the Bluefield case.

Q. What do you mean "similar in your view", Mr. Joseph, within the meaning of the Bluefield case, as to corresponding or comparable risks, and uncertainties? A. Well, I mean this: If I had selected for page 40 statistics on brewery companies, let us say, then I think there would be a very definite argument as to whether the Supreme Court meant by "comparable risks" to compare a brewery [10962] with a hydro-electric plant. But when I select operating electric utility companies, and include therein all of the information which is available, attempting thereby to refrain from any personal judgment as to the figures which should be included, then I have met the requirement of the Bluefield case.

Q. Let's see if I understand what you are saying, Mr. Joseph. That is, you construe the Bluefield decision where it refers to investments in companies having corresponding or comparable risks and uncertainties to be satisfied in a presentation for determination of a fair rate of return if that presentation includes companies merely of the same industrial class. Is that correct? A. Same general class, yes, sir.

Q. In other words, the fact that all of these companies on page 40 are electric operating utilities is sufficient in your judgment to meet the requirement of the Bluefield decision so far as comparable risks and uncertainties are concerned. Is that correct? A. Yes.

Q. And in your view you need make no other investigation of any of these companies to determine comparability other than to determine that they are electric operating companies. Is that correct? A. I think that is correct, yes.

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[11091] GEORGE H. DAVIS

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CROSS-EXAMINATION (Continued)

By MR. MYSE:

Q. You may recall, Mr. Davis, that Friday evening we were discussing the variations in demands made by the various Pennsylvania customers on the Holtwood-Safe Harbor [11092] system, do you not? A. That is right.

Q. Now, what do you understand by the term of "diversity" between demands? A. Demands that do not occur at the same time.

Q. Well, if demands of two customers had greater diversity than the demands of two other customers, what would you understand by that situation? A. I would understand that the two customers having greater diversity, there would be a greater difference between the sum of their individual maximum demands and the simultaneous demands of the two.

Q. And that would occur if there was a wide divergence between the times of the maximum demands of the two customers as compared to the divergence in the time of the second set of two customers. Is that right? A. A greater difference between the maximum demands of each customer and the demand that it happened to have at the time when there was a coincident maximum.

Q. Now, it is possible, is it not, that the diversity between peak demands of various customers may change from time to time? A. It usually does.

Q. And it is also possible that the diversity between the demands of the customers on the Holtwood-Safe [11093] Harbor system would change as between the year 1944, 1945 and 1946. Isn't that right? A. It probably did.

Q. And what that means is that the sum of the co-incident demands probably changed as between the years 1944, '45 and '46. Isn't that right? A. Without doubt it did.

Q. That also means, does it not, that you would have a consequent change in the unit costs of capacity, for example. Is that right? A. That is true, as I figured the unit cost based on the sum of the individual maximum demands.

Q. Now, the other day we mentioned one other method of determining cost to be allocated between customers in the case where you have facilities used jointly for various customers, that was the peak responsibility method. Isn't that correct? A. That is true.

Q. Now, that method assumes that the costs associated with the demands of each customer are in proportion to the ratios of the coincident demands of each customer at the time of the maximum peak demands on the system to the total maximum peak demand on the system. Isn't that right? Would you like to have that read back? A. I think that was a little twisted up there.

[11094] TRIAL EXAMINER: Read the question.

(Question read.)

THE WITNESS: Under the method of peak responsibility, the capacity costs are allocated on the ratio of each customer's demand at the time of system peak to the total coincident system peak.

MR. MYSE: Well, that is what I intended to say. Now, will you have my question read back and see whether or not you agree with it?

TRIAL EXAMINER: I don't see the necessity of reading the question back if that is what was meant.

MR. MYSE: I want to see if there is any divergence between what I asked and what the witness stated.

TRIAL EXAMINER: You will have the transcript available.

MR. MYSE: May I have the witness' last answer read back, then?

TRIAL EXAMINER: Yes.

(Answer read.)

By MR. MYSE:

Q. Well, that means, does it not, that the peak responsibility method assumes that the costs associated with the demands of each customer are in the same ratio as the ratio of each customer's demand to the total demand at the time of system peak? [11095] A. That is right.

Q. However, that assumption isn't always valid, is it? A. No, I don't think it is. That is, the assumption that the costs are associated with the ratios of individual peaks to simultaneous peak at that particular hour. There are too many variations that come in there.

Q. Do you agree with this statement, Mr. Davis: The system capacity and the use of that capacity during the most severe operating conditions and on the coincidental system peak day are the important conditions which influence demand costs? A. Yes, I think that is generally true.

Q. Do you think that statement is applicable to this proceeding in determining allocation of costs of Holtwood? A. In other words, you are asking whether I think the peak responsibility method should be applied to this case?

Q. I didn't ask you that. I asked you whether that statement which you say is generally true should be applied to this case. A. As I understood your statement, it was that the system peak demand is the important thing in determining capacity costs.

[11096] Q. Well, will you read back my statement. I don't think you have stated it exactly the way I have.

TRIAL EXAMINER: Yes.

(Statement read.)

THE WITNESS: Yes.

* * *

[11100] Q. Now, as I understand your Exhibit 64, you allocated hydro production costs associated with installed capacity which was in excess of the dependable capacity which you used for December of 1944, and classified those costs as energy costs? A. That is right.

Q. Well, who makes use of that energy created by the capacity available in excess of the dependable capacity in December? A. Oh, that is used by all customers just the same as any other energy.

Q. Well, at 1195, lines 7 through 13, you point out there it is the larger load during these periods of high river flow that constitutes the use of what you call the excess installed capacity to produce the greatest practicable amount of energy from the available water. Do you not? A. That is right.

[11101] Q. Now, since that was in answer to what should appear as a question at line 5, but actually appears as an answer, as I understand that testimony you were relating that larger load to the load delivered to Baltimore. Is that right? A. Well, more of that load goes to Baltimore, more of that energy goes to Baltimore during periods of high river flow, of course.

Q. Well, does any of it go to the Pennsylvania customers? A. It might. It goes wherever it can be used to the best advantage.

Q. Are you referring now to interchange transactions? A. That is right.

Q. You are not referring to firm power transactions? A. It could go to the firm power loads. You can't control where any particular energy goes.

Q. But I say that most of it goes to Baltimore. Is that right? A. I said more of it goes to Baltimore, more of the energy generated at the hydro plants goes to Baltimore during periods of high river flow.

* * *

[11104] Q. Well, now, as I understand your Table I, that is Roman I of Exhibit 64, the purpose of that table was to

show the assignment of Penn Water or Holtwood and Susquehanna costs associated with facilities used primarily for the service to one or more customers directly to the customers for whose service they are used. Isn't that right? A. That is right, together with the balance shown in a pool for later allocation.

Q. Well, I was going to get to that, Mr. Davis. A. Oh, excuse me.

Q. And that Table I also shows, as I understand you now, the assignment of whatever costs you thought proper to assign associated with facilities which were used jointly by all customers and you assigned those costs to a pool. Isn't that right? A. That is right.

Q. And that means, as I understand your testimony in support of the exhibit, that all of the items included in what you call pool costs are costs associated with facilities used by all of the customers in varying amounts. Isn't that right? A. That is the way they were considered, yes. [11105] Q. And that was your assumption? A. That is right.

Q. And you assumed the entire production plant at Holtwood, since you assigned it as a pool cost, was used for service to all customers of Penn Water. Is that right? A. That is right.

Q. Now, actually, the production equipment at Holtwood consists of basically two classes of equipment, that is, 25-cycle and 60-cycle generating equipment and steam 60-cycle generating equipment? A. That is true.

Q. You separated the steam and the hydro, did you not? A. Proper operating costs, yes, and in allocating costs from the pool I separated steam from hydro.

Q. Well, your Table I shows them separately and that was intended to show all of the costs associated with the steam production plant separate from the hydro production plant. Isn't that right? A. That is right.

Q. Now, you also show some $15,847,486 worth of equipment as hydro production plant assigned entirely to the pool. Isn't that right? A. That is right.

[11106] Q. And that hydro production plant that you there show consists largely of the generating units and associated equipment used for the production of energy capacity and other electrical services. Isn't that right? A. That is right.

Q. Now, eight out of the ten main generators are 25-cycle generators, aren't they? A. That is right.

Q. And they are used largely for service to Baltimore, are they not? A. That is true, except for a small amount which might go through a frequency changer.

Q. They are not used for service to Coatesville, are they? A. You could hardly find a significant amount of that power probably getting to Coatesville.

Q. Well, except for that insignificant amount they are not used for service to Coatesville? A. That is right.

Q. And they are not used for service to Metropolitan Edison Company, in 1946, or were they used for service to Edison Light and Power Company or Metropolitan Edison Company or both in 1944? A. Those units were not, no.

Q. I supposed you would say that Pennsylvania Power [11107] and Light Company did use those 25-cycle units to a minor extent in the year 1944. Isn't that right? A. That is true. They used some 25-cycle power.

Q. Now, it is clear, is it not, that so far as those eight out of the ten main generating units at Holtwood are concerned, they are not used by all other customers, are they? A. That is true.

Q. So to the extent you have those eight out of ten generating units and all the associated costs that go with it included in your hydro production plant as a pool cost, you are a little bit inconsistent, are you not? A. Those costs are allocated to the various customers on the basis of use, and this generating cost, production plant, is put in the pool here because I have made no distinction as between the cost of 60-cycle power and 25-cycle power at Holtwood, so that in the allocation later on some customer using 60-cycle power only gets an allocation from these

costs on the basis of his total use, which is a combination cost of 25 and 60-cycle, and I didn't consider that any particular injustice was done to the customer by allocating on that basis.

Q. Well, certainly you can't say that the 25-cycle generating units at Holtwood which consist of eight out of the ten are used jointly for service to all the customers, [11108] can you? A. The whole plant is used jointly—

Q. I didn't ask you about the whole plant.

TRIAL EXAMINER: Answer the question.

MR. GOLDBERG: Mr. Examiner—

TRIAL EXAMINER: Just a minute, it is clear. Read the question.

MR. GOLDBERG: I was merely going to request that the witness be able to complete his explanation.

TRIAL EXAMINER: It isn't necessary. Read the question.

(Question read.)

THE WITNESS: I told you I lumped those eight generating units in the rest of the plant and allocated the plant as a whole.

MR. MYSE: I submit, Mr. Examiner, that is not an answer to my question.

TRIAL EXAMINER: Answer the question.

THE WITNESS: I have not segregated the costs to allocate to any customer.

By MR. MYSE:

Q. I still don't think that is an answer, but you can't say, can you, that the 25-cycle generating units at Holtwood are used jointly for service to all customers, can you? A. Saying that those particular units can't be [11109] assigned specifically to customers using only 60-cycle power doesn't change my former answer.

Q. Well, will you answer my question, please, Mr. Davis? A. I will say that specifically if I picked out those eight units, I couldn't assign a portion of their use to a 60-cycle customer.

Q. You would have had to assign almost all of their use to Baltimore Company, would you not? A. That is right.

Q. And that means you would have had to assign all the costs associated with the generation of those eight out of ten units, would you not? A. That is true. That wouldn't have changed my result except as 60-cycle power might be a different cost from 25-cycle, and I don't think there is a difference.

MR. MYSE: Mr. Examiner, I move to strike the answer after the words "and that would not have changed my result." That is not responsive.

TRIAL EXAMINER: I won't strike it, but I instruct the witness not to volunteer, but simply answer the questions.

By MR. MYSE:

Q. Now, I think a few days back you agreed with me that there were seven out of nine, at least seven out of [11119] nine, 25-cycle transformers at Holtwood substation used exclusively for Baltimore. A. Those go in the same category as the generators.

Q. Now, the fact is that you have included the costs associated with the Holtwood substation equipment in line 22 of Table I of your Exhibit 64 and assigned all of such costs to pool, have you not? A. What line did you say?

Q. 22. A. That is right.

Q. And the fact is at least those seven are not used jointly for all customers. Isn't that right? A. They are in the same category as the generators.

Q. And the remaining two if they are used jointly at all are used jointly for service to P.P. and L. and Baltimore. Isn't that right? A. That is right.

Q. As I understand it, however, you did assign some of the 25-cycle facilities owned by Holtwood or Susquehanna direct to Baltimore, did you not? A. The Highlandtown Substation, you mean?

Q. I think that is one of them, is it not? A. That is right.

Q. And the Highlandtown line itself. Isn't that another one? [11111] A. That is right.

Q. Now, at lines 7 and 8 of Table I of Exhibit 64 you show that you assigned the 220 kv lines known as the Westport and the Riverside Line, two-thirds to Baltimore and one-third to pool. Isn't that right? A. That is right.

Q. And as I understand your testimony at pages 1176 to 7, you did that largely on the basis of the transmission of energy in both directions over those two lines. Is that correct? A. Yes.

Q. Now, does that mean that you assumed that the transmission of the backfeed energy North over those lines is not a use by Baltimore of those lines? A. You mean by that for the benefit of Baltimore?

Q. Yes. A. I assumed that was for the benefit of Holtwood.

Q. Then you would say that the transmission of that backfeed is not for the benefit of Baltimore. Is that your testimony? A. Largely not.

Q. You say largely not. To what extent is it a benefit to Baltimore? A. That backfeed occurs in various amounts at various times during the period of low flow when the bulk of it [11112] goes up to Holtwood, it is to enable Holtwood to meet its contractual obligations with Pennsylvania customers which it could not do without that assistance, and that is the particular reason for considering it a benefit to Holtwood, and not to Baltimore.

Q. Well, Mr. Davis, I haven't asked you about the benefits to Holtwood. I am asking you about the benefits to Baltimore. Will you confine your answer to that? A. The two are a division of the use.

Q. Will you tell me to what extent you considered backfeed a benefit to Baltimore? A. Backfeed during periods other than extreme low flow is used to help carry the Pennsylvania loads during off-peak periods in order to enable the hydro plants to do their best in furnishing peak service. That is a benefit to Baltimore. It is also a benefit to the hydro plants, because without that you couldn't credit them with anything like the dependable capacity that they actually do furnish.

Q. Well, without that backfeed, you couldn't credit Baltimore with all the savings resulting from interchange with the Pennsylvania customers either? A. A small amount of that backfeed is used directly for interchange. It is a small amount which I did not take into consideration.

Q. Isn't it a fact that as a result of the amounts [11113] of backfeed, there is made available much larger amounts at different times of energy for purposes of interchange with the Pennsylvania customers? A. It might be true.

Q. Well, isn't it a fact? A. Specifically, I haven't any figures to show what effect backfeed has on the interchange with the Pennsylvania customers.

Q. Well, isn't it a fact that by the receipt of backfeed over the 220 kv lines the Safe Harbor-Penn Water system is thereby enabled to store water for use for interchange purposes at different times. Isn't that right? A. Well, that is true, other than on system peak periods that that could be used for interchange.

Q. And it is so used? A. I expect it is.

* * *

[11114] Q. Now, let's get back to my question, Mr. Davis. The fact is that Baltimore benefits by all of the interchange transactions which result from the back-feed that [11115] comes north on the 220 kilovolt lines, isn't that correct? A Baltimore benefits from all of the operations of the whole system.

Q. I haven't asked you about all of the operations, Mr. Davis. Will you confine yourself to the backfeed and interchange transactions. A. This is one of them and it gets some benefit from that.

Q. When you say "some", they get all of the savings do they not, that are credited to the Safe Harbor-Holtwood system? A. That is true. They get all the revenue that is received by Holtwood from any source.

* * *

THE WITNESS: There is a net bill rendered to Baltimore, and that bill is reduced by every cent of revenue that Holtwood receives from any source. In that way Baltimore gets [11116] benefit from every transaction that Holtwood makes.

By MR. MYSE:

Q. So it may also benefit by reason of any back-feed transmitted north on the 220 kilovolt system which may be used in connection directly or indirectly with firm power sales to the Pennsylvania customers. Is that right? A. That is true. It can't help but benefit from it.

Q. So, too, Baltimore may benefit from the fact that back-feed is transmitted north on the 220 kilovolt lines, and converted at Safe Harbor and used for railroad purposes. Isn't that correct? A. In the same way, that is correct.

Q. So that it appears that so far as back-feed transmission over the 220 kilovolt lines is concerned, Baltimore benefits by that back-feed. Is not that correct? A. That is true in the same way as I explained.

Q. But you don't call that a use for Baltimore. Is that right? A. No, I have considered that a use to enable Holtwood to perform the function that it does, and of course if it performs it, Baltimore gets the benefit of it. If it was not assisted to perform that, Baltimore would lose the contracts by default in Pennsylvania, and of course would lose all that revenue. In that way you can say Baltimore

has to do it to save its own revenue, but it does it so that Holtwood [11117] can perform.

* * *

[11144] Q. Now, at line 25 you allocated all of the general plant to pool, did you not? A. That is right.

Q. And that again is on the assumption that all of that plant is used by all customers jointly. Is that right? A. That is right.

Q. Did you examine the character of the items included in that figure of $779,707 at line 25 to determine whether or not there were any of those items which were used exclusively for one or more customers? A. No, there was no detailed examination of that, just general plant that couldn't be assigned, so far as I was able to discover, to any particular customer.

Q. Well, would it surprise you very much to find that there are items of cost included in that figure relating to equipment used entirely in connection with the Highlandtown line which you have allocated 100 per cent to Baltimore? A. Well, that would be news to me.

Q. If that is the fact, wouldn't that mean that some of those items in the general plant, line 25, column 6, should be allocated to Baltimore? [11145] A. Well, I would have to know the nature of the items. Of course some of this is allocated to Baltimore. It is simply put in the pool to be allocated on a different basis than directly a hundred per cent.

Q. I understand that, Mr. Davis, but if any item in there were used 100 per cent for Baltimore, it should be allocated directly to Baltimore in column 5 in your view. Isn't that right? A. That would be the natural way to do it if that could be identified.

Q. Now, likewise, if there are any items in that figure at line 25, column 6 which are used exclusively in connection with transmission facilities, it should be allocated in proportion to the manner that you allocated transmission facilities. Isn't that right? A. Well, a portion of

this item is allocated to transmission. That is, all of the pool is segregated between production and transmission and then these general items are spread to the different classes on the ratio of the direct investment, so a part of it gets there in any case.

Q. But it doesn't get there in any case, as you put it, in the manner and under the theory that you have used in making up Table I of Exhibit 64, does it? A. No, it gets there through a general allocation [11146] from the pool.

Q. And that allocation to the various customers may not be in the same proportion as it would be if you had allocated directly in cases where they are used exclusively for a customer? A. That is possible.

Q. Did you examine the character of the items included in that total of 779,707, line 25, column 6, Table I of Exhibit 64? A. I don't recall that I did.

Q. Did you examine any of the items appearing in line 24, column 6 of Table I of Exhibit 64? A. No, I treated intangible and general plant as general items and allocated them on a general basis.

Q. And what that means, does it not, is that all general and intangible plant is assumed to be used in connection with the items allocated to pool? A. And it is allocated to all the customers on the basis of use.

Q. And it means, does it not—well, was your answer "yes" to that last question? A. It is in the pool, yes.

Q. And that answer means, does it not, that none of the intangible or general plant is assignable to items like Violet Hill Switching Station, or Holtwood-Lancaster [11147] line, or the Engleside Switching Station, the Donegal and Donegal Tap Switching Stations, or any of the other items for which there were no amounts allocated to the pool? Isn't that right? A. It is not allocated to those items of property. It is allocated to those companies.

Q. Well, are you saying that there is no intangible or general plant assignable to Baltimore, or any of the other

companies specified in Table I by reason of the fact that there are the various facilities that you show in columns 1, 2, 3, 4 and 5 allocated to those companies? A. I had no segregated items of general or intangible plant, and I allocated nothing directly to an individual customer on the basis of the individual items.

Q. Now, since you say you did allocate the items appearing in line 24 and 25 to the various customers in accordance with their use of capacity and energy, that means, does it not, that you are not allocating those costs to the various customers in proportion to their direct use of certain facilities? Isn't that right? A. I had no segregation of individual items. The allocation was made entirely on the total on the basis of use.

Q. Well, how did you know that the various customers used that intangible and general plant in proportion—that [11148] is, directly in proportion to the basis that you split up the pool costs? Did you make any investigation to determine whether that is the fact or not? A. I never had any breakdown of those items that I used. I used them only in total.

Q. Well, I don't think you have answered my question, Mr. Davis. Did you make any investigation to determine whether or not the general and intangible plant was in fact used by the various customers in the same proportion as you split up the pool costs? A. I have no recollection of having any information that there were directly allocable items contained in those two accounts.

Q. I didn't ask you that, Mr. Davis.

* * * *

THE WITNESS: I made no investigation to determine any direct items that belonged specifically to an individual customer.

MR. MYSE: Mr. Examiner, I haven't asked him that.

TRIAL EXAMINER: That doesn't answer the question, Mr. Witness. Take the question again.

(Question read again.)

THE WITNESS: What I intended to say was that I didn't.

[11149] By MR. MYSE:

Q. Now, it is a fact, is it not, that none of the amounts shown in line 26 as total plant in service includes any amounts which were associated with construction work in progress in the year 1944? Isn't that right? A. That is true.

Q. Nor do those amounts at line 26 include any amounts associated with plant held for future use by the company in 1944. Isn't that right? A. They do not.

Q. Isn't it a fact that in line 22 which you label, "Transmission" in the amount of $1,560,090 in column 6, Table I of Exhibit 64 is included the amount of investment relating to the Manor Substation? Isn't that right? A. I think so.

Q. Well, can you check it for me and determine that? A. All right.

It would include that. It includes everything that is not specifically allocated in the items above.

Q. Well, Manor Substation is the switching point near Safe Harbor plant where the connection is made between the lines to Safe Harbor plant to the circuit to Westport and to Riverside. Isn't that right? A. Yes.

Q. So that in reality it is a terminal switching [11150] station for the 220 kv lines. Isn't that true? A. That is right.

Q. So that if it is to be allocated at all, it should be allocated in the same manner as the Westport and Riverside lines. Isn't that right? A. That might be an acceptable way to do it.

Q. Isn't it right, if you are right on your allocation of the Westport and Riverside lines? A. That is probably true.

* * *

[11151] Q. As I understand your testimony at page 1179 with respect to line 2 of Table II, you also obtained all those figures from the Commission accountants. Is that right? A. That is right.

Q. So you take no responsibility for the accuracies of any of those figures on that line? A. No.

Q. Where did you get the figures for working capital appearing on line 6 of Table II of Exhibit 64? A. The cash working capital is twelve-and-a-half per cent of the operating expenses. Materials and supplies are reported by the company in the Form 1 report.

Q. Well, are you saying—I think it is correct and you can correct me if I am wrong—that the total working capital appearing in line 6, $590,000, you obtained from another Commission Exhibit? Isn't that right? A. Yes, that checks with the figure that was presented in another exhibit.

Q. Well, you say it checks with it. Are you saying that you made an independent determination of the amount in [11152] column 7? A. No, I made no independent determination. I simply spread the two items of cash working capital and materials and supplies on a ratio of operating expenses and of investment to the various customers and the pool.

Q. Then, as I understand it, you take no responsibility for the accuracies— A. For the total amount, no.

Q. Nor do you take any responsibility for accuracies of either of the amounts in columns 1 through 6. Isn't that right? A. No, I do not.

* * *

[11162] Q. Now, what is this adjustment credit to administrative and general expenses which you deducted in arriving at $1,789,874 balance of operating expenses, as you call it, for the year 1944? A. That is the item that was shown on the Holtwood bill to Baltimore.

Q. Shown how? A. Shown as a credit.

Q. Well, are you saying that Holtwood doesn't incur that expense of $9,703? A. That is an adjustment that was made on the Holtwood bill in connection with general expense which I accepted as a credit here on the advice of the accountants.

Q. Well, did you make any investigation to determine the character of the item and the purpose for which it was credited on the bill? A. No.

Q. Would you be surprised to learn that the entire amount of $9,703 was actually incurred as operating expense in 1944 by Holtwood? A. The only thing that I knew about it was that it was credited on the bill as a deduction.

Q. Would you be surprised to learn that it was an operating expense? A. I couldn't check that because I didn't know what it [11163] was.

Q. Well, if part of that amount had been incurred in paying a salary of one of the employees of Holtwood Company, would you consider it an operating expense? A. Surely.

Q. If part of that amount had been incurred in paying insurance obtained by Holtwood Company, would you consider it as an expense, an operating expense? A. Surely.

Q. If part of that amount had been incurred by Holtwood in paying fees to directors, would you also consider that an operating expense? A. Surely.

Q. So if those three items that I just mentioned are included in the figure of $9,703, and since you have deducted that in arriving at operating expenses, you have not allocated all operating expenses of Holtwood Company to that extent, have you? A. If those are operating expenses, I have taken them out.

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[11164] Q. Now, at line 2 you show an item of $992,535 which you label as the bill for Safe Harbor power. Is that right? A. Yes.

Q. And that bill, I believe you agreed at one time, was not the actual bill in 1944. Isn't that right? A. No, that is the cost of Safe Harbor power as developed in Exhibit 60.

Q. Well, you don't take any responsibility for Exhibit 60, do you? A. No, I just took the figure out of Exhibit 60.

Q. So you take no responsibility for the accuracy of this figure in line 2. Isn't that right? A. That is correct.

Q. Now, you know, however, that the amount actually paid to Safe Harbor was $1,214,533 in 1944, do you not? A. That is right.

Q. And that payment was required under the terms of E, [11165] F, and G in 1944, wasn't it? A. That is right.

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Q. Well, now, in the year 1944, whatever was paid by Penn Water to Safe Harbor includes compensation to Safe Harbor, does it not, for special facilities used for service to the railroad. Isn't that right? [11166] A. Compensation paid to Safe Harbor by Holtwood includes one-third of all of its costs, special facilities and other costs.

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Q. Well, to the extent that it does cover one-third of Safe Harbor's costs, it covers a portion at least of the costs incurred by Safe Harbor in providing special facilities for railroad use, and I am referring to the 25-cycle single-phase facilities. Isn't that right? A. That is correct.

Q. And to the extent that the payment by Penn Water to Safe Harbor includes or covers one-third of Safe Harbor's costs, it includes compensation to Safe Harbor for Safe Harbor's facilities used for railroad purposes in Maryland as well as in Pennsylvania. Isn't that right? A. It includes one-third of all of them.

Q. Isn't my statement correct? A. I think that is true, yes.

Q. So that the payment from Penn Water to Safe Harbor includes some compensation, undefined, of course, for services rendered to the railroad in Maryland which you say was for the account of Baltimore. Isn't that right? A. That is right.

Q. Do you know approximately what percentage of the facilities owned by Safe Harbor are used for service to the railroad in terms of dollars? [11167] A. No, I don't know the percentage.

Q. I take it, then, you wouldn't be able to give me the figure as to the approximate percentage of Safe Harbor facilities used for the railroad in Maryland in terms of dollars. Is that right? A. The investment in facilities for the railroad was given to me as $1,934,300.

Q. That is total investment for railroad facilities, you say, at Safe Harbor? A. Yes.

Q. What percentage is that of the total investment at Safe Harbor? A. I don't happen to have that total figure before me.

Q. Well, that million-some-odd dollars, however, is just the investment in special facilities. Isn't that right? It does not include whatever investment may be made at Safe Harbor in order to make the service to the railroad effective, and I have reference to the substructure under the 25-cycle generator units, for example. A. I think it includes all of the excess costs over what would have been the cost of a 60-cycle machine. That is what I was informed.

Q. So that it does not include all of the costs or [11168] investment of Safe Harbor in facilities now used for service to the railroad? A. No, it doesn't include all the cost of the generators, only the excess, as I understand it.

Q. So as I understand it, you would be unable to tell me without further investigation what percentage of the investment or costs in the form of operating expenses incurred by Safe Harbor in connection with facilities used

for the railroad are to the total costs incurred by Safe Harbor? A. No, I wouldn't be able to do that.

Q. Do you know roughly or approximately what percentage of the Safe Harbor facilities that are used in terms of dollars for service to the railroad are used for service to the railroad in Maryland? A. Well, my allocation of that would be 39 per cent.

Q. Well, are you saying that 39 per cent, then, represents the percentage which you would apply in allocating the dollars of investment, or operating expenses incurred by Safe Harbor for purposes of railroad service to the service to the railroad in Maryland? A. Yes, that is the ratio of the total output of the 25-cycle end of Safe Harbor plant to the energy going through for Maryland service over the Perryville line.

Q. And that allocation, then, would it not be on the [11169] basis of use of energy only? A. That is right.

Q. It would have no elements in it relating to the use of capacity, would it? A. Well, that would allocate the capacity cost on the basis of energy only, that is true.

Q. Now, as I understand your testimony, the figures on line 4 again you obtained from the Commission Accountants and you take no responsibility for them. Is that right? That is line 4, Table IV. A. That is right.

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[11176] Q. Now, if Baltimore had billed Penn Water for the backfeed it actually received in 1944, there would have been a bill for backfeed purchased, would there not? A. You mean if they had rendered a bill there would have been a bill?

Q. Yes. A. Yes.

Q. And there would have been a corresponding expense by the amount of that bill. Isn't that correct? A. That is true.

Q. And as I understand it, that bill, if it had been rendered in 1944, would have been upon the basis specified

in Article 6 of Exhibit Item "H". Isn't that right? A. If there had been a bill for backfeed—

[11177] Q. In 1944. A. —from Baltimore to Holtwood?

Q. That is right. A. There would have been in accordance—well, I believe that is the only basis in the contract that shows a specific method of billing, in 1944 they did not use that method.

Q. But if they had, that would be the basis that they would have used. Isn't that correct? A. That is the only thing in the contract that I know of that would have given them a basis to render a bill.

Q. Now, to the extent you have not included the dollars actually paid out by Holtwood to various Pennsylvania customers for interchange purchases, you have not included all of the costs incurred by Holtwood in line 6 of Table IV, Exhibit 64, for the year 1944. Have you? A. No, I have treated that on a net basis as a revenue.

Q. I didn't ask you how you treated it. The fact is you haven't included all the expenses of Holtwood in Table IV. Isn't that right? A. That is true.

Q. So that Table IV does not reflect all the actual costs of Holtwood. Isn't that right? A. It reflects all those that were not paid for by [11178] Pennsylvania customers.

Q. Well, will you tell me whether my statement is right or not? A. You are right as far as you go.

* * *

Q. Now, here again as I understand it, you are not [11179] responsible for any of the figures nor do you testify as to the accuracies of any of the figures in line 7 of Table V nor in line 17 of Table V, nor in line 18 of Table V. Am I correct in that? A. That is right.

Q. And likewise, as I understand it, you do not intend to be responsible for or are you testifying as to the accuracies of the amount shown in line 19 of Table V. Isn't that right? A. That is right.

* * *

[11261] Q. Now, actually of course in line 23 you didn't take the total billing demand of the railroad. You multiplied it by some percentage to arrive at the figure of 28,397. Isn't that right? A. Yes.

Q. What percentage did you use? A. I used the percentage of the total energy supplied to the railroad in Pennsylvania for the month of December, which was 38.9 per cent.

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Q. 38.9 per cent of what? A. Of the total energy supplied to the railroad—was supplied for service in Pennsylvania.

Q. Then as I understand it, you are attempting to arrive at the demands of the Pennsylvania Railroad in Pennsylvania by using a ratio based upon energy transmitted and delivered in Pennsylvania to the total energy transmitted to the railroad. Is that right? [11262] A. That is right.

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[11267] Q. And the actual losses during the peak hour in December 11, 1944 at 6 p.m. were the result of the transmission and generation during that hour. Isn't that right? A. That is right.

Q. And the transmission and generation during that hour was greatly in excess of what would have been transmitted and generated had there been adverse flow conditions during that hour. Isn't that right?

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THE WITNESS: It could have been different. These were the actual for '44.

By MR. MYSE:

Q. It probably would have been less, would it not? A. That would be assumed as a probability.

Q. Well, you as an engineer, wouldn't say, would you, that if you had an amount of energy transmitted and generated less than 300,000 during an hour that the transmission

losses and station uses nevertheless would remain the same [11268] as they were with 300,000, would you?

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[11269] Q. Actually you evaluated the amount of dependable capacity available from those two plants at only 251,500 kw, haven't you? A. That is right.

Q. Now, under conditions of generation of 251,500 kw, or kwh during that hour, there would be less than the actual amount of 23,000 kw in terms of station use and losses. Isn't that right? A. That is probably true.

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[11280] Q. Now, will you look at Table V-A of Exhibit 64, line 1, column 2, and you there show the installed capacity at the Holtwood hydro plant of 104,000 kw, do you not? A. That is right.

Q. Do you know how much of that 104,000 kw is 25-cycle capacity? A. I didn't take that into account in this study.

Q. I haven't asked you that, Mr. Davis. I asked you whether you know how much of it was 25-cycle capacity. A. Something like 80,000, if I recall.

Q. Well, 80,000 checks with my figure. Does that refresh your recollection? A. Yes.

Q. Now, that 80,000 of installed 25-cycle capacity is used principally for Baltimore. There is no question about that, is there? A. That is delivered to the Highlandtown Substation.

Q. And used principally for Baltimore, is it not? A. I would assume that most of the time it is.

Q. What other use there is is the small amount that goes to the Lancaster 25-cycle Area. Isn't that right? A. Well, what might go through the frequency changers in Baltimore and come back up to Safe Harbor over the 220 kv lines.

[11281] Q. In any event, it is delivered to Baltimore before it goes through the frequency changers? A. It is delivered to Baltimore. That is right.

Q. Now, as I understood the figures in column 4 of Table V-A, you arrived at the conclusion that the dependable capacity for the total of the two hydro plants was 67½ per cent of the installed capacity. Isn't that right? A. Yes, that is right.

Q. And you applied the same 67½ per cent in determining what proportion of the 104,000 at Holtwood hydro was dependable capacity and arrived at 70,221 kw. Is that right? A. Well, the 70,221 is a proportionate division of the total dependable to the hydro plants on the ratio of their installed capacity.

Q. But it is 67½ per cent of the 104,000 kw. Is it not? A. It ought to be. I didn't figure it. It wasn't arrived at in that way.

Q. But the fact is, it is that ratio, isn't it? A. That is what it should be.

Q. So that means that you have assumed that the dependable capacity at Holtwood is 67½ per cent of the installed capacity at Holtwood hydro. Isn't that right? [11282] A. That is right.

Q. Now, if you took 67½ per cent of the 80,000 kw of 25-cycle capacity at Holtwood, how much would you arrive at? My figures show 54,000. Is that right? A. Approximately right. That is, my mental arithmetic hits at approximately that point.

Q. That means, does it not, on your basis there is 54,000 kw of dependable capacity in terms of 25-cycle capacity at Holtwood. Isn't that right? A. That is right.

Q. And most of that is used for Baltimore, isn't it? A. Most of it is delivered to the Baltimore system, that is right. What excess they get on 25-cycle, they get a deficit on 60-cycle.

Q. Now, I think in looking at Exhibit 42, page 20, which is a sheet for December 11, 1944, at 6 p.m., which is the Area 6 system peak, if I recollect the 54,000 kw was the amount actually delivered during the Area 6 system

peak in terms of 25-cycle. Isn't that right? A. It could have been.

Q. Well, let's look at it and check it. A. It says 54,000 delivered to Highlandtown.

Q. According to Mr. Roland, is that right? A. That is right.

Q. And that was 25-cycle capacity, wasn't it? [11283] A. That is 25-cycle. That is right.

Q. Do you have any idea of what the average amount of capacity was during all of the Area 6 system peaks over the life of the contract identified in this record as Item "H" and "I"? A. No, I do not.

Q. That would be from 1931 down to date, would it not? A. That would be. I haven't studied those figures.

Q. Well, I have a figure of 58,000 kw as the average 25-cycle capacity delivered during all of the Area 6 system peaks over the life of this contract I have referred to. I wonder if you could check that figure for me?

TRIAL EXAMINER: You may refresh his recollection.

MR. MYSE: Well, if it does and he agrees with it, that will save him the problem of checking it.

THE WITNESS: I don't think I ever saw that average.

MR. MYSE: Will you check it for me?

MR. GOLDBERG: That sounds like a figure that would be within the ability of the company to check readily enough rather than within the ability of the witness.

MR. MYSE: That is why I gave him the figure.

MR. GOLDBERG: Just giving him the figure doesn't help him. We will have to consider whether we can do it readily. I do know it is a figure they can check.

MR. MYSE: Does that mean you decline to furnish that [11284] figure?

MR. GOLDBERG: That means what I just said.

By Mr. Myse:

Q. Will you attempt to check it, Mr. Davis, and tell me whether it is correct? A. I will make the attempt.

Q. Now, prior to 1931, 25-cycle capacity was all that Baltimore got from either the Safe Harbor plant which wasn't in existence or the Holtwood plant which was in existence. Isn't that right? A. I have made no study of 1931 conditions.

Q. Well, I haven't asked you for that, but isn't that the fact that prior to 1931 there was no Safe Harbor plant— A. Oh, true.

Q. So that all the energy and capacity that Baltimore did get was in terms of 25-cycle capacity from Holtwood. Isn't that right? A. All except what it might have gotten from the steam plant.

Q. Well, you are not saying that any of the steam plant energy ever got down to Baltimore via Highlandtown, are you? A. Oh, no.

Q. So it must have been 25-cycle capacity. Isn't [11285] that right?

Mr. Goldberg: I object, Mr. Examiner. The witness has stated he hasn't studied it. All we are getting is a lot of speculation on the record.

Trial Examiner: The objection is sustained.

By Mr. Myse:

Q. Of course that 10,820 kw does not represent the amount of energy delivered to Baltimore during any one hour during the year 1944, that is, the maximum amount, does it? A. No, this is based on an estimated dependable capacity. This is not any actual quantity. It has nothing to do with all these actual figures you have been giving here as 1944 actual conditions. If they could depend on 1944 actual conditions all the time, there would be a big increase in the dependable capacity estimate here.

* * *

[11334] Q. Now, before we leave Table V-A of Exhibit 64, as I understand that deduction in line 27 of 94,043 kw which you say is Baltimore's two-thirds' share of Safe Harbor, the justification for that deduction is based upon your construction of the contract identified in this record as Items "F" and "G". Isn't that right? A. That is right.

Q. Now, there is one other thing on Table V-A that occurs to me at this moment. Take a look at the firm demand of 51,000 kw shown on lines 16, which you say is the firm demand for P.P. & L. Company. Now, that demand for P.P. & L. Company, was included, plus ten per cent reserve, in the figure of 92,400 shown in line 20 which you deducted from a figure of 228,500 kw on line 12, column 5, which you show as the net dependable capacity available for load. Isn't that right? A. Yes.

Q. Now, after making a deduction for the Pennsylvania Railroad Company in Pennsylvania December billing, you arrive at a figure of 104,863 kw in column 5 on line 25 as what you call the balance available for Baltimore [11335] from Holtwood and Safe Harbor. Isn't that right? A. That is right.

Q. And that balance available is supposed to be the dependable capacity available to Baltimore at the time of the most adverse flow of record. Isn't that right? A. At the time of most adverse flow in the month when the system peak occurs, yes.

Q. And that would be the most adverse flow conditions of record for the month of December? A. That is right.

Q. Now, at page 44 of Exhibit 47 you pointed out—and I think we had some testimony with respect to an option on the part of the Generating Companies under Exhibit 76 and 77 to reduce the requirements of P.P. and L. by 20 per cent during peak periods on low flow days. Isn't that right? A. That option is in the contract, yes.

Q. Now, if that option is in effect, it means, does it not, that in addition to the 104,863 kw that you show as the

balance of dependable capacity for Baltimore from Holtwood and Safe Harbor under adverse flow conditions, there is at least 20 per cent of the 57,200 kw that you show as the firm load for Pennsylvania Power and Light Company under that option. Isn't that right? A. If the option was in effect, you say?

[11336] Q. Yes. A. That is right.

* * *

[11347] Q. As I understand your Table V-d of Exhibit 64, Mr. Davis, that table has the purpose of showing, among other things, the ratios of the non-coincident maximum demands of all the customers of Holtwood to the sum or total of all of those non-coincident demands; is not that right? A. That shows that, yes, in column 2.

Q. Now, of course you recognize, do you not, that that 10,820 shown as the annual maximum demand in kw by Baltimore does not represent the maximum load furnished Baltimore during the year 1944 from the Holtwood-Safe Harbor system, is not that right? A. Certainly.

Q. It is something else other than the maximum load furnished, isn't that right? A. That is the amount of dependable capacity that would be left to Baltimore under adverse conditions.

Q. Now, one of the assumptions implicit in the method you pursued in Exhibit 64—that is, the non-coincident method—is that the ratios which you developed in column 2 of Table V-d of that Exhibit, when applied to the joint costs which you show as pool costs will apportion all of those pool costs in proportion to the use that each customer makes of the total capacity available. Isn't that right? A. That is right.

[11348] Q. And that means you must have the annual maximum demands in each case on a comparable basis. Does that not follow? A. Yes.

Q. Now, that demand shown for PP & L, the 66,000 in column 1, line 1 of Table V-d, is a demand shown or reported on an integrated hourly basis, is it not? A. Yes.

Q. And it does include whatever demands there were by the Big and Little Inch pumping stations during the war, which has been changed somewhat? Isn't that right? A. It includes whatever they were in 1944.

Q. And it also is a demand during wartime? A. It is a demand during 1944, yes.

Q. Now, the demand you show for Philadelphia Electric Company in Column 1, line 2 of Table V-d of Exhibit 64 is not a one-hourly integrated demand, is it? A. I believe that was measured on the 30-minute basis.

Q. And if it had not been measured on a one-hourly basis, it would be somewhat less, would it not? A. It might have been slightly less. In that type of load, there is not a great deal of difference between an hour and a half hour demand.

Q. Did you make any investigation to determine how much less it would have been? [11349] A. Well, in a general way, yes, noting that the hourly demands, one after another, were hardly changed, that is, very slightly changed. You can justly assume that a half hour demand is not going to be greatly different.

Q. What do you find as the difference between the demand that you used and the one hourly demand which would be comparable to the demand shown in line 1 for PP & L Company? A. I did not find any particular amount. Just observing the very slight change from hour to hour in the Philadelphia Electric demands as they are measured, or from month to month, the maximum demand one month after another showed that the load was very uniform, and that you would not expect any serious difference between the one hour and the 30-minute demand.

Q. But you did not make any investigation to determine actually how much it was, did you? A. I did not have any one-hour measurement, no.

Q. So that in fact, your demand shown for P. E. Company is not comparable to the demand shown for PP & L?

A. There may be a slight difference in the demand shown here and the one-hour demand.

Q. Well, you didn't have the one-hour figures for PP & L Company, either, until you asked for them, did you? A. No, a lot of this stuff I did not have until I [11350] asked for it.

Q. Didn't you ask the company for the one-hour demand on P-E Company? A. I took the demand that they used in billing. I did not ask them for one-hour demands, no.

* * *

[11353] Q. Now, a moment ago you said on a system like Philadelphia Electric Company you believed there was very little difference between the demand determined on a 30-minute basis, and the demand determined on a 1-hour basis, did you not? A. I assumed that there would not be difference enough to make any significant change in the answer in this study.

Q. And is that because it is a relatively small system? A. Well, it was a rather small system.

Q. Well, is that the reason why you came to that conclusion? A. Not especially.

Q. That did not have any bearing on your conclusions, then? A. I don't remember that I thought of that particularly.

Q. Now, with respect to the demand by the Baltimore Company and the Holtwood-Safe Harbor system, there is quite a difference between demands figured on a 30-minute basis and on an hourly basis; is not that right? A. You are talking about actual demands now?

Q. Yes, sir. A. There might be.

Q. There not only might be but there is? [11354] A. There probably is.

Q. And that is due, among other things, to the fact that one of the large steel plants, Bethlehem Steel Company, is connected to the Baltimore system. Isn't that right? A. It might be. I did not investigate that.

Q. Well, don't you know enough about steel company operation to know that that causes considerable swing in the load? A. That is true.

Q. Now, who takes care of those swings in the loads as far as the Baltimore System is concerned.

MR. GOLDBERG: I object to that as repetitious. I think it was taken up both with the witness Roland and with the witness Davis in connection with the cross-examination on the contract aspect of his testimony.

TRIAL EXAMINER: He may answer.

THE WITNESS: With regard to any particular swings at any particular time, I could not tell who takes them up. Of course the swing load coming on to a large system like that will spread itself according to the way governors on generators are set. If all generators are operating on governors the most sensitive governor would take more of the load.

By MR. MYSE:

Q. Well, under most adverse flow conditions of record, which were the conditions which you assumed in arriving at [11355] the conclusions you did in Exhibit 64, at least for purposes of determining demands of Baltimore, all of the steam generating units would be on what is called base load; is not that right? A. That probably would, yes.

Q. And all of the hydro units, particularly the units of Safe Harbor and Holtwood, would be on the peak of the load; isn't that right? A. Those would be used as peaking plants.

Q. So, if there are any swings under those adverse flow conditions caused by the Bethlehem Steel Company plant connected to the Baltimore Company's system, all of those swings would be taken care of by the Holtwood and Safe Harbor hydro units; is not that right? A. That does not absolutely follow.

Q. But the likelihood is that they could; is not that right? A. Well, they might.

Q. And the probabilities are that they would; isn't that right? A. If all steam-generating plants were operating on blocked governors, they would have to take them all. But steam plants take some swings. They cannot help it.

Q. But under those adverse flow conditions, any spinning reserve would be in the hydro plants, would it not? [11356] A. That is probably true.

Q. Well, now, in your view, Mr. Davis, is the carrying of those swings by the hydro plant at Safe Harbor and Holtwood at times of adverse flow a use of the capacity at those plants in excess of the dependable capacity that you determined? A. Well, the dependable capacity, as determined here, is on a one-hour basis.

Q. Well, perhaps you misunderstood my question. I do not think that answers it. A. Dependable capacity is calculated on the basis of the highest one-hour load.

Q. Well, I am talking about the swings within the one-hour under adverse-flow conditions. A. Well, those are averaged out, and the average forms the one-hour.

Q. Well, isn't it a fact that under those conditions, that is, adverse-flow conditions, where there are swings taken care of by the hydro plants at Holtwood and Safe Harbor, that the taking-care of those swings is a use of the capacity at those plants in excess of whatever amount of dependable capacity might be available at those plants? Isn't that right, Mr. Davis? Can you answer that question? A. Those swings could be something in excess of the one-hour integrated load.

[11357] Q. And they might be considerably in excess, isn't that right? A. I do not know how much.

Q. Well, to the extent they are in excess, that is a use of capacity in excess of dependable capacity averaged over the one-hour; isn't it? A. That is right.

Q. Now, if the Holtwood and Safe Harbor hydro plants were not there, Baltimore would have to have additional steam capacity to take care of those swings, would it not? A. I could not answer that. I do not know how much steam capacity would be out of operation at that time, if any, or how much would be used part of the time. There are always high cost steam plants that are not used on base load except in dire emergencies.

Q. Well, whether or not they have to have those high cost steam units, they would have to use them if the hydro plants were not there, would they not? A. That is right.

* * *

[11393] Q. Now, if you refer to Table VI of Exhibit 64, please, in column 7 of that table, line 5, you show a credit to Baltimore of $501,268. Is that right? A. Yes.

Q. And you figured that credit, at least in your testimony at page 1197, at an energy cost of four mills per kilowatt hour. Isn't that right? A. Yes.

Q. Where did that energy cost figure come from? A. Well, that is a compromise between Baltimore's increment cost of energy and the total average production cost. It is an approximate figure.

Q. Would you say that that is a figure which might be considered the actual cost plus 10 per cent of Baltimore Company? A. No, that probably is a little low for that. I probably should have used a little higher figure.

Q. Well, how much do you think you should have used? A. Well, from information that has been brought out since this exhibit was prepared, I would think it should be 4.6 mills.

Q. You would think that 4.6 mills then represents the cost to Baltimore plus 10 per cent?

MR. GOLDBERG: Cost to Baltimore of what?

[11394] MR. MYSE: The cost of the energy.

THE WITNESS: Well, that is not as much as the overall production cost plus 10 per cent.

By Mr. Myse:

Q. Well, do you think it would represent 10 per cent? Do you think it would represent the costs reported by Baltimore Company on its monthly production statement?

Mr. Goldberg: Reported as what, increment cost?

Mr. Myse: Whatever costs are reported by Baltimore.

Mr. Goldberg: What was it?

Trial Examiner: Do you understand the question, Mr. Witness?

Mr. Goldberg: I would like to have it read.

The Witness: You mean in the Form 1 report for 1944?

By Mr. Myse:

Q. Well, what I am referring to is Article 6 of Item H which says, "The costs to be used are those reported on Electric's"—that is Baltimore Company's—"monthly production statement covering the month during which steam energy was furnished to Power"—that is Holtwood.

Now, was that four mills or 4.6 mills that you have just made reference to intended to cover the costs so described in Article 6 of Item H? A. No, that was just a general figure of somewhere between Baltimore's over-all average production cost and its [11395] increment costs, trying to assign a reasonable cost to this service regardless of contract prices.

Q. Well, then, as I understand your testimony, your rate of four mills, or the new one that you just mentioned of 4.6 mills, has no relation whatsoever to the costs described in Article 6? A. No, that was not considered.

Q. Just to get my own understanding straight, was that 4.6 mills you just mentioned in your view a cost to Baltimore or a cost to Holtwood? A. No, a cost to Baltimore.

Q. Now, just how do you arrive at the four mills? A. I just took a reasonable figure, what I thought was a reasonable figure between what they reported for increment costs, which I thought would be a little too low, and probably average over-all production cost might be a little too high.

Q. What was that incremental cost that they reported? A. It was three and a fraction mills, if I recall.

Q. What was the average cost that you considered? A. I think the average cost was 4.3, or something like that.

Q. 4.3? A. Yes.

Q. Now, did you examine the cost figures at all that [11396] they reported either as incremental or average to determine what was included in those figures? A. I took the steam production cost.

Q. Well, my question to you is, did you go back of the figures that they reported to determine what made up the incremental cost or the average cost that they reported and which you used? A. I used the figures that were reported on Form 1.

Q. Then I understand that you did not go back of the figures other than to look at Form 1? A. That is all.

Q. Now, you applied the four mills rate in coming to your credit to Baltimore of $501,268 to the net hourly backfeed received from Baltimore in 1944; isn't that right? A. That is right.

Q. And you didn't adjust that net hourly amount to any average water year, did you? A. No.

* * *

[11397] Q. Now, if you had adjusted the backfeed to an average water year, you would have gotten somewhat less kwh on a net hourly basis, would you not? A. I don't know what I would have gotten.

Q. Well, you know that the year 1944 was a below-average water year, don't you? A. That is true.

Q. And when you have lower flows, you have more backfeed; isn't that right? A. You usually do.

Q. So that when you have higher flows, you have less backfeed? A. You probably would.

Q. And you would probably have had less backfeed on a net basis in an average year than the 125 million? A. I might have had.

[11398] Q. So, if you want to adjust your figure for a credit to Baltimore on an average-water year basis, you should use if anything, if you are going to use net hourly figures at all, the net hourly figures on an average water-year basis. Isn't that right? A. It might be true.

Q. And if you applied four mills to that, you would come out with less credit; isn't that right? A. If you applied four mills to a smaller number of kilowatt hours, it would be a smaller amount of dollars. The total cost to Baltimore was probably more than the net hourly.

* * *

[11399] Q. I don't want to go all over this again, Mr. Davis, but Article 6, Item H is the only contract existing between Baltimore and Holtwood so far as backfeed is concerned; is not that right? A. No.

Q. What other contract is there? A. Items H and I together provide for backfeed.

Q. Now, can you find any other specific article in H and I which says anything about backfeed? A. Well, when it says that the resources will be pooled and there will be coordinated operation to get the greatest effect, that means sometimes there will be backfeed, and it is agreed there will be.

Q. Are you now referring to Item H and Item I and what article? A. I am referring to the article that provides for cooperation, pooling of resources and coordination of [11400] operation.

Q. Are you referring to Article VIII by any chance? A. Yes, that is a description of what I had in mind.

Q. Is that the only article you have in mind? A. I did not have any particular article in mind. I had the pro-

vision for coordination, pooling of resources for the greatest over-all benefit to the system.

Q. Now, if Article 6 of page 9 of Item H is applicable to the purchase of power and steam-generated energy from Baltimore by Holtwood, the rates clearly specified in there are on a daily net amount basis. Is it not? A. I believe that is what it says in—

Q. And if you use—

MR. GOLDBERG: I don't think he finished.

THE WITNESS: That is what it says in that article. That does not say that that is Baltimore's costs, or that that is a cost figure that must be used in allocating costs to the system.

. . . . . .

[11407] Q. Now, Mr. Davis, the fact is that none of the revenue from the interchange sales to the Pennsylvania customers is in fact turned over by Baltimore to Holtwood, is it? A. Not in cash, no.

. . . .

[11415] Q. Now, at Table VI-a, of your Exhibit 64, you add another item to the actual bill rendered by Holtwood to Baltimore, an item in the amount of $133,750, isn't that correct? A. That is correct.

Q. That means, does it not, that in your revenue shown on line 5, column 9 of Table VI of Exhibit 64 as revenue from Baltimore you have included the amount of $133,750 as a Conowingo backwater payment, is that right? A. That is right.

Q. Now, actually that payment of $133,750 was not in fact received by Holtwood Company from Baltimore Company; isn't that right? A. It was received from Conowingo.

Q. And you would not stretch your imagination to say that Conowingo is Baltimore Company, would you? A. Acting for it in this case.

Q. Does that mean that you do say that Conowingo is in fact the Baltimore Company? [11416] A. No.

* * * *

[11418] Q. In any event, it appears that the Conowingo agreement you had reference to when you included this Conowingo backwater payment in Table VI-a of your Exhibit 64 was made in 1926 or 1927, at least; is not that right? A. I am informed that it was earlier than 1931.

Q. And it was long prior to 1931? A. Yes.

* * *

Q. As I understand it, you added that figure of $133,750 as a revenue of Baltimore on the assumption that Baltimore Company is entitled to something, for which Baltimore Company would otherwise have been obliged to pay. Isn't that right? A. That is right.

Q. Now, are you saying that Baltimore Company was entitled to something that occurred long prior to the 1931 agreement? A. Well, I was looking at it from the point of view of 1944. They got this money from Conowingo by sacrificing something in the value of the plant. If they had not done [11419] that, that value of the plant would have been available to Baltimore, and Baltimore would have paid the extra $133,000.

Q. Well, what is there in Item H and I which says they are entitled to something which was sacrificed before H and I became effective? A. Nothing. It was the way they were operating in 1944. I just took it on the conditions as they existed at that time.

* * *

Q. Well, now, as I understand your testimony, you are saying that if that amount of capacity and energy which was lost by reason of the Conowingo transaction had not been lost, Baltimore would have been entitled to it. Is that right? A. Yes.

Q. And that therefore Baltimore would have been obliged to pay for it? A. Baltimore would under H and I, have paid for it.

Q. Would they have been obliged to pay any more than they are now paying? [11420] A. They would have paid the $133,000 more.

Q. Well, they would have had more energy and more capacity, too, for that payment? A. Supposedly, yes.

Q. But you have not allocated any of the cost of that lost capacity or energy to Baltimore, have you? A. No, I admit that should be done. That is the thing that is wrong with that. All I can see is that some costs should be allocated along with that service. That might be estimated as the amount of loss that is shown in the contract.

Q. Well, it might be estimated at the same amount as the revenues, $133,750. Isn't that right? A. No, the amount of loss is more nearly an estimate of the cost of that. The excess amount is only due to the fact that Conowingo could get more value out of that water than Holtwood could, so it enabled them to sell it at a higher price.

Q. Now, actually under the terms of the contract, as you showed in your Exhibit 47, you show that Holtwood's loss of energy output and demand value in not developing its tailrace level to the foot of Cully's Falls was $72,000 a year, was it not? A. That is right.

Q. And you also show on the next page, page 69, that [11421] $61,750 annually was agreed upon as the losses by Holtwood Company in addition to the loss of energy output and the demand by reason of not developing the tailrace level at the foot of Cully's Falls; is not that right? A. All the losses I recollect are the $72,000.

Q. Well, look at page 69, item (d). A. That is Holtwood's participation in Conowingo's gain. They split the gain that Conowingo got in excess of $72,000 fifty-fifty between the two.

Q. Then you have a different copy than I have. It says, "Holtwood's participation in Conowingo's gain as compensation for other losses by Holtwood," does it not? A. Yes.

Q. And that $61,750 represents those other losses, does it not? A. That is a general statement of other losses unevaluated. The $61,750 is a fifty-fifty split of the extra value that Conowingo can get out of that water.

Q. But it is for other losses by Holtwood, is it not? A. That is stated there.

Q. Well, you do not have any doubt of that, do you? A. Well, they could not find what those losses were. It is simply $61,000 not related to any loss.

* * * *

[11426] Q. At some place in your testimony I recollect that you said only a small amount of backfeed transmitted over those lines is used directly for interchange with the Pennsylvania customers. Is that right? A. That is right.

Q. That means that the major portion of the backfeed is used in connection with conversion at Safe Harbor for railroad use or in connection with the firm supply to Pennsylvania customers to the north. Isn't that right? A. That is right.

Q. And it is also true, is it not, that a major portion of whatever interchange is sold to the customers to the north comes from the Penn Water-Safe Harbor generation, [11427] that is, it is actually generated at either Holtwood or Safe Harbor. Isn't that right? A. That is right.

Q. By far the major part of it is generated at Safe Harbor. Is that correct? A. That might be true.

Q. The greatest purchaser of interchange is Pennsylvania Power and Light Company. Is that right? A. Yes.

Q. There is a direct connection from the bus at Safe Harbor with the Harrisburg area where most of that interchange goes. Is that right? A. That is true.

Q. So almost all of the interchange furnished to the P.P. and L. comes from the Safe Harbor bus. Is that right? A. A good portion of it, yes.

Q. By far the largest proportion of it is generated at Safe Harbor? A. That is probably true.

Q. So far as there is interchange with Philadelphia Electric Company over the railroad circuits, that is the Perryville line, that also comes off the Safe Harbor bus. Isn't that right? A. That is true.

Q. And a good share of it is converted at Safe Harbor [11428] and converted from the backfeed which comes up from Baltimore on the 220 lines. Isn't that right? A. A good share of the interchange?

Q. With Philadelphia Electric via the Perryville line? A. Some of that comes up from Baltimore.

Q. You don't know how much it is, then; is that the idea? A. I know how much the total backfeed is.

Q. You don't know the proportion of the backfeed which is actually converted at Safe Harbor, transmitted over the Perryville line, and used for purpose of interchange with Philadelphia Electric. Is that right? A. No.

Q. Since most of this backfeed is generated at either Holtwood or Safe Harbor, or at Safe Harbor—strike that, please.

Since most of the interchange which does go to Pennsylvania customers is generated at either Holtwood or Safe Harbor, does it not follow, that the amount of backfeed which comes up over the 220 lines has no relation to the amount of interchange furnished the Pennsylvania customers? A. Very little.

* * *

[11434] CROSS EXAMINATION (continued).

By MR. STURTEVANT:

* * *

[11454] Q. Now, Mr. Davis, I should like to ask you some questions regarding the use that is made of the output of the 25-cycle generating units at Holtwood. I do not want to add to the mass of figures which already have been presented, particularly since you have not yet analyzed the

data for 1946. But I do want to enumerate generally some of the ways in which the 25-cycle output is used.

[11455] First, a part of the 25-cycle output is normally transmitted to Lancaster and supplied by Pennsylvania Power and Light Company to its 25-cycle load. Is that correct? A. That is true.

Q. Second, a part of the 25-cycle output is converted to 60-cycles by the frequency changers at Holtwood for supply to the 60-cycle customers of the Holtwood Company. Is that correct? A. Part of it is.

Q. Do you know the capacity of the frequency changers at Holtwood? A. They are rather small, as I remember it. There are two six-thousands or seven-thousands kilowatt—

Q. Two of them together have a capacity of 12 to 14,000 Kw? A. That is the way I understand it.

Q. And the amount of the 25-cycle load converted at Holtwood is often limited solely by the capacity of the Holtwood frequency changers. Is that correct? A. That is true.

[11456] Q. Third, some of the 25-cycle output is transmitted to Baltimore, converted there to 60-cycles, and returned to Pennsylvania over the 220 KV lines for supply by the Holtwood Company to the Pennsylvania customers. Is that correct? A. Probably by displacement, that is, more energy is transmitted to Highlandtown, more 25-cycle energy than the load in Baltimore requires, and it is converted to 60-cycle and used for 60-cycle loads in Baltimore which, of course, releases other 60-cycle energy to be delivered up to Safe Harbor over the 220 KV lines.

Q. Some of the output is transmitted to Baltimore and, without the necessity of conversion, is in effect exchanged for 60-cycle steam generated energy which is sent by Baltimore Company to Pennsylvania for supply by Holtwood Company to the Pennsylvania customers. Is that right? A. Surely, that is true.

Q. Fifth, 25 cycle output at Holtwood Company is frequently transmitted to Baltimore in exchange for part of Baltimore Company's two-thirds share of Safe Harbor output, and the latter is sold by Holtwood Company to th Pennsylvania customers, either as firm energy or interchange. Is that right?

THE WITNESS: May I have that again, please?

(Question read).

THE WITNESS: That is true. More than Holtwood's generation and one-third of Safe Harbor that is left after the firm [11457] power customers are supplied is transmitted to Baltimore, that is the amount transmitted is much more than that balance, which is, of course, a portion of Baltimore's share of Safe Harbor power which is going through the Holtwood system and down over their 25-cycle line.

By MR. STURTEVANT:

Q. In these five operations I have mentioned, Mr. Davis, the output of the 25-cycle generators at Holtwood is directly or indirectly used for supplying customers of the Holtwood Company in Pennsylvania. Now, in the sixth place, principally during the higher ranges of flow, 25-cycle energy is transmitted from Holtwood to Baltimore without any substitution or exchange for 60-cycle energy and is supplied by Baltimore Company to its 25-cycle customers. Is that right?

MR. SPARKS: May we have the question, please?

(Question read).

THE WITNESS: That is a little difficult to answer. Of course, at times the 25-cycle energy is all used in Baltimore as such. At other times, much more is delivered to Baltimore over the 25-cycle line than it has 25-cycle load to require it. In that case, either by displacement or by direct

conversion and transmission back to Safe Harbor, it is supplied to Holtwood for use in Pennsylvania.

* * *

[11460] Q. Now, Mr. Davis, do not the facts which have been mentioned and also the figures which you have just quoted prove that the 25-cycle generating units of Holtwood are used directly or indirectly for supply to all of the customers of the Pennsylvania Water and Power Company? [11461] A. Well, that is true. By displacement they supply energy into the 60-cycle system which can go any place.

Q. Mr. Davis, is it feasible or proper to assign specific generating units, or costs at the Holtwood plant, to any particular customer? A. I didn't think so, and I didn't do that.

Q. Then your Exhibit No. 64 is correct in assigning all of these costs to what you term the "pool"? A. That was my idea of the best way to allocate all of those production facilities.

Q. Is not the same thing true of the Holtwood substation costs? A. That would be true, also.

* * *

[11464] Q. Is it not a fact that large amounts of the Baltimore Company's two-thirds entitlement of the Safe Harbor energy are diverted to Holtwood Company for use by Holtwood in supplying its firm load in Pennsylvania? A. That is true.

Q. Shouldn't this diverted Safe Harbor energy be treated just like backfeed steam energy for purposes of determining the cost of service to the Pennsylvania firm customers? A. So far as Baltimore's two-thirds share of Safe Harbor is concerned, I have left that out of my allocation entirely, both energy and cost of it. So far as Holtwood's one-third share of Safe Harbor energy is concerned, so far as that was used for the Pennsylvania customers I have considered only the net amount sold to those

customers and the net revenue received, and have considered that a sale for the account of Baltimore and credited the revenue accordingly.

* * *

[11471] STANLEY W. ROLAND

* * *

REDIRECT EXAMINATION (Continued)

By MR. GOLDBERG:

* * *

[11476] Q. During your cross examination Mr. Myse asked you a number of questions with respect to frequency changers and their operations in an electrical system. (For example, Transcript 9135, etc.) Will you please define "frequency changer" for the record? A. I would define a frequency changer as follows: A frequency changer is a machine which converts the power of an alternating current system from one frequency to another, with or without a change in the number of phases, or in the voltage. This definition appears on page 64 of the American Standard Definitions of Electrical Terms.

Q. In your opinion does a frequency changer and a transformer perform a similar function in a transmission network?

* * *

[11477] THE WITNESS: The answer to your question is yes. The function of the transformer is to transfer energy from one circuit to another where the voltages of the circuits are different. The function of the frequency changer is to transfer energy from one circuit to another where the frequency and sometimes the voltage and phase of the two circuits are different.

* * *

[11488] RECROSS EXAMINATION

By Mr. MYSE:

Q. You have testified this morning, Mr. Roland, that the function of the transformer is, as I understand your testimony, similar to the function of a frequency changer, is that right? A. In a broad sense that is true, yes.

Q. Well, why do you say in "a broad sense"? Are there some differences? A. Well, certainly there are differences. One is a rotating machine and one is not.

Q. What are the differences in functions, then? A. I stated what the difference in function was.

Q. Well, I don't think I got all that down. A. I said the transformer was to transfer energy from one circuit to another where there was usually a change in voltage and that the frequency changer is to transfer energy from one circuit to another where there is a change in frequency [11489] and sometimes in voltage and in phase.

Q. Now, you say that the transformer is used for the purpose of transferring energy from one circuit to another with a concurrent change in voltage, is that right? A. Yes.

Q. And that transfer from one circuit to another is a transfer of actual energy by the application of Poyntings theorem. Is that right? A. There is such a thing as Poyntings law or Poyntings Theorem, but as far as I am concerned the transfer can take place without regard to Poyntings law.

Q. Well, the fact is in a transformer electrical energy is transmitted right through the transformer using the transformer as the guiding system, as we put it in the Hartford case. Isn't that right?

* * *

[11490] THE WITNESS: The energy is transferred from one circuit to the other. Now, as to what process is involved, I could not explain that.

By Mr. Myse:

Q. You mean to say there is no electrical energy transmitted through a transformer, Mr. Roland? A. Of course there is.

Q. But there is no electrical energy transmitted by a frequency changer, is there? A. In the same broad sense, there is yes.

Q. There is no electrical circuit between one end of the frequency changer and the other? A. No, there is a mechanical link there, but viewing the thing broadly from a functional standpoint they both do the same thing. Both the transformer and the frequency changer do the same thing.

[11491] Q. You are not saying, are you, Mr. Roland, that the shaft which connects up the two ends of the frequency changer actually transmits electrical energy, are you?

A. No, that is mechanical energy.

Q. So there is that difference between a frequency changer and a transformer? A. There is a difference in the type of equipment used but broadly the function is the same. They transfer energy from one circuit to another.

Q. Well, now, in that same broad sense, a turbine will transfer energy from the steam pipelines to the electrical circuit, is not that right? A. Well, there is a distinction. The transformer and the frequency changer are parts of the transmission network, and in that network they do perform that function of linking together various parts of the network.

Now, when you get back into the turbine you are out of the network.

Q. You don't consider, then, that the steam turbine end of the generator is part of the electrical system, is that right? A. Not a part of the electrical system, no, not the turbine.

Q. Is it not part of the generating system, then? A. Oh, yes, it is part of the mechanical end of the [11492] system, the generating system, yes.

Q. Well, what about the shaft which connects up the steam turbine and the generator, is that part of the electrical system or not? A. Well, I suppose any differentiation would be somewhat arbitrary there. I don't know just where you would draw the line on that.

* * *

[11574] SAMUEL JOSEPH

* * *

CROSS EXAMINATION (Continued)

By MR. SPARKS:

* * *

[11584] A. I have this in mind, Mr. Sparks: Utilities that have reasonable capitalizations would obtain substantially the same fair rate of return, other things being equal. For example, the capitalization for a utility may be entirely reasonable if it is 50 per cent bonds and 50 per cent stock, or if it is 40 per cent bonds, 20 per cent preferred and 40 per cent common stock. The utilities which fall within the range of reasonable capitalization therefore fall in the same range with respect to the fair rate of return. They create no special problems, though the precise nature of their outstanding securities may be different.

Q. Are you saying, Mr. Joseph, that those utilities having reasonable capitalizations would have the same rate of return? A. Would command approximately the same fair rate of return, yes, sir.

Q. When you use the word "command" there, do you mean that they should be allowed the same fair rate of [11585] return? A. Yes, sir.

Q. What are the data in Exhibit 46 which may be considered in determining or estimating the cost of equity capital to Penn Water as a component of the fair rate of return? A. The cost of equity capital to Penn Water is not shown in Exhibit 46.

* * *

Q. I don't think that answers my question, Mr. Joseph. It was, what are the data which may be considered in a determination or the estimating of the cost of equity capital to Penn Water as a component of the fair rate of return. A. The cost of equity capital to Penn Water is unnecessary in a determination of the fair rate of return for Penn Water. Furthermore, I am not at all sure that it can be obtained.

Q. Is it true, then, in view of your last answer, Mr. Joseph, that the cost of debt capital to Penn Water is not to be considered in arriving at a fair rate of return? [11586] A. No, that is a somewhat different problem. If the cost of debt capital to Penn Water appears to be reasonable, then in my opinion it may be accepted as one of the elements for the establishment of a fair rate of return.

Q. What are the other elements? A. Bear in mind that you are talking about different things when you are talking about the cost of equity capital and the cost of funded debt capital. Cost of funded debt capital is rather easily determined, its reasonableness quite easily determined, but the cost of equity capital is a far different thing and can not in most cases be readily determined.

* * *

[11592] Q. So that it is correct to say that the measures of the credit of an enterprise are the yield rates at which creditors buy bonds as well as the earnings-price ratios, if those earnings-price ratios express the prospective return basis upon which the stock is sold in the market? A. I think that is a fair statement, yes, sir.

* * *

[11597] Q. Should the rate of return be fixed at a lower level than otherwise merely because of an absence of the prospect of need for new capital? A. The tendency would probably be that way, I believe.

Q. Are you saying, Mr. Joseph, that the rate of [11598] return should be fixed at a lower level than otherwise merely because of an absence of the prospective need for new capital? A. My answer is based on the fact that I

believe that if there were a need for substantial new capital, the rate of return might have to be slightly higher than otherwise.

Q. In the absence of the need, then, I take it from your answer you would say the rate of return should be lower. Is that correct? A. It would tend to be lower.

Q. Well, should it be? A. Well, it should imply a fairness in the situation that I am trying to eliminate, Mr. Sparks. It would be lower because when you raise new capital you tend to pay a little more than is fair on existing capital.

* * *

[11621] Q. Mr. Joseph, at page 10354 you said that the basis of selection of the ten common stocks included in the averages shown on page 38-A was in part the "Representativeness of the Utility itself;" what did you mean by that term "representativeness of the utility itself"?

* * *

[11622] A. Well, is the utility generally of a class that may be used in representing the electric industry?

Q. And that is what you meant when you used the term, "representativeness of the utility itself," on page 10354? A. Yes, sir.

Q. Do you mean, Mr. Joseph, that any electric operating utility would be within that class? A. Unless there were some circumstance that made it a special situation, that would be true.

* * *

[11638] Q. Now, then, I have referred to your answer beginning at line 8 and ending at line 20 on page 10072 and I ask you whether you meant by that answer that it is not necessary for the Federal Power Commission to have your testimony and Exhibit 46 in order to determine a fair rate of return for Penn Water? A. I think a fair rate of return could be determined without it.

Q. Then your answer to my question is yes, is that correct? A. Yes.

* * *

Vol. IV
TRANSCRIPT OF RECORD

(Pages 1587 to 2096)

Supreme Court of the United States

OCTOBER TERM, 1951

No. 428

PENNSYLVANIA WATER AND POWER COMPANY AND SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND, PETITIONERS,

vs.

FEDERAL POWER COMMISSION ET AL.

No. 429

PENNSYLVANIA PUBLIC UTILITY COMMISSION, PETITIONER,

vs.

FEDERAL POWER COMMISSION

ON WRITS OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

PETITIONS FOR CERTIORARI FILED NOVEMBER 16, 1951

CERTIORARI GRANTED FEBRUARY 4, 1952

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[11767] GEORGE H. DAVIS

* * *

REDIRECT EXAMINATION (Continued)

By MR. GOLDBERG:

* * *

[11769] Q. At transcript page 10538 and 10539, Mr. Myse asked you about the effect of an option in the Penn Water-Pennsylvania Power and Light Company agreement which you had discussed at page 44 of Exhibit 47. Was that option in effect in 1944? A. No.

Q. Was it in effect in 1945? A. No.

Q. Does that mean that the option had no bearing on the operations of the agreement between Holtwood and Pennsylvania Power and Light Company in 1944 and 1945? A. Yes.

* * *

[11773] Q. Referring to the question and answer beginning at transcript 10813, line 22 and ending at transcript 10814, line 4, are we to understand that you have ignored the costs of Safe Harbor incurred for services supplied to the railroad in Maryland? A. No, you are not.

Q. Did you ignore Safe Harbor's costs involved in rendering service to the railroad in Maryland? A. No.

Q. Will you please explain why you say no? A. Because all of Safe Harbor's costs are reflected in the payments made by Consolidated and Holtwood to Safe Harbor under Items E, F and G.

Thus, since Holtwood's payment of one-third of those costs is included in the total costs with which I was dealing in Exhibit 64, I have not ignored any costs which may be involved in the rendering of service to the railroad in Maryland for the account of Baltimore.

In other words, one-third of Safe Harbor's total costs [11774] are included in Holtwood's costs for whatever service those costs may have been incurred, and I have treated that one-third as Holtwood's costs, which they are.

Q. At transcript pages 10814 and 10815 you were questioned concerning the assignment of facilities which are directly related to the service of only one customer.

Have you assigned such facilities directly to the particular customer in all cases? A. No, not in all cases.

Q. Now, will you explain why you haven't done that in all cases? A. The bill for Safe Harbor power rendered to Holtwood was not analyzed for the purpose of attempting to segregate costs of single-phase from the costs of three-phase generation at Safe Harbor, but was all assigned to the pool.

This appeared to be warranted because of the flexibility in operation of the single-phase and three-phase generators provided by the frequency changer and the resulting ability to transfer power from the single-phase to the three-phase buses, or in the reverse direction.

From the fact, however, that single-phase equipment represents some investment in excess of equivalent three-phase equipment, and that in actual practice only a small proportion of the single-phase generation is converted for use in the three-phase system, it probably could be said that it is [11775] more accurate to segregate this excess cost and assign it proportionately to the railroad service in Pennsylvania and in Maryland on the same basis as the allocation of the Conestoga Substation. If this method were to be followed, it would reduce the pool costs by $46,900, and increase costs allocated to Baltimore by 39 per cent of this amount or $18,291, and increase costs assigned to the railroad for service in Pennsylvania by 61 per cant, or $28,609.

* * *

[11776] Q. Now, at transcript pages 11106 and 11107, you were asked about the use of the 25-cycle equipment at Holtwood for serving customers other than Baltimore Company.

Do you wish to modify any of your answers on those pages? A. Yes, my answer on page 11106, line 11 requires some modification.

Q. Will you please state what modification you think is required? A. The energy going through the frequency changer from the 25-cycle to the 60-cycle bus on the peak day was as much as 14,000 kilowatts during certain hours, which was considerably larger than I had indicated.

Furthermore, I find that during the peak day of 1944 as much as 6,000 kilowatts during one hour were delivered to Pennsylvania Power and Light Company at Lancaster. These data I find in Exhibit 42, page 20, column 40 and 42.

Page 20 of the same exhibit, column 40 through 43 also shows that during the hour ending at 6 p.m., December 11, 1944, 4,000 kilowatt hours were delivered to Pennsylvania Power and Light Company, 54,000 kilowatt hours were delivered to Highlandtown and 12,000 kilowatt hours delivered to the frequency changer for transfer to the 60-cycle bus at Holtwood.

Q. The hour you refer to was the peak hour on the [11777] interconnected system? A. That 6 p.m., December 11, was the hour of system peak for 1944.

Q. At transcript 11106, line 15, you stated that you could hardly find a significant amount of power from the 25-cycle generators at Holtwood getting to Coatesville.

Have you had an opportunity to review any data for the purpose of verifying your answer? A. Yes, I have.

Q. What have you reviewed? A. The data in Exhibit Number 42.

Q. And as a result of that review, what have you found? A. I find on page 20 of Exhibit 42 in column 35 during the hour ending 6 p.m., December 11, 1944, that 55,000 kilowatts were sent out from the 13 kv 60-cycle bus at Holtwood to Holtwood's customers in Pennsylvania.

I also find on the same page, line 23, for the hour ending 6 p.m. of the same day that 12,000 of the 55,000 kilo-

watt hours were supplied from the 25-cycle generators at Holtwood.

In other words, I find that the use of 25-cycle generation during the hour of system peak in Area 6 for supply to Holtwood's Pennsylvania customers was a significant amount.

* * *

[11779] Q. At transcript pages 11107 and 11109 you were asked about the joint use of eight out of ten generating units at Holtwood for service to all customers. Is that right? A. Yes.

Q. Through these questions the ratios that you used in allocating total pool costs were applied to Holtwood hydro plant alone and at page 11392 it was computed that 16 per cent of the costs of this plant had been allocated to Baltimore, whereas 80 per cent of the generators were 25-cycle and with two exceptions, their total output was delivered to Baltimore. Does that present a true picture of the situation? A. No, it does not.

Q. Why not? A. The ratio on which costs of a group of properties are allocated does not necessarily apply separately to each individual item in the group. Pool costs were allocated as a group including Holtwood hydro and steam, one-third of [11780] Safe Harbor and some transmission facilities, and if one customer received only 25-cycle energy and another received only 60-cycle energy, no injustice was done by allocating to each the average cost of 25 and 60-cycle energy. There are several reasons why the allocation results in no injustice.

In the first place, there is no signficant difference between the cost of 25-cycle generation and the cost of 60-cycle generation at Holtwood.

In the second place, the largest part of the output of the 25-cycle generators at Holtwood has to be delivered to Baltimore whether it can be used there or not, because outside of the exceptions previously noted, it is the only outlet for the 25-cycle output from Holtwood.

Furthermore, Exhibit 42 shows that an amount equivalent to about 35 per cent of the 25-cycle energy delivered at Highlandtown is simultaneously transmitted back to Safe Harbor over the 220 Kv lines for use in its 60-cycle system in Pennsylvania. In view of this situation, it is clear that the costs of 25-cycle generation at Holtwood and perhaps, some part of the cost of the Highlandtown transmission should be allocated to the pool.

Q. At page 11144 you were questioned as to the allocation of general plant on the basis of the average of the classified plant and it was stated in criticism of that method that some items in general plant were used entirely [11781] in connection with the Highlandtown line.

Do you consider that your method needs correcting for that reason? A. No, I do not.

Q. Will you state why not? A. General plant is made up of a number of items which are not considered susceptible of direct classification with any of the standard property groups. It is impractical to allocate general plant item by item, and while any item related—if there was such an item—entirely to the Highlandtown line would not be allocated 100 per cent to Baltimore by my method, which is the method commonly used, there would be allocated to Baltimore a portion of some other items only remotely related to it so that the over-all result is considered as accurate as it is practicable to obtain.

TRIAL EXAMINER: When you say it is a method commonly used, do you have in mind any particular case?

THE WITNESS: In practically every case that I have ever seen, intangible and general plant is spread over the classified items on the ratio of the totals of each classified group.

TRIAL EXAMINER: Do you know of any reported case where that has been done?

THE WITNESS: I don't have one in mind right now. I think it is a very common method of allocating property that [11782] is not susceptible of classification into the standard groups of production, transmission, distribution.

TRIAL EXAMINER: Do you have any reported case available in your notes?

THE WITNESS: I have no recollection of one at this time. I think I could easily find one.

By MR. GOLDBERG:

Q. At pages 11259 to 11264 you were asked concerning the demand you used for the railroad load which you substituted for the actual demand at the hour of the interconnected system peak. Why did you use the billing demand instead of the actual demand at the hour of system peak? A. The railroad load creates such rapidly fluctuating demands that the load at any selected hour may greatly misrepresent the capacity requirements for that load.

This fact is fully recognized by the railroads and the power suppliers and demand charges are based on the average of several maximum daily demands during the month instead of the single maximum, such averages being considered more accurately representative of the capacity required.

Such an average also serves as a more accurate measure of the cost of service to such a load than would the actual load at one particular hour.

The demand charge from the Pennsylvania Railroad Company is based on the average of the three highest daily maximum [11783] demands during the month, and this billing demand for the month of December was used for the purpose of determining the capacity required for this load.

Q. At transcript 11265 you were asked about the actual station use and loss in connection with dependable capacity under adverse flow conditions, which was reported as 23,000 kilowatts at the time of system peak.

Will you please explain why you used that figure? A. Because it was the amount actually reported in Form 12 for "Baltimore System" at the peak hour when 300,000 kilowatts was generated.

Q. Should any revision be made in that 23,000 kilowatts, in your opinion? A. Yes, I believe so.

Q. What revision should be made? A. Since in my study, 251,000 kw is used as the estimated generation under adverse conditions, I think the 23,000 should be proportionately reduced to reflect the loss associated with the 251,500 kw.

* * *

[11788] Q. Mr. Davis, isn't it a fact that special facilities represent a part of the costs of delivering kilowatt hours? A. Certainly. Ordinarily all those costs of the special facilities would be included with the other costs and computed on the basis of kilowatts and kilowatt hours.

* * *

[11789] Q. In other words, if I understand your answer, Mr. Davis, setting them up separately is a matter of form rather than of substance. Isn't that so? A. Yes.

MR. SPARKS: I am sorry. I don't understand that now. Setting what up separately?

MR. GOLDBERG: Costs of special facilities.

* * *

[11790] By MR. GOLDBERG:

Q. At Transcript pages 11177 and 11178 Mr. Myse asked you whether Table 4 included all of the costs of Holtwood Company and you testified that Counsel's statement was right so far as it went, isn't that right? A. Yes.

Q. When you testified at Line 4 of Transcript 11178 that "You—" —meaning counsel for Respondent— "are right [11791] as far as you go," what did you have in mind? A. The costs to which he referred as not being included in Table 4 were costs of interchange energy purchased from

Pennsylvania customers, which costs were entirely offset by the sale of interchange energy to the same customers, resulting in a net revenue which I took into account.

Q. In other words, it hasn't been left out in the sense that it has been ignored. Is that right? A. No, it has not.

* * *

[11885] RECROSS EXAMINATION (Continued)

By MR. MYSE:

* * *

[11896] Q. Now, will you look at E, F and G for a moment, Article VII, page 10? A. I don't have a copy of that contract with me.

Q. We will furnish you with one.

That article covers generally the furnishing of transmission lines by Holtwood to Baltimore for the transmission of energy sold by Safe Harbor to Baltimore. Isn't that right? A. That is right.

[11897] Q. And included in that article on page 10 is a provision that if for any reason Holtwood fails to transmit or cause to be transmitted to Baltimore any of the energy sold by Safe Harbor to Baltimore Co., Holtwood will forthwith purchase all such energy from Safe Harbor at Safe Harbor and pay therefor at the rates payable by Baltimore Company under Article V of E, F, and G. Isn't that right? A. That is right.

Q. Now, that means, does it not, that if Penn Water or Holtwood, as specified in that contract, fails to transmit whatever energy may be sold by Safe Harbor to Baltimore, it is required to pay for all that energy itself, isn't it? A. That is right.

Q. And receive it. Isn't that right? A. That is right.

Q. Now, you don't find anything like that in any of these Pennsylvania contracts, do you? A. No.

Q. Now, what effect, if any, did you give to these various provisions in Articles IV, V, VI, VII, VIII and IX

of the Items "H" and "I", and Article VII of E, F and G in your Exhibit 64?

* * *

[11898] MR. GOLDBERG: I don't think that there is anything in the redirect examination of the witness Davis, Mr. Examiner, or during the cross examination of the witness Davis by Mr. Sturtevant, which makes that a proper question, and I object to it on that ground.

TRIAL EXAMINER: The objection is overruled.

THE WITNESS: These particular articles in H and I are the basis for the statement I made on cross examination that in economic effect the entire output of Holtwood is sold for the account of Baltimore, and they are the basis for my considering that the interchange energy was a part of the residual to which Baltimore was entitled and was sold for its account.

The basis for my including that revenue in the revenue received from Baltimore—

By MR. MYSE:

Q. Well, I don't want to dispute with you, Mr. Davis, but as I understood your testimony at that time you were limiting the basis for those conclusions to Article VIII of H and I.

Do you now include Articles IV, V, VI, VII and IX, as well as Article VIII? A. I don't want to pin it to those. I think I stated I included the entire contract without picking out parts that specifically applied.

[11899] Q. Well, did you consider Article VII of E, F and G in any way in coming to the conclusions you did in Exhibit 64? A. Only except that the costs of transmission are included in Holtwood's costs.

Q. Well, if tomorrow Holtwood Company were to fail to transmit the energy sold by Safe Harbor to Baltimore, what effect would that have on your Exhibit 64? A. I hadn't considered that.

Q. Well, can't you consider it now in answering my question?

MR. GOLDBERG: What is your question now? I object to the question, if I understand it, Mr. Examiner, because it has been answered.

MR. MYSE: Well, it has only been answered by saying he hasn't considered—

TRIAL EXAMINER: The objection is overruled.

THE WITNESS: If tomorrow the 220 kv lines should fail—

By MR. MYSE:

Q. Mr. Davis, let me correct you. I haven't said that. I said that if tomorrow Penn Water should fail for any reason to transmit the energy sold by Safe Harbor to Baltimore, how would that affect your Exhibit 64? A. Well, if I understand you, that is the same thing.

Q. Well, in my mind it is not.

TRIAL EXAMINER: You may answer the question, Mr. Witness, [11900] as you started there.

THE WITNESS: It would simply mean a redistribution of the energy sold by Safe Harbor to Baltimore.

By MR. MYSE:

Q. In that event, all the energy sold by Safe Harbor would be sold—at least whatever was sold to Baltimore prior to the time of that failure would be sold to Penn Water. Is that it? A. It would be sold to Holtwood and delivered to Baltimore by Holtwood.

Q. And then Holtwood's cost of purchased energy, as you considered it in Exhibit 64, would be increased, would it not? A. Yes.

Q. It would be increased by the amounts of the payments theretofore made by Baltimore Company. Isn't that right? A. I am not sure about that.

Q. Well, doesn't the contract say in the event of such a failure Holtwood—that is, Penn Water—is required to purchase whatever energy was theretofore sold by Safe Harbor Company at Safe Harbor to Baltimore, and pay Safe Harbor for that energy at the amounts that Baltimore Company theretofore paid Safe Harbor under Article V? A. It says that in the amounts payable under Article V is an amount that will yield Safe Harbor a seven per cent [11901] return in addition to all operating expenses.

Q. And in considering Article V in connection with what it says under Article II, it would mean that Baltimore Company's proportion of the payments is two-thirds of those expenses. Isn't that right? A. That is right.

Q. So that in the event of failure to transmit the energy sold by Safe Harbor to Baltimore, Penn Water or Holtwood's expenses would be increased by two-thirds of the total expenses of Safe Harbor. Isn't that right? A. That is a point I hadn't considered before.

Q. Well, isn't it right? A. If there were no transmission of energy, that is if none of the energy sold by Safe Harbor to Baltimore were tranamitted by Holtwood, it would seem that might be a possible effect.

Q. Well, it would also be true if only some of the energy sold by Safe Harbor to Baltimore were not transmitted by Penn Water to Baltimore. Isn't that right? A. There might be a proportionate reduction in the payment.

Q. So that if there were a failure tomorrow by Penn Water to transmit whatever energy is sold by Safe Harbor to Baltimore under E, F and G, it would have a material effect on your Exhibit 64, would it not? [11902] A. It might be true.

Q. Well, it not only might be true, but it would have a material effect. Isn't that right? A. Well, for the period during which that lasted, it would be probably the same conditions as if the line hadn't been built.

Q. And if that were an indefinite period, it would continue to have that effect on the conclusions you reached in Exhibit 64. Isn't that right? A. Well, that would be the same as if any other radical change in equipment or arrangements should happen, and became permanent. I did not attempt to foresee those things in Exhibit 64.

* * *

[11905] Q. You pointed out that the Pennsylvania contracts are on an automatic, or as you put it, an automatically renewable basis. Is that right? A. Yes, that is right.

[11906] Q. And that means, as I understand it, that unless they are terminated under the terms of the contracts by either of the parties thereto, they would extend indefinitely into the future. Is that right? A. That is right.

Q. And that means that if they were so extended automatically and indefinitely into the future, Penn Water would continue to render service under those contracts, and the very terms of the contracts, until long after the Baltimore contract—and that is "H" and "I"—had terminated by its own terms. Isn't that right?

* * *

[11907] THE WITNESS: If the Pennsylvania contracts are continued indefinitely to the end of time, and the Baltimore contract is not renewed, your statement would be correct.

* * *

[11926] Q. Did you make any investigation to determine how many hours out of the year 1944 or any other year, there would have been more 25 cycle load converted at Holtwood if there had been greater capacity in the frequency changers at Holtwood? A. I made a partial investigation, not of every hour in the year, but of a selected number of hours in the year when Holtwood would be short of 60 cycle capacity to supply its Pennsylvania customers, but had an excess of 25 cycle capacity, and the 25 cycle capacity

was delivered to Baltimore, and Baltimore returned 60 cycle energy at the same time. The capacity in the frequency changers was limited at Holtwood, but they had more capacity in the frequency changers [11927] down in the Baltimore system.

Q. Did you determine how many hours in the year 1944 or any other year that that condition existed that you just referred to? A. I only studied the 20 days that we obtained hourly readings on for 1944.

Q. Those 20 days aren't typical in your opinion, are they? A. Well, there are some typical days there. That is not a Gallup Poll cross-section of the year, I will admit.

Q. Well, which days did you consider were typical in making that last answer?

MR. GOLDBERG: You mean typical in connection with the study you are now pursuing?

MR. MYSE: That is right.

THE WITNESS: I would say significant days, such as peak days.

By MR. MYSE:

Q. Are you now saying that there are no typical days in Exhibit 42 in connection with the matter we are now pursuing? A. No, I did not say anything like that.

Q. Well, then will you point out to me which ones you so consider as typical? A. Well, there are typical days of the different [11928] periods. You can't have a typical day for the whole year. There are typical days of low flow periods, typical days of high flow periods, typical days of maximum load period.

Q. Well, then, as I understand you, there are no typical days in Exhibit 42 for the year? A. I do not think there is such a thing.

* * *

[11931] Q. Now, I am interested in having you go back to Exhibit 42 and point out just what days you considered

low-flow when there was 25 cycle generation converted to 60 cycle at Holtwood. Can you do that quickly for me? I think you would look at column 42 in each case, would you not? A. From 25 to 60, is that right?

Q. Now, which of the days in Exhibit 42 did you consider low-flow days when there were substantial amounts of energy shown in column 42 of Exhibit 42? A. I will correct my statement there. I was looking to the column where it goes the other way.

Q. Which column were you looking at? [11932] A. I was looking at column 36.

Q. So that means, does it, that so far as Exhibit 42 is concerned, it was the low-flow days when you would expect to find and did find the major portions of the sixty cycle energy at Holtwood being converted to 25 cycle, is not that right? A. Yes.

Q. And it was the high-flow days, so far as Exhibit 42 is concerned, that you did find that substantial portions of 25 cycle energy at Holtwood was converted to 60 cycle energy, is not that right? A. Yes.

Q. Now, if you will refer a moment to page 11776 of the transcript of February 27, you there referred to the same subject matter, did you not? A. Yes.

Q. Except that in that case you were referring to the specific hour and day of December 11, 1944.

Now, that particular day was a high-flow day, was it not? I think if you will look at Exhibit 43 you will find that it is 37,400 Cfs. A. Yes, that is called a high flow day.

Q. Now, if it had been an adverse flow day—that is, a low-river flow day, the conditions with respect to conversion would have been quite different, is that right? [11933] A. That should be true.

Q. Well, it would be true, is not that right? A. I expect it would.

* * *

[11936] Q. Now, at various times in your testimony you have [11937] testified about 25 cycle energy being trans-

mitted from Holtwood to Highlandtown in an amount more than the Baltimore load requires, and specifically at page 11456 you reiterated that statement, line 5, did you not? A. Yes.

Q. Now, did you make any study to determine during what hours of any year, including the year 1944, Baltimore's 25 cycle requirements are less than the 25 cycle delivery at Highlandtown? A. No, I did not study the Baltimore load—25 cycle load. It is only a question of frequency changer capacity at one end or the other.

Q. Well, in order to make your answer at page 11456—in order to make it an answer that means something, you would have to know what proportion of the time Baltimore's 25 cycle requirements are less than the amount of 25 cycle delivery at Highlandtown, would you not? A. No, there is considerable 25-cycle generating capacity in Baltimore also which could—and there is converting equipment in Baltimore. I made no special study of the Baltimore load, either 25 cycle or 60 cycle customers' requirements.

Q. Isn't it a fact that at the time you gave that testimony on February 10, 1947, you did not know whether or not there was any 25 cycle generating capacity at Baltimore? [11938] A. I don't recall that I did not.

Q. Well, did you know at the time you gave your testimony on February 10, 1947, that there was some generating capacity of 25 cycle capacity at Baltimore? A. I do not know whether I recalled it at that particular time. I had known, and I do now.

Q. Well, at page 11459 you said, at lines 13 to 16, you did not know whether there was any actual generating capacity at 25 cycles at Baltimore. Are you changing that testimony now? A. I didn't recall it—at that time.

Q. Well, is there, or is there not? A. There is.

* * * *

[11939] Q. Well, if there are some plans to remove the 25 cycle generating capacity at Baltimore, that would les-

sen the likelihood of displacement as you use the term at page 11456. Is not that right? A. Well, Baltimore generates less—could generate less 25 cycle energy and generate more 60 cycle and let its 25 cycle load be served through Highlandtown, and supply the 60 cycle energy to Holtwood, because Holtwood needed 60 cycle and had an excess of 25 cycle energy. That was the condition I referred to and that could exist even after some 25 cycle generating equipment might have been removed.

Q. Well, the fact is that if you remove the 25 cycle generating capacity at Baltimore, it would—to that extent—lessen the probabilities that you spoke about at page 11456, beginning line 5, is not that right? A. I would think it would increase the probability.

Q. You mean if they took out the 25 cycle generating capacity at Baltimore that thereby the amount of Baltimore requirements of 25 cycle energy would be less? A. No, it would not affect the requirements for 25 cycle energy.

Q. The requirement from some other system would be thereby [11940] increased. Is not that correct? A. Yes, that is true.

Q. And the only place it can get it is from Holtwood? Is that not right? A. They have to take what there is at Holtwood, whether they need it or not.

Q. Well, now, the fact is you just do not know whether Baltimore needs the 25 cycle capacity from Holtwood or not, do you? A. I know they have to take it whether they need it or not.

Q. But you do not know whether they need it? A. I have made no study of the 25 cycle load in Baltimore.

Q. So that means you do not know whether they need it, is not that right? A. Yes, sir.

* * *

[11941] Q. Now, at the bottom of page 11456 and the top of [11942] page 11457, you were talking about Holtwood's

one-third of Safe Harbor, and Baltimore's share of Safe Harbor power. Were you there referring to what you called the two-thirds entitlement of Baltimore? A. That is right, I believe.

Q. Well, in giving your testimony at the bottom of page 11456 and the top of 11457, were you referring to Baltimore Company's two-thirds share on an hourly, a daily, or an annual basis? A. Well, this question is not based on an annual basis. It is based on frequent times.

Q. Well, I am asking you what you had in mind. A. I was answering the question, and I think I had in mind that this was at times during the year and not an annual amount.

Q. But my question to you now is: When you were referring to Baltimore's share which you said was a two-thirds share, were you referring to it on an hourly, daily or an annual basis? A. I did not think specifically about hourly or daily but just at certain periods of time within the year.

Q. Well, will you think about it now and tell me whether you are referring to Baltimore's share on an hourly, daily or annual basis?

* * *

[11943] THE WITNESS: Not on an annual basis. It might have been on an hourly or a daily basis. More likely an hourly basis would fit.

By MR. MYSE:

Q. Now, back on page 11456, line 21, you say, "That is true," to the statement by Mr. Sturtevant that some of the 25 cycle output at Holtwood is transmitted to Baltimore in exchange for part of Baltimore's two-thirds share of Safe Harbor output, and used for interchange purposes with Pennsylvania customers, is that right?

* * *

THE WITNESS: I think that happens at times.

By MR. MYSE:

Q. Now, that energy that is used for interchange purposes under the assumptions you made in Exhibit 64 is a use for the benefit of Baltimore, is not that correct? A. Well, you cannot divide that energy that comes up [11944] as to its use for interchange, or firm power. That is, I could not at the time I was preparing Exhibit No. 64 until later on when it was divided and it was shown that a small portion was used for interchange.

Q. I did not ask whether you could divide it. I asked you whether or not that interchange we are speaking about, which comes up over the 220 lines, is—at least that portion of it undivided, if you will—constitutes a use of those lines for the benefit of Baltimore? A. I would say that small portion that was actually used for interchange was furnishing an outlet for Baltimore's energy.

Q. You say it is a small portion. Have you ever made any investigation to determine what portion is interchange use and what is firm power? A. No, Mr. Spaulding did that for me.

* * *

[11946] Q. Is it a document entitled, "Allocation of Assumed Energy Entitlements for the Year 1944". Is that what you had reference to, Mr. Davis? A. Well, that was the title placed upon the later tabulations after they were requested, but they bear the same figures that are on Exhibit 143 for the two months there shown, and the title on that is "Energy Purchased by Baltimore from Holtwood Company, from Safe Harbor Company and Energy Purchased by Baltimore Company from Holtwood Company".

Q. Well, you recollect enough about Exhibit 143, now, do you not, to know that that exhibit was not furnished to you by Mr. Spaulding, is not that right? A. It was not furnished to me at all except from the filed exhibit.

Q. Filed by whom? A. I believe that was introduced—I do not remember who introduced that.

MR. GOLDBERG: Goldberg marked it.

MR. SPARKS: Mr. Goldberg introduced it.

By MR. MYSE:

Q. Now, will you look at the document entitled, "Assumed Energy Entitlement, 1944", which you referred to, and [11947] point out to me whether there is anything on that document which divides the energy displaced, as you called it, at Baltimore which comes up the 220 lines between energy used for the purposes of interchange and energy used in connection with firm power requirements, and I haven't referred to Exhibit 143, Mr. Davis? A. These are the same figures that are on your so-called "Assumed Tabulation".

Q. I am asking you to refer to this document (indicating). Will you do so, please, and point out to me anything in the nature that I asked for.

* * *

THE WITNESS: This document does not divide the backfeed into the amount used for firm power and the amount used for interchange.

* * *

[11950] Q. Now, at page 11457, beginning line 16, you say, as I understand it, at times the 25 cycle energy generated at Holtwood is all used in Baltimore as such, is that right? A. That is what the statement says.

Q. Well, I didn't quote the statement, but I want to know if that means that at times the 25 cycle energy generated at Holtwood is all used in Baltimore as such? A. Well, I meant the amount transmitted to Baltimore. I did not mean the exceptions of what might have gone through the frequency changer or up to Lancaster; those exceptions of course should be a part of that answer.

Q. And those exceptions, however, are pretty minor. Is not that right? A. At times they are. At other times they are not so minor.

Q. Well, what is the maximum amount of any one of those exceptions in terms of kilowatts during any one hour? A. Oh, I think about 14,000 through the frequency changer, and 6,000 to Lancaster.

Q. That would mean 14,000 kwh. during an hour? A. Yes.

Q. Converted from 60 cycle energy to 25 cycle energy? A. Yes.

[11951] Q. And did you say the maximum amount transmitted to Lancaster in terms of 25 cycles was 6,000 kw? A. That is the way I remember it.

* * *

MR. GOLDBERG: I think there has been a reversal of that 60 and 25 cycle. It is the question preceding the question about the 6,000 kw.

* * *

THE WITNESS: Well, you hypnotized me. It was——

By MR. MYSE:

Q. Do you want to correct your answer with respect to conversion at Holtwood given a few answers back? A. That the 14,000 kilowatts was converted from 25 cycle to 60 cycle instead of the reverse as it was stated.

Q. That would be one of the exceptions you had in mind. A. Yes.

Q. Now, it is also true that there could be times when 14,000 kw is converted from 60 to 25 cycles and that would increase the amount transmitted to Baltimore in terms of 25 [11952] cycle. Is not that right? A. The capacity is there to do that.

Q. Well, that happens at times, doesn't it? A. It might, I expect it might. I do not recall any.

* * *

[11956] Q. Now, will you turn to page 11464, line 5, please. Lines, 5 through 7, where your answer appears. You there used the term or the phrase that Safe Harbor energy is diverted to Holtwood Company. What did you there mean in connection with the use of that phrase? A. It is delivered to Holtwood instead of being delivered physically to Baltimore.

Q. Well, the fact is that all of Safe Harbor energy is delivered physically to Holtwood; isn't that right, and when I say Holtwood, I mean Pennsylvania Water and Power Company. A. I do not understand that is so.

Q. Well, is it not a fact that all Safe Harbor energy—and by that term I understand you to mean energy [11957] generated at Safe Harbor—is delivered physically to Pennsylvania Water and Power Company? A. Oh, I get you, yes—delivered to their transmission line.

Q. Now, what did you mean there when you said some of that Safe Harbor energy is diverted to Holtwood Company? A. I meant that is delivered to either the Holtwood bus or to Holtwood's Pennsylvania customers.

Q. And by that phrase "Pennsylvania customers," I take it you are referring to Pennsylvania Power and Light Company, Philadelphia Electric Company at Coatesville, Metropolitan Edison Company at York, and The Pennsylvania Railroad Company? A. That is right.

* * *

Q. So that as I understand your testimony now, you are saying there at 11464 that something more than the mathematical amount of one-third of the energy generated at Safe Harbor is in fact delivered to Holtwood's bus, or to the various Pennsylvania customers that I just enumerated; is that right? A. That is right.

[11958] Q. Well, did you ever make any determination as to the exact amount of that diversion, as you put it, in 1944? A. Yes, I studied that. I found that the amount in excess of one-third of the Safe Harbor output that was delivered

into the Holtwood system outside of the 220 kv. lines was the same amount that Baltimore received in excess of its entitlement from Holtwood in excess of the firm power demand.

* * *

Q. Now, what is this amount you referred to as the amount Baltimore received in excess of its entitlement from Holtwood in excess of the firm power demand? A. Well, I was explaining the entitlement from Holtwood, its entitlement from Holtwood which is one-third of Safe Harbor plus Holtwood generation, minus the firm power requirements in Pennsylvania.

Q. Well, that amount that you have just referred to in your last answer depends upon the assumption that all that Holtwood receives from Safe Harbor is the mathematical figure of one-third of Safe Harbor's output. Isn't that right? A. Yes, if it receives more than that one-third then [11959] that same amount in excess is delivered to Baltimore over what its entitlement would be if it received only one-third.

Q. I did not ask you anything of that kind, Mr. Davis. I asked you what was the amount, or if you had ever determined the amount in excess of one-third of the Safe Harbor output delivered to the Holtwood System, other than to the 220 kv lines. Now, can you give me that figure? A. I do not have the figure with me, but I determined that that was the same figure that Baltimore received in excess of its entitlement from Holtwood.

Q. Well, whatever it is the same as, is the amount substantial? A. Yes, quite a large amount.

Q. And you say all of that substantial amount in excess of one-third of Safe Harbor's output delivered to Holtwood's system other than the 220 kv lines is this diversion that you are talking about at 11464; is that right? A. That is what I meant there by "diversion", yes.

Q. Now, is there anything in any of the contracts identified in this record, particularly H and I, which speci-

fies such diversion? A. No, the contract provides that Holtwood will transmit Baltimore's two-thirds of Safe Harbor output to Baltimore.

Q. Well, now, just a moment. Where does it provide [11960] that? Are you referring now to page 10 of Exhibit H and Exhibit I that we referred to this morning? A. I do not know what page it is on.

Q. In E, F and G, I mean.

MR. GOLDBERG: Let the witness finish his answer.

By MR. MYSE:

Q. What other provisions did you have reference to? A. There is no other provision in the contract except the provision for coordination in H and I.

Q. We have gone into that in great detail, have we not? A. Yes, but it is still pertinent.

Q. Now, what is the provision that you referred to in H and I, is what my question related to, relating to the requirement of transmitting Baltimore's two-thirds, as you say? I would rather think it is in E, F and G, but if you know of one in H and I, I would like to have you point it out. A. It probably is in E, F and G. If you happen to know where it is, we can save time.

Q. I know of no place in H and I, but I can refer you to E, F, and G, if you think that is where it is. A. I would recognize it if I saw it. Yes, that is provided in E, F and G.

Q. Then I take it what you had reference to was [11961] Article VII of Items E, F and G that we had reference to this morning? A. That is right.

* * *

Q. Is there anything in that Article VII which says Holtwood shall transmit two-thirds of Safe Harbor's output to Baltimore? A. No, it says Holtwood shall transmit energy to Baltimore.

Q. Whatever it may be? A. That is right.

* * *

[11962] Q. Well, my question to you was—And let us make it a new question if you did not so understand it—Are the 60 cycle generating resources from Pennsylvania Water and Power Company, plus whatever it actually receives from Safe Harbor that is generated at Safe Harbor, adequate to take care of all the firm power services in Pennsylvania?

* * *

[11963] THE WITNESS: As I understand the question now, it is: Are the generating resources of Holtwood plus the total generating resources of Safe Harbor adequate?

By MR. MYSE:

Q. No, plus the amount of energy received by Holtwood from Safe Harbor which is generated at Safe Harbor adequate to take care of the firm power services of Pennsylvania?

* * *

THE WITNESS: There are times when it is not adequate.

* * *

[11964] Q. Now, Mr. Davis, referring again to page 11464 in the same line relating to what you call "diversion" of Safe Harbor energy, is it not a fact that most of what you would call diversion of Safe Harbor energy from Baltimore is for the purpose of supplying interchange customers? A. It might be.

Q. Well, isn't that the fact? A. No, I would not say most of it. 60 cycle energy is all commingled. You cannot assign any particular part of it to interchange and the other part to firm power, that I know of.

Q. A good share of it, however, is used for interchange, is it not? A. If you segregate the interchange and compare it with what comes from Safe Harbor, you might say that; but I do not see that there is any reason for doing that.

[11965] Q. Where else does the interchange come from that is supplied by either the Holtwood or the Safe Harbor

system to the Pennsylvania customers? A. Well, it comes up from Baltimore. It comes from Safe Harbor.

Q. Are you saying that backfeed is also used for interchange purposes? A. To a very small extent.

Q. Then the balance of the interchange must have been generated either at Safe Harbor or Holtwood? A. Yes, sir.

Q. Or it might have been interchange that was generated at one Pennsylvania customer and sold to another Pennsylvania customer? A. That could be.

* * *

Q. Now, assuming that some of this Safe Harbor energy is, in fact, diverted—as you put it—for use in connection with firm power supply in Pennsylvania, how does Baltimore get its compensation for that diversion? A. It gets it through H and I.

[11966] Q. By a reduction in the bill from Holtwood to Baltimore, is that what you mean? A. A credit of the revenue obtained from that energy.

Q. And that has the effect of reducing Baltimore's bill from Holtwood; is not that right? A. That is right.

Q. Now, other than the provision of Article III of H and I which covers the payments made by Baltimore to Holtwood, is there any provision in any of the contracts on record in this proceeding which covers this compensation to Baltimore for this so-called diversion that you spoke of at page 11464? A. I do not recall any.

* * *

[11969] Q. Now, in your Exhibit 64, you credited to Baltimore the net interchange revenues, did you not? A. Yes.

Q. You did not, however, charge against Baltimore the costs incurred in rendering interchange services, did you? A. No, I charged that off against the railroad, either Pennsylvania or Maryland.

Q. But you did not charge it to Baltimore, did you? A. No, except through the railroad.

Q. To the extent that some of that interchange cost was chargeable to the railroad in Maryland, you did charge it to Baltimore, but that is the only extent you charged it to? A. The rest was charged to the railroad in Pennsylvania.

Q. Now, what did you do with respect to the costs incurred in operating and having available the two north circuits on the Perryville line? Where did you charge those costs? A. The total line was charged—was divided between Baltimore and the railroad in Pennsylvania.

Q. But the fact is that almost 95 per cent of that line is used either for the railroad in Maryland or for interchange purposes. Is not that right? A. Yes, that interchange is rather tied up with railroad service. It is difficult to say whether that is [11970] for the benefit of anything else except the railroad.

Q. Well, it is not very difficult for you to say, however, that it is for the benefit of Baltimore, is it? A. That it goes through Perryville south, that is for the benefit of Baltimore.

Q. And also that that goes through Perryville north is for the benefit of Baltimore, isn't that right, as interchange? A. The net interchange, yes.

Q. And yet you have not charged the costs incurred in using that line for interchange purposes to Baltimore other than the small amount which might be associated with railroad service in Maryland, have you? A. Did you say small amount?

Q. Well, whatever the amount is. A. The other day you said it was practically all of it.

Q. Well, you have not charged those costs against Baltimore, have you? A. No.

* * *

[11977] Q. Take a look at page 11782, please, starting at line 13. You were there testifying, as I understand your testimony—tell me if I am wrong—in connection with why you didn't use the actual demands of the railroad at the

time of the Area 6 system peak in connection with your Table V-A. Isn't that right? A. That is right.

Q. Now, the purpose of making the deductions of the demands of the various Pennsylvania customers and the railroad in V-A of Exhibit 64 was merely to determine what was left under your method of the dependable capacity available to Baltimore? A. That is right.

Q. And you weren't in that Table V-A concerned with [11978] the cost of service to the railroad, were you? A. No. We were concerned with a reasonable figure for the demand required by the railroad.

Q. Then as I understand your testimony you were not considering a reasonable figure for the demand of the railroad at the time of Area 6 system peak? A. Yes, that is what I meant.

Q. But the fact is you didn't use the actual demand, did you? A. No, not at that particular hour.

* * *

[11980] Q. Now, will you refer to the bottom of page 11783, the question beginning at line 20 and the answer through the ending at line 3 of 11784?

Does that answer to that question mean you do not need excess capacity to supply Pennsylvania customers except for the maintenance you referred to in that answer? A. Well, I meant that the excess capacity during high flow periods there is used to shut down steam equipment for scheduled maintenance.

Q. Well, you are not saying you don't need the capacity other than for scheduled maintenance? A. You need it for scheduled maintenance. You need it to replace the capacity that is taken out of service for scheduled maintenance.

[11981] Q. Well, whose scheduled maintenance are you there referring to? A. That would be steam maintenance mostly.

Q. Of the Pennsylvania customers? A. No, that is mostly Baltimore's maintenance that would use that excess capacity during high flow periods.

* * *

[11984] Q. Now, a little bit further along on that same page 11792, beginning at line 12, you testified, as I understand it, that Baltimore Company owns two-thirds of Safe Harbor development. Is that right? [11985] A. That is the way I understand it.

Q. Well, actually they don't own anything of the kind. They own two-thirds of the stock. Isn't that right? A. That is what I interpret to mean owning two-thirds of the property.

Q. So you interpret the ownership of two-thirds of the common stock by Baltimore Company as equivalent to the ownership of two-thirds of Safe Harbor development. Is that right? A. I have considered all through this study that Baltimore owned two-thirds of the Safe Harbor development.

Q. And as a result of that, you assigned what you call the two-thirds share of the energy available from Safe Harbor to Baltimore. Is that right? A. Well, I took that two-thirds share as the contract share of Safe Harbor energy to which Baltimore is entitled.

Q. Now, if the event happened that we mentioned this morning under Article VII of Items E, F and G—that is, that for some reason Penn Water failed to transmit the energy sold by Safe Harbor to Baltimore, and thereby was required to purchase all of it, Baltimore would no longer be entitled to two-thirds of the energy under E, F and G, would it?

* * *

[11986] THE WITNESS: Under those conditions, it would not.

By Mr. Myse:

Q. And even though it owned two-thirds of the common stock or owned two-thirds of Safe Harbor, as you construe that ownership, it would still not be entitled to two-thirds of the energy under those conditions. Isn't that right? A. That is right.

Q. So that the ownership of stock or of the property is no criterion of what Baltimore is entitled to? A. Not under catastrophic conditions.

* * *

[12211] JOHN M. NEWLANDS

* * *

Cross Examination (continued)

By Mr. Hull:

* * *

[12242] Q. Is Exhibit 61 not a study of depreciation? A. Exhibit 61 is a calculation of a reserve requirement for which Mr. Dunn is responsible and in which I assisted him.

Q. Is the reserve requirement the accrued depreciation in the property? A. Yes, it is the best measure of accrued depreciation in the property.

Q. Do you say that without any regard to what causes of depreciation are? A. No. It is my understanding that the calculation of the reserve requirement takes into consideration the causes of depreciation. They are mostly reflected in the service lives set on the property by the engineers.

Q. Did you take the several causes of depreciation into account when you reviewed and approved the computation of the reserve requirement as contained in Exhibit 61? A. No, I didn't have to. We used service lives as estimated by the engineers. I didn't even make the calculation [12243] which resulted in the annual and accrued depreciation.

Q. So that what you did you did wholly regardless of what the causes of depreciation are? A. No, that is not so. What I did was to assist Mr. Dunn in preparing a depreciation reserve requirement.

Q. And you told me that that is the accrued depreciation. A. It is the best measure of accrued depreciation in the plant, yes.

Q. And you say that without any consideration whatever as to what the causes of depreciation are? A. No, that is not so.

Q. Well, I thought you must have considered the causes of depreciation, and that is the reason I asked you the question. A. It was not necessary for me to consider the causes of depreciation in the work which I did to assist Mr. Dunn in preparing this report. Those causes of depreciation were considered by the engineers in setting their estimated service lives. Those estimated services lives were given to Mr. Dunn and he used them in calculating the annual reserve requirement. I didn't have to determine what the causes of depreciation were in the work which I did to assist Mr. Dunn in preparing Exhibit 61.

* * *

[12293] Q. Did you at any time in the course of your investigation in connection with this case make any inquiry into what [12294] was a fair return on the investment in each year of the company's operating history? A. No, I have not.

Q. Did you make any determination of the extent, if any, by which the "aggregate credit balances of current depreciation accounts" had been accumulated by the respondents from earnings in excess of a fair return on the company's actual legitimate original cost? A. No, I have made no such investigation.

Q. Do you know whether such a determination was made by anyone else? A. I do not know.

* * *

[12296] Q. Do you not consider your computation in Exhibit 57, and the recommendations contained in Exhibit 61 to be a recommendation to the Commission that straight-line depreciation, and a depreciated rate base be used in this case in arriving at a determination of what are fair and reasonable rates? A. Not necessarily. The Exhibit 57 was prepared to illustrate the terms of the Federal Power Act, which refers to net investment.

Q. And do I understand that you were endeavoring by Exhibit 57 to arrive at a net investment rate base, as that term "net investment" is used in the Federal Power Act? A. Yes.

Q. Can you direct me to the portion of the Act to which you refer? A. Page 4 of the Federal Power Act gives a definition of net investment.

Q. Well, now, that refers, among other things, to the deduction of aggregate appropriations of surplus or income held in amortization sinking fund or similar reserves, and also to aggregate credit balances of current depreciation accounts.

[12297] Now, what do you understand to be meant by aggregate credit balances of current depreciation accounts? A. To be balance in the reserve for depreciation.

Q. And that is what you understand this definition requires you to deduct? A. Yes, I would say so.

Q. Do you understand this definition to require you to deduct that in each and every case?

MR. GOLDBERG: Each and every company?

MR. HULL: Yes.

MR. GOLDBERG: I object to that.

By MR. HULL:

Q. Do you understand it to be a general rule applicable under all circumstances?

MR. GOLDBERG: I object to that, Mr. Examiner, because it is entirely irrelevant and immaterial,

whether he thinks it is a general rule. The question should be confined to this case.

TRIAL EXAMINER: You may answer the question.

THE WITNESS: Well, I think it is a general rule, but I imagine there may be instances in which the Commission might not deduct it under the terms.

By MR. HULL:

Q. Well, now, in that definition it is clearly stated that the deduction of the aggregate credit balances of current [12298] depreciation accounts are to be deducted "if and to the extent that such items have been accumulated during the period of the license from earnings in excess of a fair return on such investment."

That qualification is in there, is it not? A. That is right.

Q. So that unless that condition is met, no deduction need be made under that definition. Isn't that right? A. That is correct, yes.

[12299] Q. And you tell me you have made no inquiry to determine what was a fair return, and of course you could not without that determine whether or not the present aggregate balances have been accumulated in excess of a fair return. Isn't that right? A. That is correct.

* * *

[12304] Q. I asked you, as I recall yesterday, whether the purpose or one of the purposes of the reserve wasn't to provide for the replacement of property. I understood you to say it was [12305] to provide for the retirement of property. Then I asked you whether indirectly that is not for the purpose of replacing property, and I asked you at transcript 12,234, beginning at line 1, this question:

"To the extent of the original cost of property in service, the collection of depreciation expense and the holding of assets reflected by the reserve are for the purpose of insuring continuity of service through replacement of

equipment. Isn't that the fact?" Your answer given at line 9 is "No".

Now, was that answer correct in the light of what you have just testified to?

A. Yes, the answer still stands.

• • •

[12308] THE WITNESS: The depreciation payments made by the consumer are made so that he will bear the total cost of rendering service to him, and to return to the company the original cost of the facilities used in such service by the time of [12309] its retirement.

• • •

[12315] Q. Mr. Newlands, when an electric utility company finds it necessary to use capital for the replacement of property, what sources of capital are available to it?

MR. GOLDBERG: The same objection, Mr. Examiner. We are completely beyond the realm of any responsibility that this signature on Exhibit 61 implies.

TRIAL EXAMINER: The objection is overruled.

THE WITNESS: The company can use any cash on hand, or it can borrow the money from banks, on bonds, from investors, on notes, or it might even sell additional common stock or request its common stockholders to make a contribution to the company.

By MR. HULL:

Q. You don't mean by that assess the common stockholders? A. That is a possibility under some State laws. It isn't often done, or by the sale of additional common stock.

Q. It is a possibility under the Federal Power Act?

MR. GOLDBERG: I object to that.

MR. HULL: He has injected it.

TRIAL EXAMINER: He may answer the question.

[12316] THE WITNESS: The Federal Power Act, so far as I know, is mute on that point. That is a question for individual State laws.

MR. GOLDBERG: That is lawyer Newlands' statement.

• • •

[12318] Q. Mr. Newlands, would it not, instead of using a depreciated net investment rate base, be more just and equitable to both consumers and investors for a regulatory commission to use an undepreciated rate base and allow to the consumers a credit on the reserve for depreciation equivalent to the risk free rate of return on such balance?

• • •

[12319] THE WITNESS: In my opinion that would not be a fair and equitable procedure.

By MR. HULL:

Q. Would you state your reasons? A. Because the company should be entitled to earn only on the amounts of its net investment in the plant. To allow the company an additional return on a depreciation reserve in effect charges the consumer twice for the service he is getting.

Q. Just explain how he is charged twice. A. Because the consumer is already charged with the cost of giving the service, including a portion of the cost of the facilities of the company which have been used up in the service to the consumer during the year. He should not again be charged with an interest rate on a depreciation reserve.

Q. I didn't say charged with an interest rate on the depreciation reserve. I suggested his being given a credit on the balance in the depreciation reserve equivalent to the risk free rate of return on such reserve.

MR. GOLDBERG: You haven't mentioned the other side of it, [12320] with depreciation on an undepreciated investment.

MR. HULL: That is correct.

THE WITNESS: Well, that still means charging the consumer with the difference between the rate of return allowed to the company and the rate of return on risk free securities which in my mind has no bearing at all on the amount of return which the company should earn, which the investor should receive.

* * *

[12344] Q. Is it a fact that the annual depreciation provision by Penn Water consists of a base figure of $355,146.73, plus 2½ per cent on net additions since 1930 which provision is included in the Power Bill? A. The provision for depreciation on Penn Water and Power Company's books is determined by taking the same amount of depreciation based on service lives which had been taken in the year 1930, and adding to that 2½ per cent of net additions, as reported in the Power Bill.

Q. And the depreciation provision as thus made up is included in the power bill? A. In effect that is so, yes.

Q. Now, is it also true that this amount of annual depreciation provision so determined is credited to Account 250, Reserve for Depreciation? A. By the amount of depreciation so determined you mean the 355,000 plus the 2½ per cent?

Q. That is right. A. That is correct.

* * *

[12468] EDWARD L. DUNN

* * *

CROSS-EXAMINATION

By MR. HULL:

* * *

[12485] A. You will find that by referring to page 18, the balance per books as of December 31, 1945, is $8,976,358. However, due to the fact that the books do not reflect certain retirements which have been made but not recorded there is an adjustment necessary to the book reserves.

As the result of this adjustment and several other minor adjustments the depreciation per books as adjusted at December 31, 1945, is $8,763,118. The reserve requirement as of December 31, 1945, is $8,408,373.

Now, there is a slight difference in the two figures because the reserve requirement does not include provisions for maintenance and the company has indicated that its book reserves are supposed to include something for maintenance.

* * *

[12530] Q. Is there any account in the uniform system of accounts [12531] wherein you record as a single figure what you have termed as the net original cost? A. No, the system of accounts is designed to record depreciation reserves and the related plant cost separately as a matter of convenience and presentation. However, they should always be considered together. They are related items.

Q. On which side of the balance sheet does the original cost appear? A. On the lefthand side of the balance sheet.

Q. And the reserve for depreciation under the system of accounts appears on the righthand side? A. Yes, that is a matter of form. It is still a contra-account to plant investment.

Q. When I referred to the lefthand side, I referred to the asset side of the balance sheet, and I take it that is what you had in mind, too, is it not? A. The lefthand side is assets and other debits.

Q. And the righthand side is what? A. Liabilities, reserves, and other credits, including capital stock, long-term debt, and so forth.

Q. And what accounting entries do you make upon the retirement of a piece of property? A. Well, without going through the detailed entries, I suppose it will be satisfactory to give you the accounts in which the retirement finally rests?

[12532] Q. That is right. A. Plant account is credited, and the reserve for depreciation is debited with the cost of plant. Cost of removal is debited to the reserve and any salvage value is credited to reserve for depreciation.

• • •

[12549] Q. Did any member of the Commission's Staff make a determination of actual depreciation? A. Yes, in my opinion the reserve requirement would most nearly measure the actual depreciation or accrued depreciation at the end of 1945.

• • •

[12550] Q. Mr. Dunn, does your Exhibit 61 constitute a study which determines the depreciation which actually exists in the property of Penn Water? A. In my opinion the reserve requirement would most nearly measure the actual depreciation or accrued depreciation which exists at the end of 1945.

• • •

[12554] Q. Mr. Dunn, in your opinion should the amount of the balance in the reserve for depreciation of an electric utility company bear any relation to the amount of actual depreciation which had occurred in the property? A. Yes. It is desirable, in a properly computed depreciation reserve.

Q. What should the relation be? Should they be substantially equivalent? A. Yes. A properly computed depreciation reserve should be substantially equivalent to the reserve requirement and the accrued depreciation in the property.

• • •

[12631] Q. Mr. Dunn, do you agree with this statement, that it is extremely important in determining profits that all expenses applicable to a given year or period must be stated in that period? A. Yes, that is a recognized principle of income determination.

Q. And it is because of that principle, is it not, that you charged depreciation annually and thus spread the original cost of the property over the depreciation expense accounts of the several years during the service life? A. That is certainly one reason for spreading depreciation expense over the period to which it relates.

* * *

[12638] Q. Now, why do you believe it is equitable to charge an equal amount to each account period? A. It is equitable from the standpoint of the consumers or ratepayers because they are charged an equal proportion of depreciation expense year by year. They are charged with all depreciation expense, and the charge is neither more nor less than the equal proportion of the cost of the property used in rendering public service. It is equitable from the standpoint of the company because it is enabled to appraise the financial progress of the company by means of comparative income statements that show the progress of the company from year to year without distortion of one of the largest items of operating expenses, which is the depreciation charge.

That remains relatively stable, and only changes as additions to plant occur. Therefore it affords a much better basis of comparison than unequal or arbitrary amounts charged [12639] to income in the operating expenses.

Q. Then you do believe that it is equitable both to the consumers and the investors to equalize this substantial cost, which is involved with the annual depreciation cost, equalize that over the period of the service life of the property. A. In the case of Pennsylvania Water and Power Company, that is particularly true. I might add that that is the method that has been used by the company for many years. It has recorded such a method on its books since 1920. It has made such computations and used them in its tax returns from the very inception.

* * *

[12640] Q. Mr. Dunn, do you agree that the cost of depreciation is a part of the cost of service of an electric utility? A. Yes.

Q. And do you agree that all of the costs of service of the electric utility should be paid by the consumers? A. Yes, all of the cost of service.

Q. And do you believe that in addition to all of the costs of service the investor should be paid a fair return upon the investment? A. The return on the investment is included in cost of service to the consumers.

Q. You consider that a cost of service? A. To the consumers, yes.

* * *

[12720] Q. In connection with your recommendation for the deduction of that depreciation reserve as adjusted from the net investment rate base, did you make any computation of the amount of the fair return to which the company was entitled in each year of its operating history? A. No, I did not make such a computation in connection with my determination although I did consider the past financial history of the company and the results of its operations.

Q. Then you made no determination of the extent, if any, to which the aggregate credit balances of current [12721] depreciation accounts had been accumulated from earnings in excess of a fair return on the company's actual legitimate original cost, did you? A. No, I did determine, however, that the company did recover all of its depreciation charges through revenues and in addition to that earn a substantial profit.

Q. By "substantial profit", do you mean a fair return? A. Well, I didn't determine what a fair return was, but as I recall the average profit was around 10 per cent.

Q. You did not, however, determine what the fair return was? A. I did not determine what a fair rate of return was, nor a fair return in the past.

* * *

[12725] Q. In the illustration I have put, does not the deduction of the $10,000 in the reserve for depreciation from the investment rate base result in decreasing the utilities operating revenues by the amount of $600, which is the rate of return of six per cent multiplied by the balance in the reserve of $10,000? A. It only results in a decrease in the return as between the first and second year. It does not necessarily [12726] result in a decrease in what the return should be in the second year. You are simply comparing two years, but in the first year there was no deduction, and one was required in the second year which is not comparable to the first year by reason of the fact that the company has accumulated depreciation expense through the medium of operating expenses. There is a different situation.

MR. HULL: Now, I ask the reporter to read the question and I would like you to answer the question.

* * *

THE WITNESS: That is the only answer I can make.

TRIAL EXAMINER: You answered on the basis of return and the question was on the basis of revenue.

THE WITNESS: It was net operating revenue, and return is synonymous with net operating revenue.

* * *

[12729] Q. Now, Mr. Dunn, the amount of $600 which I have referred to is in fact six per cent on the original investment of 100,000—no, pardon me—is six per cent of the amount in the depreciation reserve balance at the end of the first year. A. What was the first part of the question? I didn't get it.

(Question read.)

THE WITNESS: I do not so consider it. I consider the fair return as the rate of return times the net investment, and not as related to the components of the investment.

* * *

[12740] Q. * * * You have testified that the purpose of the reserve for depreciation is "to provide for the retirement of property." Now, I call your attention to the fact that property is not retired until it is withdrawn from service. Nevertheless, the consumers have paid depreciation expense between the time of the installation of the property and the time of its retirement, and since the reserve is not necessary for any other purpose than to provide for the retirement of property, and since that comes at the end of the service life, the payments made by the consumers must be advances, must they not? A. Absolutely not. In the first place, the payments made by the consumers are not in the reserve. The payments made by the consumers were charged to operating expenses, that is the depreciation expense is charged to operating expenses.

Q. And a credit to the reserve? A. Well, the money recouped comes into the company in the form of revenues, not in the form of a depreciation reserve.

Q. That is quite true, but concurrently there is a [12741] credit to the reserve for depreciation. A. Yes, but that is not an advance.

Q. No, the bookkeeping entry of the reserve for depreciation isn't an advance. A. Nor neither is the charge.

Q. But the money that comes in to the company and is credited to the depreciation reserve is an advance from the consumer, is it not? A. No, it is not.

* * *

[12744] Q. Mr. Dunn, do you agree with this, that depreciation accounting results in the accumulations of money by a utility which are commonly refegred to as depreciation funds or depreciation reserve funds? A. Not ordinarily. The depreciation accounting could result in an accumulation of such funds if a separate depreciation fund were maintained on the balance sheet.

Q. In that event you say it would? A. It could result in that, yes, not necessarily result in it even then in case depreciation funds were not recouped.

Q. Now, if there is no ear-marked fund or funds, nevertheless the amount shown in the reserve for depreciation has actually been collected in cash from the consumers as depreciation expense and used to acquire other assets, there are nevertheless depreciation funds, are there not? A. Of course the depreciation charges that are collected from customers are much greater than the balance in the reserve because the balance in reserve has been reduced by retirement in the past.

[12745] If those charges have been retained in the business and invested in other assets, they are no longer referred to as depreciation funds because they have lost their identity.

Q. Would it be proper to refer to them as assets representing depreciation reserve balance? A. No, because it might be that the company has used the money to retire its bonds or some such procedure and there is no validity to the assumption that they have been retained in the business unless they can be identified.

Q. Do you agree that accumulated depreciation funds can't be returned to the investors of the capital but must be retained by the utilities so that when utility plant wears out in service funds shall be available to provide new facilities in replacement of the worn out plant? A. No, I do not agree with that. In fact, the statement is incorrect even as a theory.

* * *

[12790] Q. Have you included any amount in Account 100.3, Construction Work in Progress? A. Yes. The company sometimes had jobs which have been completed, but not actually recorded on the books as plant in service, and we have allowed those jobs which the company has included in the power bill, but which are still carried in the account Construction Work in Progress in the rate base.

Q. When a utility company undertakes the construction of new plant, at what point is the cost of that construction entered in the account "Construction Work in Progress"? A. The cost is entered in that account promptly

upon the posting of the vouchers making payment for labor, materials, supplies, and so forth.

Q. So that assuming that the construction period extended over a period of twelve months or eighteen months, and were made continuously during that period, the charges each month would properly be posted to Account 100.3. Is that correct? A. Construction work in Progress, yes.

Q. And when so posted, they would be proper to include in a net investment rate base, would they not? [12791] A. Not if the company was capitalizing interest during construction on the work in progress, because the plant in service would be only the completed work.

Q. Well, I understand that. The company can't expect to get both interest during construction and get the construction work in progress during the period included in the rate base, but—

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[12799] Q. Has any part of Penn Water's investment in dams, reservoirs and waterways been excluded from the rate base in your calculation? A. No, we have allowed all the investment.

Q. You have not included in your net investment rate base any part of the assets reflected by the depreciation reserve balance, have you? A. Those assets are not identified, if there are such assets.

Q. Whether identified or not, you have not included them in your net investment rate base. Isn't that true? [12800] A. If the cash generated by depreciation charges, which in the case of Penn Water have been fully recouped by the company, has been invested in plant, they are included, or it is included in the rate base.

Q. Is your answer complete? A. Yes.

Q. If any part has been invested in securities, it has not. Is that correct? A. The company does have quite substantial investments in securities, and those investments are not included in the rate base.

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[12801] Q. Do you know whether or not the Federal Power Commission has at anytime determined what was a fair rate of return for Penn Water? A. Not that I know of, and I am reasonably certain that this is the first rate case the Federal Power Commission has had with Penn Water.

• • •

[12803] Q. In your opinion, does the cost of service of an electric utility company include a return on the entire investment which the stockholders have made in the company? A. Not necessarily, because the fair rate of return is applied to the investment. The net investment in property used and useful in rendering public service. If part of the investment is devoted to non-utility properties, the company is not entitled to receive from its ratepayers a return on such investment.

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[13255] Q. Do I understand that you would compute a net investment rate base under part 1 of the Federal Power Act in a different manner than in which you would compute a net investment base under part 2? A. If you understood that it is erroneous. I made no computation under part 1 of the Act.

• • •

[13256] Q. In determining a net investment rate base, would you determine differently under that definition than you would if you were applying part 2 of the Act, for instance, to property which was not licensed? A. I don't know. I have made no study of what I would do under that sub-section in this case.

Q. How would you compute the net investment rate base under part 1? A. It would depend on the facts of the case.

[13257] Q. Take the facts in the present case. A. I have not made a study of that. It is too involved. Besides, the company does not yet have a license.

• • •

[13259] Q. In making that computation of average and net plant balances, and the figures "average base" in column 9, did you or did you not consider the definition of net investment as contained in Section 3, sub-section 13 of the Federal Power Act? A. I did not consider it as related in that particular section. That is, I did not go to that section and read what net investment was and then arrive at these figures. I knew what net investment was under the rate cases the Commission has had in the past where they have used a net investment rate base.

Q. Are the figures which you have arrived at in Exhibit 57 figures which would be arrived at by the application [13260] of the definition of net investment in Section 3, sub-section 13 of the Act? A. As I previously stated, I have made no study of that.

Q. So you do not know whether it reflects net investment as there defined or not?

* * *

THE WITNESS: As I say, I have made no study of what net investment would be applying that sub-section to this property.

* * *

Q. And the concept of net investment which you did apply is what you understand to be the concept as found in the decisions of the Federal Power Commission. Is that correct? A. Well, it is more than that. I have testified on what net investment is in many rate cases, and the Commission has used that figure in its rate cases, so I know what the figure of net investment is in the Commission's rate cases.

Q. All right. Is net investment, as the Commission has applied it, computed in the same manner under part 1 and part 2 of the Act? A. In the only instance that I can recall where that occurred, it was.

[13261] Q. If depreciation expense is properly computed, collected and accounted for, the cash received as operating revenues is received by the company in advance of the time

when the property to which it relates is retired. Is that not true?

* * *

THE WITNESS: Of course, your statement contains an assumption as to the fact that such cash is actually collected in revenues. If it is, it is collected before the plant is retired because the depreciation allowance is for the current consumption of plant in service.

By MR. HULL:

Q. And the corresponding credits that are made to the reserve for depreciation are also made in advance of the charges that are made to the reserve for depreciation when the property is retired. A. The credits to the reserve are made currently with the accrual of depreciation.

* * *

[13268] Q. When you say it that way, do you include the reserve for depreciation among your liabilities? A. No, I never include the reserve for depreciation among the liabilities under any circumstances. It is not a liability.

* * *

[13318] Q. Mr. Dunn, apparently the capital surplus arises in that case because my assumption regarding plant account [13319] was not large enough. If the plant account were $200,000 and the capital stock $200,000 and the company had $75,000 in cash and $75,000 depreciation reserve, where would the difference between the depreciated original cost of the plant and the proceeds of insurance finally be reflected? A. Well, it is too difficult to give offhand answers to all of those assumptions. I can tell you tomorrow, if you wish.

Q. All right. I wish you would.

MR. GOLDBERG: In that assumption I take it the plant is $200,000.

MR. HULL: That is right.

MR. GOLDBERG: Reserve for depreciation is $50,000.

MR. HULL: Just a minute. Let me give the assumptions and we will get the answers tomorrow.

MR. GOLDBERG: All right.

MR. HULL: Original cost of the plant, $200,000; cash and securities, $75,000; total assets, $275,000; capital stock, $200,000; reserve for depreciation, $75,000; total liabilities, $275,000.

MR. GOLDBERG: Destruction of the whole plant by fire?

MR. HULL: No, a destruction of the group of property, the original cost of which was $100,000. The insurance recovery is $75,000, and the depreciated original cost of the property destroyed by fire is $50,000.

[13320] THE WITNESS: I am not sure but what I might need all the facts that would ordinarily be made available to me in that set of circumstances since you started to break down the reserve. I might need to know what the depreciation rate was, what the estimated service life was, what the age of the property was, and what the property was, and so on and so forth.

By MR. HULL:

Q. If you follow my assumptions—— A. I don't like to have these questions answered in the dark and then have them related to a specific case such as P.W.&P. Company.

Q. If you follow my assumptions that the depreciated original cost of the property destroyed is $50,000, you need no assumptions regarding service life or age. A. Oh, there might be an erroneous balance in the depreciation reserve which might affect the conclusions that I would reach.

Q. Oh, yes, and it might be that somebody faked the books and the actual capital stock liability was $250,000. But we are not dealing with assumptions like that. A. I don't know what we might get into.

Q. Just assume that the entries in the balance sheet are as I have given them to you, and that after properly computing a depreciation reserve with respect to the plant [13321] that is destroyed by fire the depreciated value is $50,000. You need not make any assumptions about service life at all. A. You say out of $200,000 of plant, $100,000 was destroyed?

Q. Plant representing $100,000 of original cost. A. And the reserve for that, the proper reserve for that was—

Q. $50,000. A. ——$50,000. Proper reserve for the balance of the plant was $25,000?

Q. That is right.

MR. GOLDBERG: Insurance recovery is $75,000.

MR. HULL: That is right.

THE WITNESS: I will give you the answer to that later.

MR. GOLDBERG: Has the question already been asked? Is the question what are the entries that would be made upon recovery?

By MR. HULL:

Q. What entries would be made to reflect the effect of the destruction of the property and the collection of proceeds on the plant account, and upon the reserve for depreciation, and I would like to know also where the difference between the depreciated cost of $50,000 and the proceeds of insurance of $75,000 will finally be reflected on the balance sheet. [13322] A. I don't believe I can answer that problem because it indicates that there might possibly be a reserve adjustment necessary and you just can't determine these reserve adjustments in the abstract. You have to have more information.

I would have to know all the facts that could be ascertained of the company's past financial policy and history by the Regulatory Commission with respect to depreciation in the past. I would be interested in knowing whether any reserve adjustments had been made in the past and why. I would be interested in knowing the estimated future life of the property. I would be interested in knowing whether the reserve had been recouped, whether the depreciation charges always had been recouped through earnings and so on.

Q. Mr. Dunn, the simple question I asked you is in conformity with the instructions and regulations of the uniform system of accounts? A. No, it isn't, Mr. Hull. It involves possibly a reserve adjustment, and the circumstances under which the depreciation reserve can be adjusted are not set forth in the system of accounts.

Q. Is it my understanding, Mr. Witness, that when you have a fire loss all of these problems you suggest are presented? A. If you lose fifty per cent of your plant in a fire loss, I assure you that very serious problems are presented.

[13323] Q. You have told me a lot of things you would be interested in knowing.

Can you tell me the things that you must know in order to give me the answer? A. The things I must know are all of the facts that can be ascertained regarding the company's past history and the estimated life of the property remaining.

* * *

[13358] Q. It is a fact, is it not, that if a reserve for depreciation for Penn Water is accumulated on the straight-line basis at rates determined by the estimated service lives shown in Exhibit 59, the reserve will be substantially greater throughout the life of the property than the amount necessary to meet retirements which are to be expected if the estimated service lives prove to be correct? A. That

will be true under the straight-line method or any other depreciation method.

Q. The excess of the reserve for depreciation over the estimated retirements, however, would be greater under the straight-line method than under any other method of depreciation accrual, would it not? A. I have a little trouble with your statement "excess of the reserve over the estimated retirements." The balance in reserve would not relate to the property retired but the property not retired. [13359] Q. Yes, but the point of my question is that the amount in the reserve would be substantially in excess of the charges to reserve for retirement of property throughout the life of the enterprise, is that correct? A. That is the same as your first question.

Q. Yes. A. I believe the answer was "yes."

Q. And the excess I refer to would be greater if the straight-line method is used than if any other method of depreciation is used. Isn't that true? A. I don't know that you referred to any excess. There is no excess. It is the amount required. I will say this in answer to the latter part of your question: That the straight-line method creates a higher reserve balance, all other facts being the same, than an interest method such as the sinking fund method or compound interest method.

* * * * *

[13374] A. When you record depreciation expense you record in operating expenses the current depreciation cost with a related entry to the reserve for depreciation. You do not record any payments received or money deposited.

* * *

[13444] THE WITNESS: Are you referring to the two million dollars in the reserve for depreciation?

By MR. HULL:

Q. Yes. A. As I said, that is a contra account to plant account, but no specific assets in the plant account can

be identified as assets reflected by the reserve for depreciation.

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[13609] REDIRECT EXAMINATION

By MR. GOLDBERG:

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[13615] Q. Now, I would like to draw your attention to the Accountants Handbook, third edition, W. A. Paton, Editor. And to page 747 thereof. At page 747 there is a paragraph which has this caption:

"Significance of Depreciation Reserve."

Is that right? A. That is correct.

• • •

[13616] Q. Will you read that, Mr. Dunn?

A. "Significance of Depreciation Reserve.

"The depreciation reserve or allowance, to the extent that it measures a careful and reasonable estimate of accrued depreciation, should be interpreted not as a true reserve, or appropriation of surplus, but rather as a contra account, or valuation account, modifying the gross book value of the depreciable fixed assets. In particular cases, the [13617] depreciation reserve may be in part surplus, as a result of setting up clearly excessive charges for depreciation, but this fact does not alter the nature of the typical reserve for accrued depreciation.

"The use of the term 'reserve', which is well nigh universal, is not altogether fortunate, particularly because of the standard use of this term in labeling genuine surplus appropriations, and also because a layman, in particular, tends to think of the depreciation reserve, when so named, as a fund of cash or other liquid assets set aside for the purpose of replacing the depreciating property at the end of its service life. The conventional depreciation reserve not only does not con-

sist of an actual fund, but can be said to represent or indicate a fund of property only in a very indirect way, if at all. The balance in the reserve or allowance for accrued depreciation represents just one thing—the estimated expiration in use of the depreciable property, shown in other accounts at cost or other gross book value. This can be emphasized by calling attention to the fact that it is quite possible to account for depreciation by avoiding the use of the reserve account entirely through the use of a procedure by which the credits are lodged directly in the plant accounts.

"The really significant element in the accounting for depreciation is the setting up of the charge to operation, [13618] and finally to revenue, by which the showing of net profit is restricted below the figure which would appear if the depreciation were neglected, and, as a result of which dividends are restricted to true net earnings and capital impairment is avoided.

"This does not deny the fact that where operation is successful—that is, where revenues are at least sufficient to cover all costs—assets tend to be built up at least to the amount of the accumulated balances in the reserve account, to take the place of the expired values, assuming the funds replacing expired values are not utilized in retiring liabilities or otherwise withdrawn from the business.

"Hatfield discusses three common misconceptions regarding the depreciation allowance:

"(1) The view that it represents a fund of money;

"(2) The view that it represents a reservation of profits;

"(3) The view that it constitutes inherently a provision for replacement.

"He shows that none of these views is sound, by pointing out that the reserve account represents noth-

ing more than an estimated expiration of asset values, that depreciation goes on whether there are any profits or not, and that the recognition of depreciation is a 'condition precedent to the ascertainment of profits,' and that depreciation [13619] acccounting should take the same form in the case of property which there is no intention or prospect of replacing as in any other case."

* * *

Q. Do you agree with the views expressed in the paragraphs you read? A. I do.

* * *

[14554] HANINA ZINDER

was called as a witness, and after having been duly sworn and examined, testified as follows:

[14555] DIRECT EXAMINATION

By MR. MYSE:

Q. What is your full name, Mr. Zinder? A. Hanina Zinder.

Q. What is your business? A. I am a consultant to Public Utilities on rate matters.

Q. Will you outline briefly your education and experience? A. I graduated from Carnegie Institute of Technology with the Degree of Bachelor of Science and Electrical Engineering in 1924.

In 1926 I obtained a Degree of Master of Business Administration from Northwestern University, specializing in the field of public utilities.

Subsequently I attended the Central Station Institute of the Commonwealth-Edison Company of Chicago and received a certificate of completion. I completed this course in 1927. As part of this course, I spent three three-month intervals in various departments of the company. In these

departments we carried on certain duties at the same time on the operations of the department.

I also attended courses at the University of Wisconsin in working towards a Ph.D. degree.

So much for my education.

[14556] As to my experience, upon graduating from Carnegie Institute of Technology in 1924, I entered the employment of the Commonwealth-Edison Company in Chicago. With the exception of a short leave-of-absence, of about four months, I was continuously employed in the Commonwealth-Edison Company for a period of approximately six years. Two years of this time was spent in the operating department of the Fifth Street generating station of the company, which at that time was the largest steam-generating plant in the United States.

Subsequent to my completion of the Central Station Institute course of the Commonwealth-Edison Company, I entered the contract department of the company where I was employed for approximately three years. My duties in this department consisted of making reports on the comparative costs of electric service for large commercial and industrial establishments in Chicago as between generation by the establishment itself and purchasing its total requirements from the company.

These reports frequently required allocations of costs of service as between private plant generation and purchasing their entire electric requirements.

The total allocations were between cost of steam heating, processed steam and electric generation. The work also involved an intimate knowledge of large power rates and their proper application to various establishments.

While engaged full-time at the Commonwealth-Edison [14557] Company, some time was spent evenings assisting in the preparation of an employee manual on public utility economics for the Middle-West Utility Company.

During this same period I instituted jointly with Dr. Paul J. Ravér a course in public utility rates and subse-

quently conducted as well a course in public utility operation and management. It was my understanding that the course started by Northwestern University in Public Utilities was the first course of that type in any university.

This university activity continued until I left Chicago in 1931.

For a period of approximately four years commencing in 1931, I was a member of the Staff of the Public Service Commission of Wisconsin. For the major portion of this period my title was that of Chief Rate Analyst. My work with the Public Service Commission of Wisconsin involved supervising the work of other rate analysts on the engineering and economic phases of rate investigations of electric, gas and water utilities. This included studies to determine not only the reasonableness of the overall earnings of the companies investigated, but also the determination of the proper relative relationship of the various rates, both retail and wholesale, based upon studies of the cost of service.

While I was with the Public Service Commission of [14558] Wisconsin, I was engaged on several occasions, part-time, on rate work for the Tennessee Valley Authority. This included investigation in the determination and design of the original rates and rate provisions, both retail and wholesale, of the Tennessee Valley Authority. During this same period; that is, from 1931 to 1935, I was engaged as a rate consultant for the Electric Home & Farm Authority.

My duties with this authority were to design and recommend a rate policy.

In 1935 I joined the Staff of the R.E.A. where I subsequently became Chief of the Rate Division. My duties at first were to assist in the formulation and to recommend the rate policies to be followed by this Administration. Subsequently, in accordance with the rate policies adopted, I participated in or supervised the negotiation for the purchase of power at wholesale by hundreds of rural electric cooperatives throughout the United States. Some of the negotiations involved controversies that required both for-

mal and informal appearances before the State Commissions, including the making and presentation of cost studies.

In December of 1937 I left the Rural Electrification Administration to join the Staff of the Federal Power Commission, initially with the title of Principal Engineer.

In 1938 I was made Chief of the Division of Rates and Statistics, which position I occupied with some changes in [14559] the designation of the Division and its activities for a period of approximately seven years until January 1, 1945.

My duties and activities as a member of the Staff with the Federal Power Commission are, of course, a matter of record with this Commission.

Briefly, these involved the direction and supervision of Commission Staff activities involving statistics, rates for both electric and natural gas companies, and engineering on natural gas matters.

At the time I joined the Staff of the Federal Power Commission it had just instituted its first rate investigation. It was my responsibility to recommend, supervise and administer the type, scope and policies to be followed in these and subsequent investigations as to rate and engineering matters.

Beginning with the Albany Lighting case of the Commission, and on through each rate case of this Commission thereafter, practically all of them required investigations, studies, and exhibits to be prepared on the allocation of costs between so-called jurisdictional and non-jurisdictional business. The direction and supervision of this work was one of my major responsibilities.

During the war I directed the Commission Staff activities under the Presidential Directives regarding the review and approval of War Power contracts. Practically all of these contracts involved the sale of large blocks of power, [14560] frequently at special rates. The determination of the reasonableness of these rates in most cases involved studies of costs, and in many cases cost allocations.

Similar work was continued after the war in assisting the War Department, Navy Department, and Reconstruction Finance Corporation with respect to the renegotiation of War Power contracts.

[14561] On January 1, 1945, I left the Commission and joined Mr. E. Holley Poe in carrying on a private consulting practice, and subsequently became an associate of E. Holley Poe and Associates. I continued this association and activity until September 1, 1946. During this period I engaged in a general consulting and advisory practice on rate and related matters involving both private and public utilities in the United States and Canada.

I was engaged as a rate consultant by the Bonneville Power Administration, and still continue in this capacity at the present time. Also during this period, I assisted in the preparation of portions of the testimony on behalf of the Natural Gas Industry Committee before the Federal Power Commission in their Docket G-580 and testified in the Washington hearing in this case.

Q. Now, Mr. Zinder, were you requested by Pennsylvania Water and Power Company to make a study of its costs allocable to Consolidated Gas Electric Light and Power Company of Baltimore?

A. I was.

Q. Have you prepared a study showing your determination of the cost of service of the Pennsylvania Water and Power Company and Susquehanna Transmission Company of Maryland allocable to Baltimore Company?

A. I have.

[14562] Mr. Myse: I ask to have marked for identification the document described as "Determination of Cost of Service of Pennsylvania Water and Power Company and Susquehanna Transmission Company of Maryland to Consolidated Gas Electric Light and Power Company of Baltimore." I understand the next Exhibit number is 319.

TRIAL EXAMINER: Yes. The document may be marked Exhibit 319 for identification.

(The document referred to was marked for identification as Exhibit Number 319.)

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[14569] Q. Does Exhibit 319 show the costs of Penn Water and Susquehanna properly allocable to Baltimore Company?

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[14570] THE WITNESS: It does.

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[14573] WM. H. EICHHORN, JR.

was called as a witness, and after having been duly sworn and examined, testified as follows:

DIRECT EXAMINATION

By MR. KING:

Q. Will you give your full name for the record, Mr. Eichhorn? A. Wm. H. Eichhorn, Jr.

Q. What is your present position with the Pennsylvania Water & Power Company? A. Secretary and Assistant Treasurer.

Q. Will you state your educational background for the record, please? A. I am a graduate accountant, and a Certified Public Accountant in the State of Maryland.

[14574] Q. Will you state your experience, please? A. I have been employed in accounting work since 1926. Since 1931 with the Safe Harbor Water Power Corporation and Penn Water & Power Company.

Q. Mr. Eichhorn, have you prepared a statement showing reconciliation of the Federal Power Commission Staff's recommended disallowances from the company's electric plant accounts pursuant to Exhibit 51, Schedule 2, and testimony as presented by witness Newlands with Penn

Water Exhibit No. 25, consolidated statement showing original cost of electric plants as of December 31, 1945? A. I have.

Q. I show you a document consisting of a summary and five sheets with supporting schedules A to Q and ask you whether this is the statement of reconciliation to which I have just referred. A. Yes, it is.

* * *

TRIAL EXAMINER: The document will be marked Exhibit 320 for Identification.

* * * *

[14575] By MR. KING:

Q. Will you state briefly the purpose of this exhibit, Mr. Eichhorn? A. The exhibit is for the purpose of reconciling mathematically the Staff's proposed disallowances from the original cost as shown in Exhibit 51 with the company's Exhibit 25, and it sets forth the differences as items.

Q. Will you describe them briefly in this Exhibit 320? A. If you will turn to page 1 you will see that items 1, 2 and 4 make up the total amount shown as item 5, which is total electric plant recommended for allowance by the F.P.C. Staff.

Items 6, 7 and 8 total as item 9, amounts recommended by the Staff for disallowance. They total $3,753,843.75. The total of items 5 and 9 give you item 10, which is a total original cost of electric plant per Penn Water Exhibit 25. That amount is $36,704,706.47.

Q. Did you say the totals of 5 and 9—I see it now, Mr. Eichhorn. Those totals give you item 10. A. That is right.

Items 11 and 12 are disallowances conceded by the company and the total amount is shown as item 13, $99,906.39.

The deduction of item 13 from item 10 will produce the amount shown as item 14, the net revised original cost of

electric plant as of December 31, 1945, as claimed by the [14576] company.

Q. What amount? A. $36,605,700.08.

Those items on page 1 are shown in more detail on pages 2 to 6 inclusive, and the items shown on pages 2 to 6 are further supported by schedules A to Q, which are pages 7 to 58, inclusive.

Q. Does that complete your answer, Mr. Eichhorn? A. Yes, that completes the description of the schedule.

MR. KING: You may cross examine.

MR. GOLDBERG: Let me understand this. I think it is probably a statement which will have to come from Respondent's counsel.

Do the Respondents propose to submit other witnesses who will testify on the data, or any part of the data, in Exhibit 320?

MR. KING: The answer to your question is "no," Mr. Goldberg, but you will recall that heretofore we submitted for cross-examination, in connection with Mr. Gunn's cross-examination on original cost, Messrs. Wetzel, Bortner, Eichhorn and Chase, all of whom assisted Mr. Gunn in connection with the subject matter.

* * *

[14577] CROSS EXAMINATION

By MR. GOLDBERG:

* * *

[14579] Q. * * * Do I understand that you have made no decisions in preparing Exhibit 320 as to the propriety of the claimed costs. Is that right? A. That is right. It is purely a mathematical reconciliation setting up Commission disallowance, less the Company disallowance, and the net difference.

* * *

[14591] Q. As a matter of fact, if we look at Schedule K-1, you have a column entitled "Title of Job Order and Description of Item." Is that right? A. That is right.

Q. Those paragraphs that appear along with each item under that column are intended to be, I take it, items of explanation of the amounts which appear in the schedule. Is that right? A. Yes.

Q. That explanation isn't necessary for your reconciliation, is it? A. Well, I believe the explanation is necessary to [14592] an understanding of it, yes.

Q. Is there any explanation in either Exhibit 26 or Exhibit 27 of Job Order C-193? A. No, not in Exhibits 26 or 27, but these figures are a part of Exhibit 25.

Q. Is there an explanation in Exhibit 25? A. No, there is no explanation in Exhibit 25.

Q. You could have made a reconciliation between the staff's allowances and disallowances with respect to original cost and the company's claims regarding original cost without these explanations in Schedule "K". Isn't that so? A. No.

Q. Why not? A. Because they are not explained in Exhibit 51.

Q. Are they explained in your exhibits which were part of your direct case? A. This is the only place in the record that I know that they are explained because they were not explained in Exhibit 51.

Q. Now, then, you can make a reconciliation without that explanation. Isn't that so? A. Not an understandable one I believe.

Q. In other words, nobody would know what Job Order C-193 was about in connection with the company's claim unless you made this explanation which is in your reconciliation. [14593] Is that it?

* * *

THE WITNESS: That is true, and I believe the reason is that in the staff's Exhibit 51 the item was not set forth and explained what it was.

* * *

[14598] Q. Mr. Eichhorn, looking at page 35 of Exhibit 320, these descriptions that appear under the column entitled "Title of Job Order and Description of Item," are they verbatim copies of what appears in the job order as a description of the item? A. No, I don't believe they are verbatim descriptions of the job order. It probably has been added to a little for explanatory purposes.

Q. The explanation under the first one, for example, who prepared that explanation? Did you prepare it? A. Well, all the explanations of these details came from Mr. Wetzel.

Q. In other-words, Mr. Wetzel gave you the year of expenditure, the job order, the title of the job order as he wrote it, and his description of the item. Is that right? A. That is right.

Q. You didn't examine the job order yourself to ascertain whether the description was an accurate one, did you? A. No. I assumed the description was an accurate one. I worked with Mr. Wetzel a long time and find he is very reliable and I can depend on what he gives me. [14599] Q. Is that what you did, you depended on what he gave you? A. That is right, I depended on Mr. Wetzel for the details. Then, of course, all the schedules in the Exhibit 320 were submitted to Mr. Gunn and he made the final decisions as to what was to be in here.

Q. Did Mr. Gunn review the job orders? A. No, he did not review the job orders.

Q. Where does the information come from indicating that the amount involved in connection with the first item on page 35 was charged to the reserve for depreciation?

* * *

THE WITNESS: That came about in connection with our determination of original cost. That work all was done under Mr. Wetzel's supervision.

By MR. GOLDBERG:

Q. Mr. Wetzel, I take it, also supplied you with the information that certain amounts were either charged to the

reserve for depreciation or operating expenses on the company's books. Is that right? A. That is right, the detailed records of the original cost determination are under his charge and were made under his supervision.

Q. Who prepared the caption appearing on page 35, [14600] "Summary of Betterments, Arising Through Minor Items Charged in Error to Operating Expenses or to Reserve for Depreciation"? A. I believe I prepared the caption. I talked to Mr. Wetzel about the items he had given me and prepared the caption.

Q. When you say you talked to Mr. Wetzel about the items he had given you, did you talk to him for the purpose of securing an accurate title for the items? A. Yes, I asked him to make an accurate title. I believe these titles he has here are accurate.

Q. Did he write that title which I quoted? A. "Summary of Betterments—", etc?

Q. Yes. A. Well, I don't believe he wrote the title other than as I suggested it be written.

Q. Did you determine that all of these were betterments? By "all of these" I mean the items listed in the various schedules in K. A. Based upon the information he gave me, yes. We discussed them generally and I asked that a schedule be made up showing those that are betterments as distinguished from those that were additions and those that were replacements.

Q. And he gave you the segregation as it appears in Exhibit 320. Is that right? A. That is right.

[14601] Q. Did you decide that the items had been charged in error either to the operating expense accounts or to reserve for depreciation?

* * *

THE WITNESS: Well, based upon the data that he gave me as to the items it appeared to me that they were in error.

By MR. GOLDBERG:

Q. Did you decide that they were charged in error? A. Based upon the data he gave me I decided that they were in error.

Q. Did you select the caption "Charged in Error" which is the heading for two columns appearing on page 35 and the other pages all the way through, at least, page 45? A. You are speaking about the items as they appear here in this exhibit and not as they originally occurred in connection with the original cost study, I presume?

Q. That is right. A. Because I make a distinction of that type for this reason: Originally these items were discussed by Mr. Gunn, Mr. Luther, Mr. Wetzel and myself occasionally as they came up in connection with the original cost determination.

Mr. Gunn, along with counsel and myself, made the joint [14602] determination that all of these items that you see here in the K Schedules and in addition the ones which are set forth in Exhibit 51 in entries 18, 23 and 24 of that exhibit were in the nature of accounting errors, and that was the basis upon which I used the heading here, "Charged in Error" which you see in the K Schedules.

Mr. King: Of Exhibit 320?

The Witness: Of Exhibit 320.

* * *

[14605] Q. You spoke of the items being in the nature of accounting errors. What do you mean by "in the nature of accounting errors"? A. Simply that they were in error.

Q. You didn't say they were in error. You said they were in the nature of accounting errors. What does that mean? [14606] A. These items apparently were charged on Schedule K-1 starting on page 35. The items were charged to the reserve for depreciation or operating expenses instead of to electric plant.

Q. What enabled you to conclude that it was in error? So far I have not seen anything that is wrong. What made it in error? That is what I am trying to get at. A. Are you referring now to Schedule K-1?

Q. If you wish, you can talk about that one. That begins on page 35. A. That is right.

Based on the information on Schedule K-1, for example, the excess cost of the enamel signs over the estimated cost at current prices of varnished and baked signs being replaced in the amount of $336.24 should, at the time the cost was incurred in 1923, should have been charged to electric plant instead of the account "Reserve for Depreciation."

Q. Why? A. Because that is a proper place to have charged that type of cost.

* * *

[14614] HERBERT B. DORAU,

* * *

DIRECT EXAMINATION.

MR. HULL: Mr. Examiner, Dr. Dorau has been sworn and his qualifications are of record at transcript 797 to 801.

By MR. HULL:

Q. Dr. Dorau, do you have your rebuttal testimony before you? A. Yes.

Q. Were you supplied with a copy of the Commission Exhibits 59 and 61? A. Yes.

Q. Did you request the Pennsylvania Water & Power Company to classify its depreciable property according to the estimated lives offered in Exhibit 59? A. Yes.

* * *

[14619] TRIAL EXAMINER: The Examiner directs the witness to hand the Reporter a copy of the exhibit he has before him and the Reporter will mark it Exhibit 321 for identification.

(The document referred to above was received and marked for identification Exhibit 321.)

* * *

[14621] By Mr. Hull:

Q. Did you also request the company to prepare for you according to your specifications a distribution of property retirements as they would have taken place and would take place according to the life estimates as offered in Commission Exhibit 59, over the period 1911-2010? A. Yes.

Q. Did you also request and have prepared under your direction a calculation of the annual gross increment to a depreciation reserve on a straight line accrual basis using the estimated lives as set forth in Commission Exhibit 59 and the investment of the Company in depreciable plant by years from 1911 to December 1945 as determined by Commission Staff and a constant dollar investment balance from 1946 to 2010? A. Yes.

Q. In the preparation of the annual gross increment to a depreciation reserve on a straight line basis and other bases for which you used the investment of the company in depreciable plant what assumptions if any did you make as to the years subsequent to 1945? A. I assumed that retirements would be followed by replacements so as to maintain a constant investment balance by years for the period 1946-2010.

Q. Where are the results of these calculations set forth? [14622] A. On Exhibit page A-1 of my exhibit (Company Exhibit No. 321).

Q. Will you explain the tabulation on exhibit page A-1? A. Column 1 of this tabulation records a 100 year period set forth as years 1 to 100. Year 1 is 1911 and year 100, the year 2010.

Column 2 sets forth the cumulative retirements of depreciable property by years on the basis previously explained.

Q. I notice that the total in Column 2 reaches $30,129,460 in the 100th year, a sum in excess of the investment in depreciable property. Why does this occur? A. By the year 2010 and, in fact to some extent before, shorter lived property will have gone through one or more life

cycles of investment, retirement and replacement and thus appear more than once in the gross cumulative total by years.

Q. Will you continue with your explanation of the tabulation on exhibit page A-1? A. The third column on exhibit page A-1 reduces the cumulative accrual of retirements as forecast by Commission Exhibit 59 to a percentage basis with the total at the 100th year as 100 per cent.

The purpose of reducing the cumulative gross retirement forecast to an index is to afford comparison with the rate of accrual of a so-called depreciation reserve on the [14623] alternative bases indicated in columns 4, 6, 8 and 10 of this tabulation.

Reference to column 3, (the cumulative per cent accrual of estimated retirements) indicates that after an elapse of 43 years, 43 per cent of the period, less than 1 per cent (.75) of the anticipated retirements will have taken place and that after 50 years, i.e., an elapse of half the period, only 8.32 per cent of the retirements estimated to occur in 100 years will have taken place. Even after 75 years, an elapse of three quarters of the period, less than 50 per cent of the estimated 100 year retirements will have taken place.

Q. What significance do you attach to the rate at which estimated retirements actually accumulate? A. The rate of accumulation of retirements of the property of this company is very slow, a large part of the investment consists of long lived property so that the average estimated life is long and the date at which the liability to retire and replace matures is very remote. The economic significance of such a liability decreases with futurity and thus the bases of reserve accrual which, although wrong in principle may be practical enough when applied to short lived property, lead to economically absurd results when applied to long lived property and wholly unreasonable consequences when applied to such extremely long lived [14624] property as that of a hydro-electric establishment.

Q. Have you determined the average estimated life of the dollar investment in the depreciable property of Pennsylvania Water and Power Company? A. Yes, the dollar weighted estimated life (using the estimates of Commission Exhibit 59) and the 1945 investment of $26,718,506 was 64 years.

Q. Have you prepared a distribution of the $26,718,506 1945 investment in depreciable property by estimated life expectancy? A. Yes, the distribution in dollars and per cent, cumulative and non-cumulative is as follows:

	Invested Dollars		Percentage	
Group	Group	Cum.	Group	Cum.
100 yrs.	3,558,389	3,558,389	13.32	13.32
75 yrs.	5,729,951	9,288,340	21.45	34.77
70 yrs.	5,123,481	14,411,821	19.18	53.95
65 yrs.	221,324	14,633,145	0.83	54.78
60 yrs.	114,831	14,747,976	0.43	55.21
55 yrs.	3,282,026	18,030,002	12.28	67.49
50 yrs.	1,448,397	19,478,399	5.42	72.91
45 yrs.	3,371,582	22,849,981	12.62	85.53
40 yrs.	1,234,316	24,084,297	4.62	90.15
35 yrs.	1,854,062	25,938,359	6.94	97.09
30 yrs.	644,222	26,582,581	2.41	99.50
[14625]				
25 yrs.	118,244	26,700,825	0.44	99.94
15 yrs.	17,681	26,718,506	0.07	100.0
Total	26,718,506		100.00	

Q. Will you continue with your explanation of the tabulation on your exhibit page A-1? A. In column 4 under the heading "straight line"—"dollars" there are set forth by years the accumulated amounts which would accrue on a straight line basis and on the basis of the life estimates of Commission Exhibit 59 applied to the investment made by Pennsylvania Water & Power Company.

The same accumulation on a percentage basis is set forth in column 5.

The accumulated totals in columns 2 and 4 may be compared and the relative rate of accumulation may be compared by reference to columns 3 and 5. Such comparisons will indicate for example that,

At the end of 43 years 34 per cent of the gross accruals will have been accumulated but only .75 of one per cent of the retirements will have been made and that even,

At the end of 61 years when 25 per cent of the retirements will have accumulated, over 55 per cent of the gross reserve accumulations will have accrued.

[14626] In columns 6 and 7 similar information is set forth for a 3 per cent interest basis, in columns 8 and 9 for a 4¼ per cent interest basis and in columns 10 and 11 for a six per cent interest basis.

Comparisons may be made on an absolute or percentage basis. Such comparisons disclose the high and rapid rate of accumulation of the accruals on a straight line basis when compared with either the accumulated volume or relative rate of retirements or the accumulated accruals on any of the interest bases. Thus for example after 43 years when,

34.29 per cent of the straight line accrual will have been accumulated, and only

.75 per cent of the retirements will have been accumulated,

23.92 per cent of the reserve accrual on a three per cent basis will have been accumulated and

20.47 per cent on a 4¼ per cent basis and

16.66 per cent on a six per cent basis,

the accumulated reserve on a three per cent basis will be $8,950,907 as compared with $13,842,846 on the straight line basis and $7,467,502 on a 4¼ per cent basis and $5,902,808 on a six per cent basis.

Q. Have you prepared a chart setting forth the relationship indicated on exhibit page A-1? A. Yes. It appears on exhibit page A-2 of this same [14627] exhibit.

Q. Will you briefly explain the chart on exhibit page A-2 of your exhibit? A. This chart sets forth graphically the facts developed in the tabulation on exhibit page A-1.

It may be readily observed that,

(1) through the first 40 years of the life of the property the proportion of the retirements which would take place according to the life estimates of Commission Exhibit 59 is insignificant and relatively inconsequential and that,

(2) the relative accumulation of gross increment to a reserve to meet the cost of such estimated retirements on the 3, 4¼, and 6 per cent accelerates more rapidly than and remains relatively well ahead of the gross increment of retirements but

(3) that the gross accrual on a straight line basis far exceeds in relative rate of accrual even that of the gross accrual on a three per cent interest basis and is absurdly in excess of the rate at which retirements are estimated to accrue and that,

(4) obviously the use of a common percentage scale eventually brings the several curves together [14628] at the 100 year point since the several totals are each treated as 100 per cent in the 100th year.

How different the absolute totals of accumulated retirements and the gross totals of reserve accruals on the various bases remain even after 100 years will be developed in later tables and charts.

Q. Are these relationships further developed and set forth in the chart on exhibit page A-3? A. Yes.

Q. Will you briefly explain the chart on exhibit page A-3? A. The chart on exhibit page A-3 differs from the one on exhibit page A-2 in that the vertical scale is in per cent rather than dollars. There are plotted against the same horizontal scale of 100 years the absolute dollar

values set forth in the table on exhibit page A-1, columns 2, 4, 6, 8 and 10.

Examination of the chart on exhibit page A-3 indicates that,

(1) the absolute gross accumulation of estimated retirements is inconsequential for more than 40 years from inception, and that,

(2) the absolute gross accumulation of accruals on each of the alternative bases of [14629] reserve accrual is far in excess of the accumulated retirement requirements and that,

(3) the absolute gross accumulation of a reserve on the straight line basis at all times far exceeds the estimated cumulative retirements and is in excess of the estimated accumulated retirements after 100 years by more than 10 million dollars and in other years by the following amounts,

90th year	$13,367,330
80th year	15,460,640
70th year	14,782,256
60th year	14,465,007
50th year	14,594,603
40th year	12,289,035

(4) the accumulated gross accruals to the reserves on the several interest bases in each instance and at all times are in excess of the estimated accumulated retirements by a wide margin of safety which in the case of the three per cent interest basis exceeds the estimates of accumulated retirements in certain years by the following amounts:

	100th year	$ 7,296,114
	90th year	10,297,153
[14630]	80th year	11,613,702
	70th year	10,494,969
	60th year	9,781,073
	50th year	9,743,903
	40th year	7,513,521

Q. What is the purpose of the tabulation on exhibit page A-4? A. This tabulation sets forth the same facts as to estimated accumulated retirements and reserve accrual on the several indicated bases for the period 1946 to 2011. It differs in scope from the tabulation on exhibit page A-1. The accumulated absolute amounts and percentages are related to the calendar years indicated in column 1. The tabulation conveniently supplies the basis for the chart on exhibit page A-5.

Q. How does the chart on exhibit page A-5 differ from the one on exhibit page A-2? A. It is a cumulative percentage chart as the one on exhibit page A-2 but limited to the period 1946-2010, the horizontal scale is in calendar years. The larger horizontal scale is easier to read. The comparisons to be made are the same as on the chart on exhibit page A-2 and the same conclusions are appropriately drawn.

Q. Describe briefly the character and purpose of the tabulation on exhibit page A-6. [14631] A. The purpose of this tabulation is to afford ready comparisons between the investment in depreciable property and the reserve balances which would maintain on the basis of the life estimates of Commission Exhibit 59.

The assumptions on which the tabulations on exhibit page A-6 were developed are the same as those made in connection with the tabulation on exhibit page A-1. From 1945 a constant investment is assumed to result from replacement of retirements at an equal cost.

The tabulation on exhibit page A-6 can be related to the tabulations on exhibit page A-1. The difference between the cumulative estimated retirements of $30,129,460 after 100 years as set forth on exhibit page A-1 and the stabilized investment of $26,718,502 as set forth on exhibit page A-6 after 1945 represents the total of predicted retirements. The difference between the accumulated estimated retirements of $30,129,460 and the accumulated straight line reserve accrual of $40,367,910 ($10,238,450)

is obviously the balance which would be found in a straight line accrued reserve under these same assumptions and circumstances as set forth in column 3 of the table on exhibit page A-6 at the 100 year level.

Similarly the reserve balances as set forth in columns 5, 7 and 9 are the same as the differences between the accumulated totals of estimated retirements as set forth in [14632] column 2 of exhibit page A-1 and columns 6, 8 and 10 of the same tabulation.

The relationships between the investment in depreciable property and the reserve balances on the various indicated bases of accrual are most readily observed by reference to columns 4, 6, 8 and 10 which set forth the percentage relationships between the reserve balances and the investment in depreciable property. It may thus be noted that,

(1) the highest ratios, for the first 100 years are reached on each basis at the end of the 82nd year when,

(a) the reserve balance on a straight line basis reaches 60.4 per cent

(b) on a three per cent interest basis 46.6 per cent

(c) on a 4¼ per cent interest basis 41.4 per cent

(d) on a six per cent interest basis 35.3 per cent.

The high relatively sustained level is reached as early as the 48th year with a 56.2 per cent reserve ratio on the straight line basis, 37.9 per cent on a 3 per cent basis, 32.1 on a 4¼ per cent basis and 26.0 per cent on a six per cent basis.

[14633] During the last 52 years of the 100 year period the average ratio of year end balances to the investment in depreciable property would be as follows:

on the straight line basis—54.1 per cent
on the 3 per cent interest basis—39.1 per cent
on the 4¼ per cent interest basis—33.9 per cent
on the 6 per cent interest basis—28.1 per cent

This means that a reserve accrued on a straight line basis would on the average for a consecutive 52 years exceed 50 per cent of the investment in depreciable property, and that even on a three per cent interest basis the reserve would stand at an average of almost 40 per cent of the investment in depreciable property for more than half a hundred years.

High average ratios of reserve balance to depreciable property will also maintain from 1945 through 1957. The average ratios of reserve balances to investment in depreciable property for the year period 1945-1957 on the several bases would be as follows:

on the straight line basis—47.9 per cent
on the 3 per cent interest basis—30.0 per cent
on the 4¼ per cent interest basis—24.6 per cent
on the 6 per cent interest basis—19.0 per cent.

Q. Does the chart on exhibit page A-7 set forth the [14634] facts tabulated on exhibit page A-6? A. Yes.

Q. Will you briefly point out the more significant relationships set forth on this chart? A. The chart on exhibit page A-7 records the percentage relationship of the reserve balances on various bases to the investment in depreciable property as set forth in columns 4, 6, 8 and 10 of the tabulation on exhibit page A-6.

It visualizes the rapid use of reserve balance ratios for the first 48 years and the striking rapid use of the ratio of the straight line reserve balance to the investment.

It is also clearly indicated and observable that the ratio of the reserve balances on the several bases remain high and relatively stable for a period of 40 years following the rapid rise of the first 48-50 years and that the ratio of the straight line reserve balance holds at an ex-

ceptionally high level as compared with the ratios of reserve balance found on the 3, 4¼ and 6 per cent bases.

The substantial extent to which the reserve balance on the straight line basis exceeds that on the interest bases can readily be observed from the chart on exhibit page A-7. From the tabulation on exhibit page A-6 it may be determined that the annual reserve balance on the straight line basis exceeds that which would maintain on the several interest bases by the following amounts, at five year intervals:

[14635] Reserve Balance on Straight Line Basis Exceeds Balance on

Year	3% Basis	4¼% Basis	6% Basis
1945	4,456,381	5,730,750	7,030,413
1950	4,826,367	6,268,183	7,777,382
1955	4,915,061	6,435,033	8,051,959
1960	4,834,642	6,372,619	8,024,360
1965	4,699,148	6,233,115	7,893,317
1970	4,666,761	6,244,223	7,988,841
1975	4,477,622	6,038,095	7,796,113
1980	4,248,697	5,768,378	7,511,193
1985	4,013,324	5,480,172	7,194,768
1990	3,774,786	5,177,537	6,852,468
1995	3,371,402	4,617,230	6,113,193
2000	3,037,521	4,120,184	5,403,100
2005	2,946,871	3,940,102	5,087,196

Q. What general conclusion do you draw from the facts as developed in the tabulations and charts on exhibit pages A-1 to A-7, inclusive? A. The conclusions indicated by the facts alone are that,

(1) the estimated life of the depreciable property of Pennsylvania Water & Power Company is extremely long,

(2) the estimated life of a large proportion [14636] of the depreciable property of Pennsylvania Water & Power Company is beyond the limits of nor-

mal human discountability and calculation, i. e., beyond 40 and 50 years.

(3) accrual of a reserve to provide for the retirement of property at cost on a straight-line basis for such long life property results in the accumulation of a very large balance for very long periods of time (50 years and more) in excess of the cost of retirements, and that

(4) accrual of a reserve to provide for the retirement of property at cost on a 3 per cent interest basis for such long life property also results in the accumulation of a very large balance for very long periods of time in excess of the cost of retirements.

And furthermore as a matter of professional opinion I conclude that,

(1) the accrual of a reserve for the retirement at cost of depreciable property of such exceedingly long life on a straight-line bookkeeping basis results in an economic absurdity,

(2) the accumulation of a reserve against anticipated retirements more than 50 years in the future serves no practical or necessary business [14637] purposes,

(3) a basis of reserve accrual which results in an average reserve to investment ratio of 50 per cent for a future period of 50 years duration fails, by the test of common sense and end result, to establish a functional relationship to any necessary economic end, and that,

(4) a 3 per cent interest basis results in the accumulation of yearly and average reserve balances more than adequate to serve necessary economic ends and provide for the retirement of property at cost with a wide margin of excess of reserve for long periods of years.

Q. Did you make a determination of the number of years of future retirement liability, at cost of property, which the reserve balances accrued on a straight line, 3, 4¼ and 6 per cent interest bases would provide? A. Yes. The results are set forth in the tabulation on exhibit page B-1 and in graphic form in the chart on exhibit page B-2.

Q. Will you explain this tabulation on exhibit page B-1 and the chart on exhibit page B-2? A. The tabulation on exhibit page B-1 sets up opposite each year the number of years of future estimated retirements [14638] which the reserve balance as of the end of the indicated year will provide. Thus as of 1951 the reserve balance on a straight-line basis is equal to the total of the estimated retirements for the next 33 years or until 1984, on a 3 per cent interest basis the reserve balance would be equal to the retirement requirements for the ensuing 21 years or until 1972, on a 4¼ per cent interest basis the reserve balance would be equal to the retirement requirements for the ensuing 16 years or until 1967 and on the 6 per cent interest basis the reserve balance would be equal to the estimated retirement requirements for the ensuing 13 years or until 1964.

It should be obvious that this calculation does not include the continuing accruals on the several bases during the periods mentioned. This is clearly indicated by reference to the advance or subsequent years of retirements which the reserve balance at the end of the selected periods would still cover, thus,

(1) the reserve balance on the straight-line basis as of 1951 equals the retirement requirements for 33 subsequent years or until 1984 but by reference to 1984 it will be found that the estimated reserve balance is again adequate to meet the estimated requirements for the next 25 years,

(2) the reserve balance on the 3 per cent [14639] basis as of 1951 equals the retirement requirements for 21 subsequent years or until 1972, but by reference to

1972 it is found that the estimated reserve balance is again adequate to meet the estimated retirements for the next 21 years,

(3) the reserve balance on the 4¼ per cent interest basis as of 1951 equals the retirement requirements for 16 subsequent years or until 1967, but by reference to 1967 it will be found that the estimated reserve balance is then again adequate to meet the estimated retirements and then for the ensuing longer period of 17 years,

(4) the reserve balance on the 6 per cent interest basis as of 1951 equals the retirement requirements for 13 subsequent years or until 1964, but by reference to 1964 it will be found that the estimated reserve balance is then again adequate to meet the estimated retirements for the ensuing larger period of 15 years.

It may be noted that the calculations of the years of future retirement liability coverage which the various bases provide end at different years. The calculations for the straight-line bases in 1988, the 3 per cent interest basis [14640] in 1996, the 4¼ per cent interest basis in 1998 and the 6 per cent basis in the year 2000. In each instance calculations were discontinued when the number of future years coverage carried through the year 2010, the end of the 100 year period, the longest estimated life of any depreciable property class, thus by 1988, the reserve balance without reference to any additional credits would be sufficient to meet retirements through the year 2010 and similarly for the results on the other bases of accrual. Thus by 1988 the straight-line basis has accrued a sufficient balance to carry retirements through the period ending with 2010. Any accruals during the subsequent 22 years would provide an excess balance as of the year 2010. Similarly the 3 per cent, 4¼ per cent and 6 per cent interest bases would have provided the entire estimated retirement requirements respectively by 1996, 1998 and 2000 and similarly any addi-

tional reserve accruals would constitute excess balances at the year 2010.

A further basis of comparison of the results of the use of the alternative bases of reserve accrual may be provided by averaging the subsequent years of retirement requirements provided by the several bases of reserve accrual.

Limiting the period to the years 1911 through 1988 at which time the straight-line basis has accrued enough to carry retirements through the year 2010, it is found that [14641] the average years of subsequent retirements provided in advance are,

on the straight-line basis—31.8 years.
on the 3 per cent interest basis—24.6 years.
on the 4¼ per cent interests basis—23.2 years.
on the 6 per cent interest basis—19.2 years.

The chart on Exhibit page B-2 sets forth the relationships indicated by the tabulation on exhibit page B-1 graphically.

Q. What conclusions do you draw from the facts developed in and derived from the tabulation on exhibit page B-1? A. The number of future years of estimated retirements which would accrue on the straight-line basis is substantially in excess of the years of future retirements which would be accrued on the 3 per cent interest basis and far in excess of the years of retirement requirements which would be provided on the 4¼ and 6 per cent interest bases.

The facts developed in the tabulation on exhibit page B-1 further support my opinion and conclusion that the degree to which the reserve balance accrued on a straight-line basis in number of dollars and years of future retirement liability anticipate the possible need for retirement at cost, serves no useful economic purpose and that the degree to which a reserve accrued on a 3 per cent interest basis provides for and anticipates future liability to retire [14642] depreciable property at cost is fully adequate to serve all useful economic purposes.

Q. Have you prepared a comparison between the estimated retirements at cost of depreciable property to Pennsylvania Water & Power Company for moving 5 and 10 year periods ahead from each year from 1911-2010 and the reserve balances which would have been accrued on the straight line, and on the 3, 4¼ and 6 per cent bases? A. Yes, the results of the calculations of the retirement requirements for 5 and 10 year periods in advance from each year 1911-2010 are presented in the tabulation on exhibit page C-1 and graphically compared on exhibit page C-2 with the reserve balances which would result on the several bases as previously set forth in the tabulations on exhibit page A-6.

Q. Will you briefly explain the tabulation on exhibit page C-1 and the chart on exhibit page C-2? A. The tabulation on exhibit page C-1 consists of two parts, the first four columns accumulate the estimated retirements for moving 5 year periods and the second four columns for moving 10 year periods, thus for the five year moving period 1954-59 it would develop on the basis of the life estimates of Commission Exhibit 59, that $1,875,342 dollars of liability to retire would mature and that for the ten-year period 1954-64 on the basis of the same estimates, [14643] liabilities to retire $3,842,163 would mature and similarly for each 5 and 10 year moving period.

The purpose of these calculations is to provide a basis for comparison and a standard of adequacy of the reserve balances accumulated on the several bases previously calculated and set forth as is done in the chart on exhibit page C-2.

Reference to the chart on exhibit page C-2 discloses the extent to which the reserve balances (see tabulation on exhibit page A-6) on the several indicated bases exceed the liabilities to retire at cost for periods of five and ten years ahead.

Comparison of the estimated retirements for a moving five-year period with the reserve balances on the sev-

eral bases for each year of the 100 year period 1911-2010 indicates that on each and every one of the reserve accrual bases the balances far exceed any requirements and that the balances on the straight-line basis are many times the requirements at all times and literally huge by comparison.

It is also to be observed that the accrued net balance on the three per cent interest basis is substantially in excess of both five and ten year moving period estimated retirements and that only the reserve balance on a six per cent basis is ever low enough to approach the retirement needs for ten future years and that not until the 90th year. [14644] Q. Have you made calculations to determine the comparative rate base levels and stability resulting under alternative treatment of depreciation reserve balances accrued on the several alternative bases? A. Yes, I have made such calculations and determinations. The results are reflected in the tabulations on exhibit pages D-1 and D-2 and cartographically set forth in the chart on exhibit page D-3.

Q. Will you explain the tabulation on exhibit page D-1? A. The tabulation on exhibit page D-1 is set forth in parallel columns by years for the period 1946 to 2010. In column 2 there is set forth for each year the total investment, being the total plant investment at cost as of January 1, 1946, plus $620,000 of working capital. It is assumed that retirements will be followed by replacements and that the total investment will thus remain constant over the entire period. Column 3 sets forth the difference between the investment and the year end balance in the depreciation reserve accrued on a straight-line basis. Columns 4, 5 and 6 are the differences between the total investments as set forth in Column 1 and the depreciation reserve balances accrued respectively on a 3 per cent, 4¼ per cent and 6 per cent basis.

For purposes of establishing the comparative level and stability of rate bases which would result under alternative [14645] treatment of depreciation reserve balances, the figures in column 2 under the heading "Total Investment"

are accepted to reflect the rate base under a nominal dollar investment standard with sinking fund provision for the cost of depreciable assets at retirement, the figures in column 3 as a rate base determined by deducting the straight-line accrued depreciation reserve balances from the total investment, the figures in column 4 as a rate base resulting from the deduction of the depreciation reserve balances accumulated on a 3 per cent compound interest basis, similarly the totals in column 5 reflect a rate base resulting from the deduction of depreciation reserve balances accrued on a 4¼ per cent compound interest basis, and similarly the figures in column 6 reflect a rate base which would result from the deduction of depreciation reserve balances accrued on a 6 per cent compound interest basis from the total investment.

Only on the nominal dollar investment standard does the rate base remain constant. The total investment less straight-line accrued depreciation reserve balances set forth in column 3 fluctuates widely from a high of $23,545,830 in 1946 to a low of $17,405,925 in 1993, a range of $6,140,000. The total investment less the depreciation reserve balances accumulated on a 3 per cent compound interest basis set forth in column 4 fluctuates from a high of $27,895,315 in 1946 to a low of $21,095,006 in 1993, a range of $6,800,000. The [14646] total investment less the depreciation reserve balance accumulated on a 4¼ per cent compound interest basis set forth in column 5 fluctuates from a high of $29,127,407 in 1946 to a low of $22,467,037 in 1993, a range of $6,660,000. The total investment less the depreciation reserve balances accumulated on a 6 per cent compound interest basis set forth in column 6 fluctuates from a high of $30,376,471 in 1946 to a low of $24,108,754 in 1993, a range of $6,268,000.

The full range of fluctuation and comparative subsequent rate base levels can only however be appreciated when the rate bases determined by reserve balance deduction are compared with the total investment. Thus the

low of $17,405,925 in 1993 on the straight line basis which was found to be $6,140,000 below the 1946 level on the same basis, is $16,134,813 below the investment made.

Fluctuations in dollar amounts under the 3, 4¼ and 6 per cent compound interest bases increase as the interest factor used decreases thus are least on the 6 per cent compound interest basis (21 per cent), next lowest is on the 4¼ per cent interest basis (23 per cent), higher for the 3 per cent compound interest basis (24 per cent), but highest on the straight line basis (26 per cent).

After reaching their respective lows in 1993 the fluctuating straight line and compound interest rate bases again [14647] rise to secondary highs in the year 2007 with $21,756,321 for the straight line basis, $24,703,192 for the 3 per cent compound interest basis, $25,696,423 for the 4¼ per cent compound interest basis, and $26,843,517 for the 6 per cent compound interest basis. These secondary highs are exceeded only by the rate bases prior to 1950 in the case of the straight line basis, prior to 1954 in the case of the 3 per cent compound interest basis. Only back as far as 1970 would the balance on the 4¼ per cent compound interest basis fall below the secondary high of $25,696,423 in the year 2007. Similarly with respect to the 6 per cent compound interest basis, it may be observed that the secondary high of $26,843,517 in the year 2007 was last previously reached or exceeded in 1971.

In order to afford ready comparison among and between the rate base levels which would maintain under the assumed treatment of depreciation reserve balances on a sinking fund, a straight-line basis and the compound interest bases at 3, 4¼ and 6 per cent their comparative magnitudes are reduced to a percentage relationship in the tabulation on exhibit page D-2. The sinking fund rate bases being a constant amount is treated as 100 per cent. The comparative magnitudes of the presumptive rate bases under the straight line and compound interest bases are represented as percentages of the total investment.

[14648] On the basis of the life estimates of Commission Exhibit 59 a rate base determined by the deduction of straight line accrued reserve balances from the investment would give a rate base for 1946 of only 70.2 per cent of the investment. Assuming deduction of depreciation reserve balances accrued on a compound interest base at 3 per cent the rate base would be only 83.2 per cent of the actual investment, accrued on a 4¼ per cent interest basis and deducted from the investment the resulting rate base would be 86.8 per cent, and accrued on a 6 per cent compound interest basis, deduction of the depreciation reserve balance would leave a rate base of 90.6 per cent of the investment.

The maximum reserve balances are found to develop by 1993. In that year the investment less a straight accrued reserve balance would leave a rate base of only 51.9 per cent of the actual investment. A deduction of a depreciation reserve balance accrued on a 3 per cent compound interest basis would leave a rate base of only 62.9 per cent of the investment. A deduction of a depreciation reserve balance accrued on a 4¼ per cent compound interest basis would leave a rate base equal to only 67 per cent of the investment, and a deduction of a depreciation reserve balance accrued on a 6 per cent compound interest basis would leave a rate base equal to only 71.9 per cent of the investment in 1993.

[14649] On the average over the period 1946 to 2010 the deduction of the reserve accrued on a straight-line basis would result in an average rate base of only 58 per cent of the total investment. Similar average relationships to the total investments on the compound interest basis at 3 per cent would be 70 per cent, on 4¼ per cent basis would be 75 per cent, and on the 6 per cent basis would be 79 per cent.

The comparative levels and the character and extent of the fluctuations in the rate bases resulting from the alternative treatment of depreciation reserve balances ac-

crued on 3, 4¼ and 6 per cent compound interest and the straight-line bases are graphically set forth in the chart on exhibit page D-3. In contrast with the constant investment rate base associatable with use of the sinking fund provision for depreciation, the bases of rates associated with compound interest and straight-line accruals for depreciation fluctuate frequently and substantially. The rapid decline in the bases of earnings in the ten years 1946-1956 is particularly noticeable. Three general levels are clearly discernable, the sinking fund basis reflecting 100 per cent of the investment remaining constant throughout the period, the straight-line basis falling sharply to 1956 and remaining characteristically well below 60 per cent of the investment is at the low extreme. The 3, 4¼ and 6 per cent compound interest bases follow the middle ground, holding most [14650] characteristically at a level representing from 70 to 80 per cent of the investment.

Q. What conclusions would you draw from the tabulations on exhibit pages D-1, D-2 and the chart on exhibit page D-3? A. I conclude that the accrual of a depreciation reserve on a straight-line basis for long life property such as that of the Pennsylvania Water and Power Company and the treatment of such a huge reserve balance as an item deductible from the investment for rate base purposes, results in an arbitrarily deflated and highly fluctuating rate base and imposes a responsibility on the enterprise of employing the assets reflecting such depreciation reserve balances by the assumption of additional risks, hazards and uncertainties if the company is to maintain a fair rate of earning power on its investment. I conclude further that on the assumption that depreciation reserve balances are to be deducted from the nominal dollar investment in utility property that the method of accrual which results in the smaller reserve balances imposes the least in the way of an unfair burden upon the investment. In my opinion these tabulations set forth clearly the reasons why the application of any method of

accrual such as the straight-line basis operates absurdly and unfairly in a case of enterprises having a large proportion of exceedingly long lived property.

[14651] Q. Have you made a determination of the annual rates of return actually earnable on the total investment in property assuming an intended 6½ per cent fair rate of return, deduction of depreciation reserve balances accrued on a straight-line basis and retirements of property on the basis of the life estimates as indicated in Commission Exhibit 59? A. Yes, I have calculated what the annual rates of return actually earnable would be for every 10th year 1946-2005 and for the year 2010 on the total investment in the rate base. I have also calculated the average cumulative rates of return for various periods ending by selected years 1946-2010. The results of these calculations are presented in the two tabulations on exhibit page E-1.

Q. Will you briefly explain the statistical tabulations on exhibit page E-1? A. There are two tables on exhibit page E-1. The first sets forth the annual rates of return actually earnable; the second sets forth the average cumulative rates actually earnable over selected periods of years. With respect to the first tabulation which has been limited to the year 1946 and every 10th year to the year 2005 and the year 2010 for the sake of brevity, column 2 sets forth the total investment in the rate base. This total is developed on the assumption that property retirements would be followed by property replacements and that no expansion of plant took place. [14652] Consequently the total investment in the rate base remains constant throughout the period and for each year. The third column records the accumulated depreciation reserve balance which would have developed on a straight-line basis using the life estimates indicated by Commission Exhibit 59.

The 4th column records the difference between column 2 and column 3, namely the investment less the depreciation reserve.

The fifth column records the number of dollars which would constitute a 6½ per cent return on the investment.

The sixth column records the number of dollars which constitute a 6½ per cent return on the investment less the reserve, that is the sums in column 4.

The seventh column records the amount by which a 6½ per cent return on the investment less the reserve would fail to equal the intended 6½ per cent return on the amount actually invested.

Column 8 records the percentage relationship between the sums in column 6 and the investment in the rate base as indicated in column 2.

Column 9 is the difference between the rate actually earned as indicated in column 8 and the intended 6½ per cent rate of return.

Columns 10 and 12 record the rate of return which would be earned on the total investment assuming that the rate [14653] earned as indicated in column 8 were supplemented in the first instance by average earnings of 2 per cent on the assets reflected by the reserve balance, and in the second instance if supplemented by 3 per cent earnings on the assets reflecting the reserve balance.

Columns 11 and 12 indicate the deficiency in rate of return as against 6½ per cent if 2 per cent and 3 per cent respectively were earned on the assets reflecting the depreciation reserve balance.

Reference to column 7 will indicate that the deficiency in return falls between $649,669 and $1,006,972, and that these deficiencies in return reduce the rate actually earnable on the actual investment to 4.56 per cent in 1946 which is 1.94 per cent return less than the assumed intended 6½ per cent rate of return. Again for example in 1985 with a deficiency in return of more than $1,000,000, the actual rate of return earnable would be only 3½ per cent, a full 3 per cent less than the assumed intended 6½ per cent rate of return.

When it is assumed that the utility enterprise could obtain a 2 per cent or a 3 per cent return on the assets reflecting the depreciation reserve balance without the as-

sumption of additional risks, hazards and uncertainties, the deficiencies in the over-all rate of return earned would become somewhat less, thus if the return of 4.56 per cent in 1946 can be supplemented by 2 per cent earnings on assets reflecting the depreciation reserve balance the actual [14654] return would increase to 5.16 per cent, a rate of return however 1.34 per cent below the intended 6½ per cent rate of return. Similarly if it were reasonable to assume that the enterprise could earn 3 per cent on the assets reflecting the depreciation reserve balance the over-all rate of return earned on the utility rate base plus the earnings on the investment or employment of assets reflecting the depreciation reserve balance, the rate of return would rise to 5.45 per cent but still 1.05 per cent below the intended 6½ per cent rate of return.

Analyzing the results for a year such as 1985 in a similar manner we find that the rate of return earnable on the total investment of 3.50 per cent would be increased to 4.42 per cent if 2 per cent could be earned on the assets reflecting the depreciation reserve balance and to 4.89 per cent if the assets reflecting the depreciation reserve balance could be assumed to earn 3 per cent without imposing on the enterprise additional risks, hazards and uncertainties.

It may be noted also that the actual rates of return earnable in the various years sampled would fluctuate widely from year to year.

The second tabulation on exhibit page E-1 makes a similar type of comparative analysis. It differs in that the results determined are cumulative for the periods selected rather than for particular years as above. The column [14655] headings are the same, the procedure is the same. The periods selected after 1946 are a five-year period 1946-51, a ten-year period 1946-55, a fifteen-year period 1946-59, and so on at five-year progressions until the entire period 1946-2010, covering the balance of the assumed maximum 100-year cycle is cumulated. The period

over which the lowest average rate of return would be earned is 1946-1998. An intended 6½ per cent rate of return would, under the assumptions previously set forth, yield only 3.72 per cent on the average investment in the rate base. If 2 per cent could be earned on the assets reflecting the depreciation reserve balance the average rate would be increased to 4.58 per cent and if 3 per cent could be assumed earnable on the assets reflecting the depreciation reserve balance, without the imposition of additional risks, hazards and uncertainties on the enterprise, a five per cent rate of return would be earned, which five per cent is however 1½ per cent below the assumed actually intended fair rate of return.

Q. Have you made a similar determination of the annual rates of return actually earnable on the compound interest bases at three per cent, 4¼ per cent and six per cent? A. Yes, such calculation has been made on both an annual and a cumulative period basis. The results on an annual basis for every tenth year 1946-2005 and for the year 2010 are set forth on exhibit page E-2 and cumulatively on [14656] exhibit page E-3. The assumptions made in connection with the tabulations on exhibit page E-2 are the same as those made in connection with the tabulations on exhibit page E-1. The difference between E-1 and E-2 and E-3 is simply the substitution of the compound interest bases for the straight-line basis of accrual in connection with the tabulations on exhibit pages E-2 and E-3. The tabulation on exhibit page E-2 is in three parts in order to set forth results under the three alternative assumptions of compound interest at 3 per cent, 4¼ per cent and at 6 per cent.

The results indicated by columns 8, 10 and 12 under the heading "Compound Interest at 3 Per cent" disclose that the intended fair rate of return of 6½ per cent could not actually be earned under any of the assumptions and conditions set forth. The nearest approach to earning the 6½ per cent intended rate of return would be in 1946 on the

compound interest basis at 6 per cent. On the assumption that 3 per cent could be earned on the assets reflecting the depreciation reserve balance, the earning rate of 6.17 per cent is still .33 per cent below the intended fair rate of return of 6½ per cent.

It is noted as observed above that the rates of return actually earnable on the various bases and under the several assumptions vary markedly from year to year. It is also appropriately observed that the selection of compound interest [14657] bases at 3 per cent, 4¼ per cent or 6 per cent makes a significant difference in the rate of return earnable on the investment.

The tabulation on exhibit page F-3 sets forth the results as the actually earnable rate of return and the deficiency in the return under the alternative conditions and several assumptions previously enumerated for various periods of years by five-year increments from 1946-2010. Taking the period 1946-1951 as an illustration it is found that after assuming that the assets reflected by the reserve balance could earn 3 per cent without imposing additional risks, hazards and uncertainties on the enterprise, the overall rate of return earnable on the total investment would still be .69 per cent short of the intended 6½ per cent fair rate of return on a 3 per cent compound interest basis, and that similarly on a 4¼ per cent compound interest basis there would still be a deficiency of more than .54 per cent, and that on a 6 per cent compound interest basis there would be a deficiency of .4 of one per cent.

It will be observed that the results for the five-year period 1946-1951 are better than those for any other period. Looking at the longer term, 1946-2010, and assuming 3 per cent earned on the assets reflecting the depreciation reserve balance the deficiency on a 3 per cent compound interest basis is over 1 per cent and similarly on a 4¼ per cent [14658] compound interest basis is .9 of one per cent and a 6 per cent compound interest basis is .73 per cent.

It is immediately observable that when the tabulations on exhibit pages E-2 and E-3 are compared with those on exhibit page E-1 the use of the compound interest basis of accrual at 3 per cent, 4¼ per cent and 6 per cent does not impose anywhere near the penalty on the investment which is exacted by the employment of the straight-line basis of accrual and reserve balance deduction for rate base purposes.

Q. Have you also made a tabulation and calculation of rates of return actually earnable and the deficiency in the return if any on the sinking fund basis? A. Yes, I have made such calculations and prepared the tabulation set forth on exhibit page E-4 for every tenth year, 1946-2005, and the year 2010 and also a tabulation on exhibit page E-5 cumulating the results over selected periods of time.

Q. Will you briefly explain the tabulation on exhibit page E-4? A. The form and procedure that is involved in the tabulation on exhibit page E-4 is identical with that used in the upper half of the tabulation on exhibit page E-1 and the tabulation on exhibit page E-2. The differences to be noted are that the reserve accrual is assumed to take place on a sinking fund basis at 3 per cent, 4¼ per cent and [14659] 6 per cent, and that instead of deducting accumulated reserve balances from the investment for rate base purposes the interest component is made an annual credit to the depreciation reserve and a deduction from the amount which constitutes a 6½ per cent return on the investment.

It will be immediately observable that under the sinking fund basis at 3 per cent and under the assumption that the assets reflected by the depreciation reserve balance will earn 3 per cent the full intended fair rate of return of 6½ per cent is actually earnable. If less than 3 per cent is actually earnable the sinking fund basis at 3 per cent results in a deficiency in the rate of return earned as indicated in columns 9 and 11. It becomes equally apparent therefore also that the use of the sinking fund basis at 4¼ per cent can not result in an actual earning of the intended

6½ per cent fair rate of return unless it were assumed that the assets reflecting the depreciation reserve balance could earn as much as 4¼ per cent without imposing additional risks, hazards and uncertainties on the enterprise. In no case are any of these calculations or any of these assumptions carried beyond a 3 per cent earning return on the assets reflecting the depreciation reserve balance since it is a matter of common knowledge that more than 3 per cent can not be earned without the assumption of additional risks, hazards and uncertainties for which [14660] compensation must be obtained unless the investor is to be exploited.

The tabulation on exhibit page E-5 establishes the results which would develop over periods of time in five-year increments and is comparable in every other respect to the tabulations on exhibit page E-4. The sinking fund basis at 3 per cent, assuming that three per cent could be earned on the assets reflecting the depreciation reserve balance, would make it possible to earn the intended 6½ per cent fair rate of return. Any earning rate in fact less than 3 per cent would make it impossible actually to earn the intended fair rate of return either on a 3 per cent, 4¼ per cent or 6 per cent basis.

Q. Have you brought together for ready comparison results of your calculations as to the comparative rates of return actually earnable under alternative methods of reserve accrual, rate base treatment and assumed earnings rates on the assets reflecting the depreciation reserve balances? A. Yes. The actual earnings rate of returns and deficiencies in return on the assumption of no income from reserve investments and 2 per cent earned on reserve investments and 3 per cent earned on reserve investments for the straight line, compound interest and sinking fund methods and for the sinking fund and compound interest methods at 3 per cent, 4¼ per cent and 6 per cent for periods of [14661] years by five-year increments from 1946-2010 are summarized in the tabulation on exhibit page E-6.

Q. Will you explain briefly some of the relationships to be observed in the tabulation on exhibit page E-6? A. It is readily observable that the only combination of circumstances under which it is possible to earn the intended fair rate of return is found under the sinking fund method on a 3 per cent basis. All other combinations of factors and circumstances result in a greater or lesser penalty in the form of a deficiency in the rate of return. This penalty in general increases with the magnitude of the reserve balance accrued and as the rate of return on the assets reflecting the reserve balance decreases.

The application of the straight-line method imposes the largest penalty on the investor because it operates to build up the largest reserve most quickly. Even though the reserve balances under the 3 per cent, 4¼ per cent and 6 per cent compound interest methods be deducted from the investment for rate base purposes, the penalty is not comparable to that which the investment suffers under the application of the straight-line method and becomes generally less as the interest rate employed under the compound interest method increases, again obviously because of the slower accrual of a depreciation reserve balance by this method.

[14662] Q. Have you prepared additional tabulations and charts showing in detail the annual rates of return actually earnable under alternative methods of depreciation reserve accrual and treatment for rate base purposes? A. Yes, in the tabulations on exhibit pages F-1, F-3, and F-5 I have set forth the annual rates of return actually earnable under alternative methods of depreciation reserve accrual and regulatory treatment of such reserve accruals on the straight-line basis, compound interest and sinking fund bases at 3 per cent, 4¼ per cent and 6 per cent. The assumptions underlying these tabulations and determinations are the same as those previously set forth for similar tabulations.

The tabulations on exhibit pages F-1, F-3 and F-5 differ however from those previously set forth on exhibit pages E-1 to E-5 in that the columns indicating the derivation of the actually earnable rates of return have been eliminated for brevity's sake and only the results in terms of actually earnable rates of return are recorded. These tabulations differ however also from those previously offered in that the actually earnable rates of return under the several assumptions and alternative bases are reported for each year 1946-2010.

The tabulation on exhibit page F-1 compares the results under the straight-line basis with those which would maintain [14663] on the compound interest and sinking fund bases at 3 per cent. The tabulation on exhibit page F-3 similarly compares the results obtainable on the straight-line basis with the results which would be obtainable on the compound interest and sinking-fund bases at 4¼ per cent, while the tabulation on exhibit page F-5 compares the results which would be obtained on the straight-line basis with those obtainable on the compound interest and sinking fund bases at 6 per cent. Otherwise, the tabulations on exhibit pages F-1, F-3 and F-5 are similar.

The tabulation on exhibit page F-1 also proceeds to determine what the effective rate of return actually earnable on the total investment would be if 2 per cent could be earned on the assets reflecting the reserve balance and if 3 per cent were earnable on the assets reflecting the reserve balance as compared with what the rate of return on the total investment would be if no income were obtainable by employment of the assets reflecting the reserve balance.

It is immediately observable that on the sinking fund basis at 3 per cent, and assuming that 3 per cent could be earned on each and every dollar of assets reflecting the depreciation reserve balance from the end of the year in which it was accrued to the time when it would be required to pay the cost of property retired, the enterprise could actually earn the 6½ per cent intended fair rate of return.

It is also readily observable that the lowest actual [14664] rate of return to be earned yearly is under the assumption of straight-line accrual of depreciation reserve balances and their deduction from the investment for rate base purposes. When no income is assumed to be earned on the assets reflecting the reserve balance these rates of return are set forth in column 2 and are in every year the lowest actually earnable rates of return as compared with the results under other bases and methods.

It may further be observed that assuming 2 per cent and 3 per cent earnings on assets reflecting the reserve balance the actually earnable rate under the straight-line method is always lower than that obtainable under the alternative compound interest and sinking fund methods.

It is also worthy of note that the average earning rate on the straight-line basis drops rapidly from 1946 to 1959 by almost 1 per cent, reaches 3.49 per cent in 1964 and the period low of 3.37 per cent in 1993 on the assumption that there is no outside income from the investment of depreciation reserve balances. On the assumption that 2 per cent average earnings on assets reflecting the depreciation reserve balances could be earned, the actual earning rate on the straight-line basis nevertheless drops rapidly from 1946 at 5.16 per cent to 4.48 per cent in 1959 and falls as low as 4.33 per cent by 1993.

Even when reserve investments earn 3 per cent, the maximum [14665] earnable without the assumption of additional risks, hazards and uncertainties by the enterprise, the actually earnable rate of return on the straight-line basis, which in 1946 would already be 1.05 per cent below the intended fair rate of return of 6½ per cent, falls further to 4.93 per cent in 1959, and to 4.81 per cent by 1993.

The penalty on the investor is largest under the straight-line method and generally larger as lower rates of earnings on assets reflecting the depreciation reserve balances are assumed available to supplement the inadequate return on rate base investment.

All of these facts are visually presented in the 3 part chart on exhibit page F-2, from which it may be additionally observed that even under the 3 per cent sinking fund method the actually earnable rate of return falls substantially below the intended 6½ per cent when reserve assets earn no return, and that even when earnings on the assets reflecting the reserve balance earn 2 per cent the total return to the investment falls short of reaching the intended 6½ per cent.

Reference to part 3 of the chart on exhibit page F-2 indicated that even when a maximum 3 per cent rate on reserve investments is earned the actually earnable total return under the straight-line basis falls rapidly to 1956 and holds well down to and often below a 5 per cent actually [14666] achievable rate of return. For the ensuing 40 years, it is generally 1½ per cent below the intended fair rate of return.

The tabulation on exhibit page F-3 is similar to that on exhibit page F-1 except that the calculations reflect the results under the compound interest and sinking fund methods at 4¼ per cent instead of 3 per cent. The figures in columns 2, 5 and 8 for the straight-line method are the same as those found in the tabulation on exhibit page F-1 and are reintroduced here for ready comparison purposes with the changed results obtained on the compound interest and sinking fund bases at 4¼ per cent.

The general effect of a change from a 3 per cent to a 4¼ per cent basis for the compound interest and sinking fund methods is two-fold. It makes the results on the sinking fund basis disadvantageous to the investor even when 3 per cent is earnable on the assets reflecting the reserve balance and increases the disadvantage of the investor under the sinking fund method when 2 per cent and no per cent income is derived from reserve investment as compared with the results found under the same assumptions in the tabulation on exhibit page F-1.

This tendency is explained by the fact that a 4¼ per cent sinking fund basis assumes in effect that the enterprise pays 4¼ per cent for the use of consumer advanced [14667] assets reflected by the depreciation reserve balances and if the enterprise is able to earn only 3 per cent, without the assumption of additional risks, hazards and uncertainties, it loses 1¼ per cent on each dollar for which it has the responsibility of safekeeping until a time when it is needed to pay the cost of property at retirement.

On the other hand the results under the 4¼ per cent compound interest basis are less confiscatory of the intended 6½ per cent rate of return than they were on a 3 per cent basis. This follows from the fact that the compound interest method at 4¼ per cent would not accrue a punitively deductible reserve balance as rapidly as one calculated on a 3 per cent basis. The improvement in the investor's position under the 4¼ per cent compound interest basis may be observed by comparing the rate of return actually earnable in 1946 assuming 3 per cent earned on the reserve investment of 5.91 per cent with the rate of 6.04 per cent similarly earnable on a 4¼ per cent compound interest basis, or by comparing the results for 1959 when on a 3 per cent compound interest basis, and assuming 3 per cent earnable on reserve investment, the actual rate of return on the total investment would be 5.45 per cent as compared with 5.61 per cent on a 4¼ per cent compound interest basis.

All of these and other relationships are again graphically set forth in the 3 part chart on exhibit page F-4. Previously [14668] noted trends and relationships are clearly observable but also the above mentioned fact that even when 3 per cent earnings of reserve investments are assumed a 4¼ per cent sinking fund basis fails to earn the intended fair rate of return of 6½ per cent.

The tabulation of exhibit page F-5 is comparable with those presented on exhibit pages F-1 and F-3 except that

the compound interest and sinking fund bases have been made at a 6 per cent rate.

The trends previously observed with respect to the changed relationships which resulted from the substitution of a 4¼ per cent interest rate for a 3 per cent interest rate and the calculations of the actually earnable rates on the compound interest and sinking fund bases are here found to be carried further. Thus the actually earnable rate of return on the sinking fund basis at 6 per cent falls even further below the intended fair rate of return of 6½ per cent under all the circumstances found for similar calculations at 4¼ per cent and 3 per cent. Thus in 1946 the actually earnable rate of return under the sinking fund basis, assuming 3 per cent earnable on the reserve investment, which was 6½ per cent on a 3 per cent sinking fund basis, would fall to 6.34 per cent when a 4¼ per cent sinking fund method was used and falls to 6.21 per cent when a 6 per cent sinking fund method is used.

[14669] For 1964 the actual earning rate, assuming 3 per cent earned on reserve investment, falls to 5.83 per cent under the 6 per cent sinking fund method or .67 per cent below the intended fair rate of return.

The other observed trend also continues with the change from 4¼ per cent to 6 per cent compound interest and sinking fund bases, namely, that the penalty which deduction of the reserve balance accrued on a compound interest basis imposes on the investor decreases even further from that indicated in the tabulation on exhibit page F-3. Thus taking 1959 as an example it is found that the actually earnable rate of return on the 4¼ per cent compound interest basis assuming 3 per cent earned on reserve investment was 5.61 per cent whereas on a 6 per cent compound interest basis it rises to 5.77 per cent which, however, is .73 per cent below the intended fair rate of return of 6½ per cent.

All of these and other relationships are again set forth in the 3rd part of the chart on exhibit page F-6. Com-

parison of these charts with those previously presented on exhibit pages F-2 and F-4 indicates that the penalty which the use of the straight-line method imposes is unchanged by the changed assumptions as to the interest factor in the sinking fund and compound interest bases.

It follows further that the penalty effect of the use of the compound interest method at the higher interest rates [14670] of 4¼ per cent and 6 per cent tends to be reduced and that the penalty factor in a sinking fund calculated at 6 per cent increases progressively as the interest factor employed more substantially exceeds the maximum earning rate which it may be assumed could be obtained by the enterprise without the assumption of additional risks, hazards and uncertainties. In fact it may be observed from the charts on exhibit page F-6 that the decrease in the penalty which results from the use of the compound interest methods at higher rates of interest and the increase in the penalty which would result from the use of the higher rates in connection with the sinking fund method results in an approachment between the results obtained under the sinking fund and compound interest methods.

The extent to which this has developed is indicated by the closeness of the lines portraying the results under the sinking fund and compound interest methods respectively under all three assumptions of no income on reserve investments, 2 per cent earnings on reserve investment and 3 per cent earnings on reserve investments.

[14671] Q. Have you made calculations and prepared tabulations which compare the actually earnable rates of return on the basis of various depreciation reserve accruals and alternative treatment for rate base purposes with the annual rates of return which would be required under the various combinations of circumstances and regulatory treatment of reserve balances so as to actually yield an intended predetermined fair rate of return of 6½ per cent? A. Yes, I have made such calculations and pre-

pared tabulations substantially paralleling the calculations and tabulations presented on exhibit pages F-1, F-3 and F-5. They are offered in tabular form on exhibit pages G-1, G-2, G-3, G-4 and G-5.

The tabulations on exhibit page G-1 compare the annual rates of return actually earnable on the straight-line basis, assuming reserve balance deduction, with the annual rates of return which would be required to yield an intended fair rate of return of 6½ per cent after the impact of such regulatory treatment.

The first tabulation on exhibit page G-1 establishes these relationships for certain selected years at 10-year intervals and for the year 2010. Assuming that 3 per cent can be earned on the reserve investment without the imposition of additional risks, hazards and uncertainties on the enterprise, we find from column 6 for example that in 1946 [14672] the actual earnable return is 5.45 per cent instead of the intended 6½ per cent. In column 7 the gross rates of return which would have to be allowed if the actually earnable rate of return is to be 6½ per cent are set forth.

Thus, for 1946, assuming straight-line depreciation accrual, deduction of reserve balances from the investment, a rate of return of 7.75 per cent would be required so as to actually yield 6½ per cent on the total investment. In subsequent years it will be seen that even higher rates of return would be required to actually net 6½ per cent on the investment.

If less than 3 per cent is earnable on the reserve investment even higher gross rates of return must be envisioned if the result is actually to be a 6½ per cent return on the investment. Thus, in 1946 on the assumption of 2 per cent earnings on the reserve investment, a rate of return of 8.19 per cent would be required to yield 6½ per cent, and if no income were earnable from the reserve investment a gross return necessary to yield 6½ per cent on the investment would be 9.27 per cent. In later years the

gross rates of return would have to be substantially higher as the penalty of larger reserve balances operates to reduce the effective return on the investment further below the intended 6½ per cent fair rate of return.

The second tabulation on exhibit page G-1 compares the [14673] average cumulative rates of return actually earnable on a straight-line basis, assuming reserve balance deduction with the average cumulative rate of return which would be required to yield an intended fair rate of return of 6½ per cent on the investment after the impact of reserve balance deduction.

The periods are from 1946-51 and for periods increasing in five-year steps. The results over substantial periods of time indicate that the gross rate of return necessarily sought to yield an actual 6½ per cent rate of return on the investment is substantially above 6½ per cent for all periods and under all conditions.

Thus for the period 1946-55 a gross rate of return of 8.05 per cent would be required actually to yield 6½ per cent on the investment assuming 3 per cent were earnable on the reserve assets.

If only 2 per cent were earnable on the reserve assets the gross rate of return required to yield 6½ per cent would be 8.64 per cent and if no income were obtainable from the reserve investment a gross return of 10.13 per cent would be required actually to yield a 6½ per cent fair rate of return on the investment.

The average cumulative rates of return required to provide 6½ per cent on the investment are for longer periods generally higher, reaching for the period 1946-1984 as high as 8.40 per cent assuming 3 per cent earned on the investment, [14674] 9.16 per cent assuming 2 per cent were earned on the investment and 11.21 per cent assuming the reserve assets to produce no income.

The tabulation on exhibit page G-2 compares the annual rates of return actually earnable on 3 per cent, 4¼ per cent and 6 per cent compound interest bases, assuming

reserve balance deduction with the annual rates of return which would be required to yield a fair rate of return of 6½ per cent under such regulatory treatment.

The calculations are for selected periods of 10-year intervals and for the year 2010. Assuming, for purposes of illustration, that 3 per cent could be earned on the reserve assets for the year 1946 a gross rate of return of 7.15 per cent would be required to yield 6½ per cent return on the investment.

For subsequent years it will be seen by reference to column 7 that the necessary gross rate of return would be even higher. If a 4¼ per cent compound interest basis were employed the necessary rate of return to yield 6½ per cent for 1946, assuming 3 per cent to be earned on the reserve investment, would fall to 7 per cent. For later years it would be higher. If a 6 per cent compound interest basis were employed and 3 per cent is earnable on the reserve assets a gross rate of return of 6.85 per cent would be adequate to produce the intended rate of return of 6½ per cent on the [14675] total investment. If less than 3 per cent is earnable on reserve assets a gross rate of return necessary to provide an actual return of 6½ per cent increases under all circumstances and is generally higher when a 3 per cent and 4¼ per cent compound interest basis is employed than if a 6 per cent compound interest basis were used.

The tabulations on exhibit page G-3 are made on the same assumptions as those on exhibit page G-2 except they are for cumulative five-year incremental periods rather than for selected years. Again it will readily be seen that, even when it is assumed that 3 per cent can be earned on the reserve asset investment, the rate of return required actually to yield 6½ per cent on the total investment on a 3 per cent compound interest basis would be 7.27 per cent for the period 1946-51.

It would have to be 7.72 per cent for the 100-year period 1946-2010.

As lower earning rates are assumed on reserve assets, the necessary gross rate of return rises as will be observed by reference to columns 3 and 5, but if the interest factor employed in the compound interest basis is increased from 3 to 4¼ per cent and 6 per cent the necessary gross rate of return which would actually yield an intended 6½ per cent fair rate of return on the total investment falls. Thus on the 6 per cent compound interest basis for the period 1946-2010 a gross rate of return of 7.32 per cent would be adequate [14676] to yield 6½ per cent on the investment, as compared with 7.72 per cent and 7.54 per cent on the 3 per cent and 4¼ per cent compound interest bases for the same period of time.

On Exhibit page G-4 tabulations similar to those presented on exhibit pages G-1 and G-2 are presented showing a comparison of annual rates of return actually earnable on the sinking fund basis with the annual rates of return required to yield an intended fair rate of return of 6½ per cent.

It is immediately observable that, if it is assumed that reserve assets investment can earn 3 per cent without the imposition of additional risks, hazards and uncertainties on the investment, the gross rate of return required actually to yield 6½ per cent on the investment is, under a 3 per cent sinking fund procedure, also 6½ per cent.

It will be noted also by reference to column 7 that on a 4¼ per cent sinking fund basis it would take a rate of return of 6.66 per cent to 6.89 per cent for various years actually to produce a fair rate of return of 6½ per cent on the investment.

If earnings of less than 3 per cent on reserve assets are assumed and a sinking fund basis at interest rates exceeding 3 per cent is used a gross rate of return of more than 6½ per cent would be required actually to yield the intended fair rate of return of 6½ per cent. For the year 1965 on a 4¼ per cent sinking fund basis and assuming [14677] 3 per cent earnable on reserve assets a gross 6.84

per cent rate of return would be required to yield an intended fair rate of return of 6½ per cent.

Similarly for the year 1963 on a 6 per cent sinking fund basis, assuming 3 per cent earned on reserve assets, a gross 7.19 per cent rate of return would be required to yield an intended fair rate of return of 6½ per cent.

The tabulations on exhibit page G-5 are similar to those on exhibit page G-4 except that they indicate the average cumulative gross rates of return which would be required to yield an intended fair rate of return of 6½ per cent for selected periods of time 1946-51 and for 5-year increments thereafter.

The sinking fund basis at 3 per cent would actually earn the intended fair rate of return at 6½ per cent and would require no gross rate of return higher than 6½ per cent, assuming that 3 per cent can be earned on the reserve asset investment. If, however, a sinking fund basis at 4¼ per cent were employed and again assuming that 3 per cent can be earned on the reserve assets investment, the gross rate of return required would be higher than 6½ per cent actually to yield a rate of return of 6½ per cent on the total investment.

If a sinking fund basis at 6 per cent were employed even higher gross rates of return would need to be accepted actually [14678] to yield 6½ per cent on the total investment. Thus for the period 1946-1951, 6.86 per cent would be required and for the entire period 7.20 per cent would be required. As previously noted in the analysis of similar tabulations, if earnings on reserve assets investment cannot be assumed to earn 3 per cent even the sinking fund basis at 3 per cent rate would fail to yield an actual return of 6½ per cent and would therefore require a gross rate of return in excess of 6½ per cent, as much for instance as 6.81 per cent for the entire period when 2 per cent earnings on reserve assets are assumed and 7.53 per cent if no earnings from reserve assets are assumed.

The necessary gross rates of return required under 4¼ per cent and 6 per cent sinking fund basis would have to be higher than the 6½ per cent intended rate of return as may be seen by examination of the columns 3 and 5 under the headings "Sinking Fund at 4¼ per cent" and "Sinking Fund at 6 per cent."

Q. What is the purpose of the tabulation on exhibit page G-6? A. The tabulation on exhibit page G-6 brings together for quick and easy comparison cumulative rates of return actually earnable under alternative methods of depreciation reserve accrual and assumed regulatory treatment with the gross rates of return required under each set of conditions necessary [14679] to provide an intended actual 6½ per cent fair rate of return on the investment.

The left-hand column arrays the various methods of depreciation reserve accrual from that method which yields the lowest actual rate of return and therefore requires the highest gross rate of return actually to yield 6½ per cent on the investment to that method which would actually result in the intended fair rate of return of 6½ per cent.

Columns 2, 3, 4, 5, 6, 7 and 8 under the heading "Return on Assets Reflected by Depreciation Reserve Balance" further classify the bases according to the interest factor employed. Column 9 under the general heading "Intended, Actual and Required Rates of Return" sets forth the intended rate of return which is assumed to be 6½ per cent in each instance. Column 10 sets forth the rate actually earnable and Column 11 the gross rate of return required actually to yield the intended 6½ per cent.

It will be seen that the straight-line method, assuming no earnings on reserve balances, is the most punitive in that the rate earnable over the entire remaining period of the 100 year cycle is only 3.77 per cent and that 11.21 per cent gross return would have to be employed to produce an actual intended return of 6½ per cent.

The compound interest method at 3 per cent, assuming no earnings on depreciation reserve assets, is the next most

punitive with 4.58 per cent and would require a gross rate of return of 9.22 per cent actually to produce 6½ per cent rate of return on the investment.

The third most punitive method is the straight-line basis assuming two per cent earnable on reserve assets. This method would allow an actual return of only 4.61 per [14680] cent and would require a gross rate of return of 9.16 per cent if it were to produce an actual return of 6½ per cent on the total investment.

A compound interest basis at 4¼ per cent is in 4th most punitive position. This basis would allow a return of only 4.84 per cent if no earnings on reserve assets were assumed and would require a gross rate of return of 8.73 per cent to produce an actual rate of return of 6½ per cent on the investment.

Among the several methods assuming 3 per cent earnable on reserve assets the straight-line method is most punitive in that it would allow a return of only 5.03 per cent and would require a gross rate of return of 8.40 per cent to produce an actual rate of return of 6½ per cent.

It will be seen that the straight-line basis captures first, third and fifth positions as being most punitive and that even assuming 3 per cent as earnable on reserve assets it is more punitive than the compound interest basis at 6 per cent assuming no earnings on reserve assets, and also more punitive than the compound interest basis at 3 per cent assuming 2 per cent earnings on reserve assets and more punitive than the compound interest basis at 4¼ per cent assuming 2 per cent earnable on reserve assets and always and under all conditions more punitive than any sinking fund basis or any other compound interest basis.

[14681] Q. What in economic fact and effect is the provision for depreciation which is made as a charge to operating expenses? A. It is an installment payment by the consumer on account of the cost of depreciable property which it is expected will be met upon the retirement of such property. Provision for the cost of property upon retirement

by periodic charges to operating expenses by consumers is in the nature of an advance, a deposit, a bond to assure a reasonable prospect of ultimate full payment. It is in the nature of a prepayment or advance because the cost of the property does not have to be met until the time of retirement.

Q. Is this progressive payment on account or advance, ahead of the time when the company requires it, of any value or service to the utility enterprise? A. Yes. Progressive prepayment on account up to some reasonable level improves the credit of the enterprise.

Furthermore, even though a retirement is not necessarily followed by reinvestment in a replacement and the replacement may at times cost more or less than the retired asset, the fact remains that the assets reflecting the depreciation reserve resulting from the prepayment of cost at retirement, serve the purpose of being available as resources to finance the replacement of retired property. This is the practical fact of everyday utility operation and was the purpose most [14682] generally recognized and urged by state regulatory statutes and agencies. The progressive accumulation of assets reserved to pay the cost of property upon retirement thus serves the purpose of keeping in the enterprise assets with which the cost of replacements can in whole or in part be met and thus serves a useful economic purpose not only for the enterprise as such but from the regulatory point of view by substantially assuring the ability of the enterprise to make retirements, renewals and replacements when economically justified so that the public interest in the continuity of the quantity and quality of the service will be protected.

The availability of assets reflecting the anticipation of retirement cost to the utility enterprise can also normally be of some direct advantage to the utility enterprise.

It is obvious that there is a lag between the time the reservation of revenue takes place and the time the cost of a retirement has to be met. How many dollars will be

available how many years in advance depends on the expected life of the property, the accuracy with which the date of retirement can be guessed and the basis on which the prepayment is accrued, but a greater or smaller number of dollars will almost always be unavoidably waiting around for their turn to be reused and under most circumstances some temporary use of such assets can advantageously be made.

The progressive accrual of partial payments on the cost [14683] of assets assumed to be subject to eventual retirement also serves the purpose of spreading the cost which matures at retirement over all the consumers served during the period of useful life.

This useful consequence is not very important in fact as far as smaller units of shorter lives are concerned since these by their frequency and distribution tend naturally to spread themselves over time. It is also admitted that this function is not particularly important after a composite property has aged to the state of equilibrium when annual accruals and annual retirements tend to balance if not yearly then at least over relatively short terms of years.

The cost-spreading function of an accrual of advance payments against the cost at retirement is therefore primarily limited to the period in the life of an enterprise during which it is outgrowing an abnormal and temporary degree of newness.

Parodoxically however, it is this very accrual of the difference between the cost of newness and the most economical degree of newness found to obtain after a composite property reaches maturity equilibrium, which proves most functionless and unnecessary since it will under the assumption of a continuing enterprise never be called on to meet the cost of retirements.

Provision of reserves for this well understood phenomena of "theoretical accrued depreciation" is thus amortization of [14684] the investment and not an advance necessary to meet cost at retirement. Since the amortiza-

tion of the cost of newness in excess of the most economical level of composite newness serves little practical purpose, when carried beyond the point of a reserve of such proportions as might improve the credit of the enterprise, its amortization should if at all be pursued at a most reasonable and temperate rate.

The rapid and arbitrary extinguishment of the "cost of newness" beyond the level which results in enterprise credit improvement, serves no useful economic purpose and constitutes in fact under some regulatory treatment but a compulsory displacement of the investor by the customer, a compulsory substitution of customer advances for the funds provided by the investors.

Whether the reserves accrued to meet that part of the cost of 100 per cent newness which will never be used to meet cost upon retirement serve any other economic purpose for the enterprise depends on how they can be employed, how much they cost the enterprise, how much of a penalty is under regulation attached to their collection, retention or employment.

Q. In what way does the utility enterprise pay for having collected, retained and/or employed the consumer advances against the time of retirement? A. Both the manner in which the enterprise pays and how much it pays depends on the regulatory formula employed. There are several obvious ways and the amount of the payment can [14685] by various devices be adjusted to work out fairly and economically for investor and consumer.

Under one method the enterprise can charge itself an interest deduction from income and credit that amount to the depreciation reserve. This is the simplest and easiest way by which both consumer and investor equities can be recognized, reconciled and administered. This method does not require attempted prophecy as to economic life of the property with a precision beyond human ability to forecast, neither does it require the pretense of identity between reserve balance and depreciation of the property in fact.

The amount of the accrual can be varied without affectation of capacity for prophetic precision and the rate which the enterprise pays can be changed as circumstances dictate. By such a simple and unaffected method the consumer is automatically credited in the proportion to which his payments against cost at retirement prove to be advances.

With management naturally on guard not to be caught with too little and commissions in position to prevent the accrual of too much too soon the investor and consumer are protected against excess in either direction and each paid for the economic functions which they perform at a price fairly representative of what their function is worth.

The sinking fund method is also available and operates equitably when an interest rate is used which on the one [14686] hand operates to accrue an adequately protective reserve and on the other does not employ an interest factor in excess of the rate of interest which the enterprise can earn without assuming additional risks, hazards and uncertainties for which it is not otherwise compensated.

Q. How does the enterprise pay for the consumer advances under the straight-line method? A. The investor pays directly by never receiving or being allowed to receive a return on so much of his investment in rate base property as is equal to the amount of the reserve balance.

The deduction of reserve balances from the nominal dollar investment amounts to the same thing as charging the enterprise the full rate of return for such use as it may be able to make of the consumer's advance deposits.

Q. Is the consumer economically entitled to compensation for his advance payment? A. Yes, the principles of economics clearly establish that assets and the means of acquiring assets have a time value because human beings have a preference for the present over the future, for a present gratification over a future gratification.

Depreciation reserve balances reflect the extent to which consumers have under regulation prepaid. They are entitled in equity and by all the principles of economic

science to a fair price for the economic sacrifice they make and the [14687] service their sacrifice renders.

Q. What is the economic function which the consumer performs by advancing payment for the cost of assets at the time of retirement and for which the consumer is entitled to compensation? A. He is entitled to compensation for the time or interest value of his advance and in my opinion something more than pure interest or time preference payment, since he does assume a small measure of risk. The consumer's advance is often for long periods of time and it seems desirable to place some urgency or pressure on utility management to make some effective use of what might otherwise become sterile or unearning assets. A liberal loan rate of interest would accomplish this purpose.

Q. What rate of interest would in your opinion be fair and economical as a consumer credit in the case of the Pennsylvania Water & Power Company under present conditions? A. I am of the opinion that 3 per cent would meet all the requirements of equity and economy. It is more than pure interest, it affords a measure of risk compensation for such incidental risk as the consumer may be taking and is a rate which the utility enterprise will not find it easy to earn without the assumption of additional risks, hazards and uncertainties, yet it is not so high as obviously and certainly to prevent the earning of the intended rate of return on the [14688] investment.

Q. Why is the consumer not entitled to a credit, in effect equal to the intended rate of return for his advance payments on account of the cost of property at retirement as would result from the deduction of reserve balances for rate base purposes? A. Because of the sacrifice which the consumer makes does not merit such compensation.

The over-all intended fair rate of return must recognize and reward various economic functions or services. Among them are the reward for foregoing natural time preference, i.e. pure interest, a risk premium to compensate

the assumption of calculated hazards, compensation for the assumption of uncertainties—the incalculable hazards and for the assumption of otherwise uncompensated functions of management on the part of the investors.

Effective regulation would also hold out the prospect of additional return to induce and reward superior accomplishment.

Obviously, the consumer, by merely advancing a payment which he will eventually have to make anyhow does not perform these functions, he performs only the prepayment function and a minor amount of risk-taking.

[14689] A rate of interest equal to a liberal loan rate therefore compensates the consumer for what he does and sacrifices.

It does not make economic sense, or even common sense, to propose that the consumer be credited with compensation for functions which he does not perform and that the investor be denied compensation for functions which he does and must perform. To do so is disruptive and destructive of those fine relations of inducement and prospective reward which are needed to make a system of economic freedom work.

The consumer takes neither the risk of loss of principal or loss of income from the employment of assets generated by his prepayment. He assumes no responsibility for their management and when he has once paid his advance on the cost of property to be retired in the future he has met his entire obligation. When losses of income or principal on reserve assets take place management cannot in behalf of the investors ask the consumers for another contribution. It is the investor who takes the responsibility for the safekeeping of consumers' advances, takes the risks of their loss or failure to earn, for this he is entitled to compensation even as the consumer is paid for that function which he does perform by advancing payment.

Q. What are the economic factors that would limit and determine the fair rate of compensation for the consumers advance of the cost of assets at retirement? [14690] A. The fair price of such an economic sacrifice is to be determined by reference to the same principles which govern all price determination.

Merely because the consumer can be compelled to make such advances by law should be no basis for dealing unfairly with him and by the same token merely because the utility enterprise can be compelled to accept such advance payments should be no basis for dealing unfairly with them.

Although both parties to the "advance of the cost of assets upon retirement" may act under compulsion it is nevertheless possible to impute a fair price to the function performed and the benefit received. The fair price lies between two measures, what such advanced funds are worth to the utility enterprise and what the money advanced is worth to the consumers.

Certainly it is worth a long term pure interest rate to the consumer, as much as he could earn in alternative investments at no greater risk and hazard, thus at least a rate equal to what he could get on long term government bonds or high grade corporate securities.

On the other side funds advanced by consumers are worth no more than the price at which such funds could be obtained elsewhere on equally attractive terms. Whether an enterprise would want any such funds at a particular price would depend on whether it had a use for them at all or could profitably [14691] use them at the price. Certainly the maximum value and fair price for customer advances would not exceed (1) the price at which the enterprise could get such funds and (2) what return it could earn on them without the assumption of additional risks, hazards and uncertainties.

Between these limits the fair price of the consumer's advance will be found. It is obvious that whatever the exact rate is or should be, it is less, and substantially less,

than the over-all intended fair rate of return to the enterprise.

The governing economic principle is that those who take economic risk must be allowed to think they can obtain the reward for risk-taking. Any attempt to operate a free economic system in the reverse will end in drying up the willingness and disposition to assume risks.

Q. In what way and under what circumstances does the acceptance of the consumer advances by utility enterprise impose additional risks, hazards and uncertainties on the investment? A. The acceptance of the consumer advance against the day when the cost of assets has to be met in retirements imposes additional risks and responsibilities from the time the funds are received until the enterprise comes into full ownership and control upon the occasion of a retirement of assets.

[14692] The acceptance of advances even if only as liquid funds for deposit in a bank imposes such hazards. In case the bank fails the loss is not a loss to the consumers who advanced the funds but of the investors whose management accepted their custodianship. The same "advance" if lost cannot be collected again from the consumers.

In terms of the hazard to earnings the enterprise takes the chances of not being able to employ the funds received either at once, advantageously or possibly at all. There are unavoidable lags in placing the funds in full and effective earning position.

Assuming that the consumer advanced funds are to be invested in securities the alternative is to invest under conditions which impose no substantial additional risk on the enterprise such as high grade bonds yielding 2.6-3.0 per cent or to invest in securities of higher yield and thus impose a greater risk on the investors.

If the investment is made in securities which did not increase the risk to the enterprise as a whole, the return will be less than the fair rate of return and the rate of return for the utility enterprise as a whole reduced. If

the investment is made in more hazardous securities the return over and above a relatively risk free rate would be earned by those who take the risk, the over-all fair rate of return on the investment might be earned or more nearly [14693] earned but only by the assumption of additional risk and uncertainty for which no compensation would be received by those who took the risk.

In the case of an expanding utility enterprise it might be assumed that consumer advances made to meet the ultimate cost at retirement might be temporarily employed in additions to property and plant. Aside from (1) the impracticability of immediate and full utilization of consumer advances for this purpose at all times and (2) the fact that sooner or later more or less of the funds so employed will be needed to serve the purpose for which they were allegedly accrued and (3) that investment in long-lived plant does not make them readily or certainly available to meet the cost of property retired at retirement, such expansion by the use of consumer advances imposes additional risks, hazards and uncertainties on the enterprise which are not voluntarily assumed except in anticipation of compensatory return.

When the utility enterprise assumes the responsibility for the investment of the consumer's advances in additional property the hazard base is increased for the investor's investment.

There is a larger property exposure to hazard. If the volume of business is increased proportionately there is greater exposure to fluctuation and at a greater leverage factor. When for rate base purposes the reserve balance (the [14694] consumers' net advance) is deducted the plant built out of such advances is in effect totally unearning and thus results in the adverse economic phenomena for the enterprise of the "larger wash and relatively smaller hangout." The consumer by the device of full reserve deduction becomes a first priority claimant having a priority even over operating expenses and bondholder interest re-

quirements. The consumer in effect demands that the return on his "advance" be paid first by the method of not allowing it to become revenue at all. His claim becomes a checkoff, a discounted bill.

Rates based on investment less depreciation reserve take the consumer's return out in the form of lower rates. The consumer's return is not even exposed to the hazard of what can happen to revenues. Any scheme by which a special group of consumer "investors" can place themselves in priority and senior position to all other investors, not to mention employees and suppliers of materials, in fact enables them to take their return out before it is earned or even received as revenue and then claim a rate of return equal to that earned "across the board" by ordinary investors cannot but increase the proportion of the risk borne by the ordinary investor. A larger amount of property and a larger volume of service involve a larger measure of risk taking and the consumer creditor does not take this added risk and uncertainty.

[14695] The paradoxical character of the whole idea that consumer advances are entitled to special priority and position and a rate of return equal to that obtained by those investors who assume the risks and hazards of the enterprise becomes more apparent if the parties at interest are taken as represented by two groups of investors, Group A which has $10,000,000 invested in Utility A and Group B which has $5,000,000 invested in Utility B.

Group B proposes a merger under terms such as these: The new AB company will assign revenues receivable in an amount equal to 6½ per cent on the $5 million investment of Group B investors.

The Group A investors get their return of 6½ per cent after operating expenses and taxes have been paid. After the addition of the property of Group B the total property exposed to risk will be 50 per cent larger, the volume of business, sales, customers will be 50 per cent larger. Then a ten per cent drop in business will be a 15

per cent reduction for the Group A investors, the ratio of expenses to "unassigned" revenue will be higher, the "above-the-line" leverage greater, in fact the entire investment of Group A exposed in every way to greater hazards and for no greater return.

Obviously Group A investors in their right minds will never voluntarily enter such an engagement but that is [14696] substantially what is demanded in behalf of utility consumers under proposals to deduct the total reserve balances from the investment for rate base purposes.

Q. Can a utility enterprise which has no opportunity or occasion for plant expansion solve the problem of large consumer advances without prejudice to its investors by disinvestment? A. I do not believe it can without prejudice to its investors. Several forms of disinvestment are conceivable even if not practical, and possibly not legal, but all of them in practical effect constitute a substitution of consumer capital for investor capital and as long or in so far as this would involve paying more for consumer capital than for presently employed capital it would prejudice the investor's position.

I understand that depreciation reserve assets may not be paid out as dividends and obviously if they were they would have to be recalled to some extent some time when needed to serve the purpose for which they were collected. Without reference to its legality disinvestment would under most circumstances be in large part impractical.

Equally important is the fact that the remainder of the investment would have assumed the responsibility for providing substitute funds when needed and such responsibility is not voluntarily assumed without prospect of compensation for [14697] the extra risk and hazard.

In any case disinvestment would counteract and destroy the intended and desired effect of adequate depreciation reservation and retention of such assets in the enterprise so as to enable it to meet its responsibilities certainly and economically in the retirement and replacement

of property, and substitute consumer advances for capital which was willing and able to bear its share of the enterprise risk at no more than a fair return for the service it was willing and able to give.

Q. Does the accrual of a depreciation reserve balance constitute a return of the investment made by investors to the investors? A. No. Reservations of revenue to meet the cost of enterprise-owned assets at the time of retirement do not constitute a return of the investment made to the investors or to anyone else.

Q. Why? A. For several reasons. First, the reserved revenue is not returned to the investors. The investors are those who own the securities of the enterprise, the bondholders and stockholders, and in the most important final sense, the stockholders. Merely entrusting an advance or prepaying on account of the cost at retirement of assets employed by the enterprise to the enterprise is not a return of the investment [14698] or of anything else to the investors nor is the enterprise in position to make such disposition of revenue received for restricted and special purposes.

Secondly, in no real and economically meaningful sense does the reservation of revenue in the name of "depreciation reservation" return the investment to the enterprise. The funds or other assets reflecting reservation of revenue against the day when the retirement takes place are collected and retained for restricted purposes. The enterprise is not free to dispose of such assets; it has a special and restricted responsibility with respect to so much of its total assets as are reflected by the depreciation reserve balance at any time.

In effect, the enterprise does not come into a full and unencumbered ownership of such assets until its rights in them have been matured by a retirement. At such time, having come into full and complete ownership, the enterprise has the right to draw down payment for assets retired at cost. Whether formally and specially tagged or

not, assets to the amount of the depreciation reserve balance are encumbered by a consumer interest, restrictions on their disposition and the practical limitations on their employment which make their position less than identical with unencumbered property.

The practical effect of revenue reservation against the day when assets are retired at cost is obviously not a return [14699] of the investment to the investors. Moreover, it is clearly not even a return of the investment to the enterprise without strings and restrictions attached so important in their effect as to make the relationship of enterprise management to reserve assets realistically describable as a trusteeship of such assets until fully earned.

Q. Is the employment of assets, generated by depreciation reserve accrual, for the purpose of debt retirement a practical, fair and economical way of reconciling the economic interests created and involved? A. No. The use of assets generated by depreciation reserve accrual for debt retirement is a limited expedient and not an effective way to achieve economic balance except under certain limited circumstances.

Q. Why? A. In the first place, the permanent alienation of assets by debt retirement is not the purpose for which such assets were accumulated. In so far as the assets reflected by depreciation reserve balances were accumulated and are or still will be needed for retirement and replacement purposes, they can at best be only temporarily employed for debt reduction. The use of reserve generated assets for debt retirement is therefore only one among several possible temporary uses of such assets by which some income or savings can be obtained by the enterprise to reduce the cost [14700] to itself of asset retirement cost anticipation.

The effect and consequences differ little from that of any other comparable use of the assets generated by the prepayment in part of the cost of assets at retirement. A utility burdened with such prepayments could invest in

the 3 per cent bonds of some other enterprise, could invest in and keep alive some of its own 3 per cent bonds or, conceivably, so far as the law might permit, retire its 3 per cent debt.

The alternative effect would be somewhat different depending upon individual circumstances. Debt retirement might be somewhat more expensive on account of the terms and conditions under which bonds could be retired, the investment in the bonds of other enterprises could be diversified and thus, without unusually large holdings of any particular security, there might be available a better resale market for such securities after the assets invested in them were required to be made available at retirement for the purpose for which their accrual was required or permitted.

The important distinction under the assumptions made is that the burden and responsibility of providing the funds with which to make replacements which is clearly the burden and responsibility of the equity investor and his management may be much greater if the company debt is retired to save the 3 per cent interest than if an investment in a [14701] diversified group of 3 per cent marketable bonds is made. Whether new financing can be accomplished when and as needed at what cost and how economically the funds could be provided in the volume needed and when needed are financial hazards for the equity investment.

However, even more important is the fact that any such employment of assets generated by depreciation reservation would yield less than what the "trusteeship" by the enterprise for such assets would cost the investor if the reserve balance is "deducted" from the investment for rate base purposes.

Under these circumstances, the equity investor would be engaging in a negative "trade on the equity" paying on the one hand the fair rate of return for the use of such assets and on the other, receiving a bond rate of interest from their employment.

The economic effect and consequence of the use of assets generated by depreciation reserve accrual for enterprise debt retirement is to substitute consumer advanced capital at a price equal to the fair rate of return, assuming 6½ per cent, for investor-advanced debt capital at 3 per cent. Determination of the adverse effect on the earnings of the equity investment requires only a simple arithmetic calculation for extensive debt reduction would obviously destroy the quality of the capital structure and eliminate the advantage which existed in the use of debt capital and which [14702] would eventually be reflected in the requirement of a higher rate of return.

If, however, instead of deducting the balance for rate base purposes the administratively simply device of a liberal risk-free rate of interest credit to the reserve balance is used or the sinking fund method at a comparable risk-free rate of interest is employed, the alternatives mentioned above become more feasible in at least the last respect. Investment of reserve generated assets at 3 per cent in the bonds of other enterprises, its own bonds or, to some extent, even debt retirement would operate to keep a fair balance between the cost which the enterprise experiences by accepting prepayment of the cost of assets at retirement and the extent to which it can by outside or additional income reimburse itself without the assumption of additional risks, hazards and uncertainties. The difference in effect, assuming legality, would arise out of the difference in the amount of risk and responsibility the equity would take under the alternatives with respect to being able to get funds when it needed them in the amounts needed and at equally favorable costs.

* * *

[14705] CROSS-EXAMINATION.

By MR. GOLDBERG:

Q. Dr. Dorau, in the Safe Harbor case you appeared as a witness in behalf of the Respondent in that case, Safe

Harbor Water Power Corporation. Isn't that right? A. Yes.

Q. In that case you set forth and testified to your conclusions and principles about certain matters of general depreciation principles and policy. Isn't that right? A. I think that is a fair description.

Q. And the conclusions and opinions that you expressed in that case are the same ones you have expressed in your direct testimony in this case. Isn't that right? A. I don't know of any portion of the direct testimony prepared for this case that is in any way in conflict with what I may have offered in the other case.

Q. Of course, you understand that my question went only to the principles that you apply to what you call the facts of the case. You understood that? A. Oh, I assume you were not concerned about the identity of mathematics and quantities.

Q. That is right. [14706] A. I was trying to make it clear that I was not in a position to pass judgment on that alleged degree of similarity.

Q. Yes. A. I was merely wanting to go on record that so far as I know there is no conflict in principle or position in any part that may deal with the same questions.

Q. As a matter of fact, in the Safe Harbor case you testified that the principles expressed by you were applicable to any set of facts or circumstances. Isn't that so? A. No. Any set of facts that had the same area of origin and application.

Q. What do you mean by the same origin and application? A. I am sure they don't have the same application in the case of the General Electric Company or a chemical company.

Q. How about electric utilities? A. I think substantially in the case of electric utilities, except possibly those instances that are under special sliding scale franchises, or something of that character.

Q. Are Safe Harbor or Penn Water in that category, within the exception? A. No, I don't believe I would except them.

Q. I think the premises upon which you founded your testimony in the Safe Harbor case are the same premises upon which you base your testimony in this case. Isn't that so? [14707] A. Insofar as that covers economic principles, yes.

Q. Yes, economic principles of depreciation. A. Yes, sir.

* * *

[14718] DIRECT EXAMINATION (Continued).

By MR. HULL:

Q. First, Doctor, I wish to direct your attention to Mr. Dunn's testimony at transcript 13,427. I will read to you the relevant portions.

MR. GOLDBERG: May I just get that?

MR. HULL: Yes.

MR. GOLDBERG: I have them now.

MR. HULL: I propose to read to the witness the question beginning at the top of transcript page 13,427, lines 1 to 4, and the answer of the witness at lines 11 to 15, the following question appearing at lines 16 and 17, and the answer of the witness beginning at line 22 and continuing to the end of the page.

By MR. HULL:

Q. Dr. Dorau, the testimony I have referred to is as follows:

"Q. Now, when an electric utility company invests the assets reflected by the depreciation reserve balance, who assumes the hazard of the loss of that capital or failure to earn the return of that capital?"

I may say, I think there is a typographical error there. That should have read "earn a return on that capital."

The answer of the witness was:

[14719] "I cannot answer the question in the terms it is put because the assets represented by the depreciation reserve cannot be identified, so I cannot tell what risks, if any, are involved in connection with such assets.

"Q. Even though they cannot be identified they are there, are they not?

"A. Not necessarily there. To the extent they are there and the utility company receives a fair rate of return on such assets, unidentified assets, there is no particular risk involved other than the risks included in the rate of return."

Now, Doctor, my question to you is this:

Do you agree that when an electric utility company invests the assets reflected by the depreciation reserve balance, that "there is no particular risk involved other than the risks included in the rate of return"?

MR. GOLDBERG: I object to that, Mr. Examiner, because the reference has not been to all of the testimony and all of the testimony is needed. The question is based only upon a fragmentary portion of all that testimony.

TRIAL EXAMINER: Objection is overruled.

By MR. HULL:

Q. Do you have the question in mind? A. I lost the question. May I have it, please?

[14720] (Question read.)

THE WITNESS: No. It seems to me the conclusion is in error in that the investor does assume the additional risks incident to the additional investment or employment of such reserve revenues.

By MR. HULL:

Q. * * * Now, Doctor, my question to you is this: In your opinion does the fact that an electric utility company has not segregated and ear-marked specific assets as invest-

ments of [14721] cash generated through charges for depreciation, or does the fact that the specific assets cannot be identified as having originated from such charges, do either of those facts mean that the company has no assets which are reflected by the balance in the depreciation reserve?

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[14722] THE WITNESS: No.

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Q. At the portion of the testimony to which I last directed your attention, Mr. Dunn referred to the reserve for depreciation as a contra account to the plant account, and at a number of other places in his testimony, particularly at pages 13438 to 13440, he referred to the fact that in his opinion the reserve for depreciation was merely an account contra to plant account.

In your opinion is the reserve for depreciation simply and merely a contra account to plant account?

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[14723] THE WITNESS: No, it is not my understanding that it is primarily that or simply that. The balance in the depreciation——

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[14724] —account measures the reservation of revenues accrued on account of the ultimate retirement of property at cost which has not been required to meet such retirements of cost.

By MR. HULL:

Q. Doctor, what is the purpose of the reservation of assets that are incident to the accumulation of credits to reserve?

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THE WITNESS: The purpose for reserving revenues is to provide assets sufficient to meet the cost at retirement. The purpose of the depreciation reserve is to record the balance of such reservations not previously required for retirements.

By Mr. Hull:

[14725] Q. Now, Dr. Dorau, at transcript 12,809, lines 15 to 20, Mr. Dunn was asked the following question:

> "Do you agree that when the depreciation reserve balance is deducted from the original investment and a depreciated rate base is used in fixing rates the utility company must assume the risk of investing the assets reflected by the depreciation reserve in some manner in order to earn upon them the utility rate of return?"

The answer to that question is found at transcript 12,810, lines 4 to 6, as follows:

> "There are several answers to the question. They certainly don't take any additional risks without receiving a rate of return greater than the commission allowed."

Then at lines 18 to 19, after the witness had been asked concerning the investment of such assets, he was asked this question:

> "Suppose it is lost, who has to replace it?
> "A. No one has to replace it."

My question to you is this: Do you agree with Mr. Dunn that if the assets reflected by the depreciation reserve balance are invested by the utility and are lost that no one has to replace them?

* * *

[14726] The Witness: No, I do not agree.

By Mr. Hull:

[14727] Q. At transcript page 12,767, beginning at line 14, the following appears, Mr. Dunn being on cross-examination:

> "Q. When an electric utility company finds it necessary to use capital for the replacement of property what sources of capital are available to it?

"A. Its own funds are available, money borrowed by means of notes, bonds, the sale of additional capital stock are the principal sources of funds.

"Q. It is true, is it not, that the sole and undivided responsibility of an electric company to provide such necessary capital is the responsibility of the stockholders?"

That last question was not answered by the witness. I would like to have your opinion on that question.

MR. GOLDBERG: Mr. Examiner, I object to that, and particularly the statement that the last question was not answered by the witness because I had objected to that and the Examiner sustained my objection as appears on line 24 of transcript 12,768. How much of this distortion is to be permitted, Mr. Examiner?

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[14728] THE WITNESS: Yes.

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Q. Dr. Dorau, in your opinion are the assets reflected by the reserve for depreciation of an electric utility company assets which are devoted to public service? A. Yes.

Q. Will you give your reasons? A. Whether actually invested in property or [14729] not, whether invested in other opportunities for earning a return or not, the assets reflecting a depreciation reserve serve in the sense that they are retained in the enterprise available for reinvestment in property upon retirement of existing property.

Q. Can you give me any analogy of other temporarily idle assets that a utility company has on which it is allowed to earn a utility rate of return?

MR. GOLDBERG: May I have that question?

TRIAL EXAMINER: Yes.

(Question read.)

THE WITNESS: I think the principle that capital necessarily and unavoidably, partly or wholly unearning because of the public obligations of the utility enterprise for continuing service, are recognized, for example, in the recognition given in interest during construction, as an element of cost. That has come to be recognized on the basis that capital is unavoidably and necessarily unearning in whole or in part even before any service may be rendered to the consumers.

Similarly, working capital, for example, may not continuously and fully be employed. Nevertheless, it has to stand by and be available for the functions which it has to perform and has come to be generally recognized as an appropriate base for earnings.

[14730] Q. Do you find any analogy in utility property held for future use? A. Well, similarly property that is not actively employed in rendering service now but is construed as reasonably necessary for future requirements or for possible present requirements which actually do not materialize has come to be recognized in appropriate amounts as deserving of recognition as a basis for a return.

Q. At transcript page 12,722, lines 11 to 15, the following question was asked of Mr. Dunn on cross-examination:

> "Now, Mr. Dunn, the effect of the deduction of the reserve balance from original cost in determining a rate base is to reduce the amounts which the consumers pay in rates by the amount of the rate of return multiplied by the depreciation reserve balance, is it not?"

In attempting to secure an answer to this question, a long series of questions was asked thereafter extending over to transcript page 12,732, and an illustration was put to him of a company beginning business with a plant account of $100,000 and capital stock of $100,000.

The estimated life of the plant was ten years, and the amount of reserve for depreciation at the end of the first year was $10,000.

The last question of this series at transcript 12,732, lines 15 to 23, is as follows:

[14731] "Q. Mr. Dunn, assuming that the $10,000 which is charged as depreciation expense in the first year and paid for by the consumers is retained by the company in cash, does not the deduction of the amount of the depreciation reserve balance of $10,000 from the original investment rate base of $100,000 and the charging of rates for the succeeding year upon the rate base of $90,000 have the effect of allowing the consumers in the second year the rate of return multiplied by the assets affected by the depreciation reserve balance?"

The answer was:

"No.

"Q. Why would it not have that effect, Mr. Dunn?

"A. Because the only reduction which the rate payers are entitled to and which they receive is the reduction due to the deduction of proper balance in the depreciation reserve. Any assumed rate of return applied to a cash figure in the company is not equivalent to that determination."

Do you agree with Mr. Dunn's answer?

* * *

[14732] THE WITNESS: No, I do not agree because it seems to me to be perfectly obvious that the effect of deducting depreciation reserve balances from the property account does in effect credit the consumers with a rate equal to the earning rate.

By MR. HULL:

Q. Do you know of any regulatory commissions which have prescribed or approved the sinking-fund method of accounting for depreciation? A. Yes.

Q. Do you know of any courts that have approved that method? A. I have them of record. I don't have them in mind. Yes, there are such approvals.

Q. Does the sinking-fund method of accounting for depreciation as approved by the regulatory commissions and courts to which you refer provide for the charging of the annuity component of the sinking fund only to depreciation expense and provide for the interest component as an income deduction?

MR. GOLDBERG: I object to that as utterly immaterial and irrelevant, Mr. Examiner.

TRIAL EXAMINER: The witness may answer.

[14733] THE WITNESS: It is my understanding, and I recall no exceptions to it in regulatory procedure that I have had the opportunity to review to the method which involves charging the annuity above the line to operating expenses and the interest credit below the line as an income deduction.

By MR. HULL:

Q. When an interest method of accounting for depreciation is used, and both the annuity and the interest components are charges to depreciation expense above the line, what designation is given to that method? A. It has come to be known as the compound-interest method.

Q. At transcript page 12,519, lines 17 to 19, Mr. Dunn testified as follows:

"The use of the sinking-fund method with an interest rate lower than the rate of return would be an application of the sinking-fund method in an improper manner."

Do you agree with that? A. No.

Q. Among the cases decided by Commissions and Courts to which we referred a moment ago, do you know of cases in which the sinking fund method was prescribed or approved with an interest rate lower than the rate of return.

MR. GOLDBERG: I object. It is immaterial and irrelevant, Mr. Examiner.

[14734] TRIAL EXAMINER: The witness may answer.

THE WITNESS: Yes, I know of such instances.

By MR. HULL:

Q. Can you tell us why the rate of interest is and should be less than the rate of return? A. Well, in summary because the enterprise finds it difficult, if not impossible, to a greater or lesser extent, to give full and effective earning power to such reservations of revenue and, secondly, insofar as it employs such assets resulting from the reservation of revenue and assumes risks greater than what may be construed a fair and reasonable risk free loan rate, it takes on additional hazards, risks, and uncertainties for which it, the enterprise, is entitled to compensation.

Q. Under any method of depreciation reservation, in what manner should the balance in the reserve for depreciation be treated in the determination of a rate base?

MR. GOLDBERG: May I have that question, please?

(Question read.)

MR. GOLDBERG: I object to that, Mr. Examiner. I know of no foundation for that question.

TRIAL EXAMINER: Objection is overruled.

THE WITNESS: May I have the question again, please?

(Question read.)

THE WITNESS: The reserve balance in my opinion should [14735] always be treated as reflecting the reservation of such an amount of revenue of necessity retained in the enterprise not deducted for purposes of rate base determination but used as a basis for an appropriate interest credit to the consumers' account on account of such risk-free employment of funds as the enterprise may be able to make or may fairly be presumed to be able to make.

By Mr. Hull:

Q. In the operation of an electric utility enterprise, upon whom does the obligation rest for securing capital necessary for replacements of property?

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The Witness: Ultimately upon the equity investment; practically upon the management which represents that equity investment.

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[14736] Q. Doctor, assume that the assets reflected by the depreciation reserve balance had been used to retire three per cent bonds, and that subsequent retirements and replacements of property required the company to reobtain capital which can only be obtained at the rate of five per cent or higher. Who bears the burden of the additional cost, the equity holder or the consumer?

Mr. Goldberg: May I have that question, please?

Trial Examiner: Yes.

(Question read.)

[14737] The Witness: The equity holder obviously immediately bears the burden of the adverse change in the cost of money. If I may explain my answer further, I do understand the operation of the regulatory process and that it is a fair presumption that under that regulatory process when and if subsequent rate determinations take place that to some extent, at least, the five per cent cost of money would then be recognized as a factor affecting the fair rate of return.

But in between times, obviously, the equity investor bears the economic disadvantage of having traded five per cent money for three per cent money.

Mr. Hull: May I have the answer, please?

(Answer read.)

By Mr. Hull:

Q. Is that right? A. Having been traded out of five per cent money into three per cent money.

* * *

[14738] Q. What risk does the consumer of Pennsylvania Water & Power Company take with respect to the assets reflected by the depreciation reserve? A. I don't see that they take any significant additional risks. They have made an advance against the time when the cost of retirement needs to be met. They certainly don't under our ordinary conception of the regulatory process stand liable to pay again in case the enterprise loses these assets collected from them, and in contrast to that the equity investor has to assume all the responsibilities of care and management and safekeeping of these assets advanced and reflected by depreciation reserve balances.

* * *

[14743] Q. Dr. Dorau, since as you testified this morning the consumers assume no risks in connection with the assets reflected by the depreciation reserve balance, is it in your opinion equitable for the consumers to receive a credit on those assets equal to the rate of return? A. It is not.

Q. Is the allowance of so large a credit in your opinion justified by sound economic principles? A. It is not.

Q. Upon sound economic principles to how much return upon those assets, or how much credit on those assets, are the consumers entitled? A. From an economic point of view they are entitled to full compensation for the time value of the funds advanced plus, in my opinion, a modest allowance over and above that so as to equal a liberal loan rate of interest, in part to act as a stimulus to the management to make the [14744] best possible use of those assets in the meantime.

Q. Doctor, have the opinions which you have expressed today and the principles you embodied in your rebuttal tes-

timony been recognized by the regulatory commissions of any of the states?

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[14745] THE WITNESS: Yes, they have been frequently recognized.

By MR. HULL:

Q. Can you tell us what states? A. Well, some years ago I provided a substantial document which recorded a large number of instances of that recognition and the employment of the sinking fund method. The states of Wisconsin——

TRIAL EXAMINER: This was some years ago, you say?

MR. HULL: Yes, I made such a careful tabulation and calculation of those.

TRIAL EXAMINER: How long ago?

THE WITNESS: By Mr. Goldberg's request.

MR. GOLDBERG: By me?

THE WITNESS: Yes, at your request.

MR. GOLDBERG: Do I have a copy?

THE WITNESS: You were provided with a copy.

TRIAL EXAMINER: How long ago was this?

THE WITNESS: Safe Harbor rate case.

MR. GOLDBERG: Before the decision, was it not?

[14746] THE WITNESS: Quite so.

MR. GOLDBERG: If it was ever provided.

TRIAL EXAMINER: Just a minute.

How long ago was that, Mr. Witness?

THE WITNESS: I suspect that is a matter of two years, at least; two and a half years maybe.

MR. GOLDBERG: Direct testimony of Dr. Dorau was December of 1944.

THE WITNESS: Then probably in February. I think it was along in February of 1945.

MR. GOLDBERG: First cross-examination was February 27th, 1945, Mr. Examiner.

TRIAL EXAMINER: This is more or less a matter of argument. You determined this from the reported decisions of the various State Commissions?

THE WITNESS: That is right.

By MR. HULL:

Q. Are you familiar, Doctor, with Order No. 38-A of the Missouri Public Service Commission?

MR. GOLDBERG: I object, Mr. Examiner. It is immaterial and irrelevant.

TRIAL EXAMINER: He may answer.

THE WITNESS: Yes, generally familiar with it.

By MR. HULL:

Q. Does that follow the principles which you have [14747] enunciated in your rebuttal testimony?

MR. GOLDBERG: Same objection, Mr. Examiner.

TRIAL EXAMINER: You may answer.

THE WITNESS: Yes, so far as I understand Order 38-A, it is in harmony with the principles which I have discussed. The Missouri Commission provides for a 3 per cent credit on depreciation reserve balance.

By MR. HULL:

Q. And an undepreciated rate base, does it not? A. Yes.

Q. If the retention in the electric utility business of the assets reflected by the depreciation reserve is required by regulatory practice, who should bear any cost or burden incident to the retention of those assets? A. The consumers should bear any extra burden over and above that

which can be reimbursed by the employment of such advances under comparatively risk-free circumstances.

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CROSS-EXAMINATION (Continued).

By MR. GOLDBERG:

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[14758] Q. I understood you to say that the purpose of the reserve is to meet a future cost of retirements when the retirement is made. Is that right? A. That is right.

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[14779] Q. Did you begin with the year 1946 in Schedules E, F and G for the sake of brevity? A. Yes, and because my purpose was to project the results of the application of alternative methods into the future.

Q. So that at least in part you ignored 35 years of past operations for the sake of brevity but concerned yourself [14780] with 65 years of estimated future operations. Is that right? A. The effect of that is correct but it was not my intention to do a historical analysis. The purpose was to show what the results would be of alternative methods projected into the future.

Q. And you think that can be shown by ignoring the past? A. I would like to assume that the past was not totally ignored in the FPC Staff assumptions as to lives.

Q. I am talking about what you did. A. So to that extent presumably actual experience may have entered the determination, but I made no such determination.

Q. Can you reach correct conclusions as to the future for your purposes by ignoring the past? A. As correct as the FPC estimates of life expectancy.

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Q. You eliminated the return earned during the 35 years of actual operations when you purport to show the [14781] cumulative rate of return in Schedule E-1. Isn't that so? A. That is correct. I was not making a post-evaluation of the return of the company in the past. I was

showing only comparatively what it would be in the future under the alternative methods.

Q. You were not making a fully cumulative return, showing you were making only a partial one. Isn't that so? A. Making it from 1945 in.

Q. Only partially, that is you were showing nothing as to the past which might be reflected in the figures? A. Never intended to.

* * *

[14786] Q. Looking at your Schedule E-1 in Exhibit 321, you have a column which is entitled "Deficiency in return." You have so entitled that column as a result of your assumption that the fair return should be computed on undepreciated investment. Is that right? [14787] A. That is correct.

Q. If, however, it is intended that the fair return be computed on depreciated or net investment, then, of course, the "deficiency in return" is the "excess in return", isn't that right? A. It could be so called, a mathematical excess.

* * *

[14795] Q. Is depreciation the amount accumulated in excess of a fair rate of return? A. Depreciation is never that. If I may correct you, does the reserve reflect——

Q. Accumulations from earnings in excess of fair return. A. Not necessarily, no.

Q. In other words, there are times when you will have reserve accumulations even though the depreciation is not [14796] earned? A. Put it this way: The necessity of giving priority to a reservation for depreciation has a claim ahead of any indicated return to the enterprise. Therefore, if there is anything over and above operating expenses, it first goes to the reserve.

Q. Is it your statement—— A. Not since about 1918 and 1920, Mr. Goldberg, has that kind of accounting been engaged in to my knowledge.

Q. Is it your statement that where the company does not earn a fair rate of return it has nevertheless received the depreciation payment from the consumer? Is that right? A. It may well have.

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[14803] Q. When you refer to "a 2 per cent or 3 per cent return on the assets reflecting the depreciation reserve balance", the percentages referred to by you are hypothetical and so are the assets. Isn't that so? A. The percentages are a convenient range of percentgaes in even amounts for ease of calculation, zero, 2 and 3. The percentages were stopped at 3 because in my opinion there is no prospect under present conditions of earning as much, even, as 3 per cent without the assumption of additional risks, hazards and uncertainties, so I did not go beyond 3 per cent. I couldn't go below zero.

Q. They are hypothetical and assumed percentages, aren't they? A. I don't know about hypothetical in that sense. There is nothing hypothetical about 2. It is a very real number.

Q. Did the company earn the 2 or 3 per cent you used? A. That is a different question. No, I made no determination of what the company earned.

Q. So far as that is concerned, then, it is a hypothetical percentage, hypothetical income. Right? A. Well, it is not intended to be a picture of the income of the company which it was able to earn on the assets reflecting its depreciation reserve balance.

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[14808] Q. If the assets reflecting the depreciation reserve balance had been used to retire bonds, have they been retained? A. If they had been used?

Q. Yes. A. Under your assumption if they had been used, obviously they wouldn't.

Q. Do you know whether assets reflecting the depreciation reserve balance have been so used by Penn Water?

A. No, without an analysis of this statement I could not say whether they had or had not.

[14809] Q. And you have made no such analysis? A. I made no such analysis but I wouldn't be a bit surprised if it couldn't be made with some time. I don't think I would assume the extemporaneous analysis of a balance sheet——

Q. You never made one in connection with the testimony you prepared here? A. I did not do that, no.

* * *

[14836] Q. Now, then, although you have, for the sake of brevity, depicted alleged deficiencies in return beginning with 1946, it is the fact, is it not, that in your depreciation reserve calculations you began with January 1, 1911. [14837] Right? A. That is right.

Q. Are we to understand that you propose a retroactive adjustment of the depreciation reserve? A. No, I have made no such proposal.

* * *

[14840] Q. I think you will find it is the same thing you did in the Safe Harbor case. A. Oh, no. I didn't, you did.

Q. In connection with my statement that in the Safe Harbor case you made a showing with respect to the entire past history of the company and the projected history on a cumulative basis, I show you Table 4 of Exhibit 53 in Docket [14841] Number IT-5914. Now having had an opportunity to refresh your recollection didn't you in that case show cumulative rates of return based upon the entire history of the company from 1933 to the year 2032, past and projected? A. It would appear so. I withdraw my remark and apologize for the lapse of memory.

Q. But you have not done that in this case. A. No.

* * *

[14847] Q. What additional risks, hazards and responsibilities are the common stock investors assuming by that in-

vestment in Safe Harbor common stock? A. The hazard of non-receipt of income or loss of principal.

Q. Is that reflected in any way by the rate of return on the common stock? A. Quite so. I think that is the best evidence that it is a risky undertaking.

Q. In other words, for assuming those additional risks, hazards and responsibilities they are going to receive 9.33 per cent dividends. Right? A. That is correct. Wait a minute, that is not quite correct. I am trying to be perfectly candid. For the assumption of the risks, hazards and uncertainties involved in this investment they are receiving that part of 9.33 per cent which is over and above what we have called a comparatively free, risk-free rate of return. Namely, if we may illustrate it by saying three per cent, again as I have, then 6.33 out of the 9.33 would be construed as the return to the investors here for assuming the additional risks and hazards [14848] of an investment in the Safe Harbor stock over and above employing those same assets in comparatively risk-free three per cent bonds.

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[14891] Q. You did not use the actual retirements for that period of time in connection with your computations shown in Exhibit 321; right? A. No, I did not, and I could not have to accomplish the purposes which this exhibit was intended to accomplish.

* * *

[14942] Q. So that you are to be understood as saying that though the Commission, if it wishes, may use a depreciated rate base, it may do so only if it makes an adjustment in the fair rate of return so as to equal the fair rate of return on total or undepreciated investment, right? A. Yes, all other factors being consistently handled the purpose of the "G" series here is to show that the Commission could pursue the mechanics of a deduction process for rate base purposes and make the necessary adjustments quite simply in rate of return to get the effect that it would have gotten had

it calculated its return on the total investment of the investors.

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[14947] Q. Isn't this the fact: That in the event that assets reflecting the depreciation reserve balance could not be identified, it would follow that no income could be identified as having come from those assets? A. I think the way I understand it it is obvious. If you can't identify the assets you couldn't identify the flow of income. But that doesn't mean to say there was no income necessarily, simply because of the first statement that there is no identification.

Q. You would say that the company has the right to assume assets reflecting the depreciation reserve exists and that there is income from such assets, and that the income that it earned was attributable at least in part to those [14948] assets. Is that it? A. I think so. If you can't identify the assets you probably can't identify the income.

Q. Could a company assume that its assets reflecting the depreciation reserve balance are all in the bank? A. You couldn't stop them from assuming that, no.

Q. It has that prerogative. A. Circumstances are obviously that it could make such an assumption.

Q. It could make such an assumption? A. Yes.

Q. And having made such an assumption it could then assume there is no income. Is that right? A. If there were no income it would follow very logically that it might also as well assume there was no income, if in fact there were no income.

Q. It doesn't know if it can't identify the assets. A. You assumed they were identified.

Q. Yes, it assumes that they are in the bank. Having assumed they are in the bank it may assume there is no income. Right? A. It might. But I say if in fact there were none. It is possible to earn a little return on bank balances at times. If you put it in a time account you could get some percentage on it.

[14949] Q. How much? A. Maybe one per cent today.

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[14957] Q. Now, if I understand what you just told us in these illustrations, whether the assets reflecting the depreciation reserve balance are invested inside the company or outside the company, there is an assumption of additional risks, hazards and responsibilities. Right? A. Depending on the character of the investment, Mr. Goldberg.

Q. Over and above this three per cent? A. All right, fine.

Q. With that, the answer is "Yes"? A. If it is above the three per cent.

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[14958] Q. Is this the fact: Whether deposited with a trustee or not, the fund or assets reflecting the depreciation reserve balance you consider a trust fund? Right? A. I think I have in some connection or other stated in effect a trust fund.

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[14982] Q. Does it take any cash to retire property except expenditures for removal or demolition? A. No. The retirement as such does not, particularly if we construe a retirement as a bookkeeping operation.

Q. I was not construing it as anything at all. A. You mean actually physically putting it out of service?

Q. Speak of it in that way first, actually physically taking it out of service, does it require any cash except expenditures for removal or demolition? A. No.

Q. As a "bookkeeping operation" does it require any [14983] cash? A. There is only the cost of the bookkeeping.

Q. Now, then, in what circumstances is there a cost of retirement which involves the utilization of cash other than cash for the bookkeeping operation or the removal or demolition of the physical property? A. The retirement as

such does not require any cash. The operation to which I referred is the replacement.

* * *

[14997] Q. There is one life assigned for the turbo generators in Exhibit 59. Is that right? A. That is right.

Q. Did you understand that that one life assignment meant that all of the turbo generators would be retired at [14998] the same time? A. I understand that such turbo generators might not be actually retired at one time. In fact, I understand very well that they may not be retired at all according to such a forecast, but they were given a specific life and it is that life I used to project the period of their existence in the account from the date of installation to the date of estimated retirement.

* * *

[15050] WM. H. EICHHORN, JR.

* * *

CROSS-EXAMINATION (Continued).

By MR. GOLDBERG:

* * *

[15062] Q. Now we come to the Schedule K series which begins on page 34. If I understand the make-up of this from what you told the Examiner the other day, you have broken down the Schedule K items into three classifications; is that right? A. That is correct.

Q. Did you make the breakdown or did Mr. Wetzel make it? A. I asked Mr. Wetzel to make the breakdown.

[15063] Q. The breakdown between betterments, additions, and replacements, then, represents his conclusions as to the appropriate segregation; is that right? A. Yes, with this understanding—that when we made the original cost determination, there was a large group of items which fell into this classification of betterments, additions, and replacements, and they were treated as one total group at that time, and what is done in Exhibit 320 in the K sched-

ules is to divide up the remaining ones which were not recommended for allowance by the staff in Exhibit 51.

Q. I understand that you concluded that these amounts shown for the three categories on page 34 were accounting errors, or, as you stated it the other day—— A. I participated in that joint determination that these were accounting errors.

Q. When you say "joint determination," I take it that means that you were in accord with the conclusions, and it also represented your own independent conclusions; right? A. I saw nothing wrong with it; that is right.

Q. You agreed with the conclusions; right? A. I think that is similar.

Q. All right, if you are using it in that sense. I would like to see if we can cover them as a whole without [15064] going into all of the details, for the sake of saving time.

Now, then, upon what standards, or what standards did you apply in reaching the conclusion that these amounts were erroneously charged either to operating expenses or to the depreciation reserve? A. First of all, these items appeared in the physical inventory, and there was no cost found for them in the plant accounts, so that since they represented physical property and were part of the plant in service, I considered, along with Mr. Gunn and counsel, the system of accounts of the Federal Power Commission instructions—electric plant accounts 2-B as permitting inclusion of those items as part of plant cost.

Q. I take it that you are referring to the last sentence, electric plant accounts, instruction 2-B, which appears on page 38 of the Commission's Uniform System of Accounts? A. Yes.

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[15065] Q. If the charges, when made, were made pursuant to accounting practice then in effect, you understood instruction 2-B to forbid re-accounting for them; isn't that so? A. No, that is not what I understand instruction 2-B to mean.

Q. Will you give us your understanding of what you understood it to mean? A. Instruction 2-B, I believe, speaks clearly for itself, and I know that you left out of your question the words, in instruction 2-B, "Charged to operating expenses in accordance with the Uniform System of Accounts in effect at the time."

Q. Go on. A. That is all.

Q. What did you understand "charge to operating expenses in accordance with the Uniform System of Accounts in effect at the time" to mean? A. Well, to me it meant that if the Uniform System of [15066] Accounts in effect at the time entry was made required items to be charged to plant account, and they were not so charged, they could be corrected under instruction 2-B.

Q. What did you understand "Uniform System of Accounts" meant? A. To me this meant, in this particular instance, the Pennsylvania Commission system of accounts which was in effect during the recording of these entries by Penn Water.

Q. All of these entries, are you saying, which appear in Exhibit 320 on the K schedules were made at a time when the Pennsylvania Commission's system of accounts was in effect? A. I believe they all were. Let me look at this for a minute.

Q. Do you know when the Pennsylvania system of accounts went into effect? A. January 1, 1919, is the effective date of one uniform system of accounts of the Pennsylvania Commission, the one that I have here.

Q. Was that the one which was in effect during the time that the entries in the K schedules were made? A. I believe it was.

Q. The earliest item I find in glancing quickly through the schedules appears on page 45. Item 26 appears [15067] to have been made in several years—1912, 1913, 1914; is that right? A. Those particular ones, '12, '13, and '14, are the only ones that I know there.

Q. The only one I found which was earlier than 1923. A. That is correct.

Q. That one was made before the 1919 system of accounts was in effect, obviously? A. That is right. As to this particular one, I believe it is proper accounting to include it in capital, even though the system of accounts was not in effect at the time.

* * *

Q. Do you consider that electric plant accounts instruction 2-B does not apply where there was not in effect a "uniform system of accounts" in the sense in which you have referred to the Pennsylvania system of accounts? A. No, I think that that is one, only one of the bases for making the corrections shown in the K schedules. I believe it does not violate accounting principles to make that correction, in any event.

Q. All right. That is because, as I take it, you say properties are in the physical inventory, and there is no cost associated with that property; is that right? [15068] A. We were asked to determine original cost and we had the property.

Q. You were asked to determine original cost within the confines of the instructions of the uniform system of accounts; is that right? A. Yes.

Q. I am trying to find out from you whether you construe the phrase "uniform system of accounts" as meaning a system of accounts prescribed by some regulatory commission. A. That is what I took it to mean, yes.

Q. In other words, you did not take it to mean in accordance with the accounting practices being followed by the utility? A. No, I don't think you would normally speak of that as a uniform system of accounts.

Q. At least, you did not think that is the sense in which it was used? A. That is right. Something uniform has to be used by more than one person or more than one company to be uniform.

Q. Then, did you understand it to mean accepted practice among utilities, even though such practice was not pursuant to a system of accounts prescribed by regulatory bodies? A. No. I took this to be a prescribed system of [15069] accounts by some authority.

Q. I see. Now, we have here only one item, you say, in which entries were made when there was no system of accounts. A. That is right.

Q. What is that Item No. 26? A. As I understand it, it is construction plant buildings which remained over after the initial construction at Holtwood.

Q. You mean after construction ceased, these buildings remained in existence and were used for operating purposes; is that right? A. I don't believe they were used for operating purposes. I think that is the reason they were charged off in 1916. They were not usable.

Q. Can you describe these buildings? Were they shacks or something? A. No, I cannot. This is the residue of the construction plant buildings account which had not been charged off, so that you could not identify from the records the exact buildings.

Q. You are unable to determine what buildings are involved; is that it? A. That is correct.

Q. If I get the picture, you are saying that these [15070] construction plant buildings were charged off because they were not used after construction ceased? A. That is my understanding, yes.

Q. And you have found no information indicating their use; is that right? A. I am informed by Mr. Wetzel, who is familiar with the details of the K schedules, as I previously testified, that the buildings were used from time to time for construction activities, but for the most part remained idle.

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[15072] Q. I understand that with respect to the other items in the K schedules the entries were made during the

time that the Pennsylvania system of accounts was in existence; is that right? A. I believe that is correct.

Q. Did you determine that the Pennsylvania Water and Power Company was following that 1919 system of accounts during the time these entries were made?

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[15073] THE WITNESS: I believe the company considered itself subject to the system of accounts. The system of accounts had been issued effective January 1, 1919. The company was subject to the jurisdiction of the Pennsylvania Commission so far as I know.

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Q. And at least you proceeded on the theory that they followed that system of accounts? A. That is one of the things that I considered, as I said before.

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[15074] Q. I am not sure I follow you on that. Let me see if I can state my understanding. You have determined that the uniform system of accounts that the company was following during the time it made these Schedule K entries was the system of accounts effective January 1, 1919, prescribed by the Pennsylvania Commission; is that right? A. That is one of the things.

[15075] Q. Did you determine that the entries as made, either to the depreciation reserve or to operating expenses, by the Pennsylvania Water and Power Company were not permitted by that system of accounts prescribed by the Pennsylvania Commission which became effective January 1, 1919? A. From the Pennsylvania system of accounts and general accounting principles it appeared to me that the items in the "K" Schedules have been properly charged to Plant Account.

Q. That is not my question. I want you to confine yourself to the system of accounts prescribed by the Pennsylvania Commission. Let's leave out of our consideration

for the moment the general accounting principles you have referred to.

So confining yourself, did you determine that the entries made either to the depreciation reserve or operating expenses were erroneous under the provisions of the Pennsylvania System of Accounts?

* * *

[15076] A. As to my portion of the determination, that is what the system of accounts of the Pennsylvania Commission indicated to me.

Q. All right. Now, then, what provision in that system of accounts indicated to you that Item Number 1 was erroneously charged to the reserve for depreciation which appears on page 35 of Exhibit 320? A. Page 43 of the Uniform Classification of Accounts for Electric Companies prescribed by the Public Service Commission of the Commonwealth of Pennsylvania, effective January 1, 1919, contains this language at page 43 under the heading of "Fixed capital accounts installed since December 31, 1918—Definitions and Instructions."

Under the subdivision of fixed capital there is the following language: "Betterments are physical changes in [15077] structures or equipment, the object of which is to make the structures or equipment affected more useful or of greater capacity than they were at the time of their original installation or acquisition. The utility shall charge as a betterment to the appropriate subaccount of '101—Fixed Capital Installed Since December 31, 1918' account that portion of the cost of such changes as will, when added to the original cost of structures or equipment bettered, give the cost of the structures or equipment in their bettered condition."

Q. Now, then, you concluded that that provision made the charge to the reserve for depreciation of Item Number 1 on page 35 of Exhibit 320 an accounting error? A. That was one of the things. Of course, there was also the

present FPC system of accounts, and the fact that we were required to determine original cost at a subsequent date.

Q. I am dealing with the provisions of Electric Plant Accounts Instruction 2-B right now.

Did you understand that the management had the discretion of determining what represented a betterment? A. I don't understand what you mean by "discretion."

Q. Wasn't it up to management to decide whether it was a betterment or not? A. It was up to whoever was going to indicate the proper charge to the account.

[15078] Q. The company was to decide whether it represented a betterment. Right? A. That is right. Someone in the company.

Q. At the time this entry was made was it determined that it was a betterment? A. Apparently not, or it would have been so charged. Apparently no such determination was made at that time. What actually happened at the time of the entry I don't know. I wasn't there.

Q. This summary of betterments as you have classified them represents a present determination that they were betterments? Isn't that so? A. A determination in 1938-39 as required by the Federal Power Commission.

Q. Now, then, do I understand from your last statement that it has been determined that these items were betterments within the meaning of the Federal Power Commission System of Accounts which became effective January 1, 1937? Is that it? A. That is another one of the things we considered.

Q. Well, was that the basis for determining that they were betterments, the standards set up in the Federal Power Commission's System of Accounts which became effective January 1, 1937? A. There was no one thing, Mr. Goldberg. I think I previously said we considered all of these things. I did [15079] for my part, and then Mr. Gunn and counsel made the final decision to include the items. As far as my part in it is concerned, they appeared to be betterments to me in accordance with all of these various meas-

ures we had to make, which were the Pennsylvania System of Accounts, the Federal Power System of Accounts, and accounting principles as I understood them.

Q. Did you determine that it was a betterment under the Pennsylvania System of Accounts as it existed in 1923? A. It appeared to me that these items were betterments under the Pennsylvania System of Accounts, the Federal Power System of Accounts and Accounting Principles as I understand them.

Q. Did you determine whether the management or the company at the time the entries were made considered them betterments? A. No, I made no determination as to what took place at the time the entry was made.

Q. And that applies, does it not, to Items 2 and 3 appearing on page 34 of Schedule "K"? A. Yes, I think that applies to Items 2 and 3.

Q. Is it your testimony that under the Pennsylvania System of Accounts, which was effective January 1919 that an expenditure determined by the management at that time as representing a betterment could be accounted for only by a charge to subaccount "101—Fixed Capital Installed Since [15080] December 31, 1918"?

* * *

THE WITNESS: I believe that an item which was a betterment under the Pennsylvania System of Accounts should be charged, or should have been charged, to Utility Plant.

By MR. GOLDBERG:

Q. Otherwise it was in error? A. That is right.

Q. From 1923 to 1935, did Pennsylvania Water and Power Company have its balance sheets and income statements certified by public accountants? A. Yes, I am sure they had.

Q. Do you recall whether at any time they took exception to the accounting as not being in accordance with the principles of accounting which the company had to follow? A. No, I don't recall they ever took exception, but on the

other hand I don't recall that their analysis of the company's accounts went that far into the plant accounting.

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[15087] Q. Isn't this the fact: That whether it is a betterment or a replacement under those definitions as they appear in the Pennsylvania System of Accounts, and which are now in the record, it is a matter of judgment which may vary with the individuals making the determination? A. I would say that is so.

Q. In other words, there is no clear line of demarcation as to what is a replacement and what is a betterment? Right? A. I believe it would depend in part on judgment, yes.

Q. And two people acting in entirely good faith could reach different conclusions on the same facts as to whether it was a betterment or a replacement. Right? A. I believe that would be possible.

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[15088] Q. Did you determine whether these items that you have referred to as betterments, additions or replacements had been individualized on the books of the company? A. Based upon the information I had from Mr. Wetzel, it was my opinion, along with the others, that these items were properly betterments, replacements or additions in accordance with the System of Accounts.

Q. Does System of Accounts mean Pennsylvania? A. Pennsylvania, FPC System of Accounts, and also my general accounting knowledge. Everything was considered.

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[15089] Q. Isn't it a fact that in connection with a reading of the accounting for betterments and replacements, as [15090] reflected on page 43 of the Pennsylvania System of Accounts, you must consider the paragraph appearing on page 37 of the System of Accounts which I read into the record?

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THE WITNESS: I think it is necessary to consider the entire system of accounts in connection with any particular section.

By MR. GOLDBERG:

Q. Because, while page 43 may appear to provide no discretion in the management with respect to the accounting, the provision on page 37 may provide that discretion if there is no satisfactory individualization of the structures and equipment. Isn't that so?

* * *

THE WITNESS: I think you have to consider both in conjunction with the entire system of accounts, but I would like to point this out as long as we are talking about that in this connection. It states, on page 43 of the Pennsylvania System of Accounts, "The Utility shall charge as a betterment."

That indicates to me that it should be done.

[15091] By MR. GOLDBERG:

Q. Yes. A. It should be so charged as a betterment.

Q. When it is a betterment? A. That is right.

Q. Yes. A. And based upon the data obtained from Mr. Wetzel in my opinion these are betterments. Therefore I think they are proper.

* * *

[15094] Q. Why did you include pages 51, 52 and 53 in Exhibit 320? A. As additional explanatory material of the item of $1400 for the Holtwood Church.

Q. Did you decide to include them or did Mr. Gunn ask you to include these in the same way he asked you to include page 18? A. No, I decided to include those as being explanatory. In Mr. Gunn's testimony I believe he refers to the letter shown as page 51 at transcript 8332, and that letter was followed by the letter which appears as page 52.

Page 53, I obtained from a book entitled "The Constitution of the Presbyterian Church in the U. S. A.," and

it appeared to me that that was the section which must have been the basis for the church not accepting the offer of the company.

Q. When was that constitution adopted? A. Well, I was unable to determine the exact date because it was for the period from 1805 to 1939, and the only copy I had available was a 1939 copy.

Q. Do you know whether the company's contribution was used for the building or for the furnishings in the building? A. I don't know exactly, but I believe it was used for the building, because that was the first thing which had [15095] to be gotten. You had to have a building before you could put the furnishings in. I don't think the furnishings cost as much as $1400 originally.

Q. The $1400, however, had nothing to do with the land; is that right? A. That is right. That had nothing to do with the land. The land always has been owned by the company and the church building is located on the land which is owned by the company.

* * *

[15101] MR. KING: * * * I also would like to state that transcript page 14,577 shows Your Honor stating as follows:

"As I understand it, Respondents' counsel is not withholding any witness who is necessary to substantiate any fact appearing in Exhibit 320 for identification. Isn't that correct?

"MR. KING: That is correct, Mr. Examiner."

In view of that statement I would like to have the record show that Mr. Wetzel has been in the hearing room all during the cross-examination of Mr. Eichhorn and that we tender Mr. Wetzel and Mr. Bortner, whom we can make available [15102] in a very short while, for cross-examination if Mr. Goldberg so desires.

* * *

[15107] CARL WILLIAM WATCHORN,

was called as a witness on behalf of Pennsylvania Water and Power Company, and, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION.

By MR. SPARKS:

Q. Please state your full name, Mr. Watchorn. A. Carl William Watchorn.

Q. By whom are you employed? A. The Pennsylvania Water and Power Company.

Q. Will you state your educational qualifications, membership in technical and scientific societies, and technical experience prior to your employment with the Pennsylvania Water and Power Company?

* * *

[15113] THE WITNESS: I was graduated from the Worcester Polytechnic Institute with the degree of Bachelor of Science in Electrical Engineering in 1923 and was granted the professional degree of Electrical Engineer in 1936 by the same school.

I am a member of the Honorary Engineering and Scientific Societies of Tau Beta Pi and Sigma Xi, respectively, an Associate Member of the American Institute of Electrical Engineers, a member of a sub-committee of the Hydraulic Power Committee of the Edison Electric Institute for the purpose of collecting forced outage data of hydroelectric units, and a Registered Professional Engineer in the State of Maryland.

I was employed in the Test Department of the General Electric Company, on electrical machinery and equipment tests, for about 15 months in 1921 and 1922; and in the Test Department of the then The New York Edison Company, now the Consolidated Edison Company of New York, Inc., for about 10 months in 1923 and 1924. I accepted employment with the Pennsylvania Water & Power Com-

pany in 1924 and have been continuously employed with that company to date.

By Mr. Sparks:

Q. What has been the nature of your employment with the Pennsylvania Water & Power Company? A. I was employed in the Company's test department [15114] for about 2 to 3 years and then as a special assistant to the Superintendent of the Company's steam plant at Holtwood for about a year. During this period I was also assigned to special studies of various kinds in the Company's Baltimore Office for various lengths of time. In 1928 I was assigned to the Company's Baltimore Office as an assistant to the Efficiency Engineer and Assistant General Superintendent, the latter of whom was later promoted to General Superintendent.

Q. Was the Assistant General Superintendent and later General Superintendent, to whom you referred in your last answer, Mr. R. L. Thomas, now Vice-President of the Consolidated Gas Electric Light and Power Company of Baltimore? A. Yes.

Q. The same Mr. Thomas who has already testified in this case? A. Yes.

Q. How long did you hold the position of assistant to Mr. Thomas? A. Until 1938.

Q. What were your duties during that period from 1928 to 1938? A. My duties during that period were quite varied from time to time, depending in large measure on what problems of the Company commanded particular attention. A great deal of my time was devoted to load and capacity studies.

[15115] Q. What position do you now hold with the Company? A. My present position is that of Efficiency Engineer.

Q. How long have you held that position? A. Since 1938.

Q. Are your duties confined to the operations of Penn Water? A. No.

Q. To what other company or companies do your duties extend? A. The Safe Harbor Water Power Corporation.

Q. Are your duties with respect to Safe Harbor any different from those with respect to Penn Water, at least to the extent that the operations of these two companies are similar? A. No.

Q. What are these duties of your present position? A. Again, they are varied, but primarily they are the general supervision of the efficiency of operation of the power generating facilities at the plants of the companies in conjunction with the maximum overall economical utilization of such power generation and facilities on the interconnected systems insofar as Penn Water and Safe Harbor are concerned.

Q. Do your present duties still include the making of load and capacity studies? [15116] A. Yes, they do.

Q. Have you ever presented any technical papers? A. Yes, several.

Q. Have any of these papers ever been published? A. Yes, one, I believe, to which I was co-author with Mr. H. A. Von Eiff.

* * * *

[15118] Q. Do the Holtwood and Safe Harbor hydro plants have sufficient storage for use over periods of longer than a few hours? A. Yes.

Q. Would you say that these plants are run-of-river plants within the definition of Instruction 4 of Schedule 2, F. P. C. Form 12? A. Definitely not. The storage at the Holtwood plant, when considered by itself, is more than sufficient to operate the entire installed capacity in the peak of the interconnected system load with refill of the storage by the beginning of the following week, even with the most adverse low river flows. However, if we consider the Safe Harbor plant alone or the Holtwood and Safe Harbor plants combined, using the storage in the Safe Harbor pond alone, such storage is sufficient to limit or regulate the

system annual maximum required steam generation over periods of several weeks.

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[15135] Q. It appears from your prior testimony that you have been working on various aspects of the application of the theory of probability to the problem of system generating capacity requirements for quite some years. When did you first start working on this general problem? A. I initiated the present line of investigation of this general problem in our company in the spring of 1936; that is eleven years ago now.

Q. That was during the period that you reported to Mr. R. L. Thomas, was it not? A. Yes.

Q. How long did you continue to report to Mr. Thomas after you started this work? A. Two more years, until the spring of 1938, when he accepted a position with Baltimore Company.

Q. Was he interested in this work? A. Yes. He was also very encouraging and in addition made available extra help to carry on the necessary investigations.

Q. Do you know if he ever used any of the results of [15136] your work? A. Yes.

Q. Had you been able as of that time to develop your method of making these studies to the comprehensive degree that you can make such studies as of the present time? A. No.

Q. Please explain. A. This line of investigation was in a formative stage up to about three years ago, although we were able to obtain fairly good results during that period. Our thoughts as to this matter did not really become crystallized until about three years ago. Our later work has largely been the development of specific details of application of the general method. We can now reasonably take into account all the pertinent factors in a practicable and expeditious manner.

Q. Did you have any responsibility in connection with the determination of the figures for dependable hydro

capacity appearing in the F. P. C. Form 12 Reports for the years 1944 and 1945 as filed by Penn Water on behalf of the Holtwood-Safe Harbor system? A. Yes.

Q. Were the determinations of such figures for dependable hydro capacity in those reports based upon your studies that you have outlined up to this point? [15137] A. Only with respect to the figures in the 1945 report.

Q. Do I understand that the figures in the 1944 report were not based upon such studies? A. No, they were not.

Q. Why were they not? A. Because the method of making such studies had not been sufficiently developed until about the middle or latter part of 1945.

Q. Have you examined the figures shown by Mr. Davis in his Exhibit 64 for dependable hydro capacity of the combined Holtwood-Safe Harbor hydroelectric developments and his allocation of such dependable capacities as between the two developments? A. Yes, I have.

Q. Do you agree with his conclusions with respect to the dependable hydro capacity of the combined Holtwood-Safe Harbor hydroelectric developments and his allocations of such capacity between these two developments? A. No, I do not.

Q. Have you examined the figures given by Mr. Thomas in his testimony on dependable hydro capacity of the combined Holtwood-Safe Harbor hydroelectric development? A. Yes, I have.

Q. Do you agree with his conclusions with respect to the dependable hydro capacity of the combined Holtwood-Safe [15138] Harbor hydroelectric developments? A. No, I do not.

Q. Will you now describe as briefly as possible the general method that you have developed for making such studies of the generating capacity requirements on any electric generating system and for the purpose of determining the dependable hydro capacity figures found in Schedule 16 of the 1945 F. P. C. Form 12 Report? A. I

used two basic propositions or principles of the theory of probability, (1) that the probability that two or more independent events will happen or exist as of the same time is the product of the probabilities that each of the separate events will happen or exist as of that time and (2) that when an event can happen or exist in more than one way, the probability that it will happen or exist is the sum of the separate probabilities of its happening or existing in each of these separate ways. These two simple propositions are all that we need to know, by way of basic principles, relating to the theory of probability in order to develop our process of statistically analyzing the capacity situation on any electric generating system.

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[15149] Q. Are there any other reasons why steam or hydro units or capacity may be unavailable other than as a result of forced outage? A. Yes.

Q. Will you please explain? A. There are further reductions in the load carrying [15150] capability of steam capacity because of changes in condenser circulating water temperature for the various seasons of the year and reductions imposed by limitations of tie cables. There are reductions in the load carrying capability of hydro capacity because of variations in river flow and available head; and then of both hydro and steam capacity because of scheduled maintenance.

Q. Are these factors taken into account in your study in addition to the unavailability of steam capacity because of forced outages and routine maintenance previously described by you? A. Yes.

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[15153] Q. How did you treat the Holtwood and Safe Harbor storage in these studies? A. I conservatively assumed that no Holtwood storage would be used other than that required for normal operation of weekly refill. The Safe Harbor storage was also conservatively used to the

extent that the available physical capacity of the hydro plants, taking the scheduled maintenance into account, was not smaller than the required hydro capacity or the drawdown was limited to a minimum elevation of 215.0, with only partial refill by the beginning of the following week.

Q. Did you mean that such use of the available Safe Harbor storage as you have just described is conservative as well as assuming no use of the Holtwood storage? A. Yes, I did. This can be shown to be a fact.

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[15162] Q. Do these two curves shown on Exhibit 329 enable you to make your determination of dependable hydro capacity? A. Yes, they do.

Q. Will you tell us how you do this? A. A comparison of these two curves shows that, for all practical purposes, over the whole range of 15-minute annual peak loads for which these curves are shown from 1,025,000 kilowatts to 1,125,000 kilowatts, and also for [15163] the whole range of overall system reliability of failure to carry the load from the corresponding average rates of one day in 400 years, which is a somewhat greater degree of reliability than is reasonable or desirable, to one day in 1.5 years, which is a considerably smaller degree of reliability than is reasonable or desirable, the system hydro plants are equivalent to or replace, capacity-wise, 285,000 kilowatts of installed dependable steam capacity made up of five 57,000 kilowatt units.

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[15164] Q. Does your previous answer mean that the dependable capacity of the system hydro plants on the load of the interconnected system is 285,000 kilowatts? A. Yes, it does.

Q. What, in your opinion, is a satisfactory and desirable degree of overall system reliability of generating capacity? A. A chance of failure to carry the system load at the average rate of one day in 25 to 30 years as a minimum to one day in about 100 years as a maximum. As

shown by Exhibit 329, this range of reliability permits a range of annual peak load of about 20,000 kilowatts to 25,000 kilowatts with a corresponding range in the magnitude of system reserve.

Q. Does the load that you use in your determination of dependable hydro capacity have any effect on such determination? A. Yes.

Q. Will you please explain? A. On the conservative basis that I used, low flow periods were the predominant factor in my determination of dependable hydro capacity. The result of this is that the [15165] shape of the system load, whether it is sharp, that is, whether it has a large excess of the weekly peak load over the weekly sustained load, or whether it is flat, that is, whether it has a small excess over the weekly sustained load, is an important factor in the amount determined as dependable hydro capacity.

Q. In what way do these load characteristics affect your determination of dependable hydro capacity? A. The sharper load shapes result in the determination of larger amounts for the dependable hydro capacity and the flatter load shapes result in the determination of smaller amounts.

Q. Do these changes in load shape have a direct or a proportional effect on your determination of dependable hydro capacity? A. A proportional effect.

Q. Have you made a determination of such proportional effect? A. Yes.

Q. What result did you obtain? A. That the dependable hydro capacity is affected by about 55 per cent of the change in the excess of the annual one-hour peak load or of the annual 15-minute peak load over the maximum weekly sustained load.

* * *

[15169] Q. I show you Exhibit 331 and ask you did you prepare it? A. Yes, I did.

Q. What does this exhibit show? A. This exhibit shows the probable average rate at which various amounts

of drawdowns may be required, in accordance with our assumption, for one week to prevent failures to carry some part of the system load. It shows that drawdowns of various specific amounts are very infrequent and also shows that drawdowns required to provide load carrying capability in excess of 20,000 kilowatts to 25,000 kilowatts are of very little concern from a practical [15170] point of view. In addition, I wish to call particular attention to the great infrequency of the larger amounts of drawdown, drawdowns of between 55,000 kilowatts and 59,000 kilowatts occurring at the average rate of one week in 1670 years and drawdowns of between 60,000 kilowatts and 64,000 kilowatts occurring at the average rate of one week in 8,000 years.

Q. What is the significance of these results? A. That the probability of failure to carry the load because of shortages of hydro energy available from the natural river flow is very small.

* * *

[15190] Q. Have you made a determination of the probability of failure to carry the load because of a shortage of hydro energy from the natural river flow, such that the Safe Harbor storage would be insufficient to prevent such failures to carry the load when there is sufficient steam capacity installed on the system? A. Yes.

Q. What result did you obtain? A. Such failures to carry the load because of a shortage of hydro energy coincident with such forced outages of steam capacity could be expected to occur at the average rate of one week in more than 120,000 years.

Q. Have heavy weekly sustained loads ever occurred during the first week of December? A. Yes.

[15190-A] Q. Did you also make a determination of the probability of failure to carry the load with respect to the first three weeks in December, in the same manner as you just described with respect to the second and third weeks of that month? A. Yes.

Q. What results did you determine for this situation? A. That such failures to carry the load could be expected to occur at the average rate of one week in more than 95,000 years.

Q. What conclusion do you draw from this analysis? A. That it is absurd to entertain any but the most remote apprehensions concerning failures to carry the load because of the occurrence of such improbable events.

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[15193] Q. Was there any material difference, in so far as [15194] your determination of dependable hydro capacity is concerned, between the load you used in your study and the load forecasted for future conditions, with Standard Time, as reported in the combined Penn Water or Holtwood and Safe Harbor System F. P. C. Form 12 Report for 1944? A. No.

Q. Was there any difference, in this same regard, between this report and the 1944 F. P. C. Form 12 Pool Report filed by Baltimore Company for the combined Holtwood, Safe Harbor, Baltimore, Bethlehem Steel and Washington Systems? A. No.

Q. Are these the Form 12 Reports referred to by Mr. Davis beginning at line 15 of page 1188 and ending at line 3 of page 1190, with intervening questions, and also referred to beginning at line 7 to line 25 of page 1206? A. Yes.

Q. Do you agree generally with Instructions 5 and 1 (b) to Schedules 2 and 16, respectively, of F. P. C. Form 12, relating to dependable hydro capacity? A. Yes.

Q. Have you evaluated all the factors enumerated therein in your study? A. Yes, in as thorough a manner as I believe it is possible to do so from a practical point of view.

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[15220] Q. I refer you to the sentence beginning at line 14 of page 1189, where Mr. Davis stated, "The excess

available by further use of Safe Harbor storage is computed at 57,000 kilowatts. This additional capacity is used only in case of emergency and obviously is of a different quality from capacity under a weekly recovery program," and ask you do you agree with this statement? A. No, I do not.

Q. Will you please explain? A. In the rare instances when Safe Harbor storage is required it serves the same purpose and use as dependable steam capacity in comparable cases of emergencies on all-steam systems, and, consequently, is nonetheless dependable hydro capacity replacing the full amount of dependable steam [15221] capacity that otherwise would perform the same service. And further, this additional capacity, which Mr. Davis says depends on drawdown, and more is actually available and used nearly all the time, thereby permitting steam capacity to be on standby for use in case of emergencies and in addition performs the useful functions of facilitating maintenance of steam units, for which purpose, additional dependable steam capacity might otherwise be required to be installed.

* * *

[15222] Q. Did you make any provisions in the load you used in your detailed study of dependable hydro capacity for the change brought about by the discontinuance of the supply to Edison Light and Power Company of York and the beginning of the supply to Metropolitan Edison Company? A. No, I did not, and I have not considered this change in any of my testimony thus far.

Q. Did you take this factor into consideration in your final determination of dependable hydro capacity? A. Yes.

[15223] Q. Will you please explain how you did this? A. As of last year, we have some recent Metropolitan Edison Company load data, which I studied and concluded that, based on such data, the dependable hydro capacity would

be increased 10,000 kw. as a result of the inclusion of this load with that of our interconnected system.

Q. What then was your final determination of the dependable hydro capacity for the year 1946? A. 295,000 kw.

Q. What was your actual experience in 1946 with respect to the effect of the supply to Metropolitan Edison Company? A. The actual experience was that the dependable hydro capacity would be increased about 20,000 kw. as the result of such supply rather than the 10,000 kw. previously estimated.

* * *

[15224] Q. Did you use any coordination with the companies in Area 5 in your determination of dependable hydro capacity? A. Only with respect to the supply to Metropolitan Edison Company in the same manner as for our supply to Baltimore Company in connection with which we coordinate our hydro operations with the steam operations of Baltimore and Washington Companies.

Q. To how much capacity benefit did this amount? A. About 5,000 kw.

Q. Is there any additional potential capacity benefit available from your using coordinated operation with the other companies in Area 5 in your determination of dependable hydro capacity? A. Yes.

Q. Can you tell us how much more? A. I don't know exactly. Our latter studies during the war showed an additional capacity benefit from coordinated operation with all the companies in Area 5 of 20,000 kw. available in Area 6 from backfeed energy alone from Area 5. I do not know to what extent changes in load shapes in Area 5 since the war, may have changed this quantity. I would, however, expect that any changes would tend to increase such benefits, and at least not adversely affect them. If [15225] this is true, then there would be additional capacity benefits available from coordinated operation with the companies

in Area 5, other than Metropolitan Edison Company, of about 15,000 kw.

Q. It is true then, is it not, that to the extent there are available such benefits, your determination of dependable hydro capacity is that much more conservative than previously stated by you? A. Yes.

Q. Are you able to state, in your opinion and to the best of your knowledge and belief, that your determination of dependable hydro capacity for "run-of-river" hydro plants is the most comprehensive and thorough that has ever been made? A. Yes, it is.

Q. Beginning at page 1190 of the record, Mr. Davis testified that dependable capacities at the two hydroelectric plants, viz: at Holtwood and at Safe Harbor, bear the same ratio as their respective installed capacities. Is such a fact? A. No, it is not.

Q. Do you normally make separate determinations of the dependable hydro capacity of the Holtwood hydro plant of Penn Water? A. No. There has never been any occasion to do so.

[15226] Q. Have you made such a determination? A. Yes.

Q. What amount did you determine as the dependable capacity of the Holtwood hydro plant? A. 100,000 kw.

Q. What is your basis for this determination? A. My intimate knowledge of the Holtwood and Safe Harbor hydro plants together with my experience as to these matters.

Q. What factors did you consider in this determination? A. There are two engineering approaches to this problem. The first is what might be called the "historical" approach, which would take into account the fact that Holtwood antedates Safe Harbor by many years and that the dependable capacity of the Safe Harbor plant would be that amount which would be used to justify its installation as of the time such determinations were made. This approach would result in a dependable hydro capacity for the

Holtwood hydro plant of slightly less than the full installed capacity and would be about 100,000 kw. The second is what might be called the "present situation" approach, on which basis the load carrying capability of each of the Holtwood and Safe Harbor plants would be based on consideration of the energy available at each of the plants for various river [15227] flow conditions. This approach would also result in a dependable hydro capacity for the Holtwood hydro plant of about 100,000 kw.

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[15235] Q. Is your determination of dependable hydro capacity a mathematical and scientific determination? A. Yes, it is, on a very conservative basis.

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[15322] HERBERT B. DORAU.

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CROSS-EXAMINATION (Resumed).

By MR. GOLDBERG:

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[15329] Q. Do you attach any significance to the fact that the depreciation reserve balance appears on the right side of the balance sheet? A. Yes, I think it is significantly indicative of the fact that it means to indicate or is taken to indicate that there was that much of a reservation of revenue against some future date when the liability to retire has matured.

Q. I see. Now, showing you the Federal Power Commission's system of accounts, and more specifically the set-up of the balance sheet which appears on pages 16 and 17, is the reserve for depreciation shown as a liability? A. Yes, it is on the liability side of the balance sheet.

Q. Isn't the balance sheet on that side called "Liabilities and Other Credits"? A. Yes, that longer form is sometimes used.

Q. Now, do you take the section of the right side of the balance sheet which is entitled "Reserves" to fall within the phrase "other credits" or the word "liabilities"? A. I have never made the distinction.

Q. You never made a distinction between liabilities and other credits when you thought about the reserve for depreciation? A. No, I also treat them as liabilities.

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[15340] Q. Well, do you, or do you not agree that they can be used to retire bonds? A. No, other assets may be employed to retire bonds.

Q. In other words, you are saying that the assets reflecting the depreciation reserve balance are not available for general corporate purposes? A. Those assets to the amount of the depreciation reserve balance are retained in the business.

[15341] Q. Does that mean that you are saying that the assets reflecting the depreciation reserve balance are not available for general corporate purposes? A. Those particular assets, if tagged and identified, would not be available for that purpose.

That is not my position in this matter. That is your assumption.

Q. Are you saying that if they had not been tagged, they may be used to retire bonds? A. No, the bonds would be presumably retired out of liquid assets available to the enterprise.

Q. Let us assume that the assets reflecting the depreciation reserve balance are invested in an electro-alloys company. When so invested, are they devoted to the public service? This is an electric utility that uses the assets reflecting the depreciation reserve balance? A. Their public service consists of their being retained in the enterprise and available as a basis of credit to finance the replacement. Their particular investment as such is, of course, not a public utility investment, I presume.

Q. But you would say that the assets are to be considered, though invested in the electro-alloys company as devoted to the public service of the electric consumers? A. Assets to that amount are retained in the business to reflect the depreciation reserve balance.

[15342] Q. Your answer is yes to my question? A. Yes.

Q. Do I understand your testimony at 14,730 that electric plant held for future use is to be included in the rate base? A. Yes, I understand that electric plant necessarily held for future use is properly in the rate base. It should be.

Q. Now, you have tried to draw an analogy between the reserve assets, and working capital. Do you recall that? A. A very general comparison, yes.

Q. However, you consider it a proper analogy, don't you? A. Yes, I used it.

Q. Is working capital provided to meet some future liability? A. Yes, that is a very short-term cycle of liability to employ.

Q. Where capital is provided to meet current expenses? A. For the cycles within the year, even?

Q. Within the year or within the month? A. It might even be within the month.

* * *

[15347] Q. How about the statement that depreciation reserve is an account contra to the plant account? A. It seems to me that is a bookkeeping observation.

Q. Do you agree with it? A. I presume that is the way they state it but I do not know what it means.

Q. Well, you testified on direct that it was not merely or simply a contra account. A. Well, all right.

Q. Now, then, is it a contra account at all? A. It seems to me it might be contra to other assets.

Q. What other assets? [15348] A. Other assets reflecting the depreciation reserve balance.

Q. Are you saying that the depreciation reserve balance may be a contra account to other assets? A. Yes.

Q. Such as? A. Cash, investments in bonds or securities.

Q. In other words, you are saying you do not agree it is a contra account only to plant account? A. I do not see that it is necessarily that, no.

Q. Now, is it a contra account at all? A. In the sense of being opposite liability, contra to assets, of course.

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[15350] Q. I want to direct your attention to certain questions and answers in the Safe Harbor record when you were on cross-examination in that case, referring to transcript page 4840, line 20, and I will read beginning at line 20 through line 8 on page 4841 to simplify it.

"Question: Now, is it your contention that the purpose of depreciation charges is to provide for replacements of property?

[15351] "Answer: I can't follow that.

"Question: Is it——

"Answer: Therefore—since a retirement is not necessarily accompanied by a replacement the purpose ends with the final accumulation of an amount equal to the cost of the unit of property and the clearing of those accounts by charging the retirement to the reserve.

"Question: It has nothing to do with the replacement of property?

"Answer: It does not necessarily have anything to do with it. But the fund generated may be employed as any other fund may be employed."

I have correctly read the transcript in the Safe Harbor case? A. Yes.

Q. And you so testified, did you not? A. I did.

Q. Do you still agree with those statements there made? A. Yes, I think I agree with those statements.

Q. May I refer you to transcript 4876 of the Safe Harbor case, when you were on cross-examination.

This question was asked you at 4876:

"Question: Now, these assets contributed by the ratepayers may be used to liquidate liability or retire [15352] bonds; isn't that so?"

And you answered, "Any assets which the company may have can be employed for any legal purpose."

That question and answer appear, do they not? A. Yes.

Q. And you so testified in that proceeding? A. Yes.

* * *

[15354] RE-DIRECT EXAMINATION.

By MR. HULL:

Q. Dr. Dorau, a few moments ago your attention was directed to certain of your testimony in the Safe Harbor case relating to assets generated as a result of depreciation reserve charges, and their use "for any corporate purpose". Did you intend by your answers in that case and in this case on the same subject to imply that assets generated as a result of depreciation charges can be used to pay dividends to stockholders without the substitution of other assets of equivalent value in place of the assets used in paying the dividends?

MR. GOLDBERG: I object to the question as leading. It puts the answer in the witness' mouth.

TRIAL EXAMINER: The objection is overruled.

THE WITNESS: No, I construed or I assumed by virtue of the context of the discussion that any corporate purpose referred to an employment of those assets in the enterprise. I never assumed that they could be paid out in dividends. I had in mind any appropriate employment of those assets by the enterprise.

[15355] By MR. HULL:

Q. Now, this morning or early this afternoon reference was made by Mr. Goldberg to the possibility of accounting

for depreciation reservation on the left-hand side of the balance sheet as a deduction from plant account. If that method of accounting were adopted, would that mean that the assets reflected by the depreciation reservation would not have to be retained in the business? A. Not at all.

Q. So that the retention would be necessary no matter which side of the balance sheet the reservation was recorded? A. Yes.

Q. Now, I direct your attention to transcript pages 14,992, beginning at line 15 and extending over to 14,994, line 16.

MR. GOLDBERG: Where was the beginning point, 14,982?

MR. HULL: 992, line 15.

MR. GOLDBERG: Did you end with line 17?

MR. HULL: 16.

MR. GOLDBERG: Line 16 ends with a question and that is why I wondered whether you intended to go to line 17.

MR. HULL: Yes, line 17.

THE WITNESS: I have just glanced over that.

By MR. HULL:

Q. You are now familiar with the subject that was being [15356] talked about? A. Yes.

Q. Now, prior to that portion of the transcript, and beginning at transcript page 14,968, line 21 you will recall that Mr. Goldberg asked you to assume that a transmission line were to be built at a cost of $500,000 which had a 40-year service life, and at transcript 14,990, line 22, he asked you to assume that the service life of that line had expired, that the line had been retired, and the company had $500,000 of assets reflected by the depreciation reserve balance.

Then at transcript page 14,993, line 23, he asked you this question:

"If replacement of the property is not to take place, is there any necessity in your opinion for the maintenance of the so-called fund?"

And by the "fund" he referred to the $500,000 of assets generated by charges for depreciation.

MR. GOLDBERG: Just a minute. You have not finished your question?

MR. HULL: No.

MR. GOLDBERG: I will wait until you finish.

By MR. HULL:

Q. —and corresponding reservations of revenue. To this you replied that under such circumstances it would not be necessary to retain those assets in order to provide for [15357] the replacement of the property retired.

Now, with that background, let us assume that under those circumstances, a regulatory body having jurisdiction had found that the $500,000 was not needed in the business to insure continuity of service, and assume also that the utility had no debts to pay off.

What other use could the utility make of those assets of $500,000?

MR. GOLDBERG: May I have the question from the very beginning?

TRIAL EXAMINER: Yes, read the question.

(Record read.)

THE WITNESS: They could invest then in non-utility property, presumably, under the assumptions.

By MR. HULL:

Q. Under those assumptions, the retention in the business would not be required, would it? A. Not for the purposes that we have assumed.

Q. Would it be possible under those circumstances to reduce the capital stock and pay a liquidating dividend to

the stockholders? A. If the law and regulatory authority allowed it.

Q. And assuming the regulatory body having jurisdiction found that these assets were not necessary in the business and might be paid or returned to the stockholders, then that [15358] could be done? A. Yes, that is my understanding if the law permits it, it could be done.

Q. Now, I want to refer you to transcript page 14,838. At transcript page 14,838, Mr. Goldberg had marked for identification Exhibit 322, a copy of which I hand you, and at transcript page 14,839 in the question, lines 13 to 16, he indicated that Exhibit 322 was based on actual investment, depreciation, and actual earnings for the years 1911 to 1945.

Then on the following page, transcript 14,840 at lines 19 to 20, he intimated that you had made that kind of a study in the Safe Harbor case, that is, one based upon the actual earnings from the initiation of the project to the time of the hearing, and he called your attention to Table 4 particularly of your Exhibit 53 in the Safe Harbor case.

Now, I ask you whether or not in your Exhibit 53 you did in fact make use of the actual investment, actual depreciation and actual earnings for the years 1933 to 1944, which were the years involved in the Safe Harbor case?

MR. GOLDBERG: That is based on your interpretation that I was relating my question to actual earnings and their use by the witness for that purpose.

MR. HULL: Yes.

MR. GOLDBERG: All right.

THE WITNESS: Well, if I left that impression at 14,840, [15359] I was in error, because I did not apply the actual earnings of the past period in my analysis.

I will direct your attention to line 21 of 14,840 which probably is not too clear, where I said, "Yes, I didn't, you did".

I thought that had clarified the matter, namely, that I had not done that but Mr. Goldberg's tabulation helped on that.

By Mr. Hull:

Q. Do you recall, also, Doctor, that in that case, after Exhibit 53 had gone in Mr. Goldberg presented you with Exhibits 172 and 173, which were based on actual earnings, and then subsequently Respondents prepared Exhibits 191 and 192 which were basically the same calculations that you have made in Exhibit 53, but which used a five and a half per cent rate of return instead of the 7 per cent used in Exhibit 53? A. I have a general recollection of that fact.

Mr. Goldberg: May I have that question, please? There were a lot of exhibits in there.

Trial Examiner: Yes.

(Question read.)

By Mr. Hull:

Q. Now, am I correct in this that you did not in any of your exhibits in the Safe Harbor case base your calculations partly upon actual earnings and partly upon assumed or theoretical earnings? A. I think that is correct. To the best of my [15360] recollection I was consistent both in the preparation of the exhibits in the Safe Harbor case and in this case.

Q. Now, I would like to direct your attention to your testimony on April 22, which covers a number of pages. I believe it begins about transcript 14,781 and Mr. Goldberg asked you to assume that Pennsylvania Water and Power Co. had on January 1, 1946 bought its plant with an original cost of $33,540,738 in the electric plant account; that the purchase had been made at that figure less the depreciation reserve and that it was entirely financed by capital

stock, the capital stock being $23,545,830 and the depreciation reserve being $9,994,908 so that both sides on the balance sheet showed a total of $33,540,738.

Now, am I correct that if those assumptions are made by the purchase of the property at the depreciated original cost of $23,545,830, the purchasing company assumed the liability represented by the depreciation reserve balance? A. Yes, I so assumed.

Q. And assuming that purchase to be made, and the company to proceed with its operations, as the liability represented by the $9,994,908 was realized from time to time, how would it have to be met? A. From other assets of the enterprise.

Q. And whose responsibility would it be to raise any additional capital? [15361]A. Management acting for the ownership of the enterprise.

Q. Now, I direct your attention to that portion of your testimony on April 23, in the afternoon, which begins, I believe, at transcript 14,900.

MR. HULL: Mr. Goldberg, do you have any objection to letting the witness see the figures you had him write down?

MR. GOLDBERG: No.

By MR. HULL:

Q. In that portion of the testimony, Doctor, you will recall he asked you to tabulate the results of the straight-line and 3 per cent sinking fund method as applied to Penn Water property, and he asked you to assume, subject to your check, a cumulative investment of $2,966,537,250; a depreciation reserve of $1,055,792,807, the difference being $1,910,744,443.

A return of 5 per cent on that would produce a cumulative return of $95,537,222. Depreciation expense cumulated would be $40,367,190.

The total of the return and depreciation expense, according to the straight-line method would be $135,904,412.

Now, the calculations for the 3 per cent sinking fund would be the same cumulative investment, to-wit, $2,966,537,250.

The return on that undepreciated rate base at 5 per cent he asked you to assume, subject to your check, to be $148,326,862 [15362] and the cumulative depreciation annuity would be $16,194,092.

The total of the last two amounts, that is the return and the depreciation annuity would be $164,520,954.

So, from that total of return and depreciation annuity he asked you to subtract the straight-line total of return and depreciation expense of $135,904,412, and derive a figure of $28,616,542.

Now, after presenting those figures to you, you called attention to the fact that the sinking fund calculation as made by Mr. Goldberg apparently did not take account of the three per cent credit.

Leaving that objection aside, will you tell us what other element enters into it that accounts for an apparently larger charge for return and depreciation under the sinking fund method than under the straight-line method? A. I think the balance of the difference, after appropriate adjustment for the 3 per cent interest component was made, would be accounted for by the difference between 3 per cent and the rate of return which the investor had earned on the additional assets reflected by the depreciation reserve balance and which under the deduction procedure is in effect, credited to the consumer.

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[15443] WILLIAM F. UHL.

DIRECT EXAMINATION.

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[15446] By MR. KING:

Q. Mr. Uhl, you have previously been sworn as a witness in this case. Is that correct? A. I have.

Q. And you have previously testified in this proceeding as to your qualifications and experience in general. Is that correct? A. That is right.

Q. What experience have you had in the valuations of water rights, riparian lands and developed waterpower for purposes of purchase or sale?

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[15447] THE WITNESS: I have been connected with the purchase or sale of a number of developed and undeveloped water power properties.

In many of these transactions I fixed the price for which the property was purchased or sold. In other cases I advised either the purchaser or seller in arriving at the price at which the sale was made and in at least one case I acted for both parties.

1. Clark's Rip on the Androscoggin River about four miles above Lewiston, Maine. Assisted the purchaser, the Union Water Power Company, in the determination of the purchase [15448] price of the riparian lands suitable for the development of Clark's Rips in 1909. Purchased from the International Paper Company.

2. In 1924 the Clark's Rips water rights were sold to the Central Maine Power Company and I assisted the seller, the Union Water Power Company, in arriving at an agreement with the U. S. Treasury, Internal Revenue Department, as to the value of the riparian lands as of 1913, for the purpose of fixing the taxable profit on the 1924 sale.

3. Clarks Falls, Great Falls, and Woods Falls on the Lamoille River at and near Milton, Vermont. In 1926 I as-

sisted the purchaser, the Public Electric Light Company at St. Albans, Vermont, in the determination of the purchase price on these three undeveloped water power sites on the Lamoille River.

4. In 1936 I placed a value on the developed water powers on the Merrimack River at Manchester, New Hampshire, for the purpose of sale by the Trustees of the Amoskeag Manufacturing Company to the New Hampshire Public Service Company.

5. In 1931 I placed a value jointly for the Commonwealth of Massachusetts and the Dwight Manufacturing Company on the difference in value of the water rights owned by the latter at Chicopee, Massachusetts, before and after the diversion of water from two of the tributaries of the Chicopee [15449] River by the Commonwealth.

6. In 1932 I placed a value on the developed water power of the Industrial Buildings Corporation on the Chicopee River at Chicopee, Massachusetts (successor to the Dwight Manufacturing Company) for the purpose of sale to the Quinnetuk Company, a public utility.

7. In 1920 I assisted the American Woolen Company in arriving at a selling price for its partially developed water power on the Oswego River at Fulton, New York, which that company sold to the Oswego Pulp and Paper Company.

8. About 1922 I made a valuation for the City of Providence, Rhode Island, and assisted in the purchase of seven water power plants and privileges owned by the Scituate Light and Power Company and the Joslin Manufacturing Company in connection with the development of the Scituate Reservoir on the Pawtuxet River for water supply purposes by the City of Providence.

9. From about 1928 to 1941 I made valuations of diversion damages to water power properties located on the Ware, Swift, Chicopee and Connecticut rivers for the

Metropolitan District Water Supply Commission, in connection with the development of additional water supply for the Boston Metropolitan District. These valuations included ten properties on the Ware River, one property with four water power sites on the Swift River, twelve properties on the [15450] Chicopee River, and one property on the Connecticut River.

All but seven of these cases were settled by agreement with my assistance, and seven came to trial before the Massachusetts Superior Court. In five of these cases I testified regarding the value in dispute and in the other two cases I acted as an advisor to the assistant attorney-general of the Commonwealth.

10. In 1932 I made a valuation of 37 water power properties, 26 of which are located in New York, one in New Hampshire, and ten in Maine, and assisted the purchaser, the International Hydro-Electric Corporation, in the acquisition of these properties. Twenty-six of these properties were partially developed and eleven undeveloped.

11. From 1936 to 1942, advised the TVA on value of riparian lands and water rights on the Hiwassee River in North Carolina and Tennessee.

12. In 1936 I was a member of a Board of Engineers engaged by TVA to place a value on the Wilson Dam and appurtenant properties at Mussel Shoals, Alabama.

13. In 1941 I assisted the American Woolen Company in arriving at a selling price for its water power rights on the Winooski River near Burlington, Vermont, which the company sold to the Green Mountain Power Corporation.

14. In 1942 and again in 1945 I was engaged by Mr. Ben Lyons of Chicago to place a value on the dam site on [15451] the Grand River, Oklahoma, which was utilized by the Grand River Dam Authority in connection with its hydroelectric development.

15. In 1945 I assisted the Village of Morrisville, Vermont, in the purchase of water rights on the Green River in Vermont.

Q. Have you made a determination of the fair market value as of March 1, 1905, of the lands and water rights required to carry out the Holtwood hydroelectric development of the McCall Ferry Power Company? A. Yes, I have.

Q. Had any construction work been done on the Holtwood power site on March 1, 1905? A. No.

Q. When was the McCall Ferry Power Company organized? A. The McCall Ferry Power Company was organized in April, 1905.

Q. What was the situation with respect to financing the development of the Holtwood power site on March 1, 1905? A. One Cary T. Hutchinson and Associates had acquired the land and water rights necessary for a hydroelectric development by 1905 and in February of that year he interested Bertron, Storrs & Griscom, bankers of New York, in the financing of his project. These bankers thereupon formed a syndicate to underwrite the finances required.

[15452] Q. When did actual construction of the Holtwood power development begin? A. Actual construction began October 24, 1905.

Q. How large a power development was contemplated? A. A prospectus describing the proposed development at Holtwood was issued under date of March 1, 1905. Amongst other things it stated that:

> "It is proposed to make a first development for 50,000 horsepower at this site; 75,000 and possibly 100,000 horsepower can be developed economically."

Q. Was there a market for the power which was to be developed at Holtwood? A. A growing market for power existed in such large centers as Baltimore and Philadelphia and negotiations for sale of large blocks of power to Baltimore interests were initiated as early as 1902.

Q. Were the power potentialities of the Susquehanna River generally recognized by March 1, 1905? A. Long before 1905 it was recognized that there were large power potentialities throughout the lower reaches of the Susquehanna River, all apparently feasible of development, though not, equally feasible. At least five power sites had been selected and studied by different persons or companies.

Q. How was the Holtwood power site made possible? [15453] A. In the case of the Holtwood power site, as in many others, a feasible power site was created by the consolidation in one ownership of what were originally individual parcels separately owned, and on none of these parcels was there a complete feasible individual power site.

Q. What procedure is followed in the valuation of water power rights? A. Water power rights are appurtenances to and are of the nature of real estate and a similar method of procedure is adopted in the valuation of water power rights as in the case of other real estate. The principal difference between the valuation of ordinary real estate and the valuation of water rights arises from the fact that the latter involves certain engineering factors which are not involved in the valuation of ordinary real estate.

Q. How is fair market value of property defined? A. Fair market value is defined as the price which would be accepted by the owner if he was willing but not compelled to sell, and which would be offered by the purchaser if he was willing but not compelled to take the property, and both were intelligent and fully informed as to the property itself.

Q. What was the fair market value of the lands and water rights required for the Holtwood hydroelectric development as of March 1, 1905? [15454] A. In my opinion the fair market value was $3,300,000.

Q. What are some of the engineering factors involved in arriving at your conclusion as to the value of the Holtwood lands and water rights as of March 1, 1905? A. In arriving at my conclusion concerning the fair market value

of the lands and water rights required for the Holtwood hydroelectric development as of March 1, 1905, the following principal points were considered by me:

1. Market for power output, its extent and distance from the site of the development.

2. Competitive sources of power.

3. Extent of engineering information available regarding the site of the project.

4. Natural advantages and disadvantages of the site.

5. Probable cost of construction.

6. Pondage and storage possibilities.

7. Stream flow characteristics.

8. Time when the development may be carried out.

9. Possibility of financing.

10. Yearly cost of producing the estimated output.

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[15456] CARL WILLIAM WATCHORN.

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CROSS-EXAMINATION.

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[15464] By MR. GOLDBERG:

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[15473] Q. Now, when did you first use this all-steam system in connection with a determination of dependable hydro capacity? A. In the latter part of 1945.

Q. What is the latter part of 1945, what does that mean—December? A. No, beginning with just a day or two prior to the first of July or the latter part of June, 1945.

Q. That is when you began making studies of dependable hydro capacity on the hypothetical all-steam system?

A. In the detail that I have testified in this case. Now, that concept didn't arise as of that time. That had extended back for quite some years.

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[15493] WILLIAM F. UHL.

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CROSS-EXAMINATION.

By MR. GOLDBERG:

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[15495] Q. Now, in arriving at your fair market value, you considered power markets which were made over the period of time from 1896 to 1912, is not that right? A. That is correct, yes, sir.

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Q. And beginning with No. 33 and running through 68, the power market reports which you considered in arriving at your conclusions are all dated subsequent to March 1, 1905? A. Yes.

Q. That would mean, would it not, that none of those reports would have been available at that date to any one reaching a conclusion as to the fair market value of the lands? Is not that so?

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[15496] THE WITNESS: Not those reports, no, no reports coming after that date, that is correct.

By MR. GOLDBERG:

Q. Now, you were concerned, of course, in reaching your conclusion as to the fair market value of the land, with the prospect of earnings available from the proposed development. Right? A. Yes.

Q. And you were concerned in arriving at an appropriate capitalization rate of those prospective earnings as well, is that not right? A. I do not know what you mean by capitalization rates.

Q. At what rate the earnings were to be capitalized in arriving at a fair market value? A. No, sir.

Q. You were only concerned with the estimate in prospect of earnings as they were reflected in these reports we have referred to; is that right? [15497] A. Well, I was interested in that, and the fact that it was probable that earnings could be made which justified the investment in this water-power development.

Q. And you gave effect to whatever estimates of earnings there were in these reports? A. No, I did not.

Q. You mean you did not take into consideration the earnings available? A. Yes, the probable earnings available.

Q. Now, you were concerned, I take it, with the value or a determination of the value of the lands as water power lands? A. Yes, sir.

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[15541] CARL WILLIAM WATCHORN.

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CROSS-EXAMINATION.

By MR. GOLDBERG:

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[15561] Q. Why did they become so important with respect to the report for 1945, and had a minor place with respect to the preparation of the report for 1944? A. Because the determination of the dependable hydro capacity as made and reported in Schedule 16 for the 1945 report was made on a much more comprehensive and thorough basis than that made as reported in 1945.

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THE WITNESS: Consequently required consideration of the factors that I stated at lines 3 to 6 on page 15157.

* * *

[15562] TRIAL EXAMINER: Why more comprehensive?

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THE WITNESS: Because it was the first time to my knowledge that all these factors affecting overall system reliability and the determination of dependable hydro capacity were taken into account in the proper manner.

By MR. GOLDBERG:

Q. Now, why were they suddenly in 1945 taken into account in the proper manner while they had not been taken into account in the proper manner in the years prior to that time? A. Because as I told you yesterday, Mr. Goldberg, I figured out about the end of June or beginning in July of 1945 how to do just that.

[15563] Q. In 1945, about the end of June or the beginning of July, you had figured out a more satisfactory manner of determining dependable hydro capacity; is that it? A. A more correct manner.

Q. Up to that time you had believed the reports that had been made to the Federal Power Commission had been correct, based upon the development of the art; as you put it yesterday, up to June or July, 1945? A. In so far as I knew that development.

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[15577] Q. So that it is fair to state, is it not, that this more satisfactory method could have been developed even before June or July, 1945? A. Right.

Q. You mean you could have developed it just about any time you had put yourself to it? A. No.

Q. Well, how about in 1944? Could you have developed this more satisfactory method? A. The best answer I can give you there, Mr. Goldberg, is I did not.

Q. But could have. I know you did not until 1945, in June or July for some reason, but what I am after now is could it have been developed in 1944? A. Well, in the same sense that the atomic bomb could have been developed in 1930, I guess; it just was not done.

Q. So that your answer is yes, it could have been done [15578] in 1944? A. Had I known as much in 1944 as I knew in 1945.

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[15580] Q. Let me see if I can break that answer down.

In 1944 you had been working at that problem, applying your mental processes to that problem steadily for how many years? A. Off and on, for about 8 years.

Q. And in those 8 years your mental processes had been such, or had fallen short of enabling you to grasp the different concepts and evaluate them in a reasonably proper and conservative manner? A. I think it would be more proper to say to apply the concepts rather than "grasp" them. I believe that was what I said in my answer.

Q. I thought you said grasp. I had written "grasp" but all right. Apply. With that substitution for "grasp," your answer is yes? A. Yes.

Q. Now then, when you speak of different concepts, I wonder if you can name them for me, that your mental processes were attempting to apply. A. Well, the concepts were the concepts or basic principles relating to the theory of probability.

Q. The what? A. The theory of probability. Namely, that the probability that two separate events will occur or exist as of the same time is the product of the probability that each will occur or exist separately, and the other one, the probability [15581] that an event will occur or exist which may occur or exist in one or more ways is the sum of the probabilities that it can occur in each of the separate ways in which it can occur.

Q. Now, those—have you finished? A. No.

Q. I am sorry. A. Now, the other factor involved is the manner of applying those two principles of probability to the problem as a whole. One of the important considerations in that problem is the method of allowing for the schedule reserve requirement—the scheduled main-

tenance requirement both as to the system steam capacity and the system hydro capacity.

Another problem is the manner of applying these concepts to the system steam generating requirement as affected by variations in river flow.

Another factor to be considered is the effect on the steam load carrying capability of the system as affected by seasonal temperature changes. I think those are the major factors involved, together with the variation in system load from day to day and week to week throughout the period of a year as we discussed this morning, I believe.

Q. Now, then the two basic principles of the theory of probability are concepts that did not originate with you? A. No, definitely not.

Q. They are concepts that have existed for a long time? [15582] A. Oh, definitely.

Q. Your problem was how to take those concepts and use them in arriving at a satisfactory method of determining dependable hydro capacity? A. That is right.

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[15587] Q. As to the extent you worked on it for eight years as set forth in your testimony, it had eluded you until June or July, 1945? A. Yes.

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[15590] Q. Now, do I understand also from your testimony that this theory of probability had never entered into the determinations of dependable hydro capacity until June or July, 1945? A. I think the fair answer there is yes, Mr. Goldberg.

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[15606-A] Q. Mr. Watchorn, I show you Exhibits 347 and 348 for identification and ask you if they are portions of your working papers? A. Yes, they are.

Q. And they have on them data which you used in arriving at your dependable hydro capacity of 295,000 kw? A. Yes.

Q. Now, taking Exhibit 347, Table 5, will you tell us [15606-B] what data appearing on that exhibit was used by you in arriving at your results? A. It will be noted in the upper portion of that exhibit that there are two groups of columns, one labeled "A, Turbine Forced Outage," and the other one labeled "B, Boiler Emergency Outage."

There are four columns under each of these main headings.

The data I used is the next to the last item in each of these columns labeled "Days Exposed in Period," and the six items above that item labeled "Unit Days of Outage."

Q. So that there can be no doubt as to the data you have just referred to, under the group of columns that bear the letter "A" there is a subdivision "1941, 365 units Actual and Adjusted." Do you see that? A. Yes, that is right.

Q. Now, then, in the column "Actual" you used the 1,127 as the outage days in period? A. I do not see that number, Mr. Goldberg.

Q. 1,127 in the column "Actual" under 1941, 365 units? A. No, I did not use that number.

Q. Did you use any of the figures in the two columns which are labeled "Actual" and "Adjusted" under the 1941, 365 units designation? A. No.

Q. How about the columns "Actual" and "Adjusted" in [15607] the "A" group under the collective heading 1939, 1940 and 1941, 1,033 units? A. I used there the column headed "Adjusted."

Q. I see. And in the column headed "Adjusted" you used, did you, the 3,752 and the 297,787; is that right? A. Yes.

Q. Now, under the "B" group—that is the boiler emergency outage data, did you use any of the data appearing in the columns under the collective heading "1941, 289 Boilers?" A. No.

Q. Did you use any of the figures appearing under the collective column, "1940 and 1941 555 Boilers" in the B group? A. Yes.

Q. Did you use the figures in the "Actual" or the "Adjusted" column? A. Adjusted.

Q. And in that column, are the figures that you used, the 1,657 and the 167,635? A. Yes, sir.

Q. Now, did you use any data in the "C" group, the boiler maintenance outage data? A. No.

Q. So that the only data that you used in your study that appears on Exhibit 347 are the four figures we mentioned? A. That is correct.

[15608] Q. Now, let us turn to Exhibit 348, and tell us, please, which data you used in your study from that exhibit? A. On Exhibit 348, there are three groups of columns. The first group to which I have reference is headed "Turbine Forced Outage," and the second group "Boiler Emergency Outage". Under each of these two general headings there are four columns.

The data I used are shown in the second column under each of these four column groups.

Q. That is the adjusted column? A. "Under 1,000 psi," pounds per square inch, heading. The first item shown in each of these columns that I used is labeled "unit days of outage", and the second item I used is the item headed "Days Exposed in Period".

Q. Now, then, that means that with respect to turbine forced outage, you used the figure 6,597 which appears in the adjusted column with respect to "Under 1,000 psi" and 637,269. Is that right? A. Yes.

Q. The first figure being the unit days of the outage and the second days exposed in period? A. Yes.

Q. Now, then, that is the only data appearing on Exhibit 348 that you used with respect to turbine forced outage? A. That is correct.

[15609] Q. Now, then, under boiler emergency outage, did you again use the figures appearing in the adjusted column

under the collective heading "Under 1,000 psi"? A. Yes.

Q. I take it the first figure you used was 5,519, being the unit days of outage, and the other figure 446,249, being the days exposed in period? A. That is correct.

TRIAL EXAMINER: What was that again?

MR. GOLDBERG: 446,249.

By MR. GOLDBERG:

Q. And the data appearing under the third group heading "Boiler Maintenance Outage", I take it you did not use at all? A. That is correct.

Q. And it is through the use of these figures we have discussed that you determined the percentage relationships? A. Yes.

Q. These data appearing on Exhibits 347 and 348 were collected by the Edison Electric Institute; is that correct? A. A committee of the Edison Electric Institute.

Q. A committee of which you are a member? A. No.

Q. Are these data that appear in Exhibits 347 and 348 published data? [15610] A. Not in accordance with my understanding of what published means, but it is data that is pertinent and available to anyone who cares to obtain copies.

Q. Can you obtain these data only by writing to the Edison Electric Institute? Is that it? Is it available in libraries? A. It may. I do not know. It depends on whether the particular library obtains pamphlets and so on, from the Edison Electric Institute or not. I do not know.

Q. Has the Institute included these data in any publications it has gotten out? A. I do not know what you mean by "publication".

Q. Pamphlets? A. Yes.

Q. Things that it prints and disseminates to the public or to the members of the industry? A. Yes.

Q. You say these can be found in published pamphlets? A. Published being used in that sense.

Q. What is the name of the publication in which these data appear? A. That is one of our difficulties as to what we mean by publication. It is the material presented relating to this subject. It isn't any periodic publication in that sense at all.

[15611] TRIAL EXAMINER: Where did you get them?

THE WITNESS: From this material that was presented or prepared by the Edison Electric Institute.

TRIAL EXAMINER: In what form?

THE WITNESS: A group of, oh, I imagine, possibly 15 or 20 pages about this size (indicating) stapled together.

TRIAL EXAMINER: With a cover?

THE WITNESS: No, my recollection is with some of the copies we had had a letter of transmittal that was sent to members of the various committees of the Institute that were known to be interested in this subject. I obtained the copies I have because of my participation as a member of this subcommittee of the hydraulic power committee.

TRIAL EXAMINER: These have never been formally published, is that the idea?

THE WITNESS: That is what I would say, yes,—not in the sense that I understand your use of the word "Published".

By MR. GOLDBERG:

Q. When did you secure these data? Was it June or July of 1945? A. Exhibit 347 was obtained some time after 1941 and Exhibit 348 was obtained in the early part, I think, of 1946.

Q. Then I take it you did not utilize these data in June or July of 1945? A. I used the data in Exhibit 347. That was explained in [15612] my direct testimony.

Q. But not the data in 348, because you did not have it? A. As of that time that is correct. The data shown on 348 in my testimony was used in connection with Exhibits 333, 334 and 345 only.

Q. Now, you have stated that the data on Exhibits 347 and 348 relate to steam equipment? A. That is correct.

Q. What data did you use for hydro equipment? A. The data that the subcommittee, of which I am a member, collected.

Q. When did they collect that data? A. I will have to check that to be sure. I think it was some time in 1932 or 1933, possibly—I mean 1942 or 1943.

Q. You say there was a subcommittee of the Edison Electric Institute? A. Well, the hydraulic power committee of the Edison Electric Institute.

Q. What is the name of the committee that collected the steam equipment data? A. There were two committees, I believe, involved in that. One was the Prime-Movers Committee and the other the Electrical Equipment Committee, I believe.

Q. And at the time of the collection of the data, were you a member of either one of the committees? [15613] A. No.

Q. Are you a member today of either one of the committees? A. No.

Q. Now, do you have with you the hydro forced outage data that you used? A. No, sir.

Q. Where is it? A. In Baltimore.

Q. Of how many sheets does it consist? A. I think there is one sheet that has the pertinent data.

Q. Does that mean you do not have your working papers here with you? A. That is correct.

Q. Is it a sheet like Exhibits 347 and 348? A. My recollection is that the data is shown as an insert down about two-thirds of a typewritten sheet of paper.

Q. An insert where? A. On the page.

Q. Was this page an excerpt from a publication? A. No, it is material that myself and Mr. Loane of Penn Water and Safe Harbor, who are the two members comprising this subcommitteee, prepared.

Q. Let me make sure that I understand that. It was [15614] the subcommittee of the hydraulic power committee of the Edison Electric Institute that collected the forced outage data on the hydro equipment? A. Yes.

Q. And that committee consisted of yourself and Mr. Loane? A. Yes. The Hydraulic Power Committee asked us to do that for them.

Q. And you think that data was collected in 1942 or 1943? A. I think that is correct.

Q. How many electric utilities did you circulate? A. I could not recall, but a great number of utilities over the whole United States and Canada.

Q. Can you be more specific about this large number? Was it 50 or less than that? A. I never thought of it just that way, Mr. Goldberg. I would have to guess. I believe I can say that every operating utility that had hydroelectric units of 5,000 kw or greater capacity responded to this questionnaire. There were comparatively few who did not.

Q. How many responses did you get? A. I do not know. A great number.

Q. Can you ascertain that? A. I could do it in the course of time, yes.

[15615] Q. What does that mean? A. Well, a day or two after my cross-examination is finished, to give me an opportunity to make the necessary investigation.

Q. Can you ascertain that information over the evening? A. No, sir.

Q. Was a questionnaire prepared to collect this data? A. Yes.

Q. Was there a definite definition of forced outage in the questionnaire? A. Yes.

Q. Do you have a copy of the questionnaire? A. No, sir.

Q. Can you secure one? A. In the course of time I can, yes, sir.

Q. Do you have one in Baltimore? A. I am sure we do.

Q. You do not think you can secure that overnight? A. No.

Q. Do you recall the definition of forced outage that you had on that questionnaire? A. Substantially the same as I gave you. As a matter of fact, I did give you the definition when you asked about the definition regarding steam turbines and steam boilers. You asked about the definition relating to hydro units at that [15616] same time.

The general scope of the definition with respect to all three matters embraced the same considerations.

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[15617] Q. Now, did the Edison Electric Institute publish the compilation of the responses that you made? A. We prepared the material relating to that investigation—I mean Penn Water and Safe Harbor prepared all the material, and our material was forwarded to the Edison Electric Institute headquarters and distributed in accordance with the request expressed for that data to be made available.

Q. In other words, when someone writes to the Edison Electric Institute for that data, that data is made available then? A. At that time. Copies may have all been distributed long since, or they still may have some; I do not know.

Q. How many years did the data cover? A. That varied. Some of the utilities reported for ten years and others for a smaller number of years.

Q. And did your compilation reflect data for all of the years? A. All the years for which data was reported. Q. Now, can you give us, or have you already told me that you cannot give me the data you used for hydro outage? A. No, all I can give you is the ratio, the 49/100ths of 1 per cent. I do not know——

Q. The figures that were involved? A. —the figures that were involved in that.

[15618] Q. Now, do you recall whether any one has submitted the data indicated who had not followed the definition of forced outages contained in the questionnaire? A. No, I am quite sure that every one did a very good job.

Q. Were there any notes on the face of the responses indicating that the definition of forced outage had not been treated as set out in the questionnaire? A. No, I cannot be sure of this, but I think some of the companies to whom we sent inquiries may have requested us for further clarification of our intended meaning, but I could not be certain of that. I think that probably was so.

Q. And then your further clarified the definition on receipt of their responses? A. We stated the same matter in another way.

Q. Now, you do not know with respect to this collection of the steam-outage data contained in Exhibits 347 and 348 whether there were any notes appended or placed on the face of the responses indicating that the definition of forced outage had not been treated in the manner requested by the directors? A. No, I would not know that. I doubt very much if any reporting company had any idea they were reporting it in a manner in any way different from that intended.

Q. Within the light of their interpretation, you mean?

[15619] A. Yes, sir.

Q. Now, then, you recall that you submitted—you said the other day—a questionnaire containing a figure with which you did not agree? A. Yes, sir.

Q. You recall, do you not, that you have appended no reservation with respect to that figure? A. Right.

Q. Now, as far as you know, some of the data submitted by companies which are included in Exhibits 347 and 348 may have been submitted with reservations which were not expressed, in the same way you submitted data with

reservations not expressed, is not that right? A. That is a possibility; yes.

Q. And that same possibility exists with respect to your hydro data? A. That is a possibility.

* * *

[15642] Q. Is the probability method of determining dependable hydro electrical capacity such as you described in your direct testimony standard practice among electrical utilities for the purpose of determining dependable hydro electric capacity? [15643] A. I think the answer to that is no. I think I should qualify that answer because, as I have stated previously, to my knowledge, my determination of dependable hydro electric capacity based on an application of the theory of probability is the first such determination, and as stated in my direct testimony, the industry is very much interested and has requested papers to be presented on that subject. As a matter of fact, the purpose of gathering this data was because the industry or members of the industry had realized there were deficiencies in determining the reserve requirements on the various systems, and they felt that a better and more scientific basis could be designed and that was the purpose for gathering this probability data.

Q. And now the industry is interested in testing whether you have improved on the deficiencies; is that it? A. Not me, no. With respect to steam capacity there are other engineers throughout the country who have made such studies at this time and this Symposium that the Power Generation Committee of the American Institute of Electrical Engineers is holding on the subject next fall or winter with the engineers from three or four other companies preparing papers on the general subject is for this purpose. However, my understanding with respect to all steam systems—Mr. Loane's and my papers are to be, as I understand it, the only papers with respect to combined hydro and steam systems.

[15644] Q. And the purpose of this symposium is to test out the developments and see how sound they are? A. I do not think there is any doubt about the soundness.

Q. Please answer my question. A. No.

Q. What is the purpose of this symposium? A. To disseminate the knowledge and information of the engineers who have been leaders in the industry in these various fields.

Q. And you are saying that the engineers undoubtedly are going to agree that your method is sound? A. No, I would be very doubtful, however, if they did not.

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[15674] Q. Were the years 1942, 1943 and 1944 in terms of load shapes comparable to 1945 and 1946? A. No.

Q. Were the years 1939, 1940 and 1941 comparable to 1945 and 1946?

• • •

[15677] Q. Would you say that Mr. Spaulding's association with the work you have been doing all along on determination of dependable hydro capacity has been of such nature as to permit him to express an opinion regarding the dependability of the principles and methods? A. Very definitely. I might also add that Mr. Walls comes in that category, too, probably outside of Mr. Loane and myself, he is outstanding in these matters.

Q. Mr. Walls, you mean? [15678] A. Definitely.

Q. How about Mr. Spaulding? A. I do not think I could say that Mr. Spaulding's familiarity as to details is as great as Mr. Walls'.

Q. But with respect to the understanding of the principles and the methods involved and his ability to state their propriety, you would say he is on a par with Mr. Walls? A. Oh, I have no question whatsoever.

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[15687] Q. Now, your basic data was in Exhibit 348? A. That is correct, as to probability characteristics.

Q. And the basic data of actual experience that you had was in Exhibit 348 and covered a period of five years, right? A. For turbines I think it was, yes, five years and boilers four years. Wait a minute, six years for turbines and five years for boilers.

[15688] Q. And you then, through this process you have been describing, sought to derive 100 years of experience? A. That is right.

Q. And not having a hundred years of actual experience, you went through this process you have described to establish a hundred years of experience? A. That is correct.

* * *

[15690] Q. And the experience for your analytical study, then, was based upon three years of experience for turbines, and two years for boilers, is that correct? [15691] A. Yes.

* * *

[15694] Q. Through this synthetic basis, you say that you have verified your conclusions, that dependable hydro capacity [15695] was 295,000 kw? A. It is at least that much.

* * *

[15730] Q. You have testified that the probability of [15731] unavailability of turbines is 1.26 per cent and boilers 99 per cent, based on the data you utilized, and you have also testified that subsequent data showed figures to be 1 per cent for turbines and 1.24 per cent for boilers.

Do you recall that testimony? A. That is correct.

Q. Now, that is a change of about 25 per cent on each of them? A. That is right.

Q. And you have testified that this change would result in a very little change in your final result because there was an offsetting effect; that is, one went up 25 per cent and one went down 25 per cent. Right? A. That is correct.

Q. Are we to understand that in your opinion data based on 3 years of records which can change in two years as much as 25 per cent is reliable data for a highly theoretical mathematical analysis? A. Again I can't answer that question directly without qualifications.

Q. You mean you would have to say "yes, but"? A. No, I couldn't even say "yes."

Q. You mean you would have to say "no, but"? Go ahead. A. The data relating to the curve shown on the right, [15732] both curves shown on Exhibit 336, was computed sometime in August or September of 1945 on the basis of the forced outage experience data shown on Exhibit 347. When the data shown on Exhibit 348 became available in the early part of 1946, January or February, I believe, it was originally my intention to recompute the curves shown, the data for the two curves shown on Exhibit 336. But, fortunately, the characteristic was apparent in those two sets of data that you have just mentioned, Mr. Goldberg, which meant it would not be necessary to make a recomputation of the data for the curves on 336.

Now, the fact is that each of the data just shifted by about a quarter of one per cent in the two-year period, and must be related to a five-year period in one case and a six-year period in another case, as it was the intention—I don't know whether that intention has as yet been altered—for the Edison Electric Institute as of the present time to gather no further forced outage data with respect to turbines and boilers than that shown on Exhibit 348, the opinion apparently being that the statistical basis for these data is reasonably satisfactory and presents a reasonable sample of what could be expected even though a larger number of years may be accumulated.

For example, any one particular year may show a very great divergence from the quantities of one per cent—what [15733] was it, turbines?

Q. Turbines, 1.26 to 1 per cent. A. One per cent for turbines and 1.24 per cent for boilers, but when you average the experience of one year with the accumulated experience with respect to turbines of six years or with respect to boilers of five years, the results for year-to-year changes are by increasingly insignificant amounts as the greater amount of data are collected.

Q. You have no further assurance that additional records may not change the percentage by an equal amount for turbines and boilers in the same direction.

Here you have been going in opposite directions, but you have no assurance in the future that the change won't be in the same direction. A. I am quite confident, Mr. Goldberg, that these data related to these different years specified showed an increase and decrease from year to year. They may have over the period in which the data were taken showed a general trend downward or a general trend upward.

Q. Are you telling us that you made an analysis of the data that you used to state that year by year there has been an offsetting increase or decrease? A. No. I would be very much surprised if that wasn't so. That is all I am trying to tell you.

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[15743] J. RHOADS FOSTER.

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DIRECT EXAMINATION.

By MR. SPARKS:

Q. Mr. Foster, your name is J. Rhoads Foster and you have previously testified in this case on the subject of fair rate of return? A. That is correct.

Q. Are you familiar with Exhibit 46 which was sponsored by Staff witness Samuel Joseph in this proceeding? A. I am.

Q. Have you read the testimony of Mr. Joseph, who presented Exhibit 46? A. I have.

Q. Are you prepared to discuss that testimony and the exhibit in relation to the determination of the fair rate of [15744] return to Penn Water? A. I am.

* * *

[15746] Q. What are your general conclusions based on this study of Exhibit 46 and the related testimony of Mr. Joseph? A. First, Exhibit 46 is the result of applying erroneous and inconsistent theories of rate regulations.

Second, Exhibit 46 is not comprehensive and fails to afford the Commission "a sound basis for the exercise of judgment in the establishment of fair rate of return" for Penn Water, but instead places an awkward and unreasonable burden on the Commission.

Third, Exhibit 46 contains numerous errors of execution; [15747] some of its parts do not reflect the standards of workmanship and technical proficiency which are necessary to give the results significance, even if valid and consistent theories had been applied in its preparation.

Q. Leaving aside for the moment any consideration of the erroneous theories of rate-making which have been recognized and applied in the preparation of Exhibit 46 have you examined that exhibit and the related testimony with regard to technical competence, and correctness of data presented? A. I have made such an examination limited to pages 38, 38 (a), 38 (b) to 38 (c) and page 40 of Exhibit 46.

Q. What principal error of method did you find with respect to page 38 (a) of Exhibit 46? A. The principal error of method is the failure of the witness to take either one or the other of two steps which might have given significance to the data. Because of that failure, the data presented on page 38 (a) are without significance for the purpose of estimating the cost of equity capital, as of March 30, 1946, or other recent date, to either Penn Water or to the other companies represented on page 38 (a).

The earnings-price ratios are stated by the witness on the basis of reported equity income for the most recent period prior to March 30, 1946, for which earnings data were available, and the number of shares outstanding at the end of that period, without either critical analysis or [15748] adjustments in recognition of changing circumstances.

The first alternative is to base earnings-price ratios on reported income, without adjustments, but at the same time to provide a collateral analysis of the manner and extent to which such earnings-price ratios fail to reflect actual investor appraisals. Such an analysis of the related circumstances should indicate generally their quantitative importance as well as the direction of their influence. An example of such related circumstances is the increase in prospective income resulting from the revision of the federal income tax laws in November, 1946.

Q. Dr. Foster, at page 10381—lines 15 and 16—of the Transcript, Mr. Joseph, speaking of the investor, said that "He buys the stock on the basis of the relationship of anticipated earnings to price," did he not? A. Yes.

Q. At page 10383 of the Transcript, with respect to recognition of what Mr. Joseph characterized as "innumerable circumstances," he said: "You would be substituting your judgment for the judgment of the market place, and you could never be sure that what you were doing came close to accomplishing what you hoped you were doing." Is that last statement in error? A. It is.

Q. In what respect? [15749] A. The recognition of changing circumstances is not a substitution of the judgment of the analyst for the judgment of the market place. The purpose of the recognition of changing circumstances is to provide a reasonably accurate and useful estimate of what the judgment of the market place actually is at the time.

Exact or precise estimates of investors' appraisals at a given time is admittedly impossible. However, reason-

ably significant and useful estimates are not impossible, and the fact that the task of analysis is difficult, is no reason for limiting the analysis, as it has been limited in connection with page 38 (a) of Exhibit 46, by use of methods that provide only grossly misleading results. Even the crudest recognition of the effect of changing circumstances would tend to avoid such absurdities as earnings-price ratios, presented as a basis for rate of return determination, which are below the yields on preferred stocks of the same companies at identical dates.

This phenomenon is observed by a comparison of the earnings-price ratios of Bangor Hydro and Southern California Edison as they appear on page 38 (a) with the preferred stocks of the same companies as they appear on page 38 (c).

However, the circumstances which have caused this phenomenon, a reversal of the usual relationship between the earnings-price ratios and yields on preferred stocks of the [15750] same companies, are not unique to these two companies but tend to be common to all companies shown on page 38 (a).

The low level which is common to the earnings-price ratios on page 38 (a) is misleading and results from employing a method limited to consideration of reported past earnings per share with no consideration of the prospective earnings which are actually reflected by the market price.

Q. Have you examined the statements of Mr. Joseph at page 10428 (lines 7-17) of the Transcript which reads as follows:

"Q. You just accepted figures from the source which you used. Is that correct?

"A. I accepted the published figures; yes, sir.

"Q. You made no adjustments of any kind. Is that correct?

"A. Because I thought it would be improper to do so.

"Q. And you accepted those figures without any question in your mind. Is that correct?

"A. That I was doing the right thing; yes, sir."

A. I have.

Q. Do those statements describe a proper use of the published data available for estimating investor appraisals? A. No.

Q. Why not? A. Mr. Joseph accepted as equity earnings, without [15751] analysis, net income as shown in the statement of income for the past accounting period, or net income less preferred dividends paid during the accounting period. All the other data contained in the reports of the companies, the letters to stockholders, footnotes to the financial statements and certifications by the public accountants, are published data. Mr. Joseph accepted the one published figure but he did not accept or consider the related and qualifying data and information.

The financial analyst must start with the published reports of actual results of operations for the accounting period. He recognizes the facts to which his attention is in part called by the published reports, changing conditions and past or prospective events, and adjusts the past earnings in order to arrive at his estimate of prospective earnings. The functions of the rate of return analyst are not to estimate future earnings of the companies subjected to analysis. It is to measure or estimate, as closely as may be possible, investor's appraisals of such investments.

Mr. Joseph thought that it would be improper to make any adjustments of the reported earnings figures, yet he recognized that the investors begin with reported earnings and make adjustments which they consider appropriate for the purpose of estimating future income.

Therefore, for the purpose of indicating investor's [15752] appraisals, it is proper and necessary either to make adjustments of reported earnings in computing earnings-price ratios or to analyze the circumstances which affect the validity and meaning of the earnings-price ratios

calculated without reflecting such adjustments. During the war or early post-war period, events and changing conditions have had unusual and substantial effects on the prospects of earnings.

Q. Have you examined the statement by Mr. Joseph at pages 10461 and 10462 of the Transcript, lines 13 to 25 and 1 to 11, which reads as follows:

"Q. Well, which is the best indication of the prospective equity income, Mr. Joseph, that remaining after you deduct the $308,000 or that which would remain after deducting the $400,000?

"A. Well, Mr. Sparks, I think that the adjustment that you are suggesting would be erroneous to make in the exhibit that I presented. Nothing is clearer in my mind than that the figures presented on page 38-A are subject to change in subsequent years. Some of the items that you have called to my attention will produce such changes, but it is by no means clear that you are pointing to all of the items, nor would the changes that you have asked about produce a more reliable showing than the one I have [15753] presented. Let's put it this way: Assume that I had made all of the changes that you have spoken to me about. I don't want to say that you have suggested, but that you have called my attention to. I would then say that if I had made those, my presentation would be subject to very grave criticism. I will say further that having had my attention called to the items that you have cross-examined me about, it is my judgment that I would not today make any change by reason of any of the items that you have asked me about, that if I made such change it would tend to impair the validity, would go further than tend to impair, it would actually impair the validity of my presentation."

A. I have.

Q. Is it a correct statement? A. No, it is wrong in several respects.

Q. What are the errors? A. Certainly in estimating prospective income and appraisals, common stock investors consider the existing requirements of bonds and preferred stock, which must be met before any equity income may be expected. They do not consider the interest and preferred dividend requirements which existed at some time in the past.

Mr. Joseph's remarks in this paragraph suggest the [15754] reason why his method failed to provide on page 38 (a) earnings-price ratios which have, without consideration of other data, significance for the purpose of rate of return determination.

He says, First, "Nothing is clearer in my mind than that the figures presented on page 38-A are subject to change in subsequent years."

I certainly agree that the earnings-price ratios change from year to year. They change from month to month, sometimes as rapidly as from an average of 12.9 per cent in March, 1942, to 7.6 per cent a year later.

At the same time Mr. Joseph asserted that if he made any change to recognize non-recurring items or changing circumstances "it would actually impair the validity of my presentation."

It may be true in a sense that a presentation of arithmetic ratios, such as those on page 38-a, between earnings as reported for past accounting periods and market prices for a single day, would be impaired by recognition of any related facts. The purpose of pages 38 and 38-A should be to present not mere arithmetic ratios but to present ratios useful in the process of rate of return determination. It is the purpose of rate regulation to fix reasonable rates for a significant period in the future. The ends of reasonable rate regulation certainly are not ill served or [15755] pertinent data impaired by a consideration of the reasons for the wide fluctuation of the earnings-price ratios.

Q. Have the earnings-price ratios for the common stocks identified on page 38-A computed by use of the

method employed by Mr. Joseph, remained at the levels shown on page 38-A? A. No, they have increased substantially. As an extreme illustration, the earnings-price ratio for the Bangor common stock was shown by Exhibit 46 as 3.83 per cent as at March 30, 1946. The earnings reported for the year 1946 were $3.06 per share and the bid quotation at the end of January, 1947, was $32; the relationship is an earnings-price ratio of 9.6 per cent.

Q. What are some other illustrations of the fluctuations in the earnings-price ratios shown on page 38-A since March 30, 1946? A. The earnings-price ratio for Consolidated Edison which appears on page 38-A and which was revised to 5.05 per cent was 8.0 per cent on the basis of the market price on March 24, 1947, and earnings per share as reported for the year 1946.

On the same basis the earnings-price ratio for Indianapolis Power and Light Company fluctuated from 6.09 per cent to 10.3 per cent.

Q. May these earnings-price ratios of the more recent dates be taken as measures of the cost of equity capital to [15756] three companies? A. They may not without consideration of their meaning and significance, and analysis of the reasons for their long term fluctuation and behavior.

Q. Have you examined the statement of Mr. Joseph at page 10420 of the transcript that it is not correct to state that the actual income of Commonwealth Edison for 1945 was $7,490,716 in excess of the $24,577,746 shown by page 38-A of Exhibit 46 and the statement:

> "Well, you are here asking me to say that the actual income of the Commonwealth Edison Company is different from what Commonwealth Edison says its actual income was and what Arthur Andersen and Company certifies its income as having been. Now, I don't think I could go along with you on that."
>
> A. I have.
>
> Q. Are those statements correct? A. No.

Q. Why? A. The financial reports of a corporation state its income for a given accounting period, subject to generally accepted accounting conventions, practices or regulatory rules. Accounting statements of income undertake to reflect but do not change the financial facts.

In 1945 Commonwealth Edison experienced a "windfall" in [15757] amount of $7,490,716 in the form of income tax reductions resulting from unusual deductions from taxable income. Income, measured by the increase of corporate assets during the period, was $7,490,716 greater than would have been the case if the unusual deductions had not been available. Income as reported by the company to its stockholders was "normalized" however, by including in the income statement charges against income totaling $7,490,716 and labeled "charges equivalent to Federal tax reductions."

Q. Were the equity earnings used on page 38-A for Commonwealth Edison and Pacific Gas appropriate for the construction of earnings-price ratios in so far as those earnings reflected the treatment of tax windfalls experienced during 1945? A. Yes, but the use of these earnings figures happened to be correct only because in the preparation of the published income statement the actual earnings happened to have been adjusted, for general accounting purposes, in a manner which gave results appropriate for the purpose of page 38-A.

Q. Are you familiar with the statement of Mr. Joseph at page 10508 of the transcript, lines 3-7, which reads as follows:

> "Q. Mr. Joseph, if public accounts—accountants prior to 1945 had abandoned the practice of making charges in lieu of taxes would you have accepted the actual reported earnings for the purpose of computations [15758] on page 38-A?
>
> "A. Yes."

A. I am.

Q. Does this statement reflect the use of appropriate methods of calculating earnings-price ratios for the purpose of pages 38 and 38-A? A. No.

Q. Why? A. That statement reflects a clerical approach which precludes the use of analytical methods. The common stock earnings of Pacific Gas and Electric Co. for 1945 are shown on page 38-A of Exhibit 46 as $13,523,200 which is after the subtraction of the tax windfall of windfall of $10,286,461 made in the income statement as published. If the subtraction, in the form of charges in lieu of taxes, had not been made in the income statement, the reported earnings would have been $13,523,200 plus $10,286,461 or $23,809,661 and undoubtedly the facts as to the tax windfall would have been set forth in a footnote. The facts would have been the same and the prospects of future income would have been no more or less because of the change in form of financial statement. Yet the earnings-price ratio resulting from the application of Mr. Joseph's method, that is, his uncritical acceptance of the published figures, would have been 75 per cent higher, merely because of the form in which the facts happen to be [15759] reported.

This undue respect for the form as distinguished from the facts and substance of published information has resulted in inconsistent treatment of similar items in the preparation of the data presented by pages 38 and 38-A.

Q. Will you illustrate what you mean by this last assertion regarding inconsistent treatment of similar items? A. Published statements of income often are not "normalized" as they were in the case of the Commonwealth Edison and Pacific Gas, to eliminate significant effects of "windfalls" or other non-recurring situations.

For instance, the income statement of Idaho Power Company for 1945 was not in a form comparable with those of the two last-named companies with respect to treatment of tax windfalls. Non-recurring income amounting to 50 cents per share, representing the effect on income

taxes of recomputation of amortization of war emergency facilities and related to previous years, was included in the earnings of $1,316,336 shown by page 38-A.

The acceptance of the published figures in the computation of earnings-price ratios shown on pages 38 and 38-A disregarded many other kinds of non-recurring effects on income, such as, the write-off of abandoned property and profit from the sale of a radio station, which had been credited to income instead of surplus.

[15760] Q. As another illustration of the uncritical acceptance of published earnings per share, have you examined the testimony of Mr. Joseph at page 10459 where he said that in stating the earnings-price ratio for Commonwealth Edison on page 38-A he should not have made an adjustment for the call of the convertible debentures of that company and the following questions and answers on pages 10459 and 10460:

"Q. Wouldn't the number of shares, Mr. Joseph, which would be issued in the conversion dilute the per-share earnings?

"A. Yes, it would.

"Q. Would that dilution affect the earnings-price ratio of the company which you have shown?

"A. Not the one that I have shown. It might have an effect upon subsequent ratios.

"Q. Wouldn't it affect the meaning and the significance of the earnings-price ratios which you have shown?

"A. No, sir."

A. I have.

Q. Is Mr. Joseph correct in stating that the call of the debentures would not affect the meaning and significance of the earnings-price ratio? A. He is not.

Q. Why? [15761] A. The debentures were called on January 23, 1946, for redemption on March 9. On March 30 the date for which Mr. Joseph determined the market price of the common stock, the number of shares

outstanding had increased by 710,864 shares, as the result of the conversion, over the number outstanding on December 31, 1945. The interest of the previously outstanding shares in income was diluted.

The earnings-price ratio shown by page 38-A was incorrectly determined, since on March 30 the additional number of shares already had been issued and Mr. Joseph's calculation did not reflect the number of shares then actually outstanding. Thus, Mr. Joseph related the market price at March 30, to the situation existing prior to the conversion and not to the changed situation which existed at the time the price was esablished.

Of course, the effect on the meaning of the earnings-price ratios is not limited by the fact that the conversion actually took place prior to March 30. The effect would have been similar if the conversion had been in prospect prior to that date and had actually occurred at a later date.

Similar inadequacies are involved in any other failure to recognize or consider the effect of significant changes in capitalization, such as refinancing of debt or preferred stock, which are experienced during the accounting period or which are definitely anticipated at the date for which [15762] market prices are used. Since 1940, such changes have been numerous in the capitalizations of the companies represented on pages 38 and 38-A.

Q. Have you examined the statement of Mr. Joseph at page 10900 of the transcript—lines 11-16, that:

> "Well, as I remember it, for one thing the elimination of the preference common would have meant the elimination of the entire Philadelphia Electric Company statistics, because the information is not available for the preference common separately. I think that was the situation then, even if it isn't now."

A. I have.

Q. What are the facts as to the nature of the security and the availability of information? A. In spite of its name, this stock is not a common stock, but a cumulative

convertible preferred. The error due to misclassifications of this stock tends to reduce the earnings-price ratios in all months prior to about October, 1945, when the one-for-one conversion ratio between the market prices of the two issues was first reached. From that date, it is not incorrectly included among the common stocks, which is equivalent to assuming conversion of all outstanding shares of the so-called preference common.

The information was at all times available separately [15763] for the $1 preference common.

At no time was non-availability of information a valid reason for including this stock among the common stock on page 38-A. The lack of error in result after October 1945 is neither because the preference common is a common stock nor because information was unavailable. The lack of error is due to the happenstance that the conversion ratio was reached for the first time about October 1945.

Q. I call your attention to the statement by Mr. Joseph at page 10934 of the transcript—lines 17-19, as to his reason for not making any adjustment for the participating right of the 5 per cent preferred stock of Southern California Edison, that: "There is no right in the preference stock until the common stock receives a dividend which vests the right, so it seems to me, in the preference stock"? Is that a correct statement? A. In my opinion it is a correct statement but not a reason for failure to recognize or consider the participating right of the preferred stock in determining the earnings-price ratios for the common stock. The right of the 5 per cent preferred stock to receive participating dividends in excess of 6 per cent, is limited by the fact that the right does not exist until the common receives a dividend (in excess of 6 per cent) which vests the right. It is equally true that the right of the common to receive higher dividends is limited [15764] by the fact that it cannot do so without vesting a corresponding right in the preferred. Thus, the value to common stockholders of the retained income is affected by the con-

tinuing participating right of the preferred. The prospective productive capacity of retained income does not have the same value to the common stockholder as it would in the absence of the right of the preferred to participate.

Therefore, it is improper to treat the $5,472,196 in entirety as earnings applicable to the common stock.

Q. Have you examined the testimony at page 10976—lines 22-25 of the transcript:

"Q. Now let me see if I understand you. For the purpose for which you have offered page 40 of Exhibit 46 should those issues, which bear note No. 1, have been excluded?

"A. Yes."

A. I have.

Q. What is the footnote No. 1? A. It identifies offerings of shares already outstanding, which were being sold by a parent company or otherwise, and which did not represent new capital to the utility.

Q. How many common stock issues are listed on page 40 of Exhibit 46 as having provided new equity capital to electric utilities during the period 1935-1945, inclusive? A. Eleven, if the issue by Florida Power Company in [15765] October 1945, which is incorrectly labeled as not representing new financing, is included.

Q. For how many of the eleven are earnings-offering-price ratios shown? A. Eight.

Q. What is the aggregate of net proceeds representing new capital realized by the eight electric utilities during this period, according to the information supplied by page 40? A. Not more than $21,000,000.

Q. What is the average dollars of new capital realized per offering over this period? A. About $2.5 million.

Q. Do the earnings-offering-price ratios for these eight instances provide a useful indication of the cost of equity capital to electric utilities in general or to Pennsylvania Water & Power in particular? A. They do not.

Q. Why? A. The number of instances and the amounts realized per issue are too small, and the diversity of risk characteristics are too great to permit significant conclusion. In any case, the significance of the earnings-offering-price ratios presented on page 40 is impaired by errors committed in their determination.

[15766] Q. Have you examined the statement by Mr. Joseph at page 11028—lines 7 to 10 of the transcript which reads as follows:

> "Q. What you really show there for Sioux City, Mr. Joseph, instead of earnings-offerings price ratio, you merely show earnings-price ratios as you show on 38-A, don't you?
>
> "A. Yes, it is very much closer to that."

A. I have.

Q. Is this a correct statement? A. No. The ratio of 9.55 per cent shown in column L for the Sioux City common stock is neither the same kind of ratio as the earnings-price ratios presented by page 38-A nor is it the same kind of ratio as those presented by page 40. It is a hybrid ratio without meaning for either purpose.

Q. Have you examined the testimony of Mr. Joseph with respect to the data presented on the last line of page 40 beginning with page 10,979? A. Yes.

Q. Will you state as concisely as possible the facts with respect to the issue of common stock by Sioux City Gas and Electric Company? A. The common stock outstanding immediately prior to the financing transactions was 118,938 shares of $25 par value stock.

[15767] The old $25 par value common stock was eliminated and two shares of new $12.50 par value common stock were exchanged for each of the 118,938 shares of old common stock outstanding. An additional 118,938 shares of $12.50 par value stock was issued. Therefore, upon completion of the common stock financing transactions, 356,814 shares of $12.50 par value were outstanding, of which 118,938

shares represented new capital and 237,876 shares represented the old capital previously represented by 118,938 shares of $25 par value.

The total number of shares offered and underwritten was 153,006. This total consisted of 34,068 shares already outstanding, after the two for one exchange, and being sold by Iowa Public Service Company and the 118,938 shares of the new issue, subject to rights of common stockholders, other than the Iowa company to subscribe to 101,904 shares. The 51,102 shown on page 40 was the number of shares not included in the subscription offer.

The bid quotations for the old $25 par stock were 38.5 at the end of September, 1945; 45.5 at the end of October and 52.5 at the end of November.

The new shares of $12.50 par value were offered to the public at 28⅞; the bid quotations on the new shares in the market were 28¼ at the end of December, 31 at the end of January, 1946 and 28.5 at the end of February.

Q. How did Mr. Joseph determine the ratio of 9.55 per cent for Sioux City shown in the last column on page 40? [15768] A. Mr. Joseph used earnings per share of $2.76, determined by dividing income of $328,351, reported for the 12 months ended October 31, 1945 by the 118,938 old, $25 par value, shares then outstanding—Moody's Supplement, P. 1642, Dec. 12, 1945. He divided these earnings of $2.76 per share by $28.88, the offering price to the public of the new $12.50 par value shares, to obtain the ratio of 9.55 per cent shown in the last column on page 40.

Q. What were the earnings per share prospectively available to the new $12.50 par value shares? A. The application of proceeds from the common stock issue was principally to redeem outstanding 4 per cent mortgage bonds and 7 per cent preferred stock. New 2¾ per cent bonds and 3.90 per cent preferred stock was issued in principal amounts less than the principal amounts redeemed.

Therefore, the prior capital requirements were reduced by the series of transactions. The prospectus dated Dec.

12, 1945, includes at page 8 "a summary of pro forma statements of income" which indicates, for the 12 months ended August 31, 1945, equity income of $580,000 on the basis of the pro forma interest and preferred dividends, and equity income of about $793,000 if the Revenue Act of 1945, enacted November 8, 1945, had been in effect for the 12 months' period.

Q. What is the earnings-offerings price ratio for the Sioux City common stock on the basis of the pro forma income? [15769] A. If determined on the basis of prospective income of $793,000 the earnings-offering price ratio is 7.7 per cent.

It should be understood that this basis reflects adjustment for the change in Federal income tax rates, but does not reflect the prospective income producing capacity of the approximately $412,626 of additional capital realized from the transactions or any other prospective change in circumstances not reflected in the pro forma statement.

Q. Have you examined the statement of Mr. Joseph at page 10989 of the Transcript—lines 3-6 that:

> "I related the earnings on the old shares, the price from the old shares determined on the price which people pay for different but similar shares."

A. I have.

Q. Were the old Sioux City $25 par value shares similar to the new $12.50 shares? A. No. They were quite dissimilar.

Q. Should the earnings per share on the old shares have been related to the offering price of the new shares for the purpose of determining ratios? A. No, the earnings per share on the old shares should have been related to the market price of the old shares.

Q. Why? A. The purpose of determining earnings-price ratios [15770] or earnings-offering price ratios is to indicate investor appraisals. The earnings per share on old shares related to the offering price of new shares indi-

cate neither appraisals of the old investors nor appraisals of the new investors, unless by accident.

Q. At page 11,609 of the Transcript—lines 17-24, referring to the earnings of 71 cents per share and the earnings offering price ratio of 4.44 presented on page 40 for the Central Vermont Public Service Corporation offering of 194,295 shares in December, 1943, Mr. Joseph said:

> "Q. Well, let me ask you this then: Shouldn't you have used the prospectus and the $1.53 which is shown in the prospectus instead of the 71 cents which is shown on page 40?
>
> "A. I will have to say that the $1.53 on the basis of my present recollection would probably result in a more accurate earnings-price ratio than that which is shown on page 40."

What should have been the earnings-offering price ratio to be shown in Column L, if the earnings shown in Column K are properly stated as $1.53 per share? A. 9.56 per cent.

Q. Do you agree that use of the $1.53 "would probably result in a more accurate" earnings-offering price ratio? A. I would say that it is more than a probability.

[15771] The 4.44% is completely erroneous and without significance.

Q. Why do you say that the 4.44 per cent is completely erroneous? A. The earnings of 71 cents per share, upon which the earnings-price ratio of 4.44 per cent is based, represents equity income of $228,003 for the 12 months ended 2/28/44, divided by the 323,000 shares outstanding as at that date.

The 323,000 shares were the number of shares outstanding after completion the previous December of transactions in connection with a plan under Section 11 (e) of the Holding Company Act filed with the SEC. The reported income for the 12 months ended 2-28-44, however, did not

reflect, except in minor part, the conditions created by the transactions incident to the Section 11 (e) plan.

Prior to the delivery of this common stock to the purchasers Twin State Gas & Elec. Co. had been merged with Central Vermont, the Vermont and New York properties of Twin State Gas and Elec. Company had been acquired by Central Vermont and $500,000 principal amount of 3¼% bonds had been sold.

The balance of income after preferred dividend requirements applicable to the property of Twin State to be merged is shown by the pro forma income account contained in the prospectus (p. 38) before adjustment, as $286,280 for the 12 [15772] months ended August 31, 1943.

The $228,003 of equity income for the 12 months ended February 28, 1944, used for the purpose of page 40 of Exhibit 46 was not reported for more than three months after the sale of the Central Vermont common stock. The use of this earnings figure was erroneous in that respect, since, even if it had been related to the property represented by the common stock, it would be information not available until after the date of offering. The $228,003 of equity earnings, however, reflected only the operations of the Central Vermont properties for the period prior to the merger in December and did not include income from operations of the acquired properties.

The facts were readily available from the prospectus and the prospectus was readily obtainable.

Q. Dr. Foster, are you familiar with the statement of Mr. Joseph at page 1000 of the transcript that in his opinion Exhibit 46 "furnishes the Commission with a comprehensive statistical background, and affords a sound basis for the exercise of judgment in the establishment of fair rate of return" for Penn Water and Susquehanna Transmission Company of Maryland? A. I am.

Q. Is that statement of Mr. Joseph's correct? A. No.

[15773] Q. Why? A. Regardless of its physical volume, Exhibit 46 does not include the information that would provide for the Commission an adequate and sound basis for the exercise of judgment in the establishment of a fair rate of return for Penn Water.

In my opinion, no regulatory commission, however expert or experienced, could establish a fair rate of return for Penn Water, or any other utility company on the basis of the information and analyses contained in Exhibit 46 and the related testimony.

Q. Have you considered in this connection the testimony of Mr. Joseph at page 9936 of the transcript that the charts and tabulations in Exhibit 46 are the same as, or are similar as to the nature of their contents, to the exhibits with respect to fair rate of return presented in other electric utility proceedings before the Federal Power Commission? A. Yes.

Q. Does this use of similar exhibits in prior proceedings influence your opinion as to the adequacy of Exhibit 46? A. No.

Q. Why not? A. Charts and tabulations which are presented in [15774] substantially unchanged form from one rate proceeding to another, aside from being brought down to date, may indicate trends in the securities markets, assuming that the data are prepared in a workmanlike manner.

Such charts and tabulations, however, are not designed either (1) to present facts as to the capital costs actually experienced by the particular utility for which the fair rate of return is to be established or (2) to present evidence of investors current appraisals of the particular utility, or (3) to disclose the risk characteristics which differentiate the particular utility from other enterprises and which must be known if the cost of its capital is to be estimated by comparison with the costs being experienced by other enterprises.

Q. In this connection, have you considered the statement by Mr. Joseph at page 9956 of the transcript—lines 18 to 23—that "returns required by investors depend upon the investors' appraisals of the risks present in the investment", and the statement by Mr. Joseph at the top of page 9958 that "the cost of capital depends upon the investor's appraisal of the risks present in the investment"? A. Yes.

Q. Does Exhibit 46 include any data as to the investor appraisals of the risks present in the Penn Water investments? A. Exhibit 46 does not by design include any indication of [15775] investors appraisals or of the costs of capital unique to Penn Water.

Q. Will you please explain that answer? A. Penn Water is not identified on any schedule or chart of the exhibit except on page 38-A. On page 38-A the earnings-price ratio for the Penn Water common stock is supplied on the basis of the market price for a single day, but apparently because the Penn Water common stock happened to be in a group used in this exhibit and in previous similar exhibits for the purpose of constructing an index of earnings-price ratios.

In the presentation of the trend series on page 38, however, the Penn Water earnings-price ratios, although readily available from the working papers, are submerged and concealed in weighted averages which are dominated by the large utilities.

Q. I call your attention to several statements by Mr. Joseph. At page 11,591 of the Transcript, lines 10-13 he stated:

> "Credit would be that element which permits the utility to proceed in its operations without financial embarrassment, and which enables it to raise the money necessary for the proper discharge of its duties."

At the bottom of page 11,591 and at the top of page 11,592, Mr. Joseph [15776] stated:

"I can gain a pretty fair idea of the credit of an enterprise by the relationship of the prices of its securities with the relationship of the prices of other similar securities.

"Q. So that it is correct to say that the measures of the credit of an enterprise are the yield rates at which creditors buy bonds as well as the earnings-price ratios, if those earnings-price ratios express the prospective return basis upon which the stock is sold in the market?

"A. I think that is a fair statement, yes, sir."

Further at page 11,594 of the transcript he stated referring to a quotation from the F. C. C. rate of return report:

"It is believed that the financial and operating characteristics of a particular utility eventually dominate the investing public's evaluation of its securities is quite true."

Are the propositions set forth in the statements which I have just read as to the determinants of investor appraisals and the credit of an enterprise reflected in Exhibit 46? A. No.

Q. In making your statement that Exhibit 46 does not provide for the Commission an adequate and sound basis for the exercise of judgment have you considered the testimony of [15777] Mr. Joseph at pages 10,954 and 10,955 as follows:

"Q. What is the significance and meaning of the earnings-price ratios shown in the last column of page 40 of Exhibit 46 for the purpose of the determination of the fair rate of return to Penn Water?

"A. Here we have a list of all of the common stocks of Electric operating utilities offered to the public during the period 1935 to 1945. The last column shows the earnings-price ratio as at the time of the offer. Looking at that column you have a view of cost

of capital on common stocks to these utilities. This, then, combined with the information shown at pages 38 and 38 (a) would give you an idea of what rate should be allowed on the equity of Pennsylvania Water and Power in a rate proceeding.

"Q. How would you get an idea of what should be allowed, Mr. Joseph, in that respect by examining the earnings-offering price ratio shown in the last column of page 40?

"A. Well, your own mental processes would determine that. You are interested in finding out what is fair to allow for Penn Water. Well, you say, in accordance with the Bluefield case and in accordance with the theory generally, 'We will allow what investors seem to be requiring.' You look at page 40 and pages 38 [15778] and 38-A, make up your mind as best you can what that requirement is."

A. I have.

Q. Do those statements correctly describe the use of pages 38, 38-A and 40 for the purpose of determining the equity capital component of a fair rate of return to Penn Water? A. No.

Q. Why not? A. I know of no "mental processes" by which it is possible from examination of pages 38, 38-A and 40 of Exhibit 46 to determine or even approximately estimate what "investors seem to be requiring" from investments in Penn Water.

The function of expert testimony is to present the facts and analyses which facilitate a considered exercise of judgment. The purpose is not to tell the Commission what to do, but it is not sufficient to present a mass of partially unrelated and wholly undigested facts and say "make up your mind as best you can."

Assuming the experience of the Commission in the particular field, its expertness and capacity for qualitative judgment, the exhibit provides no factual basis for evaluat-

ing the risk characteristics unique to Penn Water. Neither does it provide any factual basis for estimating the bias introduced by choices of method. For example, the [15779] low-earnings-price ratios shown on page 38-A are substantially the result of choice of method.

Q. Have you considered the statement by Mr. Joseph at the bottom of page 10,958 and the top of page 10,959 that Exhibit 46 meets the requirements of the Bluefield decision that: "A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties." A. I have.

Q. Is that statement of Mr. Joseph's correct? A. No.

Q. Why not? A. Neither in connection with the earnings-offering price ratios presented on page 40 or the earnings-price ratios presented on pages 38 and 38-A, nor in connection with the yields on bonds and preferred stocks shown elsewhere in Exhibit 46, is there identification or attempt at identification of enterprises which have risks and uncertainties corresponding to those of Penn Water.

Q. At page 10,960 Mr. Joseph said that all of the companies on page 40 of Exhibit 48 are companies comparable [15780] to Penn Water so far as risks and uncertainties are concerned as that latter term is used in the Bluefield case. Is that statement correct? A. No.

Q. Why not? A. The range of the differences shown on page 40 among the ratios of earnings to offering price, upon which the common stocks were purchased by investors is a sufficient demonstration of the fallacy of the assertion. Omitting the 4.44 per cent in the case of Central Vermont Public Service Corporation, which is an error, the range is from 5.37 per cent in the case of the Derby Gas

and Electric Corporation issue, with 7 instances higher and 12 instances lower than 9 per cent.

Q. At page 10,962 Mr. Joseph said that the requirements of the Bluefield decision, where it refers to investments in companies having corresponding or comparable risks and uncertainties, are satisfied by a presentation of data for companies merely of the same general class, that is, electric operating utilities having risks and uncertainties corresponding or comparable to Penn Water's risks and uncertainties? A. No.

Q. Will you please explain your answer? A. Operating electric utilities, although supplying generally the same type of service, vary widely from Penn Water as to risk and uncertainty. The latest available [15781] Directory of Electric Utilities in the United States, published by the Federal Power Commission, lists 1150 privately-owned electric utilities, not including industrial organizations furnishing energy to others as an incidental part of their operations.

This total includes enterprises of the most widely diverse investment and operating characteristics. The enterprises identified on page 40 of the exhibit as having issued common stocks from 1935 to 1945 are Class A or B electric utilities.

There were a total of 322 Class A and B electric utilities in the United States at December 31, 1945. They include widely divergent operating, market, managerial, and investment situations. The differences in credit standing among utilities supplying a given type of utility service, such as electric, are far greater than the average differences among electric, gas, telephone or water utilities as classes.

Q. Are all the bonds listed on pages 23 and 28 as having been issued by electric operating utilities during the years 1941 to 1945, inclusive, comparable as to quality with the outstanding Penn Water bonds? A. No. The bonds listed on these pages are assigned ratings varying from Aaa

to Baa and the yields at offering price varied from 2.55 per cent to 5.15 per cent. The composite listing includes bonds of diversified character [15782] and quality. The Penn Water bonds are not included. No information is supplied as to which, if any, are comparable with the Penn Water Bonds.

Q. Are all the preferred stocks listed on pages 39 and 39-A as having been issued by electric operating utilities during the years 1935 to 1945 inclusive comparable as to quality with the outstanding Penn Water preferred stock. A. No. The yields at the prices at which these preferred stocks were offered to the public varies from 3.75 to 6.67 per cent. The Penn Water preferred stock is not included. Preferred stocks which are so unlike each other cannot all be comparable with the Penn Water preferred. As to which may be comparable, no information is supplied.

Q. Are all of the fourteen common stocks which are identified on page 38-A comparable with the Penn Water common stock? A. The question is answered by the fact that the highest of the earnings-price ratios is 84 per cent higher than the lowest and that for January, 1940, the highest of the earnings-price ratios was 73 per cent higher than the lowest among the 11 common stocks included at that time. Adjustment and interpretation of the earnings-price ratios are necessary to provide any fairly exact measure of the cost of equity capital but are not required to demonstrate the existence of wide differences in investment favor. Until the level [15783] of the risks associated with Penn Water has been indicated, by reference to appropriate data, an assumption that Penn Water corresponds to the average of such a group of other utilities is as arbitrary as an assumption that it corresponds to the best or worst.

Q. Would your last statement be true if the group of fourteen common stocks had been selected because comparable with Penn Water as to risk and uncertainty? A. It would not.

Q. Are the companies or securities which are identified on the various schedules of Exhibit 46 included as the result of methods or criteria of selection which involve comparability with Penn Water? A. No. The methods or criteria of selection did not involve any consideration of comparability with Penn Water.

Q. Dr. Foster, have you examined the statement by Mr. Joseph at the bottom of page 9949 that in preparing Exhibit 46 he "had in mind the Bluefield Water Works decision and particularly this quotation from it", referring to the excerpt which is copied at pages 9947 and 9948. A. I have.

Q. In this connection have you considered the statement by Mr. Joseph at page 10,102 of the transcript that:

> "Well, I have proceeded on the theory that the Commission is going to allow this utility a fair rate of return from what investors are getting on other similar investments. They are going to treat this utility fair. They are going to allow the utility to earn about as much as is being earned on [15784] similar investments generally"?

A. I have.

Q. Does Exhibit 46 represent an application of the principle, as expressed in the quoted paragraph from the Bluefield decision, that a public utility is entitled to earn a return equal to that generally being made at the same time on investments in other business undertakings attended by corresponding risks and uncertainties? A. No.

Q. Will you please explain that answer? A. Mr. Joseph said at the bottom of page 9974 that the word "investments" was used in the Bluefield decision to mean dollars being currently committed as investments. The word could not have had any other meaning in the context of the Bluefield decision. The Supreme Court stated that a public utility is entitled to earn a return on the value of its property and that it was erroneous for the Commission not

to accord proper weight "to the greatly enhanced costs of construction in 1920 over those prevailing about 1915 and before the war". Mr. Joseph has determined yields on bonds and preferred stock at their current market values. He has determined earnings-price ratios on the basis of current market values of common stocks. Thus, he has presented evidence of the cost of capital in a manner consistent with his interpretation of the meaning of the word "investments" in the quoted paragraph.

However, Mr. Joseph has assumed that the rate of return [15785] to be determined by the Commission will be applied to an entirely different kind of "investment", past investment, made many years ago in substantial part before the first World War, at a much lower level of general prices and construction costs. Therefore, a shift takes place in the definition and meaning of the word "investments". The rates of return being realized currently on other investments, expressed at present-day values, of corresponding risks and uncertainties, applied to a rate base representing original investment could give a result consistent with the Bluefield principle only by accident.

Q. Have you examined the statement by Mr. Joseph at the top of page 11,600, in answer to a question which appears near the bottom of page 11,598 and together read as follows:

> "Q. In your opinion are different public utilities entitled to higher or lower fair returns depending upon the periods of construction of their properties and the levels of construction costs during those periods?
>
> "A. Since in my opinion the fair rate of return would be the same without regard to the time of construction, the dollars of return would vary."

A. I have.

Q. Is there an economic basis for the conclusion that the dollars of return allowed by a regulatory commission as fair and reasonable should vary substantially with the

[15786] period of construction of the property and the level of constructions costs during that period? A. There is no rational basis for such a difference in treatment.

Q. Will you please explain the reason for your answer? A. The quoted paragraph from the Bluefield decision is consistent with the valid economic principle that a utility is entitled to a "return" equal to that being made at the time on other investments of corresponding risks. The Bluefield decision is not consistent with grossly unequal annual returns resulting from application of equal rates of return to unlike rate bases. Recognition of the economic undesirability of widely varying returns because rate bases are fixed to reflect different construction cost levels, frequently has taken the form of suggestions that, where original cost or prudent investment are to be used as a rate base, the desirable flexibility may be maintained by adjusting the rate of return.

Q. Have you examined the statement by Mr. Joseph at pages 11,584 and 11,585 of the transcript which reads as follows:

> "A. I have this in mind, Mr. Sparks: Utilities that have reasonable capitalizations would obtain substantially the same fair rate of return, other things being equal. • • •
>
> "Q. Are you saying, Mr. Joseph, that those utilities [15787] having reasonable capitalizations would have the same rate of return?
>
> "A. Would command approximately the same fair rate of return, yes, sir.
>
> "Q. When you use the word 'command' there, do you mean that they should be allowed the same fair rate of return?
>
> "A. Yes, sir."

A. I have.

Q. Are these statements consistent with the quoted paragraph in the Bluefield case to the effect that a utility

is entitled to a return equal to that being made at the time on other investments of corresponding risks? A. No.

Q. Will you explain your reasons for that answer? A. The statements at page 11,584 represent a shift from the idea of a return equal to those on other investments of corresponding risks to the idea of a return equal to the average on all other electric utility investments. The averages presented by Exhibit 46 are not averages which assume equality of choice by individuals among alternative investment opportunities. They are weighted averages, which assume that each individual investment is in proportion to the ratio of the capital of each enterprise to the aggregate capital of all the utilities in the class.

[15788] Q. Have you examined the statement by Mr. Joseph at page 11,585 of the transcript which reads as follows:

> "Q. I don't think that answers my question, Mr. Joseph. It was, what are the data which may be considered in a determination of the estimating of the cost of equity capital to Penn Water as a component of the fair rate of return.
>
> "A. The cost of equity capital to Penn Water is unnecessary in a determination of the fair rate of return for Penn Water. Furthermore, I am not at all sure it can be obtained."

A. I have.

Q. Is it correct to say that an estimate of the cost of equity capital to Penn Water is unnecessary in the determination of the fair rate of return for Penn Water? A. No.

Q. Have you examined the statement by Mr. Joseph at page 9963 of the transcript which reads as follows:

> "Q. Well, would you say then that the credit of an enterprise does depend upon the composite appraisal of investors as expressed in the market place?
>
> "No."

A. I have.

Q. Is that a correct statement? A. No.

[15789] Q. Why not? A. Mr. Joseph, himself, stated at the top of page 9958 that the cost of capital depends upon the investor's appraisal of the risks present in the investment. It is obvious that the cost of capital to an enterprise is directly dependent upon its credit. In this connection Mr. Joseph said at the top of page 11,592 that it is fair to say that the measures of the credit of an enterprise are the yield rates at which creditors buy bonds as well as the earnings-price ratios, if those earnings-price ratios express the prospective return basis upon which the stock is sold in the market.

Q. Have you examined the statement by Mr. Joseph at pages 10,324 and 10,325 as follows:

> "Should the carry-over on the bonds issued in 1928 affect the cost of capital in 1944? I say no, and I think that the fact that the carry-over may be either a debit or a credit dependent upon the style or fashion of financing in 1928 is a complete answer for my question. The utility during the period from 1928 to 1944 was charging rates sufficient to recover the costs of its capital, and that without regard to whether the bonds had been issued at a discount or a premium."

A. I have.

Q. Is that a correct statement? [15790] A. No.

Q. Why not? A. It must be assumed that the utility was charging rates sufficient to recover the costs of its capital on the basis of an assumption that the capital contracts would remain undisturbed until maturity. To disallow the unamortized costs in rate of return determination is to penalize investors for inability of management to forecast trends of capital costs. It would be an application in rate regulation of a rule of hindsight rather than of foresight.

It is obvious that a discount or a premium may be experienced depending upon the selection of coupon rate which seemed most desirable at time of financing. The ex-

perience may reflect "style or fashion of financing in 1928". It does not follow that it reflects imprudent managerial decisions. Premiums payable upon redemption of outstanding bonds are an unavoidable cost of the opportunity to obtain debt or preferred stock capital at the currently low rates. Retroactive application of revised regulatory standards, which deprive utilities of the opportunity to recover unavoidable costs, or penalize investors for managerial decisions which were rational and prudent when made, increases the hazard associated with utility investments and tends to increase the returns demanded by equity investors.

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[15802] CROSS-EXAMINATION.

By MR. GOLDBERG:

• • •

[15819] Q. In stating the first alternative in your prepared testimony you say it is to "adjust the earnings-price ratios in order to recognize some of the obvious circumstances considered by investors in arriving at their appraisals, and, in addition, to recognize the existing significance of circumstances for which quantitative adjustments are not feasible."

Now then, you speak of recognizing only some of the obvious circumstances. Will you tell us why in the first alternative mentioned by you recognition is to be given only to some of the obvious circumstances and others are not to be recognized? [15820] A. I believe that recognition and consideration should be given to all the obvious circumstances influencing investor-appraisals and having a bearing on the extent to which the arithmetical relationship between reported earnings and market price may be misleading as an indication of capitalization rates. The point is that in the process of giving such recognition and consideration to those circumstances some are susceptible of quantitative recognition and some are not.

I may observe further that the testimony to which you have referred relates particularly to page 38-A of Exhibit 46; that the observations there made as to procedures which would have given significance to the data are particularly in recognition of that page of exhibit independently of page 38, the preceding page.

• • •

[15887] Q. You have at transcript 15,759 stated that undue respect for form, as distinguished from fact and substance, has resulted in inconsistent treatment of similar items in the preparation of the data presented by pages 38 and 38-A.

I was interested in securing from you all of these examples of inconsistent treatment of similar items. I understand that you have not made a study which enables you to tabulate all of them, but you say you are aware of a certain number of them.

I was interested in getting from you the inconsistent treatment of similar items of which you are aware. A. That particular category, of course, refers only to non-recurring items which were of the character which might have been adjusted for in the income statement which was published.

Q. May I interpose at that point?

In your last answer I take it that the reference in lines 2 to 5 at transcript 15,759 is to the category referred to by you as non-recurring items of a character which might have been adjusted for in the income statement which was published. Is that right? A. Yes.

Q. Idaho Power Company was an illustration of one of that character? A. Idaho Power Company was an illustration. The practice [15888] of adjusting for significant non-recurring tax savings is, of course, a relatively recent development. Its development was coincidental with the war-time increase in income tax rates, and as the result during the latter part of the period reflected on page 38 the

adjustments were generally already made in the published income statements, and during that latter part of the period Idaho Power is, I believe, the only instance of that particular kind of non-recurring item for which adjustment had not already been made in income statement.

I believe during the earlier years there will be found instances where it was not made in published income statements.

Q. You say that of recent years adjustments are already reflected in the published statements. Does that begin with 1943, or what year? A. I am sure it was not a change of form which had any abrupt beginning. I will place it generally at an earlier date closer to 1941, 1941 and 1942.

Q. Now, then, can you give us these other instances of which you are aware where there has been the inconsistent treatment of similar items in the preparation of pages 38 and 38-A of the category which you have indicated your statement had reference to? A. Limited to that particular category, adjustment for federal income tax savings, I have in mind no illustration, I think it is correct to say there were such federal income [15889] tax savings in connection with refinancing of debt or other transactions which gave rise to unusual deduction from net taxable income, and if analysis were made, such illustrations could be found for the year 1940, perhaps for latter years, and certainly for earlier years.

Q. You have not made that analysis? A. I have not.

Q. Considering your illustration as respects Idaho Power Company, is it your suggestion that the 50 cents per share, or a total of approximately $225,000, should have been deducted from the reported net income available for common before determining the earnings-price ratio?

You will find that also on transcript 15,759, Dr. Foster.

A. May I have the question, please?

(Question read.)

THE WITNESS: I believe that if the amount to which you refer is deducted, the resulting net income is a better statement of earnings available to the equity or per share under the conditions existing during the year 1945.

By MR. GOLDBERG:

Q. My question is, is it your statement that that should have been done, that the deduction should have been made before determining the earnings-price ratio? A. Well, I have testified that my position is that the earnings should be so stated as to provide the best possible [15890] expression of earnings under the conditions existing during the period, or that in lieu of such arithmetic treatment, consideration should be called to the facts and their significance indicated.

Q. Either one of those, in your opinion, should be done in determining the earnings-price ratio? A. Either the one or the other as a general proposition and, of course, the reference to Idaho Power Company, the 50 cents per share, is intended as a mere illustration.

Q. Using Idaho Power Company for the sake of the question, you are saying one or the other should be done in determining the earnings-price ratio, either a deduction or calling attention to the fact. A. Either deduction and calling attention to the related circumstances, or calling attention to the particular fact among other circumstances which influenced the prospect of income.

Q. With respect to Idaho Power Company, what other circumstances do you have in mind? A. We have already reviewed a substantial number of other circumstances which were common to Idaho Power Company as well as to others of the 14.

Q. You mean the effects of the tax laws and increasing demand for service, electric service wage trends, things of that nature that we have earlier discussed. Is that it? [15891] A. That is right, although you were the one who included the atomic power.

Q. Yes.

TRIAL EXAMINER: Did you make a check calculation using earnings and prices to obtain a comparative earnings-price ratio for these 14 companies appearing on page 38-A?

THE WITNESS: As of that date, and taking into account the circumstances which we are discussing?

TRIAL EXAMINER: Yes.

THE WITNESS: No, I have not. I did do so for the smaller group of six in connection with my direct testimony.

I should amend that statement. I did so for earlier years since at the time of the direct testimony the annual reports and other information were not yet available for the year 1945.

TRIAL EXAMINER: Have you done anything on those six companies since you last appeared on the stand in connection with your rate-of-return testimony?

THE WITNESS: I have in other connections, Mr. Examiner. I have not been asked to bring the exhibit up to date and it would, in fact, contribute little or nothing to the conclusions to bring it up to date.

TRIAL EXAMINER: But in those calculations you would have a direct comparison for the corresponding earnings-price ratios that are on page 38-A for those six companies.

[15892] THE WITNESS: I would have a direct comparison with the corresponding earnings-price ratios which are on the working papers and which are reflected in the form of averages on page 38.

By MR. GOLDBERG:

Q. Dr. Foster, we have just talked about one adjustment specifically in dollars and cents; that is, the 50 cents per share adjustment. What other adjustments should be made to the reported earnings, reported net income avail-

able for common of Idaho Power Company before determining the earnings-price ratios?

In asking that question I am not merely interested in the general nature of the adjustment but I am interested in the cents or dollars of adjustment. A. I may say this, Mr. Goldberg: The awareness of the nature of adjustment, or the consequence of failure to recognize trends and existing circumstances, does not depend upon having made a precise calculation of dollar amounts, and, further, that I have not assumed the burden of making such calculations for the 14 companies represented on pages 38 and 38-A of Mr. Joseph's exhibit.

• • •

[15893] Q. Would the consideration of all the necessary adjustments materially affect the net income available for common in connection with the determination of the earnings-price ratios other than the 50 cents per share we have already discussed? A. Consideration of all of the circumstances would indicate a material difference between reported equity income and equity income prospectively available at the time for which these prices are taken.

Q. What adjustment do we make in addition to the 50 cents per share for consideration of all these other necessary adjustments? A. If you are asking me for indication of the kind and character of such adjustments, I am unable to respond.

Q. No, I am talking about the dollars and cents of the adjustments. A. I have answered that question.

Q. You mean you cannot tell us? A. I can tell you, for instance, that the excess profits tax liability of the Idaho Power Company was $665,000 for the year 1944; it was $260,000 for the year 1945, and would have been substantially more in the absence of non-recurring credits; that the federal income tax for the year 1945 is [15894] $645,000, and that the prospective effect of the rates established by the 1945 Revenue Act was a significant and substantial reduction of those federal tax liabilities and a

corresponding increase, everything else being equal, in equity income.

Q. Taking all of that into account, which you say the investor takes into account, can you tell us what dollars and cents adjustment we are to make in the net income available for common before using it to determine the earnings-price ratio? A. I have had no occasion to prepare precise dollars and cents estimate.

Q. Can you approximate it? A. Not without expenditure of time.

Q. Does the investor make a quantitative adjustment for all these matters you have discussed? A. A careful, refined investment analysis certainly would have done so.

TRIAL EXAMINER: What do you mean by "refined"; anything more than careful?

THE WITNESS: Perhaps not, Mr. Examiner. I was using the word "careful" in the sense of care and accuracy, and the word "refined" in the sense of consideration of all or substantially all, of the pertinent considerations.

By MR. GOLDBERG:

[15895] Q. Isn't it a fact that after an investor had done all that he might still end up with no more of an adjustment than 50 cents per share because of the offsetting nature of some of the adjustments you consider? A. Certainly. The investor making his adjustments and recognizing the trends and the circumstances may find them to be offsetting. It is equally true that at other times they are not offsetting but have their influence in the same direction. Therefore, it follows that if, as a matter of accident, they are offsetting, the earnings-price ratios computed as they are computed for the purpose of Exhibit 46 tend to be representative and usable.

If, as a matter of accident, they are not offsetting, then they may be wide off the mark.

[15896] Q. Do non-recurring items occur nearly every year? A. During the recent years, particularly since the high income tax rates have motivated readjustments, corporate and otherwise, non-recurring items have tended to be present continually. That is far from true in the same degree 15 or 20 years ago.

Q. Would you say that with respect to the immediate future they will tend to appear nearly every year? A. I would say that the motivation to sell surplus property, to obtain benefits from write-off of debt discount and expense, etc., will not be as strong as it has been for the past half-dozen years.

Q. Does that mean that in the immediate future you think non-recurring items won't tend to appear every year? A. I have no basis for conclusion as to that. I assume you are referring to any particular company.

Q. When the investor considers these non-recurring items and makes allowance for them, does the allowance he makes reflect in the price he pays for the stock? A. I am trying to understand the question. I may put it this way: If in the case of a given enterprise there is experience during a year of a non-recurring tax saving, so-called, which increased earnings per share by 50 per cent of what they otherwise would have been, investors would tend to disregard the additional 50 per cent of earnings in appraising [15897] the future.

Q. And pay a price accordingly? A. And pay a price accordingly, yes.

Q. Now, then, if the actual income as reported of the Idaho Power Company had been adjusted by this 50 cents per share, it is a fact, is it not, that the earnings per share would have been reduced from $2.92 to $2.42 per share? A. That would be the effect on earnings of that particular adjustment.

Q. And the earnings per share to December 31, 1946, of Idaho Power Company were $2.74 per share. Isn't that so?

MR. SPARKS: May I have the question, please?

TRIAL EXAMINER: Yes.

MR. GOLDBERG: I might be able to help you by showing you photostatic copies of pages 1592 and 1593 of the February 8, 1947, supplement to Moody's Public Utilities.

(Question read.)

THE WITNESS: $2.74 is the earnings per share as reported by Moody's Public Utilities for the 12 months ended December 31, 1946.

By MR. GOLDBERG:

Q. That is mathematically a difference of 32 cents between the $2.74 and the $2.42, is that right? The $2.42 is the earnings per share after adjustment of the 50 cents per share? [15898] A. A difference of 32 cents.

Q. The difference between the earnings as reported to December 31, 1945, which Mr. Joseph used and the actual 1946 earnings which we have just referred to of $2.74 is only 18 cents per share, namely, the difference between $2.92 and $2.74. Isn't that so? A. I am lost with these figures. May I have it read?

(Question read.)

THE WITNESS: That is right.

By MR. GOLDBERG:

Q. You have at transcript 15760 and 15762 criticized Mr. Joseph's opinion with respect to the conversion of the convertible debentures of the Commonwealth Edison Company and their relationship to the earnings-price ratios which were used by Mr. Joseph. Have you determined what effect on earnings available for common was brought about by that conversion? A. I have made the analysis for Commonwealth Edison Company for the year 1945. I do not have that analysis here and I do not recall that in that connection I made a separate determination of what

the result would have been with reference to the effect of the treatment of the convertible debentures.

Q. Does that mean that you can not tell us what the effect would be on the 5.35 per cent shown on page 38-A of [15899] Exhibit 46 for Commonwealth Edison Company? A. The effect would be the arithmetic result of increasing equity income by the requirements of the debentures and dividing that amount of income by a number of common shares increased to correspond to the number which would be outstanding after the conversion. I have not made the arithmetic computation.

Q. You would have to take into account in that computation, wouldn't you, the Federal income tax effect? A. That is correct.

Q. We have, we think, made the correct computation, and according to our computation the 5.35 per cent becomes 5.14 per cent. I would appreciate your checking that and to facilitate that check we will be glad to supply you with the method we used in arriving at that result. A. I will be glad to accept it. It appears within the range of what I would expect it to be.

Q. Yes. And of course changing the 5.35 per cent to 5.14 per cent wouldn't have any effect on the 4.99 which is the average at the bottom of the last column on page 38-A. Isn't that so? A. It would have very insignificant effect. I may comment that I believe the choice of methods should not be controlled by the direction of effect of alternative methods nor by the quantitative [15900] effect in a given situation if in other situations the quantitative effect might be substantial.

Q. You seem to have anticipated a question I had much later on, but I think I will wait until we get to that.

You have testified at page 15765 that the significance of the earnings-offerings-price ratio, at the bottom of the page, presented on page 40 of Exhibit 46 is impaired by errors committed in their determination. Isn't that right? A. That is right.

Q. To what errors do you have reference, Dr. Foster? A. I believe I have illustrated the errors by particular reference to the determination for the offering of common stock by Sioux City Gas and Electric Company and the offering of common stock by Central Vermont Public Service Corporation.

Q. I am interested in getting all these other errors on page 40. Are you in a position to tell us what they are? A. Again I have not felt myself under the burden of making determinations in each and every instance. I have made such an analysis of each of the issues represented on page 40 for my own purposes rather than for the purpose of identifying or measuring the effect of errors which in my opinion Mr. Joseph may have made.

Q. Does that mean that you can not name or specify all the errors committed in the preparation of page 40 of [15901] Exhibit 46 which impair the usefulness of that page other than the illustrations for Sioux City Gas and Central Vermont Public Service? A. Impairment is a matter of degree.

Q. Just as you have used it, Dr. Foster? A. The two issues to which you refer were the instances in which I found the most significant errors. In other instances I would not and did not reach results precisely corresponding to those reached by Mr. Joseph. It perhaps should not be expected that two analyses would do so. There are other instances where the variation is significant; there are still others where it is not. I would have to make a comparison issue by issue in order to tell you what the differences are. I would have to go further and study them in order to determine what his errors are, if there are errors in all instances.

In other words, without description by Mr. Joseph as to how he reached the statement of earnings-offering-price ratios in each instance reconstruction of his methods at times becomes guesswork?

Q. Do I understand that when you stated the significance of the earnings-offering-price ratios presented on page 40 is impaired by errors committed in their determination, you had not made the analysis that you have just stated you would have to make? [15902] A. I have made an analysis for the greater part of the instances which was an attempt, on the basis of the information available, to determine what his method was.

Q. Does that mean that you have made the necessary detailed study to enable you to say that there are other errors on page 40, other than those committed with respect to Central Vermont and Sioux City, and that these other errors impair that presentation on page 40, significance of the presentation on page 40? A. I believe there are other errors and that they do tend to impair the presentation although they are not errors of the somewhat gross character represented in these two instances.

Q. What are these other errors you have determined were made in the presentation of the material on page 40? A. I will have to review notes for a minute to answer that question.

* * *

MR. GOLDBERG: Mr. Examiner, before we proceed I wonder if we could have the reporter check several matters in the record so that we may have them before the witness Watchorn [15903] returns?

TRIAL EXAMINER: Yes.

MR. GOLDBERG: It appears to me that the answer is missing at the bottom of transcript 15552. The page ends with line 25, but I feel the answer was made and would have appeared as line 26. I would like to have the record checked on that, and what the answer is if there is an answer.

TRIAL EXAMINER: Very well.

MR. GOLDBERG: There are two other places. Unfortunately, I didn't review the record until the record

got cold. I can't figure out what the word should be. Transcript 15583, line 12, my recollection, without having the record before me right now, is that the words I have doubt about are "finance. Judge." Then it stops there. I don't think the word "finance" is right. It doesn't seem to have any meaning.

Then at transcript 15584, line 19, in the question I asked, the word "finance" again appears. It doesn't seem to make sense in the question, I can't think of what the word was, and I was probably using the word the witness suggested earlier.

If we could have those matters checked and have them before the witness Watchorn returns I think it would be helpful.

TRIAL EXAMINER: Can you make a spot check, Mr. Reporter, during the luncheon hour or during the evening?

By MR. GOLDBERG:

[15904] Q. Dr. Foster, will you now name these other errors which impaired the significance of the earnings-offering-price ratio presented on page 40? A. First a general reference to the inclusion or exclusion of offerings and the statement of number of shares offered. There are a substantial number of offerings which are not included on page 40 where the circumstance of offering is the same as the circumstance existing in the case of offerings which are included. The statement of number of shares offered is in my opinion erroneous in that it does not reflect the full number of shares exposed to appraisal in instances of exchange offers which were underwritten.

With more particular reference to the earnings-offering-price ratios as shown by page 40, I will refer to the offerings beginning with the most recent in point of time other than the Sioux City Gas and Electric Company offering in December, 1945. The immediately preceding issue was that by Montana-Dakota Utilities Company in October

of 1945. The earnings per share available to support that issue are shown by page 40 as 72 cents per share. The 72 cents represents, I believe, reported earnings per share available from a public source, probably Moody's Public Utilities. The offering prospectus dated October 26, 1945, includes a pro forma income statement for the year 1944, which shows gross income before income taxes of $2,847,332. The statement of earnings per share, [15905] on the basis of the Federal income and excess profits taxes, actually payable for the year 1945, determined by reference to the pro forma statement of income, is approximately 86 cents per share on the 900,000 shares to be outstanding.

... that connection it may be noted that the net proceeds were indirectly applied by the company toward payment of the purchase price of the outstanding securities of Dakota Public Service Company.

Q. Before you go on, Dr. Foster, the 72 cents per share shown on page 40 is related to offering of 233,351 and 4/10 shares. Your 86 cents is related to some 900,000 shares. A. The earnings available per share on the shares being offered are necessarily the earnings per share on the total number of shares to be outstanding, including the shares already outstanding and the shares being offered.

Q. And your 86 cents is on all the shares which would be outstanding, including the offering? A. That is correct.

Q. Is that right? A. Yes.

Q. And is it your statement that the 72 cents merely is related to the number of shares offered column? A. No, I did not so state.

Q. All right. A. I said that the 72 cents is, I believe, available [15906] from reported earnings per share.

Q. I understand now. I had misunderstood. A. I do desire at this time in this connection to say that I do not have with me the notes which I made reflecting my investigation of the earnings per share as stated on page 40. The offering prospectus also disclosed the amounts of the Fed-

eral tax liabilities, and it should be noted that as of the date of this offering the proposed revenue act was before Congress and it was signed on the 8th of the following month.

If adjustment is made for the effect of that legislation, assuming all other circumstances to be unchanged, the earnings per share become $1.32. It may, I believe, be reasonably concluded that the investor appraisals of that offering were on the basis of prospective earnings in excess of 86 cents per share but less than $1.32 per share.

Q. Why do you say that? A. Pardon?

Q. Why do you say that? A. Because in general, analyses were discounting the savings prospectively to be released by the elimination of the excess profits tax.

Q. Was their appraisal closer to the 86 cents or closer to the $1? A. I made, Mr. Goldberg, approximately a year ago, an [15907] analysis which consisted of a correlation, or a multiple regression analysis, of the relationship between earnings-price ratios and proportionate gross income available to the equity and the dividend pay-out ratio. The closest relationship existed on the basis of an assumption of 60 per cent of the released tax savings becoming available. The character of that statistical analysis provided a fairly satisfactory indication of the appraisals of that particular factor.

Q. Then I take it you would say that the investor's appraisal was based on about 94 cents per share? A. I have not applied the 60 per cent here, but it is approximately 86 cents plus 60 per cent of the difference between 86 cents and $1.32.

Q. I was saying the difference between 86 cents and $1. It would be higher than 94 cents, then. Then $1.13 in round figures? A. Yes, recognizing that this method of splitting earnings per share does not give precisely correct results because it is not the same as applying the 60 per cent to the difference in total equity income.

Q. If I understand what you have just told us with respect to Montana-Dakota Utilities Company, you say the representation on page 40 erred in using 72 cents as the earnings per share instead of the 86 cents or the $1.32. Is that right? [15908] A. I believe that it erred, first, in not considering the information available from the prospectus, and, secondly, in not giving consideration to the consequence of tax revision which, as it happened at that time, was currently the significant factor.

Q. And the consequence of the tax adjustment, of course, is only one of the many adjustments you say the investor would be considering in making. Is that right? A. The investors are concerned with the several trends and circumstances which affect the prospective income. I would say merely that the revision of the war tax legislation being currently under consideration, it was important in the minds of investors.

Q. Does that complete your statement with respect to Montana-Dakota Utilities Company or are you going to give us what you consider is the correct earnings-offering-price ratio in lieu of that 6.26 per cent? A. On the basis of what I have already said it is readily possible to compute an earnings-offering-price ratio.

[15909] Q. Have you computed it? A. I have not.

Q. Does that complete your statement with respect to the errors in the representation shown for the Montana-Dakota Utilities Company; and if so, I would appreciate your going on to the others? A. The next offering listed on page 40 is the offering of 142,957 shares by Florida Power Corporation in October of 1945. In that case a total of 539,240 shares were being sold, of which 396,383 were being sold by General Gas & Electric Corporation and 142,857 shares by Florida Power Corporation.

Then to complete the statement of the circumstances, 76,793 shares were reserved against subscription by certain stockholders, 21,553 shares were in fact subscribed and the balance purchased by the underwriters.

With reference to the $1.02 of earnings shown per share, my recollection is that the prospectus was consulted by Mr. Joseph and that the $1.02 reflects that examination. The recollection is only of my earlier review and Mr. Joseph's testimony.

Q. I am not so much interested in what Mr. Joseph looked at as I am interested in finding out if you agree or disagree with the $1.02, and if you disagree what you think the showing should be. In other words, you talked about number of shares offered. You feel the number of shares [15910] offered in that column on page 40 is not the proper showing?

Then I would like to have your statement as to what is the proper showing without the necessity of the analysis of it. A. You want only a direct statement of what I think the proper showing would be?

Q. That is right. A. Here, again, I believe that consideration should be given to the prospective effect of the revised tax laws, but in this instance that effect is of relatively less importance than in the case of other issues to which attention has been called. I do not believe that my examination of the offering prospectus would have indicated earnings per share significantly different from the $1.02. There is an item of amortization which has a 6-year term which might have been given some consideration.

My analysis sheet prepared at the time of the issue shows $1.07.

If you desire that I go now into the next offering, Central Arizona Light & Power Company——

Q. I desire that you go to it if there have been errors made which you feel impair the significance of the showing on page 40. A. Since I have concluded in the case of Florida Power Company that such errors as may have been made do not significantly impair the meaning of the earnings-price [15911] ratios, I might have omitted that one.

Q. I see. A. In the case of Central Arizona Power & Light Corporation, I believe that the error consists pri-

marily in the failure to recognize the effect of the excess profits tax liability which was for that company substantial.

Q. In other words, in showing 85 cents as earnings per share, you feel an adjustment should have been made for the federal tax liability. Is that right? A. I do not believe that in view of the information generally available to the purchasers of that common stock and the information presented in the prospectus that the acquisition was in fact on the basis of the prospective earnings per share of 85 cents.

Q. Have you made the adjustment that you think the investors made for taxes? A. I will give it to you in the same form as in the case of Montana-Dakota Utilities Company.

On the basis of 1945 income tax rates I have stated the earnings per share as 78 cents, and on the basis of the 1946 income tax rates at $1.29 cents. I should repeat, perhaps, that I am referring to an analysis sheet prepared at the time of issue.

Q. What is the significance of telling us you are referring to an analysis sheet prepared at the time of the [15912] issue? A. Perhaps nothing other than to tell you that we undertake as each issue comes out to obtain the prospectus and at that time to prepare an analysis sheet which we use subsequently.

TRIAL EXAMINER: May I have the answer read, please?

(Answer read.)

THE WITNESS: The next common stock is an offering of the Pacific Gas and Electric Company in September of 1945. That was a special offering of a listed stock, the sale being of the North American Company interest.

The analysis shows, again, that the tax feature was of dominant importance. The earnings per share which I have on the basis of the tax rates effective in the year 1945 are $2.13, or the same as on page 40.

The adjustment for the 1946 tax basis shows $4.07.

I will go to Central Hudson Gas & Electric Corporation offering. In September of 1945, I have no significant criticism of the 56 cents per share shown by page 40 as representing actual earnings during the 12 months ended March 31, 1945 on the basis of the tax rates then effective. I would, however, call attention to the required reservation of net income in the amount of $120,000 per year until the year 1971, a requirement by order of the New York Public Service Commission. Although deducted prior to the statement of earnings available [15913] to the equity, the $120,000 is not in fact non-available to the equity.

The recognition of the effect of the 1946 tax rates would restate the 56 cents per share as 76 cents per share.

The next offering is that of the Lake Superior District Power Company common stock in May of 1945. As of that date for the purpose of the statement of the earnings-offering-price ratios, I did not attempt a quantitative statement of the effect of income tax law revision, although then in prospect.

The analysis of earnings on the basis of information supplied in the prospectus includes two relatively minor adjustments which tended to reduce gross income and which resulted in $1.64 per share instead of the $1.68. That, of course, is an adjustment in a direction contrary to the more important consideration of tax revision.

The Central Illinois Electric & Gas Company offering appearing on the immediately preceding line in February of 1944 was sold to the underwriters by Consolidated Electric & Gas Company.

My analysis shows earnings per share of $1.92 as compared with the $2.33, and I believe it is correct to say that the use of the offerings prospectus is the explanation of the difference. The earnings-offering-price ratio becomes 10.04 instead of 12.2.

MR. SPARKS: Had you finished Central Illinois Gas Company?

[15914] THE WITNESS: Yes.

MR. SPARKS: I wonder if you might not want to recess at this point before Dr. Foster begins on another company.

TRIAL EXAMINER: I think we have just time to take up another company.

THE WITNESS: The next is Derby Gas & Electric Company, an offering by prospectus dated August 29, 1944.

MR. GOLDBERG: August of 1944? We have January.

MR. SPARKS: It shows on page 40 as January.

THE WITNESS: That is what is bothering me, then. There is another by Derby Gas & Electric Company in the same year, which is not shown on page 40. I continually confused them.

MR. GOLDBERG: I see.

THE WITNESS: I have confused the two and I do not have here a record with respect to the offering in January of 1944.

By MR. GOLDBERG:

Q. What was the earnings-offering-price ratio on the one you don't have, which is not shown on page 40? A. I have on a tabular sheet data with respect to each of the two offerings by that company in 1944. In the case of January, the offering in January of 1944, I determined earnings per share of $2.56, and in the case of the offer in August, 1944, earnings per share of $2.14 based in each case on the information contained in the prospectus.

Q. With respect to August of 1944 offering, I wonder [15915] if we could have the data which you used to derive the earnings-offering-price ratio for that issue? A. Yes. In August, 1944, Derby Gas & Electric Company issued 54,054 shares of common stock and used the proceeds, together with other cash, to acquire certain securities of Dan-

bury & Bethel Gas & Electric Light Company directly and from Cities Service Power & Light Company. The price to the public was $20; the price to the underwriters was $18.50, and the proceeds to the company, net of company expenses, was $18.024.

Q. Per share? A. Yes. There was no competitive bidding. The equity earnings have been stated at $430,314 for the 12 months ended April 30, 1944 on the basis of the analysis of the offering prospectus.

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[15916] Q. Dr. Foster, I think you had finished Derby Gas & Electric Corporation. I think you have already given us Central Vermont. So that takes us to Southwestern Public Service, September, 1942 issue. A. Yes, intermediate between the Southwestern Public Service issue in September, 1942, and the Central Vermont issue in December, 1943, I would have included three issues involved in portfolio divestments by holding companies which are omitted.

Q. Which ones are those? A. Sales of Houston Lighting & Power common stock in May of 1943 at an earnings-offering-price ratio of about 9.4 per cent; sale of the Idaho Power Company common stock in September of 1943 on a basis of about 8.5 per cent, and a sale of the Public Service of Colorado common stock in November of 1943 at approximately 11.8 per cent.

The Southwestern Public Service offering in September of 1942 was to the common stockholders of Community Power & [15917] Light Company and General Public Utilities in connection with a reorganization. The total number of shares was 185,000, of which 44,519 were taken by the common stockholders and the balance of 140,481 shares was offered to the public. The offering was jointly with an offer of bonds and preferred stock.

Page 40 does not in this instance provide a statement of earnings per share or of the earnings-offering-price ratio. Such a statement might have been set up by reference to

the pro forma income statement contained in the offering prospectus. It would not, however, have had much meaning for the purpose of page 40; that is, earnings per share indicated by the offerings prospectus were about $1.90 a share which, of course, in relation to the offering price of $5.00 per share indicates an uncertain and unsettled situation which is not comparable with the other issues tabulated.

The next common stock on page 40 is the offering by San Diego Gas & Electric Company in November of 1941 of 246,750 shares for new capital. My analysis of the prospectus dated July 8, 1941, and considering additional prospective taxes and the net effect of a rate reduction indicates earnings per share of $1.18 as compared with $1.25 as shown on page 40.

On that basis the earnings-offering-price ratio would be 9.07 rather than 9.62 per cent.

The next item on the list is the offering by Black Hills Power & Light Company in October of 1941 of 100,000 shares, [15918] of which 92,650 shares had been issued to General Public Utilities, Inc. as part consideration for the Dakota profits of General Public Utilities. Analysis of the offering prospectus dated October 28, 1941 giving consideration to an expected tax increase indicates earnings of $2.53 per share and an earnings-offering-price ratio of 15.3 per cent. Here, again, there is being established something of a new situation without a record of experienced earnings and the earnings-offering-price ratio is out of line with more mature situations.

Page 40 does not show earnings per share but states that information is not available.

Q. It is very much like that Southwestern Public Service, is it? A. It is generally the same kind of situation. The fact is that information is available but the facts are such as to make the information not particularly useful or significant in connection with the purposes of page 40.

Q. Did you give us the earnings-offering-price ratio for that Southwestern situation? I don't think you did. You

said earnings per share were $1.90. A. In relation to an offering price of $5.00, earnings-offering-price ratio would be 38 per cent.

Q. Yes. A. Obviously, not significant.

Q. All right. [15919] A. The next offering is that of the Louisville Gas & Electric Company in October of 1941 which was not underwritten. This was an offering by the company to the public and any security dealer or broker at a discount of 75 cents from the price to the public. 25,690 shares out of 150,000 offered were purchased and the balance was taken up by the holding company.

There was, of course, no offering prospectus. The analysis which I have of the earnings for the year 1940, which is for a date other than that shown by page 40, indicates $1.25 as compared with $1.49. There is, of course, no comparison between the two analyses.

The next item is an offering of 28,336 shares of United Illuminating Company common stock which was sold to the underwriters by United Gas Improvement Company in September, 1941. My analysis of the earnings per share and earnings-offering-price ratio in this instance gives results which coincide with those shown on page 40.

325,000 shares of Missouri Utilities Company common stock, offered in September, 1941, were sold to the underwriters by Community Power & Light Company jointly with an offering of bonds and preferred stock by Missouri Utilities Company. In this instance also my analysis of the earnings per share and the earnings-offering-price ratio gives the results which coincide with those presented by page 40.

[15920] The next issue is a sale to the underwriters of San Diego Gas & Electric common stock by Standard Gas & Electric Company in July, 1941. The analysis of the offering prospectus indicated earnings per share of $1.07 and an earnings-offering-price ratio of 7.4 per cent as compared with the 11.3 per cent shown by page 40.

I have next an offering by Connecticut Light & Power Company in April of 1941 which is not listed on page 40.

Q. What was the basis for that offering, the earnings-offering price? A. The source of the information is the offering prospectus.

Q. I was wondering what earnings-offering-price ratio you had. A. 7.3 per cent.

Q. All right. A. I do have the offering of Michigan Public Service Company common stock by the trustee for Inland Power & Light Corporation in October, 1940 jointly with an offering of bonds and preferred stock by Michigan Public Service Company.

The analysis of the offering prospectus indicated for the Michigan Public Service Company common stock, prospective earnings of $1.88 per share, or an earnings-offering-price ratio of 13.2 per cent.

The next is the West Penn offering by the company of [15921] 160,000 shares in April of 1940 for the purpose of providing proceeds to be expended for construction purposes. The offer was jointly with an issue of 3½ million of bonds.

The statement of equity earnings per share indicates $1.70 and an earnings-offering-price ratio of 6.29.

In the case of Indianapolis Power & Light Company, the total number of shares offered was 714,835 shares, of which 68,850 represented new financing, and the balance for sale to holding company interests.

I believe the earnings per share and the earnings-offering-price ratio is appropriately stated with reference to the total number of shares being offered. So stated, I have $1.76 per share and earnings-offering-price ratio of 7.33.

In the case of the Newport Electric Company, which was a sale to the underwriters by Utilities Power & Light Corporation, jointly with the sale of bonds by the Newport Electric Company, the earnings per share were $2.53 and earnings-offering-price ratio was 8.56 per cent.

I find that I have excluded Boston-Edison, the offering of December, 1935, from this tabulation. I have no information concerning it.

TRIAL EXAMINER: $3.53 instead of the $2.85?

MR. GOLDBERG: $2.53.

THE WITNESS: Which was that, Mr. Examiner?

TRIAL EXAMINER: Newport.

[15922] THE WITNESS: Newport, earnings per share were $2.53 and the earnings-offering-price ratio 8.56 per cent.

By MR. GOLDBERG:

Q. You gave us the earnings-offering-price ratios as determined by you, about half of them, and on the other half you did not. I think maybe we had better complete the record and get them all in.

For Central Vermont Public Service Company the earnings, I think the record shows, are $1.53 per share as determined by you. That would mean an earnings-offering-price ratio of 9.5. Is that right? A. May that be read?

(Question read.)

THE WITNESS: That is right. I have 9.56.

By MR. GOLDBERG:

Q. And the earnings-offering-price ratio for Derby Gas & Electric, January, 1944 offering, works out to 14.2. Is that right? A. That is right.

Q. You gave us Central Illinois but not Lake Superior Power ratio. I have worked it out to 7.29.

TRIAL EXAMINER: Which is that?

MR. GOLDBERG: Lake Superior.

THE WITNESS: I have the same percentage.

TRIAL EXAMINER: What is that?

[15923] MR. GOLDBERG: 7.29.

TRIAL EXAMINER: You used the 2.36 for Derby?

MR. GOLDBERG: You mean earnings per share?

TRIAL EXAMINER: Yes.

MR. GOLDBERG: 2.56 as determined by Dr. Foster. 2.36 and 13.1 are related.

TRIAL EXAMINER: Yes.

By MR. GOLDBERG:

Q. With respect to the Central Hudson Gas, Electric Corporation, what earnings-offering-price ratio was it that you had, Dr. Foster, based upon your 60 per cent relationship you talked about in connection with your income tax adjustment? I have worked it out to 6.94. A. Correct.

Q. And for Pacific Gas & Electric, using the same derivation, it worked out to 8.23. A. I check that percentage, also.

Q. Central Arizona Light & Power Company came to 8.27 earnings-offering-price ratio. A. Yes.

TRIAL EXAMINER: How did you use that?

MR. GOLDBERG: We had earnings of 78 cents and $1.29 to work with. Take 60 per cent of the difference between those two and you come out to about $1.09.

TRIAL EXAMINER: I see.

[15924] THE WITNESS: Correct.

By MR. GOLDBERG:

Q. Florida Power Corporation came out to 6.59 earnings-offering-price ratio. Is that right? A. Yes.

TRIAL EXAMINER: Did you do the same thing there?

MR. GOLDBERG: Yes.

THE WITNESS: Yes.

TRIAL EXAMINER: 60 per cent, I mean.

MR. GOLDBERG: Well, there I had only a $1.00 figure, $1.07, from Dr. Foster.

THE WITNESS: May that be restated? Did you say $6.59?

By MR. GOLDBERG:

Q. 6.59, yes. A. I got 6.59 in relation to $1.13 as the earnings per share.

Q. You said $1.07. I have that down there.

What is it with respect to $1.07? A. I have 6.31, $1.07 being the unadjusted earnings for the year ended July 31, 1945.

Q. $1.13 is an unadjusted figure or is it a different period of time? A. I believe the $1.13 represents the 60 per cent adjustment.

Q. I see.

[15925] Montana-Dakota Utilities Company, the earnings-offering-price ratio works out to 9.86. Is that right? A. Correct.

TRIAL EXAMINER: What did you use there for the per-share earnings?

MR. GOLDBERG: The 60 per cent of the difference between 86 and $1.32 added to 86, I think, gives you about $1.13.

THE WITNESS: That is right.

TRIAL EXAMINER: The same figure you used above, then, the one next to the above?

MR. GOLDBERG: They happen to be the same.

THE WITNESS: Yes.

By MR. GOLDBERG:

Q. And completing it for Sioux City Gas & Electric Company, the earnings per share were $1.89 and the earnings-offering-price ratio on that basis was 6.55? A. That is right.

TRIAL EXAMINER: You didn't use the 60 per cent there, did you?

THE WITNESS: Yes.

TRIAL EXAMINER: You did?

THE WITNESS: Yes.

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[15971] TRIAL EXAMINER: The hearing will be in order. I think we had better get straight on the rulings made on May 2 at transcript page 15799 to transcript page 15800 and 15833 and 15839.

Again at transcript 15799 parts of the prepared testimony that were stricken referred to the pagination of the prepared testimony before transcription by the reporter pursuant to the direction of the Examiner.

It should be stated that the rulings apply to the official transcript as follows:

The first ruling striking testimony applies to transcript 15746, line 18, continuing over to page 15747, line 4, both inclusive.

The second ruling applies to transcript page 15751, lines 10 to 24, both inclusive.

Next, transcript page 15758, beginning with line 9 and continuing over to 15759, line 1.

Next, to transcript 15774, the phrase "By design" in line 25.

The next applies to 15775, lines 8 to 11.

MR. GOLDBERG: Line 8 beginning with the word "but"?

TRIAL EXAMINER: Yes, but not including the word "the", and the phrase "concealed" at line 15.

Next, 15783, lines 14 and 15; next 15789, lines 2, 3 and [15972] 4, through the word "investment" and line 6, beginning with the phrase "in this connection" and continuing through line 11.

The ruling at transcript page 15833 strikes the testimony on page 15773, lines 2 to 11, inclusive, and the ruling at transcript page 15839 strikes the testi-

mony beginning with line 25 on page 15773 through line 14 on page 15774.

MR. GOLDBERG: Didn't that ruling strike out the answers appearing at lines 19 and 23 of page 15773?

TRIAL EXAMINER: No.

MR. SPARKS: May the record show that I renew my objection to Your Honor's rulings?

* * *

[15974] J. RHOADS FOSTER

* * *

CROSS-EXAMINATION (Resumed).

By MR. GOLDBERG:

* * *

[15990] THE WITNESS: It does not appear. I have here a computation for each of the fourteen companies as at March 31, 1947 made in the manner which Mr. Joseph used for the purpose of page 38-A.

TRIAL EXAMINER: You have not put those in?

THE WITNESS: I have not put those in.

TRIAL EXAMINER: Do you have them available there and could you read them in the record?

THE WITNESS: If the Examiner desires, I would be glad to do so.

By MR. GOLDBERG:

Q. You say you are going to read into the record the March 30, 1947 earnings-price ratios? [15991] A. If the Examiner desires that I do so.

TRIAL EXAMINER: March 30, 1947?

THE WITNESS: March 31.

TRIAL EXAMINER: And this will be what the witness Joseph has called the "Earnings-Price Relation"?

THE WITNESS: As I understand the method used by Mr. Joseph.

By MR. GOLDBERG:

Q. These that you are going to read into the record are supposed to be determined on the same basis that Mr. Joseph determined his, or are these adjusted earnings-price ratios? A. No, as I just said, on the same basis that Mr. Joseph used as I understand their basis.

TRIAL EXAMINER: And your latest earnings, will they be in every case for December, 1946?

THE WITNESS: I believe so.

TRIAL EXAMINER: And if they are not, would you indicate it?

MR. SPARKS: It will be for the year 1946.

TRIAL EXAMINER: The calendar year 1946?

THE WITNESS: That is right, the year ended December 31, 1946.

Does the Examiner desire that I read the earnings per share and the ratio, or shall I also include the market price?

TRIAL EXAMINER: You may include all three.

THE WITNESS: For Bangor Hydro Electric Company, a market price of $31; earnings per share of $3.06 and a ratio of [15992] 9.87 per cent.

For Boston Edison Company, a market price of $44, earnings per share of $2.53, and a ratio of 5.75 per cent.

For Cleveland Electric Illuminating Company, a market price of 38¾, earnings per share of $2.55, and a ratio of 6.58 per cent.

For Commonwealth Edison Company, a market price of 29¾, earnings per share of $1.91 and a ratio of 6.42 per cent.

For Consolidated Edison Company of New York, a market price of 27¼, earnings per share of $2.20 and a ratio of 8.07 per cent.

For Consolidated of Baltimore, a market price of 75¾, earnings per share of $5.46 and a ratio of 7.21 per cent.

For Detroit Edison Company, a market price of 27.18, earnings per share of $1.67, and a ratio of 6.16 per cent.

For Houston Light and Power Company, a market price of 87¾, earnings per share of $5.48, and a ratio of 6.25 per cent.

For Idaho Power Company, a market price of $35, earnings per share of $2.74, and a ratio of 7.83 per cent.

For Indianapolis Power and Light Company, a market price of 26¾; earnings per share of $3.23 and a ratio of 12.07 per cent.

For Pacific Gas and Electric Company, a market price of 39⅝ths, earnings per share of $2.72 and a ratio of 6.86 [15993] per cent.

For Pennsylvania Water and Power Company, a market price of 63⅜ths; earnings per share of $4.73, and a ratio of 7.46 per cent.

For Philadelphia Electric Company, a market price of 24¾; earnings per share of $1.72 and a ratio of 6.95 per cent.

For Southern California Edison Company, a market price of 33⅛, earnings per share of $1.94, and a ratio of 5.86 per cent.

I have determined the simple average, Mr. Examiner. I have not determined a weighted average.

TRIAL EXAMINER: What is the simple average?

THE WITNESS: The simple average is 7.38 per cent.

* * *

[15996] Q. Now, without concerning ourselves with what Mr. Joseph did, the fact is that you are not in a position to tell us whether Bangor Hydro Electric Company or any of the other companies listed on page 38-A are companies of corresponding or comparable risks and uncertainties to Penn Water, is not that right? A. I have had no occasion to make studies for the purpose of establishing the

degree of comparability between the Penn Water equity investment and the others identified on page 38-A. I do know that there is substantial variation between those opportunities for investment with respect to character and quality of risk, that they are not comparable with each other, that probably some are comparable with Penn Water and some are not. I have had no occasion to make an explicit determination.

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[16004] Q. Several years ago did you conclude that it was sufficiently comparable to New Jersey Power and Light Company to be used as a measure of determining the rate of return for New Jersey Power and Light Company? A. The formula for a determination of the rate of equity return to New Jersey Power and Light Company, which is embodied in the so-called New Jersey plan which has a continuing application to New Jersey Power and Light Company, includes Boston Edison common stock as one among ten common stocks which are used for the purpose of establishing an average earnings-price ratio which averaged over a period of time and subjected to the addition of a multiplier fixes the annually determined return on equity capital for New Jersey Power and Light Company.

I would like to add in further answer to your question that that selection of Boston Edison among the ten was not based upon comparability with New Jersey Power and Light Company but upon considerations of representativeness of the market prices of the common stocks and the reliability of such evidences of investor appraisals and changing appraisals.

Q. The selection was based upon meeting the criteria in the Bluefield case including correspondence of risks and uncertainties; is not that so? A. That is an incorrect statement. I do not want to quibble, Mr. Goldberg.

[16005] The selection was not based upon the consideration that Boston Edison, among others, was comparable with

New Jersey Power and Light equity as an investment opportunity.

The formula provided for a multiplier which results in an upward adjustment of the average earnings-price ratios to recognize what we have believed to be a difference in investment quality and risk.

Q. The companies used in developing the rate adjustment plan for New Jersey Power and Light Company appear on page 10 of a report issued by the Board of Public Utility Commissioners for the State of New Jersey on the New Jersey rate adjustment plan; is not that so? A. That is right.

Q. And you are familiar with this report, which is dated March 28, 1944, are you not? A. With the assistance of Major Flagg, I wrote the report.

Q. Yes, that saves me another question.

The ten companies are Boston Edison Company, Central Hudson Gas and Electric Company, Cleveland Electric Illuminating Company, Commonwealth Edison Company and subsidiaries, Connecticut Light and Power Company, Consolidated Edison Company and subsidiaries, Consolidated Gas Electric Light and Power Company of Baltimore, Detroit Edison Company, Philadelphia Electric Company and Pennsylvania Water and Power Company; is not that so? A. Yes, sir; • • •

• • •

[16008] Q. But I am asking you whether it is your statement that when the ten companies were used in developing this New Jersey rate adjustment plan, it was considered that they were not reasonably comparable to New Jersey Power and Light Company? A. I have answered that it was considered that they were sufficiently non-comparable that that non-comparability was recognized by a quantitative adjustment in the formula.

• • •

[16010] Q. Are you referring to the selection of the barometer group which heading appears on page 79? A.

The barometer group is a short identification of the ten companies.

Q. Now, with respect to those ten companies in the selection of the barometer group, this statement appears, "The rate of return (expressed as earnings, not dividends) expected by equity investors in other enterprises 'attended by corresponding risks and uncertainties' is the measure of the fair return to the equity investors in the Electric Department, but the problem is to find enterprises of this class for which representative market quotations are available."

That statement appears there, does it not? A. It does. May I read it further?

Q. Yes, I am going to. This statement appears, does it not, "A total of only about thirty-five publicly owned common stocks are in the list from which the selections must be made. Since the function of the barometer group is to make available an index of the movement (not necessarily the level) of the cost of equity capital, the following criteria are of first importance in the selection: 1. The common stock should be traded in the market in sufficient volume and regularity that the established prices are representative of investor appraisals.

"2. The common stock should have been publicly owned [16011] for a sufficient time that knowledge of its income experience is generally available and it is 'seasoned'.

"The group of ten utility capital stocks has been selected primarily with reference to these criteria."

I have correctly read, have I not, from that report? A. Yes.

Q. And the group of 10 referred to are the ten companies we read into the record. Is not that right? A. Selected by reference to these criteria, and recognizing as was stated in a sentence which you read, that the level of cost of equity capital is not necessarily the same for the average of the group of 10 as it was for New Jersey Power and Light Company and since we conceded that it was not

the same, as I have explained, that difference was recognized and reflected in the formula by an adjustment factor.

Q. And one of the criteria you were attempting to meet in establishing the rate of return were the phrases in the Bluefield case we have heretofore referred to? A. We were attempting to meet that criteria by the adjustment which I have referred to which in our opinion would meet it but the average of investor appraisals for the group of ten, including Boston Edison, would not have done so.

Q. Now, with respect to comparability, this is stated on page 81, is it not, "Since the first criteria in selection of [16012] the barometer group are the considerations of representativeness, further attention must be given to means of obtaining comparability with New Jersey Power & Light Company." I have correctly read that, have I not? A. That is right.

Q. And it goes on to say, does it not: "A large measure of comparability is obtained by limitation of the group to electric or electric-gas combination companies"? A. That is right.

Q. And it says further, does it not, "Second, the ten include only utilities operating in the Northeast, since there are regional differences in the cost of capital." Is not that right? A. That is right.

Q. Stopping for a moment, all of those ten do not operate in the northeast; is not that so? Commonwealth Edison you would not say operates in the northeast? A. Well, it might have been a liberal definition of northeast.

Q. Detroit Edison Company is another one. Now, that certainly is being pretty liberal in saying that is in the northeast, is not that so?

MR. SPARKS: That depends on where you are.

By MR. GOLDBERG:

Q. Well, right where we are or were when we wrote that [16013] report in Jersey City? A. As one who came from Missouri, it is perhaps a handicap as a consequence.

Q. You would say that is a rather liberal use of the term to say that Detroit Edison operates in the northeast. A. Not from the point of view of a Missourian.

• • •

Q. It states "Third, operating companies which are also functional holding companies are excluded." Is that right? A. That is right.

Q. Then it does go on to say what I think you have been insisting: (1) "The barometer group is generally comparable, but the average earnings-price ratio requires three adjustments before it may reasonably be used as the equity capital [16014] return rate." Is not that so? A. That is right.

Q. And am I correct in my understanding that these three adjustments were accomplished simultaneously by application of the appropriate "capital structure factor." A. That is right. The word "Capital structure factor" should be in quotes as a name given to an adjustment factor which accomplished more than adjustment for the differences in capital structure.

Q. And you say it accomplished also consideration of the size of the company? A. Size of company was one of the characteristics which caused the risk quality of the average of the ten barometer stocks to vary from New Jersey Power and Light Company.

Q. Now, then, at page 72 the opinion is expressed, is it not, in that report, that the rate of return provisions of the New Jersey plan are consistent with the standard expressed by the Supreme Court in the Bluefield case? A. That is right.

Q. Now, then, at page 74 this appears, does it not, "The Electric Department of New Jersey Power & Light Company obviously has no security market experience available as direct evidence in establishing the historical cost of debt or preferred capital stock (although such experience is available on a Company basis) or the current cost of equity capital.

[16015] "Direct evidence of the current cost of equity capital is not available for the further reason that the company is a subsidiary of a holding company. Its common stock is not outstanding in the hands of the public and is not bought and sold so as to permit expression of investor appraisals of its value. Therefore, the equity capital component of the basic rate of return is determined by reference to earnings-price ratios representing returns 'on investments and other business undertakings which are attended by corresponding risks, and uncertainties.' (Bluefield Company v. Public Service Commission.)" That appears there, does it not? A. It does.

• • •

[16017] Q. Now, in connection with determining the basic rate of return for that plan in the paragraph numbered 12 at page 10 of the report, this appears, does it not?

"If the required information is not available for any of the above listed common stocks"—and that refers to the barometer group of stocks, does it not?
A. It does.

Q. —"at the time of determination of the basic rate of return for any test year, the number of such common stocks shall be maintained at ten by substituting, for such test year only, the common stocks of other electric or electric gas combination operating utilities. Such substitution shall be made in accordance with the following order of preference: (a) electric utilities with annual gross operating revenues of from five to fifty million dollars and located in the New England, Atlantic and East North Central States; (b) electric-gas combination utilities of the said size and located in the said areas; (c) electric utilities located anywhere within the United States, and (d) electric-gas combination utilities located anywhere within the

United States. When more than one utility is [16018] available in accordance with this order of preference, the utility with the largest annual operating revenue shall be substituted."

I have correctly read from that paragraph, have I not? A. You have.

* * *

[16032] Q. Now, Dr. Foster, with respect to transcript page 15765 at the bottom of the page the last answer, are we to understand from that answer that the issues which are represented on page 40 of Exhibit 46 are too small to be significant with respect to conclusions on Penn Water? A. The statement at lines 20 to 25 at the bottom of page 15765 refers to the instances listed on page 40 which represent offerings of common stock for the purposes of providing new capital.

Therefore the statement does not refer to all of the instances listed on that page but only those not excluded by use of footnote No. 1 on that page.

It was with reference to the 8 earnings-price ratios——

MR. SPARKS: Earnings-offering-price ratios?

THE WITNESS: Earnings-offering-price ratios representing net proceeds of not more than 21 million dollars that this [16033] statement was made.

By MR. GOLDBERG:

Q. In other words, the statement was addressed to the issues on page 40 that are not included in footnote 1. Is that it? Those that are not affected by footnote 1? For example, Boston Edison Company, West Penn Power Company and Louisville Gas and Electric Company, and so on? A. The statement was so limited because of Mr. Joseph's testimony that for the purpose for which page 40 was offered, the other instances should have been excluded.

Q. You mean as you understood Mr. Joseph's testimony, the purpose for which page 40 of Exhibit 46 was included requires reference only to the issues that do not have the footnote 1 reference? A. Yes, the testimony to which I refer is that quoted at lines 12 to 16 of page 15764.

Q. What did you understand was the purpose for which page 40 had been offered? A. I understood that the purpose for which the page was offered was to provide evidence or an indication of the cost of equity capital to enterprises comparable with Penn Water.

Q. Now, then, you say that the group of eight to which the footnote 1 is not appended is insufficient in number and amounts, and their diversity of risk characteristics are too great to permit significant conclusions as to Penn Water; is [16034] that right? A. That is right.

Q. Now, then, do I understand from your testimony that for the purposes for which you understood page 40 of Exhibit 46 was offered, it is appropriate to include the issues which have footnote 1 appended?

• • •

THE WITNESS: I will be compelled to give you a qualified answer to that question.

In recognition of the capitalization rate associated with the sale of common stock already outstanding, it requires that consideration be given to the difference in circumstances between the sale of such common stock and the offering of common stock for the purpose of providing new capital.

• • •

[16040] Q. In other words, your objection did not so much run to the number of instances and their amounts, and even their diversity of risk characteristics, but to the fact that there had been no showing on page 40 of Exhibit 46 which would enable one to give consideration to this diversity of

risk characteristics and the effect of the size of the issue in arriving at significant conclusions; is that right? A. I believe you are saying, that since there is that [16040-A] diversity of risk characteristics, there has been no showing upon the basis of which it would be possible to reach a conclusion as to which one, if any, is comparable with the Penn Water common stock.

Q. That is what I understand you are saying. Is that right? A. Yes.

* * *

[16042] Q. Now, you appeared as a witness for the Consolidated Edison Company before the New York Public Service Commission on January 17, 1947; is not that right? A. As of approximately that date. I am not sure as to the exact date.

* * *

[16050] TRIAL EXAMINER: Where in Exhibit 46 have you criticized any tabulations for not showing adjustments where those [16051] tabulations relate to other than spot earnings-price ratios?

You began by instancing page 38-A, and you decided there you had spot ratios only.

THE WITNESS: The criticism was directed specifically to page 38-A.

TRIAL EXAMINER: What other page?

THE WITNESS: The cross-examination yesterday however brought out the application of that criticism to page 38, the preceding page.

* * *

[16053] Q. It is a fact, is it not, Dr. Foster, that in your exhibit in the New York case, schedule 3 of that exhibit, you did not adjust the earnings-price ratios for the period 1942 to 1946, inclusive? A. What do you mean by "adjustment of earnings-price ratios"?

Q. You did not adjust the earnings.

* * *

THE WITNESS: The method used in the preparation of the schedule to which you refer in the exhibit of which it was a part was the same as that which has been described here.

So far as the adjustments, the statements of earnings-price ratios are concerned, I believe it is correct that the work had already beeen done, and as presented there, was the same as had been presented here.

With more specific reference to your question, the adjustment for the year 1944 was one, which was for reduction of Federal income taxes by extraordinary deductions charged to surplus, for the purpose of stating adjusted gross income.

With respect to the statement of income deductions, there [16054] was a corresponding adjustment for charges equivalent to the reduction in Federal income taxes in the amount of $2,100,000.

For the year 1945, in the analysis of gross income there was an adjustment in the amount of $6,270,000 representing a reduction of Federal income taxes by extraordinary deductions charged to surplus.

Also in that year there was an adjustment of the income deductions in a corresponding amount.

For the 12 months ended Sept. 30, 1946 there was an adjustment of the same character, and for the same purpose, in the amount of $5,120,000.

Q. Is it not a fact, Dr. Foster, that on Schedule 3, columns 12 and 13 of Exhibit 126 in the New York case, your earnings-price ratios are based upon earnings as reported by the companies? A. The earnings-price ratios are based upon the earnings per share as shown by Schedule 3. There was no acceptance of earnings as reported because they were reported. The adjustments which I have described are reflected on Schedule 3, and it happens that they are adjustments which affect the amount of gross income and the income deductions rather than the net income.

Q. Now, does your answer mean that on schedule

3 of Exhibit 126, columns 12 and 13 for the period 1942 to 1946, that the earnings employed were the earnings as reported by [16055] the Consolidated Edison Company? A. It means that the period which you have identified the earnings employed for the purpose of the construction of the earnings-price ratios after consideration of pertinent circumstances would be earnings represented by equity income as reported.

* * *

Q. In connection with your appearance before the New York Public Service Commission, when you presented Exhibit 126 there was included in that exhibit, schedule 16, which bears this title, "Electric and Electric Combination Utility Common Stocks offered to the Public (a) During the period January, 1939 to November, 1946, inclusive, with Earnings Offering Price Ratios"; is not that right? A. Yes.

Q. And you have, I think as you have already stated included among the issues shown in that schedule 16, 20 of the 22 issues shown on page 40 of Exhibit 46. I think you can accept my statement for that, because I have checked it.

* * *

[16057] Q. With the exception of the Boston Edison Company issue on page 40 of Exhibit 46, all of the issues shown on that page are reflected in your schedule 16 to Exhibit 126 in the New York case? A. I believe that is a correct statement.

Q. Now, then, your schedule 16, all of the column shown on schedule 16 with the exception of column 14 correspond with the columns shown on page 40 of Exhibit 46; is not that so? A. You mean as to the general character of the data?

Q. Right. A. —being set out?

Q. Right. A. I believe that is correct.

* * *

[16072] REDIRECT EXAMINATION

By MR. SPARKS:

Q. Page 15891 of the transcript, lines 16 to 22, you were asked by the Examiner whether you have done anything toward bringing the earnings-price ratios for the six common stocks up to date since your last appearance on the stand. You answered that you have not brought the earnings-price ratios to a recent date, and that to do so, would contribute little or nothing to the conclusion.

Please explain why in your opinion more recent price ratios would contribute little or nothing to the conclusion.

A. Exhibit 167 provides for the months September, 1944 to December, 1945, inclusive earnings-price ratios for the Penn Water common stock, and averages for the six other common stocks in which are reflected data becoming available after the preparation of Exhibit 29.

The earnings-price ratios representing the six common stocks have increased steadily and sharply since November, 1945. These earnings-price ratios are not adjusted for the effect of the [16073] revision of the Federal income tax rates, or other influences which caused the end of the downward movement and the beginning of the upward movement of the earnings-price ratios.

The upward movement is continuing. One cycle of earnings-price ratio movement ended in November, 1945, and a new cycle is under way.

No indication is now available to the length of the new cycle or as to the earnings-price ratio levels which will be established under such a new cycle. Therefore the earnings-price ratios established in most recent months would not modify the conclusion as to the cost of equity capital to Penn Water.

Q. At page 15994 of the transcript the Examiner and you referred to summarized earnings-price ratios for 80 electric utility common stocks determined by relating reported earnings per share for the year 1946 without adjustments to market prices or quotations as of March 31, 1947.

Do you have a statement which shows the number of these earnings-price ratios within each 1 per cent interval in the range from 4 per cent to 17 per cent? A. Yes.

Q. Does the 80 include the earnings-price ratios for the 14 common stocks identified on page 38-A of Exhibit 46? A. It does.

Q. Is the distribution of the 14 earnings-price ratios [16074] shown separately? A. It is.

MR. SPARKS: Mr. Examiner, I have the tabulation which has just been referred to by Dr. Foster, and I ask that it be copied into the record at this point.

MR. GOLDBERG: May we see that before that is done?

MR. SPARKS: Yes.

MR. GOLDBERG: Are you going to have the whole thing copied into the record?

MR. SPARKS: Yes, we planned to have the whole memorandum copied.

TRIAL EXAMINER: The reporter may copy in the record at this point the tabulation referred to.

(The tabulation referred to is as follows:)

Earnings—Price Ratios for 80 Electric Utility Common Stocks* Distributed by Percentage Intervals.

Based on Earnings for 1946 (as reported) and March 31, 1947 Prices.

Earnings-Price Ratio Range	Distribution of 80	Distribution of 14 Identified on P. 38(a)
4.00–4.99	1	—
5.00–5.99	8	2
6.00–6.99	13	6
7.00–7.99	8	3
8.00–8.99	11	1

*All electric utility common stocks for which market prices are reported in the Bank and Quotation Record dated April 7, 1947 and for which per share earnings were available.

[16075] Earnings-Price Ratio Range	Distribution of 80	Distribution of 14 Identified on P. 38(a)
9.00– 9.99	11	1
10.00–10.99	14	—
11.00–11.99	2	—
12.00–12.99	3	1
13.00–13.99	5	—
14.00–14.99	2	—
15.00–15.99	—	—
16.00–16.99	2	—

By MR. SPARKS:

Q. What is the significance of this distribution of the 80 earnings-price ratios, Doctor? A. First, it indicates the approximate number of electric utility common stocks available at that date for a study of investor appraisals.

Second, it indicates that wide differences exist among the common stocks with respect to the risk characteristics of these opportunities for investment, and with respect to investor-appraisals of such risks, the variation is from 4.97 per cent which is the earnings-price ratio for the Hartford Electric [16076] Light Common stock to 16.8 per cent for the Puget Sound Power and Light Company common stock, and 16.1 per cent for the Illinois Power Company common stock.

Third, a group of fourteen common stocks selected from among the 80 common stocks by application of the criteria of superior marketability and availability of prices could not be expected to be comparable with the Penn Water common stock.

The average for the group of 80 common stocks is 9.17 per cent.

MR. GOLDBERG: Is that a simple arithmetic average?

THE WITNESS: That is a simple arithmetic average. Only two of the fourteen are above this average. The two

are relatively small companies which, on the basis of the earnings shown by page 38-A, would have a weight of about 1.5 per cent in a weighted average.

By Mr. Sparks:

Q. At page 16018 of the transcript, Mr. Goldberg asked whether the rate of return ascertained under the New Jersey plan is applied to a rate base which fluctuates with changes in price levels. You replied that it is not. Will you please outline the circumstances which differentiate the results which follow from the operation of the New Jersey plan from those which would follow from applying a current cost of capital rate of return to an original cost rate base. A. First, the rate of return provided by the New Jersey [16077] plan is applied to the prudent investment and not an original cost rate base.

Second, the basic rate of return provided by the New Jersey plan includes full recognition of the prudent actual cost of capital represented by debt, and preferred stock capital.

Third, the effect of the adoption of prudent investment as the rate base under the New Jersey plan is influenced by availability to the company of returns in excess of the basic return.

The fair return available to the company is the basic return resulting from application of the basic rate of return to the rate base, plus such amounts of additional return as may be available for corporate purposes under the provisions affecting the stabilizing reserve and adjustments of charges for service.

Fourth, the stabilizing reserve and other provisions of the plan provide a stability of return to the common stockholders which otherwise would not be available.

The gain in certainty of return tends to compensate for what would otherwise tend to be an inadequacy of return under conditions of rising price levels.

Fifth, the formula for determination of the basic rate of return reflects in the basic rate of return earnings-price ratios averaged over a period of years, and avoids the inequities likely to result from use of spot earnings-price ratios.

Q. Doctor, at page 16058 of the transcript, Mr. Gold-
[16078] berg questioned you with reference to Schedule 16 of Exhibit 126 which you submitted in the Consolidated Edison proceeding before the New York Commission.

MR. GOLDBERG: That is what transcript page?

MR. SPARKS: 16058.

By MR. SPARKS:

Q. Did you use the data contained in Schedule 16 of that exhibit in reaching a conclusion as to the representative capitalization rate for the Consolidated Edison common stock?

A. No, the capitalization rate for Consolidated Edison was estimated by analysis of investor's appraisals of the Consolidated Edison common stock over a period of years.

The data appearing on schedule 16 were used in the preparation of charts 9 and 10 in that exhibit, having to do with cost of financing.

The purpose of schedule 16 was to make available these cost of financing data.

* * *

[16081] RECROSS EXAMINATION

By MR. GOLDBERG:

* * *

[16087] Q. We may be able to shorten this, then: Yesterday you read into the record the earnings-price ratios set forth on page 38-A of exhibit 46, using market prices at March 31, 1947 earnings as reported for 1946, and gave us the earnings-price ratios as well as the market price. Do you recall that? A. I do.

Q. Well, these earnings-price ratios that you read in yesterday have been distributed on this tabulation that was read into the record this morning? A. Yes; they are the same earnings-price ratios.

Q. Can you name the eight companies in the group of 80 whose earnings-price ratios fell within the 5 to 5.99 per cent, and before you do that, am I correct in my understanding that of that eight, two of them are part of the fourteen, namely, Boston Edison and Southern California Edison?

MR. SPARKS: Three, I think.

THE WITNESS: Two; you are correct.

By MR. GOLDBERG:

Q. So that the 80 really consist of an additional 66 [16088] companies; is that right, considering that we have already got fourteen. A. Perhaps I should say that the calculation or procedure was the other way around. I made the calculations for all that I could find, which of course, included the fourteen.

Q. In other words, the column showing distribution of the 80 includes the 14 that are under the column "Distribution of fourteen identified on page 38-A"; is that right? A. That is correct.

Q. Now, then, will you identify the additional six companies as having earnings-price ratios between 5 and 5.99 per cent? A. I will. Concord Electric Company, 5.40 per cent; Connecticut Power Company, 5.96 per cent.

New Bedford Gas and Electric Light Company, 5.99 per cent.

Central Hudson Gas and Electric Company, 5.90 per cent.

San Diego Gas and Electric Company, 5.58 per cent.

United Illuminating Company, 5.28 per cent.

Q. Now, will you give us the seven additional companies in the distribution of the eighty whose earnings-price ratios fall within the range of six to six point ninety-

nine per cent? A. The majority of these at low range are small New England electric companies; there is a geographical element there.

Answering your question concerning the seven additional common stocks in the range from 6.0 to 6.99 per cent, they [16089] are as follows:

Dallas Power and Light Company, 6.21 per cent.

Lynn Gas and Electric Company, 6.69 per cent.

Malden Electric Company, 6.59 per cent.

Central Maine Power, 6.78 per cent.

Cincinnati Gas and Electric Company, 6.79 per cent.

Connecticut Light and Power Company, 6.74 per cent.

West Pennsylvania Power Company, 6.07 per cent.

Q. Now, will you give me the companies and the earnings-price ratios for the additional five within the range from 7 to 7.99 per cent? A. Duke Power Company, 7.84 per cent.

Haverhill Electric Company, 7.29 per cent.

Consumers Power Company, 7.81 per cent.

Scranton Electric Company, 7.33 per cent.

Sierra Pacific Power Company, 7.73 per cent.

Q. Now, then, will you identify the ten additional companies falling in the range from 8 to 8.99 and give us the earnings-price ratios? A. California Electric Power Company, 8.11 per cent.

Newport Electric Corporation, 8.98 per cent.

Central Arizona Light and Power Company, 8.51 per cent.

Central Ohio Light and Power Company, 8.62 per cent.

Dayton Power and Light Company, 8.19 per cent.

Delaware Power and Light Company, 8.67 per cent.

[16090] Ohio Edison Company, 8.43 per cent.

Sioux City Gas and Electric Company, 8.44 per cent.

Tampa Electric Company, 8.53 per cent.

I have come out with nine instead of ten. I have overlooked one. If you would like me to find it I will do so.

Q. Let us pass it for the moment and go to the fourteen which range from 10 to 10.99. A. As I came out with 9, if I have a correct tally—

Q. I got 9, too.

MR. SPARKS: I have nine, also

TRIAL EXAMINER: Nine for the 9 to 9.99?

MR. GOLDBERG: Yes, 9 in the 9 to 9.99.

By MR. GOLDBERG:

Q. It should be 10 based on the distribution you show?

A. The distribution that I have been referring to is that within the range of 8 to 8.99 per cent.

Q. I am sorry. I skipped one. The last group you read was the range of 8 to 8.99 and we should have had 10, but so far we have only got 9. Apparently one has been overlooked. The next range is 9 to 9.99, which is again 10. A. Correct.

MR. SPARKS: I understand you are asking for fourteen, right?

MR. GOLDBERG: No, I had missed the fact that I had not gotten the 9 to 9.99.

[16091] THE WITNESS: Arizona Edison Company, 9.69 per cent; El Paso Electric Company, 9.00.

Holyoke Water Power Company, 9.32.

Iowa Southern Utilities Company, 9.81.

Carolina Power and Light Company, 9.65.

Central Vermont Public Service Company, 9.24.

Columbus and Southern Ohio Electric Company, 9.86.

Florida Power Company, 9.86.

Public Service of Indiana, 9.36.

Again I come out one short. It will show up somewhere because the totals check.

By MR. GOLDBERG:

Q. Let us go to the fourteen in the range from 10 per cent to 10.99 per cent. A. Black Hills Power and Light Company, 10.58 per cent.

Community Public Service Company, 10.60 per cent.
Frontier Power Company, 10.59 per cent.
Mountain States Power Company, 10.50 per cent.
Northwestern Public Service Company, 10.83 per cent.
Oklahoma Gas and Electric Company, 10.09 per cent.
Southwestern Electric Service Company, 10.10 per cent.
Virginia Electric and Power Company, 10.94 per cent.
Western Light and Telephone Company, 10.55 per cent.
It may be observed that some of these are not strictly electric utilities although I believe that they are in major part [16092] electric.
Central Illinois Electric and Gas Company, 10.08 per cent.
Northern Indiana Public Service Company, 10.50 per cent.
Southern Carolina Electric and Gas Company, 10.85 per cent.
Southwestern Public Service Company, 10.61 per cent.
Utah Power and Light Company, 10.09 per cent.
I do check fourteen this time.
Q. Will you give us the companies in the range from 11 per cent to 11.99? A. Southern Colorado Power Company, 11.81 per cent.
Iowa Public Service Company, 11.68 per cent.
Q. Now, there are two additional companies in the 12 to 12.99 per cent in addition to the one included in the fourteen. Will you give us those? A. They are Missouri Public Service Corporation, 12.27 per cent, and Tucson Gas Electric Light and Power Company, 12.96 per cent.
Q. Now, will you give us the five companies in the range 13 to 13.99? A. Missouri Utility Company, 13.95 per cent.
Tidewater Power Company, 13.53 per cent.
Birmingham Electric Co., 13.71 per cent.
Empire District Elec. Co., 13.61 per cent.
Public Service Co. of Colo. 13.92 per cent.

Q. Now how about the two companies within the range 14 to [16093] 14.99 per cent? A. The Arkansas-Missouri Power Co., 14.81%.

Lake Superior District Power Co. 14.09%.

Q. And you already have identified the two in the 16 to 16.99 per cent so we need not go into those? A. That is right.

* * *

[16106] EDWARD S. LOANE

was called as a witness and, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

By MR. SPARKS:

Q. What is your full name, Mr. Loane? A. Edward S. Loane.

Q. What is your present position? A. I am assistant to the vice president of Pennsylvania Water & Power Company.

* * *

[16109] Q. Will you outline briefly your education and experience? A. I studied civil engineering at The Johns Hopkins University, School of Engineering, and received the degree of Bachelor of Engineering in 1928.

I stayed at the University for one year as a graduate student in mathematics, during which time I was also an instructor.

During two summers while I was at the Hopkins, I was employed by Penn Water, one summer in Baltimore and one in Holtwood.

For a little less than a year in 1929 and 1930, I was employed by a consulting engineer then engaged in bridge [16110] design.

Since March, 1930, I have been employed by Penn Water.

I am a Registered Professional Engineer in Maryland, an Associate Member of the American Society of Civil Engineers, and for a number of years have been a member of the Hydraulic Power Committee of the Edison Electric Institute.

Q. What have been your duties since you were employed by Penn Water in 1930? A. I have been a member of the staff of the administrative department which has been successively under the direction of Mr. R. L. Thomas, Mr. F. A. Allner, and Mr. G. W. Spaulding.

My early work related largely to hydraulic and hydrologic studies, including analysis of rainfall and run-off records of the Susquehanna area and studies of flood probability, stage relations, etc. The hydraulic work included analysis of turbine tests of various kinds, conduct of and reports upon other tests relating to turbine discharge and the benefits resulting from various methods of hydraulic operation.

During the past 10 years this work has been more directly concerned with the relationship of hydrology and hydraulic tests and computations to the results of operating experience. Analyses made of storage and river stage relations, of turbine performance, of the results of operation during drawdowns, floods, and other special situations have led to [16111] improvements in operating practices, in efficiency or in capacity. I have collaborated with Mr. Watchorn in studies relating to economic operation of the Holtwood and Safe Harbor hydro plants in conjunction with the interconnected steam system, and in studies of coordinated operation of the several power systems in F. P. C. Areas 5 and 6 and the benefits obtained from such operations.

Over a period of years, I have also worked with Mr. Watchorn in the development of methods of analysis of the capacity requirements of a hydro-steam system, the application of which methods has been discussed at length in the testimony of Mr. Watchorn.

I have made from time to time studies relating to the energy and capacity benefits resulting from additions to or modifications of the Holtwood and Safe Harbor plants and from other possible hydro developments.

Q. Mr. Davis showed in Exhibit 64, Table I, Line 1, all of the Hydro Production Plant of Penn Water as assigned to the "Pool." His testimony at pages 10816 and 11104 of the transcript and at other places in the record was that he intended to allocate all property on the basis of use. Is all of the Hydro Production Plant of Penn Water used for services to all of the companies listed in columns 1 to 5 of Table I of Exhibit 64, and considered in Exhibit 64 as customers of Penn Water? [16112] A. No, all of the plant is not used for all customers.

Q. Is the 25 cycle portion of Holtwood used for service to all customers? A. No, the 25 cycle service is provided to only two customers, Baltimore and Pennsylvania Power & Light. In addition, a very small amount of the 25 cycle generation is converted for use in the 60 cycle system.

Q. What part of the 25 cycle generation is converted at Holtwood? A. During recent years an average of about 4 percent, and this conversion is as high as 4 percent only because of the exceptional situation existing in these recent years. Furthermore, the conversion from 25 cycle to 60 cycle is offset in part by conversion from 60 cycle to 25 cycle. The net annual amount of conversion from 25 cycle to 60 cycle has recently averaged only 2 percent of the 25 cycle generation.

Q. For what purpose is 25 cycle generation converted to 60 cycle at Holtwood? A. To increase the amount of 60 cycle service available from Holtwood; but since a large part of such conversion takes place at times when Penn Water has an ample supply of 60 cycle generation for use in supply of the firm Pennsylvania loads, conversion at such times is only for the purpose of supplying additional interchange services.

Q. Is the 60 cycle portion of the Hydro Production [16113] Plant and the Holtwood Steam Station used for service to all customers? A. No. Except for almost negligible amounts of generation it is used only for service to Metropolitan Edison Company at York, Pennsylvania Power & Light Company's Lancaster Division, and Philadelphia Electric Company's Coatesville Division.

Q. What are the almost negligible exceptions that you noted in your last answer? A. A small part of the 60 cycle generation at Holtwood may be converted at Holtwood and the resulting services delivered at Highlandtown. A small part may reach Baltimore or Washington over the 220 kv system. A small part of the Holtwood 60 cycle generation may be converted at Safe Harbor to provide service to the Pennsylvania Railroad.

Q. What part of the total Holtwood 60 cycle generation is involved in these minor exceptions? A. About 2 percent of the total Holtwood 60 cycle generation may be used for service to Baltimore and the Pennsylvania Railroad.

Q. Have you prepared a tabulation showing certain data for the years 1941 to 1946 with respect to the 25 cycle and 60 cycle hydro generation at Holtwood, the send-out to the two 25 cycle customers, and the use of the Holtwood frequency changers? [16114] A. Yes, I have.

Q. Is this tabulation, marked Exhibit 349, the tabulation you have prepared and which I have just described? A. It is.

Q. Beginning on page 11455 Mr. Sturtevant asked Mr. Davis a series of questions relating to the use of the 25 cycle generation at Holtwood. He divided this use into six separate categories. The first two classifications of use of the 25 cycle generation concerned the deliveries to Lancaster and to the Holtwood frequency changers. Does the tabulation, identified as Exhibit 349 show the amount of 25 cycle generation delivered to Lancaster and to the frequency changers? A. Yes, it does.

Q. Is the balance of the 25 cycle generation sent to Baltimore? A. Yes, it is.

Q. What is the ratio of the 25 cycle net sendout to Baltimore to the total 25 cycle hydro generation at Holtwood? A. For the average of the five years, 1941 to 1945, the ratio was 90.5 percent and for 1946, 91.5 percent. Either of these figures might be considered to be typical of average flow conditions, but not of average load conditions.

Q. Why do you say these figures are not typical of average load conditions? [16115] A. The conversion from 25 cycle to 60 cycle has been higher in recent years than we expect it to be in the near future. Reduced conversion would increase the percentage of 25 cycle sendout to Baltimore.

Q. What factors did you consider in your statement that the conversion from 25 cycle to 60 cycle at Holtwood will be decreased in the near future? A. The large installations now under construction and the planned capacity additions by the utilities in FPC Area 5 are expected to reduce the interchange deliveries in Pennsylvania. The capacity additions planned in Area 6 and the retirement of 25 cycle steam generators in Baltimore will both increase Baltimore's need for 25 cycle hydro. Both these facts will tend to reduce the conversion from 25 cycle to 60 cycle at Holtwood.

Q. The third and fourth classifications of use that Mr. Sturtevant assumed in his questions, depended on the fact that at certain hours there are deliveries by Penn Water at Highlandtown at the same time there are backfeed deliveries to Penn Water on the 220 kv circuits in Maryland. Assuming this to be the fact, does it change your previous answer relating to the use of the 25 cycle generation not sent to Lancaster or not converted to 60 cycles at Holtwood? A. No, that answer is not changed. All the 25 cycle services supplied at Highlandtown are consumed on the Baltimore system.

[16116] Q. The third classification involved the assumption that 25 cycle energy, delivered by Penn Water at Highlandtown, was converted by Baltimore to 60 cycles and delivered to Penn Water as backfeed. Is any energy from Highlandtown so converted and delivered? A. It is very unlikely. There may be very small amounts of energy from Highlandtown used in Baltimore Company's frequency changers. Such amounts must be small, for this operation would take place only when the delivery at Highlandtown is greater than the 25 cycle load in Baltimore; and this could happen only on Saturdays, Sundays or holidays and a few off-peak hours of week days in high flow. But then, because of high flow, it is most unlikely that any of the resulting 60 cycle energy would be delivered by Baltimore as backfeed to Penn Water.

Q. Did you furnish to Mr. Zinder the figures appearing in column 1 of Table 1 and of Table 2, both of Schedule B and appearing at pages 24 and 25 of Exhibit 319? A. Yes.

Q. Where were those figures obtained? A. They were obtained from the records of the company and the testimony and exhibits in this case.

Q. Do you agree generally with all the statements of fact contained in Exhibit 319, with respect to the use of the facilities of Penn Water & Power Company and S. T. Company? [16117] A. Yes.

Q. Were you directed by the officers of Penn Water to prepare a report showing corrections that should be made to Mr. Davis' Exhibit 64? A. I was.

Q. Is the document which has been identified as Exhibit 350 the report showing the corrections to Mr. Davis' Exhibit 64 that you have just referred to? A. It is.

* * *

[16123] CARL WILLIAM WATCHORN

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CROSS-EXAMINATION

By MR. GOLDBERG:

Q. Mr. Watchorn, there are a number of matters on which you were to make investigation and report. One of them [16124] was with respect to the conference on June 25, 1946, between yourself, Mr. Spaulding, Mr. Von Eiff, Mr. Roland and Mr. Davis. Have you made any investigation to ascertain whether there is a memorandum covering that conference? A. I have.

Q. And what have you found? A. I found that there was such a conference and that Mr. Loane, in addition to the parties you mentioned, was also present at that conference.

Q. Were you able to ascertain whether there is a memorandum covering that conference? A. Oh, yes, there is a memdrandum.

Q. So that you have now refreshed your recollection with respect to the subject matter at that conference, is that right? A. That is right.

Q. And having refreshed your recollection you are now aware, are you not, that in that conference Messrs. Roland and Davis were advised that the 295,000 KW dependable hydro capacity was made up of several components? A. I am not in a position to state from my refreshed recollection of that memo that that statement is so.

Q. You mean your memo does not enable you to state what was discussed with respect to the makeup of the 295,000 KW dependable hydro capacity, is that right? [16125] A. If you ask me what was discussed I can tell you, but I can't answer that question without giving a tremendous amount of qualifications relating to it.

Q. Well, let's see if we can avoid qualifications and get to the heart of what was discussed. You are aware, are you not, that the makeup of the 295,000 KW reported as

dependable hydro capacity was discussed in that conference? A. That is correct. One of the subjects of that conference and one of the two subjects discussed related to the amount of 295,000 KW.

Q. Now then, in that discussion, having refreshed your recollection about the discussion, you know, do you not, that Messrs. Roland and Davis were advised that the base component of the 295,000 KW was 161,000 KW, which was determined by applying the energy available from the hydro generation during the week of the most adverse river flow to the actual 1945 load curve for the week of the maximum load on the interconnected system, using a weekly recovery cycle? A. I am not so aware.

Q. It is your statement that they were not so advised? A. Categorically the answer is that they were not so advised.

Q. I take that to mean if you were limited to a yes or no answer, you would have to say no, is that right? A. That is correct.

[16126] And that if you were permitted to explain your answer you could say yes with an explanation, is that right? A. No, I wouldn't say yes with an explanation, I would give the explanation.

Q. Let us have your explanation, then we will see whether you can say yes. A. My recollection of that meeting now with respect to the discussion relating to dependable hydro capacity, is that either Mr. Davis or Mr. Roland stated they were interested in determining a comparison between the 161,000 KW reported by Baltimore Company for the pool in the pool Form 12 report for the year 1945, with the 295,000 KW—in Schedule 16—the 295,000 KW filed by Penn Water for the Holtwood-Safe Harbor System.

Q. In Schedule 16? A. In Schedule 16, that is correct. One or the other started the discussion and led it for a considerable way through. It was quite apparent that they had made their own conclusion that the substance of

the question that you have asked me was the manner in which the 295,000 was derived, without asking whether that was so. The conference then went on with reference to Schedule 2 and instead of going to Schedule 2 itself the conference went to the notes to Schedule 2 in the Penn Water-Safe Harbor System report—I mean the Holtwood-Safe Harbor System report—filed by Penn Water, [16127] in which my recollection is there was a number shown for the month of December for weekly use of pondage, with refill as of the beginning of the following Monday morning, of 207,000 KW, whereas the pool report filed by Baltimore Company showed an amount of 161,000 KW.

The question was as to how we could reconcile those two figures. Mr. Davis and Mr. Roland were informed in substance—

Q. Were what? A. Were informed in substance; I don't know the exact words—that the Baltimore Company's determination of 161,000 KW as shown in Schedule 2 was based on the actual experienced loads for 1945 with weekly refill, and that the 207,000 KW shown in the note for the corresponding condition by Penn Water was based on estimated 1946 loads.

In other words, there was no implication or intention in our answer in any manner whatsoever that the 207,000 was derived from the 161,000 as a component.

They then asked how the difference could be explained. It was explained that a part of the difference related to the treatment of the supply of Penn Water and Safe Harbor to Metropolitan Edison in 1946, which supply did not exist in 1945. The balance of the difference was a result of the difference in the load basis used by Penn Water and Safe Harbor, as contrasted with that used by Baltimore Company, Penn Water's estimate being based on estimated 1946 load with [16128] Baltimore Company's determination being based on actual load, actual load for 1945.

I would have to check as to whether the difference in the treatment with respect to M. E. was 10,000 KW or 6,000 KW. It is one or the other of those two numbers but the difference is quite inconsequential. The correct number is that 10,000 KW was the difference as to the treatment of M. E. and 36,000 KW was the difference resulting from the treatment of the load.

No reference, in my recollection, was made with respect to Schedule 2 itself. However, this same note showed for complete refill of the Safe Harbor pond, in the table in which the number of 207,000 KW was shown, for complete refill of the Safe Harbor pond at the beginning of the following week for the month of December, 207,000 KW, and showed an additional amount of 59,000 KW which would be the result of the use of the Safe Harbor pond for the stated specified conditions over the period of the week without complete refill at the beginning of the following Monday morning, with the result that the total amount shown using Safe Harbor pondage was 266,000 KW; and I think the memo states that Mr. Davis asked if the 88,000 KW difference between the 295,000 KW shown on Schedule 16 and the 207,000 KW shown in the note to Schedule 2, was that amount, or whether the 59,000 KW was the result of the use of Safe Harbor's pondage.

[16129] He was told that at times that was so and that at other times it would be the result of flows in excess of the most adverse flow.

The question was then asked if the remaining 29,000 KW was not the result of the use of flows higher than the most adverse, and there was a statement to the effect that it could be considered in that light.

In addition it was pointed out—my recollection with respect to this matter is that Mr. Spaulding made this statement, and further my recollection of my impression of that time is that Mr. Spaulding had in mind not Schedule 16 of Form 12, but rather his cost of service study, which is Exhibit 35 in this case.

Q. Did he express that or is that something you are assuming? A. If I may go on in my own way we will straighten that out a little later. It was my recollection of my impression, and on further check with Mr. Spaulding he assures me that that was his intention as of that time.

In that connection he stated that the 295,000 KW was a judgment figure and pointed out that on the basis of seasonal use of Safe Harbor storage we would obtain an assured capacity of the Holtwood and Safe Harbor plants of 260,000 KW and, making an allowance of 15 percent reserve, there would be the equivalent of 39,000 additional reserve value, resulting in a [16130] total dependable capacity of 299,000 KW.

There is a further note in the memorandum to the effect that Mr. Spaulding pointed out that if the study in Exhibit 35 had been made on an assured basis, that substantially the same result would have been obtained as if made on the basis of using a judgment figure of 295,000 KW.

There is a further statement in that memo that the basis for Penn Water's estimates of 1946 loads for the interconnected system, were based on prewar experience relating to loads, and there is a further statement that a suggestion was made to both Messrs. Davis and Roland that they confer with their fellow workers in the Federal Power Commission who, we understood, were working with the Army Engineers investigating the feasibility of new hydro-electric developments, pointing out it was our understanding that they were making studies on the basis of seasonal use of pondage and that their load shapes were based on the 1940 loads.

I think that covers that memo relating to the conference with Messrs Davis and Roland as of June 25, 1946.

* * *

[16135] Q. Is it your testimony, Mr. Watchorn, that the 295,000 KW reported as dependable hydro capacity in

the 1945 FPC No. 12 report, filed by Penn Water, was merely a judgment figure? A. No, that is not m testimony.

Q. Your testimony was that the 295,000 KW as shown in Exhibit 35 was merely a judgment figure? A. That is correct.

Q. And it is just happenstance that the two come out together? A. Yes, I think that is fair.

* * *

[16141] Q. Now then, isn't it the fact from your review of the memorandum that it appears that at no time during the conference was it suggested that the determination either by Mr. Spaulding in Exhibit 35 or the determination in FPC Form 12 for 1945 of 295,000 KW, was based upon the probability method as testified to in this case? A. That is not correct, Mr. Goldberg.

Q. You state that in that conference they were advised that the probability method was followed in determining the 295,000 KW in reporting that amount in FPC Form 12 for 1945? A. No, I did not say that, Mr. Goldberg.

Q. Was it suggested to them—that is, Roland and Davis—that the probability method had been followed in arriving at the 295,000 KW for Form 12? A. The second complete paragraph on page 5 reads as [16142] follows:

> "Mention was also made of probability as another approach to determination of the 295,000 KW dependable hydro capacity. The purpose of this study was to show that the same reliability of service could be provided with the Holtwood-Safe Harbor hydro capacity replaced by at least 295,000 KW of steam capacity."

And further referring to the note to Item 1(b) of Schedule 16 of the Form 12 report for the Holtwood-Safe Harbor system filed by Penn Water for the year 1945, which was available to Messrs. Davis and Roland prior to the meeting or the conference of June 25 and with respect

to which they stated they were interested, relative to the calling of this meeting, note Item 1(b) is as follows:

> "The dependable capacity available from the system hydro plants was determined in accordance with the instructions for Schedules 2 and 16. This determination is based on estimated loads for the year 1946. It takes into account seasonal variations in the firm power load of the interconnected system, peaking capabilities of system steam capacity, scheduled steam maintenance requirements, frequency of occurrence, duration and magnitude of low flows in the various seasons throughout the year and frequency of occurrence and magnitude of high flows, together with the requirements for emergency [16143] use of stored energy to carry the system load during periods of forced outages of large amounts of system steam capacity."

That, although not using the word "probability" in that paragraph, spells it out so clearly that anyone should have no question but that the theory of probability was the sole and only basis for the determination of the 295,000 KW reported in the schedule thereto.

Q. Was that what Messrs. Roland and Davis were advised in the conference on June 25, 1946, that the sole and only basis— A. They didn't ask that question.

Q. —was the probability method? A. They didn't ask that question and they had the report with them and nobody stopped them from reading it. It was assumed they had read it and they raised no question as to what the meaning of that note was.

Q. You say they were not told that because they didn't ask that question, is that right? A. Well, I don't know as to that particularly. All I am stating is that they didn't ask the question.

Q. And therefore nothing was said about it, is that your point? A. There was something said. I just

quoted here the second paragraph on page 5 where it was stated that, "Mention [16144] was also made of probability as another approach to the determination of the 295,000 KW dependable hydro capacity." So, Mr. Goldberg, I have to say that mention was made of probability as being a basis for the determination of the 295,000.

Q. Not as the sole basis for the determination but only as another approach in determining dependable hydro capacity, isn't that so? A. Talking about—

Q. Let's talk about what you said in the memorandum, isn't that so?

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THE WITNESS: That is what the memo states, yes.

By MR. GOLDBERG:

Q. And that is what they were advised that it was merely another approach that could be used? A. The memo so states but as I have stated previously the 295 dependable hydro capacity was discussed at that conference in two different lights.

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[16151] Q. Did I understand you to say during your cross-examination that you had first determined that outage for scheduled maintenance could be treated as an additional load, that you had first determined that in June or July, 1945? A. That was one of the factors determined as of that time. Another factor I overlooked the other day when you were asking that general line of questions, is a very important consideration as to the treatment of the load carrying capabilities of the hydro plant and the reductions in such load carrying capabilities of the hydro plants were also treated as an addition to the load.

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[16171] Q. What is the maximum in terms of feet for the 6 million kilowatt hours? Is it 12 feet? A. That is about 12.2 feet for Safe Harbor, and I don't know, I cannot recall

at this moment just what elevation we used for Holtwood in that matter.

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[16185] Q. I want to show you an article written by Mr. Spaulding on "The Coordinated Operation of Hydro and Steam Capacity in Electric Power Systems," which appears in Volume 66 of the 1944 American Society of Mechanical Engineers Transactions. The article begins at page 545 and I see that you apparently have a copy of your own; is that right? A. That is a copy of one of my coworkers.

Q. Well, let me just call your attention, then, to the part that I was interested in. On page 548 of the volume referred to, this paragraph appears and runs over to page 549:

[16186] "It is necessary to emphasize that the amount of hydro capacity which may be available from drawdown cannot be considered as replacing the entire system reserve requirements. Obviously, it is impossible for pondage to be used as protection against all outages of steam capacity, for these are almost continuously existent; in low flow the available pondage would soon be exhausted, as opportunities for refill would be inadequate. Neither could pondage provide protection against errors in load estimates, which must be made several years in advance, nor could it provide capacity to cover scheduled maintenance, where required during the peak load period of the year. However, under normal conditions, pondage might be considered for about one-third of the total required system reserve."

I have correctly read that paragraph, have I not? A. That is correct.

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[16187] Q. I see. Well, I will let you read it, I assure you, but right now let me ask you if you agree with the state-

ments made in the paragraph I have just read. A. I think that, in the absence of the portion of the paragraph to which I have just made reference, that the statement in the paragraph that you have just read is a conservative treatment of that problem and as of that time, I was in perfect accord with it.

TRIAL EXAMINER: What year was that?

THE WITNESS: That paper was presented at a meeting April 3 to 5, 1944.

MR. GOLDBERG: Now, may I have the last answer read?

TRIAL EXAMINER: Yes.

(Answer read by the reporter.)

By MR. GOLDBERG:

Q. Now, do I understand that though you were in accord with the statements contained in that paragraph at the time it was presented, you are not today in accord [16188] with those statements? A. Not to the same extent as of then, for the reason that since that time I have found it impossible to make an evaluation of all the relevant factors.

Q. And these relevant factors to which you refer are those that came to you in the latter part of June and beginning of July, 1945? A. Oh, no, the factors I am speaking of there, most of which are mentioned in Mr. Spaulding's paper.

Q. You mean today you are better able to evaluate the factors referred to in that paragraph, or in the paper, than you were at that time? A. Oh, I have since evaluated them. My testimony is related to that evaluation, whereas of that time I couldn't make that evaluation.

Q. But now you don't agree with that paragraph any more, because you have been able to make an evaluation? A. Not in its entirety, that is correct.

* * *

[16191] Q. You don't know today whether you can agree with the statement that "However, under normal conditions, pondage might be considered for about one-third of the total required system reserve;" is that right?

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[16192] THE WITNESS: Yes, sir. My answer is that I do know whether or not I agree with that statement.

By MR. GOLDBERG:

Q. Do you? A. No, I do not agree with the statement.

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[16194] Q. You had expressed a desire to read a paragraph into the record, and I would like to give you that opportunity now. And just so the reference can be to the copy as it appears in the official transactions, will you tell us on what page of said transactions it appears? A. It appears on page 547, and is contained in two paragraphs at the top of the column to the right on that page, and reads as follows:

[16195] "In the foregoing procedure, there are certain hydro resources which have not been fully evaluated. Additional hydro capacity is available for something less than 93 percent of the time, resulting from river flows in excess of those used in capacity computations. Such capacity is available for the release of steam units, for maintenance work, in addition to that scheduled in advance, and much maintenance of this nature has recently been necessary."

Parenthetically, this last condition refers to the conditions that existed during the war.

"Additional hydro capacity is also available from the short-time use of pondage when required by the simultaneous forced outage of a large number of steam units, even with stream flows lower than those used in capacity computations. The extent to which a system

would be willing to rely on such capacity as firm would be influenced by the forced outage record of its own or similar steam generating equipment, and upon the amount of other reserve capacity then available on the system.

"Perhaps someone will eventually evaluate and properly combine all the pertinent factors by the application of a probability theory. As this theoretical solution now seems impractical, an attempt has been made to approximate the possible use of pondage in the light of the forced outage experience of steam generating equipment, [16196] the ideal objective still being that a combined hydro and steam system should have substantially the same degree of reliability as an all-steam system."

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Q. And in an earlier answer you have indicated that those two paragraphs should be taken into account in connection with the paragraph that I read into the record from the article: is that right?

• • •

A. Yes. What I meant there was that since I have now been able to make the evaluation, expressed in particularly the last paragraph I have just quoted, I no [16197] longer agree with the last sentence of the paragraph in Mr. Spaulding's paper that you had quoted.

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[16251] Q. Let's see if I can inspire you, as I did yesterday. Do you remember, on June 16, 1941, you and Mr. Loane jointly prepared a discussion of a paper by H. C. Forbes and K. F. Bellows of the Consolidated Edison Company of New York relating to generating system capacity reserves in connection with probability? A. I have so testified.

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[16252] Q. Now, then, this was stated by you and Mr. Loane:

> "We have found no easy way of reducing the variations in magnitude of stream flow to a probability basis and at the same time retain the essential variations in flow with respect to time."

That appears there, does it not? A. That is correct.

Q. What did you mean when you said that? A. What I had stated before that the previous work I had done in this matter involved a tremendous amount of calculations to get a result, which even then did not take into account all the pertinent factors involved.

Q. Do you mean today you have found an easy way of doing what is there referred to? A. Oh, yes, I testified to that on cross examination by you.

Q. So that today you have found a way of reducing the variations of magnitude of stream flow to a probability basis and at the same time retain the essential variations [16253] in flow with respect to time; is that right? A. That is correct, and that was the point of the passage in Mr. Spaulding's paper that I desired to read into the record yesterday, which you so kindly permitted me to do.

* * *

[16254] Q. In that same paper, you and Mr. Loane stated, did you not, as follows:

> "The particular generating system in which we are interested is a coordinated combined hydro and steam system. The hydro plants are low head, approximately 50 feet, and operate run of river, as distinguished from seasonal storage."

Is that right? A. That is correct.

Q. You were there referring to Safe Harbor and Holtwood? A. That is correct.

* * *

Q. I have no subsequent questions. A. Oh, then, it so states on that page.

Q. In that same paper, you said this, did you not:

"The valleys in the steam generation requirements either in the case of an all-steam system or combined hydro and steam system should be utilized for maintenance of the steam units. We have found it convenient in our probability studies to treat the scheduled outage of steam equipment as an addition to the load and to consider that [16255] all the steam units are available at all times except for possible forced outages. The procedure is conservative—" that has a familiar ring? "—although slightly inaccurate and results in a considerable simplification of our computations."

You so stated, did you not? A. That is correct.

Q. What was the date of that paper? A. I want to give a qualification respecting this.

Q. Before you do that, will you tell us the date of the paper? A. The date of this paper is June 16, 1941.

Q. Now, will you go ahead with your qualification? A. And in preparing my testimony with respect to this matter, I merely checked the title of the discussion and the paper to which it referred, without reading its text, and apparently, between the time that this paper was prepared and subsequent work, that I had forgotten that we had done on this and rediscovered this process at a later date. In fact, there would be no point with respect to this particular matter had I recalled that this was the fact, to have not so stated, in my direct testimony and cross examination.

• • •

[16256] A. I would like to correct that and say, in fact, there would be no point, had I been aware of this matter, to have not so stated in my direct testimony, in contrast to which there would have been no point with respect to this particular matter.

• • •

Q. Let me see if I can unravel that in my own mind. I understand that what you are trying to do is reconcile the statement with respect to the time of discovery of the addition of scheduled outages of steam equipment to the load, and your statement on cross examination that you first discovered it in June of 1945. That is what you are trying to do, reconcile the two? A. That is correct.

* * *

[16332] REDIRECT EXAMINATION

* * *

[16344] By MR. SPARKS:

Q. In Mr. Reiblich's question at the top of page 16261, he referred to Baltimore Company's interpretation of the instructions of Form 12, relating to dependable hydro capacity, stating that Baltimore Company [16345] considered "the difference between the highest annual one-hour peak and the maximum base steam load requirements for the minimum seven-day river flow reported on for that period of the year." In that interpretation was Baltimore Company assuming the coincidence of minimum flows with maximum loads? A. They were, and that is one of the objections to using that rule of thumb method without proper consideration of probability, for we know that we do not frequently get such a coincidence. My criticism has gone largely to the fact that they used the most adverse flow on record "for that period of the year" together with an estimate of an "annual one-hour peak" that was not as large as past experience had indicated must be expected for future peak loads.

* * *

[16392] H. ZINDER

* * *

CROSS EXAMINATION (Resumed)

By MR. GOLDBERG:

Q. On page 2 of Exhibit 319, Mr. Zinder, you speak of the operations of the system. That is the paragraph immediately preceding the caption "Summary of Results." Do you see that? A. Yes.

Q. The system you there referred to consists of what? A. The system of Penn Water.

Q. So that when you speak of the operations of the system, I take it you mean only the operations of Penn Water? A. Essentially so.

Q. So that when you stated that the determination of what would be a reasonable and feasible method of assigning property and costs is based on a study, among other things, of the operations of the system, you were speaking essentially of a study of the operations of Pennsylvania Water and Power Company? [16393] A. That is right.

Q. Did you study the operations at all or any of the other companies comprising the interconnected system? Namely, Safe Harbor, the Washington Company, and the Consolidated Company? A. I didn't study the operations of those systems as complete systems. Certain transactions between those systems and Penn Water, which appeared in the study of the Penn Water System.

Q. Did you study the operations of the Consolidated, Washington and Safe Harbor Companies in so far as they had a bearing on the transactions with which you were concerned? A. I think so.

Q. What transactions were those? A. The transactions that I was concerned with are those between Penn Water and Baltimore Company, the service rendered by Penn Water and Baltimore Company.

Q. Were you concerned, in your study, with the services rendered by Baltimore to Penn Water? A. No, not directly.

Q. What do you mean by "not directly"? A. Well, it was necessary, in determining the services rendered by Penn Water to Baltimore, to determine the use of certain facilities. And over some of those facilities, [16394] some services were rendered by Baltimore to Penn Water. To the extent that that entered into my studies, or were necessary in connection with my studies, they were considered.

Q. Did you consider that there were services rendered by Penn Water to its Pennsylvania customers in Pennsylvania? A. No, not as far as determining any costs of such services was concerned.

Q. To what extent, then, did you concern yourself with the services rendered by Penn Water to the Pennsylvania customers? A. Only to the extent of determining that any of the facilities used in connection with those services or any of the costs involved in connection with those services also involved facilities or costs in connection with service by Penn Water to Baltimore.

Q. I understand, from that last answer, that you studied the services rendered by Penn Water to the Pennsylvania customers in Pennsylvania for the purpose of ascertaining whether the facilities involved in rendering those services had a bearing on the costs you were allocating to Baltimore; is that right? A. That is right. In other words, whether any of those facilities were also facilities involved in service to Baltimore.

[16395] Q. From your studies, are you able to describe the physical operations of the interconnected system? A. In a general way, yes.

Q. Will you do so? A. First of all, Penn Water has a hydro plant and steam plant. The hydro plant has both 25 and 60-cycle units installed. The steam plant has only 60 cycle units. From the Holtwood hydro plant, there is the Highlandtown line, which carries 25-cycle energy from the Holtwood plant to Baltimore. I might say that, also, at the Holtwood plant, there is the Holtwood substation. Also, out of Holtwood, there is a line to Lancaster, for the

purpose of delivering 25-cycle energy and services to Lancaster.

There are lines from Holtwood to Lancaster and to Coatesville for 60-cycle service.

From the Safe Harbor plant, there are two major 220 kv lines for the transmission of 60-cycle energy and services to Baltimore. One is known as the Westport line and the other is the Riverside line. From a point on the Westport line, there is a connection to Potomac Electric Power Company. Also from the Safe Harbor plant there is a 25-cycle single phase line known as the Perryville line, used primarily for service to the Pennsylvania Railroad.

There is also a line from the Holtwood plant for [16396] service to Metropolitan Edison.

I think that that is both a brief description of the facilities and the operations. The Safe Harbor plant generates both 25-cycle single phase service and 60-cycle three-phase service.

Q. For the most part you have described the physical facilities of the system, isn't that so, rather than the operations of it? A. Well, I have tried to describe the physical facilities and the use made of those facilities, which, in turn, represents an operation.

Q. How does the interconnected system operate with respect to the rendering of service to Pennsylvania Power and Light Company at Lancaster, for example?

* * *

A. With respect to the 25-cycle service to Lancaster, that is service rendered by Penn Water alone. As far as the operation of the interconnected system, of what you call the interconnected system, is concerned, for service to Lancaster, I can't describe it in detail, except to say that my determination found that none of the facilities used for that service, as far as Penn Water was concerned, were involved in rendering service to Baltimore, on the part of Penn Water.

[16397] By Mr. Goldberg:

Q. How did you determine that? How did you go about finding that out? A. Well, there is no major and direct connection between the transmission line to Lancaster and Baltimore, and that is also based on discussions with the company people.

Q. Who? A. Mr. Loane.

Q. Is there any major connection between Baltimore and the railroad for service through the Conestoga Substation, through the Safe Harbor plant?

* * *

The Witness: I can't answer that.

By Mr. Goldberg:

Q. Why can't you answer it? Do you mean you have not made any studies that would enable you to answer it? A. I did go into some of these other operations at the time of my study, but my study was concerned with the service rendered by Penn Water to Baltimore. Your question, as I understand it, deals with a connection between Baltimore and the railroad.

Q. As I understood your earlier answer with respect to service at Lancaster, one of the elements you considered was the lack of a major connection between Baltimore and the service of Lancaster; is that right? [16398] A. Yes.

Q. And you derived that information, you say, in part, from a discussion with Mr. Loane? A. Yes.

Q. Now, since that formed one of your bases for concluding that service to Lancaster had no bearing on your allocations to Baltimore, why didn't you concern yourself with the existence or lack of existence of major connections between Baltimore and other services involved on the interconnected system? A. Well, I can answer that this way: I did, to the same extent as I described in the case of Lancaster. I think I stated in my exhibit that the costs shown were not less than the amount determined in here. That statement was made because, to some small extent, it

is possible that other facilities were involved, and I did not include those other facilities and other costs.

Q. At the moment I am concerned with your understanding of the operations, because I think you will agree with me that you must have an understanding of the operations to arrive at a reasonable cost allocation. Is that a fair statement? A. Not entirely in this case.

Q. Why not? A. The study which I have presented here is confined [16399] to the service rendered by Penn Water to Baltimore. It is not concerned with all the services rendered by the company or by Penn Water. It was necessary, therefore, for me to concern myself only with those facilities and costs involved in that service.

Q. Now, when you said it isn't necessarily so, in this case, in response to my question, I take it you were relating that to the very narrow function you were performing in presenting your testimony in this case; is that right?

* * *

A. Maybe my objection, or not objection but difference, has to do with a function I am performing. I considered the single problem, namely, service by Penn Water to Baltimore, and my studies were related to that.

By Mr. Goldberg:

Q. Are you saying that you can arrive at a reasonable allocation with respect to Baltimore Company, considering the operations of the interconnected system and the other services that Penn Water renders, by only concerning yourself with the services rendered by Penn Water to Baltimore Company? A. Let me try to put it in my words. I am not sure I have your words clear.

[16400] Q. All right. A. I believe I have arrived at a reasonable cost of those services, or at a proper cost of those services rendered by Penn Water to Baltimore.

Q. And you say that you can arrive at that without considering other services rendered by Penn Water to

other customers in their relationship to the service rendered to Baltimore?

* * * *

A. I say that I can arrive, and have arrived, at such a cost by considering the Penn Water system and those facilities and costs incurred in connection with its service to Baltimore.

By MR. GOLDBERG:

Q. And you have done that without regard to the relationship of the services rendered by Penn Water to Baltimore and other services rendered by Penn Water to other customers? A. No, I wouldn't say that.

Q. Why not? A. I have gone sufficiently far, I believe, in my review of the operations of the system, to determine those costs which I believe are properly allocable to Baltimore. [16401] In connection with that determination, no part of the costs, for example—or no portion of the payments made to Safe Harbor are included, and no portion of the costs of such purchases as Penn Water makes from its other customers has been assigned to Baltimore. To the extent that some of those purchases, or some of those services purchased, are used to render service to Baltimore, to that extent—and their costs have not been included here—I would say that the cost that I have shown is understated to that extent.

Q. Have you concluded, in your studies, that the payments made to Safe Harbor by Penn Water had no bearing on the cost of service to Baltimore by Penn Water? A. I would prefer to go to the statement I have made in that respect in the exhibit in answer to that question.

Q. Are you looking for the statement you make at the bottom of page 4 and at the top of page 5 of your exhibit? A. Yes, that is right. At that point I state that—let me read that statement—

"In addition to the costs associated with its own investments, Penn Water has other costs. It receives

services from Safe Harbor Water Power Corporation, hereinafter referred to as Safe Harbor, and it engages in interchange transactions with its customers [16402] resulting in the receipt as well as delivery of energy and services. The costs associated with these transactions must also be allocated to the use made of these services. Consideration was given to the character of these services. It was found that some of the costs associated with these services might properly be allocable to Baltimore but that the amount involved would be relatively small. Accordingly, no part of the payments associated with these services has been assigned to Baltimore. Thus it may be stated that the cost to serve Baltimore is no less than the amount determined herein."

* * *

[16518] Q. Sources that are available only on an as-if-and-when basis are not considered by you as firm power commitments; right? A. That is right.

* * *

[16581] G. W. SPAULDING

* * *

DIRECT EXAMINATION

* * *

[16584] By MR. SPARKS:

Q. Beginning at line 15 of page 906 of the transcript, Mr. Roland testified with respect to the companies from whom Penn Water receives electric energy. What are the facts as respect the receipt of electric energy from Safe Harbor Water Power Corporation by Penn Water? A. Penn Water receives all of the electric services including electric energy available from the Safe Harbor Hydroelectric Development, owned and operated by the Safe Harbor Water Power Corporation. Such services are sup-

plied to the transmission facilities of Penn Water by Safe Harbor within the latter's project boundary, in part for delivery by Penn Water and its wholly owned subsidiary, S.T.Co., from Safe Harbor to Baltimore Company at points in Maryland; in part are delivered by Penn Water to the joint customers of Penn Water and Safe Harbor in Pennsylvania; in part are delivered by Penn Water and S.T.Co. to the Pennsylvania Railroad Company in Pennsylvania and Maryland; and in part are delivered by Penn Water to Metropolitan Edison Company.

Q. For what purpose does Penn Water receive such electric service from Safe Harbor Water Power Corporation? A. All of such electric services are used in public service either by Penn Water or by the public utilities' customers of Penn Water or the joint customers of Penn Water and Safe Harbor, except for such amounts as may be consumed [16585] in transmission and other system losses.

Q. At line 5 of page 909 of the record, Mr. Roland testified that the 110 Kv. line extending from Baltimore Company's Philadelphia Road Substation in Baltimore, to its Gunpowder Substation in Maryland, was owned by the Susquehanna Transmission Company of Maryland, but was leased to Baltimore Company. Is this line in fact leased to the Baltimore Company? A. No, it is not. This 110 Kv., 60 cycle transmission line, approximately 9.6 miles in length, is one of the several special facilities provided by Penn Water and S.T.Co. for the sole use of Baltimore Company under the contract identified as Items H and I.

Prior to the Supplemental Agreement of June 1, 1931, certain special facilities, including this transmission line, were furnished at a specified contract rate, which rate was considered as a rental charge. Under the Supplemental Agreement of June 1, 1931, there is no itemized charge relating to these special facilities. The compensation for the use of this line is included in the lump sum payments under that contract.

Q. Beginning at line 11 of page 912 of the record, Mr. Roland testified with respect to the receipt of payments by Penn Water from its customers, including Pennsylvania Power & Light Company and Philadelphia Electric Company. For what [16586] purpose does Penn Water receive such payments? A. Penn Water receives payments from the Pennsylvania Power and Light Company and the Philadelphia Electric Company for all of the services, including electric services rendered to those companies. The payments received for these services were received by Penn Water, acting for itself and as agent for Safe Harbor. The electric services so rendered are rendered jointly by Penn Water and Safe Harbor.

——— Mr. Sparks: I would like to offer this document for identification.

Trial Examiner: The document may be marked for identification as Exhibit Number 352.

(The document referred to was marked for Identification as Exhibit Number 352.)

By Mr. Sparks:

Q. Does this exhibit show the demand, energy and special facilities charges included in the revenue received by Penn Water from all of the Pennsylvania customers? A. Yes.

Q. And they were all revenues received for services rendered jointly by Penn Water and Safe Harbor except to Metropolitan Edison Company for the year 1946? A. That is right.

Q. At the top of page 913, Mr. Roland testified with respect to the use of the services by Baltimore Company, [16587] Pennsylvania Power & Light Company, Philadelphia Electric Company and Metropolitan Edison Company, which Penn Water delivered to such companies. Is it a fact that all of the services, including electric energy, which are furnished to those customers, are resold by them?

A. No, not all of such services. Certain amounts of electric energy delivered to such companies are consumed in their respective power systems as losses. Of the other electric services supplied, such as power factor cooperation, voltage regulation, frequency control, spinning reserve or capacity service, I am not aware that such services are all resold; rather, it is my opinion that such services are used by the receiving companies in part to augment their own services and in part are consumed within the respective electric systems in the same manner that energy losses are consumed.

Q. Beginning at line 4 of page 914 of the record, Mr. Roland testified with respect to the deliveries of energy by Penn Water to the Pennsylvania Railroad Company at Conowingo and Perryville, Maryland, for the account of Baltimore Company, and also with respect to the deliveries to the Potomac Electric Power Company near Takoma Park, Maryland, for the account of Baltimore Company. Mr. Roland referred in this connection to his Exhibit 37 and certain of the symbols designated thereon. Was Exhibit 37 a map prepared by the [16588] Company? A. It was.

Q. Do similar maps, now prepared and published by the Company, contain the symbol designations referred to as respects Perryville, Maryland; Conowingo, Maryland; and Takoma Park, Maryland, as were shown on Exhibit 37? A. No, they do not.

MR. SPARKS: I would like to offer this map for identification.

TRIAL EXAMINER: It may be marked for identification as Exhibit No. 353.

(The document referred to was marked for Identification as Exhibit Number 353.)

By MR. SPARKS:

Q. Why was the designation of such delivery points changed? A. Because of possible misinterpretation as to the meaning of the phrase "for the account of Baltimore

Company" and specifically because of such misinterpretation by Commission witnesses in the present proceedings.

Q. Was such designation as shown on Exhibit 37 a misstatement of the facts? A. Not in all instances, but it was an over-simplified representation.

Q. What are the facts as respects the interconnection [16589] points at Conowingo and Perryville, Maryland? A. At Perryville, Maryland, and Conowingo, Maryland, there are interconnections between the transmission facilities of Penn Water's wholly owned subsidiary, S.T.Co., and the electrification facilities of the Pennsylvania Railroad. At both points of interconnection, S.T.Co.'s transmission lines connect with the Railroad's distribution substations supplying its electrified division and electric services are supplied from the facilities of S.T.Co. to the facilities of the Railroad. Although these points of interconnection are referred to as delivery points in the Railroad Power Supply Contract, identified as Exhibit 10, there is no reference in the contract as to which one of the several supplying companies will make such deliveries.

The phrase "for the account of Baltimore Company," shown on Exhibit 37, was intended to refer to the Operating Committee's Memorandum, identified as Exhibit 11 in this proceeding, which provides that for the purpose of computing a division of the total revenues received by Baltimore Company from the Pennsylvania Railroad, the deliveries of electric services, including energy, in the State of Maryland and the District of Columbia shall be considered as deliveries by Baltimore Company, while deliveries of electric services to the Railroad in Pennsylvania shall be considered as deliveries [16589-A] by Penn Water.

Q. On page 9336 of the record, Mr. Roland referred to Schedule 13 of the Holtwood-Safe Harbor Power System Statement to the Federal Power Commission on its Form 12 report for the year 1944, and referred specifically to a note thereto relating to the hourly load supplied to the Pennsylvania Railroad in Maryland by Penn Water and

Safe Harbor for the account of Consolidated Gas Electric Light and Power Company of Baltimore. Was this note, attached to Schedule 13 of the 1944 FPC Form 12 Report, intended in any way to indicate that the energy supplied to the Railroad in Maryland was not a joint supply of Baltimore, Penn Water and Safe Harbor? A. No, on the contrary. The notes attached to Schedules 13 and 14 of the Holtwood-Safe Harbor Power System Statement (FPC Form 12) for the year 1944 were intended to make it perfectly clear that the supply to the Railroad, both in the State of Pennsylvania and the State of Maryland, was a joint supply of Baltimore Company, Penn Water and Safe Harbor.

Q. What are the facts as respects the interconnection point near Takoma Park, Maryland? A. At a point northeast of Takoma Park, Maryland, there is an interconnection between the transmission facilities of S.T.Co. and the transmission facilities of the Potomac Electric Power Company, such interconnection point being merely the division of ownership of a single continuous 220 kv. [16589-B] transmission line extending from Ellicott Substation near Baltimore to the Takoma Park distribution substation of Potomac Electric Power Company, adjacent to the District of Columbia line. Through this point of interconnection, electric services are supplied from the transmission facilities of S.T.Co. to the system of Potomac Electric Power Company and these same facilities are also used for the interchange of electric services.

[16590] However, neither Penn Water nor S.T.Co. has any contract for the supply of electric services to, or the receipt of such services from, the Potomac Electric Power Company. Provisions for such transactions, including interchange, are part of an agreement between Baltimore Company and Potomac Electric Power Company to which Penn Water is not a party. The contract, identified in this proceeding as Item D, between Baltimore Company, Penn Water and S.T.Co., provides that S.T.Co. will provide the

necessary facilities and will transmit over these facilities such electrical power and energy as may be delivered to it at the terminals of its transmission lines for such purposes. Under the contract, identified as Item F, Penn Water, through its subsidiary, agrees to construct and operate the facilities above referred to and to perform at all times the obligations undertaken by Baltimore Company under its agreement with Washington Company.

Q. At pages 929 and 930, Mr. Roland referred to energy supplied by Philadelphia Electric Company to Penn Water at Perryville through the facilities of the Pennsylvania Railroad, stating that such deliveries were considered as interchange delivery by Philadelphia Electric Company to Penn Water and that such energy as is used by the Railroad south of Perryville is considered a delivery by Penn Water to the Railroad for the account of Baltimore Company.

Will you please explain the use of the expression "for [16591] the account of Baltimore Company"? A. Any use by Penn Water of the expression "for the account of Baltimore Company" in this connection is the result of arrangements provided for under a contract between the Pennsylvania Railroad on the one hand and Philadelphia Electric, Penn Water, Safe Harbor and Baltimore Company on the other hand. Such contract, identified as Exhibit 135, is known as the Railroad Parallel Operation Agreement. Under such operations as provided therein, Philadelphia Electric Company frequently supplies amounts of electric services greater than its contractual obligations and some of these electric services, including electric energy, are used by the Pennsylvania Railroad in the sections of its electrification south of Perryville.

Such energy so used south of Perryville is metered within the Railroad system at that point and such supply so metered is accounted for under the contract identified as Exhibit 134 as an interchange transaction by Philadelphia

Electric Co. to Penn Water and a delivery by Penn Water, Safe Harbor and Baltimore Company to the Railroad under contract identified as Exhibit 10.

Q. Are all deliveries to the Pennsylvania Railroad in Maryland, including the District of Columbia, in fact an operating responsibility of Baltimore Company alone? A. They are not. They are merely a part of the joint [16592] operating responsibilities of Baltimore Company, Penn Water and Safe Harbor.

Q. At line 8 of page 934, Mr. Roland testified with respect to the division of the output of the Safe Harbor plant to Baltimore and Penn Water. Is it a fact that Baltimore Company received in 1944 two-thirds of the output of the Safe Harbor Development? A. It is not.

Q. What happens to the output of the Safe Harbor Hydro-electric Development? A. All of the electric services of the Safe Harbor Plant are delivered within the project boundary of the Safe Harbor Development to the transmission facilities of Penn Water. Penn Water transmits the major portion of such output for delivery to the joint customers of Penn Water and Safe Harbor or to the customers of Penn Water and such output is not transmitted from the State of Pennsylvania. Penn Water also transmits a portion of such output for delivery to the Pennsylvania Railroad at Fishing Creek, Pa., and at Conowingo and Perryville, Md.

The balance of the Safe Harbor output which is very substantially less than two-thirds of the output is transmitted by Penn Water over its 220 kv. transmission lines to Baltimore and Washington.

Q. Can you give the actual proportion of the electric energy generated at Safe Harbor which was delivered over the [16593] transmission facilities of Penn Water by Penn Water to Baltimore Company at or near Baltimore and Takoma Park, Maryland, in the years 1945 and 1946? A. In 1945, 41 per cent of the energy generated at Safe

Harbor was so delivered and in the year 1946, 33 per cent was so delivered.

Q. Are the facts with respect to such operations for 1946 presently on file with the Federal Power Commission? A. Such facts are reported in the 1946 Annual Report recently filed by Safe Harbor with the Federal Power Commission in its Form 1 Report and specifically shown on pages 512 and 513 thereof. Related facts are also reported by Penn Water in its Form 1 Report recently filed with the Federal Power Commission for the year 1946 and more specifically shown on pages 508, 512, 513, 514, 522, 523, 524 and 531 thereof with notes relating thereto.

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[16595] Q. On Exhibit 355, being the graphical presentation of power flow across such State line, could you indicate the relative amount of the backfeed from Maryland that is used for the requirements of the Pennsylvania Railroad? A. The proportion of backfeed transmitted from Baltimore Company or Washington Company to Safe Harbor and used in connection with the requirements of the Pennsylvania Railroad varies from month to month. The percentage of the total backfeed so used was at least 35 per cent in 1946.

Q. Does this latter exhibit indicate by comparison [16596] with Exhibit 40, the abnormalities of the year 1944 resulting from low river flow? A. Yes, and it shows the large amount of backfeed energy received from Baltimore Company in 1944 as compared with 1946 which was very close to an average flow year.

Q. Beginning at line 3, page 935, and extending through line 8, page 941 of the record, Mr. Roland was questioned with respect to the use of electric energy received by Penn Water from Maryland and the District of Columbia for purposes of resale to other electric utility companies in Pennsylvania.

Is all of the electric energy received as backfeed from Maryland and the District of Columbia by Penn Water

used in connection with the firm power obligations of either Penn Water or of Penn Water and Safe Harbor jointly in the State of Pennsylvania? A. No, it is not.

Q. What use was made of the electric energy received as backfeed from Maryland and the District of Columbia by Penn Water which was not used in connection with the firm power obligations of either Penn Water or of Penn Water and Safe Harbor jointly in the State of Pennsylvania? A. Most of such amounts of electric energy were used in connection with the supply to the Pennsylvania Railroad Company, both at Perryville and Conowingo, Maryland, and at Safe Harbor, Pennsylvania, being a part of the joint obligations [16597] of Baltimore Company, Penn Water and Safe Harbor to that customer, while a small amount of such energy was used in connection with interchange transactions involving the delivery of such electric energy by Penn Water or Penn Water and Safe Harbor jointly to their electric utility customers in the State of Pennsylvania.

Q. Was all of such backfeed energy received by Penn Water from Maryland and referred to by Mr. Roland at pages 935 to 941, and which may have been used in connection with services to the Pennsylvania customers of Penn Water or Penn Water and Safe Harbor, used by such customers in public service? A. No, it was not, because a part of such energy was consumed in the transmission from Maryland to Safe Harbor and from Safe Harbor to these customers and a portion was consumed within the power systems of these customers as transmission and system losses.

Q. Was such backfeed energy from Maryland and the District of Columbia delivered to Penn Water continuously at all times throughout the year? A. No.

Q. When is such backfeed energy received by Penn Water and transmitted from Maryland to Pennsylvania? A. Backfeed is transmitted from Maryland to Pennsylvania generally during the low flow months of the year, but

[16598] at other times of the year backfeed may also be received during the off-peak hours of the week.

Q. Is this backfeed energy used directly by Penn Water or Safe Harbor in supplying their Pennsylvania customers? A. No.

Q. What happens to this electric energy received by Penn Water in Maryland and transmitted to Pennsylvania as backfeed? A. Such electric energy is in all cases co-mingled with electric energy or other electric services generated or supplied at either the Safe Harbor or Holtwood Power Developments before being used in connection with either their firm power obligations or interchange transactions with their Pennsylvania customers.

Q. Do the deliveries of electric services, including electric energy, which were made to the Pennsylvania customers and to the Pennsylvania Railroad Company by Penn Water and Safe Harbor always include an amount of co-mingled backfeed energy received from Maryland? A. They do not.

Q. At page 947 of the record, Mr. Roland testified with respect to the operation of house units at Safe Harbor during low flow operation. Is it a fact that at all times there is a generator operating, providing capacity and producing energy or reactive kva. at Safe Harbor? [16599] A. That is a fact.

Q. Is it a fact that at all times there is a generator operating and producing energy or reactive kva. at Holtwood? A. Except for a total of 135 hours in the last three years (1944-1945-1946) and then only on Sundays, there was a generator operating and producing energy or reactive kva. at Holtwood, and for each of those 135 hours there were frequency converters operating in the Holtwood plant supplying reactive, voltage regulation and other electric services.

Q. If at all times there is a generator operating at Safe Harbor, is it a fact that, as testified to, for example, by Mr. Roland at page 955, beginning at line 13, all of the energy

supplied to the Pennsylvania Power & Light Company at Donegal and Lehman Farm and to the Holtwood bus via Lehman Farm comes from Maryland? A. No. At all times such energy supplied at Donegal and Lehman Farm and to the Holtwood bus is energy transmitted from the Safe Harbor plant at 66 kv. and at times such energy is co-mingled with energy that might be from Maryland. At no time does all of the energy supplied at those points originate in Maryland without first being co-mingled with other electric services, including capacity, energy or reactive kva. originating at Safe Harbor.

Q. Have you prepared a tabulation showing the amounts of energy supplied by Penn Water, or Penn Water and Safe Harbor [16600] to their Pennsylvania firm customers (other than the Pennsylvania Railroad) for the years of 1944, 1945 and 1946, for those hours when there was no net backfeed from Baltimore Company received by Penn Water and transmitted from Maryland to Pennsylvania, and also for those hours when there was net backfeed received by Penn Water from Baltimore Company? A. I have.

MR. SPARKS: I would like to have this document marked for identification, Mr. Examiner.

TRIAL EXAMINER: It may be marked as Exhibit Number 356 for identification.

(The document referred to was marked for Identification as Exhibit Number 356.)

By MR. SPARKS:

Q. Will you please explain this exhibit? A. Exhibit 356 shows the total kilowatt hours supplied to the Pennsylvania firm customers in each of the three years, divided into the kwh. supplied during those hours when there was no net Baltimore backfeed and that supplied during those hours when there was such backfeed. The percentage that each is of the total energy deliveries is also shown. Also shown on Exhibit 356 are the total revenues received for

all firm electric services to these Pennsylvania customers, segregated to show the revenues billed and received for energy services [16601] alone during hours of Baltimore backfeed.

Q. Have you prepared a tabulation showing the kilowatt hours received by Penn Water in Maryland and transmitted to Pennsylvania during the years 1944, 1945 and 1946 that were used in connection with supply to Penn Water's, or Penn Water and Safe Harbor's Pennsylvania firm customers other than the Pennsylvania Railroad? A. I have.

MR. SPARKS: Mr. Examiner, I would like to have this document marked for identification.

TRIAL EXAMINER: It may be marked as Exhibit Number 357 for identification.

(The document referred to was marked for Identification as Exhibit Number 357.)

By MR. SPARKS:

Q. Will you please explain this Exhibit? A. Exhibit 357 shows in Column 1, the kilowatt hours of net Baltimore backfeed used in connection with electric services supplied to Penn Water's or Penn Water and Safe Harbor's firm power customers in Pennsylvania (excluding the Pennsylvania Railroad) for the years 1944, 1945 and 1946.

There is shown in Column 2 of this exhibit an amount of dollars received from these customers for an amount of energy equal to the amounts shown in Column 1. These dollars were computed by using the average energy rates actually billed to [16602] these customers.

Column 3 shows, as a percentage, that portion of the kilowatt hours of net Baltimore backfeed used in connection with electric services for firm supply, shown in Column 1, in relation to the total firm kilowatt hours supplied to the Pennsylvania customers.

Column 4 shows, as a percentage, the dollars computed and shown in Column 2 in relation to the total revenues received from these Pennsylvania customers for all firm power services under their respective contracts.

Q. Have you prepared a tabulation showing the amounts of interchange energy supplied to the Pennsylvania customers during those hours when there was no net Baltimore backfeed received by Penn Water from Maryland, and also during the hours when there was such backfeed received by Penn Water and transmitted from Maryland to Pennsylvania? A. I have.

MR. SPARKS: Mr. Examiner, I would like to have this document marked for identification.

TRIAL EXAMINER: It may be marked as Exhibit Number 358 for identification.

(The document referred to was marked for Identification as Exhibit Number 358.)

By MR. SPARKS:

Q. Will you please explain this exhibit? [16603]
A. Exhibit 358 is a tabulation showing for the years 1944, 1945 and 1946 the amounts of interchange energy supplied to the Pennsylvania interchange customers during hours of no net Baltimore backfeed and also during those hours when there was such backfeed received by Penn Water and transmitted from Maryland to Pennsylvania. There is also shown the percentage each of these is of the total interchange services supplied.

Also shown on this Exhibit 358 are the total revenues received for all interchange services to these customers segregated into the revenues received for the energies supplied during such hours and the percentage each of these is of the total interchange revenues received.

Q. Have you prepared a tabulation showing the kilowatt hours of net Baltimore backfeed transmitted from Maryland to Pennsylvania by Penn Water and used in

connection with the supply of interchange services to these Pennsylvania customers? A. I have.

MR. SPARKS: I would like to have this document marked for identification.

TRIAL EXAMINER: It may be marked as Exhibit Number 359 for identification.

(The document referred to was marked for Identification as Exhibit Number 359.)

By MR. SPARKS:

Q. Will you please explain this exhibit? [16604] A. Exhibit 359 shows in Column 1, the kilowatt hours of net Baltimore backfeed used by Penn Water and by Penn Water and Safe Harbor in connection with the supply of interchange services to their Pennsylvania customers during the years 1944, 1945 and 1946. There is shown in Column 2 of this exhibit an amount of dollars received from these customers for an amount of energy equal to the amounts shown in Column 1. These dollars were computed by applying the average hourly rates used in connection with the interchange billing to these customers during such periods.

Column 3 shows, as a percentage, that portion of the kilowatt hours of net Baltimore backfeed used in connection with interchange services supplied, shown in Column 1, in relation to the total interchange kilowatt hours supplied to the Pennsylvania customers.

Column 4 shows, as a percentage, the dollars shown in Column 2 in relation to the total revenues for interchange services received from these Pennsylvania customers.

Q. Was the year 1946 a typical or normal year as respects the amount of interchange transactions? A. No.

Q. What was the nature of such abnormalities? A. During the year 1946 the utility companies in Eastern Pennsylvania experienced material growth in load. To meet such requirements and still complete required [16605] maintenance of equipment, much of which had been

deferred during the war period, they arranged with us, under existing contracts, for an unusually large amount of interchange services which is reflected in the data shown on Exhibits 358 and 359 for the year 1946.

Q. Were the 1944 operating conditions as respects the amount of backfeed received from Maryland representative of the operating conditions in 1945 and 1946 or for average river flow conditions? A. They were not. River flow conditions experienced during the year 1944 were substantially lower than average and the amount of backfeed energy received was greater than normal due in part to low river flows and in part to war conditions.

Q. Beginning at page 979, Mr. Roland testified concerning the ownership of facilities for the transmission of electric energy which is transmitted from one or more states and consumed at points outside thereof, the amounts of electric energy so transmitted, and the sale of such electric energy for resale.

Does Penn Water own and operate facilities for the transmission of electric energy which is not transmitted from one or more states and consumed at points outside thereof? A. Yes, they do.

Q. What are some of these facilities? [16606] A. With the exception of the 220 kv. transmission system extending from Safe Harbor to Baltimore and Washington and the 66 kv. transmission system extending from Holtwood to Baltimore and a portion of the 132 kv. transmission system extending from Safe Harbor to Perryville for the supply of electric service to the Pennsylvania Railroad, all of the facilities of Penn Water and Safe Harbor are used either in whole or in large part for the generation or transmission of electric energy which is not transmitted from a state but which is consumed at points within the state where such energy and other electric services are generated.

Q. Are the amounts of electric energy generated at either the Safe Harbor or Holtwood plants and consumed

in Pennsylvania substantial in amount? A. Yes, they are substantial both in amount and in proportion to the total amounts so generated and in proportion to the amounts so transmitted.

Q. Can you state what proportion of the total amounts of energy generated at Holtwood and Safe Harbor is consumed within the state of Pennsylvania and which was not transmitted from one or more states and consumed at points outside thereof? A. Such proportion of the total amounts of energy generated at Safe Harbor and at Holtwood for the year 1945 was at least 44 per cent and for the year 1946 was at least [16607] 51 per cent.

Q. Beginning at line 18 of page 979 of the record, Mr. Roland attempted to use the amounts of energy transmitted to the city of Coatesville, Pennsylvania, during the year 1944 as evidence of the substantial amount of energy transmitted from a state and consumed at points outside thereof. Was the total amount of 152,292,000 kilowatt hours in fact all transmitted from a state and consumed at points outside thereof? A. Absolutely not. Mr. Roland used the total requirements of the Philadelphia Electric Company in its Coatesville Division on page 979. Only a very small percentage, if any, of such energy was in fact transmitted from a state and consumed at a point outside thereof.

Mr. Roland, in Exhibit 42, claimed to have found that during his twenty hand-picked days there were only 59 per cent of the hours when he could find that there was any co-mingling of backfeed electric services available at Holtwood for delivery to the customers supplied from Holtwood, including Philadelphia Electric Company's Coatesville Division, but during such hours there was only supplied 13 per cent of the energy during such twenty days. Mr. Roland's assumption was that if a single kilowatt hour of backfeed was received at Safe Harbor, regardless of the amount of energy generated by or available to Safe Harbor from sources within the state, [16608] then all of the energy supplied by Safe Harbor, both backfeed and

that produced within the State of Pennsylvania, was interstate energy (or became interstate energy).

He then went on to assume that because some of the energy sent out from Safe Harbor was energy contaminated with backfeed and a single kilowatt hour of such energy was received at Holtwood as 60 cycle, then all of the energy sent out from Holtwood at 60 cycle was interstate energy. It was only on this assumption that he could find any such number of hours in his hand-picked twenty days that showed any backfeed energy that could possibly have been used in connection with the supply to Coatesville.

After studying Exhibit 42, it is my opinion that a very small percentage of any backfeed energy was actually used in connection with the supply of the electric services to the Philadelphia Electric Company at Coatesville and in any such use it was largely submerged in the electric services supplied from the Holtwood and Safe Harbor developments themselves. In this explanation I want to be sure it is understood that I do not agree with the assumption used by Mr. Roland in his preparation of Exhibit 42, nor in his conclusions drawn therefrom.

Q. Do Penn Water and S.T.Co. operate facilities which are used in local distribution? A. Yes, they do.

[16609] Q. Please describe such facilities? A. Facilities at Holtwood used in connection with the supply of electric services to the Pioneer Electric Division of the Pennsylvania Power & Light Company and also certain facilities at Highlandtown Substation in Baltimore are distribution facilities.

Q. Do Penn Water and S.T.Co. own and operate facilities used only for the transmission of electric energy not transmitted from a state and consumed at any point outside thereof? A. They do.

Q. Please describe such facilities? A. The 110 kv. transmission line extending from Philadelphia Road Substation in Baltimore to the Gunpowder Substation in Maryland is a transmission facility used exclusively by Balti-

more Company as a part of that Company's transmission network supplying the area contiguous to Baltimore City and which load area does not extend outside of the State of Maryland.

Q. In Exhibit 42 and the testimony supporting that exhibit, Mr. Roland testified as to the flow of energy to the York, Pennsylvania area. Beginning at page 8797, Mr. Roland was questioned in that connection with respect to the flow of energy under the new Metropolitan Edison contract, identified as Exhibit 72.

Is it a fact that under the new M.E. contract, Exhibit 72, the flow of energy to the York area for firm power purposes [16610] is materially different, both in quantity and time, as compared with the flow of energy under the superseded Edison Light and Power Company contract, identified in these proceedings as Exhibit 71? A. It is quite different.

Q. What are the major differences as respects energy flow? A. Under the superseded Exhibit 71, Penn Water and Safe Harbor had an operating responsibility for 40 per cent of the electric service requirements, including energy of the Edison Light and Power Company at all times during the day and week. To fulfill these obligations, definite amounts of electric services were supplied to the York area, not only during the peak periods of the week, but also during all other hours including Saturday and Sunday.

Under the present Metropolitan Edison Company Contract, Exhibit 72, the operating responsibilities of Penn Water were limited to two conditions. The first, to supply all of the electric service requirements of M. E. Co. above its steam line. No electric services are required to meet this condition except during the peak hours of the week and during such hours Penn Water and Safe Harbor are always operating substantial amounts of hydro capacity in addition to the Holtwood steam capacity.

The second provides that Penn Water shall supply a [16611] specified amount of electric services below the M.E. steam line, but only when the actual generation at Holtwood and Safe Harbor exceeds 50,000 kw. The obligation for such supply is less than ten per cent of such generation.

Therefore, Penn Water's obligation for services to Metropolitan Edison Company is, from a practical operating viewpoint, limited to those hours when there are substantial amounts of generation at Holtwood and Safe Harbor.

Q. Is it a fact that under the contract, Exhibit 72, no supplemental electric services from other sources are required by Penn Water to meet its firm power obligations to Metropolitan Edison Company? A. That is a fact. Penn Water requires no supplemental services either from its Pennsylvania customers or Baltimore Company to meet its firm power obligations to Metropolitan Edison Company.

Q. Is it a fact that under contract, Exhibit 72, that no backfeed energy generated in Maryland is used to supply Penn Water's firm power obligations to Metropolitan Edison Company? A. That is a fact. However, I found one hour in 1946 when any backfeed energy from Baltimore might be said to have been so used and that was during a period when one of the Holtwood 60 cycle hydro units was out for maintenance.

Q. As a result of the contract changes and the operations [16612] resulting therefrom with respect to the delivery of firm power energy in the York area, do the results in the year 1944 have any relation to the actual facts as they exist today? A. They are not.

Q. Beginning at line 17 of page 8834 of the record, Mr. Roland testified that you advised him that the sales to the Pennsylvania Railroad in the State of Maryland are the obligations of Baltimore Company and the sales in the State of Pennsylvania are the obligations of Penn Water.

Did you so advise Mr. Roland? A. I did not.

I was very specific in discussing these transactions with the Pennsylvania Railroad to point out that only one bill was rendered to the Railroad by Baltimore Company and that for the purposes of computing the division of the revenues as between Penn Water and Baltimore in accord with an Operating Committee Memorandum, which has subsequently been identified as Exhibit 11, the deliveries to the Pennsylvania Railroad in Pennsylvania "were considered as deliveries by Penn Water" and that deliveries to the Railroad in Maryland were, for such purpose, "considered as deliveries by Baltimore."

At no time in my discussions with Mr. Roland did I refer to the obligations or operating responsibilities of the respective parties to the Pennsylvania Railroad contract. [16613] Q. At the bottom of page 8837 of the record Mr. Roland testified that Baltimore Company supplied part of the power requirements of the Pennsylvania Railroad in Pennsylvania. Does Baltimore Company in fact supply any of the Railroad's power requirements in Pennsylvania? A. Baltimore Company does not directly supply any of the requirements of the Pennsylvania Railroad. Baltimore Company has no facilities for so doing. All electric services supplied to the Pennsylvania Railroad are in fact supplied through the facilities of Safe Harbor and Penn Water in Pennsylvania and Maryland, and through the facilities of Potomac Electric Power Company in Washington. Baltimore Company has a joint operating responsibility for all of the electric services supplied to the Railroad.

Actually, of the electric services supplied by Baltimore Company to the Potomac Electric Power Company and by that Company to the Railroad at Benning, only a very small amount, perhaps of the order of one per cent of such supply, can be traced over the Railroad's own facilities from Maryland into Pennsylvania, but such transmission is carried out by the Railroad for its own purposes.

As to the supply to the Pennsylvania Railroad at Conestoga Substation and from the Perryville line, such serv-

ices are supplied to the Railroad through the facilities of Penn Water. A large part of such electric services may from time [16614] to time be co-mingled with energy originating in Maryland from Baltimore Company.

Q. Beginning at line 13 of page 8845 of the record, Mr. Roland testified that for billing purposes that portion of the energy sold in Maryland is considered a sale by Baltimore and the billing and the split-up of the money paid by the Railroad is paid accordingly.

Is it a fact that for billing purposes to the Pennsylvania Railroad, under the power contract identified as Exhibit 10, that portion of the services sold in Maryland is considered as sold by Baltimore Company? A. No, that is not correct.

Q. Will you please state the facts? A. The billing to the Pennsylvania Railroad for the services rendered under the contract identified as Exhibit 10 is prepared jointly by Penn Water, Safe Harbor and Baltimore Company, largely from the records of Penn Water and Safe Harbor. The necessary billing records are transmitted by Penn Water to Baltimore Company and such bill is rendered by Baltimore Company to the Pennsylvania Railroad.

In the computation of this bill there are no records included, nor is the Pennsylvania Railroad interested in the portion of the services delivered to the Railroad in the states of Pennsylvania and Maryland, respectively, nor is the Railroad concerned how the amounts of such revenues [16615] received by Baltimore Company are split up between the parties to the contract. However, in connection with the intercompany billing as between Baltimore Company and Penn Water, Penn Water does advise Baltimore Company as to the amounts of energy delivered to the Railroad in Pennsylvania and Maryland, respectively, in order that a division of such Pennsylvania Railroad revenues may be made. In the determination of this division, an arbitrary method had been agreed upon by the

parties in accordance with the provisions of Exhibit 11 of this record.

Q. Beginning at page 8894, Mr. Roland testified concerning his understanding of the difference between the gross meter readings of energy in connection with interchange transactions and the billing figures for energy in connection with interchange transactions between Philadelphia Electric Company and Penn Water at Perryville and Thorndale.

Will you please describe the difference between gross meter reading figures and billing figures in that connection? A. When two electric utilities each have power generating facilities which are operated in parallel and which are used to interchange energy, capacity, reactive power, etc., in varying amounts through different hours of the day or the week, meters are provided to measure and integrate such interchange transactions. Due to the inability of operating personnel to regulate the flow of power and energy between [16616] the systems as their respective loads may vary, power and energy may flow in one direction and then in the opposite direction during a portion of such hours. It is customary to provide, and in the present instance there are provided at both Perryville and Thorndale, ratcheted KWH meters and RVAH meters with associated printometers to record the hourly integrations of the several ratcheted meters which record the gross flow in each direction for each clock-hour. The printometers provide a record of gross transfers in each direction for each hour.

When two systems are interconnected by more than one transmission path as is the case between Penn Water and Philadelphia Electric over the Railroad facilities via Thorndale and via Perryville, not only may there be a reversal of flow at each interchange point during an hour, but there may unintentionally be flow in one direction through Perryville with a reversal of flow at Thorndale. The net of such hourly integration at Perryville and Thorn-

dale, respectively, is the effective energy transferred between the systems in any hour.

It is obvious then that the net hourly interchange at two points is the only record of interest for any billing period. It is impracticable to consider operating costs for a billing period less than a clock-hour and, therefore, the net hourly integration at Perryville and Thorndale in any [16617] clock-hour is the basis for interchange accounting between Penn Water and Philadelphia Electric.

* * *

[16618] Q. Beginning at line 14 of page 9063, Mr. Roland testified that he was interested in knowing what kind of deliveries were being made at the various points and among other things whether the energy so delivered was paid for. In determining the kind of deliveries being made, is it necessary to know whether or not the deliveries are on a net or gross meter reading basis? A. It is.

Q. In determining whether the energy delivered was paid for, is it necessary to know whether the billing basis was upon a net or gross meter reading? A. It is.

Q. Why do you say that it is necessary to know the character of the meter readings, in order to determine the kind of delivery and whether such energy delivered was paid for? A. The billing and payments for energy and other services specified in the contract are determined by the [16619] services themselves as specified in the contract. Obviously, if charges, rates or payments specified in a contract are based upon a net meter reading basis, rather than a gross meter reading basis, the amount of charges calculated on each of those bases would be different. In all instances, the net meter reading basis is used for interchange accounting and billing purposes for the reasons just described.

Q. Beginning at page 9066 of the record, Mr. Roland was questioned concerning the circulation of energy from or between the Westport and Riverside Substations at Bal-

timore via the 220 kv. transmission system between Baltimore and Safe Harbor.

Is it a fact that at times these 220 kv. transmission lines are used for the transfer of energy between that portion of Baltimore Company's system near Riverside and that portion of its system near Westport? A. Frequently. That is one of the recognized uses of the 220 kv. transmission line. It frequently happens that the generation at Riverside is in excess of the local requirements of Baltimore Company in the Riverside area and such excess flows from Riverside to Safe Harbor and back from Safe Harbor to Westport and to Takoma Park. Such a 220 kv. loop being in parallel with Baltimore Company's 110 kv. ring circuit and also in parallel with that Company's 33 kv. cable system connecting Riverside and Westport, the proportions of [16620] power and reactive flows in each parallel circuit will depend largely on the electrical characteristics of each path.

Q. What was the principal purpose of providing the Riverside line in addition to the Westport-Safe Harbor circuit between Safe Harbor and Baltimore? A. It was originally contemplated that two high voltage lines would be required between Safe Harbor and Baltimore, not for their circuit capacity but to provide reliability, including electrical stability in the event of trip-outs on one line due to lightning or other electrical phenomena, and the Baltimore system depended on a large amount of capacity from Safe Harbor both then and now.

This second circuit to Riverside, initially planned for operation in 1932, was delayed until 1937 largely due to depression conditions.

Q. Were there any special circumstances which culminated in a decision to provide the second circuit in 1937? [16621] A. Yes, there were. Baltimore had just made a contract providing for a large supply of 60-cycle power to the Sparrows Point plant of the Bethlehem Steel Company in the Riverside area. Baltimore at first contemplated

supplying this new load by 33 kv. cable circuits from its Gould Street plant, but three factors persuaded them to have Penn Water provide this line in 1937. The first was the desirability of higher reliability for service than could be provided by a single supply source; second, the recognition that this steel plant load would have tremendous load swings or fluctuations in its power requirements, amounting to from 15,000 to 20,000 Kw. many times an hour, which if superimposed on the cable system would result in serious voltage difficulties throughout the 60-cycle city system; and, third, the anticipation of additional industrial loads in the Riverside area in excess of the cable system then planned.

Q. Beginning at page 9164 of the record, Mr. Roland was questioned with respect to the 25-cycle capacity available to Baltimore prior to and after 1931. By reference to the contract of December 31, 1927, can you state how much capacity was considered as being available to Baltimore under that contract? A. Under the 1927 contract, 48,778 Kw. was considered as the one-hour integrated assured peak supply to Baltimore Company under minimum flow conditions, and an additional [16622] 13,333 Kw. was considered as available for carrying the swings in excess of the one-hour integration. Baltimore Company paid for both the one-hour capacity and swing capacity at the same rate.

Q. Has there been any change in the conditions governing the availability of 25-cycle capacity from the Holtwood plant to Baltimore Company since 1927? A. Yes, there has.

Q. What changes have taken place? A. The construction of the Safe Harbor dam and the operation of the Safe Harbor pond have increased the 25-cycle capacity available to Baltimore from the Holtwood development. Furthermore, the falling off of the 25-cycle load requirements in the Lancaster area has made more 25-cycle capacity available to Baltimore.

Q. What is the magnitude of the present 25-cycle peak supply at Highlandtown from Holtwood for the use of Baltimore Company? A. The monthly peaks delivered at Highlandtown during the last three years have varied with one exception from 60 Mw. to 77 Mw., generally being in excess of 70 Mw.

Q. Are these maximum deliveries greater or less than those experienced between 1927 and 1931? A. They average greater today.

Q. Have you prepared a chart showing the monthly [16623] 25-cycle peak deliveries of energy to Highlandtown Substation for Baltimore Company's use for the period 1927 to date, together with Baltimore Company's own monthly 25-cycle system peaks for the period 1930 to date? A. I have.

MR. SPARKS: I offer it for identification, Your Honor.

TRIAL EXAMINER: It will be marked Exhibit 361.

(The document above referred to was received and marked Exhibit 361 for Identification.)

By MR. SPARKS:

Q. At line 9 of page 9341 of the record, Mr. Roland testified that it was his understanding that the peak transfer energy under the Railroad contract is billed by Penn Water to the Pennsylvania Railroad. Is his understanding in accord with the facts? A. No, it is not. The only bill rendered to the Pennsylvania Railroad for all services provided in connection with the contract, identified as Exhibit 10, is the bill rendered by Baltimore Company on behalf of itself and as agent for the other companies supplying services. This bill as rendered by Baltimore Company specifically includes payments for this "peak transfer energy."

Q. Beginning at page 9456 of the record, Mr. Roland was questioned with respect to the metering points in the York area, used for purposes of determining energy sold

to [16624] the Lancaster and Harrisburg areas of Pennsylvania Power & Light Company and also with respect to the metering points at Lancaster and Harrisburg, used for the purpose of determining the energy sold to the Metropolitan Edison Company. In connection with these transactions with M.E. and P.P.&L., will you explain the situation with respect to these several metering points? A. The actual meter readings of the electric services delivered at York and at Harrisburg do not indicate individually the amounts of energy and other interchange services carried out with the Metropolitan Edison Company or with the Pennsylvania Power & Light Company. Such meters at York and Harrisburg must first be netted to obtain a record of the net deliveries at these two points. Such netting at these two points balances out the large amount of circulating energy that is frequently experienced, and there are days when such circulating energy amounts to 75% of the total gross metering at Harrisburg.

Q. Will you please illustrate this by using certain specific figures? A. The interchange meters at Harrisburg for the year 1944 recorded a gross flow from Penn Water to Pennsylvania Power & Light Company of 41,000,000 Kwh., and a gross flow from Pennsylvania Power & Light Company to Penn Water of 34,000,000 kwh. During many of these hours there was a reversal of power [16625] at this metering point at Harrisburg. The net power flow at Harrisburg correcting for such reversal was 38,000,000 Kwh. from Penn Water to P.L. and 31,000,000 Kwh. from P.L. to Penn Water. There was also a large amount of circulating energy which normally flowed from Holtwood toward York and from M.E. toward P.L. and from Harrisburg back toward Safe Harbor. In the year 1944 this amounted to 16,000,000 Kwh. The net south meters at P.L. must, therefore, be corrected for this circulating energy, reducing such net flow south from 31,000,000 kwh. to 15,000,000 Kwh. There was also a certain amount of unintentional flow from M.E. to Penn Water, some of

which was transmitted by the way of Harrisburg toward Safe Harbor. In the year 1944 this amounted to 4,000,000 Kwh. so that the actual billing of interchange purchased by Penn Water from P.L. in 1944 was only 11,000,000 Kwh. although the gross meter reading at Harrisburg was 34,000,000 Kwh. The billed energy, therefore, was less than one-third of the gross metered energy. Similarly, in connection with interchange transactions between Penn Water and M.E., 4,000,000 Kwh. also flowed to M.E. via Harrisburg so that the net metered delivery at Harrisburg of 38,000,000 Kwh. was reduced by this 4,000,000 kwh. and the actual interchange energy billed by Penn Water to P.L. was 34,000,000 Kwh. compared with the gross meter reading at Harrisburg of 41,000,000 Kwh. Similar corrections have to be made to the gross meter readings at York in order to determine the amount [16626] of energy to be accounted for and billed between Penn Water and M.E. in connection with their interchange transactions.

Q. Mr. Spaulding, as a result of your analysis of the gross meter readings, can you conclude that the assumptions made by Mr. Roland in connection with his Exhibit 42 are applicable to the actual conditions and are related to the energy accounting used in connection with the billing for interchange transactions? A. No, I cannot. It should be obvious that Mr. Roland's Exhibit 42 does not give any consideration to the several factors I have just mentioned.

Q. Beginning at page 9506 of the record, Mr. Roland testified with respect to the effects of oil shortages on the Eastern Seaboard during the war on the amounts of backfeed transmitted from Maryland to Pennsylvania over the facilities of Penn Water. Will you explain what effect such oil shortage did have on the amount of backfeed during 1944? A. During the summer and fall of 1944 there was a critical oil shortage for use by the Public Utilities in the New Jersey and Eastern Pennsylvania areas. Efforts were made by these companies to convert their oil-burning

boilers for the use of coal as fuel, although this was not in all instances practicable. During this period of conversion and afterwards, there was a capacity and energy shortage in these areas due in part to a lack of oil and in part to the national [16627] effort to conserve oil resources. The interconnected companies including Penn Water, Safe Harbor, Baltimore and Washington, used every effort to assist these companies during this oil shortage. As a result there was an abnormal amount of backfeed from Baltimore and Washington in the year 1944 over and above what might have been necessary as a result of lower-than-average river flow. Furthermore, there was more interchange energy furnished by Penn Water to its northern interconnections which might otherwise have gone to Baltimore Company except for this oil shortage. It is impossible to estimate exactly the amounts of such additional backfeed received from Baltimore Company or the amounts of interchange sales to these companies at those times because our operating records do not indicate the specific purpose for each interchange transaction. One measurement is the amount of emergency interchange energy transactions by Penn Water and in part by Safe Harbor which in the year 1944 amounted to 23,676,000 Kwh. By no means did all such emergency interchange involve backfeed supply from Baltimore, but the larger part of such emergency interchange resulted from such oil shortage.

Q. Beginning at page 9511 of the record, Mr. Roland testified with respect to the comparability of load shapes in the years of 1944 and 1946. Were there any appreciable differences in the load shapes for the interconnected system load, that is, the load requirements of the companies in F.P.C. [16628] area 6, together with load requirements of Penn Water's and Safe Harbor's Pennsylvania customers? A. There were.

* * *

[16629] Q. Beginning at page 9512 of the record, Mr. Roland was questioned with respect to the War Production

Board Order L-94. Did this War Production Board Order L-94 have an effect on the flow of energy on your Safe Harbor and Penn Water system during the year 1944? A. It did.

Q. What effect did it have? A. Section b-1 of Order L-94 made it incumbent upon each utility "to operate its reservoirs, generating plants, substations, transmission lines and other facilities" and to "interchange electric power with other utilities so as to achieve the maximum coordination of power supply for war production and essential civilian uses, and for relief of [16630] power shortages." Penn Water and Safe Harbor, as well as all of the other utility companies on the Eastern Seaboard between the Potomac and Hudson Rivers, made every effort to assist each other in the many instances that arose during the war, and specifically during the year of 1944, not only during fuel shortages but during those periods when it was essential to take certain equipment out for maintenance or where abnormal loads were encountered in one system or the other in excess of their readily available capacity. The effect of this War Production Board Order L-94 resulted in abnormalities of energy flow on the system of Penn Water and Safe Harbor in the year 1944.

Q. Is the Exhibit which was offered for identification in the record as Exhibit 228, the Order of the War Production Board L-94, dated May 1, 1942, which you have just referred to, and which your Company recognized as a basis for certain obligations in its operations? A. It is.

Q. Is Exhibit 229, being an Administrative Letter dated August 20, 1945, the effective revocation of Order L-94? A. It is.

Q. On page 9548, Mr. Roland testified that the Railroad Company in sending a check to Baltimore Company for service rendered to the Railroad Company under contract identified as Exhibit 10, did so with the understanding that [16631] Holtwood Company should receive a part of it. Is it a fact that the Railroad Company in paying Baltimore

Company does so with the understanding that each of the parties to the contract will receive a portion of such payment in proportion to the services rendered? A. There is no such understanding on the part of the Railroad Company. The Railroad Company merely considers that it has met its obligation to the contract when its check is made to Baltimore Company and there is no other arrangement to which the Railroad Company is a party that provides for any division for such payment. Furthermore, it was and always has been recognized that the division of such payment between Penn Water and Baltimore Company, in accord with the Operating Committee's memo, identified as Exhibit 11, did not make an equitable division of the payments, but was merely an arbitrary division and that any further debits or credits for service could be covered by payments made to Penn Water and Safe Harbor under contracts identified as E, F, G, H and I.

Q. On page 9479 of the transcript, Mr. Roland was asked about the load swings of the customers served by the Penn Water and Safe Harbor system and indicated that he had not examined any information that would indicate the magnitude of such swings. Had Mr. Roland ever discussed this matter with you? A. Yes, he had, and spent nearly an hour in the Load [16632] Dispatcher's office of Penn Water and Safe Harbor examining the several graphic load and power flow charts, with specific reference to the load swings encountered. There was at that time considerable discussion about the load swings of the Bethlehem Steel Company, a customer of Baltimore, which swings are frequently in excess of 30,000 Kw., and we discussed the effect of these swings both on the frequency and voltage and their effect on the general services of the Companies. Mr. Roland also expressed considerable interest in how these load swings of the Bethlehem Steel Company and those of the Pennsylvania Railroad were directly reflected on our charts of power flow over our Northern interconnections, which indicated that Baltimore Company

was leaning heavily on these ties to carry these sharp load fluctuations that would otherwise be an operating and economic burden to Baltimore Company. These matters appeared to interest Mr. Roland at that time.

Q. Beginning at page 10176, Mr. Howell testified that his Exhibit 47 had been taken to Baltimore for the purpose of having it checked by Company officials. Was Exhibit 47 checked for accuracy by any persons associated with your Company? A. Several of my associates endeavored to check certain of the data Mr. Howell had recorded and so far as the limited time permitted, to review his factual statements. Mr. Howell had advised us that he was in a hurry to turn his Exhibit over for printing. We found many inaccuracies which we called to [16633] Mr. Howell's attention but we were unable to complete our review of this Exhibit.

Q. Did you tell him you thought it needed certain revisions? A. Yes, and made several notes on his copy of the early draft of that Exhibit. I specifically cautioned him that we did not attempt to check all of his statements and that we could not agree with certain of the statements that we had reviewed.

Q. At page 10179, Mr. Howell testified with respect to the 25-cycle loads of Baltimore Company. Has that Company recently indicated their intentions of abandoning and replacing a portion of this 25-cycle capacity on their own system? A. It has.

Q. What is the nature of that information? A. Baltimore Company has released statements to the press and to their stockholders that they intend to provide additional capacity at Westport to replace certain old equipment to be retired. They have further advised our Company that they intend to provide a 60,000 Kw., 60-cycle unit at their Westport Plant in about 1950 to replace an equal amount of old 25-cycle capacity there.

Q. What effect will such change have upon the 25-cycle demands of Baltimore Company upon Penn Water? A.

Baltimore Company's estimate of their 25-cycle [16634] requirements in 1955 is in excess of 120,000 Kw. and they are planning to depend very largely on the Holtwood 25-cycle supply supplemented by their own frequency changer capacity in Baltimore, for by that time they are planning to retire all of their 25-cycle generating capacity in Baltimore.

Q. In the light of such announced plans of Baltimore Company, do you anticipate that your present 25-cycle supply to Baltimore Company at Highlandtown will be changed from 25 to 60 cycles within the next decade? A. No, I do not.

Q. At page 10211 in connection with Mr. Howell's testimony with respect to Exhibit 47, he stated his understanding of the use made of the 25-cycle transformers at Holtwood. Is it a fact that two of the nine transformers are used for the 25-cycle service to Lancaster and the other seven transformers used for service to Baltimore Company? A. No. Seven of the nine 25-cycle transformers at Holtwood are used exclusively for service to Baltimore Company, and one transformer is required for service to Pennsylvania Power & Light Company at Lancaster. The ninth transformer serves as a reserve for either the Lancaster supply or the Baltimore supply, but is regularly used in supplying Baltimore Company.

Q. At page 10521 Mr. Davis stated that Metropolitan Edison Company does not supply any energy to Pennsylvania Power [16635] & Light Company. As he used the term "supply", he meant delivery. Is it a fact that Metropolitan Edison Company does not supply any energy to Pennsylvania Power & Light Company, as Mr. Davis used the word "supply"? A. No, it is not a fact. Metropolitan Edison Company does supply energy to Pennsylvania Power & Light Company for Penn Water, and for the following reason: The inter-connections with Pennsylvania Power & Light Company and with Metropolitan Edison

Company operate as two parallel paths between Penn Water and Safe Harbor on one hand and their Northern customers on the other. It is impossible to control the flow of power on each of these two parallel paths. Therefore, when power is being interchanged between Penn Water and Safe Harbor on the one hand and these Northern companies on the other, some of this power may flow over each circuit although the interchange transaction may have been arranged with only one of these two customers. In the event arrangements are made to supply Pennsylvania Power & Light Company with a specified amount of interchange energy, it frequently happens that a portion of this energy will flow through Violet Hill into the Metropolitan system, in which case Metropolitan Edison Company does supply such energy to Pennsylvania Power & Light Company.

Q. At page 10522 Mr. Davis was questioned with respect to the source of the supply by Penn Water to Pennsylvania Power & Light Company. What is the major source of the [16636] energy so supplied? A. Most of the 60-cycle service is generated at the Safe Harbor plant, and substantially all of the 25-cycle service is generated at the Holtwood hydro plant.

Q. Beginning at line 15, page 10537 Mr. Davis testified with respect to an option on the part of Penn Water and Safe Harbor to reduce their demand obligations to Pennsylvania Power & Light Company under their contract during periods of low flow. Is this option now in effect? A. It is.

Q. When did it go into effect? A. As of February 15, 1947.

Q. Under the provisions of this contract does Penn Water and Safe Harbor have the option of reducing their obligations to Pennsylvania Power & Light Company during periods of low flow to 80% of the Lancaster load requirements? A. Yes.

Q. Since February 15, 1947 have Penn Water and Safe Harbor exercised their option to reduce their obligations to less than 100% of the Lancaster load requirements?
A. No, we have not.
[16637] Q. Are they in a position to do so in the event you experience extreme low flows comparable to the lowest flow on record such as was used by Mr. Davis as his assumption for the determination of dependable hydro capacity in connection with Exhibit 64? A. Yes.

Q. At line 13, page 10548 of the record Mr. Davis testified "As an engineering and operating matter, Safe Harbor has no physical ability to do anything under" the Coatesville power supply contract. Is it a fact that Safe Harbor has no such physical ability? A. It is not. As an engineering and operating matter, Safe Harbor has the same, if not greater physical ability to generate energy, capacity, spinning reserve, etc., as Penn Water. There are ample transmission facilities between Safe Harbor and Penn Water where connection is made with the transmission facilities between Holtwood and Coatesville. Safe Harbor has the same ability from an engineering and operating point of view to supply Coatesville as it has to supply Baltimore or the Pennsylvania Railroad Company. It has the same ability to supply Coatesville that Baltimore Company has to supply service under its contract with Potomac Electric Power Co.

Q. Since 1933 has Safe Harbor physically provided electric service for supply to Coatesville or to its other customers at a time when Penn Water was unable to do so?
[16638] A. Yes, during the 1936 flood when Penn Water's hydro and steam plants were forced to shut down completely and were unable to supply any electric service to its customers, Safe Harbor provided all of these services to the full extent of the requirements of these several joint customers, not only because Safe Harbor had the operating responsibility to perform this obligation, but because as an

engineering and operating matter Safe Harbor had the physical ability to do so.

Q. Does Safe Harbor as an engineering and operating matter also have the physical ability to supply Pennsylvania Power & Light Co. and the Pennsylvania Railroad Co.? A. Yes, it does, and during my cross-examination I specifically indicated how Safe Harbor controls to a large extent both the facilities used and the amount of supply furnished to Pennsylvania Power & Light Company and to the Pennsylvania Railroad Company.

Q. Has the Federal Power Commission ever specifically recognized that Safe Harbor Water Power Corporation and Penn Water jointly "sells electric power and energy" to the Coatesville Division of the Philadelphia Electric Co.? A. Yes, it has.

Q. In what connection? A. It so stated in its Order dated June 30, 1939. "In the matter of Safe Harbor Water Power Corporation", Order allowing a supplemental rate schedule to take effect prior to [16639] date of filing.

MR. SPARKS: I ask to have this identified as Exhibit No. 364.

(Exhibit No. 364 is marked for Identification.)

By MR. SPARKS:

Q. Is this exhibit the Order of the Commission just referred to? A. It is.

Q. Beginning at line 14, page 10552 of the record, Mr. Davis testified that Penn Water is the only Company that has any ability to perform the obligations under the Coatesville Power Supply Contract. In the light of your last several answers do you agree with Mr. Davis' statement? A. Certainly not. Penn Water and Safe Harbor have the joint operating responsibility and they each have the ability to perform the obligations under the contract with the Philadelphia Electric Company for firm power supply to its Coatesville Division.

Q. Beginning at page 10560 Mr. Davis testified that it was his understanding that the difference under the present Metropolitan Edison Co. contract, identified as Exhibit 72, and the contract with the Edison Light & Power Co., which it superseded, being Exhibit 71, was that Exhibit 72 provides for a firm power capacity considerably larger than heretofore furnished to Edison Light & Power Company. Have you prepared a chart to indicate the [16640] difference in the amounts of firm power service rendered under these two contracts? A. Yes, I have.

MR. SPARKS: I will ask the reporter to mark this with the next exhibit number.

(Exhibit No. 365 is marked for Identification.)

By MR. SPARKS:

Q. Will you please explain this exhibit? A. The chart is generally self-explanatory. Prior to 1946 Penn Water and Safe Harbor had an operating responsibility for a more or less uniform and constant amount of energy and capacity. Under the present Metropolitan Edison Co. contract the amount of services fluctuate widely with river flow. This exhibit does not attempt to show the other services furnished, such as reactive power, spinning reserve, etc., which also is of importance and specifically provided for under the existing contract identified as Exhibit 72. To the right of the chart is shown a comparison of the daily load requirements under the earlier Edison Light & Power Co. contract, at which time Penn Water and Safe Harbor were responsible for 40 per cent of Edison's requirements. Under the present Metropolitan Edison Co. contract Penn Water's obligations vary with river flow.

Q. At page 10568 of the record Mr. Davis testified as to the special facilities shown on Table 9, Exhibit 47, [16641] furnished by Safe Harbor, used in providing services to the Pennsylvania Railroad Co. Are all of the special facilities so provided contained in this table? A. I believe they are all referred to generally, but the costs

which the Companies used as a basis for the specified annual charges were limited to the additional out-of-pocket costs to Safe Harbor or Penn Water in furnishing such facilities.

Q. Will you give an example of what you refer to? A. Table 9 of Exhibit 47 refers to certain annual charges related to the initial frequency converter and single phase generator at Safe Harbor. The contract identified as Exhibit 10 provided that two of the generators at Safe Harbor would be designed for 25 cycle single phase generation. The specified annual charge for the initial generator was related only to the increased costs of providing a 25 cycle single phase generator as compared to the cost of providing a 60 cycle generator. The specified facilities charges therefore do not include any annual costs related to the water wheel turbine, to the structures, or to the associated equipment.

Q. Has the Federal Power Commission ever specifically recognized that the Safe Harbor Corporation provided facilities for the purpose of supplying energy to the Pennsylvania Railroad Company and for the purpose of selling such energy to the Pennsylvania Railroad Co.? A. It has.

[16642] Q. In what connection? A. In connection with its Order of September 22, 1939. "In the matter of Safe Harbor Water Power Project No. 1025", Order authorizing installation of additional generating unit.

MR. SPARKS: I ask that this be marked Exhibit No. 366.

(Exhibit No. 336 is marked for Identification.)

By MR. SPARKS:

Q. Is this the document you refer to? A. Yes, it is.

Q. Beginning at page 10581 of the record, Mr. Davis testified with respect to Table 11 of Commission's Exhibit 47. Do the amounts of kilowatthours shown in column 3 of Table 11 as sales to the Railroad by Baltimore and Holt-

wood Companies, respectively, indicate the actual deliveries to the Railroad for the various years shown by each of those companies? A. They do not. The only deliveries to the Railroad for each of the years shown on Table 11 are the "Total" sales of kilowatthours shown. The kilowatthours shown in column 3 opposite Baltimore and Holtwood, respectively, are merely the amounts of the kilowatthours delivered to the facilities of the Railroad in the States of Maryland and Pennsylvania, respectively.

Q. Are the amounts of revenues shown in column 4 the actual amounts paid for the kilowatthours shown in column 3 respectively? A. They are not. The dollars shown in column 4 opposite the "Total" kilowatt-hours have no relation to the total kilowatt- [16643] hours. They are the total dollars paid by the Railroad for all of the services rendered under the contract identified as Exhibit 10, which total dollars are made up of specified charges for capacity, energy, and for special facilities. The revenues in column 4, opposite Baltimore and Holtwood, respectively, in column 2, are merely the division of the total revenues for each year computed upon the relative proportion of the energies shown in column 3.

Q. What proportion of the total revenues received from the Railroad was for energy charges? A. Approximately 55 per cent in the year 1944.

Q. What proportion of the total revenues so received from the Railroad was for special facilities' charges? A. Approximately 15 per cent in the year 1944.

Q. What percentage of the total revenues so received from the Railroad was for demand charges? A. Approximately 30 per cent in the year 1944.

Q. Does the average revenue received per kilowatthour shown in column 5 have any significance? A. It does not.

Q. Why not? A. The average revenue per kwh, shown in column 5 for the total sales to the Railroad is not an indication of the amount charged for energy services,

but is an indication of the [16644] amount charged for energy, capacity, and special facilities. Had an analysis been made of the use made of special facilities and of capacity by the Railroad in Pennsylvania and Maryland, respectively, the so-called average revenue per kilowatt-hour in column 5 would not be the same for the supply in Maryland and in Pennsylvania.

Q. Beginning at page 10589 of the record, Mr. Davis testified with respect to table 10 of Exhibit 47. Are the figures shown in the last column of table 10 taken from any bill rendered by Penn Water to the Railroad? A. No.

Q. What do such figures represent? A. They merely represent the division which Penn Water receives from Baltimore Company as the result of the arbitrary division of the total revenues made in accord with Exhibit 11 in these proceedings.

Q. What do the figures in the second from the last column in the exhibit represent which are headed "PW-KWH"? A. They are merely the amounts of Kwh. delivered to the facilities of the Railroad in the State of Pennsylvania and which are used by Penn Water and Baltimore Company as a basis for the arbitrary division of the total revenues received by Baltimore Company from the Railroad.

Q. At page 10595 of the record, Mr. Davis testified with respect to the $6,000 annual credit to the Railroad [16645] Company for the use of a 110 Kv. circuit that extends from Benning over to Westport. Is this 110 Kv. circuit used by Baltimore Company for its own benefit? A. It is.

Q. Did the Railroad build a circuit from Benning to Westport? A. No, it did not.

Q. What are the facilities for which the Railroad receives this credit? A. The Pennsylvania Railroad overbuilt on its electrification structures a three-wire circuit insulated for 110 Kv. operation, from a point adjacent to

the Railroad's own step-up transformer substation at Benning to a point near the Patapsco River, just south of Baltimore, where interconnection is made with the ring circuit facilities of Baltimore Company.

Q. Why were these facilities provided in connection with the Railroad power supply contract? A. Under the power supply contract, identified as Exhibit 10, Potomac Electric Power Company has no operating responsibility to provide capacity or other electric services to the Railroad and only provides the frequency changer facilities at Benning. The Railroad desired assurances of what was then referred to as a "firm back-up" for this Benning supply. Baltimore, Penn Water and Safe Harbor could not give the Railroad such assurances, in part because of limited cable capacity in Potomac Electric [16646] Power Company system between the terminal substation of the 220 Kv. transmission line near Takoma Park and Potomac Electric Power Company's Benning frequency changer. The Railroad, therefore, agreed to provide this transmission facility in order that Baltimore, Penn Water and Safe Harbor could assure the Railroad of a firm supply from Benning at a point on the southern end of the Railroad's electrification. In recognition of the fact that these facilities would also be used by Baltimore Company for other purposes, the Railroad provided these facilities but received a credit of $6,000 for their use.

Q. Why do you say then that this 110 Kv. circuit is used by Baltimore Company for its own benefit? A. This 110 Kv. circuit is regularly used by Baltimore Company for interchange of electric services with Potomac Electric Power Company under their power supply contract. If it did not exist, Baltimore would not be able to obtain as much interchange service from Washington, although it would be in a position to provide its contractual obligations to Washington. The operating records for the last five years indicate that more than one-third of all the services to Washington from Baltimore and over 25 per cent of all

electric services transmitted from Washington to Baltimore were transmitted over these 110 Kv. 60 cycle line facilities.

Q. At line 23 of page 10605, Mr. Davis testified that the [16647] amount which Baltimore paid Penn Water shown in the last column on Table 10 of Exhibit 47 compensated Penn Water for all special facilities provided for service to the Railroad. Is this a factual statement? A. It is not. The amount so computed is an arbitrary determination of the division of the total revenues. It does not relate either to the amount of special facilities provided or to the other services actually rendered by Penn Water and does not compensate Penn Water in full for the special facilities provided by it in connection with services to the Railroad.

Q. Beginning at page 10730, Mr. Davis testified with respect to Table 2 of Exhibit 47 and the kilowatthours shown in column 3 thereof, which he stated were sold by Safe Harbor to Baltimore, and Penn Water, respectively, for the years shown. Are the kilowatthours shown in column 3 for Baltimore and Holtwood, respectively, the actual kilowatthours delivered to those companies for the years shown? A. They are not. They are merely the mathematical equivalent of the two-thirds and one-third, respectively, of the total output of the Safe Harbor plant, after a minor adjustment for losses. The actual deliveries by Safe Harbor for Baltimore Company and Penn Water during these years were quite different and especially during the last five years when Baltimore received nowhere near the two-thirds of Safe Harbor's total [16648] output, as I testified to in my redirect testimony.

Q. Are there any records in the Federal Power Commission's files showing for the year 1946, the actual amounts of Safe Harbor energy supplied by Safe Harbor for delivery to Baltimore Company? A. Yes.

Q. Where are such data to be found? A. Such data are shown in the Form 1 Report for 1946, recently filed by Safe Harbor Company.

Q. Does this Safe Harbor Form 1 report also show the amounts of energy delivered by Safe Harbor Company to Penn Water for their joint supply to their Pennsylvania customers? A. Yes.

Q. Does the Penn Water Form 1 Report show the amounts of Safe Harbor energy delivered to the joint customers of Penn Water and Safe Harbor, namely, Pennsylvania Power & Light Company and Philadelphia Electric Company for its Coatesville Division? A. There are shown on Schedules 530 and 552 of Penn Water's Form 1 Report, the amounts of energy delivered to such customers and the revenues received for all services supplied to these customers by Penn Water and Safe Harbor jointly. Such revenues are collected by Penn Water acting for itself and as agent for Safe Harbor.

Q. Does this Penn Water Form 1 report also show the [16649] amount of energy from Safe Harbor delivered to the Pennsylvania Railroad Company? A. Yes. Schedule 532 shows the deliveries made by Penn Water and Safe Harbor jointly to the Pennsylvania Railroad, in part being deliveries in the State of Pennsylvania and in part being deliveries at Perryville and Conowingo to the Railroad. The revenues shown on that same schedule are not related to the services rendered but are merely the amounts which Penn Water is entitled to receive as a division of the total revenues received by Baltimore Company from the Railroad for 1946.

Q. Did Penn Water actually receive from Baltimore such a division, to which it is entitled, of the Railroad revenues in 1946? A. No.

Q. At page 10745, Mr. Davis was questioned about the bills rendered to Penn Water by Baltimore Company for backfeed. Have there been times since the effective date of the 1931 Supplemental Agreement, identified as Items H and I, when Baltimore did actually render a bill to Penn Water for the amount of backfeed energy furnished during any period? A. Yes, there have been.

Q. How were the amounts of such bills computed? A. Such bills were computed generally in accord with Article 6 of the 1927 contract which is a part of Item H in [16650] these proceedings. The daily net backfeed was computed from the actual meter readings of energy flow between Baltimore on the one hand and Penn Water and Safe Harbor on the other. The energy rate applied to such daily net backfeed was the total average unit production cost at Baltimore's Westport Station for the month, such cost including all operation and maintenance expenses. Such average rate is shown on the face of the bills rendered by Baltimore to Penn Water for such backfeed energy.

MR. SPARKS: I would like to have marked for identification this copy of the backfeed bill, as Exhibit 367.

(Exhibit No. 367 is marked for Identification.)

By MR. SPARKS:

Q. Is this document a copy of one of the bills you have just referred to? A. It is.

Q. How were the amounts paid by Penn Water to Baltimore Company for backfeed services treated in the determination of the power bill for services to be rendered under the 1931 Supplemental Agreement identified as Items H and I? A. Such payments were treated as a payment by Penn Water for power purchased.

MR. SPARKS: I wish to have marked as Exhibit 368 the Holtwood Company's bill to Baltimore Company for December, 1931.

(Exhibit No. 368 is marked for Identification.)

[16651] By MR. SPARKS:

Q. I show you Exhibit 368 and ask you if this is a copy of Penn Water's bill to Baltimore Company for the year 1931 for services rendered under the contract identified as Items H and I? A. It is.

Q. Will you indicate the treatment in this bill of Holtwood Company's payments for power purchased as back-

feed? A. Item (d)2 records the payments made by Penn Water to Baltimore Company for backfeed in 1931 in the amount of $14,452.47, such amount being included in the item entitled "Sum of (a), (b), (c), and (d)."

Q. Has there been an appreciable amount of daily net backfeed recorded within the past four or five years? A. Yes, there has.

Q. Has there been any billing for such backfeed since 1931? A. Yes, there was billing for backfeed in 1932.

Q. Has Baltimore Company billed Penn Water for such backfeed in recent years? A. No.

Q. Why not? A. The matter was discussed by the Operating Committee and with Baltimore Company's counsel in 1941 and it was [16652] recommended that Baltimore Company need not bill Penn Water for such backfeed because there would be no net effect on the income of either party and no outside parties would be affected.

Q. Will you please explain why? A. Had Baltimore Co. billed Penn Water for such backfeed, the operating revenues and the operating expenses of both companies would have been increased alike to the extent of the amount billed for such backfeed, but the operating income and the net income of both companies would have been unaffected.

Q. Have you prepared a tabulation showing the backfeed energy received by Penn Water from Baltimore Company in the years 1944, 1945 and 1946 showing the annual amounts of net hourly backfeed, the annual amounts of daily net backfeed for each year, and the applicable contract rates of Baltimore Company for such daily net backfeed? A. I have.

MR. SPARKS: I will ask the reporter to mark for identification as Exhibit No. 369 this tabulation "Backfeed Energy Received from Baltimore Company."

(Exhibit No. 369 is marked for Identification.)

By MR. SPARKS:

Q. Is this the tabulation you just referred to? A. It is.

[16653] Q. Beginning at page 10759, Mr. Davis testified with respect to the effect of the M. E. contract, identified as Exhibit 72, and was questioned as to whether such contract resulted in an increased use of the natural resources of the Susquehanna River as contrasted with operations under the old Edison Light and Power Company contract, Exhibit 71. Is it a fact that the operations under Exhibit 72 have resulted in an increased use of the natural resources of the Susquehanna River? A. Yes.

Q. Why? A. Without attempting to go into all of the operating details, I can give two specific reasons: First, because of the change in the form of contract, Penn Water and Safe Harbor are enabled to operate their hydro capacity and to utilize the available energy from the river flow during a smaller number of hours and thereby get a greater capacity utilization as is generally shown from an examination of my Exhibit 8 in these proceedings. Secondly, whenever hydro developments, such as those at Holtwood and Safe Harbor are utilized and operated to provide the requirements of the peaks of several systems, rather than required to supply a more or less uniform twenty-four hour load, a greater utilization of the natural resources can be obtained.

Q. Do you mean, Mr. Spaulding, that the greater the number of systems on which the hydro is operating, the greater [16654] is the opportunity for utilizing the natural resources? A. Yes.

Q. Do you agree with the designation used by Mr. Thomas at page 1236 of the record, referring to the Holtwood and Safe Harbor plants as "run-of-river" type developments? A. No, I do not.

Q. In what respect do you disagree with this designation? A. First, he related the water stored behind the dams to the annual energy output and such relationship is not controlling either at these plants or anywhere else. Second, he related the amount of storage to the maximum usable flow at Safe Harbor which is likewise not a con-

trolling consideration. Third, his statement that the river flow cannot be stored in any appreciable quantity and to a large extent water must be used as it runs down the river, is not a correct statement because it does not conform with the facts.

Q. Will you please state what in your opinion are the essential factors to be considered in connection with the utilization of stored water in relation to a "run-of-river" type development or a "storage" type development? A. The essential consideration of a storage development is the amount of stored water available to supplement the normal flow of the river during periods of minimum flow or maximum loads, or a coincidence of those two factors. While the usable storage behind both dams is only equivalent to the [16655] full power house draft of Safe Harbor during a twenty-four hour period, the essential and important facts are that the usable storage behind both dams is greater than the minimum flow of the river for a seven-day period. When such usable storage is used to supplement the minimum flow of the river, it greatly enhances the capacity value of these hydro plants.

Q. Do you insist that Holtwood and Safe Harbor are not run-of-river plants? A. I have frequently referred to them as such, but in connection with the capacity value of the hydro plants at Holtwood and Safe Harbor in this case, it is important to recognize the distinction between a run-of-river plant without storage and a run-of-river plant with storage. The Federal Power Commission, itself, properly recognized that distinction in its printed instructions relating to Schedules 2 and 16 of its F.P.C. Form 12 Report for electric power systems. Under F.P.C.'s definition, neither Holtwood nor Safe Harbor would be classified as run-of-river developments.

* * *

[16656] Q. At page 1238 Mr. Thomas stated that "for economic development such plants as Holtwood and Safe Harbor must be operated in conjunction with an adequate

supply of steam electric power which is used to firm up the hydro supply." Do you agree with that statement? A. I do not.

Q. Why do you disagree? A. His statement that steam electric power is used to firm up a hydro supply is erroneous. Supplemental steam power does not firm up a hydro supply. Rather, when such steam power is used in conjunction with or supplemental to a hydro supply, the maximum utilization can be made of the natural resources. Steam energy is necessary to supplement a hydro supply such as that at Holtwood and Safe Harbor under certain flow conditions, but I would disagree that such supplemental energy firms up the hydro resources. The load shape alone determines the capacity value of a hydro development.

Q. Then, in your opinion, Baltimore Company has not [16657] installed steam capacity to firm up the hydro resources of the Susquehanna River? A. No, neither Baltimore Company nor anyone else has installed steam capacity to firm up these hydro plants; rather, they have been firmed up by the growth of the peak portion of the system load on which they were operating in part or in whole.

Q. Has Penn Water ever considered providing additional steam capacity itself at Holtwood to provide such supplemental supply? A. Yes, it has on several occasions within the last ten years.

Q. Would such additional steam capacity, if provided by Penn Water at Holtwood, be a duplication of existing steam electric plants operated by Penn Water's customers? A. Not necessarily. It could have and may now provide additional steam capacity to meet the growing needs of its customer companies.

Q. Would the location of additional steam capacity at Holtwood be at an economic disadvantage because of its distance from the load centers? A. No, as a matter of fact, additional steam capacity, if provided at Holtwood,

would be as close or closer to the load centers of its Pennsylvania customers than the presently-existing steam plants installed on the system of these [16658] customers.

Q. Has Penn Water relied almost entirely on the steam plants of Consolidated Gas Electric Light and Power Company of Baltimore to firm up its hydro capacity? A. No, for the reason just given, these steam plants have not firmed up Penn Water's hydro capacity. The Penn Water and Safe Harbor capacity has been firmed up and is being firmed up on the system loads themselves. However, for the reasons given in my re-direct testimony, Penn Water has been obtaining a large part of its supplemental supply from Baltimore Company merely because the incremental cost of such supplemental steam supply was slightly lower than the cost of procuring such supplemental supply from its northern customers. However, this situation may have been temporary and is very likely to reverse in the near future with the completion of additional highly-efficient and economical generating capacity on the systems of the northern companies.

* * *

[16660] Q. Could Penn Water depend on interchange energy arrangements for obtaining the necessary supplemental steam energy to meet its firm power obligations in conjunction with the hydro supply from the Holtwood and Safe Harbor developments? A. Yes, its present contracts covering interchange energy and other interchange services are sufficiently [16661] flexible, yet comprehensive, and its operations under those contracts are so well understood by all parties, that Penn Water could depend on such interchange energy arrangements to provide for the necessary supplemental energy even though Baltimore, for any reason at all, was unable or unwilling to provide such supplemental supply during those times when it was more economical to obtain such supply from Baltimore.

Q. At page 1252, line 22, Mr. Thomas testified as follows: "I am confident that Holtwood Company could not

and would not depend on interchange energy for firming up its hydro supply. Putting it in another way, Holtwood Company would not and could not purchase interchange energy on a when, as and if basis and resell it as firm power." Does Holtwood Company purchase interchange on a when, as and if basis and resell it as firm power? A. Yes, it does.

Q. In your opinion is there anything unusual or improper in such procedure? A. No. Penn Water is always in a position to supply its firm power commitments from its own resources in any emergency created by a temporary failure of the supply which Mr. Thomas characterizes as "when, as and if."

Q. Has the Federal Power Commission ever given recognition to such use of supplemental energy? A. Yes. F.P.C. in its instructions relating to Schedule [16662] 2 of its Form 12 Annual Power System Statement provides that "Contracts for purchase or interchange of off-peak energy also may be taken into account" in presenting "a realistic picture of the potential energy and capacity of system hydroelectric plants."

Q. From where does Penn Water obtain most of the supplementary supply which is needed and which we might speak of as available on a "when, as and if basis"? A. From Baltimore Company, but only because under present conditions it is the most economical source.

Q. Is Baltimore Company obligated to furnish this service? A. Only up to the limit of its available generating capacity located in plants in operation at the time.

Q. That is in accordance with Article 6, Item H, is it not? A. Yes.

Q. Does Baltimore Company at times obtain energy from others for supply to Penn Water and Safe Harbor? A. Yes, from Potomac Electric Power Company.

Q. Is such energy received by Baltimore Company from Washington Company as firm or as interchange energy? A. Interchange energy.

Q. So Baltimore, itself, is then using interchange energy from Potomac Electric Power Company to supply what Mr. [16663] Thomas would have you consider as a firm service from Baltimore to Holtwood Company. Is that right? A. Yes, except that I do not agree with Mr. Thomas that backfeed services under Article 6 are or should be considered in the nature of a firm service.

Q. Do other utilities make use of interchange purchases on a "when, as and if" basis to supply their "firm service obligations"? A. Yes, frequently. Where a utility is in a position to reduce its operating expense by interchange purchases, it follows this practice.

Q. Is it always economy that dictates the use of interchange for such purpose? A. No, it is sometimes necessity which dictates such use of interchange to supplement deficiencies in the resources available to the purchaser of the interchange. Such interchange transactions are made under the emergency provisions of the interchange agreements.

Q. Does Baltimore Company purchase large amounts of interchange energy on a "when, as and if" basis from Washington Company? A. Yes, it does.

Q. And, is such supplemental energy at times used to supply its own system load requirements? A. Yes.

[16664] Q. Are the hydro companies taking any unusual risks when they depend on "when, as and if" available energy to meet their firm obligations? A. No. It is inconceivable that the interconnected companies would be deficient in energy during the off-peak hours and that is the only time when the hydro companies are interested in purchasing economy interchange as supplemental energy.

Q. Are the hydro companies contributing to the overall system economy when they use "when, as and if" available energy to meet their firm obligations? A. Yes, they are. Optimum use of the hydro capacity and energy requires peaked operation in low-flow periods as was shown in Exhibit 8. There is certainly no need or justification for

making a firm arrangement for a service that can satisfactorily and economically be obtained as interchange. Such arrangement would simply increase the cost of the firm power services and such increased costs would then have to be passed on to the customers of Penn Water and Safe Harbor.

Q. Is it necessary for any of Penn Water's and Safe Harbor's customers, including Baltimore Company, to install capacity in addition to that required for their own purposes, to enable them to supply the backfeed required by Penn Water and Safe Harbor? A. No, it is not.

* * *

[16665] Q. Is it necessary that any one of your customers be in a position to provide you all the backfeed you may from time to time require? A. No, it is not. It is only necessary that we obtain such backfeed from all our customers collectively.

Q. Are there wide variations in the annual amounts of hydro energy obtainable from the Susquehanna River from the [16666] Holtwood and Safe Harbor hydro plants? A. Yes, the river flow varies quite widely, and the energy obtainable is generally in direct proportion. We recently experienced in the year 1945 an excess generation of about 500 million kilowatt hours, which is approximately 30% in excess of the expected generation for an average flow year. On the other hand during the year 1941 there was a deficiency in generation, that is, generation less than expected on an average flow year of about 400 million kilowatt hours, which is about 25% less than normal generation. The river flow experienced in 1946 was very near to the expected average flow.

Q. When the 1931 Power Agreements between Penn Water, Safe Harbor and Baltimore were negotiated, and I am referring to the contracts identified as Items E, F & G and H and I, was it then recognized that there would be fluctuations in the annual amount of energy obtainable from

these hydro plants from year to year? A. Yes, it was.

Q. And was it expected that the full effect of these energy variations would affect Baltimore Company only? A. Yes.

Q. Does Baltimore Company now experience the full effect of such fluctuations in electric services? A. No, not entirely, because the M.E. contract, [16667] Exhibit 72, provides that M.E.Co. shall receive under that contract amounts of energy varying to a large extent with river flow. So that to the extent that M.E.Co.'s supply fluctuates with river flow, Baltimore Company's supply is less affected by such fluctuations.

Q. Did Baltimore Company appreciate and recognize that its operating expenses would similarly fluctuate with river flow because of the varying amounts of steam generation necessary? A. Yes, it did.

Q. Were the payments to be made by Baltimore Company under the contracts identified as E, F & G and H and I established in recognition that there would be such fluctuations? A. Yes, they were so established and in particular Exhibit A of Item H clearly shows that an adjustment was made to correct 1930 revenues for average flow conditions as a basis for future payments.

Q. Mr. Spaulding, is it your opinion that the usable capacity from the Holtwood and Safe Harbor hydro plants varies from year to year as widely as the variation in energy generation you have just referred to? A. No, indeed, there is nowhere near the variation in usable capacity. In fact, the variations in river flow from year to year have a very small effect on the use made of [16668] the hydro capacity available to Baltimore Company. Certainly, the availability of capacity on a twenty-four hour basis would vary, but this is not a measure of use or availability of capacity for system operations. When looked at from the viewpoint of use made of capacity, I find the variation from year to year only a fraction of the variation in hydro energy.

[16669] Q. At page 1255, Mr. Thomas testified that "Baltimore Company assumes definite risks and obligations which are not undertaken by the Pennsylvania customers of the Holtwood Company." Is that statement correct? A. Baltimore Company may have assumed certain obligations under our contract, identified as Items H and I, not undertaken by the Pennsylvania customers, but any risks and obligations there may have been are not a burden on Baltimore Company today. It must also be recognized that Baltimore Company then obtained and today still has available to it very definite advantages and benefits not available to the other customers of Penn Water.

Q. At the same page, Mr. Thomas also stated that "as the residual receiver, the contractual supplier of backfeed steam electric energy, the underwriter of the system operations, the risktaker and the contractual guarantor of Holtwood Company's earnings, Baltimore Company is not comparable to the Pennsylvania customers." Do you agree with that statement? A. Baltimore Company is the residual receiver—both companies understood that at the time the contract was made. There are advantages to Baltimore Company in such a position. Baltimore Company is one of several suppliers of supplemental energy, but I do not agree that as a supplier it is in any different position, in fact, than any of the other several [16670] interchange customers of Penn Water; and there is no actual burden to Baltimore Company in so doing. Rather, Baltimore Company, in addition to obtaining the savings resulting from such interchange transactions, obtains all of the economic advantages of the coordinated operations of the Penn Water-Safe Harbor and Baltimore systems; advantages that are not available to the other customers of Penn Water. I do not agree that Baltimore Company is the risktaker and the contractual guarantor of Penn Water's earnings.

Q. Why do you state that you do not agree that Baltimore Company is the risktaker and the contractual guarantor of Penn Water's earnings? A. First, because

Article VII of the 1931 Supplemental Agreement, identified as Item H, largely relieves Baltimore Company of such risks. Second, because through the several other terms of this contract, certain other protections are available to Baltimore and which it has exercised. Third, because Baltimore Company has recourse to regulatory authority as to the reasonableness of the charges for the services received.

Q. Has Baltimore Company ever been relieved of a portion of the payments provided for under the 1931 Agreement? A. Yes, it has.

Q. In what connection? A. As the result of the 1936 flood, Baltimore Company [16671] was relieved of certain payments and other obligations.

Q. By how much was Baltimore Company's payments reduced in 1936? A. Baltimore Company received a credit of $29,873 as compensation for its own cost of producing or purchasing the replacement of electric services lost. Penn Water incurred maintenance expenses, directly or indirectly related to the flood, of $125,493 which were credited to the charges otherwise payable by Baltimore Company. Penn Water also made net additions to its plant, based on its experience during the flood as a precautionary measure to protect future services, amounting to approximately $483,000 which were subsequently excluded from the "cost of net additions" used in the computation of annual payments thereafter.

Q. You stated that any risks and obligations there may have been, are not a burden to Baltimore Company today. Will you explain this statement? A. In my opinion a risk or an obligation is only of significance when there is a direct cost or a hazard of cost or loss relating thereto. Penn Water's stockholders alone are affected by the hazards as respects property loss, loss in revenue, reduction in return, and the hazards of extraordinary or unusual costs incurred.

Q. Will you explain? A. Penn Water's stockholders, for example, assumed [16672] the costs and losses in

revenue resulting from the 1936 flood. Penn Water's stockholders alone have the risks and hazards to property and loss in revenue resulting from war, strikes, major catastrophes and any other causes of like nature beyond the control of either party, and I am here referring to Article VII of the contract identified as Item H. Penn Water's stockholders alone have the risks and hazards from competition including Government hydro developments on the Susquehanna River or in the general geographic area and from any other forms of government subsidized power developments. Penn Water's stockholders have the risks and hazards of costs or loss in revenue that may result from damage to the transmission lines between Safe Harbor and Baltimore, and I am here referring to the first paragraph of Article VII of the contract identified as Items E, F and G.

Q. What burdens does Baltimore Company have under these power contracts? A. Any burden that Baltimore Company may have, results from fluctuations in river flow. However, such additional costs in the low flow years are substantially averaged out over a period of years with the additional benefits obtained in high flow years so that any detrimental effect there may be is limited to the disturbances caused in the regularity of Baltimore Company's operating expenses and resultant earnings from year to year, and this fluctuation of earnings could [16673] be eliminated through the use of an equalization reserve. From a long range point of view, even without such equalization reserve, the resultant effect is negligible. Furthermore, the effects of any such fluctuations are in large part mitigated through Federal and State income taxes whereby the governments assume a portion of the burden of equalizing operating expense fluctuations through income taxes.

Q. Have any early risks and obligations that Baltimore may have had, disappeared? A. Yes. Whatever may have been the risks or burdens in the past affecting Baltimore Company as a special customer through the present form

of contract, the economic changes in the past decade have made Penn Water's hydroelectric services more valuable in relation to the steam sources of supply available to Baltimore Company. Baltimore Company has already taken steps in an attempt to limit the present hydro supply to the Pennsylvania customers, in order that such hydro supply may be profitably available for Baltimore Company's own use. The effects of a further increase in the level of labor costs and coal prices will affect steam production costs relatively more than hydro production costs because of the relatively small amount of labor required for the hydro service. The trend of taxes appears to be downward. All of these factors tend to make the hydro service more attractive and desirable to Baltimore Company.

[16674] Q. What steps has Baltimore Company taken to limit the present hydro supply to the Pennsylvania customers? A. During the past six months, Baltimore Company has presented requests to Penn Water at conferences and in writing to terminate or limit the services supplied Metropolitan Edison Company, Pennsylvania Power & Light Company and the Coatesville Division of Philadelphia Electric Company, under the respective firm power contracts with such companies.

MR. SPARKS: I would like to have a group of letters between Penn Water and Baltimore Company marked for identification.

(The letters referred to were marked Exhibit No. 370 for Identification.)

By MR. SPARKS:

Q. Are these the letters you referred to with certain related correspondence? A. Yes.

Q. In the event that the firm power contracts with Metropolitan Edison Company, Pennsylvania Power & Light Company and Philadelphia Electric Company, are terminated, for any reason, would the transmission facilities now being used to supply these Pennsylvania cus-

tomers cease to be of use? A. No. None of such transmission facilities would cease to be used. Even in such eventuality as you mentioned, all of these transmission facilities would continue to be used [16675] and useful for interchange services between the several interconnected companies.

Q. Can you now foresee the possibility of these facilities being superseded by other higher voltage facilities? A. No. Even though a 220 Kv. interconnection were provided between Safe Harbor and the existing 220 Kv. network of these northern companies, such new interconnection facilities would not materially reduce the usefulness of the existing facilities.

* * *

[16676] Q. In considering the costs of service from a steam electric generating plant, what general classifications of those costs can usually be made? A. One can and does usually class certain of the plant costs as fixed costs and the balance as variable costs.

Q. Is this classification of costs as between fixed and variable a rigid one? A. No, to a certain extent it must be a matter of informed judgment.

Q. What is the purpose of making a separation of variable and fixed costs? A. Generally for use in economic studies necessary for system planning and for operations accounting. The fixed costs may or may not all be considered to be capacity costs and certain variable costs may not all be considered to be energy costs.

Q. You have referred to certain costs being related to capacity and certain costs being related to energy. Would you make any allocation for costs relating to other attributes of electric service, such as spinning reserve, power factor cooperation, voltage and frequency? A. It is not generally necessary to make a specific allocation of the costs for those other attributes, although there are very definite costs incurred in supplying them. However, if the [16677] costs of such special services were to be considered

in determining a rate for such services, it would then be necessary to segregate them.

Q. Can an analogous treatment be applied in the determination of hydroelectric plant costs? A. Yes. It is similarly necessary to consider the various services furnished from a hydroelectric development, the relative amounts thereof, and to consider the investment costs, as well as the operating costs incurred in providing those services. Not the least consideration is the purpose for which the hydro plant was constructed, the relative demands for use and uses made of these several services today. A hydro plant may be used to provide peaking capacity with a very small amount of annual energy, yet this plant may be continually used for spinning reserve, voltage and frequency regulation, and power factor regulation. For such a plant most of the fixed costs incurred should properly be considered as capacity costs. On the other hand, hydroelectric plants such as those at Niagara Falls and at Beauharnois on the St. Lawrence River, near Montreal, have almost a 100 percent use factor, i. e., generators are fully loaded throughout the year, and it would, in my opinion, not be proper to consider all of the fixed costs of those plants as capacity costs. If, however, a hydro plant was economically provided in conjunction with a flood storage project where the plant was only operative at times of flood, the fixed [16678] charges would all be allocable as energy costs.

Q. In addition to the purpose for which a hydro plant is built, or is being used, are there any other considerations which make it improper to use all fixed costs as capacity costs? A. Yes. Generally I have in mind that certain fixed costs are incurred specifically in connection with the production of energy and contribute nothing to the amount of capacity available.

Q. Can you illustrate this situation? A. There are many hydro projects in the United States with dams several hundred feet in height built for the purpose of creating large storage reservoirs which are used for sea-

sonal drawdown. The maximum drawdown of the reservoir level at such a plant may be as much as 100 feet which occurs at the end of the low water season of the year which may also be the peak load season. This fact, and perhaps other considerations, frequently lead to installation of generator capacities sufficient to utilize the full turbine output at operating heads experienced under such drawdown conditions. In other words, the full electric capacity of the plant is actually used when the reservoir is at or near minimum drawdown elevation. For such projects the fixed costs chargeable to capacity might properly be the approximate costs necessary for a dam much smaller than that provided for maintaining [16679] adequate storage capacity, and the difference in the cost of the two dams together with differences in costs for flowage basin property, highways, and bridge relocations may be a substantial part of the total project cost incurred not for the use to be made of capacity but for the use to be made of the energy services.

Q. Can you give a similar analogy for medium or low head plants, such as those at Holtwood and Safe Harbor? A. Yes. When the Safe Harbor plant was under consideration and economic studies were being made to support its justification, no serious thought was given to the installation of the same amount of capacity at an extended power house at Holtwood, although capacity could have been provided there equal to that installed at the Safe Harbor plant for a fraction of the cost of the Safe Harbor project. The same amount of spinning reserve, voltage regulation and power factor regulation could also have been so obtained, but the amount of energy available from such capacity installation at Holtwood would have been less than one-half of that obtainable from the Safe Harbor development.

Q. Would the difference in cost between the Safe Harbor project and installation of the same amount of capacity at Holtwood be any measure of the cost incurred for energy at the present Safe Harbor plant? A. I think it might properly be so considered, but I [16680] did not approach

it from this point of view. I did, however, recognize the fact that the amount of capacity provided at Safe Harbor was not provided for capacity alone, rather it was provided to obtain the relative amounts of capacity, energy and the other attributes of electric service as were then expected to be needed by and useful to its several customers. To ignore these factors in any cost allocation is not being realistic.

Q. On page 11182 of the record, Mr. Davis testified that all of the investment costs associated with the steam plant are costs which have a function of providing capacity. Is it a fact that all of the investment costs associated with the Holtwood steam plant have the function of providing capacity? A. Certainly not. I have in mind particularly the investment in boiler plant, coal preparation plant and coal recovery facilities, and possibly also the investment in circulating water tunnels, pumping capacity and condenser capacity, where a very much smaller cost would have been necessary had it not been desired that the Holtwood plant operate for long continuous periods at maximum plant output, i e., on base load. Many steam plants in the country today are designed and built with undersized boiler plants because it was recognized that the boilers would only be loaded to full capacity, or overloaded, for a relatively few hours each month. Certainly [16681] it is not a fact that all of Holtwood steam plant investment was made to provide capacity.

Q. Mr. Davis showed in his Exhibit 64, Table 5, line 26, a figure of $19.22 per kilowatt and a figure of 1.43 mills per kilowatt hour. In your opinion are these figures representative of a realistic cost per kilowatt and per kilowatt hour of the services supplied by Penn Water? A. Without agreeing with his method of computing capacity for the purpose of deriving a cost per kilowatt, and after adjustment for the errors in his determination of energy used in deriving his cost per kilowatt hour, in my opinion his cost per kilowatt and cost per kilowatt hour are entirely unrealistic.

Q. Are all of the costs of Safe Harbor incurred in connection with the rendering of electric services to the Pennsylvania customers, including the services rendered to the Pennsylvania Railroad by Safe Harbor, included by Mr. Davis in his Exhibit 64? A. No, they are not.

Q. What costs, if any, of Safe Harbor were included by Mr. Davis in his Exhibit 64? A. Only those costs of Safe Harbor represented by an assumed bill rendered to Penn Water were included by Mr. Davis in line 2 of Table IV of Exhibit 64. Mr. Davis did not use the actual total costs of Safe Harbor in computing [16682] such assumed bill, but rather a much reduced cost based on a lower rate of return than provided under that contract.

Q. Were the costs used by Mr. Davis in his Table IV of Exhibit 64 related to the services actually rendered? A. No, they were not. The costs used by Mr. Davis were taken to be only one-third of such total assumed costs of Safe Harbor, but the services rendered by Safe Harbor to the Pennsylvania customers jointly with Penn Water and to the Railroad jointly with Penn Water and Baltimore were greatly in excess of one-third of the total electric services rendered by Safe Harbor in that year. As a result the costs incurred by Safe Harbor in rendering services to Penn Water and to its Pennsylvania customers were greatly in excess of the one-third of Safe Harbor's assumed costs.

Q. At page 10847, Mr. Davis testified that Baltimore Company is standing back of the peaks of the firm power obligations of Penn Water and Safe Harbor to others. Is this an accurate statement of the facts? A. It is not. Baltimore Company has no obligation in connection with any of the firm power obligations of Penn Water and Safe Harbor to their Pennsylvania customers. Baltimore Company does have an obligation to the Pennsylvania Railroad jointly with Penn Water and Safe Harbor. Baltimore Company stands back of nothing with respect to Penn Water and Safe Harbor's obligations to their Pennsylvania customers, [16683] except its agreement to provide back-

feed energy as supplemental energy to Penn Water during the hours when Baltimore Company can do so from generating units in plants that are otherwise operating, that is, that are otherwise required by Baltimore for its own uses.

Q. At page 11100 of the record, Mr. Davis testified with respect to the use of energy generated at Safe Harbor and Holtwood by the installed capacity available in excess of what he determined to be the dependable capacity of the Holtwood and Safe Harbor plants, and further stated that such energy was used by all of the customers just as any other energy. Who in fact uses such energy? A. Assuming first that there is energy generated from capacity installed in excess of the dependable capacity of these plants, such energy is, in fact, used either for delivery to Baltimore Company or for delivery in connection with interchange transactions.

Q. Then, none of such excess energy is used in connection with the firm power obligations of Penn Water and Safe Harbor to their Pennsylvania customers? A. That is correct.

Q. Is there any justification for eliminating the costs associated with construction work in progress and plant held for future use in connection with any cost allocation of the services rendered by Penn Water? [16684] A. No, there is not.

Q. Why not? A. Most of the properties and facilities, the costs of which are included in construction work in progress, are or shortly will be in use. Any cost allocation made should relate to the actual costs for service now and in the near future. Certain investments now being accumulated in connection with contemplated projects are classified as property held for future use. We are acquiring, as opportunity presents, the necessary right-of-way for transmission lines under a definite plan of use. Investments are also being made for future use in connection with an additional hydroelectric development. By the very nature of such latter plans, it is necessary for this company

to acquire lands and other property over a period of many years. To do otherwise would naturally increase the purchase price of such properties.

Q. In Table III-a of Exhibit 64, Mr. Davis eliminated for cost allocation purposes certain expenses incurred by Penn Water for administration and general expense. What are the facts in respect to this expense for the year 1944? A. Referring to Exhibit 18, being Penn Water's bill to Baltimore Company for services rendered under contract identified as Items H and I for the year 1944, there is an item (x) entitled "Miscellaneous Credits" in an amount of $9,703.62. This amount was treated as a deduction in the [16685] determination of the annual charges to Baltimore Company. This is the amount that Mr. Davis used as a reduction to Penn Water's expense in his Table III-a of Exhibit 64. The amount so treated in the 1944 bill as rendered, was made up of three items: a portion of the directors' fees, a portion of the costs incurred for use and occupancy insurance, and the salary of one employee.

These items of general expense were excluded from the power bill by agreement between the parties and for the following reasons:

Penn Water's directors' fees were in that year greater than those paid by Baltimore Company to its own directors, and Baltimore Company urged us to deduct that portion of such expenses in excess of the amounts Baltimore Company paid to each of its directors. Penn Water agreed in such connection to deduct from the bill an amount of $4,065 for the year 1944, but without agreeing that its fees paid to its directors were unreasonable or were not proper operating expenses. Certain use and occupancy insurance relating to loss of revenue from fire and sabotage, was carried by Safe Harbor and Penn Water during the war years. Such expenses were recognized by Baltimore Company as proper operating expenses, but Baltimore Company felt that such insurance was in part a protection to Penn Water against loss of revenue under the general catastrophe

clauses of the respective contracts E, [16686] F and G and H and I. Penn Water agreed to deduct from the annual bill for the year 1944 an amount of $3,211.87, being one-half of the costs of such U. and O. fire and sabotage insurance carried by Safe Harbor Company plus one-half of only the U. and O. sabotage insurance carried by Penn Water, but Penn Water did not agree that such insurance costs were not proper operating expenses. Penn Water further agreed to deduct from the annual bill an amount of $2,426.75, relating to the salary and expenses of one of its employees, but did not agree that such expenses were not proper operating expenses.

Q. What were the amounts included in the item entitled "Miscellaneous Credits" being Item (x) of the power bills for years 1945 and 1946? A. In the year 1945 the amount in Item (x) which was treated as a deduction in the determination of the annual charges to Baltimore Company was $11,238.38 and in the year 1946 the amount was $15,283.28. The differences in the three years, 1944, 1945 and 1946, were largely the result of an increase in amount of expenses for directors' fees so deducted and a decrease in the cost of use and occupancy insurance for 1946 due to the cancellation of certain wartime insurance.

Q. In Exhibit 64, Table IV at line 2, Mr. Davis shows as Penn Water's payment to Safe Harbor Company an amount of [16687] $992,535. By reference to Exhibit 17 it would appear that Safe Harbor's bill to Penn Water for the year 1944 was $1,214,553.53. What was the actual amount billed by Safe Harbor to Penn Water and paid by Penn Water under Items E, F and G in 1944? A. $1,214,553.53.

Q. Were such charges, made by Safe Harbor to Penn Water, provided for in a contract on file with the Pennsylvania Public Utility Commission? A. Yes. The contracts identified as E, F and G in these proceedings have been filed with Pennsylvania Public Utility Commission by Safe Harbor Company and designated by that Commis-

sion as Safe Harbor Tariff No. 1, including Supplement No. 1 thereto. This same contract has also been filed with the Pennsylvania Public Utility Commission by Penn Water and designated by that Commission as Pennsylvania Water & Power Company Tariff No. 5, including Supplement No. 1.

Q. Has the Pennsylvania Public Utility Commission ordered Safe Harbor Water Power Corporation to reduce its charges to Penn Water for the year 1944 or for any subsequent year? A. It has not.

Q. Beginning at page 11233 of the record, Mr. Davis testified with respect to the actual capacity available from the Safe Harbor-Holtwood system at the times of various system peaks.

[16688] Have you prepared a tabulation showing the actual capacity available and in use for the Safe Harbor and Holtwood power developments for the years 1944, 1945 and 1946, at the time of the Area 6 annual system peak, and at the time of Safe Harbor-Penn Water system peak? A. Yes, I have.

MR. SPARKS: I ask that this tabulation be identified as Exhibit No. 371.

(The document was marked Exhibit No. 371 for Identification.)

By MR. SPARKS:

Q. Is this the tabulation you have prepared? A. Yes.

Q. What other information is shown on this exhibit? A. I have also shown the amount of capacity available and in use at the Holtwood hydro plant, at the Holtwood steam plant, and at the Safe Harbor hydro plant at the time of the various system peaks shown. There is also shown on the lower portion of the exhibit the maximum annual capacity available and in use at the Holtwood power development and at the Safe Harbor development for each year,

for comparison with the amounts of capacity available at the time of the system peaks.

Q. Have you also prepared a tabulation showing the actual firm power demands of the Pennsylvania customers on [16689] Penn Water-Safe Harbor system for the years 1944, 1945 and 1946, at the time of the Area 6 annual system peak, at the time of the Safe Harbor-Penn Water system peak, and at the time of maximum output from the Holtwood power development, together with the maximum requirement of each Pennsylvania customer including the Pennsylvania Railroad requirements on the Divisions of the Railroad's electrification normally supplied by Penn Water, Safe Harbor and Baltimore Company? A. Yes, I have.

MR. SPARKS: I ask that this tabulation be identified as Exhibit 372.

(The document was marked Exhibit No. 372 for Identification.)

By MR. SPARKS:

Q. Beginning at page 11236, Mr. Davis testified with respect to statements in the FPC Form No. 12 "Power System Statement" for 1945, filed by Consolidated Gas, Electric Light and Power Company of Baltimore as the "Pool" report which purports to include data obtained by them respecting the operations of the power systems of Potomac Electric Power Company, Penn Water and Safe Harbor, and the power facilities of the Bethlehem Steel Company in Baltimore. Is all of the data relating to the operations of the Safe Harbor-Penn Water system shown by them in this 1945 Pool Report, shown in the manner supplied to Baltimore Company by Penn Water and Safe [16690] Harbor? A. No, it is not.

Q. In what respect does this "Pool" report filed by Baltimore Company include data different from the information reported or supplied by Penn Water and Safe Harbor to Baltimore Company for the purpose of prepar-

ing such "Pool" report? A. The amounts shown in Baltimore Company's "Pool" report to the Federal Power Commission, Form 12, for the dependable capacity of the Holtwood and Safe Harbor plants are different from the information supplied to Baltimore Company. The dependable hydro capacity of the Safe Harbor and Holtwood plants reported in this "Pool" report by Baltimore Company is not the information supplied to them in writing for such purpose, is incorrect in my opinion, and this fact was called to Baltimore Company's attention in writing at the time.

MR. SPARKS: I ask that the copies of letters of May 28, June 3 and June 5, 1946, be marked as Exhibit 373.

(The letters were marked Exhibit No. 373 for Identification.)

By MR. SPARKS:

Q. Are the copies of the letters in Exhibit 373 the correspondence you have just referred to? A. They are.

Q. Beginning at line 15 of page 1192 of the record, [16691] Mr. Davis testified that the capacity available for Baltimore Company from Penn Water and Safe Harbor is not a measured quantity. Is it possible to measure and determine the maximum demands by Baltimore Company on the Holtwood-Safe Harbor system? A. Yes.

Q. When generally do the maximum demands occur? A. During those higher river flow periods of the year when the hydro capacity is fully loaded and the load demands of Penn Water's and Safe Harbor's other customers are off peak. While such occasions may occur during the early morning hours, the demands of Baltimore Company on the Penn Water-Safe Harbor system during many other periods of the same days and at other times during the year are only a few thousand Kw. less.

Q. Is it more difficult to determine Baltimore Company's maximum demands than it is to determine the maximum demands of the Pennsylvania firm power customers?

A. It is no more difficult to determine such demands because they are measurable quantities.

Q. Are such metered maximum demands the all measure of the capacity services rendered to Baltimore Company? A. No.

Q. What other factual data must be considered? A. It is necessary to determine from operating records, [16692] the additional amounts of capacity and spinning reserve that was available. Such additional capacity services are only available to the other customers of Penn Water and Safe Harbor on an interchange basis.

Q. Will you explain the use made by Baltimore of such maximum demands and of the other capacity services in meeting its own system load requirements? A. First, Baltimore Company uses such maximum demands of power and energy to carry its own peak load requirements in the manner described, both in my Exhibit No. 8 and by Mr. Thomas in his Exhibit No. 69; secondly, the dependence generally on the Penn Water-Safe Harbor capacity for reserve capacity in part as spinning reserve and in part as cold reserve, and third, during those periods of average river flow when Baltimore's steam capacity is taken out of service for inspection and maintenance.

Q. Does Baltimore regularly depend on Penn Water and Safe Harbor for capacity services, when it is necessary to remove its steam generating equipment from service for maintenance work? A. Yes, that has always been a recognized use of Penn Water and Safe Harbor capacity both in the system planning and in preparing advance schedules of the capacity requirements of Baltimore Company.

Q. In what manner does Baltimore plan in advance to [16693] make use of Penn Water and Safe Harbor capacity in connection with its steam plant maintenance? A. The operating departments of Baltimore Company, Potomac Electric Power Company, Penn Water and Safe Harbor each year collaborate in preparing a maintenance

schedule covering all outages of major steam generating plant equipment that may need be scheduled for routine overhaul, inspection or repair. This schedule is first prepared in the third quarter of the year for the following year and is revised from time to time, as necessary, due to changing river flow conditions or to adjust for interruptions caused by changes in operation or in equipment conditions that occur throughout the year.

MR. SPARKS: I ask that these three steam plant maintenance schedules be identified as Exhibit 374.

(The documents referred to were marked Exhibit No. 374 for Identification.)

By MR. SPARKS:

Q. Are the sheets which have just been identified as Exhibit 374 several of the recent maintenance schedules prepared by Baltimore Company just referred to by you? A. Yes, they are the steam maintenance schedules as originally prepared by Baltimore Company in collaboration with the other operating people mentioned. The heavy dark line on each chart is the original prearranged outage schedule [16694] of steam plant facilities affecting capacity. There is included in Exhibit 374 such charts for the years 1944, 1945 and 1946. The original schedules were revised from time to time during the year and the hatched areas are the resultant changes in the original outage schedules. However, it should be pointed out that the actual capacities shown as scheduled out of service are exclusive of forced outages occurring during the same periods which at times were as much as 100,000 Kw. greater than the amounts shown on this exhibit. I desire to point out that in the preparation of the original maintenance schedules and the revisions made thereto, it was necessary to arrange for such scheduled outages at times when there would be the necessary capacity margins available on these systems. The capacity margin available for such outages in turn is related to expected river flow conditions. Con-

sideration was and is given, not only to the load carrying capacity of the hydro plants with most adverse river flows, but to the capacity margins available on the system with river flows for each month that can be expected to occur at least 90 percent and 75 percent of the time.

Q. Can the river flows be predicted sufficiently far in advance for the operating people to arrange for the outages of steam capacity for a two-week period? A. Yes. It is the regular practice of the hydro companies' hydrographic observer to maintain a running estimate [16695] of river flow for a seven-day period and, in collaboration with the weather bureau, to predict river flows for a two weeks' period. We are also able to predict, based on ground water observations, the assured flow that can be experienced in the absence of any rainfall for periods of four to six weeks in advance. However, we are concerned in scheduling steam capacity outages, only with possible reductions in river flow during the time a large sized steam unit will be out of service for maintenance and it is most infrequent that we experience any very sudden drop in river flow that cannot be forecast with reasonable accuracy two weeks in advance.

Q. Is the two weeks' estimate of river flow sufficient for scheduling the outage of steam generating capacity? A. Yes, it is. The maximum outages of steam generating equipment shown on Exhibit 374 are the result of scheduling outages of several generating units or boilers at the same time. One of such units may be scheduled out of service for overhaul for a period of from four to six weeks, but certain of the other equipment scheduled for outage during the same period can always be returned to service on one week's or shorter notice if required due to forced outage of other steam capacity. This is the reason that it is continuously possible to take advantage of river flows in excess of the most adverse conditions for a large portion of the scheduled outages of steam capacity on this interconnected [16696] system.

MR. SPARKS: I ask that this be identified as Exhibit 375.

(The document was thereupon marked Exhibit No. 375 for Identification.)

By MR. SPARKS:

Q. Are the diagrams shown in Exhibit 375 the underlying data used by the companies in the preparation of the schedules incorporated in Exhibit 374? A. They are.

Q. And, it is this background information which supported your statement that the maximum outages of steam generating equipment are the result of scheduling outages of several generating units or boilers at the same time? A. That is correct.

Q. Will you indicate two examples from Exhibit 374 when actual outage of steam generating capacity was considerably greater than would have been possible had most adverse river flows been experienced? A. During January, 1944, there was actually 82,000 kw. of steam generating capacity out for maintenance. With most adverse river flow the desired capacity margin would not have permitted any outage of steam capacity during this period. Again during the first part of January, 1945, there was actually 96,000 kw. capacity out for maintenance while, [16697] had minimum river flows been experienced, the capacity margin as shown would indicate that such outages would have been limited to 39,000 kw., assuming no forced outages of steam capacity.

Q. Is there also similar coordination between the utility companies operating in FPC Area 6 and the northern customers of Penn Water and Safe Harbor in their scheduling of steam generating equipment outages? A. Yes, all of the companies on the interconnected system along the eastern seaboard between the Hudson and Potomac Rivers coordinate their steam plant maintenance schedules to a very large extent. It was largely because of this fact that the unprecedented war loads were carried and still

permit all essential maintenance work to be carried on. This coordination of maintenance schedules is only one of the several advantages of coordinated operation and each of such interconnected companies is continually kept informed as to the actual conditions and to the forecast of the Susquehanna River flow, because it is with the regularly experienced flows in excess of most adverse conditions that have made it possible for these companies to maintain their equipment with the growth in loads experienced.

Q. Has Mr. Davis ignored these factors in his allocation of capacity? A. Yes, he has, and I want to point out that altogether [16698] too much emphasis has been laid by Mr. Davis and at times by Baltimore Company on the amounts of hydro capacity available on the system with most adverse river flows.

Q. Is the hydro dependable capacity determined for most adverse flow conditions any measure of the actual use made of the available capacity of Safe Harbor and Penn Water? A. No. The use made of the capacity of Penn Water and Safe Harbor has been greatly in excess of these so-called "most adverse flow conditions" and in my opinion such minimum value of hydro capacity is no basis for a capacity allocation or a cost allocation related thereto. It is the use made of this capacity that should be considered in this connection and not what might have been available under some abnormal condition that occurs once in fifty years. To do otherwise is to ignore the realities of the situation. Anyone looking at a graphical picture of the use made of Safe Harbor and Holtwood hydro capacity during the last three years or even of the use made of such capacity in 1941, which was one of the lowest flow years on record, can scarcely avoid the recognition of these facts.

Q. Have you prepared such a graphical picture for the years 1941, 1944, 1945 and 1946? A. Yes, I have.

MR. SPARKS: I ask that this document showing combined Holtwood-Safe Harbor daily peaks for 1941,

1944, 1945 and [16699] 1946 be marked for identification as Exhibit 376.

(The document was marked Exhibit No. 376 for Identification.)

By Mr. Sparks:

Q. Will you explain these graphs? A. The heavy dark line generally below the hatched area has been drawn to record the maximum one-hour hydro generation for each day of the year, as shown by the scale at the left, at the Safe Harbor and Holtwood plants. The hatched area shows the generation of the Holtwood steam plant on the same hour of the day. The top of the hatched area, therefore, shows the actual maximum one-hour generation used on the interconnected system either by Baltimore and Washington or by Penn Water's and Safe Harbor's Pennsylvania customers for each day of the year. Such data alone shows the extent to which Penn Water and Safe Harbor's capacity was used in carrying the load requirements of their customers.

Q. Is that the only consideration of the use made of capacity services? A. No. There is also shown on each of these charts a black dot for each day of the year which shows the total amount of capacity actually operating and used in providing capacity services at the Holtwood and Safe Harbor plants. The difference between the capacity operating and the amounts of generation is generally the amount of spinning reserve [16700] used and useful on the system as operating reserve for load swings, protection against forced outages of capacity and load estimating errors, for voltage regulation and power factor cooperation, and for frequency and tie line regulation. In addition to the amounts of operating capacity shown, there were at times certain amounts of idle capacity not running but which were counted upon as reserve capacity by Baltimore and Washington companies, thus making it unnecessary for these companies to operate banked boilers and extra generating units for reserve.

Q. Why can Baltimore, for example, count on units not operating at the hydro plants as reserve, whereas they must have steam units spinning to provide alternative reserve capacity? A. Because the hydro units can be brought up to speed, synchronized with the load and loaded to capacity, all in a fraction of a minute, whereas the more modern steam generating units require from two to four hours to bring from standstill to full load and even the older generating units require at least an hour to make available for carrying load. In fact, if a modern unit were operating at minimum load and there was a sudden demand for its use, it would be necessary to pick up such new demand very slowly, i. e., over a period of approximately one-half hour, in contrast to the ten second time in which the same service can be obtained from a hydro [16701] unit. This operating factor is most important in the event of a forced outage of equipment.

Q. Are there any specific points which you wish to make with respect to these charts? A. Yes, the peak load on Baltimore-Washington system and on the systems of our northern companies have been and still are experienced in November and December. The charts for each year show to what extent utilization was or could have been made of the hydro capacity installed at the Holtwood and Safe Harbor plants during these system peak periods. I also desire to emphasize that during a larger part of each year Holtwood and Safe Harbor capacity in excess of 300,000 Kw. was being utilized on the interconnected system. In 1944, such capacity was utilized on two-thirds of the week days in the year (i. e. exclusive of Saturdays, Sundays and major holidays); in 1945 on over 90 percent of such days; and in 1946 on about 85 per cent of the week-days.

Q. Is the daily use of capacity a significant factor in your consideration of the capacity value of the Holtwood and Safe Harbor developments? A. Yes, it was one of the several significant factors I considered. I believe, how-

ever, a much more important consideration is the weekly use, which perhaps can best be expressed as an average of the maximum weekly use of such hydro capacity. It is a well known fact that the system [16702] load requirements vary from day to day due to temperature, cloudiness, thunderstorms, habits of the people, such as Thursday night shopping, ironing day on Tuesday, etc. It is the weekly peak system requirements which largely determine the use made of the hydro capacity. I have, therefore, had determined from the companies' operating records both the actual amount of hydro one-hour generation and the actual amount of hydro capacity operated at the Holtwood and Safe Harbor power developments on the hour of the Area 6 system peak for each week of each year. From these records, I find that the average weekly use of such hydro generation was 250,000 Kw. in 1944, 290,000 Kw. in 1945 and 272,000 Kw. in 1946, to which must be added the load carrying capacity operating at the Holtwood steam plant. From these same records, I find that the use made of the hydro capacity actually operating in part for system reserve, at the time of these weekly peaks, was 295,000 Kw. in 1944, 316,000 Kw. in 1945 and 298,000 Kw. in 1946, and which again does not include approximately 28,000 Kw. of steam capacity available at the Holtwood steam station. No one can well ignore these facts as to use of these hydro and steam capacity services by Penn Water and Safe Harbor's customers.

Q. Did these facts influence your use of the figures of 295,000 Kw. for hydro capacity and 28,000 Kw. for steam capacity in connection with the capacity values in Exhibit [16703] No. 35? A. Yes.

Q. Beginning at line 2 of page 1195, Mr. Davis testified that the 10,820 Kw. shown by him on Table VI-A of Exhibit 64, and which was later adjusted upwards as a result of errors admitted on cross-examination, should be taken to be the maximum capacity furnished during the year 1944 to Baltimore Company by Holtwood Company. Was more

than this 10,820 Kw., as later adjusted, used by Baltimore Company in the year 1944? A. There certainly was.

Q. What was the actual amount of capacity service furnished by Penn Water and Safe Harbor to Baltimore Company at the time of the interconnected system peak in the year 1944 and by interconnected system peak I mean the peak requirements of Baltimore, Washington and of the Pennsylvania customers of Penn Water and Safe Harbor and including the total requirements of the Pennsylvania Railroad supplied by these companies? A. It was 181,000 Kw. at the time of the peak load requirements of such system in 1944, which occurred at 6:00 P. M. on December 11, being the capacity service actually supplied by Penn Water and Safe Harbor to Baltimore Company at Highlandtown, Westport, Riverside and Takoma Park, Maryland.

[16704] Q. Do you make a distinction between capacity service furnished and the maximum hourly Kwh. delivered at these points? A. Yes, I do.

Q. In arriving at such amounts of capacity service, did you make an adjustment for the actual interchange transactions on those hours between Penn Water and Safe Harbor on the one hand and their Pennsylvania customers on the other? A. Yes, I did. Any interchange deliveries by Penn Water and Safe Harbor at those times could have been made available to Baltimore Company, had such capacity service been required by Baltimore Company. Such adjustment was made by adding to the actual deliveries to Baltimore Company the amounts of interchange delivery to others at that time.

Q. Have you prepared a tabulation showing the years 1944, 1945 and 1946, the actual deliveries to Baltimore at the times of those annual system peaks? A. I have.

MR. SHARKS: I ask that this document be marked for identification as Exhibit 377.

(The document was marked Exhibit No. 377 for Identification.)

By Mr. Sparks:

Q. Does this exhibit also show the actual deliveries of power and energy to Baltimore at the time of the annual [16705] system peaks adjusted for interchange transactions, in the manner you have just referred to? A. Yes, it does.

Q. And does the last column in the upper portions of this exhibit show the capacity service available to Baltimore Company at the time of such annual system peaks? A. Yes, it does.

Q. Have you also shown at the bottom of this exhibit similar amounts of actual delivery and maximum amounts of capacity service to Baltimore in the years 1944, 1945 and 1946, irrespective of the time of the year and irrespective of the system loads at the time? A. I have.

Q. When you refer to the capacity service available to Baltimore Company by Penn Water and Safe Harbor at the time of such annual system peaks, are you including only the capacity available from the Holtwood and Safe Harbor power developments? A. I am.

Q. Are there other capacity services available to Baltimore from Penn Water and Safe Harbor? A. Yes, there are.

Q. What is the nature of such additional capacity service available to Baltimore from Penn Water and Safe Harbor? [16706] A. Penn Water and Safe Harbor might have been able to obtain additional energy and capacity and to have made such additional energy and capacity available to Baltimore as a result of arrangements between Penn Water and its northern customers, Metropolitan Edison, Pennsylvania Power & Light and Philadelphia Electric. However, there were no such services actually being received by Penn Water in the hours shown on Exhibit 377.

Q. Under what conditions would such additional capacity service be available from these northern customers of Penn Water, which Penn Water and Safe Harbor might have made available to Baltimore Company? A. First,

to the extent that these companies may have had additional capacity available at the time of the system peaks shown on Exhibit 377, and, second, as a result of coordinated operations between Penn Water and Safe Harbor on the one hand and these northern companies on the other.

Q. Will you please indicate what you mean by such coordinated operations? A. When greater amounts of hydro capacity can be utilized by operating the capacity and available energy at Holtwood and Safe Harbor on the combined system loads of the utilities operating in FPC Areas 5 and 6, Penn Water and Safe Harbor supply additional interchange energy to their northern customers at the time of such combined system peak and receive [16707] interchange energy from these northern customers in the early forenoon hours and during the evening hours. Any resultant gain in the utilization of hydro capacity without any net use of available energy from such operations is available in part to Baltimore Company as a result of such coordinated operations.

Q. At line 19 of page 1195 of the record, Mr. Davis testified that the 10,820 Kw., which he later adjusted upwards on cross-examination, is comparable to the maximum annual demands of the Pennsylvania customers. Is this correct? A. No, it is not. It is nothing but a hybrid figure that has no comparability whatsoever with the maximum annual demands of these Pennsylvania customers.

Q. Beginning at page 11350 of the record, Mr. Davis testified that he used 40 percent of the York billing demands for the year 1944 in arriving at the 9,000 Kw. firm demand on Holtwood Company, shown in line 18 of Table V-A of Exhibit 64. He described this part of the Edison Light and Power Company as the demand which Holtwood was contractually responsible for. Was Penn Water alone responsible for 9,000 Kw. demand of Edison Light and Power Company in 1944? A. No. Penn Water and Safe Harbor acting jointly as generating companies had the operating responsibility for 40 percent of demand of

Edison Light and Power Company. That was a joint responsibility of both companies and not of Penn [16708] Water alone.

Q. Were any of the firm demands shown on lines 16, 17, 18 and 23 of Table V-A of Exhibit 64 the sole operating responsibility of Penn Water? A. No. Safe Harbor also had an operating responsibility for such demands.

Q. Were any of the firm deliveries shown on lines 8 and 9 of Table V-B of Exhibit 64 the sole operating responsibility of Penn Water? A. No. Safe Harbor also had an operating responsibility for such deliveries.

Q. At Table VI-A of Exhibit 64, Mr. Davis added as a revenue from Baltimore Company to Penn Water, the "Conowingo Backwater Payment" of $133,750. Was this amount of revenue actually received from Baltimore Company? A. It was not.

Q. From whom did Penn Water receive this revenue? A. From the Susquehanna Electric Company, the operating company of the Conowingo Hydroelectric Development.

Q. Are these payments made under the terms of the contract between Penn Water and the Susquehanna Electric Company, identified as Exhibit 235? A. Yes.

Q. What is the date of this agreement? A. The contract was executed on February 20, 1926.

[16709] Q. Was a certificate of public convenience and necessity issued in connection with this contract by the Public Service Commission of Pennsylvania? A. Yes, that Commission issued a certificate of public convenience after investigation in re: Application Docket 15250-1926, and "found and determined that the granting of said application is necessary and proper for the service, accommodation, convenience and safety of the public and that this Certificate is issued, evidencing its approval of said application as set forth in said report and order." This certificate of public convenience was dated by the Commission November 22, 1926.

Q. What revenues did Penn Water receive from the Susquehanna Electric Company in the year 1930? A. $124,500.

Q. Did this agreement between Penn Water and Susquehanna Electric Company specifically provide for increased payments in the years 1931, 1932 and 1933? A. It did.

Q. What payments were provided in that agreement for the year 1933? A. $133,750.

Q. And is that the amount currently being billed to the Susquehanna Electric Company in accord with the terms thereof? [16710] A. It is.

* * *

[16712] Q. What is the present likelihood of Government hydroelectric developments on the Susquehanna watershed or other nearby watersheds that might compete for the present load markets served by Penn Water? [16713] A. So far as I know, there are no such projects now authorized by Congress. However, there are strong proponents, both within and without the Halls of Congress, for the development of the St. Lawrence River for power in tremendous quantities under Federal subsidies and in addition, the Army Engineers have been, within the past six months, actively engaged in resurveying several potential power sites on the Susquehanna River in cooperation with the Federal Power Commission. There are in existence today several comprehensive reports prepared jointly by the Federal Power Commission and the Army Engineers covering hydroelectric power developments on the Susquehanna, Potomac and Delaware Rivers which could be submitted to Congress on relatively short notice should there be a need for major public works. It is an announced policy of our Government to use such public works as an aid to the national economy in periods of business recession.

Q. In your opinion is the threat of Government subsidized competition one of the existing risks of Penn Water? A. Yes. I believe it is a risk and concern to Penn Water.

The fact that the completion date of a Government subsidized hydroelectric development has not been established, is no assurance that such competition will not be encountered or that the risk of such competition is not currently present.

[16714] Q. Mr. Spaulding, have you recently made a determination of the actual costs of Penn Water's and Safe Harbor's firm power services rendered to Baltimore Company for the year 1946? A. Yes, I have.

MR. SPARKS: I ask that this document entitled "Costs of Firm Power Services" be marked Exhibit 378 for identification.

(The document was marked Exhibit No. 378 for Identification.)

By MR. SPARKS:

Q. I show you this document identified as Exhibit 378 and ask you if it is your determination of Penn Water's and Safe Harbor's costs for firm power services rendered to Baltimore Company in 1946? A. It is.

Q. Will you please explain the distinction between the actual 1946 costs and the adjusted 1946 costs of firm power services rendered to Baltimore Company as shown in this Exhibit 378? A. The actual costs of firm power services rendered to Baltimore in 1946 are related to the actual operating expenses and to the average investment in electric plant for the year 1946, while the adjusted costs of firm power services rendered to Baltimore Company for 1946 reflect certain authorized [16715] increases in plant investment; increases in operating expenses as estimated for current conditions, largely the result of salary adjustments made in 1946 but only in small part reflected in the expenses of that year; and an adjustment of Safe Harbor's State and Federal income taxes to eliminate the abnormalities of its actual 1946 income taxes resulting from the refunding of Safe Harbor's bonds in that year.

Q. The summary of the results of this cost of service study is shown on the second page of this exhibit, is it not? A. Yes.

Q. Did you generally follow the same methods of cost allocation in this exhibit as you used in connection with Exhibit 35? A. I did.

Q. Did you make any segregation of the investment in the property of Penn Water and S. T. Co. of Md. as between the four general groups shown on Schedule 1a of Exhibit 378 different from that used in Exhibit 35? A. The only change made was with respect to the allocation of the present investment in Manor Substation. This investment was all classified as "General Production Plant" in Exhibit 35, but upon further consideration has been classified with the 220 Kv. transmission lines in Exhibit 378 as "Special Facilities for Baltimore Company."

Q. Did you make any segregation of the investment in the [16716] property of Safe Harbor as between the two general groups shown on Schedule 2a of Exhibit 378 different from that used in Exhibit 35? A. No.

Q. Referring to Schedule 1a of Exhibit 378, is the amount shown in Item 6, "Excess of Book Cost over Revised Original Cost" different from that used in connection with Exhibit 35? A. Yes. It is slightly greater in Exhibit 378, reflecting the adjustments subsequently admitted by the company. The amounts shown in Item 5 on Schedule 1a of Exhibit 378 are consistent with Mr. Eichhorn's reconciliation exhibit, identified as Exhibit 320.

Q. Have you made any other changes in your methods of allocations in Exhibit 378 as compared with those used in Exhibit 35? A. Yes, there are a few minor changes, relating to the allocations of working capital, general expenses and general taxes, but none of such changes in method of allocation are of material significance.

Q. In your determination of the adjusted 1946 costs of firm power services rendered to Baltimore Company,

what additional electric plant investments have you included? A. In addition to the costs which have been incurred on construction work in progress, and which I have included [16717] in both the actual and adjusted costs of service, as I did in Exhibit 35, I have here included in the adjusted 1946 costs of service, the estimated costs to complete certain plant additions which have been authorized by the board of directors and the management, and work on which is now in progress. The major item so included and which accounts for two-thirds of the total additional costs, was the 66 Kv. switching yard at Manor Substation, together with related additions to transmission plant, the estimated net increase in electric plant being approximately $550,000; of which $30,000 will be net increase in Safe Harbor's electric plant.

The other items of investment included were Penn Water's costs of providing additional cooling equipment for power transformers; the enclosure and modernization of the Holtwood Hydro control room; the installation of additional ground wires for the Philadelphia Road-Gunpowder transmission line to increase the reliability of this line for Baltimore's sole use; additional hydraulic concentrator equipment for river coal recovery; additions to the steam station boiler ash disposal system; and certain other items which for Penn Water amounted to a total net increase in electric plant of $750,000, as shown on Schedule 1b and for Safe Harbor a net increase of $120,000, as shown on Schedule 2b of Exhibit 378. It should be mentioned that the net additions reflected in the adjusted 1946 costs of service do not include all of the [16718] construction budget items contemplated for 1947.

Q. What was your basis for adjusting the operating expenses which you earlier referred to in connection with your adjusted 1946 costs of service in Exhibit 378? A. There were definite increases in wages and salaries made throughout the companies, effective 1946, and which were not fully reflected in the operating expenses for 1946. There

was also certain maintenance work which was scheduled for 1946, but which due to lack of manpower and materials had to be deferred. Such maintenance work is of a routine nature such as must be planned each year and, therefore, an adjustment has been made to the 1946 actual operating expenses in such connection. However, I have not attempted in these adjustments to reflect my present estimates of further increases in operating expenses for the immediate future, resulting from the present trends in labor rates and costs of materials.

MR. SPARKS: I ask that this document headed "Comparison of Bills for and Costs of Firm Power Services" be identified as Exhibit 379.

(The document was marked Exhibit No. 379 for Identification.)

By MR. SPARKS:

Q. Mr. Spaulding, I show you Exhibit 379. Does Schedule A of Exhibit 379 show your comparison of the costs of [16719] Penn Water's and Safe Harbor's firm power services rendered to Baltimore Company, shown in Exhibit 378, with the bills applicable to firm power services rendered to Baltimore Company for the year 1946? A. It does.

Q. Will you please explain the derivation of the amounts shown in Schedule A of Exhibit 379 from the bills applicable to firm power services rendered to Baltimore Company for the year 1946? A. Schedule B of Exhibit 379 is a copy of Safe Harbor Company's actual net bill to Baltimore Company and Holtwood Company for the year 1946. Item (g) of Schedule B shows the amount of this bill to Baltimore Company for 1946 to have been $2,033,001.59. This is the amount shown on Schedule A of Exhibit 379.

Schedule C of Exhibit 379 is Penn Water's net bill to Baltimore Company for the year 1946, item (i) thereof showing this amount to have been $1,399,331.10.

Schedule D of Exhibit 379 is Penn Water's firm power bill to Baltimore Company for the year 1946, computed in the same manner as the firm power bills to Baltimore Company, incorporated in Exhibit 19, except that this Schedule D is based on actual 1946 results rather than the earlier estimates for the year 1946. Penn Water's firm power bill to Baltimore Company shown on Schedule D is $2,824,420.03. This is the [16720] amount shown on Schedule A of Exhibit 379.

Q. What difference did you find between the total costs incurred by Penn Water and Safe Harbor in rendering firm power services to Baltimore Company and the amounts of their firm power bills to Baltimore Company in 1946? A. The sum of the combined bills applicable to firm power services rendered to Baltimore Company in 1946 was less than the combined costs for firm power services rendered to Baltimore Company by $266,578.

Q. On Schedule A of Exhibit 379, there is shown as the "Adjusted" cost of firm power services rendered to Baltimore for 1946 an amount of $5,663,000. Is such adjusted combined costs comparable to the actual combined bills for firm power services shown in the first column of this exhibit? A. No, it is not.

Q. Why not? A. Should any regulatory authority having jurisdiction, direct the continuance of the present forms of contracts between Safe Harbor, Penn Water and Baltimore Companies (Items E, F & G and Items H & I), the bills to Baltimore Company applicable to firm power services would increase with actual increases in operating expenses, taxes and increases in electric plant. The combined bills applicable to firm power services to Baltimore Company would, therefore, on an adjusted basis, be different from the billing amounts [16721] shown on Schedule A of Exhibit 379. However, should any regulatory authority having jurisdiction, direct that the charges to Baltimore Company by Penn Water and Safe Harbor in the future be directly related to the services rendered, then the

adjusted 1946 costs, shown on Schedule A of Exhibit 379, should be considered in connection with the actual 1946 firm power services rendered to Baltimore Company.

* * *

[16787] CROSS EXAMINATION

By MR. WAHRENBROCK:

* * *

[16796] Q. Can you point out a single hour of these I have referred to in Exhibit 42 in which a substantial amount of energy was supplied from the station service bus to the main bus at Safe Harbor? A. No, I cannot.

[16797] Q. It would be necessary to find such hours in order to show Mr. Roland's' conclusions were inaccurate, would it not?

* * *

THE WITNESS: If he made such a conclusion, yes.

* * *

[16814] Q. All right. I am trying to get the effect of your limitation. As I understood it, you said that when the Safe Harbor was not supplying electric energy then its only contribution in the nature of a power factor cooperation and in the nature of a voltage regulation was through the supply of RKVA. A. That is correct.

Q. I want to understand what its contribution in the way of power factor cooperation or voltage regulation is during those hours when it supplies electric energy. A. I am sorry I didn't understand your question. Generally it is the same. There may be also a change in the supply of energy which results from the power factor cooperation and voltage control.

Q. But that change would be a change in the supply of the electric energy and reflected in the logging of the energy? A. That is correct.

Q. So that whether or not Safe Harbor is supplying [16815] electric energy, its services of voltage regulation and power factor cooperation consist in the supply of RKVA? A. Generally that is correct.

Q. Is the measurement of RKVA the measurement of the power factor cooperation which Safe Harbor supplies, or do you mean something else by power factor cooperation than the supply of kilovars?

THE WITNESS: May I have the question again, please?

(Question read.)

THE WITNESS: The answer to the last part of your question is that the degree or the amount of power factor cooperation can be measured in terms of the amount of RKVA provided.

By MR. WAHRENBROCK:

Q. And is a kilovar a measure of RKVA? A. Yes.

Q. Do you have meters which so measure the RKVA supplied from Safe Harbor? Does Safe Harbor have meters which measure the RKVA which it supplies? A. They do.

Q. Are those meters logged? A. They are.

Q. Hourly? A. They are.

Q. Do its contracts with Penn Water provide for a charge [16816] per kilovar or thousand kilovars? A. No, the charges are independent of the services rendered.

Q. There is no relationship between any payment or charge between those companies and the supply of RKVA? A. You are referring now still to Safe Harbor and Penn Water?

Q. Yes. A. There is no component of the charges that are related to the amount of RKVA provided.

* * *

[16862] Q. And those services so supplied by Safe Harbor are, as you have said, the obligation of Safe Harbor to supply?

* * *

[16863] THE WITNESS: Any obligation of Safe Harbor to provide these services is part of the joint obligation of Penn Water and Safe Harbor to these Pennsylvania customers, to their Pennsylvania customers, together with the

obligation or operating responsibility which Safe Harbor may have to provide those services to Penn Water and Baltimore.

• • •

Q. When you speak of any obligation, is there any obligation to furnish such services by Safe Harbor? A. There is a joint obligation to furnish such services on behalf of Penn Water and Safe Harbor.

[16864] Q. Does that place any obligation on Safe Harbor? A. I don't know.

Q. Can you refer to any provision in the items E, F and G in which there is a joint obligation for the supply of those services by Safe Harbor in any part?

• • •

THE WITNESS: I could not find and would not expect to find in E, F and G any designation of joint obligation on behalf of Penn Water and Safe Harbor to their Pennsylvania customers as an operating matter.

By MR. WAHRENBROCK:

Q. Are you able to refer to any other contract under which Safe Harbor, either alone or with any other company, is obligated to supply these services to which I have just referred? A. Yes.

• • •

[16865] Q. What contracts?

• • •

THE WITNESS: I have in mind the power supply contract with the Philadelphia Electric Company for their Coatesville division, the power supply contract with the Pennsylvania Power & Light Company for their Lancaster Division, the power supply contract of the Pennsylvania Railroad.

• • •

[16866] Q. I think we can close this now.

Is there any obligation to render such service by Safe Harbor either to Penn Water or to Baltimore under items E, F and G?

• • •

THE WITNESS: I think there are operating responsibilities for Safe Harbor to provide such services under E, F and G, under contract identified as items E, F and G.

• • •

Q. By that do you mean that there are provisions in items E, F and G which so provide?

• • •

THE WITNESS: No, I think I stated that I considered that under the provisions of E, F and G there are operating responsibilities for Safe Harbor to provide such services [16867] at times.

• • •

[16905] Q. How do the other services affect the meter readings of energy flows in which Maryland energy is comingled?

• • •

[16907] THE WITNESS: The other electric services, and I am referring to voltage regulation, power factor cooperation, materially change the amount of energy recorded on the meters and shown on certain columns of Exhibit 42 from what would have been recorded on those same meters had such services not been rendered by Safe Harbor.

In addition, these services rendered by Safe Harbor affect the other metered readings, and I refer to the KVA metered readings, which are part of the services being rendered and about which we are talking.

• • •

Q. Do I understand you to say that these meter readings which are reflected in Exhibit 42, those columns which are based on meter readings which you previously identi-

fied, that such meter readings do reflect energy flows which are the [16908] result of all of these other electric services supplied, as you say, at that time?

* * *

THE WITNESS: They do.

* * *

[16945] WILLIAM F. UHL

* * *

CROSS EXAMINATION

By MR. HALL:

Q. Mr. Uhl, by whom were you requested to make a valuation of the land and water rights of Holtwood project? A. By Mr. Spaulding and Mr. Gunn of the Pennsylvania Water and Power Company.

Q. When did they request you to make that valuation? A. Some time in 1945. I wouldn't be able to say exactly.

Q. Over what period of time were you engaged in making this study and determination? A. Well, I studied the matter off and on as time became available to me. Just how long, I really couldn't tell you. That is a matter of three or four months, perhaps six months.

Q. During 1946? [16946] A. Yes, the latter part of 1945 and the early part of 1946.

Q. What material furnished by the representatives of Penn Water did you review in connection with your fair value determination? A. Principally the historical data which is contained in one of the exhibits which I think is in the record here. I don't recall the number of it.

Q. Do you mean Exhibits 26 and 27? A. I would have to see them to be sure.

MR. KING: Excuse me, Mr. Hall, you said fair value determination. I think that was inadvertent, but I don't think that is the witness' statement.

MR. HALL: Do you mean to say fair market value determination would be more accurate?

MR. KING: Yes.

By MR. HALL:

Q. If I substituted that term, I assume your answer would be the same? A. I assumed you meant fair market value, yes.

Q. When I referred to Exhibit 26, I referred to a document which is in evidence and is entitled "History of the Holtwood Development to the Beginning of Commercial Operation, October 1, 1911." Is that one of the documents to which you referred? [16947] A. Yes, that is one of the documents which was furnished to me.

• • •

[16948] Q. Did you not also review data furnished by Penn Water, and which was referred to by Mr. Goldberg in his preliminary questions a few days ago, which data consisted of power market surveys and the document which he referred to was made up of 68 separate documents? A. I thought that was the one we were just looking at.

Q. The one you were referring to a minute ago, Mr. Uhl, was Exhibit No. 27. The document that Mr. Goldberg referred you to a few days ago, in the preliminary examination, was the one which I now place before you. [16949] A. This is the one that I had. I never had this one.

Q. You never had Exhibit 27? A. They look so much alike that I thought it was the same one.

Q. You never had Exhibit 27; is that right? A. No, sir, I don't recall ever having that. I never saw it. I thought that was the same one. I am sorry.

Q. Did you study any material in connection with making your determination, not furnished by Penn Water? A. No, sir. I did recall my own experience in connection with Penn Water in the early days.

Q. In other words, if you considered additional material, it was limited to your own experience? A. The

knowledge of the situation back in the beginning of 1905 and 1906 with which I was familiar.

Q. What situation are you referring to? A. The water power situation there at McCall's Ferry.

Q. Is it not a fact that you considered information relating to water power in the New England States? A. Everywhere that I had knowledge of. I considered all the knowledge that I had of water power, everywhere, sir.

Q. Did the documents which you reviewed for the purposes of your study cover the whole history of the project [16950] from approximately 1900 to the date of your determination?

MR. KING: You mean of the Holtwood project?

MR. HALL: Yes.

A. From what date did you say?

By MR. HALL:

Q. From approximately 1900 to the date of your determination? A. Yes; some of the history went further back than that, even, during the nineties.

Q. Did you ever visit the Holtwood project for the purpose of determining the fair market value of the lands and water rights? A. Well, that was incidental to my visits. I visited the property a number of times, and I visited the property back in 1905 and 1906, but that wasn't the only thing that I had in mind. There are other things I had in mind as far as that goes. I think I visited the property again in 1910 and 1911, around there.

Q. When you—if you did—visited the project in connection with this case, did you do anything which had a connection with the determination of the fair market value of the lands and water rights? A. No.

TRIAL EXAMINER: What was the purpose of your visits in 1905 and 1906 and 1910?

[16951] THE WITNESS: I was at that time employed by the Allis Chalmers Manufacturing Company, and I tried

to sell them the hydraulic and electrical equipment for the project.

By Mr. Hall:

Q. But in 1905 and 1906 you did nothing in connection with placing a fair market value on the lands and water rights which would be required for the Holtwood project? A. No, sir.

Q. How about 1910 and 1911? A. No.

Q. Were you, at the outset of your fair market value study, aware of the purpose for which you were to make your fair market value determination? A. No, I don't think I recall that I was.

Q. When did you first become aware of the purpose for which you were to make your determination? A. Well, the purpose for which I made my examination was to determine the market value of the water rights.

Q. And in what connection was that determination to be made? A. I didn't know in the beginning in what connection it was made for. Just in connection with this rate case.

• • •

[16952] Q. Well, what phase of this rate case do you have reference to? A. The value of it, the value of the property.

Q. How about the cash value of the securities involved in this case? A. No, I didn't hear anything about that in the beginning. I heard about that later.

Q. But you were aware of the fact that this determination was being made in connection with this particular hearing? A. This rate case, yes, sir.

Q. When did you become aware that your valuation was to be related to the cash value of the securities issued by McCall Ferry? A. Well, I overheard conversations from time to time.

Q. When? A. I can't tell you that.

Q. What do you mean you overheard? Do you mean by that that you were in any conference at which that sub-

ject was discussed? A. I was in a good many conferences, yes, sir, in which that was discussed. I don't mean many conferences where that particular thing was discussed, but I was present at a good many conferences.

Q. Both before and after your study? [16953] A. No, I don't think that—I wasn't interested in what it was for, Mr. Hall. I took a purely professional attitude towards it. I was asked to determine the market value. What they wanted to use it for, I really was not interested in.

Q. Well, you knew what it was, but you weren't interested in it? A. Well, I later found out why it was. As far as I knew, it was just to determine the value of this property.

Q. When did you reach your conclusion as to the fair market value of the property? A. Early in 1946.

Q. How early in 1946? A. That, I couldn't say. Some time before writing this memorandum, which I think is one of the exhibits in this case, the date of which is March 18, 1946.

MR. KING: It is not an exhibit, Mr. Uhl, but it has been furnished to Mr. Goldberg.

A. It was furnished with my working papers; that is right.

By MR. HALL:

Q. For the purpose of your determination, did you consider that the value of Holtwood site was represented by its value for the best available use to which it could be put? [16954] A. No, I was only interested in its market value as water rights. Whether another—

Q. Water rights for what purpose? A. For power purpose. Whether another use could have been made of it, I wasn't interested in it.

Q. Did you, for the purpose of your determination, consider that the power development was the most valuable use to which the lands forming the Holtwood site could be put? A. Usually a combination of parcels of land, in a

situation of that kind, is found to have its most valuable use for that purpose.

Q. Wasn't that the situation here? A. Yes, as far as I was concerned, that was the value I was trying to determine; for that use. Now, whether or not some other use could have been made of it, I wasn't interested in it.

Q. What made the land and water rights more valuable for water power development than for any other purpose?

MR. KING: I object to that question. The witness hasn't testified to that, Mr. Examiner.

MR. HALL: He said that was the situation here, Mr. Examiner.

TRIAL EXAMINER: Well, I don't think it is necessary to go back to check the record too carefully. I think the [16955] witness has implied that. The objection is overruled.

* * *

A. I didn't say it was, and I don't know that it was. I said usually combinations of parcels of land of that kind find their most valuable use in that, but whether that was the most valuable use, I don't know, and I wasn't interested in it because all I was interested in was the market value for that particular use.

By MR. HALL:

Q. But did you have any reason to believe that that was not the situation in so far as the Holtwood site was concerned? A. I made no investigation of it, and I have already said that usually a combination of parcels of land in a situation of that kind find their most valuable use for that purpose, but I did not investigate to see whether there was a more valuable use of it, whether a more valuable use could be made of it.

Q. Do you have any reason to believe that what you just stated is not the situation with reference to the Holtwood site? A. Pardon me, Mr. Hall, I don't quite understand your question.

Q. Well, you have testified that the value for water [16956] power purposes is $3,300,000. Does that land have a greater value for any other purpose? A. You mean did it have, in March, 1905? I don't know.

Q. Is it reasonable to assume that it did have a greater value for any other purpose? A. I don't know. I made no investigation, so I am not in a position to answer that question.

Q. Mr. Uhl, in the third complete paragraph on page 3 of your report, which you referred to a few minutes ago, did you not state "These lands, unconsolidated, could not be put to use for power development, and this is a more valuable use than any to which they could otherwise have been put." A. That is right. I did say that in my working papers.

Q. And you still believe what you said in your report, do you not? A. As far as my investigations went, yes, but only so far. Whether there was "gold in them there hills" or not, I didn't look into it—oil or coal or any other thing—Mr. Hall.

Q. Mr. Uhl, just exactly what was the character of the lands which you valued? Were they farm lands or what? A. Partly. Partly farm lands, partly hillsides, [16957] partly river bottom—all the lands necessary to flow the water to an elevation of 155.

Q. Was the farm land under cultivation in 1905? A. In part. I will have to admit that I didn't investigate it in 1905 to see whether it was or not.

Q. Well, do you know whether or not the farm lands were cultivated? A. No, I don't.

Q. Is your valuation limited to the lands which Hutchinson transferred or caused to be transferred to McCall Ferry for a consideration of $750,000 and certain securities? A. The land I valued was only the land necessary to make a water power development at that site to elevation 155, with a dam with crest elevation 155.

* * *

[16958] Q. Mr. Uhl, do you know whether your valuation covers property in addition to that which Hutchinson transferred or caused to be transferred to McCall Ferry for a consideration of $750,000 and certain securities? A. My valuation covers only the lands and rights necessary to make a development as it was contemplated on March 1, 1905, that is, with a dam cresting elevation 155.

TRIAL EXAMINER: And in connection with that limitation of the area which you valued, you made no check to determine whether it corresponded with any transfers made to McCall Ferry by Hutchinson?

[16959] THE WITNESS: That is right; you are right. I did not.

By MR. HALL:

Q. That was March, 1905? A. That is correct. I did not make any check to see whether more or less land was involved.

Q. In other words, I take it you were not concerned from whom the land was obtained but what land was required for the total development; is that right? A. That is correct.

Q. Mr. Uhl, could the parcels of land forming the Holtwood site, in an unconsolidated state, be put to use for power development? A. No, sir.

Q. Am I correct in stating that you have testified that the Holtwood site was made possible by the consolidation, in one ownership, of what were originally individual parcels, separately owned, and on none of those parcels was there a complete feasible individual power site? A. That is right.

Q. On what date was the consolidation of individual parcels complete? A. That, I cannot tell you. I assumed that it was all assembled on March 1, 1905.

Q. If we assume that they had not all been assembled on that date, what effect would it have on your $3,300,000

[16960] determination? A. That I couldn't say unless you were to tell me how much was lacking.

Q. Well, you don't know that; is that right? A. Oh, no, I assumed that it was all assembled, all that was necessary for making the development, as of that date.

Q. Using your approach, does this consolidation create added value for those lands? A. Added to what?

Q. Over and above the bare cost of the individual parcels. A. It may and it may not.

Q. You made no determination of that fact? A. No, I didn't.

Q. You were not concerned with what they actually paid for them? A. No, sir, not at all.

MR. KING: What who actually paid for it?

MR. HALL: He answered the question, Mr. King. I think the witness understood it.

MR. KING: Well, I would like to find out.

TRIAL EXAMINER: You may read the question and answer, Mr. Reporter.

(Question and answer read.)

[16961] MR. KING: I want to know who you mean by "they".

MR. HALL: Anybody.

MR. KING: That clarifies it.

By MR. HALL:

Q. That is what I had in mind. A. I understand: anybody is what I had in mind.

Q. Including McCall Ferry. A. Anybody who might be interested in buying it.

Q. Using your approach, Mr. Uhl, you assumed that collectively the individual parcels had a greater value than those parcels would have had individually? A. That is usually true, but I made no study to determine if that was so in this particular case.

Q. Well, you said that, under single control, they made power development feasible? A. That is right.

Q. Doesn't that mean that, according to your approach, they had a greater value collectively than the tracts would have had individually for power purposes? A. For power purposes, they had no value except as an assembled body of individual parcels.

Q. Isn't it also true that the value for water power purposes resulting from consolidation cost the purchaser of the individual tracts nothing?

MR. KING: What do you mean by "purchaser of the [16962] individual tracts", Mr. Hall?

MR. HALL: Anyone who would be willing to purchase the land.

MR. KING: Are you talking about McCall Ferry power land now?

MR. HALL: I am talking about the person who would effect the consolidation.

THE WITNESS: It cost them a great deal, I would say.

By MR. HALL:

Q. What did it cost over and above the bare consideration of the individual purchases? A. To begin with, I assume the gentleman thought his time was worth something and the risks he was taking in connection with assembling the land. Then, there are such things as the cost of surveys, title searches, options, legal and court expense, in clearing titles, cost of deeds and recording deeds, cost of plans and estimates, cost of surveys of available market, and the negotiations to secure contracts for power, to eliminate competition, and especially taxes and carrying charges from the date when the first money is expended on the project until the date of sale of a complete and feasible power site. But on top of all that, the kind of people who do that sort of thing usually consider their own time very valuable, and they should, by right, do so.

[16963] Q. Now, Mr. Uhl, is there reflected in your $3,300,000 valuation the elements of cost which you just mentioned? A. Yes, sir.

TRIAL EXAMINER: Will you read that list of costs, Mr. Reporter?

(Record read by the reporter.)

By MR. HALL:

Q. Now, Mr. Uhl, how much of the $3,300,000 represents risks of assembling the land? A. I don't know. I have made no attempt to segregate the various things.

Q. Were all the risks that you have in mind incurred prior to March 1, 1905? A. Yes.

Q. What were those risks that you have in mind? A. The risks that I have in mind particularly are that in buying a number of parcels of land with the idea of combining a certain area, you may find that after buying certain ones, you cannot get the rest of them.

Q. Is that involved here? A. Of course, it is involved here, unless you had the right of eminent domain to condemn the rest of the parcels. You wouldn't be sure whether you could get them all or not, and perhaps you might be able to get them at an exorbitant cost. Those are the principal risks, as I see [16964] them, in connection with assembling a series of parcels of land for that purpose.

Q. Were those risks that you have referred to involved in this case, as of March 1, 1905? A. Well, they had previously been.

Q. In connection with what purchases? A. The various parcels of land.

Q. Which ones? A. Any parcels of land. It is always true.

Q. What parcels of land did they have? A. Oh, I didn't investigate how many parcels there were. It is just the general condition that I am talking about.

Q. And I take it you made no detailed investigation to ascertain whether or not these difficulties were actually experienced? A. Well, they must have been if a person—

Q. That is merely speculation on your part, is it not? A. Oh, of course, it is the common occurrence, that is all, and to that extent it is speculation. I didn't investigate this particular case.

Q. Now, do I understand that you cannot give us the amount, included in the $3,300,000 valuation, as cost of surveys? [16965] A. No, sir. I cannot give you anything except the market value of the whole assembled property. And I wasn't interested in the cost of those various things.

Q. Now, if I understand what you are saying, it is you cannot give us a breakdown for any of the items mentioned previously? A. That is correct.

Q. Have you assumed, for the purposes of your valuation, Mr. Uhl, that all of the elements to which you referred, such as cost of surveys, title searches, options, and so forth, existed in this case as of March 1, 1905?

MR. KING: As of March 1, 1905?

MR. HALL: Yes.

A. No, sir. I assumed that the property was all assembled at that time.

By MR. HALL:

Q. Well, had any legal or court expenses been involved as of that date? A. I don't know, and I didn't care, for the purpose of my valuation.

Q. What contract negotiations had been carried on prior to March 1, 1905?

MR. KING: By whom? Anybody?

MR. HALL: For purchase of power in connection with the water power development at Holtwood.

MR. KING: By anybody?

[16966] MR. HALL: Yes.

A. I can't tell you the details, but the history shows that various people negotiated for the sale of power, and various people were interested in it.

By Mr. Hall:

Q. Can you identify those people? A. No, I don't see why I should, for the purpose that I had in mind.

Q. What companies or purchasers were involved in the negotiations for the purchase of power? A. I imagine everybody in the countryside was interested.

Q. You say you imagine they were? A. Yes.

Trial Examiner: Why did you refer to these various categories of costs in your answer some time previously?

The Witness: Just simply to show, in answer to his question, whether there are any other costs besides the bare cost of land involved.

Trial Examiner: Well, apparently you had them listed in your notes and working papers.

The Witness: Yes.

Trial Examiner: Why do they appear in your notes and working papers if, as I understand it, you were not interested in whether they actually existed?

[16967] The Witness: Because I have to talk with other people, I have to put these things clear in my own mind and I write a memorandum to myself. I don't think there is any particular—I say a lot of things which have no particular bearing, except to remind myself when I talk to others about it.

Trial Examiner: How did you use them in arriving at your $3,300,000, if at all?

The Witness: Only to this extent: that I knew from experience that they are always to be met with in the combining of a number of parcels of land, a great number of parcels of land, and that there are a good many costs in-

volved besides the bare land cost, and we know that that adds to the value.

TRIAL EXAMINER: If you know that, why did you note it? There is an implication that—

THE WITNESS: Well, I have sometimes to educate counsel, you know, and other people in connection with these matters.

TRIAL EXAMINER: What did you do with those notes as to the other categories of costs, beyond the bare cost of land?

THE WITNESS: Well, they are in this memorandum which I consider part of my working papers.

TRIAL EXAMINER: What is the nature of that memorandum?

[16968] THE WITNESS: Simply a relation of facts and things that have to do with the valuation of water rights.

TRIAL EXAMINER: What is the title of it?

THE WITNESS: The title is "Estimate of Fair Market Value as of March 1, 1905, of the Lands and Water Rights Acquired to Carry Out the Holtwood Hydroelectric Development of the McCall Ferry Power Company, and now owned by the Pennsylvania Water and Power Company."

TRIAL EXAMINER: Do you have a heading under which these categories of costs, other than bare land costs, appear?

THE WITNESS: No, sir, it is just simply a statement, a paragraph saying, "In addition to the bare cost of land, which is used and useful—" then I mention these.

TRIAL EXAMINER: How do you mention them? Let me have your language.

THE WITNESS: "Used and useful in the development of water power, other factors are involved." Then I go on to say "Cost of surveys, title searches, options," and these

other things that I mentioned previously in the record. It is just a fact, that is all. Just simply a statement of fact, that is all that was involved.

TRIAL EXAMINER: Is that memorandum applied in any detail as to the contents of that passage, to the Holtwood development?

[16969] THE WITNESS: No, sir, not at all. There are no calculations in this. It is simply factual data.

TRIAL EXAMINER: What I am trying to discover is whether that is a general statement, applicable to any project, or whether that statement came as a result of a conference that you had with the officers of the Respondent, in which you determined that that generality applied in this case.

THE WITNESS: It is a general statement. It is true in connection with all similar situations.

TRIAL EXAMINER: Did you ascertain as to whether it applied specifically to Holtwood?

THE WITNESS: No, but I don't see how it could be otherwise. How can anyone assemble parcels of land without surveys, and so forth? I have done it myself, as far as that is concerned. I have done the same thing, I have assembled parcels of land myself, and from my own personal experience, I know it is necessary to do all these things. I have done it personally.

MR. KING: Does your Honor understand that the document to which Mr. Uhl is referring has been furnished to Mr. Goldberg and Mr. Hall as the working papers?

TRIAL EXAMINER: No, I do not.

MR. KING: It has.

TRIAL EXAMINER: Just a minute. You did have some general knowledge of the assembly of these parcels?

[16970] MR. HALL: He stated that he didn't, Mr. Examiner.

MR. SPARKS: What was Mr. Hall's statement?

TRIAL EXAMINER: Did you?

THE WITNESS: No, I said repeatedly that I assumed, on the date of my valuation, which was March 1, 1905, all these things had been done, and this was a property all assembled. How it was assembled, I wasn't interested.

TRIAL EXAMINER: Suppose it wasn't done; suppose this was the one exception? How did you know it was?

THE WITNESS: I just assumed. My valuation is based on the assumption that this was done, that the property was available and could be used for water power purposes. I assumed that. If my assumption is correct, my valuation must be correct.

MR. KING: Your Honor understands that all the facts which the witness stated he assumed, it is Respondent's position, are in the record.

TRIAL EXAMINER: I understand that. I am trying to get at his processes in connection with these other categories of cost.

THE WITNESS: I simply make the statement in my working papers that these are the other costs besides the cost of land and naturally those costs, added to the cost of land itself, are a greater amount than the bare cost of land. That is all I am saying. And these things, the time they take [16971] and the risk they take, are what adds value. Otherwise, why would they do it? Why would assemblies of parcels like that be purchased and sold, as they are?

By MR. HALL:

Q. Mr. Uhl, isn't this a fact: the report which you have been discussing and which the Examiner has asked you about is the report which you prepared as a result of your study and submitted to the company to show the

elements that you considered in arriving at your determination? A. No, sir, it is a report—

Q. Well, now, you give me your description of it.

MR. KING: Let him answer, Mr. Hall.

MR. HALL: He said "No, sir."

MR. KING: He didn't finish.

A. I said no, sir, it is a memorandum that I wrote to myself.

By MR. HALL:

Q. Didn't you submit it to the company? A. I did afterwards. I gave them copies, but the purpose of it was to clarify the situation in my own mind, not in anybody else's mind.

Q. And in your own mind you were stating in that report elements to be considered and which you did consider? A. No, I didn't consider them. I considered they had [16972] been done, but in arriving at my valuation, as of March 1, 1905, I assumed that there was a combination of property in sufficient amount, no matter what it had cost, or how it had been acquired, to make a water power development at that site, with a dam at crest elevation 155. I tried to get at the market value, that a willing purchaser and a willing seller might arrive at, as to the value of it. Somebody would be interested to pay that much money for that assembled property. Somebody might be willing to sell it for that amount of money. Not necessarily even for development, immediate development, it might be somebody who bought it for speculation, which is often done. Complete properties. I have taken part myself in negotiations of that kind.

TRIAL EXAMINER: How did you arrive at your figure of $3,300,000?

THE WITNESS: By comparing it with actual sales and purchases of other water power rights.

MR. HALL: Would you give us that arithmetic that you used in arriving at that figure?

THE WITNESS: No arithmetic except the multiplication of a certain number of horsepower by a certain figure. I multiplied 165,000 horsepower by $20 a horsepower, and got $3,300,000.

By MR. HALL:

[16973] Q. 165,000 horsepower times what? A. $20 per horsepower.

Q. How did you arrive at that $20? A. I arrived at that by comparing this property with actual sales and purchases of other water power properties.

Q. What actual sales and purchases are you referring to? A. Those sales mentioned in my direct examination.

MR. KING: And they appear, Mr. Uhl, do they not, beginning on transcript 15447?

THE WITNESS: Yes, 15447, line 23.

By MR. HALL:

Q. When did the actual sales involved in the Clark's Rip on the Androscoggin River take place? A. The first sale of that property was made in 1909. It was again sold in 1924.

Q. What was the price involved in the Clark's Rip on the Androscoggin River? A. $325,000.

Q. And that was in 1909? A. 1909.

Q. What kind of land was involved? A. Pardon me?

Q. What kind of land was involved? A. River bottom and marginal lands.

[16974] Q. How much was river bottom? A. I couldn't tell you that.

Q. Do you know how much was marginal land? A. I couldn't tell you that.

Q. How much river bottom was involved in the land in the Holtwood project? A. I couldn't tell you that.

Q. Is there any involved? A. Yes, of course.

Q. That was transferred or held at March 1, 1905? A. Yes.

Q. What parcels? A. I don't know.

Q. How do you know that there were any involved? A. River bottom?

Q. Yes. A. There had to be. I don't see that it was bought or sold as river bottom, but the area was involved.

Q. Do you mean it had to be involved in the land which was held in 1905 or which you considered? A. Which I considered that they had a right to use.

Q. Was there any consideration involved in the use of the river bottom lands? A. I don't think I understand your question, Mr. Hall.

Q. Was there any cost incurred in connection with [16975] the river bottom lands that you have in mind? A. I don't know.

TRIAL EXAMINER: What was the price of $325,000 based upon, and who were the parties involved in the sale?

THE WITNESS: The parties involved, Mr. Examiner, the seller was the International Paper Company, and the purchaser was the Union Water Power Company of Lewiston, Maine.

TRIAL EXAMINER: What was the corporate relationship between those two, if any?

THE WITNESS: There was none whatsoever.

TRIAL EXAMINER: What was the basis of the determination of the $325,000, do you know?

THE WITNESS: Yes. I arrived at that myself in connection with the purchaser. The basis of that is that the possible development of 17,000 horsepower would be made at that river at that time, everything taken into consideration, storage, pondage, and possible use, which amounted to $19 per horsepower.

TRIAL EXAMINER: I am not sure that this isn't going too far, but how did you arrive at your $19 per horsepower?

THE WITNESS: By reference to other purchases and sales.

TRIAL EXAMINER: Contemporaneous?

THE WITNESS: Yes, contemporaneous and past—quite a few of these water power rights are sold from time to time, [16976] and that is the yardstick on the basis of which they are purchased and sold.

TRIAL EXAMINER: When you say you assisted the purchaser in that sale, what do you mean?

THE WITNESS: I mean that he engaged me to go up there and look over the property and talk it over with him and consider why he might want to buy it, because he happened to have some money that he would like to put into that property which is a water power four miles above where he already owned one, one of the oldest water powers in New England, owned by the Union Water Power Company in Lewiston, Maine. It is a canalized project, one of the earliest canalized water power developments, and they felt that the market for power was growing, and they should put themselves in the position to own some additional rights which they might develop if they desired to. Actually, they did not develop it, and in 1924 they sold it, and sold it at a very substantial profit, and at that time again I was engaged to determine—

TRIAL EXAMINER: Well, before we get to 1924, did you make the determination of the $325,000 as a valuation?

THE WITNESS: No, that isn't exactly what I did. In all these cases they are mostly, you might say, horse-trading propositions. You determine about the maximum that you would pay for the property, and then, by trading [16977] back and forth, you buy it for as much less as you can. That is really what it amounts to.

TRIAL EXAMINER: What valuation did you put on it, for the purchaser?

THE WITNESS: I don't recall now, but more than that. I didn't make any memorandum of the actual valuation.

TRIAL EXAMINER: You mean $325,000 was the actual purchase price?

THE WITNESS: That was the actual purchase price which was finally arrived at by trading. The International Paper Company owned a great many water power properties on that river, some of them developed for paper mill purposes. At that time they decided they were not going to build any more paper mills on the river and they would just as soon get rid of the property. The other fellow thought he would like to own the property, because he thought he might be willing to use it. It was a trade which was certainly made between people who knew what they wanted to do, and knew about that kind of property. That is, they were well informed about the property.

TRIAL EXAMINER: Was that property owned directly by the International Paper Company or a subsidiary?

THE WITNESS: No, sir, directly by the International Paper Company.

By MR. HALL:

[16978] Q. Mr. Uhl, I believe you have stated that, for the purposes of your determination, you assumed that all the land required for the project, as contemplated as of March 1, 1905, were under single control? A. Yes, sir.

Q. Now, is it a fact that all the lands and rights required for the project were under single control as of March 1, 1905? A. I do not know.

Q. Well, isn't it a fact that additional parcels of land, other than that under the control of Hutchinson, McCall Ferry, as of March 1, 1905, were employed for the Holtwood project? A. To the best of my knowledge and be-

lief, they actually owned enough to raise the dam later to 165, and did build a dam to elevation 165, Crest Elevation 165.

Q. You are saying that to the best of your knowledge and belief, as of March 1, 1905, McCall Ferry had under single control all the land actually acquired for the ultimate development of a project with an output of 165,000 horsepower? A. Yes, and other lands besides, to the best of my knowledge and belief, which were later released.

Q. Now, if that were not the case, your valuation [16979] would be affected, would it not? A. If they did not have sufficient, you mean, to make a development to Elevation 155? Yes, sir.

Q. Under single control. A. Yes, sir.

Q. It would affect your determination? A. Yes, indeed.

Q. Do you know when the properties which had not been acquired as of March 1, 1905, were actually acquired?

* * *

A. I didn't know there were any properties that had not been acquired as of March 1, 1905.

By Mr. Hall:

Q. Then, I take it from what you have said, that you do not know whether your determination of $3,300,000 includes lands acquired after March 1, 1905? A. I have no knowledge.

Q. For the purpose of your study, were you furnished data showing the actual consideration paid for land and water rights involved in the project, or for any portion thereof? A. No, sir.

Q. Do you know the actual consideration paid for each [16980] tract of land that was acquired for the project?

Mr. King: By whom, Mr. Hall? By anybody?

Mr. Hall: By anybody, or in particular by McCall Ferry.

A. I have no knowledge of that.

By Mr. Hall:

Q. Mr. Uhl, did you investigate the prices at which Susquehanna River properties were being sold in the early part of 1905? A. Do you mean complete properties or parcels of land?

Q. Well, did you make an investigation for a complete project? A. Yes.

Q. At the actual cash price at which they were sold? A. No. Oh, no, I thought you said whether there were any others.

Q. Well, were there? A. No, sir, as far as I could determine, there were not.

Trial Examiner: No other what?

The Witness: Any other complete water power properties.

Mr. King: You mean on the Susquehanna River?

The Witness: On the Susquehanna River. The lower Susquehanna River.

[16981] By Mr. Hall:

Q. Were there any individual parcels of land sold prior to March 1, 1905, leading to the development of a water power site? A. Yes, the record shows a great many transactions had taken place.

Q. What was the actual consideration? A. I didn't look into that.

Q. Were you furnished with a tabulation showing the lands and water rights involved in the Holtwood project?

Mr. King: As of what time, Mr. Hall? Any time?

Mr. Hall: As of March 1, 1905, or any time.

A. The best of my recollection is that I did see some tabulations. Whether it was for all the parcels or—

By Mr. Hall:

Q. How many acres were involved in that project? A. I don't know.

Q. Did you ever know? A. In the Holtwood development?

Q. Yes. A. Yes, I think I do know.

Q. You can tell us how many acres of land was involved in the project itself? A. Yes.

Q. How many? [16982] A. I don't know whether I can for Elevation 155. I can for Elevation 165.

Q. As I understand it, your valuations related to Elevation 165? A. No, sir, it is based on Elevation 155.

Q. But you do not know the acreage involved in the development of project at Elevation 155? A. No.

Q. Did you ever have that information? A. I may have had. I don't recall.

TRIAL EXAMINER: Did you use it in any way in connection with your $3,300,000 figure?

THE WITNESS: No, sir, I did not.

By MR. HALL:

Q. Using your approach to a fair market value determination, Mr. Uhl, would the number of acres required affect your fair market value determination? A. Only very indirectly.

Q. Incidentally? A. Very incidentally. The only effect it would have would be to give me information with regard to the pondage involved.

Q. Is your determination of fair market value affected in any way by the nature of the interest held, that is, whether the land was owned in fee or whether only a flowage [16983] right was had? A. Well, if the flowage rights were perpetual, it wouldn't make any difference.

Q. Did you determine the facts in that respect? A. No, sir.

Q. Does it cost as much to acquire a limited flowage and right over land as it does to acquire the fee? A. That I couldn't tell you. That might be different for every case. I couldn't tell you that.

Q. From your last answer, I take it that you do not know whether you would place the same market value on a limited flowage right over a tract of land as on the actual fee or title to the tract? A. Well, I would have to know what you mean by "limited flowage rights," Mr. Hall.

Q. I am talking about a flowage right as distinguished from fee type.

MR. KING: What do you mean: an easement?

MR. HALL: Just exactly what I said.

MR. KING: Well, the witness said he didn't know what you meant by "limited flowage rights."

MR. HALL: Less than a fee title.

MR. KING: Would that cover a permanent easement? Would you consider that a fee title?

TRIAL EXAMINER: The witness may consider all those [16984] matters. He is capable of doing so.

A. I have already said that if the easements were perpetual, it wouldn't make any difference.

By MR. HALL:

Q. Mr. Uhl, does your estimate of fair market value of lands and water rights required for the project include the lands required for the relocation of the Columbia and Port Deposit Railroad tracks? A. No, sir.

Q. Do you know from whom the lands used for that purpose were acquired? A. Yes, I know that a contract was made with the railroad to—

Q. That wasn't my question. Do you know from whom the lands used in connection with the railroad were acquired? A. No, sir.

MR. KING: You mean from whom the railroad acquired the land?

MR. HALL: The witness understood, I think, Mr. King.

MR. KING: I don't think it is clear in the record, Mr. Examiner.

TRIAL EXAMINER: What did you understand by the question, Mr. Witness?

THE WITNESS: Well, I didn't quite understand it, [16985] because, to the best of my knowledge and belief, the railroad owned the land, and had owned the land. But if there was any additional land required to raise the railroad, I didn't take that into consideration.

By MR. HALL:

Q. Did your valuation for land include the land required for the Holtwood Village? A. No, sir.

Q. Do you know from whom and when that land was purchased? A. No, sir.

Q. Mr. Uhl, did you, during the course of your study, locate any records indicating the total investment of the project, including land and transmission lines, as of September 30, 1911?

MR. KING: By Penn Water, you mean?

MR. HALL: I mean the total investment in the project as of that date.

MR. KING: By whom, though?

MR. HALL: The total investment that had been incurred in connection with the project up to that date. Does that make it clear?

MR. KING: By anybody?

MR. HALL: Yes.

A. I have a figure of $13,609,191.

[16986] By MR. HALL:

Q. Where did you get that figure? A. Well, I don't recall, but—

Q. Well, you got it from the records of the company, did you not? A. The records of the company, somewhere.

Q. Did those records show as of the same date, September 30, 1911, the total investment in the power plant alone, exclusive of the lands and transmission lines? A. Yes.

Q. What did they show as the cost, exclusive of the lands and transmission lines? A. $10,670,000.

Q. Now, the difference between the 13 million and the 10 million dollars is $2,939,000, approximately; is that right? A. That is approximately right.

MR. KING: Mr. Examiner, might I suggest this time for the mid-morning recess if it is agreeable to Mr. Hall and Mr. Goldberg?

MR. HALL: May I just finish this?

MR. KING: Certainly.

TRIAL EXAMINER: Very well.

By MR. HALL:

Q. How much of the $2,939,000 represents investment in [16987] transmission lines? A. I don't think I have that information, Mr. Hall.

Q. Do you have any way of determining at this time approximately what part of the $2,939,000 represented investment in transmission line? A. Well, the previous year, December 13, 1910, the item I have for transmission lines is $1,128,381.

Q. Will you repeat that figure, please? A. $1,128,-381.

* * *

By MR. HALL:

Q. Does that figure of $1,128,000 include the cost of substation and related equipment for the line? A. I think it does, but I would have to check on that to be certain.

* * *

Q. Mr. Uhl, before the recess, we had under consideration the investment of the project as of September 30, 1911, and you had mentioned the fact that the records [16988]

indicated that $2,939,000 represented the cost of lands and transmission lines, and you had also stated that your information indicated that of the $2,939,000, $1,128,381 represented cost of transmission lines. How much of the $2,939,000 represents value assigned to securities issued in part payment for property? A. I don't know.

Q. Did you make any investigation to determine that fact? A. No, sir.

Q. How much of the $2,939,000 represents cash paid for land? A. I do not know.

Q. Did you make any investigation to determine that fact? A. No, sir.

Q. This $2,939,000 included not only the property upon which you placed a value of $3,300,000 as of March 1, 1905, but all additional land acquired by McCall Ferry up to September 30, 1911; isn't that so? A. I think I would like to have that question read.

TRIAL EXAMINER: Read the question.

(Question read.)

MR. KING: Mr. Examiner, may we have it understood, to save time, that when Mr. Hall refers to value, that he [16989] means market value?

MR. HALL: I mean fair market value.

MR. KING: Thank you.

MR. HALL: That is, when I am referring to $3,300,000, I am referring to the fair market value as used by the witness?

MR. KING: Thank you. I had assumed you were.

A. Well, if that figure includes all the land, what you say must be so.

By MR. HALL:

Q. Do you have any reason to believe that it does not include it? A. No, I have no reason to believe that it doesn't.

Q. Now, instead of approaching the valuation of lands and water rights as you have done, for only a part of the property on which you place a valuation of $3,300,000, why did you not break down the figure of $2,939,000 to determine the portion thereof which was paid for all the lands and water rights acquired as of September 30, 1911? A. Well, I was asked to determine the market value of the lands and water rights.

Q. Not the cost? A. That is right.

Q. Mr. Uhl, did you confer with any individuals responsible for the acquisition of lands and water rights by McCall Ferry Power Company for the Holtwood project, in [16990] making your determination of $3,300,000? A. No, I didn't confer with them.

Q. During the course of your study, did you find any documentary evidence reflecting an engineering valuation as of March 1, 1905, of $3,300,000, for the Holtwood land and water rights? A. No.

Q. Did you find an engineering valuation made on or before March 1, 1905, which placed any valuation upon the Holtwood lands and water rights? A. No.

Q. On page 15453 of the transcript, lines 17 through 22, you have defined the fair market value of property as follows:

> "Fair market value is defined as the price which would be accepted by the owner if he was willing but not compelled to sell, and which would be offered by the purchaser if he was willing but not compelled to take the property, and both were intelligent and fully informed as to the property itself."

Can you state it to be a fact that those representatives of McCall Ferry responsible for the acquisition of the property on which you placed a valuation of $3,300,000, were willing to pay that much cash for the property? A. I am not in a position to state that, no, sir.

Q. In other words, the $3,300,000 is a valuation which [16991] you today think McCall Ferry would have been

justified in paying for the property? A. Either McCall Ferry or someone else.

MR. KING: In 1905, you mean, Mr. Hall?

MR. HALL: In 1905, yes.

[16992] By MR. HALL:

Q. And as I understand it you think now you would have given that advice to McCall Ferry in view of what you considered to be the value of the property to the company or anyone else for power purposes? A. I believe I would have so informed them.

Q. Did you discover that any person actually offered $3,300,000 in cash for the Holtwood land and water rights, in 1905 or earlier? A. No, sir.

Q. Do you know of any cash offer for the Holtwood water power rights in 1905 or earlier? A. No, sir.

Q. In your opinion, Mr. Uhl, would not a prudent investor, before spending $3,300,000 for the property on which you placed your valuation, assure himself that his proposed development would result in reasonable earnings on his total investment in the project?

* * *

THE WITNESS: If he bought it for the purpose of making a development, yes. However, he might of course purchase it for re-sale.

[16993] By MR. HALL:

Q. Well, the re-sale feature was not involved in connection with the Holtwood site; isn't that so? A. Well, it didn't turn out to be that way. But as far as I am concerned I wasn't interested in arriving at that value, whether they did or not.

Q. Assuming that there were no prospects that the project would ever show any earnings after operating expenses, would a prospective investor, in your opinion, be willing to pay more than a nominal amount for the lands and water rights which you valued?

MR. KING: What is a "nominal amount?"

MR. HALL: Well, he wouldn't be willing to pay more than real estate value or farm land value.

* * * * *

THE WITNESS: Well, he probably wouldn't pay anything for it. I wouldn't think he would pay anything for it.

By MR. HALL:

Q. In your opinion, wouldn't an investor be willing to pay more for the property if the estimated earnings from its use were greater than operating expenses? A. Yes, it all depends upon what he thought he could make out of it, or what he could do with the property.

[16994] Q. Isn't it a fact that, using your approach, no determination of fair market value of property could be made without a consideration of the probable revenue and operating expenses of the project in their relation to the plant investment required and the cost of competing power? A. Consideration of those elements certainly would have to be given.

Q. And considerable weight would have to be given to those elements? A. Yes, it is one of the elements which is important.

Q. Am I correct in stating that you have previously testified that your valuation of the Holtwood lands and water rights involved the application of certain engineering factors? A. Yes, sir.

Q. You have testified that there were 10 principal engineering factors considered by you in arriving at your determination, the first of which was "market for power output, its extent and distance from the site of the development."

Why did you consider that an important engineering factor to be considered in making your determination? A. Well, if there was no market for the power output naturally there would be no value to the property.

Q. For power purposes? A. For power purposes.

Q. Now, the fact is did you consider it in connection [16995] with market for power output?

* * *

MR. KING: I object to the question as being unintelligible.

THE WITNESS: I don't understand it, Mr. Examiner. If I might have it once more.

TRIAL EXAMINER: Never mind.

By MR. HALL:

Q. Mr. Uhl, I simply mean this: What did you consider, in connection with market for power output? What elements? A. I considered the fact that a great deal of power was being developed by steam power in the surrounding territory and at great cost at that time, and that if water power could be developed at a reasonable cost the output from it could be sold in that market, not only the existing market but a rapidly growing market. The facts show that the power market was developing very rapidly at that time, and ever since.

* * *

Q. I take it, Mr. Uhl, from your last statement, that that consideration contributed to your determination of fair market value of $3,300,000? [16996] A. Yes, very largely—that there was a market for the power output.

Q. Now, precisely what effect did the market available for the output of the project have upon your determination of $3,300,000? A. It was one of the principal considerations in determining that there was market value to the property.

Q. Could you tell me, in terms of dollars, how much your $3,300,000 figure was affected? A. No, I couldn't tell you that.

Q. Mr. Uhl, assuming that there is an available market, what difference does it make, in so far as your determination of fair market value of lands and water

rights is concerned, whether the market is adjacent to the site or is located 60 miles away? A. It doesn't make any difference.

Q. You have stated that your first element was "market for power output, its extent and distance from the site of the development." Now, how did the last part, "its extent and distance from the site of development," enter into your determination? A. Simply that it would cost less to deliver the power where it was wanted if the distance was short than if it was a long distance, generally speaking. That might not always be true.

[16997] Q. And that all enters into the economic feasibility of the project? A. That is right.

Q. And of the delivery to the market? A. That is correct.

Q. In other words, the difference involved in "its extent and distance from the site of the development," among other things, is the cost involved? A. Yes, it makes a project more desirable if the conditions are favorable.

Q. Mr. Uhl, what amount of power output did you have in mind for the Holtwood project when you made your determination? A. The amount of power which I had in mind was that ultimately 165,000 HP would be economically developed at that site.

Q. What power surveys, contract negotiations or power contracts were given weight in your determination of the fair market value of the Holtwood water rights? A. None.

Q. Do you mean by that that you were not concerned at all with whether or not any contract negotiations— A. Yes, I was concerned with the fact that contracts could be made for the output.

Q. You were concerned with it, but not to the extent of what actually happened; is that right? [16998] A. Yes, if I had information of anything that actually happened to a purchaser, but at that time there wasn't any

development there, as of March 1, 1905. All there was there was the land and water rights. Now, whether or not the prospective purchaser had a contract or not didn't interest me particularly.

Q. Well, were you interested in whether or not there was a prospective purchaser available? A. Yes, of course.

Q. Were you interested in whether or not there was a prospective purchaser actually negotiating for power? A. Well, I knew that that was a fact. Not only a prospective purchaser of this site but of various water-power sites, on the lower Susquehanna. Historical records show that various people were trying to make contracts for output from possible developments on the lower Susquehanna River.

Q. Who were they? A. Well, there was a gentleman by the name of Harlow.

Q. Was he interested in developing power or in buying it? A. He was interested in both.

Q. What would he have done? A. He was the gentleman who tried to promote a water-power project on the lower Susquehanna River.

Q. To what use would he have put the power which you [16999] say he was interested in purchasing?

* * *

MR. KING: The witness hasn't said Harlow was interested in purchasing the power.

TRIAL EXAMINER: Let the witness answer.

THE WITNESS: He was interested in marketing the power in the surrounding territory.

By MR. HALL:

Q. But was Mr. Harlow interested in buying power developed by someone else? A. No, sir. He was interested in combining water-power sites and purchasing lands, and making contracts for possible sale of power which he might develop.

Q. Now let me get back to my original question. Who were the prospective purchasers actually negotiating for the power to be developed at the Holtwood site? A. Purchasers of power?

Q. Yes. A. I think the records show that the public utility interests in Baltimore particularly were interested in purchasing power developed at some site on the Susquehanna River, not necessarily the Holtwood site.

Q. Well, what was the nature of their negotiations for the acquisition of that power? How far had they gone? [17000] A. They had made tentative contracts, I believe.

Q. Well, now, are you sure of that fact? A. Yes. I have seen some.

Q. And those contracts were entered into prior to March 1, 1905, for power to be developed at the Holtwood site? A. That is correct. Yes, sir.

Q. What information did you have as to the probable quantities and prices at which the power output could be sold? A. The records again show that discussion had taken place for sales to be made at $20 to $30 per HP.

Q. What quantities of power are you now referring to? A. Well, some of them were say—one that I recall was 4,000 kw.; one for 10,000 kw.; one for 20,000 kw. They were various amounts.

* * *

Q. Does your last answer relate to the negotiations between McCall Ferry and Consolidated and the railroad? A. Yes, that particular answer did, but there were also, as evidenced in the history, other interests besides the McCall Ferry Power Company who were negotiating for the sale of power from possible developments on the Susquehanna.

Q. So that you considered it reasonable to assume that the [17001] Holtwood power could be disposed of on terms similar to the arrangements finally agreed to in the initial contracts which were carried out with Consolidated of Baltimore and the united railway interests? A. Yes, I

assumed that satisfactory contracts could be made for the output from a development that might be carried out at Holtwood.

Q. The second engineering factor which you have testified you considered was "competitive sources of power." Just how did this factor enter into your determination of the fair market value of the Holtwood lands and water rights? A. It entered in this way: That there was other water power available on the Susquehanna River, and also the fact that the power at that time was largely made by steam. Naturally, if there was another power site available in the same territory which showed better prospects of development that would be a very competitive situation. Or, if there was some immediate prospect of a cheapening of steam power that would be something to be taken into consideration. In other words, what would be the chances of having someone else take the market, the prospective market, away from the possible development of a site.

Q. In other words, Mr. Uhl, in arriving at your determination of $3,300,000 you compared the cost of producing power at the Holtwood project with the cost of producing the [17002] same amount of power by steam? A. I made no direct comparison, but I knew that power could be made at less cost at that time by water-power development at that or some other site on the Susquehanna River than could be made by steam power in the adjacent territory.

Q. And although you did not make any direct comparison, in reaching your conclusion you did consider the cost of developing steam power as related to the cost of the Holtwood project? A. Yes. I knew it would cost more to make power by steam, at that time, than it would cost at the Holtwood, or than I believed it would cost at Holtwood.

Q. How did the cost of producing competitive steam power compare with the probable cost of producing hydro power at Holtwood? A. I didn't make any calculations

of that kind. My general knowledge of the situation at that time didn't make it necessary to make such a calculation.

Q. Didn't you make estimates of the cost of producing steam power? A. I did not. No, sir. I mean in this particular case, in this situation.

Q. But you gave consideration to the cost— A. Oh, yes. I knew what the cost was to make steam [17003] power in those days.

Q. What did you consider to be the probable cost of producing hydro power at Holtwood? A. I know that the development could be made for about $100 a HP, at least, which was a low cost for water power; that during those days any water power which you could make at between $100 and $200 a HP was a good development.

Q. Now will you tell us what the comparable figure was for producing steam power? A. That varied very greatly, of course, with the size of the—

Q. What was the maximum and minimum amount?

A. The cost of steam power plant, in those days, was about $40 to $50 a HP. But the cost of producing power was very high. It took from three to four pounds of coal per kilowatt-hour, and the operating costs were very high because the units were very small. The steam turbine was just in its experimental stage. There were very few in operation, and those purely experimental, which made the operating cost of steam plants extremely high.

Q. What load factor did you consider in connection with the $100 per HP for hydro power? A. I didn't consider any load factor in detail, except that a probable load factor was in the nature of 50%.

Q. What cost of the production of hydro did you consider, [17004] per kilowatt-hour? A. I have already stated that I considered that the development there could be made for $100 a HP.

* * *

Q. Is that the cost of investment per horsepower? A. Yes.

Q. Well, I had in mind the prices at which power could be sold. A. Well, the price at which power could be sold would be whatever the market would bear; not what it cost to make power but what you could sell it for.

Q. What cost of production did you have in mind, per kilowatt-hour? A. Well, if you wished to, if it cost about $100 a HP, the production costs wouldn't be over $10 a HP.

Q. And that is an estimate you make without reference to actual figures? A. Oh, yes. Anyone familiar with that kind of thing should know that.

Q. How did the $10 figure which you just gave us compare to the steam figure which you considered? [17005] A. I considered that the producer of steam power would be glad to pay at least $30 a HP—$20 to $30—for power in those days.

Q. Does the $10 per HP depend upon extreme flow characteristics? A. Oh, yes.

Q. And in reaching your $10 valuation did you consider stream flow characteristics? A. Yes.

Q. And that is stream flow characteristics of the Susquehanna River? A. That is correct.

TRIAL EXAMINER: To what degree?

THE WITNESS: To the degree that I knew that they would have to make contracts, where the purchaser of the power would probably have to hold his steam plant in reserve, or where he would have to build an auxiliary steam plant in order to continuously produce the full amount of water power.

TRIAL EXAMINER: How deeply did you go into that?

THE WITNESS: Well, not in detail. It was just done generally, I think. No river, no matter how well reservoired, always has the same amount of water in it, so you have to make provision for low flow.

* * *

[17006] Q. Mr. Uhl, before the noon recess, we had under consideration the engineering factors upon which you relied. Proceeding now to the third engineering factor which you considered, which reads "Extent of engineering information available regarding the site of the project," how did this factor enter into your determination? A. Principally with regard to the availability of definite information, such as the characteristics of the dam site and the flow of the stream to be developed. There was a good deal of information available in connection with the lower reaches of the Susquehanna River—much more so than generally is available in connection with the earlier studies of water-power projects.

Stream flow measurements had been carried out for some time, and the river had been used for navigation purposes [17007] for a great many years, which made people familiar with its behavior and also some water power had already been developed on the river for industrial purposes, and in the particular location for the proposed Holtwood dam, a suitable foundation could be viewed and studied, and also it was known that suitable material for concrete for building the project was available near the site.

Those are the kinds of things that I had reference to when I spoke of the engineering information available regarding the site.

Q. Was all the information to which you have just referred available as of March 1, 1905? A. Yes.

Q. Did you take into consideration any information or data which came into existence after that date? A. No, sir.

Q. You didn't consider any such data? A. No, sir.

Q. The fourth engineering factor which you considered was natural advantages and disadvantages of the site. How did this factor enter into your considerations? A. The natural advantages which were evident were the fall in the river, and the fact that the sound rock foundation was available, and also that a not excessive amount of

land would be flooded out by making the development. [17008] The particular dam site location was suitable in so far as the width of the river at that point made it possible to build a dam with sufficient spillway area to take care of floods, and also to build a power plant. Also, in that particular location there was about five feet of fall in a very short distance which meant that a dam could be built which was somewhat less in height than the head which would be developed. There were certain disadvantages, one of which was the railroad relocation made necessary, and the other which at that time was considered somewhat serious by some engineers was the fact that ice conditions are sometimes bad on that river.

There was also the fact that there would be, or at least there was at that time, no proposed storage, up-river storage in prospect and that river, in its natural state, was somewhat fluctuating. Those were the disadvantages that I considered.

Q. The fifth factor which you considered was "Probable costs of construction." Why did you deem this to be an important factor in determining the fair market value of the project, lands, and water rights? A. Because some sites are rather questionable because of bad foundation conditions and other risky situations, such as lack of availability of suitable construction materials, and the distance from railroads which [17009] would make transportation expensive. Some forms of foundations, such as limestone foundations, are very expensive to make watertight, and in this particular case, everything in connection with the cost of construction, as far as could be determined, was favorable. A foundation of good, sound rock was exposed, and, as I say, construction material was readily available, the railroad was nearby, the country was developed, it was within an area of availability of labor for construction purposes—all those things showed that construction conditions were favorable from a cost standpoint.

Q. What did you consider to be the probable cost of constructing the Holtwood project? A. I think I have already stated that I believed that the development could be made there in the lower ranges of general cost of hydro-electric developments at that time, of about $100 per horsepower.

Q. What does that make the total investment cost in the project? A. That would depend upon what to develop there, what the prospective purchaser might want to develop.

Q. What did you consider to be the probable development? A. I considered that an ultimate development of 165,000 horsepower would be suitable.

[17010] Q. And what did you consider to be the total investment on that basis? A. As I said, about $100 a horsepower, if the whole development was immediately made, which, of course, would not be the case.

Q. Well, how much in dollars? How much would the total investment be in dollars? A. I wouldn't be able to say. That would depend upon what the prospective purchaser intended to do, how much of the power he proposed to develop immediately and how quickly.

Q. And you gave that no consideration; is that what you are saying? A. Not the extent of development, no. Simply that a reasonable amount of power could be developed such that it could be marketed.

Q. Mr. Uhl, doesn't the over-all cost of a project have a bearing upon the economic feasibility of that project? A. Yes, sir.

Q. Well, didn't you determine, during the course of your study, what would be the over-all investment in the project? A. Well, I couldn't say how large a development a prospective purchaser might make, so I couldn't possibly [17011] estimate that.

Q. How did you arrive at the hundred dollars per horsepower value? A. Because I said the conditions were favorable towards a low cost development at that

point. And experience showed that, with conditions favorable, that is about what it would cost to make a hydro development.

Q. Well, in order to conclude that it was a low cost development, was it not necessary for you to calculate what the probable over-all cost would be? A. No, sir. I know that I knew from conditions that it would be within the lower ranges of cost of hydro-electric development such as they were being carried out at that time. And I was familiar with a great many of them.

Q. As I understand what you have said, the hundred dollars per horsepower valuation is a judgment determination which is not or was not subject to mathematical calculation? A. Well, if I had known just what kind of a development a prospective buyer would make there, I could have made an estimate of it. But it wasn't necessary for my purposes to do that.

Q. Mr. Uhl, would not what the prospective buyer intended to do have a bearing on what he was willing to pay for the lands and water rights? [17012] A. No, I don't think so. A prospective buyer might even buy it and not develop it at all.

Q. But that was not the type of buyer you were dealing with in connection with your evaluation of the Holtwood lands and water rights? A. Any kind of a buyer. As far as I was concerned, it could be any kind of a buyer.

Q. Are you saying that a buyer who is going to do no more than hold onto the lands, would pay $3,300,000 for the lands? A. That was my opinion, yes, sir. He could afford to pay that much.

Q. Would a buyer, in your opinion, be willing to pay that amount if he had no intention of selling it for power purposes?

MR. KING: Might we have that question read?

THE WITNESS: I don't think I understand it.

By Mr. Hall:

Q. Well, is it your statement, Mr. Uhl, that a willing buyer would be willing to pay $3,300,000 for the sole purpose of keeping the land in his own ownership without development for power purposes? A. Yes, if he thought he could sell it.

Q. That wasn't my question. A. Well, that would be the only possible reason he [17013] would buy it. If he didn't intend to make the development himself, he would buy it for the purpose of selling it to someone.

Q. You are saying if he is buying it for resale, he is buying it for the purpose of reselling it for power development, in other words? A. Very likely.

Q. Mr. Uhl, isn't it a fact that the amount of horsepower which a purchaser will develop has a bearing on what he is willing to pay for the necessary lands and water rights? A. It might and it might not. If he had in mind developing it himself, he probably would have in mind a certain size development, at least to begin with. He might increase it as time went on, just as that did happen at Holtwood.

Q. And those probabilities he would take into account in determining what he would be willing to pay? A. Yes; it depends upon the market conditions at the time. If he thought he could market 50,000 horsepower, he would undoubtedly develop it for that. If he thought he could market a hundred thousand horsepower, that is what he would develop it for. Practically all hydro developments are made with increased installations in view when they are first made. At least, they were in those days, and [17014] they still are, a great many.

Q. Mr. Uhl, you recognize, do you not, that there is a point beyond which the willing purchaser would not go because of consideration of the economic feasibility of the project; is that not so? A. In his mind, yes. Of course, different people have different ideas about what they can do with a property.

Q. What initial development was this willing buyer contemplating? A. I don't know.

Q. That would have a direct bearing on the hundred dollars per horsepower, would it not? A. Yes, if he made too small a development, the initial cost would probably be more than a hundred dollars per horsepower.

Q. Isn't it a fact that if your hundred dollars per horsepower is based upon a development of 165,000 horsepower, that initial installation of 50,000 would mean considerably more than a hundred dollars per horsepower; isn't that right? A. That is right.

Q. Do you know how much more? A. No. It would still be within the lower ranges of cost of hydro development at that time.

[17015] Q. Mr. Uhl, what determines whether a hydro project is economically feasible? A. Principally whether there is a market for its use. That is really the principal consideration.

Q. And you have reference to a market for power at reasonable prices? A. Of course.

Q. And reasonable profits? A. Why, I don't know what a reasonable profit might be.

Q. A reasonable return on the investment. A. Well, I think if I made a development, I would certainly want to be sure that the income was a little larger than the outgo.

Q. What you mean—when you say "a little larger than the outgo," you mean a reasonable return? A. Yes. But, of course, different people have different ideas about what a reasonable return is.

Q. Mr. Uhl, what would the willing buyer have considered a reasonable return for the Holtwood project in 1905 when he was considering buying the land? A. I wouldn't know. That would depend again, as I say, upon who did the dreaming, if you want to call it that. Of course, every promoter must have a good dream in order to have the courage to promote any kind of a project.

Q. The sixth engineering factor that you considered [17016] was pondage and storage possibilities.

Why did you consider this factor in arriving at your determination? A. Because both pondage and storage possibilities affect the use you can make of the flow of the stream. There should be sufficient pondage, so that during low flow conditions, the water could be held back for use at times when it is most valuable. And, of course, if storage could be developed, it would increase the low flow of the stream. Those are the reasons why pondage and storage possibilities must be considered.

Q. Just what effect did this factor have upon your determination? A. Well, if there had been storage possibilities at reasonable cost, the market value undoubtedly would have been higher.

Q. You say if it had or had not? A. If it had. If the storage possibilities were available at reasonable cost, it would have enhanced the market value.

Q. You mean the greater the storage possibilities, the higher you would have fixed the fair value of the land? A. That is correct.

Q. The seventh factor you considered is "stream flow characteristics."

[17017] Why was it necessary to consider this factor in arriving at your determination? A. Because the more constant the flow of the stream is, the greater the amount of prime power you could depend upon, whereas the more fluctuating it is, the less prime power could be depended upon, and, therefore, it would affect the standby power that is required to market the total output.

Q. The eighth factor you considered was "Time When the Development May be Carried Out."

What, in your opinion, is the importance of this factor in arriving at the fair market value of lands and water rights involved in the Holtwood project? A. Well, at Holtwood or any project, for that matter, if the market conditions are such that the development would not be jus-

tified for some time in the future, you would have to discount the market value of it at the particular time. If you have a situation where the existing market and the market immediately ahead is such that the development is warranted immediately, or soon after the time we are talking about, why, then, you wouldn't have to discount it.

Q. If I understand what you are saying— A. In other words, the present value of something in the future comes into the picture.

[17018] Q. And as I understand what you are saying in this connection and in connection with the other engineering factors that you relied on, the more favorable those engineering factors, the higher price you would fix, and the less favorable, the lower price you would fix? A. That is right.

Q. What date of completion did you have in mind when you made your determination? A. I didn't have any exact date in mind. I had in mind that the market conditions were such that immediate development would be warranted.

Q. What date of completion did you have in mind for the Holtwood project? A. Well, some two or three years, four years, something of that order. As near as anything of that kind can be estimated. Something that would be done in the near future, and not ten, five to ten years away.

Q. No, wait a minute. Assume that they had started construction on March 1, 1905. How long would you have estimated it would have taken to construct the property? A. Two to three years, I would say.

Q. Mr. Uhl, when you spoke of a period from two to three years, were you referring to 165,000 horsepower development? A. No, sir, I was referring to whatever initial [17019] development would be made.

Q. Would that be about 50,000 horsepower? A. Well, that is what the McCall Ferry people had in mind. I didn't figure on exactly 50,000 horsepower. I figured on

some reasonable amount of power, 50,000 to 100,000 horsepower, in that order, as an initial development I believed that the market would have warranted such a development, as quickly as it could be carried out in those days. Naturally, the hundred thousand horsepower wouldn't come into use at the same time. It would be one unit after another, as projects like that are actually carried out.

Q. Did you consider when the additional units would be installed? A. Well, it looked to me as though they could be installed, not as fast as they would want to, but probably the whole 165,000 horsepower would be installed in the course of ten years.

Q. Was the conclusion that you have just stated influenced by what you know actually transpired with reference to the Holtwood development? A. Well, I can't put facts out of my mind. Just what I would have known in 1905 and 1906, I can't tell you. I have tried to put myself in that position.

Q. I recognize that it is difficult to divorce [17020] from your mind— A. Subsequent events have transpired, and I knew about them. To what extent they influenced my thinking, I can't tell you.

Q. The ninth factor you considered was "Possibility of Financing." How did this factor influence your determination? A. Well, I knew that about that time everybody was falling all over themselves trying to finance those kinds of properties. That was my own personal experience that I am familiar with. I knew that with a situation that looked as favorable as this one, they would have no trouble in financing the project.

Q. When you refer to "everybody," do you mean people— A. Bankers. I am talking about bankers. At about that time there was a great deal of development going on, and the power situation was developing very fast, and large projects were being carried on all over the country, coast to coast. Minnesota, Washington, California,

Niagara Falls, all over, down South, everywhere. They had no difficulty in financing any of them at that time.

Q. And they were financing them by selling bonds and giving stock as "sweeteners" or as bonuses? A. Various ways.

[17021] Q. Including that? A. Including that, yes, sir. They had to make it attractive because the risk was great. They had to even go to England for some of the money in some of these cases.

Q. And that is why financing was not done through cash sales of common stock, because of the large risk involved; isn't that so?

* * *

A. Well, of course, I can't say, because I doubt if any two cases were exactly alike. I suppose in some cases common stock may have been sold for cash considerations, and in others not, as far as I know.

By Mr. Hall:

Q. Do you know of any instance where the project was financed by the sale of common stock for cash? [17022] A. Common stock for cash only?

Q. Yes. A. No, I personally don't know of any case.

Q. Mr. Uhl, what business were you engaged in from 1901 to 1905? A. In 1902, do you mean?

Q. From 1901 to 1905. A. Well, I graduated from college in 1902. In 1901 I went to college. In 1902 I started in doing water-power work. And have stayed in it ever since.

Q. Well, let me put my question in this way: what work were you engaged in from 1902 to 1905? A. In water-power work.

Q. That covers a multitude— A. Designing and selling equipment, machinery that was used in water-power work.

Q. That substantially covers what you did during that period? A. Yes, sir.

Q. You were working for equipment manufacturers? A. That is correct.

Q. Do the terms of financing have any effect on fair market value of lands and water rights? A. Not as far as I can see.

Q. You mean that you can think of no terms related [17023] to financing, which would have an effect upon fair market value of lands and water rights, using your approach? A. No, I can't see how there is any relation between the two.

Q. Then, what was the purpose of considering possibilities of financing? A. Well, if it was impossible to finance a project, it would be very difficult to imagine anybody wanting it. Where were you going to find a willing buyer if there wasn't a possibility of financing?

Q. You recognize, of course, that bankers could insist upon certain terms which would have an effect upon what a prudent man would be willing to pay; isn't that so? A. Well, I don't know. He might not have to go to a banker to finance the purchase of water rights.

Q. How about in the case of Holtwood? A. Well, I don't know. I don't think they did, as a matter of fact. I think the people who promoted it were very wealthy people.

Q. Who do you refer to as having promoted this project? A. Dr. Cary T. Hutchinson.

Q. And you think he was a well-to-do man, financially? A. I know he was. I knew him very well myself.

[17024] Q. You did? A. Oh, yes.

Q. Personally? A. Oh, yes, indeed.

Q. He was in control of this project, wasn't he? A. Promoter of it. He promoted it, not in the very beginning, but the man who finally promoted it and got it all together, as I understand.

Q. For the purposes of your determination, did you give any consideration to the financial arrangements whereby the money for the project was actually obtained?

A. No, sir, only in so far as I considered the project sufficiently attractive so that I believed that no trouble would have been encountered in financing it.

* * *

Q. That was an assumption on your part without going back and ascertaining the detailed facts? A. Only my general knowledge of the fact that many similar projects had been financed without difficulty in those days.

Q. My question, Mr. Uhl, was that for the purposes of your determination, did you give any consideration to [17025] the financial arrangements whereby the money for the Holtwood project was actually obtained? A. No, sir.

Q. You did not? A. No, sir.

Q. In your opinion, would the willing buyer of the lands and water rights give consideration to the rate of interest he would have to pay for his money? A. He might not have to obtain any money. He might spend his own money.

Q. Assuming that he did have to obtain money, would he give consideration to that fact? A. If he had to carry it for any length of time, yes, I think there is no question about that.

Q. And do not the fixed charges on funded debt affect the cost of the project?

MR. KING: Just a minute. What do you mean by "cost of the project"?

MR. HALL: I mean the cost of constructing the project.

* * *

A. Yes, interest during construction is one of the [17026] items that you have to consider in actually constructing a project.

By MR. HALL:

Q. And that, in turn, has a bearing upon the cost per kilowatt hour? A. Yes, the cost of the project, and consequently anything that is done with it.

Q. From your acquaintance with Hutchinson, do you know whether or not he was financially able to construct this project without going and seeking money from other sources? A. I wouldn't think that he would have considered assuming all the risk involved personally, even if he had the money. I don't think he had enough money, but I am not sure. But I can't conceive of any one man taking such a risk alone.

Q. Mr. Uhl, the tenth and last principal factor which you have testified you considered was the "Yearly cost of producing the estimated output." What do you consider to be the yearly cost of producing the project output? A. I think I previously said something in the order of $10 per horsepower.

Q. What is the nature and amount of the yearly cost which you considered? [17027] A. The things that enter into it are—

Q. Well, will you identify those "things"? A. Interest, depreciation, taxes, insurance, maintenance, operation, and administration.

Q. And did you determine what each of those elements were? A. No, sir.

Q. Are you referring to $10 per horsepower per year?

A. Yes, sir.

Q. Mr. Uhl, we have reviewed these ten individual factors which you have considered. Would you, in a general way, concisely as possible, tell us, step by step, how you arrived at the fair market value of the lands and water rights which you valued as of March 1, 1905?

Mr. King: Might I inquire of Mr. Hall if he asks the witness to repeat all of the cross examination up to now?

Mr. Hall: No. I want him to give us a concise statement as to just his mental processes in arriving at these amounts. He has told us the items he considered. Now, I am wondering if he could state, concisely, the different steps.

A. I considered all the factors that I could think of, to satisfy myself that a project could be constructed from a physical point of view, at a reasonable cost, at a cost in [17028] the lower ranges of water-power cost, at the time. And that the annual cost of the power, or, rather, the difference between the annual cost of the power and the price—

TRIAL EXAMINER: I think you are repeating something. I think what counsel is interested in is the mechanics of the $3,300,000.

THE WITNESS: I am getting to that, sir.

TRIAL EXAMINER: Can't you get to that without repeating what you have said before?

THE WITNESS: I will come to it shortly. I am getting to the picture.

TRIAL EXAMINER: I think it sounds like repetition of the previous testimony.

MR. HALL: I agree, Mr. Examiner.

MR. SPARKS: Well, Mr. Examiner, I just got through hearing Mr. Hall ask for his mental processes. I think that is what the witness is trying to give.

TRIAL EXAMINER: I can't imagine counsel asking for a repetition.

MR. SPARKS: Well, I can imagine it, Mr. Examiner, after nine months of this.

A. I came to the conclusion that there was a sufficient margin between the probable cost and the probable income from this power so that I could relate it—

TRIAL EXAMINER: Mr. Witness, I don't know whether [17029] you are proceeding under an implied suggestion of your counsel or my suggestion. But I wish you would adopt mine.

THE WITNESS: I am going to do that right now.

That margin which made me able to relate it to actual sales of other water-power sites. That is what I am coming to. And since none of these projects are exactly alike, yet there is considerable similarity, one must weigh the various differences and as nearly as possible relate this to actual sales and purchases of water rights. And, having done that, having considered all those factors, I arrived at what I considered a proper value of these water rights.

TRIAL EXAMINER: Now, then, how did you—

THE WITNESS: Based on actual purchases and sales of other water rights.

TRIAL EXAMINER: Then, how did you get the figure of $3,300,000?

THE WITNESS: By arriving at a figure of $20 a horsepower, which is in the lower ranges of actual sales of water rights. In my experience, in actual participation in purchases and sales, they have ranged all the way from $10 a horsepower to $150 a horsepower for undeveloped water rights, on the same comparative basis, and I have considered that, taking all these things into consideration, $20 per horsepower would be something a willing buyer would pay for [17030] it, which would give him sufficient margin to go ahead and make a development, and assume all the risks necessary if he wanted to make the development, or to buy it and hold it for a time and perhaps sell it to someone else.

TRIAL EXAMINER: Now, then, where did you get your $20 per horsepower?

THE WITNESS: From these actual purchases and sales which I spoke of.

TRIAL EXAMINER: Now, will you give the dollars per horsepower for each one you considered?

THE WITNESS: Yes, I will be glad to give you that.

I considered Clark's Rip on the Androscoggin River, which was purchased in 1909 at $19 a horsepower.

Clark's Rip was again sold in 1924 for $39 per horsepower.

It was also determined by the Internal Revenue Department of the United States Treasury that the value of those rights in 1913 was $27, because, in the purchase or sale of this water power, which was bought in 1909, it was necessary to determine the profit that the company made in 1913 at the beginning of income taxes.

The purchaser of those rights in 1924 added to it some additional rights, and brought the cost of the undeveloped site to $42 per horsepower, the same site.

On the Kennebec River, at Solon, in Maine, the purchaser, [17031] whom I represented, paid for those water power rights $30 per horsepower.

TRIAL EXAMINER: When was this?

THE WITNESS: In 1931.

TRIAL EXAMINER: And where?

THE WITNESS: Solon, Kennebec River, Maine. He sold those rights again in 1936 for $45 per horsepower.

Rams Island water rights, on the Androscoggin River in Maine, were purchased in 1931 for $10 a horsepower. I assisted the purchaser in that case.

At Milton, Vermont, on the Lamoille River, the purchaser, the Public Electric Light Company, bought the rights in 1926 for $22 a horsepower.

On the Green River in Vermont, the Green Mountain Power Company, in 1928 purchased the water rights there for $65 a horsepower. These same rights were sold to the Village of Morrisville in 1945—and I assisted the purchaser—for $79 per horsepower.

The water rights at Palmer's Falls, on the Hudson River, New York, were purchased in 1931 for $138 a horsepower. The water rights at Winooski, Vermont, on the Winooski River, were sold in 1941 by the American Woolen Company to the Green Mountain Power Company for $40

a horsepower. I assisted the seller, American Woolen Company, [17032] in that transaction.

At West Enfield, on the Penobscot River in Maine, the water rights were purchased in 1927 by the Bangor Hydroelectric Corporation for $20 per horsepower.

At Franklin Falls, on the Winnepesaukee River, the water rights were purchased in 1931 for $16 a horsepower and were sold again in 1945 for $34 a horsepower.

At Berlin on the Androscoggin River in Maine, the water rights were purchased in 1945 for $15 a horsepower.

Union and Cataract Falls, on the Saco River in Maine, in 1928 the water rights were purchased for $22 a horsepower.

And at the Rockaboma Rip on the Penobscot River in Maine, the water rights were sold in 1922 for $20 a horsepower.

Those are all transactions in which I participated, and then of course I participated in a good many developed water powers. These were all undeveloped water powers.

TRIAL EXAMINER: Just land and water rights?

THE WITNESS: These I mentioned were all just land and water rights. As I say, I did participate in a great many where they were developed.

TRIAL EXAMINER: Where did you get your horsepower figure?

THE WITNESS: Horsepower is calculated horsepower. [17033] The horsepower basis that I deal with is based on a flow in a stream available 20 to 25 per cent of the time. Most all developments in the last 35 years—at least those used for public utility purposes—have been made on about that basis. In other words, that is a common yardstick.

None of these figures are calculated figures. They are trade figures; that is, between buyer and seller.

By MR. HALL:

Q. Is this some more of the horse trading that you have referred to? A. Yes, sir. Nobody pays any more

for them than they have to, and everybody tries to get as much for them as they can. Just like they do for everything else.

Q. In connection with the transactions that you mentioned, was the consideration always paid in cash? Do you know? A. No, I don't know.

Q. In other words, the consideration may have been in securities, so far as you know? A. Well, as far as I know, that is not so. In none of these cases that I mentioned, I don't believe there were ever any securities involved. They were out and out sales.

Q. Do you know, for instance, what consideration passed for the Clark's Rip property at Lewiston, Maine? [17034] A. I am sure about that. There were no securities involved.

Q. All cash? A. Well, there might have been notes. I can't tell you that it was all cash. There might have been notes. But I mean there were no securities involved, I know that.

Q. What were the terms of the notes? A. I don't know about that.

Q. Were they long-term or short-term notes? A. That, I can't tell you. You see, I don't know as there were any notes. But I said there might have been. But I am sure there were no securities involved.

Q. But you are not sure of that with respect to all the transactions that you mentioned? A. No, I am not sure about it.

Q. Mr. Uhl, as I recall, in the figures you gave, there was a range from $15 to $138 per horsepower. How did you arrive at the $20 per horsepower? A. As I say, that was in the lower ranges of actual purchases and sales, and in 1905 not so much was paid for water power rights as later on. Those that I mentioned, where the consideration was greater, had peculiar advantages attached to them, such as in the case of Palmer Falls, a precipitous fall of—I have forgotten how much now, but 60 or 70 feet, so that

a small dam in practically [17035] no distance at all would provide a very large head, and also the fact that there was a good deal of storage on that river, and right in the midst of a very good market. Some of the lower figures that I gave you were in connection with developments where there was no immediate prospect of development. In other words, they were discounted figures because of future development.

Q. Is the number of feet of fall per mile an important consideration in the valuation of land and water rights, using the approach you did? A. Well, it may be, as in the case of Holtwood, it is quite an important consideration. Again, it might not be. It might be a disadvantage. If the fall was too rapid, the pondage might be too small, without flowing too much land.

Q. Mr. Uhl, in connection with the Clark's Rip project on the Androscoggin River, you stated that in 1909 it was sold for $19 per horsepower, whereas in 1924 you stated that it sold for $39 per horsepower. A. That is right.

Q. What caused the increase? A. Well, there are two things which caused the increase between 1909 and 1924. A substantial amount of storage was developed in the upper reaches of the river. The other element that came into it was that there was a [17036] greater demand for the power. The purchaser bought it for immediate development, whereas the original purchaser bought it for possible development.

Q. What are or what were the points of similarity between the Clark's Rip project in 1909 and the Holtwood project in 1905? A. Well, it was—

Q. Specifically, what was it? A. A good dam site was available; the land had all been assembled; a substantial amount of pondage was available. On the other hand, the prospect of immediate development wasn't as far ahead on the Androscoggin as at Holtwood, the cost per horsepower would probably have been somewhat more on the

Androscoggin than at Holtwood. The head was somewhat less

Q. Where? A. On the Androscoggin.

Q. Now, all these projects that you have referred to were sold as complete water-power projects? A. Oh, yes, complete water-power projects.

TRIAL EXAMINER: What do you mean by that?

THE WITNESS: Well, sufficient land and water rights so that the development could be made without the purchase of additional land and rights.

By MR. HALL:

[17037] Q. And the valuations that you have referred to were based upon the use of the land for water-power purposes? A. Yes.

Q. Mr. Uhl, was the power market available for the Clark's Rip project similar to that available to the Holtwood project? A. Not in 1909. It was in 1924.

Q. How about 1905? A. In 1905 there was less market near the Androscoggin River project than there was near the Holtwood project.

Q. Mr. Uhl, which of the sales to which you have referred took place within a period of time which you would consider reasonably contemporaneous with the date of March 1, 1905? A. Well, naturally, the first one that I participated in, which was in 1909.

Q. And that is the only one; is that right? A. That is the nearest one, yes.

Q. That is the only one anywhere that you consider reasonably contemporaneous with Holtwood; isn't that right? A. Yes, as far as period of time is concerned, that is correct.

* * *

[17038] Q. Mr. Uhl, in the case of Holtwood what water rights, if any, were acquired, separate and apart from the land acquisitions? A. I don't know.

* * *

Q. Mr. Uhl, you have used the phrase "water rights." A. Yes.

Q. What is your definition of "water rights?" And what do you include under that definition? A. I include under that definition riparian lands, and [17039] in some cases riparian lands may or may not include the bed of the stream. In some cases it does, and the water rights include all the riparian lands, and, if the stream bed is separate, also the stream bed. All lands and rights necessary to build a dam and flow the land which would be flowed by that dam.

Q. Now, "water rights" as you have used it includes the right to build the dam; is that right? A. That is right.

Q. Does it include preliminary engineering? A. I don't understand your question.

Q. Well, does it include necessary permits and licenses? A. To build a dam?

Q. Yes. A. Yes.

Q. In making your determination, what consideration, if any, did you give to the necessity of obtaining from the federal government a license to construct a project? A. There was no occasion for it in 1905.

Q. In your opinion. A. In my opinion and in my knowledge.

Q. You know that— A. The river was declared non-navigable in 1904, I know that.

Q. By whom? [17040] A. By the Secretary of War.

Q. You know, of course, that Penn Water has now been required to take out a license for the Holtwood project?

A. That is right. But there was no Federal Power Commission in 1905.

Q. Well, are you familiar with the requirements of the law in 1905 with respect to the construction of hydro projects? A. Yes, I think I am reasonably familiar with it.

Q. You know that there was a Rivers and Harbors Act, do you not? A. Yes. And I know that the river was declared non-navigable in 1904.

Q. And that is why you considered that you did not have to take into account whether or not it was necessary to obtain a license from the federal government? A. Oh, well, I assumed that everything necessary to make that development was existent, in arriving at that value.

* * *

Q. Mr. Uhl, I show you at this time a document containing 15 numbered pages, dated March 18, 1946. Is that the report which you prepared and submitted to Penn Water in connection with your determination of the fair market value of the land? [17041] A. Well, I wouldn't call it a report; no. It is a memorandum which I wrote.

Q. And submitted to Penn Water? A. And I did submit copies of it to them.

Q. And that is the only report that you did submit to Penn Water? A. That is, as far as I recall, the only report.

Q. And that document is entitled "Estimate of Fair Market Value, as of March 1, 1905, of the Lands and Water Rights Required to Carry out the Holtwood Hydroelectric Project Development of the McCall Ferry Power Company and Now Owned by the Pennsylvania Water & Power Company"? A. It is.

Q. Did you make any independent investigation and verification of the historical information contained in this document relating to the history of the Holtwood project, the cost of its plant, its operations, the date of commercial operation, and so forth? A. Only in so far as I studied these two documents that we spoke about this morning, which I think are Exhibits 26 and 27.

Q. And the power market surveys, consisting of 68 separate documents. A. Yes.

Q. In other words, you accepted the facts as stated in those [17042] documents for the purpose of writing this document? A. Yes.

* * *

[17043-A] RE-DIRECT EXAMINATION

By MR. KING:

Q. Mr. Uhl, this morning while you were being cross examined, I believe you made some references to contracts prior to March 1, 1905. Will you explain what you meant by that reference? A. I didn't say so. I meant to say that there were negotiations for contracts. There weren't actually contracts, but negotiations for contracts were being carried out.

Q. Prior to March 1, 1905? A. Yes.

* * *

[17045] RE-CROSS EXAMINATION

By MR. HALL:

Q. Mr. Uhl, you referred to negotiations for power contracts that were carried out prior to March 1, 1905. Specifically, just what negotiations did you refer to? A. I would have to refer to my working papers.

Q. You may do so. A. There is a report, so-called Warfield's report——

Q. What is the date of that report? A. Dated August 5, 1901.

This is a letter from the General Electric Company to Mr. Thomas J. Hayward, in which he refers to conversations regarding furnishing electric current from the Susquehanna River to Philadelphia Company.

Q. Who is this individual to whom the letter was addressed? [17046] A. He is a gentleman connected with the General Electric Company, Mr. Mullen.

Q. To whom was that letter addressed? A. Mr. Thomas J. Hayward of the firm of Bartlett, Hayward and Company.

Q. Where was that firm located? A. 100 Broadway, New York.

Q. Was that individual connected with the Holtwood project? A. He was connected with the General Elec-

tric Company; was a co-promoter of this project, you might say. They were interested in promoting this project.

Q. You mean General Electric was interested in promoting the Holtwood project? A. Yes.

Q. With Hutchinson? A. What was that?

Q. Was a co-promoter with Hutchinson? A. They were helping to promote it, yes.

Q. Helping Hutchinson? A. Yes.

Q. Was C. A. Coffin president of General Electric at that time? A. I believe so.

Q. Here is a letter dated February 19, 1910, from Mr. L. B. Stillwell, a consulting engineer, to Mr. Warfield [17-047] of Baltimore, President, Continental Trust Company, in which the advantages of taking power from the Susquehanna River are brought forward.

[17048] Q. Wasn't Mr. Warfield interested in a development in the vicinity of what is now Conowingo? A. No, I think he was interested in the utilities in Baltimore.

Q. And not the development of hydro power? A. I think he was only interested in the use of the power and not in the development of power, as I recall it.

Q. Was either Mr. Stillwell or Mr. Warfield connected with the Holtwood project? A. I think Mr. Stillwell is one of the engineers who made some reports on the Holtwood project.

Q. Now, these references which you have just made were the ones you had in mind when you stated that negotiations were being carried on prior to March 1, 1905; is that right? A. I think there were others. I would have to search for them more carefully. I know there are a good many references to the power market and negotiations for power.

Q. Are those two the only references you can put your hand on right now? A. Well, if you give me a little more time I think I can find some others. I would have to go through them one by one because it is so long since I have studied them.

Q. Without going any further, Mr. Uhl, these two negotiations, or these two documents to which you referred, are the only ones you have been able to find so far?
[17049] A. So far, yes.

* * *

[17056] GEORGE W. SPAULDING

* * *

CROSS EXAMINATION (Resumed)

By MR. WAHRENBROCK:

* * *

[17070] Q. I would like to ask you now if you will describe with some particularity all of the facilities owned by Penn Water which are actually used in the process of local distribution? A. Is that not in my testimony?
[17071] Q. Not the detailed description. There is a reference, a general reference to facilities; but I want to find out just what the facilities are.

Your testimony appears on transcript 16608 and 16609.

* * *

THE WITNESS: And we are speaking of what they own today?

By MR. WAHRENBROCK:

Q. Whatever period of time was covered, or whatever date was covered by your testimony on rebuttal. A. I would be glad to do so with the understanding, of course, that I am speaking from an operating point of view, and not from a legal point of view when I use the words "Distribution facilities".

There are facilities in the Holtwood power house and part of the Holtwood Development that are used in part for what we refer to as local village use, and by that I am referring to the use of electric services by the residences of company employees and the company buildings generally constituting the village.

Then, as a part of those facilities, is the connection to the distribution circuit of Pennsylvania Power and Light Company which formerly was owned by the Pioneer Electric Company, the predecessor of Pennsylvania Power and Light Company.

[17072] The facilities in the Highlandtown Station owned by Susquehanna Transmission Company of Maryland and consisting generally of step-down transformers from 66 KV to 13 KV with an extensive 13 Kv indoor bus arrangement with large numbers of 13 kv cable connections.

The outgoing cables from just inside the building line are owned by Consolidated Gas Electric Light and Power Company of Baltimore and constitute connections to their extensive 25 cycle distribution system.

Generally Baltimore Company owns those cable facilities from outside of the property into and including the potheads, the connections from the potheads back toward the bus being owned by S. T. Co.

There are several metering units generally referred to as metering facilities owned by the company, and by the "company" I am referring to Penn Water, that are a part of the distribution facilities of Pennsylvania Power and Light Company, such metering facilities being located in the latter company's substations.

Q. The latter company being Pennsylvania Power and Light Company? A. That is correct. There are certain facilities of the Pennsylvania Railroad at Conestoga substation which is a jointly occupied substation by Penn Water and the Pennsylvania Railroad near Safe Harbor, the control facilities for both Penn Water transmission facilities, the Pennsylvania Railroad [17073] transmission facilities and part of the railroad distribution facilities being owned and operated by Safe Harbor Water Power Corporation from the latter's control room at Safe Harbor.

Then there is the 110 kv Gunpowder line carrying two circuits.

Q. Excuse me. My question relates to facilities used in the process of local distribution. A. I have that in mind. This tower line and its transmission lines extending from the Philadelphia Road substation of Baltimore Company near Highlandtown substation of S.T.Co., but not electrically connected therewith and extending from Philadelphia Road to Gunpowder Switching Station, a distance of about nine miles, the tower line and circuits are owned by S.T.Co., are operated by S.T.Co., from a maintenance point of view, but from an electrical point of view are operated by Baltimore Company and are therefore used by Baltimore Company in connection with its transmission and distribution facilities in Baltimore County and the outskirts of Baltimore City.

I think I stated that these latter facilities are owned by S.T.Co. rather than by Penn Water. Those are all I recall at the moment.

* * *

[17151] Q. We are somewhat uncertain what the figures in the fourth column of figures on Exhibit 354, under the heading "PW&P, 60-cycle 220 KV, 25-cycle 132 KV" represent, and I would like to ask you to explain what those figures represent. A. They are the amounts of kilowatt hours determined on a net hourly basis, which are sent out in part over the 220 KV transmission system of Penn Water from Safe Harbor towards Baltimore and Washington, plus certain net hourly amounts that are sent out from Safe Harbor, over the 132 KV 25-cycle single phase circuits, to the railroad, and which are transmitted by the railroad to Benning, District of Columbia, and converted from 25-cycle single phase to 60-cycle three-phase.

* * *

Q. Mr. Spaulding, I think you said kilowatt hours; actually the values are in megowatt hours, are they not?

A. That is correct.

* * *

[17188] Q. What did you mean when you referred to certain facilities of the Pennsylvania Railroad as distribution facilities on Transcript 17,073? A. I don't have that page of the transcript here.

Q. Then I show you a copy of the transcript referred to. [17189] It is at the top of the page. A. I was referring to the transformer facilities and the circuit arrangements which the Pennsylvania Railroad Company owned in Conestoga substation for stepping the voltage down from 132 kv. to 12 kv. and for the use of their trolley service.

Q. Do I understand that the Railroad serves ultimate consumers such as householders or small commercial establishments or industries? A. No, it is for their own use on their own trolley, but it is for the purpose of distributing their electric services to their trains, wherever they may be.

Q. That is a somewhat different use of the word "distribution" than is normal in the practice of public utility engineers. A. No. From a technical point of view that is distribution when you distribute the energy in electric services—

* * *

Q. Is it your testimony that from an operating electric utility engineer's viewpoint the 110 Kv. transmission line from the Philadelphia Road substation in Baltimore to the Gunpowder substation in Maryland is used in the process of local distribution? A. I think it could be so looked at because it is part of the distribution system of Consolidated Gas Electric Light and [17190] Power Company of Baltimore.

Q. When you say that you think it could be so looked at, do you mean it is ordinarily not so looked at? A. No, I did not intend to so mean. I meant that perhaps one engineer would classify it as transmission facilities and another engineer distribution facilities.

Q. I thought you testified on your direct that it was a transmission facility used exclusively by Baltimore Company as a part of that company's transmission network supplying an area in Maryland outside of Baltimore.

* * *

THE WITNESS: I did so testify.

* * *

[17216] Q. Let me see if I understand that now. With the exception of these fluctuations in capacity services rendered, which you have stated do affect the amounts billed under Exhibit 382, do I understand that fluctuations in the other electric services which you say are rendered do not affect the dollar amounts of the bills unless power factor falls below .85 or voltage departs more than a specified amount from a stipulated figure? A. That is correct so long as it is understood that the services could not have been rendered except that these other services were provided at Safe Harbor and Holtwood plants.

Q. Do I understand you, then, as saying that the rendition of these other services is a necessary incident to the supply of energy for which the dollar amounts are billed? A. Absolutely.

* * *

[17270] H. ZINDER

* * *

CROSS EXAMINATION (resumed)

By MR. GOLDBERG:

Q. Mr. Zinder, in your Exhibit 319, page 1, in the second paragraph, you talk about cost as used in your study as including the cost of purchased power and energy. Do you see that? A. Yes.

Q. Does that mean that you have not included the cost of voltage, reactive, power factor cooperation, phase and frequency? A. I was dealing there with costs of power

and energy. In my mind that would include, let me say, any electrical services that were purchased for which a cost was shown on the books of the company.

Q. In other words, it included these elements I mentioned? A. All I can say is that it went into the various services rendered and the cost incurred—various services received and the costs incurred in connection with it, and I [17271] considered those costs.

Q. And that was all covered by this phrase "Power and Energy"? A. That is what I intended to have it cover, yes.

Q. And you intended by that phrase to cover voltage, reactive, power factor cooperation, frequency and the other services; is that right?

* * *

THE WITNESS: I would say yes, all services purchased.

* * *

[17272] Q. Now, I take it that the cost figures you have used in your exhibit or rather the figures you have used as cost in your exhibit have been accepted by you without assuming any responsibility for their accuracy? A. More specifically the cost figures received from the company shown in column 1, Schedule B, Table 1 and column 1, schedule B table 2, I take no responsibility for. I might add the same is true with respect to the cost figures shown on schedule A, table 1, column No. 1 and schedule A, table 2, column 1. Those cost figures were taken from Exhibit 64.

Likewise in that case I take no responsibility for those figures.

* * *

[17310] Q. Now, in that data supplied by Mr. George Diehl, he proposed certain allocations between 25 and 60-cycle equipment of the operating and production expenses; is not that so? [17311] A. Yes, let me get the question again, please, to be sure I have answered it properly.

(Question read.)

THE WITNESS: He indicated what to him might be the basis for allocating certain expenses, production and operating expenses.

By MR. GOLDBERG:

Q. And did you employ the allocations he proposed? A. I employed it by using it as a basis for reaching my own conclusions.

Q. Will you use one of his proposed allocations as an illustration and tell us whether you used that one as he proposed it, or whether you modified it in any regard? A. I arrived at a judgment figure on an over-all basis of 76 per cent of the hydro plant operating expenses as properly allocable to 25 cycle. Mr. Diehl's memorandum discusses the possibility of a portion of the expenses being on a 75 per cent basis, others on an 80 per cent basis, and I just considered that not item by item but on an over-all basis and I reached a judgment basis of 76 per cent.

Q. Well, your judgment was based upon the information he had supplied you, right? A. As part of the information that I received.

Q. Well, what other information did you have that provided you with a basis for modifying Mr. Diehl's judgment with [17312] respect to the appropriate allocation between 25 and 60 cycle equipment of production and operating expenses? A. Well, first, I do not know that I modified his judgment. He did not come out with an over-all figure. I do not know what his over-all figure would be if he made such an allocation but it would probably be somewhere between 75 per cent and 80 per cent, if you take his statement here. I have used 76 per cent.

In addition to talking to Mr. Diehl and getting this memorandum, I talked to other plant people.

Q. Who were they? A. Mr. Stabley, T. C. Stabley, station superintendent at Holtwood, and I talked to Mr. Loane.

Q. Were they the only plant people with whom you discussed the allocation of production and operating ex-

penses as between the 25 and 60 cycle equipment? A. Let me put it this way; they were the principal ones I discussed it with, as you recall, Messrs. Diehl, Stabley and Loane.

Q. And what Mr. Diehl told you is embodied in that letter which is part of your working papers? A. Right.

Q. What did you learn from Mr. Stabley with respect to the appropriate segregation of costs as between 25 and 60 cycle equipment, that is production and operating costs? [17313] A. I do not recall exactly what I learned from it. I discussed first of all, with him as I recall, whether he could not segregate his personnel, and how much of his cost he could segregate, how he worked his maintenance program, and points of that kind were discussed. I just used that as part of my basis of arriving at my own judgment in the matter.

Q. Did he segregate his personnel on a 76 per cent basis? A. He stated he could not segregate his personnel as between 25 and 60 cycle operations.

Q. How much of his costs could he segregate as between 25 and 60 cycle operations, did he say? A. I do not recall that he went into what particular items of the production expense he felt could be directly allocated.

I reached a conclusion after discussion with him that as a whole, it could not be done on the basis of getting specific cost records, that it would have to be done on a judgment and allocation basis.

Q. Now, did Mr. Stabley express any judgment as to what percentage of the costs were allocable to 25-cycle and what percentage was allocable to 60-cycle? A. No, I do not recall raising that question with him on an over-all basis.

Q. Now, what did he tell you about how he worked his [17314] maintenance program as it bore on the determination of an allocation of production and operating expenses between 25 and 60-cycle equipment? A. I do not recall specifically on that except that I felt satisfied with the con-

clusion that even maintenance expenses could not be allocated strictly in accordance with the number of units, that the number of units might be a predominating or largely determining factor, but you could not actually say that the maintenance expense would specifically vary in that relationship.

Q. So that is it not fair to state that as far as Mr. Stabley's information was concerned, it did not help you very much in arriving at your judgment allocation of production and operating expenses as between 25 and 60 cycle?

MR. SPARKS: Was it Mr. Stabley or Mr. Diehl?

MR. GOLDBERG: Stabley is the man we have been talking about.

THE WITNESS: I would say it was very helpful to me. Even a negative answer is an answer which is helpful to me.

By MR. GOLDBERG:

Q. When Mr. Stabley told you he could not segregate the personnel as between 25 and 60 cycle equipment, how did that help you in arriving at 76 per cent? A. That helped me reach the conclusion that it would have to be a judgment figure no matter who did it.

[17315] Q. But it did not help you in arriving at what that judgment should be? A. Well, other discussions with him helped me with that.

Q. What other discussions helped you in concluding that they should be 76 per cent? A. I would say my discussions with him as to the general behavior of the production expenses. I would recall that as far as he was concerned, there was a general agreement that an allocation on the basis of number of units, for example, and giving that considerable weight he would agree with, as far as I recall my conversation. He did not give me any final answer. That I reached myself, and I did not, or do not recall asking him for an over-all answer.

Q. What did he tell you about the general behavior of the production expenses that was helpful in arriving at the 76 per cent? A. Take, for example, maintenance. If an allocation was to be made predominating weight would be proper to the number of units involved. I think there was not an identity but a fairly close agreement between Mr. Stabley's views as I discussed them, and Mr. Diehl's views as set forth in this memorandum.

Q. So you got no more out of Mr. Stabley than you got out of Mr. Diehl; is that right? [17316] A. Well, I got something out of both of them. I cannot say how much from one or the other.

Q. All you got out of Mr. Stabley, as I understand it, was that if you were to go ahead on a number of unit bases, he would feel that that was a fair basis; I think that is right? A. I got out of Mr. Stabley, looking at it that way, and I believe this is a supposition—that if I made an allocation of 80 per cent, that would be as high as I could allocate to 25 cycle, and that 75 per cent would be about as low.

Now, I would say that both Mr. Diehl and Mr. Stabley were of the opinion that it might fall within those limits.

Q. Are you saying that Mr. Stabley actually expressed the view that the allocation of production and operating expenses as between 25 and 60 cycle equipment was somewhere between 75 per cent as a minimum and 80 per cent as a maximum? A. No, I did not say that. I answered the question I thought that you put to me, and it required an assumption, and I made the assumption.

Q. But Mr. Stabley never expressed any percentage to you, did he? A. No, and I have said that.

Q. Did you ask him to express any percentage? A. I do not recall.

Q. You were interested, however, in ascertaining what [17317] percentage he might have in mind, right? A. Yes.

Q. But you do not recall whether you asked him that? A. Right. I might say I was interested in going into the details with him.

Q. Did Mr. Loane express an opinion as to the percentage that might be properly allocable to the 25-cycle equipment and to the 60-cycle equipment of the production and operating expenses? A. Yes, I think he expressed an opinion in our discussions. I am trying to recall now whether it was on an over-all basis or for operation and maintenance separately, but I do not remember.

Q. Do you recall what percentage he expressed? A. No.

Q. So, essentially it was Mr. Diehl's information that you relied on in arriving at your judgment; is not that a fair statement? A. Well, I gave most weight to that.

Q. Even though Mr. Diehl did not arrive at an over-all percentage, did you reach the conclusion in considering the percentages he did arrive at, that they were accurate? A. No, I reached the conclusion that you could not get anything accurate in the sense of knowing exactly what was spent in terms of operation or maintenance on 25 as against [17318] 60 cycle.

Q. Do you know what basis Mr. Diehl followed in arriving at his percentages? A. I asked him to set those down, and they are set down in this memorandum.

Q. Is it your statement that you have in that memorandum sufficient information to enable you to reach an independent judgment as to the percentage allocations expressed by Mr. Diehl?

* * *

Mr. Sparks: Is that question clear to you, Mr. Zinder?

The Witness: I think it is.

I interpret the question in this way: Did I rely on that alone, or rather, could I by this alone reach an independent judgment?

By MR. GOLDBERG:

Q. As to the percentages expressed by Mr. Diehl?

MR. SPARKS: Now, Mr. Examiner, just a minute. What is the relevance here of this witness' independent judgment as to the accuracy of the conclusions reached by Mr. Diehl? I see no relevance, and I object to that.

MR. GOLDBERG: I think I can explain that, and it should be obvious. Here is information that he is relying on, and the question is, whether that information is sufficient as a basis for his own judgment.

[17319] MR. SPARKS: That is not the question. If that is it, I have no objection.

MR. GOLDBERG: I will have to ask the questions in my own way.

MR. SPARKS: I think the questions ought to be clear and proper.

TRIAL EXAMINER: The objection is overruled.

THE WITNESS: I felt I needed more than this memorandum to arrive at an independent judgment and sought, and did get more.

By MR. GOLDBERG:

Q. And the more you sought, and did get, is the information that you mentioned that Mr. Stabley gave you, right? A. And discussions with Mr. Loane.

Q. Now, what did Mr. Loane tell you that contributed to your store of knowledge that enabled you to determine what allocations should be made of production and operating expenses as between 25 and 60 cycle equipment? A. He furnished no specific information in terms of dollar figures that I recall. We discussed the problem in relation to the operation of the plant, what he knew of the operation of the plant, what his judgment was and I used that in arriving at my own judgment.

Q. But you cannot remember what his judgment was? A. No, I do not recall offhand as to what figures—[17320] I did not put them down in writing—that he gave me.

MR. SPARKS: What was the answer, please? I do not know whether it is complete.

(Record read.)

By MR. GOLDBERG:

Q. You do not know whether Mr. Loane's percentage was expressed as an over-all percentage, either, right? A. No, I do not recall specifically.

Q. Now, what did Mr. Loane tell you about the operations of the plant that helped you arrive at this 76 per cent? A. I do not recall.

Q. What do you recall about what he told you that helped you? A. I recall we discussed the question of how the plant was operated.

Q. What did he tell you? A. In terms of the labor and employment. He did not go into detail on that.

I also was testing my own tentative conclusions with what conclusions he might have with regard to items. For example, I recall specifically discussing with him also the question as to whether it would be proper in his judgment to separate operation and maintenance and take maintenance on a straight number of unit basis. All questions I thought that would be helpful to me in discussing the problem of what [17321] was a proper basis of allocating that item.

* * *

[17488] Q. Do you know how the 25 cycle hydro equipment is operated during periods of extremely low flow? A. No, I do not at the moment recall.

Q. Well, do you know whether or not the 25 cycle hydro equipment during such periods is operated independently of other transactions on the interconnected system? A. I could not answer that. I did not make any study of the matter.

Q. Does that mean that you are of the opinion that in an interconnected system you would expect the 25 cycle hydro equipment to be operated independently of what is occurring on that interconnected system? A. I cannot answer that question. It appears to me to be of a very general nature, and I could not answer that [17489] without more information. I would like to say that in this cost allocation, as I stated at the outset, I took and lifted Penn Water out of the interconnected system and treated it as a single unit, as a single corporation, looking at its transactions and its costs. That was part of the problem to take Penn Water alone, starting with that first basic premise and then determining what was necessary in order to arrive at the costs or Penn Water's costs for service to Baltimore by determining what those services were and what the costs were related to them.

Q. All right. Now, when you lifted Penn Water, as you say, out of the interconnected system and considered it as a self-contained unit, did you restate the operations of Penn Water to meet that assumed condition? A. I made no restatement of operation. I simply took the facilities as I found them. The transactions over those facilities as I found them.

Q. In other words, you took the facilities and the transactions as they are found as part of an interconnected, coordinated system and made a cost allocation based on Penn Water as not being part of that interconnected and coordinated system; is that right? A. That is not so.

Q. Now, when you lifted Penn Water out of that interconnected system and considered it as a self-contained whole, [17490] did you consider the costs in relation to operations of Penn Water as part of an inter-connected, coordinated system? A. I took their costs as I found them.

Q. And they are costs incurred in operating as part of a coordinated interconnected system, right? A. Yes. Now, for my purpose—and by my purpose I mean in con-

nection with determining the costs of service to Baltimore —I was only interested in a portion of those costs.

Now, the 25 cycle costs were not involved in interchange; there was no interchange with respect to 25 cycle 3 phase service. I took the 25 cycle costs as I found them.

Q. Did you determine the relationship of the 25 cycle service to Baltimore to the operations of the interconnected and coordinated system? A. It was not necessary.

Q. You did not do it? A. I did not do it because it was not necessary.

Q. And you did not consider it necessary even though the interconnected system was operated as a unified power pool? A. I would say my answer to that is yes, based upon or in relation to a determination or study such as I have presented here.

* * *

[17492] Q. On page 3 you say some of the agreements are joint with one or more of these other suppliers with varying degrees of responsibility and obligations on the part of the parties.

Which agreements did you conclude were joint?

* * *

[17493] THE WITNESS: First let me say that my use of the term "joint" as I stated before is where another party is involved or is a party to the contract. I considered the agreement with the Pennsylvania Railroad as being a joint agreement.

* * *

[17494] THE WITNESS: I believe that Safe Harbor is a party to the Pennsylvania Power and Light Company contract, to the Metropolitan Edison contract—

By MR. GOLDBERG:

Q. The new one or the old one? Do you have copies of the exhibits before you? If not, I can give them to you because that would help you in answering.

THE WITNESS: All right, if you will.

In answer to your question as to the Metropolitan Edison it appears that Safe Harbor is not a party to the new contract.

By Mr. Goldberg:

Q. Exhibit 72 in this proceeding? A. I am looking now at Exhibit 72, which is the contract between Metropolitan Edison and Pennsylvania Water and Power Company dated Nov. 15, 1945.

Q. Your reference to Metropolitan Edison was related to Exhibit 71, was it not? A. To Exhibit 71, that is right. Safe Harbor is a party to the Coatesville contract which is with the Philadelphia Electric Company and that is Exhibit 73; and also to the supplemental agreement between the same parties which is Exhibit 74.

Safe Harbor is also a party to the agreement with the [17495] Pennsylvania Power and Light Company, which is Exhibit 76.

* * *

[17498] Q. Now, when you say more than one party involved, does that mean you ascertained whether all the parties to the contract were actually supplying energy? A. No, I did not.

* * *

[17501] Q. You have never before in your consideration of Penn Water's contracts and Safe Harbor's contracts referred to them as joint agreements; is not that so? A. I do not recall that I ever had or that I haven't. That goes back quite a way when you say "never before".

Q. Up to this proceeding you have been of the opinion that Safe Harbor sold electric energy to only two customers, Consolidated and Penn Water; is not that right?

* * *

The Witness: I do not recall that I ever made a conclusion of that character. I do not recall that I have ever been called upon to make one.

By MR. GOLDBERG:

Q. I would like to show you Exhibit "X" in Docket IT-5914, being the Safe Harbor Water Power proceeding, which was Exhibit 18 in Docket No. IT-5494, being the first Safe [17502] Harbor rate case proceeding before the Commission, and to the first page of that exhibit.

That is a report, is it not, on the property, operations and contracts of Safe Harbor Water Power Corporation? A. That is right.

Q. And that is a report which you signed, is it not? A. Right.

Q. I direct your attention to the last page thereof. A. Right.

Q. You signed that at the time you were with the Federal Power Commission and were chief of the Division of Rates and Statistics; is not that so? A. Yes, sir.

Q. Now, referring to page 1 of that report, the first paragraph, you say there, don't you:

> "The energy generated at this plant is sold under long term contracts to the Consolidated Gas Electric Light and Power Company of Baltimore and to the Pennsylvania Water and Power Company."

* * *

THE WITNESS: That is right, as an introductory statement.

By MR. GOLDBERG:

Q. I shall get to the others, Mr. Zinder. The plant you were there referring to was the hydro-electric generating [17503] plant of Safe Harbor Water Power Corporation, is not that right? A. That is right.

* * *

[17509] Q. Referring to page 14 of that exhibit, the second paragraph, you there state, do you not:

> "Besides the generation of electric energy in the hydroelectric and steam plants at Holtwood, the com-

pany purchases one-third of the output of the Safe Harbor plant."

A. That statement appears on page 14 of the document which you have handed me.

Q. Is there any doubt in your mind you were there referring to Holtwood Company?

* * *

THE WITNESS: The company there referred to is the Pennsylvania Water & Power Company.

* * *

[17513] Q. Now, referring to page 39 of that same document under the section entitled "Other System Contracts," this statement is made, is it not:

> "In addition to the contract for the construction and operation of the Safe Harbor Plant, the Safe Harbor [17514] Water Power Corporation is a party to several other contracts and agreements. These contracts do not provide for any direct sales by Safe Harbor for, as previously pointed out, its entire output is sold to the Baltimore and Holtwood Companies. However, these contracts are important to Safe Harbor as they have affected the design, construction and operation of the plant to a considerable extent."

A. That statement that you read appears on page 39 of the document under the heading, or under the major heading of "Other System Contracts" and the subheading "Pennsylvania Railroad Company Contract."

Q. Referring to page 40 under the subheading "Other Contracts," of this section that we are talking about, there are listed the—I better read it, rather than paraphrase it. This appears, does it not:

> "The Safe Harbor Water Power Corporation is also a party to several contracts for the supply of electric energy and power to certain other utilities operating in the State of Pennsylvania. Most of these con-

tracts were originally entered into by Holtwood, but in recent years Safe Harbor has become a party thereto, although the agreements are carried out principally by Holtwood and Safe Harbor might be said to be a silent partner." That appears there, right?

[17515] A. That appears at the point you designated in the document.

Q. And then the contracts are listed on page 40 continuing over to the top of page 41, right? A. Certain contracts are listed following that statement on page 40 and continuing on page 41, yes.

Q. These contracts are listed as the contract of May 1, 1933, between Penn Water, Safe Harbor and Pennsylvania Power & Light Company for the supply of electric power and energy to the Lancaster System of P. P. & L.; the agreement of June 11, 1934, between Penn Water, Safe Harbor and P. P. & L. relative to the Safe Harbor-Donegal connection and the facilities to be provided by each party; as well as the letter agreement of April 28, 1939, between Penn Water, Safe Harbor and P. P. & L. relative to the provisions in the above contract pertaining to the parallel operation of the Lancaster Division with the main system of P. P. & L. Company and for the furnishing of certain other services, as well as the contract of August 1, 1933, and the supplement of December 13, 1938, between Penn Water, Safe Harbor and Philadelphia Electric Company for the supply of electric power and energy to the Coatesville System of Philadelphia Electric Company and, finally, the contract of January 1, 1935, between Edison Light & Power Company, Met Edison and Pennsylvania Water & Power Company and Safe Harbor for the supply of energy and power to York, [17516] Pennsylvania, and vicinity, isn't that right? I have correctly described the contracts that are listed as the "Other contracts" on pages 40 and 41, right? A. That is a statement of the contracts listed under the statement you read appearing on pages 40 and 41 of the document.

Q. Now, following the description of these contracts on page 41 you state, do you not:

"As previously pointed out, although Safe Harbor is a party to these contracts and furnishes a part of the power and energy, the actual sales are made by Holtwood which collects the revenue."

A. That statement appears on page 41.

Q. And on page 44 under Section 8 entitled "System Power And Energy Transactions In 1938" and the subheading "Safe Harbor to Baltimore and Holtwood," you state:

"As previously brought out the Safe Harbor Company sells its entire output under a long term contract to Baltimore and Holtwood."

A. That statement appears at the point in the document you designated.

Q. Now then, on page 44 again you show in a tabulation, do you not, sales to Baltimore, Pennsylvania Power & Light, Philadelphia Electric Company, Edison Light & Power Company, and the Pennsylvania Railroad Company of kilowatt hours?

[17517] MR. SPARKS: Where does it say sales, Mr. Goldberg?

MR. GOLDBERG: Let me read what it does say.

"In 1938 Holtwood generated 757,177,000 kilowatt hours and received 332,513,900 kilowatt hours from other systems including the purchase from Safe Harbor which represented 25.2 percent of its total system energy or a total of 1,089,690,900 kilowatt hours available on the system. It disposed of such energy as follows."

By MR. GOLDBERG:

Q. I have correctly read that, right? A. That appears on page 44.

Q. And that is an introduction to a tabulation showing the disposition of that energy to Baltimore, Pennsylvania Power & Light Company, Philadelphia Electric Company, Edison Light & Power Company and the Pennsylvania Railroad, right? A. That is right.

Q. Disposition by Penn Water, right? A. Disposition by Holtwood.

Q. To Baltimore and other customers, right? A. That is right.

Q. Now then, on page 45 this appears:

"In addition to the sales by Holtwood, it participated in several interchange transactions some or all of which involved Safe Harbor energy as follows."

[17518] I have correctly read that, have I not, from page 45? A. That statement appears on page 45.

Q. Following that statement is a tabulation which names Philadelphia Electric Company, Pennsylvania Power & Light Company and Metropolitan Edison and shows point of interchange with these companies as Perryville and Thorndale, Harrisburg and Violet Hill respectively, right? A. That appears after the statement you just read.

Q. Now on page 44 where disposition of the energy by Holtwood to Baltimore and other companies is tabulated, revenue is shown for such disposition, right? A. There is a column headed "Revenue," yes.

Q. And there is a column with respect to the interchange referred to on page 45, the tabulation on page 45 of the exhibit headed "Amount of settlement," isn't that so? A. There is such a column on page 45.

Q. Now then, I want to show you Exhibit 24 in Docket No. IT-5914, which is entitled "Supplemental rate report, property operations and contracts of Safe Harbor Water Power Corporation." You recognize that document, don't you? A. The document looks familiar.

Q. If you look at the next to the last page you find, do you not, that you signed it as Chief of the Division of Rates and Research? A. I see that.

[17519] Q. Now referring to the second paragraph on page 17 of Exhibit 24 in Docket No. IT-5914, this statement appears, does it not:

> "Energy generated at Safe Harbor Plant in Pennsylvania is transmitted over these lines into the State of Maryland to the vicinity of Baltimore and Takoma Park where it is sold by Holtwood and Safe Harbor at wholesale to Baltimore."

A. That statement appears on page 17 of the document I have before me.

MR. SPARKS: Now, Mr. Examiner, I object to any further questions and to the last question with respect to what Mr. Goldberg has termed as Exhibit 24 in Docket IT-5914. In the first place, there is nothing to show that that is the exhibit that was put in in that case. Its authenticity is not proved and the same thing is true of this so-called Item X which was, according to Mr. Goldberg's statement, Exhibit 18 in the first Safe Harbor case.

This witness has been and is being questioned about a document which has not been authenticated.

TRIAL EXAMINER: It has been authenticated to the extent the witness accepts his authorship of it, isn't that right?

MR. SPARKS: But, Mr. Examiner, that hasn't been authenticated to the extent that it is proved that either one [17520] is an exhibit in any other case. All we have is Mr. Goldberg's statement about it.

MR. GOLDBERG: Mr. Examiner, may the witness be withdrawn and I will take the stand and authenticate the exhibits?

TRIAL EXAMINER: I don't think that the description of the document as an exhibit in a prior proceeding is as important as the acknowledgment of the authorship of the statements at some prior date by this witness.

MR. SPARKS: That is all right, Mr. Examiner, if Mr. Goldberg is not going to argue in his brief that in Item X, which is in the record in the Safe Harbor case in Docket IT-5914 Mr. Zinder made certain statements. If he is not going to argue that, then there is no question of authenticity except as they may be documents which Mr. Zinder signed.

TRIAL EXAMINER: Mr. Witness, do you recognize the documents as described by counsel?

MR. GOLDBERG: Both, Mr. Examiner, I take it the items I have referred to as Exhibit X by reference in IT-5914 and Exhibit 24 in IT-5914?

TRIAL EXAMINER: Yes.

THE WITNESS: By recognizing the documents, Mr. Examiner, I recognize the signatures in both cases and do say they are my signatures. The first document I recognize as a report. I still don't exactly recall it in detail.

[17521] TRIAL EXAMINER: Did you qualify each of these documents, do you recall, for admission in a prior proceeding?

MR. SPARKS: You mean did he testify, Mr. Examiner?

TRIAL EXAMINER: That is correct.

THE WITNESS: My best recollection is, and I am quite certain of that, that I did not testify in either of these two proceedings.

By MR. GOLDBERG:

Q. Mr. Dunstan testified in IT-5494 and Mr. Fosdick testified in IT-5914 and sponsored each of those exhibits, is that right? A. That is my impression—

MR. SPARKS: Wait a minute, let's get the question first. I don't think the witness understood the last part of the question.

TRIAL EXAMINER: All right, read the question.

(Question read.)

THE WITNESS: Well, Mr. Dunstan testified with regard to the first in Docket IT-5494.

MR. SPARKS: With regard to that exact document, Mr. Zinder?

THE WITNESS: That I would have to check. I know that Mr. Fosdick testified in Docket IT-5914. My best recollection is I did not testify in either of those dockets or cases.

TRIAL EXAMINER: Now, unless it is absolutely necessary [17522] I do not wish to have counsel taking the witness chair. Is there any other way in which counsel could establish that?

MR. GOLDBERG: Yes, I can bring the official records of the Commission in.

TRIAL EXAMINER: Suppose you do that. You could do that after the luncheon recess.

MR. GOLDBERG: It would have to be after the luncheon recess.

TRIAL EXAMINER: Suppose we proceed on that basis and have the original exhibits produced.

MR. GOLDBERG: Let me inquire, are counsel for the respondents actually questioning the authenticity of the copies I have here as being accurate copies of the exhibits in the official records of the Commission?

MR. SPARKS: Yes, we are, Mr. Examiner.

MR. GOLDBERG: All right.

MR. SPARKS: I don't know whether those documents which Mr. Goldberg has been questioning the

witness about are either the exhibits that were introduced in those cases or are true copies; we don't know that.

TRIAL EXAMINER: All right.

MR. SPARKS: We have had no opportunity this morning to examine either one of those documents and this morning is the first time any reference was made to either one of them on this cross-examination.

[17523] TRIAL EXAMINER: All right.

MR. GOLDBERG: I suggest, Mr. Examiner,—

TRIAL EXAMINER: If counsel can assure the Examiner it is his belief that when the original copies of the exhibits are produced they will prove to be exact copies—

MR. GOLDBERG: That these will prove to be?

TRIAL EXAMINER: Yes.

MR. GOLDBERG: No question in my mind about that.

TRIAL EXAMINER: All right, then, the objection is overruled as directed to this line of questioning in so far as it relates to the authentication of these two documents, pending the production of the original exhibits. I mean by that, if on the production of the original exhibits it should prove these are not exact copies then some remedial steps will be taken.

Is there a pending question?

MR. SPARKS: I believe the question was answered.

TRIAL EXAMINER: Let us have the record read.

(The record was read.)

MR. SPARKS: May I have a continuing objection, Mr. Examiner, to any further questions with regard

to what has been referred to by Mr. Goldberg as Exhibit 24 in IT-5914?

TRIAL EXAMINER: Yes.

By MR. GOLDBERG:

Q. Mr. Zinder, the lines there referred to are the [17524] 220 Kv. lines, are they not? A. The statement which you read appearing on page 17 of this document refers to two circuits operating at 230 Kv. connected directly with two circuits of Holtwood Company running to Baltimore.

Q. We now speak of them as 220 Kv., do we not? A. Yes, I believe that is right.

Q. This appears, does it not, at the bottom of page 17 and top of page 18:

> "The 25 cycle 13.3 Kv. energy transmitted from Safe Harbor to Conestoga Substation is stepped up to 132 Kv. for transmission by Holtwood to various points from Conestoga Substation in Pennsylvania, to Perryville Substation in Maryland where it is sold to the Railroad by Baltimore. Four 132 Kv. 25 cycle, single phase, transmission lines owned and operated by Holtwood for this purpose run between these two points. Energy is also purchased by the Railroad at Conestoga for transmission over its own transmission lines running from Conestoga to Harrisburg, Pennsylvania, to Coatesville, Pennsylvania, and also to Perryville, Maryland."

I have correctly read that, haven't I?

A. The statement you read appears at the bottom of page 17 and the top of page 18 of the document you have submitted [17525] to me.

Q. You state, do you not, on page 18:

> "Energy is also sold by Holtwood to the Edison Light and Power Company at York, Pennsylvania, and

to the Philadelphia Electric Company at Coatesville, Pennsylvania, over the 2-circuit 70 KV transmission lines running from the Holtwood plant"?

A. What you read is a portion of the last paragraph beginning on page 18 of the document before me.

Q. You do not there say, do you, that the energy is also sold by Safe Harbor? A. There is nothing in that statement saying that energy is also sold by Safe Harbor.

Q. At the top of page— A. Pardon me, could I go back to page 18?

Q. Yes. A. All right.

Q. At the top of page 25 of Exhibit 24 you state, do you not:

"The contract between Holtwood and Baltimore as it is modified is similar to the agreement under which Safe Harbor sells all of its power and energy to Holtwood and Baltimore in that it is largely independent of the amount of power and energy supplied."

You so state, do you not?

[17526] A. That is a portion of the paragraph appearing on page 25 of the document before me.

Q. Do you want to read the balance of the paragraph? A. I don't want to read it.

Q. I just want you to know you are at liberty to read any additional portions you wish. A. I just wanted the record to show that it is not an entire paragraph.

Q. Yes. The balance of the paragraph isn't necessary for that first sentence, the first sentence is an accurate sentence without the balance of the paragraph, isn't that so? A. Well, I am not sure, I would have to study it a little bit more.

Q. Then let's read the balance of the paragraph so that nobody will have any doubts. Continuing the paragraph on page 25, you state, do you not:

"Thus, a reduction in Holtwood's operating expenses as a result of reduction in the cost of service

supplied to Holtwood by Safe Harbor would automatically reduce the cost of service to Baltimore"?

A. What you have read is the balance of the first paragraph appearing on page 25 of that document.

Q. Referring to page 27 there is a table entitled: "Table 8, Safe Harbor Water Power Corporation, Docket IT-5914, Revenue from Energy Sales 1938-1943, Inclusive," isn't [17527] that so? A. That heading appears on page 27 of the document.

Q. And it has seven columns, right? A. Correct.

Q. The first column is "Year;" the second is "Sales to;" the third is "Kilowatt hours;" the fourth is "Percent of total;" the fifth is "Gross revenue;" the sixth is "Percent of total;" and the seventh is "Average revenue cents per kilowatt hours." A. Those are the seven columns.

Q. Under the second column "Sales to" there is shown Baltimore and Holtwood companies, right? A. There is shown Baltimore and Holtwood.

Q. Those are Baltimore and Holtwood companies, right? A. I assume so.

Q. Those are the only sales shown for Safe Harbor, right? A. There are no other sales listed under the column "Sales to."

Q. On page 28 there is a tabulation entitled "Table 9, Safe Harbor Water Power Corporation, Docket IT-5914, Holtwood Sales of Energy 1938-1943, inclusive," isn't that so? A. The title appears at the top of Table 9, page 28.

Q. And Column 2 of that table is entitled "Purchaser," right? [17528] A. That is correct.

Q. And the purchasers are shown in each of those years as Baltimore, Pennsylvania Power & Light Company, Philadelphia Electric Company, Edison Light & Power Company and Pennsylvania Railroad Company? A. That is right.

Q. Turning now to page 29 we find another table, do we not, entitled "Table 10, Safe Harbor Water Power Corporation, Docket IT-5914, Interchange Transactions by

Holtwood, 1938-1943, inclusive," isn't that so? A. That title appears at the top of Table 10 on page 29 of the document.

Q. And the companies with whom the interchange transactions take place are listed as Philadelphia Electric Company at Perryville and Thorndale, Pennsylvania Power & Light Company at Harrisburg and Metropolitan Edison Company at Violet Hill, isn't that so? A. The companies you named are those listed in Column 2 of that table.

Q. And on Tables 9 and 10 Safe Harbor isn't mentioned, isn't that so? A. Safe Harbor's name appears at the top of the table.

Q. Well, as a purchaser or seller? A. It isn't mentioned as a purchaser and is not listed in Column 2 labelled "Company."

[17529] Q. Of Table 10? A. Of Table 10.

Q. And the appearance of Safe Harbor is in connection with the designation of the proceeding, the appearance of the name "Safe Harbor"? A. I assume so.

Q. Now then, referring to page 30 there is a table entitled "Table 11, Safe Harbor Water Power Corporation, Docket IT-5914, Sales to Railroad for Years 1938-1943, inclusive," isn't that so? A. That title appears on page 30.

Q. And the selling companies to the Railroad on that table are shown as being Baltimore Company and Holtwood, isn't that so? A. Column 2 of the table on page 30 under the heading "Selling company" has only two names, Baltimore and Holtwood.

* * *

[17537] MR. SPARKS: Mr. Examiner, we are prepared with some redirect at this time, but I think you will realize that the character of the cross-examination today, up to now, has been such that we could not under

any circumstances be prepared to go forward with redirect with regard to that cross examination.

TRIAL EXAMINER: Will you specify what cross examination you have reference to?

MR. SPARKS: I will be glad to. I refer specifically to the cross examination by counsel for the staff relating to Exhibit X in the Safe Harbor case, IT-5914, which contains 40-some pages, and to cross examination by counsel for the staff with regard to Exhibit 24, in the Safe Harbor [17538] rate case, IT-5914, which documents were first referred to in this record this morning. We have had no opportunity to examine those two documents, nor have we had an opportunity to examine the direct testimony or the testimony given under cross examination, if there was any, of the witnesses who sponsored those two exhibits in IT-5914, and in the earlier Safe Harbor case, where I understand the document referred to as Exhibit X was also an exhibit.

It will be necessary for us, if we are to have a reasonable opportunity to complete the redirect testimony of this witness, to examine the testimony of the witnesses who sponsored those two exhibits and to examine those two exhibits. We have not, as I say, had an opportunity to do that, and it is unreasonable to require us to go ahead with redirect based on this morning's cross examination, without our having an opportunity to make that study and to give consideration to those documents and to today's transcript.

[17539] TRIAL EXAMINER: Why do you refer to the testimony of the witnesses in the prior proceeding?

MR. SPARKS: Because we don't know, Mr. Examiner, at this time, whether the testimony of the witnesses who sponsored those two exhibits has any bearing on the redirect of this witness with relation to his

cross-examination this morning. We don't know until we examine that testimony. They qualified the exhibits in that proceeding, presumably, but we have had no opportunity to even determine that, let alone to determine what they said.

MR. GOLDBERG: May I be heard, Mr. Examiner?

MR. SPARKS: And let me say one other thing, Mr. Examiner. This witness was first on cross-examination, I think, a week ago. Counsel for the Staff waited until the last day before he brought in these exhibits, and made it necessary for us to consider those exhibits before going forward with redirect.

MR. GOLDBERG: May I be heard?

TRIAL EXAMINER: No, I don't think it is necessary.

MR. GOLDBERG: I just wanted to address one inquiry to counsel for the Respondents through the Examiner.

TRIAL EXAMINER: What is the nature of the inquiry?

MR. GOLDBERG: Counsel for the Respondents stated this is the first time today that on the record reference has been made to these exhibits. I would like to inquire whether today, [17540] was his first knowledge of those exhibits and his knowledge of their contents.

MR. SPARKS: My answer to that, Mr. Examiner, is an unqualified "yes." Today is the first time I have ever laid eyes on those two exhibits, and it is the first time I have ever heard of those two exhibits.

TRIAL EXAMINER: I don't see why you should not be prepared to conduct redirect examination of the witness by Monday morning with regard to those two exhibits.

MR. SPARKS: I am not sure that we will be, Mr. Examiner. You will recall that we have had proposed rebuttal testimony, and exhibits served on us. If your ruling is to be applied to us with regard to cross-examination, on those exhibits and on that testimony, and if we are to be given an opportunity to prepare rebuttal on those exhibits and on that testimony, I don't believe we can be ready by Monday morning with this witness.

TRIAL EXAMINER: Well, I will give you until Monday morning. Now, Respondents' counsel is not single-handed. He has here before us the very witness who prepared those previous exhibits and who apparently is familiar with that in both those previous proceedings.

MR. SPARKS: We have here before us the witness who prepared those exhibits, Mr. Examiner, did I hear you say?

TRIAL EXAMINER: Exhibit X and Exhibit 24.

[17541] MR. SPARKS: No, Mr. Examiner, there is no testimony that the witness Zinder prepared those exhibits.

TRIAL EXAMINER: He assumed responsibility for the preparation of those exhibits, did he not?

MR. GOLDBERG: "Directed and supervised," according to his testimony.

MR. SPARKS: Whatever the evidence shows, Mr. Examiner, it shows. But I am sure it does not show that this witness prepared them; and I am sure the record does show, this morning, that the witnesses who sponsored those exhibits in the Safe Harbor case prepared them, and not this witness.

TRIAL EXAMINER: Well, I think this witness can be of sufficient aid to you in preparing for that part of

the redirect to justify the Examiner setting Monday morning, 10 o'clock, as the time for you to conduct your redirect of this witness.

MR. SPARKS: Let me say, Mr. Examiner, that on the basis of Mr. Goldberg's statement yesterday that he would be through with the cross-examination early today, the witness Zinder made an appointment to go to New York Friday. So that he will not be available for any help to me, or to anybody else, in preparing his redirect.

TRIAL EXAMINER: When will the witness return from New York? Tomorrow evening?

THE WITNESS: Probably.

[17542] TRIAL EXAMINER: I still set Monday, 10 o'clock, as the time for your redirect.

MR. SPARKS: I take exception to your Honor's ruling and say the ruling deprives Respondents of a fair trial because we have not been given a reasonable opportunity to prepare redirect.

* * *

[17543] REDIRECT EXAMINATION

By MR. SPARKS:

* * *

[17552] Q. At page 16517 you were questioned about the possibility of depending on "as, if and when available" power to meet firm power commitments. This question followed other questions relating to the differences between Penn Water's 60-cycle generation under certain specified conditions and the 60-cycle requirements of the Pennsylvania customer loads. Then, at line 16 of page 16518, you agreed that "sources that are available only on an as, if, and when basis, are not considered by me as firm power commitments," was that your testimony? A. That is right, yes.

Q. Does that testimony mean that Penn Water cannot receive supplemental energy supplies on an as, if, and when basis, and use them in connection with its supply of firm power loads? A. No, it certainly does not.

* * *

[17553] Q. Have you now been informed that there may be some misunderstanding of the designation "Manor Substation"? A. Yes, I have. I have now been informed that there will soon be a 66 kv Manor Substation in addition to the 220 kv Manor Substation.

* * *

[17563] FURTHER CROSS-EXAMINATION

By MR. GOLDBERG:

* * *

[17573] Q. Does that mean that you did have all of Penn Water costs, which it incurs in rendering service to its customers? [17574] A. To the best of my knowledge, I have. That was what was given to me, and, as I stated, I started with those figures and took no responsibility for them.

Q. And they are in column 1 on page 25, Exhibit 319; is that right? A. The costs given to me are in Column 1, Page 25, yes.

Q. And those are the costs given to you pursuant to your request for all of the costs incurred by Penn Water in rendering service to its customers; isn't that so? A. I do not recall the exact nature of my request, but I believe it was essentially that.

Q. That is what you had wanted to make your allocations, total costs, all costs of service? A. That is right.

* * *

[17613] GEORGE W. SPAULDING

* * *

CROSS EXAMINATION

By MR. WAHRENBROCK:

* * *

[17667] Q. Well, maybe it is implicit in your understanding as an engineer, but do I understand that what you mean is that for interchange accounting any particular amount of electric energy moving from one party to the interchange to the other is considered as having the same cost as that moving from the second to the first during the same hour, but may not have the same cost during different hours?

* * *

A. The reason I ask is that your question carried a statement about which you and I have been discussing for several days, namely, whether the energy and the other services actually were transmitted between two parties—that is, delivered by one and received by the other, and of course, I have continuously stated that they were not in [17668] connection with this transaction, I didn't want to encumber the record by going all through that again and, therefore, I wanted to point that out before I went back and was more specific about the rest of your question. With that understanding, I shall be glad to have the question read and endeavor to explain it.

* * *

A. May I answer it this way: that the costs on the system of each party are assumed not to change within a clock hour. And that is the reason that we used the net flow in that hour.

By MR. WAHRENBROCK:

Q. And that assumption of no change within the hour does not extend outside the hour and hence you do not attempt to net the net of one hour against the net of the

[17669] other; is that right? A. That is correct, yes. It would be a coincidence, perhaps, if you found the same cost on two different hours in the same day. Frequently, of course, that coincidence does occur.

Q. Yes. Then, it is the assumption of the equality of cost which is the basis for the netting within the hour? A. That is right. Well, may I say the behavior of the costs, rather than the assumption of the costs, and I am not using behavior in any peculiar sense there. The costs don't, as a rule, change very much within the hour, and while they may on one hour change in one direction, perhaps in another hour they may change in the other direction, and for all practical purposes, it is acceptable by the systems with which I am familiar, in connection with the interchange transactions, to assume, based on the experience of the companies, that the costs do not vary within the hour, or if they do, such changes do not justify any more accuracy of accounting.

Q. Then, it isn't because the gross flows are not actual or real, physically, but because of this cost aspect, that they are netted within the hour?

* * *

[17670] A. So long as we are talking about a single line between two parties, I think I would agree.

By Mr. Wahrenbrock:

Q. Yes. A. And by single line I mean a single electrical interconnection between the two systems.

Q. Involving merely actual interchange at that point, such as is involved in this testimony at the bottom of transcript 16616 and the top of 16617? A. No, because at 16616 that is not the situation. We have more than one interconnection over which the flow of electric services are metered separately on the two parallel paths.

* * *

[17672] Q. You have spoken in several different connections of net hourly energy flows. The first reference you

made was that on 16595, lines 12 to 15. Now, what I seek to ascertain is that generally, in this interchange accounting, to which Penn Water is a party, the reason for the hourly netting is essentially this cost aspect which you have just explained. A. I think that is generally correct, but to be sure that I do understand it, when we speak of the cost aspects, we have to include, of course, the additional accounting that might be required if you attempted to use shorter periods of time, the amount of records, the amount of manpower, and so forth, which is all a part of these costs that we are talking about. After all, we operate our system on a practical basis and not on a theoretical basis at all times in connection with this accounting. There are certain limits to the practicalities of carrying out interchange accounting as distinct from firm power accounting, and we have to consider the practical aspects of it, and we do. And it was for that reason that I stated, on page 16595, that the gross flows of energy have no significance in that connection.

Q. But you don't mean to say, do you, that there are not actual energy flows as measured by the ratcheted megawatt hour meter readings on the system?

* * *

[17673] The Witness: No, indeed.

* * *

[17681] Q. Referring, if you will, please, to transcript 16626, and your answer, which begins on line 9, where you say that Mr. Roland's assumptions are not related to the energy accounting used in connection with the billing for interchange transactions, do you mean that he has used gross energy flows, while the billing is done on the net hourly basis? A. The accounting and recording of energy is done on a net hourly basis, yes.

[17682] Q. Whereas he used the gross energy flows? A. That is correct, and I don't know of any use made of those

gross figures, and that is the reason I thought they did not have significance.

Q. Yes. But again, in this case, as in the other case, you are not denying that the gross energy flows are actual electric energy flows? A. I am not denying that the meters recorded the kilowatt hours shown, no.

Q. And that the kilowatt hours flows shown by the meters did occur? A. Instantaneously, yes.

Q. Well, weren't Mr. Boland's figures to which you were here referring based on integrating meter readings? A. That is correct.

Q. Then, it would not be limited to just instantaneous flows? A. It might be.

Q. Don't the integrating meters integrate all of the flows throughout an hour? A. Well, I am sorry. I see you misunderstood my use of the word "instantaneous." I wasn't thinking in terms of cycles, I was thinking in terms of a few minutes. In other words, if you have power flowing in one direction and for a short time you have it flowing in the other, [17683] actually, of course, the kilowatt hour meters read the proper flow of power for whatever period that may be, in one direction, and then in the reverse direction.

Q. And the integrating ratcheted kilowatt hour meter readings add up to the total of those flows, however long or short in one direction, and the other ones add up to the totals of those flows, however long or short in the other direction? A. Certainly.

Q. You are not saying here that those flows didn't actually occur as so added up? A. No, indeed.

* * *

[17689] Q. By backfeed you mean flow, from Maryland north? A. From Baltimore and Washington Companies north.

* * *

[17709] Q. Directing your attention to transcript 16599 of your rebuttal testimony, and particularly to the sentence which begins on line 19 and ends on line 23, in which you refer to energy originating in Maryland, is the supply of electric energy from the Baltimore Company accompanied by the supply of any other electric services transmitted from Maryland? A. Generally not.

Q. The Baltimore Company does not supply to Penn Water or Safe Harbor voltage regulation services or any power factor cooperation, or any frequency control? A. Generally not.

Q. When does it supply? You say generally not. A. I say that because the back-feed received from Maryland, under the conditions referred to at this point in the record, is received in the same manner that interchange services are received, and when interchange services are being received, it is the responsibility of the receiving company to provide the necessary voltage regulation, necessary capacity services, the necessary frequency control, and the necessary power factor cooperation.

Q. And the company which supplies the energy under these interchange arrangements does not supply these other [17710] electric services? A. As a rule, no, that is correct, except by special arrangement, which are separate arrangements.

Q. And does the Baltimore Company generally not supply capacity or spinning reserve when it supplies energy? A. Generally not, that is correct.

Q. Have you examined meter readings to ascertain whether the Baltimore Company did supply any r. v. a.? A. I have examined a lot of meter readings on the log sheets as recorded on the log sheets of the companies, and I find that Baltimore Company almost never provides any reactive kva in such connection. There are a few occasions when very small amounts of such service are provided.

Q. Has Penn Water ever called on the Baltimore Company to provide spinning reserve? A. No, it doesn't have to during those conditions. It has ample for itself.

Q. But does it, in fact? A. No.

• • •

[17747] Q. What I have reference to is perhaps explainable by reference to the sentence in your testimony which begins on line 7 where you say "The electric services so rendered are rendered jointly."

[17748] Now by saying that those services were so rendered jointly what did you mean as to what Penn Water did that is different from what it would be if Penn Water supplied those services by itself.

• • •

[17749] THE WITNESS: If these electric services were not rendered jointly Penn Water would have to operate much differently than it now does, both as respects the supply of reactive KVA and the other electric services.

• • •

[17750] THE WITNESS: I cannot state specifically what Penn Water would do differently but I know it would do something differently.

• • •

Q. Is there anything in the physical operations of Penn Water which enables you to characterize, as you do in line 8, the services which it renders as joint services?

• • •

[17753] THE WITNESS: The answer is yes.

• • •

Q. What?

MR. MYSE: I object to that, Mr. Examiner. That calls for at least several days' testimony. It is all set out fully in his direct examination in the case in chief.

TRIAL EXAMINER: What makes you think it is going to call for two days' testimony?

MR. MYSE: Well, Mr. Examiner, it took that to put it in in the first case in chief.

TRIAL EXAMINER: Why did you put it back in the rebuttal?

MR. MYSE: I haven't put that question in rebuttal. I keep repeating, Mr. Examiner, the whole line of cross-examination is outside the scope of the witness' direct examination.

TRIAL EXAMINER: If this witness had covered the question of joint services, why did you put in that last sentence?

MR. MYSE: In order to rebut the statement of Mr. Roland at page 912 on line 11 of the record.

TRIAL EXAMINER: The objection is overruled. I think counsel's statement is sufficient justification for the [17754] cross.

* * * *

THE WITNESS: In order that I may answer it as specifically as possible, which services are we talking about and to whom?

By MR. WAHRENBROCK:

Q. The question goes to the services which you are referring to in lines 7 and 8 and the two companies which you name in lines 2 and 3, to which those services are supplied? A. Yes. Penn Water alone cannot perform the necessary physical operations and Safe Harbor must cooperate in the performance of those physical operations in order that the proper amounts of electrical services may be supplied both to Pennsylvania Power and Light and to Philadelphia Electric. The physical operations I have in mind are the physical control of the electrical facilities, including the turbine and generators, the transformers, the switching equipment; I am also referring to the availability of the necessary indicating instruments which are essential to the proper control of the flow of electric services and

the facilities that need to be controlled in connection therewith.

Q. I am sorry, Mr. Spaulding; that does not answer the question.

• • • •

[17755] THE WITNESS: I cannot be any more specific than I was in my last answer.

MR. WAHRENBROCK: May I have the last answer read?

(Answer read.)

THE WITNESS: I am referring to the answer that was struck.

• • •

[17771] Q. Well, doesn't Baltimore supply three-phase 25-cycle energy which is utilized by the railroad for its requirements, its single-phase requirements? A. No.

• • •

Q. Isn't it a mere matter of connection of transformers in order to be able to utilize energy at a single-phase from three-phase facilities?

• • •

THE WITNESS: That is possible with the proper connections [17772] and arrangement of transformers, but Baltimore does not have such facilities for doing that.

• • •

[17775] Q. Then is it true that your testimony was not referring to all of the backfeed energy received by Penn Water from Maryland as referred to by Mr. Roland at pages 935 to 941?

• • •

[17776] THE WITNESS: Mr. Roland did not show the amount of the backfeed energy received by Penn Water from Maryland. He referred only to the amounts after it was delivered to Safe Harbor. I was talking about the same backfeed energy he was except that the amounts are dif-

ferent in two respects: First, he used gross flow and I used hourly nets. Second, he metered it at one end of the line and I metered it at the lower end of the line in Maryland.

• • •

[17805] Q. Do you agree that two-thirds of the entire output of Safe Harbor is sold to Baltimore Company and one-third to Holtwood?

• • •

THE WITNESS: I don't know.

• • •

[17809] Q. Do you know whether Baltimore receives two-thirds of the energy output of Safe Harbor, either by delivery to it of energy, or by the delivery to others for the account of Baltimore of energy? A. No, it does not receive two-thirds by those two methods.

Q. Why not? A. Because it doesn't.

Q. In what respect does it not?

MR. MYSE: Mr. Examiner, I think that question is [17810] argumentative, and objectionable on the grounds that it is too vague.

TRIAL EXAMINER: Yes.

By MR. WAHRENBROCK:

Q. Is it your point that when delivery is made to someone else for the account of Baltimore that it is not delivered to Baltimore? A. To whom does it make deliveries for the account of Baltimore?

Q. To the Pennsylvania customers. A. No delivery is made to Pennsylvania customers for the account of Baltimore. Notwithstanding Mr. Roland's testimony, no delivery is made to Pennsylvania customers for the account of Baltimore. I don't think Baltimore wants to be in interstate business right now, either. So I am surprised they would contend that.

• • •

Q. I wish you to refer to transcript 16619, if you will, please. When you say that net meter readings are used for interchange accounting and billing, do I understand you to mean that amounts of energy supplied in one direction are offset against corresponding amounts supplied in the other direction? And only the difference is paid for in dollars and cents?

• • •

[17811] A. Within the same hour, yes, sir.

• • •

Q. Would you agree that by that process the [17812] corresponding amounts during the same hour are, in effect, traded? A. No.

Q. Or bartered, for each other? A. No, I would not.

Q. Why not? A. Because I don't think they are.

• • •

[17839] CARL WILLIAM WATCHORN.

• • •

[17840] RE-DIRECT EXAMINATION (Continued).

• • •

[17848] By MR. SPARKS:

• • •

Q. Now I refer you to page 15616 where Mr. Goldberg was referring to the questionnaire used in the gathering of data on hydroelectric units and where at lines 4 to 7 he asked you to ascertain the number of utilities to whom the questionnaire was sent, the number which responded, and he also asked you to obtain a copy of the questionnaire and bring it into the hearing [17849] room.

Are you now prepared to furnish the data there requested and do you have a copy of the questionnaire before you? A. I do.

Q. All right. Will you proceed to give the data requested by Mr. Goldberg at that point? A. The ques-

tionnaire was sent out to 72 companies in the United States and Canada, of which 37 responded, many of them for several years and some for only one year. I have a copy of that questionnaire and explanatory notes with me.

* * *

[17851] RE-CROSS-EXAMINATION.

By MR. GOLDBERG:

Q. With respect to the questionnaire sent to 72 companies in the United States and Canada, you said 37 responded, many of them for several years and some for one year only. How many of the 37 responded for several years? A. I don't know.

Q. Approximately. [17852] A. The data was with respect to 295 units and the responses accounted for 1,092 unit years. On the average that would result in 3.7 years of experience as to each of the units.

* * *

[17898] EDWARD S. LOANE.

* * *

[17899] DIRECT EXAMINATION.

By MR. SPARKS:

Q. Mr. Loane, I show you a copy of a document entitled "Results of Certain Corrections Made to Exhibit 64," which document consists of 13 pages of text and several pages of tables in the back, and which has been identified as Exhibit 351, and ask you if you prepared that exhibit? A. Yes, sir; I did.

Q. Was that exhibit prepared by you in the light of the Examiner's ruling that Exhibit 350 would not be admitted in evidence because of certain defects which the Examiner referred to? A. Yes, it was.

Q. Is Exhibit 351 a revision of your Exhibit 350? A. Yes, sir.

* * *

[17901] CROSS-EXAMINATION.

By MR. GOLDBERG:

* * *

[17916] Q. When you referred to the table V-b at the bottom of page 12 and the top of page 13 and suggest the change of cost of backfeed energy from Baltimore to a cost computed on a daily net basis, do you there have reference to Article 6 of Item H in this proceeding? A. I suppose it would ultimately get back to that, but I referred to the billing which was carried out when there was [17917] actually billing for the backfeed.

Q. Did you conclude that billing was under Article 6? A. I know it is.

Q. What billing are you referring to? A. Exhibits which Mr. Spaulding introduced referring to the billing, I think back in 1931 or 1932.

Q. Just that one year? A. Prior to that, too, from 1927 on, we had such billings.

Q. You say there was billing from 1927 on for backfeed. Is that right? A. I believe so.

Q. Have you personally checked that? A. I know it is so in 1931 or 1932, whichever year he has.

Q. The only year that you are certain about is 1931 or 1932. Is that right? A. Yes.

Q. Was there billing all through the year or just for one month of that year? A. Whenever there was that daily backfeed in those years.

Q. Do you know of your own knowledge for what months there was billing in 1931 or 1932? A. It seems to me the last billing there was September, 1932. I am not sure.

[17918] Q. Exhibit 367 presented by Mr. Spaulding shows billing for backfeed for November, 1931. Are you familiar with that exhibit? A. I have seen it before.

Q. Is it your statement that there are bills for backfeed from the year 1931 in addition to the one which has been marked as Exhibit 367?

• • •

THE WITNESS: I don't know.

By MR. GOLDBERG:

Q. When you referred to the existence of billing, did you have Exhibit No. 367 in mind? A. No. I was more certain about September, 1932 bill, which was the last time such billing was carried out.

Q. That is what you had in mind, at least? A. I also knew of the exhibit.

Q. In connection with your statement on page 13 regarding the basis for the adjustment of the cost of the backfeed energy from Baltimore Company, did you take into consideration any of the other provisions of Items H and I? [17919] A. I didn't take into consideration any of it.

• • •

[17921] By MR. REIBLICH:

Q. Mr. Loane, you would agree, would you not, that the combined Baltimore-Safe Harbor-Holtwood system is operated as a unified power pool in the interests of overall system economy.

• • •

THE WITNESS: That is right.

• • •

Vol. V

TRANSCRIPT OF RECORD

(Pages 2097 to 2154)

Supreme Court of the United States

OCTOBER TERM, 1951

No. 428

PENNSYLVANIA WATER AND POWER COMPANY AND SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND, PETITIONERS,

vs.

FEDERAL POWER COMMISSION ET AL.

No. 429

PENNSYLVANIA PUBLIC UTILITY COMMISSION, PETITIONER,

vs.

FEDERAL POWER COMMISSION

ON WRITS OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

PETITIONS FOR CERTIORARI FILED NOVEMBER 16, 1951

CERTIORARI GRANTED FEBRUARY 4, 1952

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[17956] GEORGE W. SPAULDING.

• • • • •

CROSS-EXAMINATION.

By MR. WAHRENBROCK:

• • •

[17976] Q. Will you explain the method you used in arriving at the conclusion that 35 per cent of the total backfeed—that at least 35 per cent of the total backfeed in 1946 was used in connection with the requirements of the Pennsylvania Railroad?

• • •

[17978] THE WITNESS: For any hour in which there was a net amount of energy received at Safe Harbor over the 220 kv circuits from Baltimore to Washington, I first presumed that a portion of that energy was received for the purpose of supplying interchange or used in connection with interchange arranged by Penn Water with its Pennsylvania customers, involving additional generation by Baltimore Company in order to do so, and therefore it was proper and is proper to recognize that the first use of that backfeed was for such interchange because had there not been interchange there would have been less energy received.

The second step was then to determine how much of the remainder was converted by the frequency changer at Safe Harbor from three-phase sixty cycle to single phase, twenty-five cycles.

By MR. WAHRENBROCK:

Q. Can you explain how you did that? A. Yes, I did that in two ways.

In order to determine the maximum amount of such backfeed used in connection with railroad services, I assumed that all remaining backfeed after adjustment for interchange transactions was so converted, and using that method of determination on an hourly basis, I found that about 43 per cent of the [17979] backfeed was used in con-

nection with single phase and railroad supply to the Pennsylvania Railroad.

Then in order to get any possible limitations or other assumptions someone else might prefer, I used a second assumption and arrived at a second answer of 35 per cent of the backfeed used in connection with railroad services, by assuming that none of the backfeed remaining after accounting for interchange transactions was available for conversion until all of the sixty cycle generation at Safe Harbor, plus all the infeed at Safe Harbor from the 66 kv circuits from Holtwood Company was first used for conversion and then the remainder, if any, was assumed to come from the backfeed from Baltimore as indicated by the notes on my work sheet.

* * *

Q. Let me ask you a question now, first about your first assumption, which as I understand it was that the flow of energy from Maryland onto the Safe Harbor bus is a flow of energy which is first used for the supply of interchange energy delivered by Penn Water to the Pennsylvania customers, is that correct? [17980] A. That is generally correct, yes.

Q. That assumption is an assumption not that the energy received from Baltimore is actually the energy which is delivered by Penn Water to the Pennsylvania customers at the points of deliveries, but that as a matter of economics of the operation of the business you treat it that way, is that correct? A. No, I do not think I would agree with you and I think I stated before the reason for treating it in that manner.

The economics of system operation determine the amount of interchange transactions, namely the amount delivered by Penn Water and Safe Harbor to its Pennsylvania customers as interchange. Whenever such transaction is arranged for, it generally means that Baltimore will increase its generation or that Washington would have to increase their generation.

That, at times may result in backfeed from Maryland to Pennsylvania over the 230 kv circuits. When it does result in such backfeed I know as an operating man that the only reason there is backfeed is in order to supply energy for use in connection with these interchange transactions.

I am not interested in the slightest where that energy goes in a tracing manner. I am interested in the purpose for which it does come back from Maryland to Pennsylvania.

Therefore, in everything that we do today, and everything [17981] we have done for years Baltimore Company and Penn Water have always recognized that that backfeed is first used in connection with interchange transactions.

It was only natural then that in preparing this worksheet and this figure that I would use exactly that same procedure.

I cannot answer the question of where it went as a matter of physical fact and I am not interested, I am only interested in the purpose for which this backfeed was received.

TRIAL EXAMINER: Now, let us not repeat unnecessarily.

By MR. WAHRENBROCK:

Q. The same explanation applies to your second presumption, does it not, your second assumption? A. Which one?

Q. That is, that none of the remaining backfeed is available for supply of the railroad until all of the 60 cycle Safe Harbor generation and all of the infeed at Safe Harbor from the 66 kv circuits from Holtwood has first been used for the supply of the railroad's requirements? A. In that connection, I do not agree with that assumption; but I was afraid that someone else might want to use it and I wanted to show the extreme possibilities, on any possible assumption that one might use, what percentage figure one

could get and that is the reason I used the second presumption, not that I agree with it in any respect.

[17982] Q. The second assumption, whether you agree or disagree with it, is likewise one which is not based upon the actual tracing of the energy? A. Absolutely, that is correct. It is not based on any tracing of energy.

• • •

[17984] Q. Are there hours when there is a receipt of what you refer to as backfeed on the Safe Harbor bus and no delivery of interchange energy to the Pennsylvania customers? A. There may be.

Q. During such hours is the receipt of backfeed determined by the interchange requirements? A. Obviously, if there were no interchange requirements the amount received would not be related to the interchange requirements, if I understood your question.

Q. Then the answer is yes? A. My answer stands as it was.

Q. Can you answer it yes or no?

• • •

[17985] THE WITNESS: No.

By MR. WAHRENBROCK:

Q. Is it determined by the firm power requirements?

• • •

[17986] THE WITNESS: It may or may not be, not necessarily, no.

• • •

Q. You have said it may or may not be, I want to know under what circumstances it would and under what circumstances it would not.

TRIAL EXAMINER: That is going too far afield. Obviously the circumstances mean nothing in this hearing unless they relate to the exhibit you are now using as the basis of your cross-examination.

• • •

[17987] Q. Mr. Spaulding, why during an hour when there was no interchange requirement and backfeed was received

from Maryland and there was a firm power requirement, did you not assume that the backfeed went to the supply of that firm power requirement before going to the supply of the railroad requirement? A. Because Baltimore Company has an operating responsibility relating to the supply of the Pennsylvania Railroad's firm requirements. That is very obvious from all of my testimony.

[17988] Q. Why did that firm obligation—why did you assume that firm obligation was of such a nature that the energy went first to it over the supply of energy to the other firm obligations? A. Because in one case Baltimore Company has an operating responsibility and in the other case it has none, and when I say it has an operating responsibility of course I am talking about the supply to the Pennsylvania Railroad, and when I say it has none I am referring to the Pennsylvania customers of Penn Water and Safe Harbor, including Met. Edison, Pennsylvania Power and Light, and Philadelphia Electric.

* * *

[17995] Q. I will now reframe the question and put this question to the witness: When you say that the Baltimore Company has an operating responsibility for the supply of the firm power requirements of the Pennsylvania Railroad is that operating responsibility an operating responsibility for the supply of energy which is transmitted from Maryland? A. At times, and I am assuming when you talk of "the supply of energy which is transmitted from Maryland", you are not referring to the supply of energy to the railroad, but rather the supply of energy to Penn Water and Safe Harbor who have the facilities for furnishing electric services to the railroad.

I have to make that assumption in connection with my answer, Mr. Wahrenbrock.

Q. All right. Now, you say at times, what are those times? A. At such times as Penn Water and Safe Harbor do not have sufficient energy themselves to supply the requirements of the Pennsylvania Railroad—and I am speaking of all the requirements of Pennsylvania Railroad,

under Exhibit 10—while operating their facilities—and I am referring to their generating facilities—for maximum utilization of the natural resources.

• • • •

[18002] TRIAL EXAMINER: Mr. Witness, in addition to the interchange requirements should the firm power requirements under some circumstances come ahead?

THE WITNESS: No.

TRIAL EXAMINER: Why not?

[18003] THE WITNESS: Because Baltimore Company has no operating responsibility at any time for the firm power requirements in Pennsylvania. They do have an operating responsibility for at least a portion of the Pennsylvania Railroad requirements and the interchange is not a requirement at all but is a transaction to carry out the most economical operation.

• • • •

[18005] Q. I ask that you direct your attention, if you will, please, to transcript 16601 of your rebuttal testimony, and particularly to line 18 of that page, and I ask if you will, please, that you state what you meant in that answer by the term "net Baltimore backfeed"? A. It is the amount of kilowatt-hours determined from the sum of the net hourly readings measuring the amount of backfeed received by Penn Water and transmitted to Safe Harbor.

Q. Is that limited to the amounts received over the 220 kv circuits? A. Right.

Q. And by backfeed, you mean energy transmitted from Maryland to Safe Harbor, is that right? A. That is correct.

Q. Now, in the same line and in the next line, will you explain what in that answer you mean by the phrase "In connection with electric services supplied to Penn Water's or Penn Water's and Safe Harbor's firm power customers in Pennsylvania (excluding the Pennsylvania Railroad)"? A. The net kilowatt-hours received by Penn Water and Safe Harbor, used in connection with all electric services

[18006] supplied to the Pennsylvania customers, inclu g energy, capacity and so on.

Q. When you say "used in connection with", do you mean that that energy supplied in whole or in part energy requirements of those customers? A. I do not know. The energy was received at Safe Harbor at the time that energy was being delivered to these Pennsylvania customers to meet their requirements.

Q. The figures which you show in your Exhibit 357 are not clear to us, Mr. Spaulding, and I would like to have you refer to your Exhibit 357, and take the kilowatt-hours in column 1 and explain how you computed it for any one year, if you will, please? A. Supposing that you use one hour as an example, and of course, I do not have the exact hourly figures to use, but I would use a hypothetical hour for purposes of illustration.

I again, as in our discussion this morning, considered that any of the backfeed received at Safe Harbor was the amount actually metered because of the interchange transactions that may have been arranged for in that hour, and therefore I reduced my net backfeed by that amount.

Secondly, I further considered that the second use of backfeed was for the supply of the Pennsylvania Railroad loads.

However, in this instance, in contrast with Exhibit 354 I assumed that any amounts so received and delivered to the [18007] Pennsylvania Railroad, any amount so received in connection with the delivery of services to the Pennsylvania Railroad for service in Maryland was a delivery from Safe Harbor to Baltimore Co. I was therefore only concerned with the amounts supplied to Pa. Railroad in Pennsylvania in connection with the computation of this figure.

TRIAL EXAMINER: What figures are you referring to, Exhibit 357?

THE WITNESS: Yes.

TRIAL EXAMINER: What column?

THE WITNESS: Column 1.

By Mr. Wahrenbrock:

Q. How did you determine the amount of that portion to which you last referred of the deliveries to the Pennsylvania Railroad which were used in Maryland? A. For the hypothetical hour, I knew the requirements of the Pennsylvania Railroad in Maryland. I knew the amounts delivered to the Pennsylvania Railroad facilities at Benning. The balance was the amount delivered to the Pennsylvania Railroad in Maryland.

Q. Did you have to take into account the amounts delivered or interchanged at Perryville and which originated from the Philadelphia Electric Company at Chester? A. Not for this purpose, no.

Q. Well, if there were during any of these hours receipts [18008] at Perryville from the facilities of the railroad of energy originating in Philadelphia Electric at Chester, how was that measured and determined that it was not included in these amounts? A. May I use a second example to show that? May we assume that there were 20,000 kwh received at Safe Harbor over the 220,000 volt facilities from Baltimore and that there were during the same period or hour delivered to Pennsylvania R. R. from whatever source it may have been delivered a total of 30,000 kilowatt-hours used by the railroad in Maryland; that 5,000 of those kilowatt-hours were supplied from Benning.

The net amount supplied to the railroad in Maryland was 25,000 kilowatt-hours delivered to the railroad at Perryville for use in Maryland.

Q. And delivered at Conowingo, also, or in part? A. That is correct; Conowingo and Perryville for use in Maryland.

I was not concerned with who made the delivery. For that hour, then, we have 20,000 kilowatt-hours received at Safe Harbor from Baltimore and 25,000 delivered to the railroad for use in Maryland.

I then had for that hour no backfeed at all used for any other purpose because there was more delivery to the

railroad in Maryland than there was received from Baltimore.

Q. Now, to test the question that I was seeking the [18009] answer to, may I just change one figure for you and ask you what you did under those circumstances? A. You may.

Q. Instead of 20,000 kilowatt hours received at Safe Harbor over the 220 circuit from Baltimore, assume during that hour there were 25,000 kilowatt hours? A. There would still be no use of backfeed for Pennsylvania customers as is shown in column 1 of Exhibit 357.

Q. Now, that is the way you did make your calculation, on that theory illustrated by that hypothetical hour? A. That is correct.

Q. Now, what I want to inquire is how in so making your allocations of energy you took into account, or whether you in fact did not take into account that during that hour part of the 25,000 delivered to the railroad at Conowingo and at Perryville may have been energy which, as you explained earlier in your cross-examination, was supplied to the railroad facilities at Chester by the Philadelphia Electric Co. and being in excess of the requirements of the railroad between that point and Perryville were treated as delivered to Penn Water, and by it to the Pennsylvania Railroad for use beyond Perryville.

* * *

[18010] THE WITNESS: I did not concern myself with whether or not a portion of the 25,000 kwh delivered to the railroad for use in Maryland at Conowingo and Perryville came from Chester, or whether it came from Safe Harbor for the purpose of these figures on Exhibit 357.

By MR. WAHRENBROCK:

Q. A portion may have come from that source during those hours? A. That is correct.

Q. And as much as 25,000 might come from that source during any one of those hours? A. Perhaps.

Q. That is 25,000 megawatt hours or kilowatt hours? A. Kilowatt hours in one hour and I doubt that there would be that much.

Q. Now, with this same hour in mind that we have last been talking about, that is the illustration you gave with the 25,000 kilowatt hours received at Safe Harbor over the 220 circuits from Baltimore, the other figures remaining as you gave them, assume, if you will, that the meters show a flow from the 60 cycle Safe Harbor bus to the 25 cycle Safe [18011] Harbor bus of only 10,000 kilowatt hours.

Under such conditions, did you make any adjustment in the manner of treatment which you have previously explained?

* * * *

THE WITNESS: I did not concern myself with the operation of the frequency changer at Safe Harbor in connection with the determination of the amounts shown on Exhibit 357.

By MR. WAHRENBROCK:

Q. And I understand that to mean that if the meters on the circuit between the 60 cycle bus and the 25 cycle bus recorded less than 25,000 kilowatt hours in the direction [18012] of the 25 cycle bus during this hypothetical hour, that made no difference in your treatment of the allocation of energy during that hour.

* * *

THE WITNESS: My statement was that I gave no consideration to the operation of the frequency changer or the amount of energy converted through the frequency changer in either direction.

By MR. WAHRENBROCK:

Q. We are not clear, in spite of your previous answer, that you have started in this allocation with the net hourly energy receipts over the 220 kv circuits, that you may not in your answer have overlooked transactions over 66 kv. 25 cycle line from Holtwood to Highlandtown, and I want

to ask you if you will state specifically whether the starting figure which you used in this computation on Exhibit 357 was the receipts over the 220 kv circuits without any deduction for any amount which might have been flowing in the other direction during the same hour over the 25 cycle circuit? A. I did net the flow on the 25 and 60 cycles as a starting figure, but that was not your first question. Your first question was how does the energy become transmitted as shown on that exhibit and that energy is transmitted from Safe Harbor over the 220 kv circuits.

[18013] Q. Were there substantial amounts transmitted from Holtwood to Highlandtown during the hours which you considered in calculating the figures in the first column on Exhibit 357? A. I do not understand your question. First, what do you mean by "substantial amounts"?

Q. Substantial in relation to the amount of backfeed over the 220 kv circuits?

* * *

THE WITNESS: I do not know how to answer that question specifically. Of course I did consider all hours in the year in order to arrive at the figures shown, but in all hours there was not backfeed over the 220 kv lines.

In certain hours of the year there were substantial amounts flowing from Holtwood to Highlandtown in Baltimore, as the record clearly shows.

I still do not know whether I have answered your question.

By MR. WAHRENBROCK:

Q. Well, maybe we can approach it if you can tell us what the figures for any one of the years in column 1 on Exhibit 357 would have been if you had not deducted from the receipts over the 220 kv the flow toward Highlandtown over [18014] the 132 kv circuits from Holtwood to Highlandtown?

* * *

THE WITNESS: I do not believe I can.

By Mr. Wahrenbrock:

Q. Were there hours in which the flow toward Highlandtown over the 132 kv circuits exceeded the amount of flow—you are shaking your head; I do not understand. A. There is something wrong with your question already. You talk about the 132 kv lines at Highlandtown. Of course, there are no 132 kv lines at Highlandtown.

Q. I see. The line from Holtwood to Highlandtown is a 66 kv line? A. Yes.

Q. All right. Were there hours when the amount of the net flow to Highlandtown from Holtwood over the 66 kv circuit exceeded the amount of the flow from Baltimore to Safe Harbor over the 220 kv circuits? A. Most of the time.

Q. Now, during an hour in which the flow toward Highlandtown over the 66 kv circuit exceeded the amount of the flow towards Safe Harbor over the 220 circuit, did you use a negative figure in computing the total which went into the first column on Exhibit 357? A. No, I did not. [18015] There is nothing in that hour. I would use zero in that hour.

Q. You would use zero in that hour? A. Right.

Q. I wish you would look at Exhibit 369, if you will, please, and tell me whether the figures in the first column on that exhibit are computed by netting the flows on the 66 kv circuit from Holtwood to Highlandtown against the flows on the 220 kv circuit from Baltimore to Safe Harbor? A. That is correct, and in order that you may understand, I wish to state again that in each instance after netting the flows in those two circuits, I also gave consideration to the amount of energy delivered to the railroad at Perryville for use in Maryland, so that those three factors must be taken into consideration in each hour in connection with the amounts shown in column 1 of Exhibit 354.

Q. Is the same thing true of Exhibit 369, the first figure, the figures in the first column? A. That is correct.

Q. Now, your reference to your deduction of the deliveries to the railroad makes it seem to me material to inquire whether the flows over the line from the Conestoga bus at Safe Harbor to Perryville are predominantly in that direction or in the reverse direction? A. I think—I was not concerned with that.

[18016] Q. But do you know? A. The flow was predominantly from Conestoga substation to Perryville over circuits P-7 and P-8, and predominantly from Perryville to Conestoga on circuits P-5 and P-6.

Q. In your deduction of the amounts supplied to the railroad, to which you previously referred, did you take net amounts over those four circuits? A. No, I computed it exactly, as I stated sometime back, by taking the difference between the requirements of the railroad in Maryland and the amounts received by the Railroad from the Benning frequency changer.

Q. And the actual metered flows on the circuits from the Conestoga bus to Perryville did not influence your determination? A. The amount of energy flowing on any of the groups of circuits was not used by me in arriving at the figure used in the determination of the amounts shown on Exhibit 357.

Q. Well, then, will you explain what the basis is for the figures you used as representing the railroad's requirements for its own purposes in Maryland?

* * *

The Witness: I will have to give consideration to the meters at Perryville on the so-called bypass that we discussed yesterday, the meter readings on P-7 and P-8 circuits at [18017] Safe Harbor, the meter readings at Fishing Creek and the meter readings at Benning.

Q. And your figures which are reflected in the first column of Exhibit 357 are based upon the totals for each of those three years of figures so computed from such meter readings?

* * *

THE WITNESS: I am sorry. I do not understand the question.

By MR. WAHRENBROCK:

Q. Well, you say you gave consideration to the meters on the bypass, on circuits 7 and 8, at Safe Harbor, at Fishing Creek and at Benning? A. Oh, those were for the purpose of determining the requirements of the railroad in Maryland for its own use.

Q. Now, do I understand you mean that you took the yearly totals of those meter readings and computed the yearly requirements for each of these three years of the railroad in Maryland from those meter readings?

MR. MYSE: For what purpose?

THE WITNESS: Certainly not for the purpose of Exhibit 357. I considered them hourly along with the other things we have been discussing in the last 15 or 20 minutes. I took no annual figures.

[18018] Everything was on an hourly basis.

By MR. WAHRENBROCK:

Q. But you took those hourly figures that you have just referred to for these meters on the bypass, on circuits 7 and 8, Fishing Creek, and Benning which entered into your hourly calculations which you made for every hour for each of these three years? A. No, but I had to have that amount being the railroad's requirement in Maryland for each hour of each of three years as one of the components that I considered in connection with the figures shown on 357; but I did not use the figure for every hour. It is not a matter of plus or minus. I had to set it up in order to determine this figure but I only used it for relatively few hours.

Q. That is to say you made a sampling study? A. No, I had to do it every hour but only in certain hours of the year were there amounts that I reflected in Exhibit 357, as the title would indicate.

For instance, there were only certain hours in the year when there was a net backfeed from Baltimore for any purpose. There are two purposes: one was the net backfeed that is used for railroad purposes, such as we discussed this morning in connection with Exhibit 354.

Then there were also amounts of net Baltimore backfeed used in connection, et cetera, which are computed for the [18019] purpose of Exhibit 357.

Q. Now, for every hour in which there was a net backfeed, that is a net of the flow on 66 kv circuits and on the 220 kv circuits, did you in reaching the figures in the first column of Exhibit 357 actually compute the railroad's Maryland requirements by using the meter readings on these four sets of meters that you referred to, the bypass, circuits 7 and 8, Fishing Creek and Benning? A. I think that is generally a correct statement, yes. The only reason I do not want to say yes, is because I had determined that amount as well as the amount of such energy supplied from Benning before I could determine whether there was a net Baltimore backfeed for the purpose of Exhibit 357.

Q. Yes, I assumed that.

Did the deductions which you made in connection with computation of the figures in the first column of Exhibit 357 for supply of the railroad's requirements for its own use in Maryland have the effect of reducing the amount for most hours which went into the total in the first column on Exhibit 357? A. I think that would be the mathematical effect, yes; not in every hour, but I think the net effect for the year would be as you intimate.

Q. Do you recall whether the actual net hourly delivery to Safe Harbor over the 220 kv circuits, without deduction for the flows in the opposite direction during those hours over [18020] the 66 kv circuits to Highlandtown for 1946, was in the neighborhood of 155 million kilowatt hours?

• • •

THE WITNESS: Yes. It was actually 157,809,000 kilowatt-hours.

TRIAL EXAMINER: Did you have that on an exhibit?

THE WITNESS: It is the figure in the lower right-hand corner of Exhibit 354, being the bottom figure in the last column to the right after adjusting or after deducting the amount of actual net hourly backfeed over the 25 cycle circuit from Highlandtown to Holtwood in an amount of 1,673,000 kilowatt-hours.

TRIAL EXAMINER: Where did you get the 1,673,000?

THE WITNESS: That is shown on one of my work sheets, entitled, "Net Hourly Megawatts Received by P. W. P. from Baltimore Company".

TRIAL EXAMINER: It is not in an exhibit?

THE WITNESS: No, I do not think it is.

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[18021] By MR. WAHRENBROCK:

Q. Inasmuch as that work sheet to which you referred in answer to the Examiner is not in the record, can you give us for the years 1944 and 1945 the corresponding figures to the one which you gave the Examiner of 157,809,000 for the year 1946? A. The corresponding figure for the year 1945 is the amount shown for the year 1945 in Exhibit 354 the last column to the right after adjustment or after deducting the sum of the net hourly readings of the backfeed from Highlandtown to Holtwood of 60,000 Kwh. I do not have the figures for 1944 with me.

Q. May I understand your last answer for 1945? The figure would be 50,216 megawatt-hours less 60 megawatt-hours, is that correct? A. Yes, sir.

Q. Or 50,156 megawatt-hours? A. Yes.

Q. For 1945 and that figure for 1945 differs from the figure which you show for 1945 in the first column of Exhibit 369 by reason of the fact that that figure of 50,000

hours represents flows to Safe Harbor over the 220 kv circuits without deduction for flows from Holtwood to Highlandtown over the 66 kv circuits; is that correct? A. Yes.

[18022] Q. And the figure of 157,809 megawatt-hours which you give us for 1946 differs in the same way from the figure of 99,439 megawatt-hours in the first column on Exhibit 369 for the year 1946? A. It does differ because in Exhibit 369 I have netted the flows on the two circuits in order to determine the annual backfeed energy supply for the purpose of Exhibit 369.

Q. Directing your attention again, if you will, please, to your Exhibit 354 and particularly to the last column of figures on that exhibit, will you tell me first whether that includes energy transfers across the Maryland-Pennsylvania boundary over the facilities of the railroad not used for its own use? A. No, there is no reflection in that figure in any way for any flows over the Safe Harbor-Perryville line.

Q. Do the figures in that column include deliveries from Perryville to Conestoga across the Maryland-Pennsylvania boundary? A. They do not.

Q. Why did you exclude those?

• • •

The Witness: Because there is no energy flow across that boundary, namely, the state line, which is not used for [18023] the Pennsylvania Railroad directly.

Now, to be sure that we are talking about the same thing we are there talking in that column about the net flows from Perryville to Safe Harbor and I think that the other answer is that there never is a net hourly flow in that direction and if there is the resultant energy is used directly by the Pennsylvania Railroad in Maryland.

I am sorry, Mr. Examiner, on reconsideration of that last answer, it is not responsive, obviously, because we are talking about net hourly flows from Maryland to Pennsyl-

vania. I am still of the opinion that there is not experienced any net hourly flows on those lines from Maryland to Pennsylvania but if there are, such energy is used by the Pennsylvania Railroad north of the State Line of Pennsylvania and Conestoga Substation.

TRIAL EXAMINER: What lines are you referring to now?

THE WITNESS: P-5, P-6, P-7 and P-8 and such energy is received from the Philadelphia Electric Company at Chester via Perryville.

By MR. WAHRENBROCK:

Q. Let me understand this, Mr. Spaulding: As I understood your testimony the other day—and I think you will remember it clearly, I cannot point to it in the record—but there was a reference to the fact that at times energy from Chester, Pennsylvania would come to Perryville, Maryland, [18024] go up to Safe Harbor, to the Conestoga bus at Safe Harbor, come down over the other two circuits to Perryville again and go on down over the railroad facilities to Benning where it was delivered to PEPCO.

Do you recall that testimony? A. I do recall it. I do not recall that statement but I recall the testimony where we were discussing the general subject.

Q. Yes, now in the event of such a flow of energy there would be a flow from Perryville in Maryland up on two circuits to the Conestoga bus in Pennsylvania, is not that true? A. Yes.

Q. No such amounts are reflected in your last column or any place else on your Exhibit 354? A. No, because there would be an equal amount going down the other circuit and the hourly net would be zero, or at least would not be a negative hourly net representing flow from Perryville to Conestoga.

Q. Upon what basis do you assume that the energy which flows from Perryville to the Conestoga bus over one pair of circuits returns to Perryville over another pair?

• • •

[18025] THE WITNESS: I do not know what you mean by basis. Do you mean how do I know what happens?

By MR. WAHRENBROCK:

Q. I would be glad to have you explain that. A. I know from the operating records and my knowledge of the operations over those circuits it does happen.

Secondly, it is a very obvious electrical phenomena because if you have power flowing between two points over two paths with different impedance the flow of the current over those two paths will be in proportion to the impedance.

I know there is a considerable amount of energy—a relatively small amount of energy to be sure—but some of the energy that flows around the bypass of Perryville, and for the same reason this power goes up one pair of lines and back on the others, from Perryville to Conestoga and return.

That is something I can see on the meter any day at all. That is how I know it takes place, but perhaps that does not answer your question.

Q. As I understand it, there may be hours when energy originating at Chester reaches Perryville and is transmitted from Perryville up to the Conestoga bus of Safe Harbor in Pennsylvania? A. Frequently.

Q. As I understood your answer a few questions ago, you [18026] did not reflect those amounts which were energy-moving from Perryville in Maryland to the Conestoga bus in Pennsylvania because you said any such flows are offset by corresponding flows in the opposite direction over the other pair of circuits from the Conestoga bus back to Perryville? A. That is correct and I should add that there is usually more energy flowing from Conestoga to Perryville than there is flowing from Perryville to Conestoga.

Q. What I am seeking to ascertain is the basis of your statement that whenever there is such a flow of energy originating at Chester from Perryville to the Conestoga bus

there is always an equal amount or a corresponding amount flowing from the Conestoga bus down to Perryville. A. I know that from my intimate knowledge of the operations over those circuits.

Q. When you say that you mean that there are corresponding amounts but again not necessarily the same electric energy?

* * *

THE WITNESS: There are corresponding amounts, that is correct.

[18027] By MR. WAHRENBROCK:

Q. But those amounts are not necessarily the same electric energy? A. I do not know that and no scientist in the U. S. knows that and I include the most technical scientists there could be. No one knows when energy flows on to a bus and flows off which is the same energy and which is not.

* * * *

Q. Mr. Spaulding, directing your attention, if you will to your Exhibit 356 and to your testimony with respect thereto, when you there refer to hours of net Baltimore backfeed, do you again mean the same as you did in using that term with respect to Exhibit 357? A. I am not quite sure. I presume you are referring to page 16,600 and I think the wording there is a little different. I can say, perhaps to save time that the method of determining the net Baltimore backfeed which I used in connection with the preparation of Exhibit 356, was the same procedure and generally the same basic figures that I [18028] used in connection with the preparation of Exhibit 357.

Q. On Exhibit 356, the second column of figures in the first tabulation, the figure for 1944 being the figure of 180,675,000 should the heading of that column be understood as though it read "Kilowatt-hours supplied during Hours of net Baltimore Backfeed"? A. They were the kilowatt-hours supplied during the hours when I found

there was "Net Baltimore Backfeed" in the manner that we just discussed.

Q. And the same thing is true of the fourth heading on the same tabulation, "Kilowatt-hours supplied during hours of no net Baltimore backfeed"? A. That is correct, with the same qualifications.

Q. And the same thing is true for the corresponding headings in the second tabulation on the same exhibit, the third heading and the fifth heading? A. I am sorry, I do not believe I see exactly what headings you are referring to now.

Q. The heading in the second tabulation for the third column of figures should be read in the sense that it means "Revenue received for energy only during hours of net Baltimore Backfeed"? A. I think that is correct.

Q. And the fifth heading "Total revenue received for Electric Services Exclusive of Revenue Received for Energy [18029] only during Hours of Net Baltimore Backfeed"? A. That is correct, using net Baltimore backfeed in the manner that we discussed before the recess.

Q. Refer, if you will, please, to Exhibit 358 and to your testimony with respect thereto; when you speak of hours of net Baltimore backfeed in this exhibit and with respect to this exhibit, do you use that term with the same meaning as that to which you previously testified?

* * *

THE WITNESS: I do not think I should answer this one categorically and I will try to answer it as direct as possible.

So far as the determination of the hours during which the amount of net Baltimore backfeed is concerned, I used the same basic figures in connection with Exhibit 358 that I did in connection with Exhibits 356 and 357.

However, in determining the use of such "Net Baltimore Backfeed" I here considered its first use in connection with interchange transactions.

By Mr. Wahrenbrock:

Q. And then do I understand that the hours of net Baltimore backfeed referred to in the heading of Exhibit 358 are not the identical hours as the hours of net Baltimore backfeed referred to in the heading to Exhibit 356? [18030] A. No, they are not the same hours nor are they the same hours in connection with Exhibit 357.

The same basic data was used in each, the same method of approach was used in each but they do not represent the same hours and, of course, they do not represent the same use of energy in connection with the several services.

Q. Let me understand you. With respect to Exhibit 358 by "Hours of Net Baltimore Backfeed" as used in this exhibit, do you mean hours in which there was a net supply of energy over the 220 kv circuits from Baltimore to Safe Harbor after deducting the amount flowing in the opposite direction over the 66 kv circuits from Holtwood to Highlandtown, is that correct?

* * *

The Witness: May I put it a little differently and see if I can answer it specifically. If there was backfeed over the 66 kv, 25 cycle circuits that would be added to any backfeed over the 220 kv circuits; if there was a delivery from Holtwood to Highlandtown at the time there was backfeed over the 220 kv circuits then the net effect was first considered and then that was reduced by the supply, if any, from Conestoga substation to the Pennsylvania Railroad at Perryville and Conowingo for the railroad's own use, other than what was delivered at Benning.

[18031] By Mr. Wahrenbrock:

Q. For the Railroad's own use in Maryland? A. That is correct. The net of those three figures then determined the amount of net Baltimore backfeed in that hour.

Q. And you chose only such hours as did show such a net flow towards Safe Harbor; is that correct? A. That is correct.

Q. Aren't those the same hours that you used on Exhibit 357 as hours of net Baltimore backfeed? A. They are the same basic hours but there may or may not have been interchange during those hours.

Q. But those are the same hours of net Baltimore backfeed? A. That is correct.

Q. And those are the same hours of net Baltimore backfeed as you used on Exhibit 356? A. That is correct.

Q. In each case the hours of net Baltimore backfeed means the same thing but you have used in the one case—that is to say, you have used in the case of Exhibit 356—you have shown kilowatt-hours supplied to Pennsylvania firm customers during such hours of net Baltimore backfeed whereas in Exhibit 358 you have used interchange supplied to Pennsylvania customers during such hours of net Baltimore [18032] backfeed, is that correct? A. That is correct. There would always be amounts of firm power services delivered, for example, to the Coatesville Division of Philadelphia Electric Company and therefore I gave consideration in Exhibit 356 to all of the hours in which there was "Net Baltimore backfeed".

But in Exhibit 358 I only gave consideration to those hours in which there was interchange supplied by Penn Water and Safe Harbor to their Pennsylvania customers and that did not occur in every hour in which there was backfeed. That is the distinction I was trying to make.

Q. Yes. A. So that we do not use necessarily the same hours in each instance although the same basic hours are first considered.

Q. Then on Exhibit 358 where in the headings to particular columns there is a reference to hours of Baltimore backfeed, you mean hours of net Baltimore backfeed? A. That is correct.

Q. And where there is a reference to hours of no Baltimore backfeed you mean hours of no net Baltimore backfeed? A. That is correct.

Q. Within the meaning of the term "net Baltimore backfeed" that you have just described? A. That is correct, that I have just described in [18033] connection with these three exhibits, 356, 357 and 358.

Q. Now, in these Exhibits 356, 357 and 358—let me withdraw that for the moment. Is the same thing true of your use of the term "net Baltimore Backfeed" in Exhibit 359? A. The same basic figures, the same basic hours were first determined and used in connection with Exhibit 359 as we used in connection with Exhibits 356, 357 and 358.

Q. In Exhibit 369 does "Annual backfeed energy supplied by Baltimore Company," similarly mean net Baltimore backfeed?

* * *

THE WITNESS: That cannot be answered categorically because there are several figures shown in Exhibit 369. The amounts shown in the first column are determined in the same way and were from the same basic data as was used with reference to the last few exhibits we have been talking about, but the amount shown in the second column was not so determined.

By MR. WAHRENBROCK:

Q. Kilowatt hours received on hourly net basis there refers to net Baltimore backfeed as you have described your computation of net Baltimore backfeed in your previous testimony? A. Which we have just been referring to, yes.

Q. In these Exhibits 356, 357, 358, 359 and 369 you have netted energy as you have just described irrespective [18034] of whether it was supplied at 60-cycle, 3 phase or 25-cycle 3 phase, or 25-cycle single phase and irrespective of differences in voltage? A. That is correct, in the manner that I have described.

Q. In your Exhibits 356, 357 and 358 if instead of netting against the amounts of energy supplied to Safe Harbor over the 220 kv circuits, any flows in the opposite direc-

tion over the 66 kv circuits and deliveries for Maryland use by the railroad, you had used the flows on the 220 kv circuits without any deductions, would you have obtained a larger number of hours of Baltimore backfeed? A. I think that would be the tendency. I do not know what effect there would be.

Q. Would there also have been a tendency to substantially increase the amounts of such Baltimore backfeed in each hour? A. I would not agree it was substantial; I would agree that was the direction.

Q. Did you attempt to ascertain what that effect would be, the amount of it? A. I did not determine what the amount would be.

Q. Did you attempt to ascertain what the effect would be on the number of hours? A. I did not attempt to do that. I only know from my general knowledge that it would be in that direction.

Q. Directing your attention to Exhibit 359, if instead [18035] of using net Baltimore backfeed as you have explained your usage of that term you had used Baltimore backfeed without deducting flows toward Highlandtown and Maryland use of energy by the Pennsylvania Railroad, would the percentage figures in column three have been larger?

MR. MYSE: Mr. Examiner, we have just gone over that. The witness said yes, it would be in that direction, but he has not made any specific study of it. Why do we have to go all over it chapter and verse again?

TRIAL EXAMINER: Is that the thing you had in mind, Mr. Witness, when you gave your previous answer, it would have that same effect on this place?

THE WITNESS: I think so but I should like to check this particular exhibit to be sure. My difficulty is that here he is asking about percentage figures and percentage figures could be misleading. If you are talking about kilowatt-hour figures my answer would be correct.

Question, please.

(Question read.)

THE WITNESS: That would have been the tendency.

By MR. WAHRENBROCK:

Q. In your testimony before the afternoon recess today and shortly after the noon recess you testified with respect to what the figure would have been without the deduction of the flows over the 66 kv circuit and for Maryland use by [18036] the railroad which, as I believe in the case of the year 1946 you said would have been 157,809,000 kilowatt hours instead of the 99,439,000 kilowatt hours shown for 1946 in the first column of Exhibit 369. Would the difference between the 157 million and the 99 million figure be made up of the additional hours and the increase within the hours to which I have previously referred?

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MR. MYSE: Which hours are you now talking about?

THE WITNESS: I do not think the number of hours has any bearing on the difference but they are the differences between the net hour delivery on the 220 kv circuits alone and the net hourly delivery on the basis that we have been referring to as net Baltimore backfeed.

By MR. WAHRENBROCK:

Q. If, as you have testified, the use of the deliveries to Safe Harbor over the 220 kv circuits without deduction for the amounts in the opposite direction over the 66 kv circuits and the Maryland consumption by the railroad would tend to increase the number of hours of Baltimore backfeed and tend to increase the amount of hours, those two tendencies would be reflected in the difference between the figure of 99 million and the figure of 157 million to which I previously referred? [18037] A. That is correct.

Q. Mr. Spaulding, as a matter of fact, were there hours in which Penn Water received interchange from Philadelphia Electric and during the same hour delivered interchange to Pennsylvania Power and Light or Met. Edison

or both of them, and during the same hour received what you have defined as net Baltimore backfeed?

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THE WITNESS: I do not know and my difficulty comes from your inquiry about the interchange with the Philadelphia Electric because that is the thing that I am not in a position to answer.

By MR. WAHRENBROCK:

Q. That is, you did not ascertain whether hours of net Baltimore backfeed during which Penn Water was delivering to Pennsylvania Power and Light or Met. Edison were hours in which there were also receipts of interchange from Philadelphia Electric? A. I would not be interested in that because the amounts of receipts from the Philadelphia Electric are used by the railroad.

TRIAL EXAMINER: What is that?

THE WITNESS: The amount of receipts from the Philadelphia Electric Company—and I, of course, understand the [18038] way in which he uses that expression—is, in fact, all used by the railroad.

TRIAL EXAMINER: That would be over P-5 and P-6?

THE WITNESS: It would be either at Thorndale or Perryville, Mr. Examiner. His question is more general than the one we had before.

By MR. WAHRENBROCK:

Q. Then do I understand that you treated any such energy as not being received because it was energy which was actually used by the railroad, not because of any priority which you assigned to it? A. Which exhibit are we talking about now?

Q. All of these three in which we have used net Baltimore backfeed, that is to say, 356, 357, and 358.

MR. MYSE: Mr. Examiner, I have been listening very patiently and I pride myself in being able—at

least. I think I know something about the flows of energy but this last question stumps me. I do not see how it has any connection whatsoever with any of the exhibits or the direct testimony up to this point.

* * *

TRIAL EXAMINER: The witness may answer.

THE WITNESS: The amounts received by the railroad and metered at Perryville and Thorndale as being used by the [18039] railroad west of Thorndale and south of Perryville, did not affect in any way my determinations on Exhibits 356, 357, 358 and 359.

TRIAL EXAMINER: The question asked why.

THE WITNESS: I do not understand that question, Mr. Examiner, I merely state that it did not affect the answer. It did not influence what I did, I used it in no way. I do not know what your next question is.

By MR. WAHRENBROCK:

Q. Well, if there was such energy you treated that on the basis of the use actually made of the specific energy; is that true?

MR. MYSE: Same objection.

TRIAL EXAMINER: He may answer.

THE WITNESS: I knew that it was used by the Pennsylvania Railroad and was not used for anything else. I am sorry, I do not believe I understand the question beyond that point.

By MR. WAHRENBROCK:

Q. I think that answers it, if I understand the answer right, that is, that the fact that energy was actually used by the railroad determined that you would exclude that from your consideration? A. No, I did not have to use it, there was no occasion to use it at all. That is the reason I have difficulty. There is no relation between this ques-

tion and all the questions [18040] we have been talking about for the last two hours.

Q. And the reason you did not have to use it was because that energy you regarded as actually used by the railroad? A. No, it is because I had no occasion to use that energy at all in connection with my determination. It was not of any interest to me in making my determination, any more so than the amount of energy that was sold in the City of Chicago in the same hour, it just did not have any relation.

Q. I think maybe I can ascertain what I have been seeking to ascertain by asking you this: In connection with your testimony earlier today you said that in allocating the net Baltimore backfeed you treated it as being utilized first to supply the interchange requirements of the other Pennsylvania customers, meaning other than the Pennsylvania Railroad.

Do you recall that? A. Yes.

Q. Now, if during such an hour when there was net Baltimore backfeed and interchange requirements of the other Pennsylvania customers were being supplied and you applied the net Baltimore backfeed to those requirements, those interchange requirements of the other Pennsylvania customers, you did not deem it necessary to give any consideration to the receipt of interchange energy from Philadelphia Electric during any such hour as it may have occurred? [18041] A. I do not think it would occur. It would be very, very abnormal to receive energy over the railroad circuits and send it out somewhere else. It may happen once in a great while but then I do not believe we had backfeed from Baltimore. You are getting a lot of probabilities there and I do not think that has any relation.

Q. All right——

THE WITNESS: May I have the first part of your inquiry read?

(Question read.)

THE WITNESS: I went back to get the first sentence in your statement because we have been talking about two determinations here today, one represented by Exhibit 354 and the other by Exhibits 356 and 357, 358 and so on.

Therefore, in order to be responsive I must know when during the day we were talking about this Baltimore backfeed.

Was it in connection with Exhibit 354?

MR. WAHRENBROCK: Ir connection with Exhibit 354, yes.

MR. MYSE: Now, may I have the question, please.

TRIAL EXAMINER: Yes.

THE REPORTER: There is no question pending.

MR. MYSE: I withdraw my request.

MR. WAHRENBROCK: I withdraw my statement, too. You are right in asking which of these it is, and I mean to say [18042] 357.

• • •

THE WITNESS: In other words, I do not believe we were receiving energy as interchange from the Philadelphia Electric which was being consumed by the railroad at the time we are sending out interchange over the 60 cycle tie.

By MR. WAHRENBROCK:

Q. During hours of net Baltimore backfeed when interchange requirements for the other Pennsylvania customers were treated by you as being first supplied with such net Baltimore backfeed, did you give any effect to the fact that interchange energy was being received from any of the other Pennsylvania customers during the same hour?

• • •

THE WITNESS: No, that would become circulating power that we talked about the other day. If it was coming in over one sixty cycle tie and going out over the other it is

treated as circulating power and is not considered as interchange at all under any circumstances.

TRIAL EXAMINER: Counsel referred to Exhibit 357, was that 357 or 358?

[18043] MR. WAHRENBROCK: I was referring to 357. I do not believe it would make any difference, if the Examiner has 358 in mind.

TRIAL EXAMINER: 357 is the firm, is it not?

MR. WAHRENBROCK: I was referring to 357.

THE WITNESS: In principle it would not make any difference; in detail, of course, it would.

MR. WAHRENBROCK: Let me carry the last question just one step further if I may.

By MR. WAHRENBROCK:

Q. Assume an hour of net Baltimore backfeed in which electric energy is being supplied to Pennsylvania Power and Light under interchange agreements and is being received from Met. Edison under interchange agreements, in such an hour did you in deducting from the Baltimore backfeed or in allocating the Baltimore backfeed first to the interchange requirements, did you give any effect to the receipt of energy—interchange energy from Met. Edison? A. No, because in that instance assuming that the amount delivered to P. P. & L. as interchange was the same as the amount received from ME Company as interchange, would not be considered an interchange transaction but would be considered circulating flow which we discussed a couple of days ago. That is not considered an interchange transaction and there is no accounting for it as such.

* * *

[18044] Q. If the amounts were not equal what effect, if any, did you give? A. If the amounts were not equal and it was a delivery of interchange services then of course we considered that first in determining how the Baltimore

backfeed was to be used or in what connection it was to be used. If it was a receipt then obviously it was a receipt and there was no adjustment to the Baltimore backfeed.

Then you go back to the question as to what you next consider it was used for. If the net was a receipt then obviously none of Baltimore's backfeed was considered in connection with interchange in connection with Exhibit 358.

Q. To take specific figures, suppose during a particular hour the net Baltimore backfeed as you have treated it was 20 and the interchange supplied to P. P. & L. was 10 and the interchange received from Met. Edison was 5, how much [18045] did you treat of the 20 Baltimore backfeed as going to interchange with other Pennsylvania customers before determining how much you allotted to other purposes? A. Well, the assumptions you made would result in an interchange transaction of 5,000 or five units—I assume you mean 5,000 kwh—and presumably that would be a transaction with P. P. & L.

The difference between the 10,000 to P. P. & L. and the 5,000 from M. E. Company being circulating, therefore I would assign 5,000 of the net backfeed as being used in connection with interchange services and 15,000 for some other purpose.

Q. That helps me to understand it. Now, just to see what you did in the other type of situation, reverse the Pennsylvania Power and Light and the Met. Edison figures —I am sorry, I do not mean reverse them. I mean 5,000 was delivered to Pennsylvania Power and Light and 10,000 was receiv d from Met. Edison. Now, in such a circumstance did you apply any of the net Baltimore backfeed to interchange requirements ahead of the other uses to which you allocated it? A. I did not because there were no interchange deliveries in that hour. The net interchange transaction was 5,000 received by Pennsylvania Water at Safe Harbor and Holtwood.

[18049] Q. * * * As I understood your use of the term "net Baltimore backfeed," as you described it it was the amount transmitted from Maryland to Safe Harbor over the 220 kv. circuits less the amount in the same hour, if any, transmitted from Holtwood to Highlandtown over the 66 kv. circuits. Is that correct and is that the method by which you actually determined those amounts, or did you also deduct the amount, if any, supplied to the railroad facilities over and above the amount used by the railroad for its own use?

* * *

[18050] MR. WAHRENBROCK: May I strike the last part of the question, please, beginning "or"? I will end my question at that point, Mr. Examiner.

* * *

THE WITNESS: That is neither correct nor the method I used.

By MR. WAHRENBROCK:

Q. I think it is a good thing, then, that I asked because that was my understanding. Will you explain, then?

* * *

[18051] THE WITNESS: In any hour I determined the amount of "net Baltimore backfeed" by first determining the net hourly amounts of energy transmitted from Maryland to Safe Harbor over the 220 kv. lines, and if such net amount was representative of a net flow from Maryland to Pennsylvania I then deducted from such net amount the net amount, if any, of the flow from Holtwood to Highlandtown over the 66 kv. 25 cycle circuits, and further deducted such amounts, if any, which were consumed by the Pennsylvania Railroad in Maryland in excess of the net hourly amounts, if any, which may have been supplied to the railroad from the Benning frequency changer.

By MR. WAHRENBROCK:

Q. Thank you, Mr. Spaulding. That answers directly what I was seeking to get at. I believe if your attention

were directed to it you would want to say that in deducting the amount transmitted from Holtwood to Highlandtown, deducting the net amount transmitted from Holtwood to Highlandtown, you meant to say deducting the net hourly amount? A. That is what I did in fact, deduct the net hourly [18052] amount of the energy, if any, delivered at Highlandtown being transmitted from Holtwood.

Q. And the amounts which you deducted representing amounts consumed by the Pennsylvania Railroad in Maryland in excess of amounts supplied to the Pennsylvania Railroad from the Benning frequency changer were also net hourly amounts? A. I considered the net hourly amounts of the supply, if any, to the railroad from Benning. Obviously the amount consumed by the railroad is not a net amount.

TRIAL EXAMINER: That net hourly is figured on the basis of both of the 220 kv. lines, is that right?

THE WITNESS: Yes.

TRIAL EXAMINER: One from Westport and the other Riverside?

THE WITNESS: Yes.

[18053] By MR. WAHRENBROCK:

Q. Mr. Spaulding, in computing the kilowatt-hours of net Baltimore backfeed used in connection with the electric services supplied to Pennsylvania firm customers as shown in your Exhibit 357, will you illustrate your method of computation by taking the following hypothetical hour: namely, one in which the net Baltimore backfeed, as you have just explained that term, is 50,000 kilowatt-hours. The interchange requirements of the Pennsylvania customers, other than the Pennsylvania Railroad, are 10,000 kilowatt-hours.

The Pennsylvania Railroad consumes in Maryland, exclusive of the amounts supplied to it through the Benning frequency changer, 25,000, and upon those facts, how did you determine the number of kilowatt-hours used in con-

nection with electric services supplied to Pennsylvania firm customers out of the net Baltimore backfeed? A. May I make two comments before I answer?

Q. Yes. A. You referred to interchange requirements. I do not agree they are requirements. They are interchange transactions.

Q. I will be glad to accept that statement. A. Secondly, I thought it was evident from my last answer that the amount of 25,000 kwh. used by the Railroad for its own use in Maryland less any amount which may have been supplied from Benning had already been considered and accounted for in [18054] connection with the determination of the net Baltimore backfeed of 50,000 kilowatt-hours which you first used in your assumption.

My answer to your question, therefore, would be that 40,000 kilowatt-hours would have been considered by me as being used in connection with electric services supplied to the Pennsylvania firm customers under your assumption.

Q. And in arriving at the figures which appear on Exhibit 357 the method which you have just explained for such hours was followed by you; where such hours occurred, I mean. A. No, because you have not indicated in your assumption what the requirements of the Pennsylvania Railroad were in the State of Pennsylvania for its own use, and the figure of 40,000 kilowatt-hours which I gave you might have been used in whole or in part in supplying the Pennsylvania Railroad requirements in Pennsylvania before I would have considered it available for use in connection with electric services supplied to Pennsylvania firm power customers exclusive of Pennsylvania Railroad, as shown on the heading of Exhibit 357.

Q. Then the method which you described with respect to the hypothetical hour I gave was used, and in addition you deducted the requirements of the Pennsylvania Railroad in Pennsylvania? A. I did so in arriving at the amount shown in Exhibit 357, as will be indicated by the title.

[18055] Q. Will you explain how, for that purpose, you determined the Pennsylvania Railroad requirements in Pennsylvania? A. They are known to me hourly from meter records.

Q. Which meter records, on which circuits? A. I have to give consideration to the meters at Thorndale, Pennsylvania; certain of the meters at Perryville, Maryland; the meters at Fishing Creek, and certain meters at Conestoga substation,

* * *

[18058] Q. In an hour in which there was transmitted over the 220 kv. circuits to Safe Harbor, 50,000 kilowatt-hours net amount and there was transmitted over the 25-cycle lines from Holtwood to Highlandtown a net amount of 25,000 kilowatt-hours, and there was supplied to the Railroad for consumption in Maryland, exclusive of the amount supplied to the Railroad at Benning, a net amount of 25,000 kilowatt-hours, you treated the net Baltimore backfeed as being zero for that hour. Is that correct? [18059] A. I so considered it.

Q. Did you consider that the amount of energy supplied to the Baltimore Company for that hour was zero? A. For what purpose?

Q. For the purposes of interchange accounting under the contracts. A. I am afraid you will have to be a little more specific, Mr. Wahrenbrock.

MR. MYSE: Mr. Wahrenbrock, do you mind if I furnish the witness with Exhibits 18 and 19, and also 20?

MR. WAHRENBROCK: No, indeed.

THE WITNESS: Is there a question pending?

By MR. WAHRENBROCK:

Q. You have made a comment. I would like to ask you whether, in the light of those exhibits which have been handed you, you are now able to answer the question. A. May I have the original question?

(Question read.)

THE WITNESS: For the purpose of determining Holtwood Company's firm power bill to Baltimore Company for the years 1944, '45, '46, such firm power bills being shown for the year 1944 and 1945 in Exhibit 19 and for the year 1946 in Exhibit 379, Schedule D, the interchange accounting with Baltimore Company was determined in that manner.

By MR. WAHRENBROCK:

[18060] Q. Thank you.

TRIAL EXAMINER: To what manner do you refer?

THE WITNESS: In the manner just described in the preceding question.

TRIAL EXAMINER: Will you indicate more specifically what that is?

THE WITNESS: The amount of net Baltimore backfeed which we have been discussing this morning was determined, as I stated in the second or third answer in this morning's record and that was the method used in determining the interchange accounting shown and used in connection with the Holtwood firm power bills I have just described.

TRIAL EXAMINER: The question was whether, on the basis of the hypothetical figures, the interchange accounting would not come out zero.

THE WITNESS: And I agreed that it would. He then asked me if that method was the method used.

TRIAL EXAMINER: I didn't hear that.

THE WITNESS: As represented by the several examples he gave me.

Let me state again, Mr. Examiner——

TRIAL EXAMINER: Offset against the 50,000 net over the 220 kv. circuits to Safe Harbor, the 25,000 running over the 66 kv. at 25-cycles and the 25,000 to the railroad for use in Maryland?

[18061] THE WITNESS: With the understanding that no part of that 25,000 was supplied to the Railroad from Benning.

By MR. WAHRENBROCK:

Q. Referring to transcript 16,607, the first line and the 51 per cent figure, it appears from the work sheets which you have supplied to us, and particularly the work sheet which has the heading, "Generation by Penn Water and Safe Harbor and Distribution Between Maryland and Pennsylvania in Megawatt-Hours", that for 1946 you derived a percentage figure of 51.7 by a method which includes the consideration of an amount of 126,095 megawatt-hours designated as "132 kv., Perryville and Conowingo, net hourly delivery."

Do you recognize that figure, and will you explain how it was computed? A. Yes, I will. The amounts shown on the work sheet are the actual amounts supplied to the Pennsylvania Railroad at Conowingo and Perryville. Such actual supplies are taken on a net hourly basis and accumulated and shown on the work sheets as amounting to 126,095 megawatt-hours for the year 1946.

Q. In computing that figure did you make any deductions for amounts at other points, such as Fishing Creek? A. I don't know what you mean by "deductions." It states it is the amount delivered at Perryville and Conowingo. Obviously it does not include the amounts at Fishing Creek.

Q. Is any of the amount included in the 126,095 based [18062] on meter readings at Perryville? A. In part.

Q. The part being the Philadelphia Electric interchange? A. No.

Q. What part? A. Being the amount supplied to the Railroad section in Maryland through the by-pass meter known as the BB meter.

Q. That is the only part of this 126,095 based on meter readings at Perryville. Is that right? A. Yes.

Q. All the other meter readings are of meters located at Conestoga? A. Well, we are right back into the com-

plications of the meters. I will have to explain it here so we won't get confused.

Under the Railroad contract identified as Exhibit 10, electric companies—and I am there referring to Penn Water, Safe Harbor, and Baltimore Company—agree to provide meters at Perryville on the 132 kv. high-tension lines. However, those meters would have cost, as I recall it, something like 75 or 100 thousand dollars, and it was determined that meters could be installed at Conestoga substation on those circuits with special compensating windings which were referred to as "loss meters" which, in effect, looked down over the lines and measured the quantities at Perryville in both directions.

Therefore, although the actual kilowatt-hour meters are [18063] not at Perryville, they do meter the amounts at Perryville and were provided for a few thousand dollars instead of $100,000.

Q. The figure of 126,095 is a net figure based upon readings of the by-pass meters actually located at Perryville and these "loss meters" physically located at Conestoga but reading as though located at Perryville, to which you have just referred, and not others. Is that correct?
A. No. Let me explain that again.

You have kilowatt-hour meters on each transformer at Conestoga substation connected to the lines going to Perryville.

I am here concerned only with those meters on lines P-7 and P-8. In addition to those kilowatt-hour meters there are compensating meters known as "loss meters". By reading the kwh. meters and either adding or subtracting the "losses" as metered, it is possible to determine the amounts on the circuit at Perryville. However, consideration must be also given for the amounts tapped from circuits P-7 and P-8 at Safe Harbor and at Fishing Creek and proper adjustments made for those amounts so taken off.

It is because of these complications that I recognize it would take so long to explain the other question you asked

me about the meters used in determining the supply to the Railroad in Maryland and Pennsylvania, respectively.

[18064] TRIAL EXAMINER: How does the by-pass meter work?

THE WITNESS: The by-pass meter, Mr. Examiner, is in the bus tie breaker at the distribution substation of the railroad at Perryville, being a 12,000 volt bus. One section of that bus is supplied through transformers with the 132 kv. circuits running from Safe Harbor via Perryville to Benning and the other section of that low tension bus is supplied by transformers connected to the 132 kv. circuits extending from Safe Harbor via Perryville to the Lamokin Substation of the Railroad near Chester, Pennsylvania. There is a certain amount of power flow between the 132 kv. circuits north and those south, and that is metered at the time it flows across the bus tie breaker in the Perryville Substation. That is known as the BB meter.

* * *

By MR. WAHRENBROCK:

Q. Then do I understand that this figure of 126,095 is based upon the readings of the by-pass meters at Perryville, the meters on circuits P-7 and P-8 physically located at the Conestoga Substation, with adjustments based upon the readings of the so-called "Loss meters" physically located at the Conestoga Substation, and with deductions for amounts supplied [18065] from the P-7 and P-8 circuits to Safe Harbor and to Fishing Creek? A. At Safe Harbor and Fishing Creek, yes. The Railroad has distribution substations at Safe Harbor and Fishing Creek that are supplied from these circuits and adjustment has to be made for the amount so supplied.

Q. The deductions, then, are of amounts supplied from the P-7 and P-8 circuits at Safe Harbor and at Fishing Creek? A. That is correct.

Q. With that amendment my statement is correct? A. That is correct.

TRIAL EXAMINER: What becomes of the amounts taken off there? Are they used by the railroad?

THE WITNESS: They are used by the railroad on their trolley circuits for the operation of electric trains along the C&PD freight division of the railroad.

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[18088] Q. So that Exhibit 42 reflects whatever supply of energy there may have been from the house units on to the main bus at Safe Harbor during the hours covered by that exhibit? A. That is correct.

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[18260] EDWARD L. DUNN.

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RE-CROSS-EXAMINATION (Continued).

By MR. HULL:

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[18262] Q. You have in your exhibits and testimony considered five per cent as a reasonable rate of return to be allowed to the Respondent company for the immediate future, have you not?

• • •

THE WITNESS: I have made no study of what is a reasonable rate of return for Pennsylvania Water & Power Company and the fact that I selected five per cent is merely for illustrative purposes.

• • •

[18318] GEORGE W. SPAULDING.

• • •

CROSS-EXAMINATION (Resumed).

By MR. GOLDBERG:

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[18322] Q. Now, then, Mr. Spaulding, directing your attention to 189.9 million kilowatt hours appearing in line 4

schedule 3-a [18323] of Exhibit 378, would you please describe for us your derivation of that figure? A. That figure is the sum of two groups of items, namely, first the sum of the kilowatt hours supplied as interchange by Penn Water and Safe Harbor to their Pennsylvania customers that did not involve any net hourly backfeed from Baltimore.

Secondly, it includes the sum of the kwh supplied by Penn Water and Safe Harbor to their Pennsylvania customers that was supplied during the time that "Net Baltimore Backfeed was being received from Maryland."

Q. So that relating your answer to your exhibits, Exhibit 359 shows 23,019,000 kilowatt hours used for interchange. Therefore the balance of the 189 million kilowatt hours being the difference between 189.9 million kilowatt hours and the 23,019,000 comes from diverted energy; is that right? A. I think that is correct.

• • •

TRIAL EXAMINER: What do you mean by "Diverted Energy"?

THE WITNESS: I am glad you asked me that, Mr. Examiner. That is a term I have coined here, and I should like to explain it in order that there may be no misunderstanding. It is the [18324] amount of energy that would have been delivered to Baltimore Company and Washington Company except that it was more economical to supply that energy to the Pennsylvania customers and for Baltimore or Washington Company to increase their own generation. It was called diverted energy merely for the purpose of distinguishing it from the amount of backfeed itself.

By MR. GOLDBERG:

Q. Does my memory serve me right? I have a recollection that the company speaks of diverted energy in its FPC form 12 report; is that right? A. I am not sure whether they do or not. I am not familiar with that use,

although if you show it to me, it might recall my memory.

Q. I am just looking here to see—yes, I think that this probably refers to the same thing. If it does not I wish you would tell me.

I show you the 1944 Power System Statement, FPC form 12 filed by Pennsylvania Water and Power Company covering the Holtwood-Safe Harbor system, and I direct your attention to Schedule 8 and the notes to Schedule 8, Column 4, lines 11 to 22, inclusive, and there reference is made, is it not, to the diversion of energy which is delivered by Penn Water over its northern interconnections to others whenever interchange transactions are practicable and economically justified; that is, whenever the cost of increased generation at the [18325] steam plants on Consolidated or PEPCO systems is lower than the cost of power generation in other plants in the interconnected systems? A. The term is used in the same way as it was used in that issue of form 12.

Q. That is what I thought.

In speaking of this diverted energy, do you make any distinction or attempt to determine whether it is Holtwood's entitlement or Baltimore's entitlement which is diverted? A. I do not know what you mean by "entitlement" in that connection.

Q. Well, I will try to be more specific. Under Items E, F and G, for example, there are two-thirds entitlement and one-third entitlement to Consolidated and Holtwood respectively of Safe Harbor's output.

Now, then, when you speak of this diverted energy, do you attempt to make any identification of the diverted energy in relation to entitlements, that is, whether it is Baltimore's entitlement that is diverted or Penn Water's? A. No, I make no attempt to distinguish between them. I was not interested in that because I am treating both companies together here.

* * *

[18341] Q. It is the fact, is it not, that a considerable amount of the backfeed is transmitted to Pennsylvania during daylight hours? A. No, it is not a fact. When you say "considerable amount" that is such an ambiguous statement. In my opinion there are relatively small amounts of energy received from Baltimore and use in connection with firm supply in Pennsylvania during the daylight hours. There are at times considerable amounts of backfeed received and used in connection with interchange transactions but I would not agree that there was any amount of energy received and used in connection with firm power services in the daytime hours unless by daytime you mean Saturdays, Sundays and holidays, or after the peak in the evening while the sun is still shining. I do not think of those as daytime hours.

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[18342] Q. If you have 50 going to Highlandtown and 50 going back in the other direction over the 220 kv lines, you cancelled out one against the other in arriving at your 80 million kilowatt hours, is not that so? A. For the purpose of this cost-of-service study I did that; yes, sir.

Q. So that it is a fact, is it not, that the actual [18343] physical deliveries of backfeed to Pennsylvania used in connection with firm supply at Pennsylvania would be greater than the amount shown in line 3 of schedule 4-a? A. That is correct, because I have considered all the generating sources as a group for the purpose of this cost-of-service study; I could not do otherwise for this purpose.

• • •

Q. If I understood one of your answers in connection with line 3, Schedule 4-a of Exhibit 378, it was this, was it not, that the backfeed is supplied by Baltimore Company as it is, so that Baltimore Company can receive, as you put it, energy which is more valuable to it at other times? A. That is correct.

Q. Doesn't that apply as well to the Pennsylvania customers? A. I am sorry, I do not understand your question. Doesn't what apply as well?

Q. The use of the backfeed makes the Safe Harbor-Holtwood energy output more valuable to the Pennsylvania customers [18344] as well? A. No, I would not agree.

Q. Why not? A. I do not see that there is any relation at all. Let me explain what I meant again. Let's assume Baltimore sent back to Penn Water 1 million kilowatt hours in a day during the hours from 9 P. M. to 9 A. M. the following morning, and received from Penn Water and Safe Harbor 1 million kilowatt hours between the hours of 9 A. M. and 9 P. M. the following day.

The net delivery to Baltimore from Penn Water and Safe Harbor is zero but Penn Water and Safe Harbor have delivered energy when its value is high and received energy when its value was very low, so that the net deliveries may be zero but a very valuable service has been rendered.

There is nothing comparable to that in connection with Pennsylvania customers at all.

Q. Is it a fact that the supply of backfeed during off-peak hours enables Penn Water to supply the Pennsylvania customers during on-peak hours? A. No. It enables Penn Water and Safe Harbor to have more service to supply during the on-peak hours to everybody.

Q. Including the Pennsylvania customers? A. That is right, and due to that it is necessary for Penn Water and Safe Harbor to obtain supplemental energy. [18345] It can obtain it from wherever it is most economical to do so. In the year 1946 a portion of that supplemental energy was received from Baltimore.

Q. Now, when the backfeed is the supplemental energy that you have referred to then it does enable Penn Water to supply the Pennsylvania loads during on-peak hours? A. No, it permits Penn Water and Safe Harbor to have more energy to supply Baltimore during the on-peak hours.

Q. When talking about the Pennsylvania customers it

does, in so far as Pennsylvania customers are concerned, enable Penn Water to supply their loads during on-peak hours? A. No, that is not correct.

Q. You say it is not correct because you want to include Baltimore as well? A. No, I am just saying it is not a correct statement.

Q. Is not the supplemental energy which Penn Water receives a benefit to Penn Water in connection with the supply of the Pennsylvania loads during on-peak hours? A. No, it is not.

• • •

[18346] Q. Let me put it this way, which I hope will eliminate any difficulties. Is it possible by using the hydro energy only without any supplemental supply of energy to meet the on-peak requirements of the Pennsylvania customers? A. I should like to answer that, I should like to give two answers to that question. First, the answer is yes, they can. Secondly, they do not operate that way, they never were intended to operate that way and it would not be economical for them to operate that way unless we changed the Pennsylvania contracts and provided for greater supply.

Q. Now, then, do I understand that your answer "yes, they can" is, if I may put it this way, "An answer based upon physical capacity alone without regard to the economics of [18347] the situation"? A. That is correct.

We went all through that on my re-direct, as you recall.

Q. I just want to understand exactly what you are saying; by having regard for the economics of the situation reliance is had on the supplemental energy to assist in meeting the on-peak requirements of the Pennsylvania customers? A. No, that is not correct. The supplemental energy makes possible a greater utilization of the energy and capacity resources of the hydro plants when used in supplying both the Pennsylvania customers and Baltimore Company and Washington.

Q. You mean, then, that the hydro plants can supply the firm power requirements of the Pennsylvania customers without any supplemental energy, right? A. They could as a physical fact.

Q. But as an economic fact they cannot? A. They could not supply the firm power requirements of Baltimore Company, the Pennsylvania Railroad and the Pennsylvania customers without operating their hydro plants in such a manner as to make the fullest use of the energy in providing capacity value of the hydro plants. You go right back to my Exhibit Number 8 in this proceeding where I explained that by conserving hydro energy for use during the peak hours it is possible to obtain a greater capacity value in terms of kilowatts—not dollars—from the hydro plants [18348] by such operation. To obtain this operation it is necessary for Penn Water and Safe Harbor to obtain supplemental energy to meet their off-peak requirements.

Q. Could the firm requirements of P. P. & L., M. E. Company and Philadelphia Electric Company be supplied by the hydros without any supply of supplemental energy? A. Yes, it could but it would not be for the reasons I have just given.

Q. And you say they could, even during periods of low flow? A. That is correct, but that is not the way they operate. It is not the way they were intended to operate.

Q. It is not the way they were intended to operate and it is not the way they operate because of a desire to secure maximum economy and maximum utilization of natural resources, is that right? A. That is correct, and when I say the way they do not operate and would not operate I am referring, of course, only to the present firm power requirements of the Pennsylvania customers. There might be quite a different method of operation if there were changes in those Pennsylvania customers' contracts which would permit an entirely different operation of the hydro plant and there would not be any requirement of supplemental energy and we might not have to consider the firm

power requirements to Baltimore, but we are talking [18349] about the situation as we find it today.

Q. You mean they would supply their own off-peak requirements? A. That is correct, as Metropolitan Edison Company does today.

I am referring to that type of contract. If all the Pennsylvania contracts—in fact, if Baltimore had the same type of contract there would be no need of supplemental energy at all and it would be possible to obtain even a greater utilization of natural resources of the Susquehanna River.

Q. Under those circumstances you are saying each company would supply its own off-peak requirements? A. Yes, sir, as they can today.

Q. In securing maximum economy and utilization of natural resources the supply of supplemental energy is a necessary component of that operation in meeting the on-peak requirements of the Pa. customers, is not that so?

* * *

MR. SPARKS: Mr. Examiner, I have listened to this at quite some length this morning without objecting. I do object now to this line of cross-examination since it was gone into thoroughly on cross-examination after re-direct of Mr. Spaulding last fall, and I am sure it was gone into during his cross-examination in chief. It is therefore, repetitive.

[18350] TRIAL EXAMINER: The objection is overruled.

* * *

THE WITNESS: No, that is not correct. The supplemental energy is required to meet the off-peak requirements of the present firm power customers, not the on-peak requirements.

By MR. GOLDBERG:

Q. Those off-peak requirements are firm power requirements? A. Yes, sir, they are, in connection with present contracts.

* * *

[18355] Q. Will you please turn to Exhibit 379, Schedule D? A. Yes, sir.

Q. Do I correctly understand that Schedule D does not represent any bill which is actually rendered to Baltimore Company? A. You correctly understand that the dollars shown on that bill were not the dollars paid by Baltimore Company.

Q. Well, is Schedule D a reproduction of a bill actually rendered to Baltimore Company for 1946? A. No, it is not.

Q. It is, shall we say, a hypothetical, a synthetic bill which you have developed to point out Items (d) 5a and 5b? A. I think I would say more than that, Mr. Goldberg. For some time Baltimore and Penn Water have considered the necessity of a firm power bill and have discussed the means of preparing such a bill and billing in accord with a firm power bill, but because of the imminence of the present proceedings Baltimore Co. did not desire to use this form of bill.

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[18378] Q. Have the rates gone up on Pennsylvania Power and Light Company since 1933? A. They have.

[18379] Q. Since 1933 they have been increased? A. That is right, by reason of adjustments in the contract.

Q. A fuel adjustment? A. That is correct, by reason of the fuel rate adjustments provided for in the contract.

MR. SPARKS: May we have Mr. Goldberg's original question about the rate?

TRIAL EXAMINER: Yes.

(Question read.)

THE WITNESS: I am sorry. I did not recognize that you were limiting that to Pennsylvania Power and Light Company. The Pennsylvania Power and Light Company contract for firm power services does not contain a fuel rate

adjustment, so that is the exception of the Pennsylvania customers.

By Mr. Goldberg:

Q. So that the rates of Pennsylvania Power and Light Company have not been increased since 1933, and your answer was directed to Philadelphia Electric Company? A. And to Metropolitan Edison and the Railroad.

Q. What are the "very definite advantages and benefits not available to the other customers of Penn Water" that Baltimore Company obtained in 1931 and still has today? A. One of them was the matter we discussed this morning, whereby supplying off-peak energy at a time when [18380] Baltimore's cost is low, and when it is being generated on the most efficient generating units, permitting the conservation or retention of water behind the hydro dams in order that the same amount of energy may be supplied to Baltimore Company during the on-peak hours when such energy would otherwise have to be generated on the less efficient and higher cost generating equipment at Baltimore and Washington.

Q. And your testimony is that in so far as Penn Water and Safe Harbor, if you will, are concerned, that supply of backfeed is not beneficial to Penn Water? A. No, that is not; that is beneficial to Baltimore Company.

Q. In relation to Penn Water's and Safe Harbor's, if you want to put it that way, firm power requirements of Pennsylvania? A. That is right, and that is one of the several big advantages to Baltimore Company.

Q. Now, what are the other very definite advantages and benefits not available to the other customers of Penn Water which Baltimore Company secured in 1931 and still has today? A. The flexibility that comes from operating large hydro plants such as those at Holtwood and Safe Harbor together with the generating facilities of Baltimore and Washington, as two horses in a team, if you will, all of the advantages of such operation inure to Baltimore

Company and do not [18381] inure to any of the Pennsylvania customers, including in that manner the capacity advantages which permit the flexibility of operation of the hydro and steam at such times as they will have the greatest benefit to Baltimore Company both from an operating point of view as to economy, and from an operating point of view as to scheduling of maintenance.

Q. This flexibility of operation is of benefit to Penn Water? A. No, it is not. It is a benefit to Baltimore Company.

Q. In other words, you have the interconnected system with the benefit flowing from the flexibility of the interconnected system, flowing solely to one member of that interconnected system; is that it? A. That is the benefit that flows to Baltimore through the contract, and is not available to the other customers of Penn Water.

Q. Is your answer "yes" to my question? A. May I have it again? I thought I answered it.

(Question read.)

THE WITNESS: Well, I did not say to one member, because there is more than one party that benefits to some extent. Washington gets some benefit from that as the result of being a member or being a party to a pooling arrangement, but most of the economic advantages flow directly to Baltimore Company [18382] and I think it would be correct to say that any advantages that might otherwise go to Washington other than those provided for in that contract still flow to Baltimore Company, so that I think your statement is correct.

Q. Well, I want to be sure I understand. Are there any advantages flowing to Penn Water from this flexibility of operations derived from this pooling arrangement? A. No.

Q. So that it is your testimony that it goes to only two members of the interconnected system, namely, Washington Company and Baltimore Company? A. Well, I have

since qualified that and said that it all goes to Baltimore Company because Baltimore Company gets all the economic benefits that grow out of the interconnection arrangement between Baltimore and Washington except such as may go to Washington under the terms of that agreement.

Q. That qualification really goes to one customer, is your testimony? A. That is correct, all the benefits flow to Baltimore Company, those benefits we have been talking about.

Q. Is maximum utilization of natural resources a benefit flowing from the interconnected system? A. The maximum utilization of the natural resources results from such coordination, and the benefits of such operation flow to Baltimore.

[18383] Q. All of it flows to Baltimore? A. The day to day, hour to hour or year by year benefits flow to Baltimore Company, that is correct.

Q. And would that be your testimony if I substituted for maximum utilization of natural resources resulting from the operations of the interconnected system, maximum economy resulting from the operations of the interconnected system, all of those advantages flow only to Baltimore from day to day, hour to hour and year to year?

• • •

THE WITNESS: I do not believe so because some of the economies are the result of interchange transactions, the savings from which are divided between Baltimore Company on the one hand and Penn Water on the other, which Penn Water passes on to its Pennsylvania customers in the way of a saving in their operating expense from such interchange.

By MR. GOLDBERG:

Q. So you would say that there is a benefit in connection with interchange that flows to Penn Water and the Pennsylvania customers? A. Yes, there is.

Q. That is the only qualification you would make, interchange? A. My difficulty in answering that is just what we go [18384] back to when you say is that the only qualification, interchange. Are you going back to the economies of operation?

Q. That is right, the point you just mentioned. A. That is correct.

* * *

[18386] Q. So that we can safely talk about the minimum amount and in talking about that amount it is your testimony—and I will not relate it to anything else right now—is it your testimony that the hydros, Safe Harbor and Penn Water can meet the requirements of 45,000 kw on a continuous basis without receiving any supplemental supply of energy? A. Of course, giving consideration to the steam generation at Holtwood?

Q. Yes. A. It could not under all low-flow conditions, no, but under most low-flow conditions it could and at such times it would not require supplemental energy from some source.

Q. What are the advantages to Baltimore Company as the residual receiver as you have testified in lines 20 to 22 of transcript 16,669? A. One of the advantages is the ability or opportunity [18387] to use hydro energy and capacity during high-flow periods for purposes of steam station maintenance and for other equipment maintenance work.

It must be recognized in connection with that position as a residual receiver that there is a very definite seasonal variation in the amounts available and while it cannot always be predicted way in advance, it can be predicted with reasonable accuracy for periods of six weeks or thereabouts.

Q. That fits into the advantage that you described as flexibility of operations? A. Yes, that is right, that is one of them.

Q. Are there any other advantages that you have in mind when you use the word "advantages" in line 22 of

transcript 16,669? A. There is a definite tax advantage under the existing contract in such a position.

Q. You mean a federal tax advantage? A. Yes.

Q. Is that related to that pyramiding situation? A. That is right, yes, it grows out of that form of contract. The difference between a "d. c." company that Mr. Walls testified to in the proceedings in IT-5914 and the "S. H." type of contract is a very real dollar advantage, several hundred thousand dollars a year, I believe.

Q. Any other advantages that you have in mind? [18388] A. No, I think those were the only two.

Q. What do you understand by the phrase "residual receiver"? A. A company who will receive or can receive the amounts that may be available after some other situation has been met. In this instance, of course, the amount of energy, capacity and other services that are available after the other obligations of Penn Water and Safe Harbor have been met and provided for.

* * *

[18436] Q. * * * I would like to show you an article written by Mr. Allner, with which you are probably familiar——
[18437] A. Yes, I think I assisted him in the preparation of the data therein.

Q. Which appears in Volume 66 of Power at page 135. I have a photostatic copy so I can leave this before you.

The article is entitled "Operation of Hydro and Steam Plants in Parallel." Isn't that right? A. Yes.

Q. And it is by F. A. Allner; is that correct? A. That is correct.

[18438] Q. And from what you have just said you, of course, knew Mr. Allner and worked with him. Is that right? A. Very well, yes, indeed.

Q. At the time he wrote the article he was general superintendent of Pennsylvania Water and Power Company. Is that right? A. It so states in the article.

Q. Mr. Allner was connected, was he not, with the design and construction of the Holtwood Steam plant? A. Yes, he was.

Q. Referring to page 136 under the caption "Size and Type of Generating Units," do you see that? A. Yes.

Q. This appears, does it not: "From the point of view of low first cost and of economy of operation under base load conditions, larger generating units would have been desirable. However, these considerations were subordinated to sturdiness, reliability of service, quick starting and maximum coordination with the hydroelectric plant." It so states, does it not? A. It does. You have read it correctly.

Q. You don't disagree with that, do you? A. No, indeed, recognizing it was written in 1927 under then-existing conditions, and I think the next sentence which you did not read is the sentence you and I have been discussing [18439] at some length for the last hour and a half.

Q. If you think so I would be glad to have you read it. A. I would like to.

> "Furthermore, under the existing conditions these initial steam units must often operate at a comparatively small load, either when separated from the rest of the generating system, or in high flow when operating on the peaks so as to take the top of the load and give the hydroelectric units maximum load. All these considerations pointed toward relatively small sturdy machines for the initial installation, approximating in capacity the hydroelectric units."

* * *

[18441] Q. I want to refer you to another article written by the same Mr. Allner entitled "The Holtwood Steam Plant Design and Operation in Coordination with Water Power." Are you familiar with that article? A. It appears to have considerably the same text as the other article appearing in "Power" had.

MR. SPARKS: Does it have a date on it?

THE WITNESS: Yes, it was presented at the summer convention of the American Institute of Electrical Engineers in Detroit, Michigan, in June of 1927.

By MR. GOLDBERG:

Q. The same year the other article was presented to which we referred, is that correct? A. It was.

Q. Will you refer to page 8 of the article, the first paragraph in the right-hand column on that page? Beginning at about the third line this appears, does it not: "The present boiler installation is larger than needed for the first two turbines, and surplus pulverizing capacity on a bituminous rating was installed to offset partially the reduction in capacity when milling river coal." Is that right? A. Yes.

Q. "Switching equipment is installed for two more units [18442] and the cable tunnel to the hydroelectric plant will take care of the ultimate station."

Have I correctly read from the article? A. You have.

Q. And I imagine you agree with that, do you not? A. I agree with the statement as written in 1927, yes. Those are not all the facts today which I referred to on page 16,680.

Q. The facts today, Mr. Spaulding, can't change the reasons why capacity was installed at the time it was installed, isn't that so? A. But additional costs have been incurred since then, Mr. Goldberg.

* * *

[18459] Q. Is it your statement, in the light of that testimony, that furnishing backfeed does not constitute furnishing capacity service? A. That is correct.

* * *

Q. You say when arrangements have been made to operate capacity without energy that that constitutes the furnishing [18460] of backfeed as a capacity service? A.

Well, my difficulty with the question is this: That backfeed has generally been used in reference to energy alone, yet we had an example the other day in one exhibit, I believe it was a bill for interchange services rendered between Penn Water and P. P. & L. Company for April, 1944 in which there was capacity services arranged in advance and billed as interchange services, and during that month certain of that capacity that was operated without energy was operated by Baltimore Company. That is an instance where capacity service is provided by Baltimore Company in connection with interchange transactions arranged, first, by Penn Water with its Pennsylvania customers, and may or may not involve the furnishing of backfeed energy.

I assumed you were using the word "backfeed" in a general sense rather than as energy itself.

Q. When there is a backfeed flow of energy, at such times does Baltimore Company ever furnish any capacity service? A. In connection with such interchange transactions as I have just referred to.

Q. How about when the backfeed is being supplied for firm delivery in Pennsylvania? A. No, Penn Water and Safe Harbor are themselves providing capacity service in that connection, and they are receiving services as backfeed.

Q. That is true even when Safe Harbor and Penn Water [18461] generating units are not generating electric energy? A. That is correct, they need not be generating electric energy.

Q. Could you define capacity service that Safe Harbor and Penn Water are then providing? A. Yes. There is capacity operating for the rendering of such capacity service, such as I have described the last several days.

Q. You mean reactive? A. Reactive, yes, as well as capacity being one of the services being rendered by Penn Water and Safe Harbor. Reactive is another service. Voltage regulation is another service being rendered by Penn Water and Safe Harbor, and supplied together with

energy received by Baltimore Company in connection with such service.

Q. Does that apply during extended low-flow periods? A. Yes. One doesn't have to have energy to provide capacity service at all.

Q. One can be supplying energy and still be supplying capacity service? A. One can be. One doesn't necessarily. For instance, interchange transactions largely relate to supply of energy without any capacity commitment whatsoever, or any capacity obligation whatsoever.

Q. You said a little while ago that when Baltimore starts [18462] up a unit in a generating station that is already operating to meet Penn Water's requests for backfeed that Baltimore is doing no more than anybody else does. A. That is correct.

Q. Does that apply to the Pennsylvania customers? A. Yes.

Q. Is it your statement that they are obligated to start up a unit in an operating station that is operating to supply Penn Water's demands? A. They have the same obligation that Baltimore Company has to do so.

Q. Your answer is "Yes", then, to my question? A. That is correct. Neither one, of course, is considered to have such an obligation. It is merely an agreement to do so from time to time.

* * * *

Q. Is it your statement that Article 6 on page 9 of the Item H is not the basis for the furnishing of backfeed by Baltimore upon request by Penn Water? A. It is the provision which indicates that Baltimore will provide such backfeed energy, yes.

Q. And is it your statement that there is nothing in Article 6 imposing an obligation upon Baltimore Company to [18463] start up a unit in a generating station in operation if necessary to meet the requirements for backfeed made upon it by Penn Water? A. No more so than any

other customer that Penn Water arranges with to provide interchange energy.

Q. That is not my question. My question is directed solely to Baltimore Company. I will have it read. A. It is an agreement by Baltimore Company to do so; that is correct.

Q. It is an obligation of Baltimore Company? A. From an operating point of view I do not consider that any different operating responsibility than is undertaken by any of the other customers.

Q. That is not my question. It is an obligation of Baltimore Company—— A. What do you mean by "obligation"?

Q. You used it yourself this evening.

TRIAL EXAMINER: Is it an operating responsibility?

THE WITNESS: It is.

By MR. GOLDBERG:

Q. Is it an operating obligation? A. I don't know what the legal obligation is, Mr. Goldberg.

Q. You have used "operating obligation" without regard to any legal concepts, and I ask you in that sense whether it [18464] is an operating obligation.

TRIAL EXAMINER: Look at your testimony on 16,682.

MR. GOLDBERG: I was just looking at that, Mr. Examiner. I was going to get at that next.

• • •

THE WITNESS: I don't consider it so.

By MR. GOLDBERG:

Q. But you do consider, whatever it is that Baltimore has to do, is no more than what the Pennsylvania customers have to do on an as, if and when basis; is that correct? A. That is correct.

Q. You do recognize, however, do you not, that whatever Baltimore has to do it has to do until 1980 while what-

ever the Pennsylvania customers do they do on an hour to hour or day to day basis? A. I still don't consider it any different.

Q. You recognize that, however, don't you? A. I recognize that the contracts have different termination dates.

Q. You recognize, do you not, that the provisions of Article 6 are not on an hour to hour and day to day basis? A. No, I do not.

Q. You look at them as representing nothing more than an hour to hour and day to day basis? [18465] A. That is correct. I look at them exactly that way, as nothing more than an hour to hour and day to day basis.

* * *

[18466] Q. You are familiar with Article VIII appearing on page 35 of Item H, I am sure. Does that Article VIII mean [18467] to you that the operations of the steam stations and the hydro stations of the interconnected system are to be so coordinated that backfeed from Baltimore and Washington will be available when and to the extent that it is required by Penn Water?

* * *

THE WITNESS: No, it means that it will be operated to provide maximum economy only.

* * *

[18548] Q. What investments are now being accumulated in connection with contemplated projects which are classified as property held for future use? A. Largely land items.

Q. What are the contemplated projects? A. Additional transmission facilities and additional [18549] hydroelectric developments.

* * *

[18555] Q. Now, you were talking about an investment having been made for future use in connection with "an additional hydroelectric development". What is the amount of

the investment that has been made for that purpose? A. The amounts as of December 31, 1946 were slightly under $60,000.

Q. Is the general location of the property above Safe Harbor? A. Yes, sir.

Q. Is it not fair to state that there are no definite plans for that additional hydroelectric development? A. There are no definite plans in that a specific design, a specific location or a specific date has been set; and when I say "specific" of course, I mean that they have not been definitely determined.

Q. In thinking about this additional hydroelectric development, I take it you are thinking about it as a separate hydroelectric development above Safe Harbor? A. That is right.

I should like to change an answer I made a few moments ago as to the amounts that have been invested for such purposes. I think I gave a figure as of December 31, 1946.

Q. Right. A. I should like to qualify that statement by saying that for the purposes of my cost-allocation study, evidenced [18556] by Exhibits 35 and 378, I only included an amount of dollars equal to some $57,000.

MR. SPARKS: You are relating that statement, Mr. Spaulding, to the investments being made for future use in connection with an additional hydroelectric development?

THE WITNESS: Yes.

By MR. GOLDBERG:

Q. I take it the money has been spent for the acquisition of land rights; is that right? A. Yes, sir.

Q. I take it there has been no thought given to who would own and operate the plant if and when constructed, is that right? A. Yes, there has been some thought given to it.

Q. Is it contemplated that Penn Water would own and operate it, in your present thinking? A. That decision has not been made.

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[18563] Q. Now, at transcript 16686 you complain, line 24, to transcript 16687 line 6, both inclusive, about Mr. Davis' use of $992,535 in his allocation because you say Penn Water actually paid more than that in 1944.

Now, then, considering as you have said, that an allocation should have regard for the future, was $992,535 more consistent with the future than the $1,214,000? A. That remains for the courts to determine. That matter is already before the Third Circuit Court, and I cannot determine what their judgment is going to be.

Q. Is the rate reduction ordered by the Commission in Safe Harbor's rates presently in force? A. With the stipulation by the parties that the money will be refunded to Safe Harbor in the event the courts hold that such amounts are deficient.

Q. So that the charges today are based upon the Commission's order, right? [18564] A. That is right. With the stipulation I just stated, which I believe is also in the hands of the Federal Power Commission.

Q. When were Items E, F and G filed with the Pennsylvania Commission? A. I could not tell you. I do not have that date. I will be glad to get it for you if you wish.

Q. I would appreciate it. A. Probably there was more than one date because the contract identified Item G was filed, I am sure, later than contracts E and F.

Q. I would appreciate having all the dates. A. I think I can give it to you, and it was filed both by Safe Harbor and by Penn Water with Pennsylvania Public Utility Commission.

Q. And filed by Penn Water at the same time and Safe Harbor? A. I would presume at the same time, yes.

Q. Will you ascertain that? A. If I can do so over the evening.

Q. Have any revised schedules been filed with the Pennsylvania Commission regarding Items E, F and G by either Safe Harbor or Penn. Water? A. As I recall, the Pennsylvania Commission has been advised of the receipt of FPC Order 143, and that the parties [18565] have entered into a stipulation relating to the amounts currently being paid and the conditions under which Safe Harbor may look to those parties for additional sums in the event that the contentions of Safe Harbor Company are upheld by the Third Circuit Court.

Q. So that no revised schedules have been filed with the Pennsylvania Commission? A. Not that I recall unless you call that letter a schedule. It was not filed as a schedule.

* * * *

[18614] Q. Do you recall at all when you reached your conclusion with respect to the 295,000 kw for hydro and the 28,000 kw for steam capacity in connection with the capacity values as you express it in Exhibit 35?

* * *

A. I would say it was within a matter of weeks of the time the testimony was finished and I think it was finished very shortly before it was presented. I would say it was during the first part of the year 1946, probably the first quarter.

[18615] By Mr. Goldberg:

Q. That was the testimony presented in connection with the identification of Exhibit 35, is that correct? A. Yes, sir.

Q. Do I correctly understand you did not employ the probability method in arriving at that 295,000 kw? A. No, you are not to understand that. I had the benefit of Mr. Watchorn's conclusions in the probability determination of dependable hydro capacity and at that time I gave

very careful consideration to it, among the other factors that he considered.

Q. You mean it entered into your judgment in arriving at the 295,000 kw? A. Yes, definitely, and was one of the strongest factors, but I did not desire to use it until I had considered these other matters, as well.

* * *

[18618] Q. What do you mean by that, every time you have used it in such connection? A. Every time I have used "dependable capacity" in connection with my rebuttal testimony of Mr. Davis, Exhibit 64, every time I have used dependable capacity as I used it in connection with Exhibit 35 and Exhibit 378, I have used dependable capacity as being the dependable capacity determined from a probability study.

* * *

[18635] Q. When you stated to the Examiner a little while ago that Penn Water always had, I think you said, services available or resources available—— A. I think the latter is right.

Q. You were there confining yourself to capacity, and it did not intend to extend your answer to availability of energy, is not that so? A. I did intend to include availability of energy.

Q. You always have enough energy? A. Yes, but may I explain that, because I think I see the difficulty.

Penn Water and Safe Harbor do have the necessary energy resources to meet all the firm power requirements of the Pennsylvania customers. In order that they may provide energy services to Baltimore also, Penn Water and Safe Harbor obtain supplemental energy services, not capacity services but energy services, from either the Pennsylvania customers or from Baltimore off-peak, in order that there may be ample energy resources to supply Baltimore Co. during the on-peak hours in addition to the sup-

ply of all of the firm power services to the Pennsylvania customers on-peak.

• • •

[18675] Q. Referring you to your answer at lines 1 to 8 of transcript 16638, has Baltimore Company since 1933 physically provided electric service for supply to Coatesville at times when Safe Harbor and Penn Water were unable to do so? A. No.

• • •

[18685] Q. Referring to 16649, to the question beginning at line 23 and the answer following, will you please specify the times since the effective date of the 1931 supplemental agreement when Baltimore did actually render a bill to Penn Water for backfeed?

MR. SPARKS: I object to that as cumulative. Mr. Goldberg questioned Mr. Loane about the same details, as I recall, a few days ago.

• • •

TRIAL EXAMINER: He may answer.

THE WITNESS: In the years 1931, 1932 and I believe '33, if that is sufficient. I do not have the exact months in those years.

By MR. GOLDBERG:

Q. Was it more than one month? A. Oh, yes; several months, if not many months in those three years.

Q. Is it your testimony that such bills were rendered under "Article 6 of Item H"? A. Generally so; not exactly in accord with that section.

[18686] Q. That brings us to the next question: You have testified: "Such bills were computed generally in accord with Article 6—" and I will stop there. I was wondering what your qualification was when you say "Generally in accord"? A. Article 6 of the 1927 agreement in Item H states, "The costs to be used are those reported on Electric's monthly production statement covering the month

during which steam energy was furnished to Power—" in this instance Electric refers to Baltimore Co. and Power to Penn Water, and the costs there referred to are the costs to be used and to which 10 per cent is to be added in determining the amount of the bills. Actually that exact method was not used after 1931, or at least was not used after the middle of 1931; rather, the amounts used were as shown on Exhibit 367 where it indicates that the Westport production cost alone was used rather than the monthly production statement cost for all of the generating stations of Baltimore, and the difference was rather material.

Q. You have answered three questions in one. Tell me this: Was the supply of energy shown in Exhibit 367 provided by the Westport Station? A. That is not known, of course, exactly where it was provided. It was provided by the system and the costs at Westport were used for the month in which such energy was supplied by Baltimore Company to Penn Water.

Q. Am I correct in my conclusion that the face of the [18687] bill discloses that the charge was based on an agreement between R. L. Thomas and F. E. Ricketts? A. Yes, to the extent that Mr. Thomas and Mr. Ricketts were at that time—that is, in 1931 and 1932—members of the operating committee designated under the provisions of the contract H, and the bill was made out in accord with that operating committee's determination.

Q. Does that agreement which appears on the face of Exhibit 367, in substance apply to all the bills which were rendered in 1931, 1932 and 1933? A. Yes.

Q. Was it a written agreement or an oral agreement? A. There was no written agreement and I do not know whether it was any more than merely the arrangement by the operating committee, they having power to do so in connection with this matter.

MR. SPARKS: I take it your question about the agreement, Mr. Goldberg, in the years 1931, 1932 and 1933, related to the backfeed bills?

MR. GOLDBERG: That is right.

THE WITNESS: And specifically such as is shown on Exhibit 367.

By MR. GOLDBERG:

Q. Do you view the agreement appearing on Exhibit 367 as a modification of Article 6 or as having nothing to do [18688] with Article 6? A. I do not view it as an agreement. I view it as a procedure which the operating committee agreed to, which was their interpretation, I guess, I cannot say, presumably their interpretation of Article 6.

I do not know whether they had advice of counsel in that matter or not.

Q. Did I understand you correctly to say that Article 6 is not limited to Westport's production costs or to any station's production costs? A. It does not appear to be and I know that prior to 1931 the system costs were used.

Q. Is the $8,383.16 shown on Exhibit 367 a part of the $14,452.47 shown as Item (d)-2 on Exhibit 368? A. It is.

Q. Do you know in what months the other backfeed charges covered by the additional $6,000 took place? A. No, I do not recall. I think it was the latter part of the year but I would not be certain.

Q. Was it at the same rate as shown in 367? A. Not at the same rate but under the same bases as are shown on Exhibit 367.

Q. Will you turn to Exhibit 369? A. Yes, sir.

Q. Referring to Exhibit 369, what do you mean by [18689] "Baltimore Co. Average Monthly Production Cost Plus 10%" which is the heading for the fourth column? A. The amounts shown or the rates shown in column 3 were determined in the following manner: Baltimore Company's average production cost for each month was determined from their production statements. To that 10 per cent was added, then such amounts were averaged for the year in proportion to the amounts of daily net backfeed

energy received by Penn Water in each month of that year, so it was done on a monthly basis using monthly averages, and then from that getting an average for the year, but it was done on a weighted basis rather than a numerical average basis.

* * *

[18691] Q. When you put the caption "Baltimore Co. Bill to Penn Water under Article 6 of 1927 Contract" on the last column of Exhibit 369 you were not there referring to any actual bills for 1944, 1945 and 1946, is not that so?

* * * *

[18692] THE WITNESS: No, I was not referring to any actual bill rendered, but rather the bills that would have been rendered under the contract except for the reason given that such billing did not affect either company's net income.

TRIAL EXAMINER: No, I do not understand that.

THE WITNESS: Mr. Examiner, in the past the record will show that I stated that the reason there was today no billing for backfeed under H and I was because the operating committee [18693] had been advised by counsel for Baltimore Company that the necessity for billing for backfeed between Penn Water and Baltimore Company under H and I was of no interest to any party other than Penn Water and Baltimore and that because it did not affect the operating income of either company it could be dispensed with.

Accordingly, we have not been billing for backfeed under Article 6 of the 1927 agreement or under H and I since about 1933.

It is true that it did not appear to affect anybody until these proceedings started and now it is evident that it does affect somebody and that is the reason we have pointed that out, particularly the distinction between the net billing and the gross billing, the gross bills being the firm power bills rendered by Penn Water to Baltimore Company.

TRIAL EXAMINER: I see. What is the net bill?

THE WITNESS: The net bill is the bill actually rendered by Penn Water to Baltimore Company. The firm power bills are the bills that would have been rendered had we billed for backfeed and accounted for backfeed services separately in accordance with the initial intent of the contract.

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[18699] Q. Is it not a fact that in 1927, when Article 6 was executed as part of the 1927 agreement the 220 kv lines were not in existence? A. They were not in existence.

• • •

[18700] Q. Now, this backfeed that appears in Exhibit 367 was handled over the 25-cycle line, that is over the Highlandtown line, right? A. No, I do not think it all was.

Q. Well, none of it was handled over the 220 kv lines, was it? A. I think so, yes.

Q. Were the 220 kv lines already operating in December, 1931? A. No, there was no power flow over the 220 lines. They did not go in until about 2 weeks after this bill was rendered.

[18701] Q. The energy was November? A. Yes, and that is why I was first confused; there was subsequent billing of course related to energy that flowed over the 220 lines.

Q. So that this energy in Exhibit 367 was handled over the 25-cycle lines, right? A. Yes.

Q. So there is no netting involved in Exhibit 367 between flows over the 220 kv circuits and flows over the 25-cycle lines, right?

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[18741] Q. Mr. Spaulding, I think there are some matters of homework that you were to report on. Are you ready to report on them? A. Yes.

Q. I think one of them related to the dates of filing of Items E, F and G with the Pennsylvania Commission? A. I have those dates.

Q. Would you please state them? A. The original Safe Harbor contract identified as Item E, dated June 1, 1931, together with the supplement to this 1931 contract dated August 1, 1932 and identified in these proceedings as Item F, was filed by Safe Harbor Water Power Corporation with the Pennsylvania Public Utility Commission on September 16, 1933, and was designated by that Commission [18742] as Safe Harbor Tariff No. 1.

These two contracts identified as Items E and F were also filed with the Pennsylvania Public Utility Commission by Penn Water on September 16, 1933 and were designated by that Commission as Penn Water Tariff No. 5.

The second supplement to this 1931 Safe Harbor agreement which has been identified in these proceedings as Item G and dated November 22, 1939 was filed with the Pennsylvania Public Utility Commission by Safe Harbor Water Power Corporation on December 7, 1939 and was designated by that Commission as Safe Harbor Tariff No. 1, Supplement No. 1.

This supplemental agreement, Item G, was filed by Penn Water with the Pennsylvania Public Utility Commission on December 7, 1939 and that was designated by that Commission as Penn Water Tariff No. 5, Supplement No. 1.

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[18757] RE-DIRECT EXAMINATION.

By MR. SPARKS:

Q. Mr. Spaulding, at transcript page 17,216 Mr. Wahrenbrock asked you at line 17:

> "Do I understand you, then, as saying that the rendition of these other services is a necessary incident to the supply of energy for which the dollar amounts are billed?"

And you answered "Absolutely".

In making that answer, did you mean to imply that the services provided at the Safe Harbor and Holtwood plants

other than the supply of energy are incidental to the supply of energy?

• • •

[18758] THE WITNESS: No, I did not. As I have pointed out in many places in my testimony there are times when the other services, such as capacity service, is provided at Safe Harbor and Holtwood when no energy is supplied.

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[18759] Q. Referring to your answer at lines 4 to 6, inclusive, page 18,343, is that answer reported correctly? A. It is not. When I referred to generating sources——

TRIAL EXAMINER: Now, wait just a minute.

THE WITNESS: I was referring to the generating sources of Penn Water and Safe Harbor as a group.

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[18857] DALE E. GOUBLEMAN

a witness herein, having been first duly sworn, testified as follows:

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[18858] DIRECT EXAMINATION.

By MR. GOLDBERG:

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[18864] Q. Do you have data showing whether or not Penn Water investors in common stock were concerned with the probability of future rate reductions? A. Yes, I have.

Q. What data do you have? A. I have photostat copies of "Standard Unlisted Securities—Stock Reports", published by Standard & Poor's which [18865] are utilized by investors in making investments.

Q. Are there statements in such reports disclosing concern with probability of rate deductions? A. Yes, there are.

Q. Please tell us what reports you have? A. I have reports dated May 25, 1938, December 5, 1938, February 27,

1939, October 11, 1939, January 12, 1940, May 6, 1940, August 28, 1940, February 26, 1941, April 13, 1942, June 4, 1943 and November 29, 1944.

Q. What is the nature of the statements which appear in those reports to which you have had reference in your earlier answers? A. Well, the report for May 25, 1938 states with respect to Penn Water common stock, as follows: "The possibility that earning power may be impaired by rate reductions dictates a conservative attitude toward the otherwise strongly situated common stock."

This same statement in virtually those very words appears in each of the reports to which I have made reference. In addition, the report of May 25, 1938, states that "because of the contractual nature of the business, earnings should be well maintained. Nevertheless, rate investigations make for some uncertainty."

The report also states: "Pennsylvania Water & Power's 1937 operating income was equal to 9.3 per cent of depreciated [18866] book value of plant." Again, in the report of August 28, 1940, after referring to the Commission's order reducing Safe Harbor's rates it is stated that if the Safe Harbor order is upheld "Pennsylvania Water & Power also would be vulnerable to a rate reduction", and in the report of February 26, 1941, it is stated that: "Regulation of hydro wholesalers has taken a more aggressive turn in the recent past. In 1940 the FPC limited earnings of Safe Harbor Water Power to 6 per cent on 'net investment'. Should the Commission be upheld, Pennsylvania Water & Power also would be vulnerable to a rate reduction."

This same warning appears in virtually the same words in the report of April 13, 1942. Also the report of August 28, 1940 states:

> "In 1939, operating income was equal to 8.9 per cent of depreciated book value of plant." The report of June 4, 1942, stated:

"In 1942, the Company earned 9.0 per cent on net plant, excluding $2,106,765 transferred from plant to the electric plant adjustment account", and under the caption "Prospects" is the statement "One uncertainty in the outlook is the possibility of regulatory pressure upon the high rate of return."

Q. Are the reports to which you have referred all of the reports in which the investors' attention is directed to the possibility of rate reductions affecting the earnings of [18867] Penn Water? A. No, there are others. I have merely referred to some of the typical statements which appear in those reports.

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[18875] CROSS-EXAMINATION.

By MR. SPARKS:

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[18879] Q. This was my question, Mr. Goubleman: Are you in agreement with the standards and principles which Mr. Joseph testified were followed in the compilation of Exhibit 46? A. Yes, I believe that I am.

Q. Were those standards and principles followed in the preparation of Exhibit 404? A. I believe they were with one or two minor exceptions. I have supplemented Exhibit 404 in one or two places.

• • •

[18894] Q. Mr. Goubleman, referring now to page 38 of Exhibit 404, do you have the figure for April, 1947 which should follow the 6.89 as shown for March, 1947? A. I have computed that figure to be 6.97 per cent.

Q. That is for April, 1947? A. Yes.

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[18925] GEORGE H. DAVIS.

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DIRECT EXAMINATION.

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[18928] By MR. GOLDBERG:

Q. Have you examined the "Cost of Service Study", Exhibit 378, in which Mr. Spaulding allocates Pennsylvania Water & Power Company's and Safe Harbor's cost of service to Baltimore? A. Yes.

Q. What are the principal differences between the method used by Mr. Spaulding and that used by you in your allocation? A. Mr. Spaulding allocates costs to Baltimore only and makes no allocation between any of Holtwood's other customers.

Mr. Spaulding does not consider Pennsylvania Water & Power Company by itself but combines it with Safe Harbor. His analysis, therefore, gives no answer to the question of how much of Pennsylvania Water & Power Company's costs are applicable to Baltimore or to any other customer.

Q. What is the effect of Mr. Spaulding's method on the proportion of Pennsylvania Water & Power Company's service which is included in the total service that he allocates to Baltimore? A. It tends to increase the percentage of Holtwood's service that he allocates to Baltimore.

[18929] Q. How does it increase the percentage? A. By entitlement under Items E, F and G, Baltimore purchases 66 2/3 per cent of Safe Harbor's output. However, the per cent of Holtwood's output delivered to Baltimore is much less than that, due to the greater proportion of it which is required to supply the Pennsylvania customers.

Q. How does this affect the result? A. On the combined ratio, the proportion of Holtwood's costs allocated to Baltimore is greater than the proportion of its service supplied to Baltimore.

Q. Have you prepared a cost allocation based on the data and costs of 1946? A. Yes.

Q. Have you also prepared an explanation of this allocation and its relation to the allocation based on 1944 data and costs as part of the 1946 study? A. Yes.

Q. Is Exhibit 421 for Idenfification the document referred to? A. Yes.

Q. In this allocation have you made a determination of dependable hydro capacity? A. Yes.

[18930] Q. In making that determination, have you followed the method used by the Holtwood Company? A. I have followed the general method which was used by Holtwood and Baltimore in reporting dependable capacity prior to 1945, and which was discussed at a conference between this Company's engineers and members of the Commission Staff on June 25, 1946.

Q. Who attended this conference and where was it held? A. It was held in Mr. Spaulding's office in Baltimore and was attended by Messrs. Spaulding, Watchorn, Loane and Von Eiff of Holtwood Company and Mr. Roland and myself for the Staff.

Q. What was the occasion for the conference? A. The Commission had received reports from Holtwood and Baltimore Companies giving estimates of dependable capacity which varied widely. The conference was held at the request of the Staff for the purpose of learning the methods by which these different results were obtained.

Q. What information were you given at the conference in Mr. Spaulding's office? A. There was no disagreement as to the derivation of the load-carrying capability of the hydro plants, based on minimum flow and the actual loads during the peak week under the weekly recovery program. This figure for 1945 was 161,000 kilowatts. This basic capacity had previously been determined each year [18931] by both Holtwood and Baltimore Companies.

In this conference Mr. Watchorn agreed that the 161,000 kilowatts was correct for that capacity, based on

1945 loads, but said it was not the dependable capacity of the plants. He went on to explain that other elements of capacity value had to be considered in estimating dependable capacity and gave us the following list of other components that should be considered. He gave us values for each component, which when added to the basic capacity of 161,000 kilowatts, gave 295,000 kilowatts, which was the figure that Holtwood Company had reported to the Commission as dependable hydro capacity:

Base load carrying capability	161,000 kw.
Added Capacity:	
For use of Safe Harbor Storage without refill	59,000 kw.
For change in load shape and energy from Pa. customers	46,000 kw.
For probability of better than most adverse flow	29,000 kw.
Total	295,000 kw.

Q. What dependable capacity did you use in your cost allocation for 1946? A. 250,000 kilowatts.

Q. Have you made a computation to determine what the result of your allocation would be if you used the 295,000 kilowatts as dependable hydro capacity? A. Yes.

[18932] Q. What is the result, using 295,000 kilowatts? A. It would increase the costs allocated to Baltimore Company from $181,739 to $269,645 and reduce the percentage of revenue in excess of allocated cost applicable to Baltimore Company from 96.37 per cent to 92.5 per cent.

Q. Did you make a mathematical determination to arrive at 250,000 kilowatts? A. No, except in computing the basic load carrying capability of 167,000 kilowatts.

Q. How did you determine the added amount which you include in the 250,000 kilowatts? A. This is a judgment figure based on consideration of the factors which may have additional capacity value. This estimate is also based

on the principle that dependable capacity is not what the seller may be able to compute, as a possible steam capacity replacement, and it may not be just what the buyer would be pleased to pay for, but it is that amount which operating engineers and officials of the company upon which will rest the responsibility for any failure to carry the load, can reasonably, and actually will depend on, in any determination of investment to be made for additional capacity requirements.

* * * *

[18933] By Mr. Goldberg:

Q. Mr. Davis, I show you Exhibit 422 for Identification and ask you if you prepared that exhibit? A. I did.

Q. Do I understand that that is a cost allocation prepared in the same manner as Exhibit 421, except that Exhibit 422 is prepared on 1944 data?

* * * *

Mr. Myse: I want to object to that question on these grounds—and it may be a little bit premature to object to the exhibit but the same objections go to the exhibit. Those objections are as follows: Exhibit 422 and any testimony in connection therewith is not proper rebuttal. They do not rebut any of the evidence which Respondents have put in up to this date. So far as I can see, Exhibit 422 is nothing more than a cumulative exhibit based on a new method, in part. As I said before, that does not rebut anything except it may rebut Mr. Davis' own testimony in the case in chief of the [18934] Commission Staff and I therefore object to this exhibit and any testimony based thereon.

Mr. Goldberg: I hardly think that calls for a response, Mr. Examiner.

Trial Examiner: I think maybe you had better respond to it.

Mr. Goldberg: I would be glad to, Mr. Examiner. The Examiner will recall that the witness Loane pre-

sented an alleged rebuttal exhibit in which he testified certain additional adjustments should be made to the 1944 cost allocation presented by the witness Davis.

Mr. Examiner, this is clearly in rebuttal to that.

TRIAL EXAMINER: Is it confined to that?

MR. MYSE: May I explain my objection a little bit further?

TRIAL EXAMINER: Just a minute. Is it confined to that?

MR. GOLDBERG: Well, it is not confined to that because it would only be half an exhibit if it were only confined to matters that Mr. Loane brings out. Mr. Loane did not bring out the adjustments that operate in favor of Baltimore Company.

MR. MYSE: Let me explain my objection and show how it is not confined to that.

TRIAL EXAMINER: Wait just a minute. What is the scope of Exhibit 422 for Identification?

[18935] MR. GOLDBERG: Precisely the scope of 421 for Identification, except that 422 is 1944 data.

TRIAL EXAMINER: 421 is your own exhibit, it is not Respondents?

MR. GOLDBERG: I realize that, Mr. Examiner.

TRIAL EXAMINER: What has this to do with the witness Loane?

MR. GOLDBERG: The witness Loane has testified on rebuttal that the proper cost allocation based on 1944 data would be thus and so, as he reflects in his Exhibit 351. Now, then our reply to that is quite the contrary, it is what is shown in Exhibit 422.

MR. MYSE: May I be heard, Mr. Examiner?

TRIAL EXAMINER: Not just yet. Mr. Witness, refer to your Exhibit 422 for Identification. What does it consist of briefly?

THE WITNESS: It consists of the same allocation of costs as Exhibit 64, incorporating all of the things which appeared to me to be proper that were brought out during cross-examination on Exhibit 64, together with some other items that were suggested by the things that were brought out in cross-examination on Exhibit 64.

MR. MYSE: It seems to me to be redirect, Mr. Examiner.

TRIAL EXAMINER: It seems to me you referred to the cross-examination twice.

[18936] THE WITNESS: Of Exhibit 64?

TRIAL EXAMINER: Yes.

THE WITNESS: Yes, I did.

TRIAL EXAMINER: Read me the witness' statement?

(Statement read.)

TRIAL EXAMINER: You mean there was one category you brought out which you considered proper and another category you were uncertain about?

THE WITNESS: No, the other category was things suggested to me in a study of the exhibit by the things that were brought out but which were not brought out in cross-examination on Exhibit 64.

TRIAL EXAMINER: How does your Exhibit 422 relate to Respondents' Exhibit 351?

MR. GOLDBERG: What does the Examiner mean by relate?

TRIAL EXAMINER: Let us see if the witness can answer that.

THE WITNESS: Exhibit 351 introduced a number of things that were brought out during cross-examination on Exhibit 64 which appeared to me to be proper corrections and which I adopted. It brought out a number of others which I did not consider to be proper and which I did not

adopt. It also suggested others which had not been brought out which seemed to me to be proper corrections and I incorporated those in Exhibit 421.

[18937] TRIAL EXAMINER: When you were recalled at one time you presented an exhibit that accepted certain changes that were brought out in your cross-examination?

THE WITNESS: 292 and 249.

MR. GOLDBERG: That is right, and the witness has just stated those were reflected in Exhibit 351 but that Exhibit 351 goes far beyond that.

TRIAL EXAMINER: What is the relationship of Exhibits 249, 292 and 64 to your Exhibit 422 for Identification? Have you gone farther in your 422 than you did in 249 and 292?

THE WITNESS: That is right, incorporating things that were suggested.

TRIAL EXAMINER: Your Exhibits 249 and 292 incorporated things that were directly brought out on your cross-examination?

THE WITNESS: That is right.

TRIAL EXAMINER: And your proposed 422 goes one step further and incorporates certain matters that you selected after further deliberation, is that right?

THE WITNESS: That is correct.

TRIAL EXAMINER: In other words, there is in the record now no cost allocation study by you in one simple, consolidated form that does all of these things that you have proposed to do in 422, is that right?

THE WITNESS: Up to this point, no, there is not.

MR. MYSE: May I ask a few questions along that line?

[18938] TRIAL EXAMINER: Yes.

By MR. MYSE:

Q. Mr. Davis, will you tell me what connection Table V-B of Exhibit 422 has with Mr. Loane's Exhibit 351?

MR. GOLDBERG: Objection, Mr. Examiner. I say that is entirely immaterial and irrelevant to the presentation of this exhibit.

MR. MYSE: The reason I ask this question—and I might explain it to the Examiner—is because Table V-B introduces an entirely new theory of energy balance. There was nothing in Exhibit 64, Exhibit 249 or Exhibit 292 that had any connection with Table V-B and, what is more, there is nothing in Exhibit 351 or 350 that has any connection with the energy balance which is now introduced for the first time.

MR. GOLDBERG: That is the trouble with Exhibit 351.

TRIAL EXAMINER: Mr. Witness, you may answer that question, but do it in the same general way in which you responded to the Trial Examiner's questions with regard to the consolidation of all these matters.

THE WITNESS: Table V-B incorporates those criticisms of Exhibit 64 which appeared to me to be proper. It also incorporates a change in the amount of energy which is supplied by Baltimore to the Holtwood system which was suggested to me by that cross-examination but was not brought out or suggested in either the cross-examination or Mr. Loane's exhibit. [18939] Otherwise this is exactly the same treatment of energy as that in Exhibit 64.

TRIAL EXAMINER: Have you numbered your tables in 422 for Identification so that they are parallel with the corresponding tables in Exhibit 64?

THE WITNESS: That is correct.

By MR. MYSE:

Q. Did I understand you to say, Mr. Davis, that Table V-B was something that was not brought out in the testi-

mony of Mr. Loane? A. He did not suggest this change in the amount of energy supplied by Baltimore to the Holtwood system.

MR. MYSE: That is my point, Mr. Examiner, there is absolutely nothing in Exhibit 351 or in any of the testimony of Respondents which calls for this particular testimony in rebuttal. So, I say it is not proper rebuttal and on the witness' own statement it is apparent, if proper at all it may have been proper on redirect but time has long gone since redirect.

* * *

[18941] MR. MYSE: I also object to Exhibit 422 on the ground that it is immaterial and irrelevant. Certainly at this late date the year 1944 and any costs therefor have no bearing [18942] on what the reasonableness of the Penn Water or Susquehanna charges should be.

I also point out that we object to Exhibit 422 on the ground that Tables I, II, III, III-A, IV and V are cumulative in that they are merely revisions of prior exhibits, namely Exhibits 64, 249 and 292.

Insofar as the balance of the tables are concerned —I should have included V-A in that—in so far as Table V-B, Table V-C and Table VI are concerned, as well as Table VI-A, they of course are based in part on Table V-B, which is something entirely new to this proceeding up to this point.

To that extent, of course, they are not cumulative but they are subject to the objection I made at first, not proper rebuttal.

MR. GOLDBERG: Mr. Examiner, I cannot help but reach the conclusion that these are but frivolous objections because if the tables referred to are cumulative then by the same token so are the tables presented in Exhibit 351 because they merely go over in part the same revisions made by the witness Davis.

Now, then, the Respondents objecting here would be the first ones to object to an allocation which carried through only part of the suggested revisions. They would insist that there be brought into the hearing room a complete picture of the situation as it relates to 1944. That certainly is what we have done here and it is a desirable procedure.

[18943] Mr. Examiner, counsel has stated that the year 1944 at this late stage is immaterial and irrelevant. I am not so sure about that but I am sure that that is a matter to be decided by the Commission and the Commission should have all of the information available to it to determine whether 1944 is the appropriate basis or 1946 is the appropriate basis, or perhaps some combination of both.

After all, we have had testimony here that the year 1944 is abnormal but by the same token we have had testimony that the witnesses who have so testified regarding the abnormality of the year 1944 have no standard to test the normality or abnormality of the year.

Now, Mr. Examiner, apart from anything else, I might say it is absolutely essential to have in this record an allocation based upon 1944 data companion to that based upon 1946 data. We have had in this case alleged rebuttal testimony which was clearly not rebuttal testimony but which represented no more than Respondents' case in chief which they had elected to withhold until they had had an opportunity to see the Staff's case and cross-examine it.

A clear example of that was the witness Uhl's testimony. His testimony reveals that even before the proceedings had started he had reached conclusions regarding the value of certain land and land rights for the purpose of the determination of the cash value of securities and they brought it in for the [18944] first time only in connection with rebuttal.

I do not think we need any more argument as to the propriety of Exhibit 422.

MR. MYSE: Let me reply briefly to that. I want to deny that we have elected to withhold anything and state that we have been suffering under a handicap because of the fact that we have been unable to find out from the Commission staff what the government proposes in this case, and we still have not found out.

MR. GOLDBERG: That is not what is causing your suffering if that be true. I might point out to the Examiner, there are changes in Exhibit 378 that were never brought into the case before. Who was Mr. Spaulding rebutting there?

TRIAL EXAMINER: I was just considering that. Respondents' Exhibit 35 treated of 1945 and 1946 estimated, and 378 treated of 1946 actual, is that right?

MR. MYSE: That is right.

MR. GOLDBERG: Actual and adjusted.

MR. MYSE: Those adjustments were made and explained in the exhibit. They were necessary because of certain nonrecurring items.

MR. GOLDBERG: I think it goes beyond that.

TRIAL EXAMINER: The objection is overruled.

MR. MYSE: May I take an exception. I want to point out to the Examiner one thing in this connection: We spent [18945] something like three months of intensive labor—a great many people worked on it; I do not know just offhand how many man-hours were involved but there were a great many—in preparing for cross-examination of Exhibit 64. Now, we are suddently confronted with an exhibit which purports to be a correction of Exhibit 64 but, because of Table V-B is something that is entirely new.

TRIAL EXAMINER: How much does V-B influence 422?

MR. MYSE: Table V-B, Your Honor will note is one of the most important influences on column 9, line 5 of Table VI which is the pay-off.

I might say that in Exhibit 421, which the witness has described as the exhibit which includes an explanation of the differences, the witness himself says in the explanation included in Exhibit 421, page 4, in connection with Table V-B of Exhibit 421—and as I just got through saying the witness said the same explanation applies to V-B in Exhibit 422—he says as follows:

> "The increase in the credit to Baltimore over that shown in Exhibit 64 is due in a small part to this credit for capacity, but mostly from the credit for energy delivered to Holtwood from Baltimore's portion of Safe Harbor."

TRIAL EXAMINER: Where are you reading from?

MR. MYSE: The second to the last paragraph on page 4 in [18946] the text of Exhibit 421.

It is that phrase "The increase in credit to Baltimore Company results mostly from the credit for energy delivered to Holtwood from Baltimore's portion of Safe Harbor" which is the keystone of this entire business in Table V-B.

If you will examine Table V-B in this Exhibit 422 and compare it with the comparable table in Exhibit 64, which is the energy balance, you will see they are widely different, they have no connection with each other and it will take us months of study to trace back the figures.

MR. GOLDBERG: Mr. Examiner, I think you are familiar with the story of "Wolf, Wolf." I think we have had here that cry of "Wolf" raised over and over again and I submit that the authenticity of that cry

of anguish can best be tested by reflecting upon the times when that plea is made. For example, yesterday when counsel for Respondents stood up and protested that he had not had a reasonable opportunity to prepare for the cross-examination on the subject of rate of return of the witness Goubleman, which was on a very narrow scope, although they had had that testimony in their possession almost a month. I think that is a pretty fair index of how authentic these claims are.

TRIAL EXAMINER: Well, let's get on. Counsel may make any motion he desires after the cross-examination of direct rebuttal with regard to Exhibit 422, in respect to further time to [18947] prepare further cross-examination, and I will take that under advisement.

* * *

THE WITNESS: Yes, that is right.

* * *

[18948] Q. Mr. Davis, I show you Exhibit 423 for Identification and ask you whether the tabulations which constitute that exhibit were furnished the staff of the Federal Power Commission by Pennsylvania Water & Power Company? A. That is correct.

Q. Did the staff suggest the titles for the columns or any of the descriptive material on Exhibit 423 for Identification? A. No.

* * *

[18952] CROSS EXAMINATION

By MR. MYSE:

* * *

[18999] Q. In order to avoid misunderstanding I would like to have your idea of what the total cost of Holtwood is that you found as applicable and so allocated to Baltimore. Will you do that and give me the total figure? A. I told you what the total figure was.

TRIAL EXAMINER: Do you have any objection to simply adding up those figures?

THE WITNESS: I do not like to take my mind off from where he is going; I would like to have him do it.

TRIAL EXAMINER: I think that is a minor consideration.

THE WITNESS: The gross cost is $1,425,459.

[19000] By MR. MYSE:

Q. Now, as I understand it, that is the figure which shows the cost of Holtwood which you found allocable to Baltimore before deducting credits to Baltimore, right? A. That is right.

TRIAL EXAMINER: How did you get that figure?

THE WITNESS: From Table VI, line 5, column 5, we have the special facility cost of $772,540. In note 3 to line 5, column 4, we show the charge to Baltimore for energy as $652,919. That makes a total of $1,425,459.

TRIAL EXAMINER: $652,919?

THE WITNESS: Right.

TRIAL EXAMINER: You add that to the $772,540?

THE WITNESS: Right.

TRIAL EXAMINER: I thought you added the 552,000, the 38,000 and the 181,000.

THE WITNESS: The 181,000 is a net cost after deducting credits.

By MR. MYSE:

Q. Net cost of what? A. I probably cut that. The net cost to Baltimore after deducting credits is $181,739. The two credits are the one shown in column 6, line 5 of $38,400 and the second item shown in note 3 to column 4, line 5, which is the credit for energy supplied from Baltimore of $1,205,320.

[19001] The sum of those two, $1,243,720 substracted from $1,425,459 gives the $181,739.

Q. That means, does it not, that the $1,425,459 which you found as the total Holtwood cost to be applicable to Baltimore Company is made up of two items, "Special Facility Costs" as shown on line 5, column 5, Table VI of Exhibit 421 and "Energy Costs" which are shown in the first line of footnote 3, is that right? A. That is right.

Q. And there is nothing included in that total cost for capacity cost? A. No.

* * *

[19013] Q. Do I understand that these accountants gave you the breakdown of the $32,939,420 as that breakdown appears in the last column of Table I? A. Yes.

Q. And you take no responsibility for any of the figures? A. That is correct.

Q. So that you do not know whether they are accurate or not, is that right? A. I take no responsibility for them.

[19014] Q. You do not know whether they are accurate then, is that right? A. No, except for my faith in the accounting examiners.

Q. Do I understand that the accounting examiners of the Commission's Staff gave you none of the other figures in any of the other columns on Table I, but that represents your work, right? A. That is right.

* * *

[19015] Q. What I am getting at, Mr. Davis, is do you or do you not take any responsibility for any of the figures appearing in column 7 of Table II? A. Oh, no.

Q. When you say you do not take any responsibility that means you do not know whether they are accurate, or not? A. I know Mr. Dunn.

Q. But you personally, do not know whether the figures are accurate, or not, do you? A. I didn't investigate myself, no, sir.

* * *

[19022] Q. Referring to Table II of Exhibit 421, line 2, as I understand it, those figures as to depreciation reserve, like the comparable figures in your Exhibit 64, are figures for which you take no responsibility; is that right? A. That is right.

TRIAL EXAMINER: How did you get those figures, by direct ratios that you developed on Table I?

THE WITNESS: No, those figures are developed, as I understand it, from the particular groups of property to which they apply, which groups of property are shown in Table I and there are various rates of depreciation on the different classes of property.

TRIAL EXAMINER: You used the parenthetical figure of one-third, two-thirds, 91 per cent, 9 per cent and so on?

MR. MYSE: We are talking about Table II, Mr. Examiner.

[19023] TRIAL EXAMINER: I know, but he is back to Table I.

THE WITNESS: On Table I we used those ratios to assign property to the various customers and to the pool and from the totals of the property that was thus assigned the various items for the depreciation reserve and the depreciation expense were developed, from the particular items of property.

TRIAL EXAMINER: How did you get "P. P. & L. $40,000" on Table II from Table I?

THE WITNESS: That is the accountant's derivation from the depreciation; $40,000, you mean?

MR. MYSE: You mean the $5,000, do you not, Mr. Examiner?

TRIAL EXAMINER: Yes, the $5,000.

THE WITNESS: That is the accountant's development of depreciation for that property, those items of property which are listed on Table I amounting to a total of $40,000.

By Mr. Myse:

Q. Well, as I understand you used that same figure of $5,401 appearing on Table II, line 2, column 1 of Exhibit 421 and that is a figure which was furnished to you by the Commission's accountants, is that right? A. That is right.

Q. And that is an example of what you testified to a moment ago as to the kind of figures for which you take no responsibility whatever? A. That is right. I was just explaining how I [19024] understood it was developed.

Q. That means, does it not, that you do not know whether the figure of $5,401, as an example, is accurate or not? A. I accepted that as it was given to me without knowing what it was.

* * *

[19028] Q. Will you refer to Table IV of Exhibit 421, please.

Now, as I understand it, you take no responsibility for the accuracy or otherwise of any of the figures appearing in Column 7 of Table IV. Am I right in that? A. That is right.

Q. And those were all obtained from Commission accountants? A. That is right.

Q. Likewise, you take no responsibility whatsoever for [19029] any of the figures appearing in Line 4 of any of the columns of Table IV of Exhibit 421. Is that right? A. That is right.

Q. And those are figures which again were furnished to you by Commission counsel? A. That is right.

* * *

Mr. Myse: Can we amend it by saying Commission's Staff accountants instead of counsel?

Trial Examiner: Yes.

By Mr. Myse:

Q. Now, as I also understand, you take no responsibility for the use of the figure of 5 per cent as the rate of return. Is that right. A. I do not.

Q. Now, do you take any responsibility whatsoever for any of the figures appearing in any of the columns in Line 3 of Table IV of Exhibit 421? A. All of them except the one in Column 7.

Q. Well, I understand, then, by that testimony that you actually figured all the taxes applicable to each of the columns in Table 4 of Exhibit 421. Is that right? A. I made that allocation, that is right.

* * *

[19032] Q. Now, if you will again refer to the first page of the text of your Exhibit 421, you there state that the engineering and operating data are from reports by Holtwood Company to the Commission.

Now, my first question is, what reports were you there referring to? A. For 1946 the only report we had was the Form 1 report up to date.

Q. So that was the only report then that you were [19033] referring to in the text of your Exhibit 421. Is that right? A. That is true. We had to obtain additional information by special request.

Q. Without specifying in detail, can you refer me generally to the kind of engineering and operating data that you there referred to in the text of your Exhibit 421 as having come from Form 1 for 1946 filed by Holtwood Company and used in your Exhibit 421? A. I believe we have already been over most of it that came from Form 1.

Q. Well, I don't care for detail. I would just like to have you identify generally, if you can, just what the character of information was, engineering and operating data. A. Well, there is no engineering data in Form 1 or operating data except as regards the plants and transmission lines which are given in the Form 1 report.

Q. Well, generally what schedules of that Form 1 did you rely upon for the engineering and operating data that you used in your Exhibit 421? A. Well, sales data we used in developing some of the ratios.

Q. Were you referring to Schedule 530 of Form 1 for 1946? A. 530.

Q. 532? [19034] A. 532 is so twisted up I couldn't use it. 550—

Q. Just a moment.

All right, what else? A. 551, 552, 575.

Q. 575, you say? A. That is right—Schedule, not page.

Q. Yes, I understand. A. 579. There are data in 584 and 586 that are used in the exhibit, but figures shown there I did not take directly from Form 1. Most of those figures were compiled and furnished to me by the accountants.

Q. By who? A. By the Staff accountants.

Q. Does that complete all of the schedules which you can say you used, or which show any of the figures which you described as engineering and operating data from reports by Holtwood Company to the Commission? A. Well, generally: I wouldn't say that there are no other figures in the report that I didn't use. I just went through hurriedly and gave you the major ones.

Q. Those are the important ones? A. That is right.

* * * *

[19045] Q. The fact is you made the allocation of 45 percent of the York line, for example, to Baltimore because that is your opinion of the ratio of the interchange use of that line. Isn't that right? A. That is right.

Q. Now, coming back to the Ellicott City-Takoma line, isn't it a fact that that line is also used for interchange purposes? [19046] A. That may be.

Q. Well, don't you know that to be a fact? A. I think it probably is.

Q. And it is used primarily for interchange purposes between Baltimore and Pepco. Isn't that right? A. That is probably true.

Q. And if it isn't used for interchange purposes between Baltimore and Pepco, it is used for the purpose of supplying firm energy from Baltimore Company to Pepco. Isn't that right?

* * *

THE WITNESS: I believe that is right.

* * *

[19056] DALE E. GOUBLEMAN

* * *

FURTHER DIRECT EXAMINATION

By MR. GOLDBERG:

Q. Mr. Goubleman, you were asked to supply the May, 1947 earnings-price ratio for page 38 of Exhibit 404. Do you have that figure? A. Yes.

Q. I might state inferentially or parenthetically that the request appears at 18903 and 18904. Will you give that figure, please? A. 7.14 per cent.

* * *

[19061] GEORGE H. DAVIS

* * *

CROSS-EXAMINATION (Resumed)

By MR. MYSE:

Q. Mr. Davis, last night we were referring to a figure of 88,606,000 kwh which you used in arriving at your 45 per cent of the York Line allocable to Baltimore Company and 45 per cent of the Violet Hill Substation allocable to Baltimore Company.

Now, it is a fact, is it not, that you assumed in making your calculation that all of the 88,606,000 kwh which was

billed to Metropolitan Edison Company as firm energy was actually delivered over the York Line and through the Violet Hill Substation, isn't that right? A. That is right.

Q. Now, if, in fact not all of that 88,606,000 kwh was actually transmitted over the York Line and through the Violet Hill Substation, it would tend to increase your percentage, would it not? A. If you used more than 88,000,000 which is 55 per cent, you would have something greater than 55 per cent.

Q. I think you misunderstood my question.

[19062] MR. MYSE: Will you read it back, please?

(Question read.)

By MR. MYSE:

Q. It would tend to increase the 45 percentage that I am referring to. Isn't that right? A. Oh, yes, if you used a smaller total and the interchange amount remained the same, the 45 per cent would increase.

* * *

[19063] Q. Well, if we assumed that the 88,606,000 kwh that we have been referring to was in fact transmitted over the York Line and through the Violet Hill Substation, and the total energy transmitted over that line was the figure of 175,958,000 kwh, what is the ratio between those two figures? A. Well, that would be something less than 55 per cent for firm, but your 175,000,000 includes another amount that was delivered to Pennsylvania Power and Light Company through the Metropolitan Edison system which was simply an incidental delivery because there existed parallel paths, and doesn't represent anything that this line was built for.

Q. The fact is the energy was transmitted over that line, was it not? A. 175,000,000 was transmitted over that line.

Q. And that represents a use of the line, does it not? A. That represents a use of the line which was incidental

and apart from any purpose of the line and would be offset by the use of some other lines that might have carried that energy to P.P. and L. through Harrisburg.

* * *

[19067] Q. Yes; all right. Now, will you refer to page 18986, line 4 of the transcript where I asked you to furnish the [19068] figure showing the percentage of energy furnished by Holtwood to Baltimore compared with the total resources as you testified to them, as well as the percentage of energy costs which you allocated to Baltimore compared with the total costs of service as you testified to them in your Exhibit 421.

MR. GOLDBERG: What is the page reference?

MR. MYSE: Page 18986.

By MR. MYSE:

Q. And a little later at page 18987, line 14, where the question was repeated and it was clarified to make it clear that I meant total costs of energy when I was referring to costs or total costs of service. Have you those figures available this morning, Mr. Davis? A. I think maybe I can give them to you. I was asked this in connection with my statement as to the ratio that would have been obtained by Mr. Spaulding if he had used Holtwood Company alone, and the ratio that I had in mind there was the Holtwood resources compared with the requirements of the firm customers in Pennsylvania, which would be about 25 per cent. I could add to those resources, as Mr. Spaulding did, the amounts supplied by Baltimore, and if I add that 256,000,000 to Holtwood's resources, that would bring the ratio up to about 40 per cent. That 40 per cent ratio, however, includes sending back to Baltimore the energy which it has already supplied at its own cost from steam generation, and charging it back [19069] at a hydro cost.

Now, the other ratio that you asked for as to what I allocated has no relation to my reference to a ratio on

Mr. Spaulding's method, because my method is different, and the ratios are not comparable in any way.

Q. Well, let's have the figure. A. The ratio of energy allocated to Baltimore, which includes the delivery to the Highlandtown Substation and also energy sold as interchange in Pennsylvania from Holtwood's resources, which is 502,000,000 kilowatt-hours—

TRIAL EXAMINER: What is 502,000,000, interchange?

THE WITNESS: 502,000,000 kilowatt-hours is the total energy charged to Baltimore at average Holtwood hydro costs.

By MR. MYSE:

Q. It is actually 502,485,000? A. That is right.

TRIAL EXAMINER: Where did you get that figure?

THE WITNESS: That is the 376,684,000 that is delivered directly to Baltimore at Highlandtown, plus 125,801,000 of Holtwood's resources which are sold as interchange in Pennsylvania which are treated here as sold for the account of Baltimore.

Q. Both of those figures come from column 11 of Table V-B of your Exhibit 421, do they not? A. That is correct, and that 502,000,000 is [19070] approximately 50 per cent of Holtwood's total resources.

Q. And the total energy resources you refer to then must be 992,320,000 kwh as shown in column 3 of Table V-B of Exhibit 421, is that right? A. That is correct. That ratio, however, is not comparable at all to a ratio developed and used on Mr. Spaulding's method of allocation.

* * *

Q. And that ratio, to be a little more accurate, would be 50.6 per cent, isn't that correct? A. I think that is probably right. You also asked for the ratio of the cost charged to Baltimore for that energy to the total energy costs.

Q. Total energy costs of Holtwood? A. That is right.

Q. That would be the same ratio, would it not, the way you have done it in your exhibit? A. That is right, that is the energy cost, Holtwood's cost.

* * *

[19071] Q. Now, Mr. Davis, if we were to determine the ratio of the Holtwood energy delivered at Highlandtown as you found it as compared with the net generation less the losses as you found them at Holtwood, what ratio would you get? A. Just generation at Holtwood only?

[19072] Q. That is right, we will leave off the one-third Safe Harbor this time. A. That generation at Holtwood is 758,801,000.

Q. From which you would have to subtract 58,804,000 as losses. Is that correct? A. Well, that wouldn't be quite right. Those losses apply to the handling of the other energy from Safe Harbor. Strictly Holtwood losses would be—

Q. Somewhat less? A. —somewhat less than that.

Q. For the moment let's subtract the 58,804,000. A. That would be 700,000,000.

TRIAL EXAMINER: Why do that if it doesn't obtain?

MR. MYSE: Well, I can show, Mr. Examiner, that the ratio by subtracting somewhat less will be slightly smaller, but not much different.

TRIAL EXAMINER: Why would you give him the ratio of the two amounts?

MR. MYSE: If he has the amounts of losses of Holtwood alone he can use those.

THE WITNESS: I don't have the amount of losses applicable to the net generation only.

By MR. MYSE:

Q. Well, couldn't you divide the 58,804,000 proportionately? [19073] A. 992 and 758.

Q. Yes, which would give you a rough approximation, would it not? A. Yes, that would give me about 44 or 45 million.

Q. 758,801,000 less 45,000,000, is that right? A. That is right.

Q. According to my calculation that is 713,801,000, is that right? A. Yes, that is right.

Q. And that would be a figure equivalent to the generation at Holtwood less whatever losses are applicable to that generation, is that right? A. That should be somewhere near.

Q. And that would be the figure equivalent to what you would call the generating resources at Holtwood? A. That is right.

Q. Now, if you take the ratio of the amount delivered at Highlandtown to those generating resources at Holtwood, what figure do you come out with? A. About 53 per cent.

TRIAL EXAMINER: Now, what figures are those that you are relating?

THE WITNESS: That was Holtwood's net generation, line 1, column 3 in Table V-B minus an adjusted figure for losses applicable to that net generation which we roughly took to [19074] be 45 million, I believe, and that then considered to be Holtwood's generating resources from its own plants, a ratio of the 376,000,000 delivered to Highlandtown to that net generation minus losses was about 53 per cent. I don't know what it means, but that is the arithmetic.

By MR. MYSE:

Q. Well, it means this much, does it not, Mr. Davis, that that 53 per cent is the per cent of the Holtwood output that you say was delivered to Baltimore? A. That is the per cent of roughly Holtwood's net generation delivered to Baltimore.

THE WITNESS: The 376,000,000 is 25 cycle energy and there is no other place for it to go but to Baltimore, even if it has to turn around and come back up to Holtwood as 60 cycle energy. It has to go there and when the water is up they have to generate 80 per cent of the output of Holtwood as 25 cycle and there is no place to use it except to send it to Baltimore.

By MR. MYSE:

Q. Mr. Davis, I haven't asked you for a speech. Can you tell me whether my statement is correct or not. The 53. [19075] per cent represents 53 per cent of Holtwood's output delivered to Baltimore, is that correct, or is it not? A. 376,684,000 kilowatt-hours was delivered to Highlandtown and that is roughly 53 per cent of Holtwood's net generation minus a roughly-adjusted figure for losses.

* * *

[19076] Q. Are you saying that that means that it is 53 per cent of Holtwood's output when you are saying it is 53 per cent of Holtwood's generation? A. I don't know just exactly how you distinguish between output and net generation.

Q. Well, I have no distinction. I want to know if that means the same thing to you, Mr. Davis. A. Yes.

Q. It does? A. Surely.

Q. So that it is a true statement— A. That Holtwood's output from its own generation—

Q. That is right, so it is a true statement that the 53 per cent represents Holtwood output delivered to Highlandtown from its own generation? A. I think I told you that twice already.

* * *

[19094] Q. So my statement is correct if I say that you have no place in your Exhibit 421 allocated any of the costs associated with those facilities referred to in lines 20 to 24 inclusive, of the first column under the heading P. P. & L. of Table I of Exhibit No. 421 to Baltimore on account of

any interchange use which may be made of them? [19095] A. I think that is a correct conclusion from my answer.

Q. And it may or may not be obvious, but I want you to tell me whether or not it is the fact that you have not allocated to Baltimore any costs associated with the transmission lines owned by Pennsylvania Power and Light Company which may be used for interchange purposes between Harrisburg and Safe Harbor or Holtwood? A. I have no cost figures for Pennsylvania Power and Light Company's lines; in my study I haven't allocated them to anything for any purpose.

Q. Now, likewise, as I understand your exhibit, you have included all of the costs associated with the transmission circuits between Safe Harbor and Penn Water in what you term the balance of transmission system on line 25 of Table I, and the balance of transmission expense in line 16 of Table III, isn't that right? A. That is right.

Q. And that means, doesn't it, that you have not allocated directly to Baltimore any of the costs of such transmission circuits which may be associated with the interchange use of those circuits, isn't that right? A. The only allocation to Baltimore from those circuits would be through allocation from the pool.

Q. So the answer is you have not allocated to Baltimore any of the interchange costs associated with those circuits [19096] between Safe Harbor and Holtwood; isn't that right, Mr. Davis? A. If you say "have not allocated directly to Baltimore," that is right.

TRIAL EXAMINER: Does it eventually get allocated to Baltimore?

THE WITNESS: A portion of it gets allocated to Baltimore, but not on the basis of interchange use.

By MR. MYSE:

Q. As I understand your Table III of Exhibit 421, the figure of $952,712 which you show on line 5 under the head-

ing, "Pool" as total production expenses were allocated to pool on the assumption that the facilities associated with such costs are used in common by all customers. Isn't that right? A. That is right.

Q. That means, does it not, that the services produced by the steam plant, for example, represented by the costs in lines 2, 3 and 4, are services for all of the customers of Holtwood; is that right? A. You said 2, 3 and 4?

Q. Yes. A. That is correct.

Q. And that means you assumed that all of the customers obtain a use of those steam facilities by obtaining some service from those facilities, isn't that right? A. That is right.

[19097] Q. Now, just how does Baltimore, for example, obtain the use of the steam facilities of Holtwood? A. You mean to trace directly some of the energy from the steam plant to Baltimore?

Q. Can you do that? A. Well, a very small amount could be traced directly.

Q. I don't want you to trace the amounts.

MR. GOLDBERG: Let him finish.

TRIAL EXAMINER: You may finish your answer.

THE WITNESS: The service from any particular piece of equipment is valuable at times, not because it goes directly from that piece of equipment to some customer, but it may replace other energy and release some from another source to go to that customer, and I have classed them all in the pool together, and allocated them on the basis of use.

MR. MYSE: May I have that last answer read, please?

TRIAL EXAMINER: Yes.

(Question read.)

By Mr. Myse:

Q. Now, let's see if I understand your idea of "use" as embodied in that last answer. That means, does it not, Mr. Davis, that if all of the services produced by the Holtwood steam plant were actually transmitted to a Pennsylvania customer, that you assume, nevertheless Baltimore may be using those steam facilities because it replaces energy which might [19098] otherwise be transmitted to Baltimore? A. It might do that, and it might relieve Baltimore of supplying some backfeed, or various other ways.

Q. And because of that replacement, as you have just described it, you say that is a use of Holtwood's steam facilities, for example, by Baltimore Company, is that right? A. That is the way it goes.

Q. Now, Mr. Davis, does line 1 of Table III of Exhibit 421, in the amount of $269,145 show the total cost of service as you or the Commission accountants found them? A. Unfortunately, no. That contains an artificial reduction in cost there which I tried to remedy, but failed to make it satisfactory, so I have to deduct, according to the accountant's advice, the backwater payment from Conowingo from the total cost of the hydro, which reduces the cost that is charged to the customers artificially. It doesn't reduce it really, but simply compels the use of a lower figure because someone else pays a part of the cost.

Q. Well, actually the figure of total hydro production cost is higher than $269,145; isn't that correct? A. That is correct.

Q. And it is higher by how much? A. By $133,750.

Q. And that $133,750 represents as I understand it, the payment from the Conowingo Company under the backwater agreement? [19099] A. That is right.

Q. Now, is it your judgment that the total cost of hydro production as shown in line 1 should be only $269,145 instead of the higher figure with the addition of $133,750, or was it the accountant's judgment?

* * *

THE WITNESS: My judgment was that the higher figure was the proper cost to be allocated to customers of Penn Water; but inasmuch as Penn Water is receiving the $133,750, there seems to be no satisfactory way of handling it except to say that Penn Water had a net cost of only $269,000. I tried to represent that in a way that seemed to me more proper in Exhibit 64, but it was objected to so strenuously that I consulted the accountants, and they said this was this proper way to handle it.

TRIAL EXAMINER: Who objected to it?

THE WITNESS: Mr. Myse, principally, or his experts.

MR. MYSE: Well, I don't recall any such objection that he refers to. I might say that we objected to the method in the way he handled Exhibit 64, but we certainly don't agree with this method, as well.

MR. GOLDBERG: That means there is no satisfying him.

[19100] By MR. MYSE:

Q. Now, you said it was unfortunate. Have you explained that in your last answer? A. Yes, that is what I meant to explain, that it does not actually reduce the cost by having someone else pay a part of it. But the financial effect on Holtwood is as if the cost were reduced to $269,000.

Q. Now, referring to line 18 of Table III of Exhibit 421—

TRIAL EXAMINER: Before you do that, referring to your Exhibit 64, your corresponding figure is $357,980, isn't it?

THE WITNESS: What figure?

TRIAL EXAMINER: Comparing with your $269,145.

THE WITNESS: Well, in Exhibit 64—I don't have it here—the corresponding figure in Exhibit 64 was the total cost of the hydro. Now, the total cost of hydro in 1946 is $402,895, and from that—

TRIAL EXAMINER: 402,000 what?

THE WITNESS: 402,895. That is reduced to $269,145 by crediting the backwater payment from Conowingo.

MR. MYSE: May I proceed?

TRIAL EXAMINER: Well, the $357,980 which appears in Table III of Exhibit 64, line 1—

THE WITNESS: That would be the total cost without any reduction.

TRIAL EXAMINER: —is affected by the fact that it [19101] belongs to another year?

THE WITNESS: That is right.

* * *

[19108] Q. Let me understand that. That figure of $1,053,-564 which appears in column 7, line 2 of Table IV of Exhibit 421, comes from sheet 1 of Schedule 5 of Exhibit 392 prepared by Mr. Dunn? A. That is correct.

Q. And that figure does not represent either the actual bill rendered by Safe Harbor to P.W. for the year 1946 or the actual amount paid by Penn Water to Safe Harbor for the year 1946, does it? A. It is slightly greater, I believe.

Q. In any event, it doesn't represent the actual figures that I referred to? A. That is true.

* * *

[19121] Q. Now if we went through a similar process of tracing your allocation of the intangible and general plant, which appears in lines 27 and 28 of Table I of your Exhibit 421, we would find, would we not, that although you have allocated a certain proportion of that intangible plant and general plant to the one-third of the transmission lines which you have allocated to the pool, appearing in lines 7 through 11, inclusive of Table I, you have not allocated any of that intangible and general plant to the remaining two-thirds of those same transmission lines, is not that correct?

* * *

[19122] THE WITNESS: The intangible and general plant is allocated to transmission on Table V, shown in column 4 line 5 on the percentage of the directly assignable items, which in this case is the 11.8 per cent of the total.

TRIAL EXAMINER: How do you do that, did you add up the figures in the pool column of Table I?

THE WITNESS: Yes, we have the total.

TRIAL EXAMINER: What is the total?

THE WITNESS: The total pool on Table I is $24,227,004 and the total intangible and general plant, total of items 27 and 28 on Table I is shown on line 5 of Table V, column 5, as $970,810, and 11.8 per cent of that is assigned to transmission on the ratio of the actual amount of transmission investment to the total.

Then the total transmission investment and rate base developed in line 13, column 4 of Table V determines the items of depreciation and return in lines 18 and 19, column 4. Those items are the fixed costs on all of the items above in Table IV, or are fixed costs on the total investment, and together with the other items of operating costs of transmission, they are assigned entirely to the capacity component and, because I have no capacity shown here for Baltimore, no part of that is allocated to Baltimore in Table VI.

By MR. MYSE:

Q. Mr. Davis, I have not heard an answer to my question [19123] yet. I appreciate the Examiner has been asking you some clarifying questions. A. I have been through practically the same as what you called the "Rigmarole" for the investment and have come out with approximately the answer you need.

Q. Let's see if I understand it. That means that although you have allocated part of the costs and part of the investment associated with general and intangible plant to one-third of the transmission lines, known as the 220 kv

lines, you have not allocated either any of the investment or costs associated therewith of such intangible and general plant to the remaining two-thirds of such 220 kv lines, is not that right? A. Nothing of the intangible and general plant assigned to transmission in the pool gets allocated to transmission lines which are assigned directly.

Q. To Baltimore? A. To Baltimore or to any other customer.

Q. That is the two-thirds of the 220 kv lines which you had assigned to Baltimore, and hence there is none of that intangible and general expense allocated to that two-thirds portion, is that right? A. That is true.

Q. You have, however, allocated 68.4 per cent of the total intangible and general plant to hydro production [19124] facilities?

TRIAL EXAMINER: Where is that?

MR. MYSE: That appears on Table V, column 1, line 4.

THE WITNESS: You mean line 5?

MR. MYSE: Line 4.

THE WITNESS: Oh, the percentage, 68 per cent to hydro production, that is true.

By MR. MYSE:

Q. Would you say it is approximately correct to say that you have allocated as an energy component approximately 25 per cent of the return costs associated with that 68.4 per cent of intangible and general plant that I have just referred to? A. Approximately 25 per cent of that would go with the items 18 and 19 which are derived from the rate base to the energy component.

Q. Now, it is that 25 per cent of the 68.4 per cent in terms of return which is all that was allocated to Baltimore as costs associated with intangible and general plant, is not that correct? A. That is correct. It was only from

the energy component that any costs are allocated to Baltimore.

* * *

[19125] Q. Mr. Davis, I show you a photostat of a document headed "Safe Harbor Facilities" and I ask you whether or not that is the photostat of the work sheets which were furnished to Respondents yesterday in connection with your determination of the difference between the figure of 1,007,185 appearing in column 6, line 2 of Table IV of your Exhibit 421 and the figure of $1,053,564 appearing in the same line of the same table, column 7? A. That is correct. This develops $46,379, which is the difference between those two figures.

MR. MYSE: I would like to have marked for identification with the next exhibit number the document just described by the witness, and I ask that we may have the opportunity to withdraw it to make additional positive photostats for [19126] service on all counsel and for the record.

TRIAL EXAMINER: The document handed the reporter may be marked Exhibit 424 for Identification and may be withdrawn by counsel.

(Exhibit No. 424 is marked for Identification.)

By MR. MYSE:

Q. Referring to Exhibit 424 for Identification, it is a fact, is it not, that in determining the depreciation expense which you ultimately included within the figure of $46,379, you applied a percentage of 6.4 per cent to a figure of $507,370, right? A. That is right.

Q. Where did the figure of $507,370 come from? I might refer you to sheet 1 of Schedule 5 of Exhibit 392. The same figure appears thereon, and I ask you if that is where you obtained the figure?

TRIAL EXAMINER: What is the reference again?

MR. MYSE: Sheet 1 of Schedule 5 of Exhibit 392?

THE WITNESS: That is right.

By MR. MYSE:

Q. Now, as I understand it, this method that you used represents your judgment, not the judgment necessarily of Commission accountants; is that right? A. This method of deriving the costs from the investment furnished us by the company is my own derivation.

[19127] Q. And as well as the method of deriving the portion of the depreciation expense from the total of $507,370 is also your method, and you take responsibility for it; is that right? A. Applying that 6.4 ratio, you mean, yes.

Q. Now, how was that 6.4 per cent determined? A. That is the ratio of the total investment figure supplied by the Company as representing the facilities at Safe Harbor installed for service to the Railroad Company to the total Safe Harbor plant.

Q. In other words, it is a ratio of investment items? A. That is right.

Q. Now, actually the figure of $1,934,300 which you use in Exhibit 424 as the total gross investment for railroad service was a figure supplied by the company, but includes only excess costs of 25 cycle generators in the amount of $608,100, is that right? A. That is right.

Q. It does not include all of the costs of the 25 cycle generators? A. No, this just includes the costs that are assigned for railroad service that would not have been otherwise incurred.

Q. Now, you are not saying, however, that the investment made in the 25 cycle generators other than the [19128] $608,100 is not used for railroad service, are you? A. No, the balance of that goes in the pool. That is the cost that is assumed would have been incurred if they had been all 60 cycle 3 phase generators.

* * *

[19129] Q. I think your answer to my last question preceding this one may not be quite correct, and in order that we might get the record clear on that, I would like to go over it again. In order to determine the return component of the $46,379 as derived in your Exhibit 424, you applied the ratio of 6.4 per cent as derived in the manner described heretofore to a figure of $1,400,208 which you describe in Exhibit 424 as "Return 5 per cent", is not that right? A. That is right.

Q. Now, where did you get the figure of $1,400,208? You did not derive that, of your own knowledge. You got that from the accountants, did you not? A. Yes, sir.

Q. Now, that return of 5 per cent in the amount of $1,400,208 is a return figured on a depreciated rate base, is it not, or do you know? A. Yes, it is.

Q. The ratio of 6.4 per cent, however, was determined [19130] by comparing the gross investment figures, is that correct? A. Yes.

Q. And it was not determined by comparing the depreciated investment figures, if you want to call them that? A. No, that would assume that the depreciation reserve was not significantly different in the two items that I used to derive the 6.4 per cent.

Q. That means, does it not, that you assumed that the depreciation reserve applicable to the gross investment for railroad service, as furnished to you by the company, would be the same percentage as the depreciation reserve applicable to the entire investment of Safe Harbor? A. I assumed it would be near enough to make no significant difference in the answer.

Q. And implicit in that assumption is the further assumption that the age of the two groups of property is approximately the same, is not that right? A. Well, it is an assumption that whatever factors there are determined, the depreciation reserve would be near enough together on the whole on an average so that the ratio would

make no significant difference in the answer derived by applying it.

Q. Well, do you consider that age is a significant factor? A. In depreciation reserve?

[19131] Q. Yes. A. Surely.

Q. Now, referring again to Exhibit 424, I note that you arrived at a figure of $17,053 for operating and maintenance of the frequency converter at Safe Harbor, and you arrived at that figure, as I understand it, by applying the ratio of 2 per cent to something. How did you arrive at the figure? A. 2 per cent to the total value of the frequency changer as given above in the list of investments.

Q. You mean you applied 2 per cent to the figure of $852,500? A. Yes.

Q. Where did you get the figure of 2 per cent? A. 2 per cent is assumed to be a fair average amount to represent operating and maintenance of electrical equipment.

* * *

Q. Well, what do you base your assumption on? That is what I am trying to get at. A. It is a figure that is quite generally used for approximate determination of operating and maintenance of electrical equipment where it cannot be directly determined readily.

Q. Well, did you make any investigation of Safe Harbor's [19132] records to determine whether or not you could determine any portion of that operation and maintenance with respect to the frequency changer? A. I inquired whether any records were kept of separate equipment, and I found there were no records available.

Q. Did you examine any of the work sheets of Mr. Spaulding in connection with Exhibit 378 in determining what method he had used in arriving at the operation and maintenance expenses associated with such frequency converters at Safe Harbor? A. I examined that exhibit. I do not recall what method he used for that at the moment.

Q. Well, I did not ask you whether you examined the exhibit. Did you examine any of the work sheets which

were furnished to the Commission Staff? A. Yes, I examined some of the work papers.

Q. Did you not find in there a breakdown of operation and maintenance with respect to the frequency converters at Safe Harbor? A. I do not recall that.

Q. In any event, you did not use that breakdown, if there is such a one, in your estimate. You used 2 per cent? A. I used 2 per cent before that exhibit and its work sheets were available to me.

* * *

[19134] Q. Did you inquire of any of the operating people at Holtwood or Safe Harbor with respect to the operating expenses and maintenance expenses of the frequency converter? A. I made no inquiry since way back before Exhibit 64 was prepared, and the preparation of this work sheet here is a repetition of the method I used in Exhibit 64 without any further inquiry.

Q. Well, when you inquired in connection with the preparation of Exhibit 64, did you inquire with respect to the expenses incurred in operating and maintaining the frequency converter at Safe Harbor from any of the operating people at Holtwood or Safe Harbor?

MR. GOLDBERG: Objection, Mr. Examiner. We have finished with Exhibit 64.

MR. MYSE: Mr. Examiner, he has tied it right back.

TRIAL EXAMINER: All right, you may answer.

MR. GOLDBERG: He did not do any tying back. It was brought up by counsel for Respondents.

TRIAL EXAMINER: All right.

THE WITNESS: I made no inquiry except as to the existence of separate records of operating and maintenance of the separate pieces of equipment at Safe Harbor.

[19135] By Mr. Myse:

Q. And, as a matter of fact, Mr. Davis, the fact is, is it not, that you did not have to make any inquiry with respect to the maintenance or operating expense of these frequency changers because in the original 64 you did not make any such calculation, right?

Mr. Goldberg: Now, I object to that, Mr. Examiner. We are right back into Exhibit 64.

Trial Examiner: Yes, I think so.

Mr. Myse: Well, I think it is apparent from the exhibit. I will withdraw the question.

By Mr. Myse:

Q. Now, in arriving at the $46,379 you did not include any taxes, did you? A. No.

Q. Nor, did you include any general or administrative expense in connection with the operation of that frequency changer, did you? A. That is supposed to be included in the 2 per cent, all expense.

Q. Do you think the 2 per cent covers general and administrative as well as operating and maintenance? A. Well, the general and administrative expense that would apply to a particular machine I did not consider particularly at all. I did not consider that any significant amount of the [19136] administrative and general expense would apply to this particular equipment or this particular machine.

Q. Well, the 2 per cent certainly does not cover taxes, does it? A. I understood there were no property taxes in Pennsylvania that applied to such equipment.

Q. What about income taxes and general taxes? A. Income taxes are based on revenue and I had no revenue to base them on in determining the cost of this particular equipment.

Q. You did find a return, however, on this particular equipment, did you not? A. Surely, that is fixed cost.

based on the investment, and the investment is what I had to start with.

Q. Now, I note on 424 that you deduct, or that what you did do is arrive at a figure of $139,138 as total cost of railroad facilities, you termed it, is that right? A. That means the total excess cost of those facilities over what would have been incurred if they had been the same as the other generators in the station.

Q. And the total cost of facilities would be something greater, right? A. The total cost of these facilities, sure, that is true.

Q. Now, however, you arrived at the $46,379 by [19137] dividing the figure of $139,138 by three, did you not? A. That is the portion paid by Holtwood Company.

Q. Now, how does Holtwood Company pay that portion? A. By paying one-third of the total Safe Harbor costs.

Q. And that goes back to your assumptions in connection with Items E, F, and G that we cross-examined you on at length before?

MR. GOLDBERG: What assumptions are those? I object to the question as vague and indefinite, Mr. Examiner.

MR. MYSE: I was trying to shorten the cross-examination and if I have to get into it again, it will take weeks.

TRIAL EXAMINER: Well, you had better establish what you are talking about in the way of assumptions.

By MR. MYSE:

Q. Well, Mr. Davis, you assume that Safe Harbor paid one-third, or that Penn Water paid one-third of the cost of $139,138, and only one-third of those costs by reason of the provisions in Items E, F, and G, right? A. Provisions of E, F and G, and the other documents that show the carrying out of those provisions, such as the bill to Holtwood Company.

Q. What other document do you now have in mind other than the bill? A. Well, the bill, and it appears in other records that the payment that Holtwood makes is one-third of the Safe Harbor [19138] costs. What I mean is that I got it from the contract, and also from the evidence that the provisions of the contract had been carried out.

Q. You say that evidence is embodied in the bill from Safe Harbor to Holtwood, is that right? A. That is right, and the inclusion of that amount in Holtwood's cost. That is all I have here to allocate is one-third of Safe Harbor's costs.

Q. You are not saying that in the bill from Safe Harbor to Holtwood there appears an item of $46,379, are you? A. I got called down for characterizing a question this morning, and I almost did it again. I am not saying that, no.

* * *

[19139] Q. Referring again to Table V, Exhibit 421, as I understand your previous testimony, I take it that you are not responsible for the accuracy of any of the figures appearing in line 7 of Table V, am I correct in that? A. Yes, sir.

Q. Nor are you responsible for the accuracy of any of the figures appearing in line 18 of Table V of Exhibit 421, right? A. Yes, sir.

Q. And that means any of the figures in any of the columns in each case? A. That is right.

TRIAL EXAMINER: What do you mean by "Any of the figures in any of the columns"?

MR. MYSE: Lines 7 and 18, isn't that right, Mr. Davis?

THE WITNESS: Yes.

By Mr. Myse:

Q. I take it you are also not responsible for the figure of 5 per cent used in computing the figures appearing in line 19 of Table V. Right? A. I believe so.

Q. Well, I do not like your belief necessarily, Mr Davis. [19140] A. Well, I think I have told you that about three times in the last day or so. I am not responsible for it, for the five per cent return.

Q. Now, do I understand your exhibit correctly in saying that the 74.85 per cent figure appearing in line 22 of Table V was derived from Table V-A by taking the ratio of 250,000 kw found by you to be the total dependable capacity, the total dependable hydro capacity as compared with the total hydro installed capacity? A. That is right, following the same method I used in Exhibit 64.

* * *

[19147] Q. There is one correction I think I should make. I refer to lines 16 to 21, inclusive of page 19124. The question is:

> "Q. Now, it is that 25 per cent of the 68.4 per cent in terms of return which is all that was allocated to Baltimore as costs associated with the intangible and general plant, is not that correct? "A. That is correct."

Now, as I understand it, the answer is not entirely correct. It is correct only in so far as 25 per cent of the 68.4 per cent was allocated to the energy component, is not that right? A. 68.4 per cent of the return for the investment in the pool is included under hydro, column 1.

Q. Let's take it step by step, Mr. Davis. That means, does it not that 68.4 per cent of the return costs associated with intangible and general plant was allocated to hydro production costs, is that right? A. 68.4 per cent of the intangible and general plant is allocated to hydro and the return on that proportion of [19148] general and intangible plant would be included in the total amount of

return allocated to hydro in line 19 and the total hydro cost, approximately 25 per cent of it, is assigned to the energy component.

Q. And as we went through it yesterday only approximately 50 per cent of the cost assigned to the energy component was allocated under your method to Baltimore, is not that right? A. That is correct.

Q. So that if you can say that approximately 68 per cent of the return associated with intangible and general plant was allocated to hydro production costs then only 50 per cent of the 25 per cent of that 68.4 per cent in terms of return costs was allocated to Baltimore Company, right? A. That was all that was in the energy component.

Q. And whatever was in the energy component, only approximately half of it was allocated to Baltimore Company, is that right? A. Yes, sir.

Q. Now, will you turn to Table V-A of Exhibit 421? A. Yes, sir.

Q. Mr. Davis, where did you get the figure of 167,000 kw, appearing in column 4, line 3 of Table V-A of Exhibit 421? A. That is obtained by applying the total energy available from the hydro plants under minimum flow conditions for [19149] the week of the peak load in December, to the maximum loads for that week that actually occurred in 1946.

TRIAL EXAMINER: What figure are you now talking about?

THE WITNESS: The 167,000 kilowatts of dependable capacity on the weekly recovery cycle under minimum flow and peak load conditions.

TRIAL EXAMINER: What was your actual mathematics in that?

THE WITNESS: The actual mathematics was computation of the total amount of energy that the hydro plants could generate during that week under the minimum flow conditions.

TRIAL EXAMINER: What was that, do you have it?

THE WITNESS: It is approximately 5½ million kilowatt-hours as I recall—No, that was wrong; it was 3,561,000 kilowatt-hours.

By MR. MYSE:

Q. Mr. Davis, first of all, as I recall your testimony you referred to the week of the peak load of December 16? A. The week of December 16 to the 22nd, inclusive.

Q. In the year 1946? A. Yes.

Q. That was the week of the peak load on the area 6 system, is that right? A. That is correct.

Q. And it was not the week of the peak load on the [19150] Holtwood-Safe Harbor system, was it? A. No.

Q. And it was not the week of the peak load on the Holtwood system alone, is that right? A. The Holtwood system alone, do you mean the Holtwood steam and hydro plants?

Q. That is right. A. No, it was not.

* * *

THE WITNESS: I should qualify that first answer by saying it was the peak load of area 6 system plus the load to the Pennsylvania customers.

By MR. MYSE:

Q. I wanted to make that clear. That is the area 6 system as you have used it throughout your testimony? A. That is true.

By MR. GOLDBERG:

Q. Do I correctly understand that Holtwood and Safe Harbor are part of that Area 6 system? A. The Pennsylvania customers of Holtwood are included in the peak of the area 6 system.

Q. And Penn Water and Safe Harbor are part of that area 6 system, right? [19151] A. That is right.

MR. GOLDBERG: My question to counsel is, what is this Holtwood-Safe Harbor system?

* * *

THE WITNESS: What I presume he means by the Holtwood-Safe Harbor system is the Holtwood hydro and steam plants, plus the Safe Harbor hydro plant.

* * *

[19176] Q. Mr. Davis, referring again to your Table V-A of Exhibit 421, you there show that you added to the figure of 167,000 kw in column 4, line 3, which you call a "Dependable capacity on weekly recovery cycle under minimum flow and peak load conditions," a figure of 83,000 kw in the same column, [19177] line 4, which you call "Additional capacity value for maintenance, short period loads, from use of pondage, etc." Is that right? A. Yes, sir.

Q. And you therefore arrived at a figure of 250,000 kw, which you call "Total dependable capacity allocated on the basis of installed capacity?" A. That is right.

Q. And in column 4, however, it is what you call the total dependable capacity? A. For the hydros, yes.

Q. Now, that 83,000 kw that you show on Table V-A of Exhibit 421 is the same 83,000 kw that you referred to in note (6) at page 2 of the text of Exhibit 421. Is that right? A. That is right.

Q. Now, can you explain for me just exactly how you arrived at that figure of 83,000 kw? A. Well, that general explanation is in the text following mention of 83,000 kilowatts on page 2 of the text. There are a number of uses where capacity in addition to the minimum load-carrying capability of the plant is of value, and can justly be added to obtain the total dependable capacity of the hydros.

This is a repetition of the method used in Exhibit 64 [19178] for determining dependable capacity except that in that exhibit a figure of 75,000 kilowatts was already added by the company in its estimate of a change to post-war conditions and to standard time, which I accepted and considered that it included something for these other items.

As it turned out, about 36,000, if I recall, was contained in that figure which would account for some of these other items.

In addition to the 75,000 there I added 28,000 as capacity for the sustained use of storage. Now, that is half of what is calculated to be the sustained load on storage for a period of a week. 28 was used in Exhibit 64 on the judgment that all of that 58 or 59 thousand which was computed as sustained load from the use of storage was certainly not of the same value as the base-load carrying capability of the plant under minimum flow conditions, and a judgment figure of half of it was included as a portion of the dependable capacity.

Now, not having any estimated figure for changed conditions here, but applying it to the actual conditions of 1946, I considered approximately the same amount available for the use of pondage, and from the 83,000 that would leave 55,000 which can be considered capacity value for scheduled maintenance, for short time emergencies, for expectation of better than minimum-flow conditions, for swings, for any of the intangibles that the plant can be depended upon for valuable capacity [19179] service.

That figure is not a mathematical determination. It cannot be assigned in detail, parts of it, to any of those items in particular, because sometimes it might be all applied to one item. It might be that the whole amount might be used for short-time emergency at one time, or all of its value used for scheduled maintenance at another time.

The fundamental basis of the determination of dependable capacity for the purpose of allocating costs is an attempt to determine what capacity would be of value in saving investment in additional generating equipment. Whatever you could figure out by any method mathematical or otherwise, as dependable capacity so far as applying that to a cost allocation goes, if it would not, in fact be sufficiently convincing to people responsible for carrying the load so that actually investment would be saved, then it is not dependable capacity for cost allocation purposes.

TRIAL EXAMINER: Just a minute. Read the question.

(Question read.)

MR. MYSE: Mr. Examiner, I recognize that the question has been answered long since, and that I did not call for a speech, but in the hope that he would wind up sometime soon, I have been letting him run on.

If the Examiner feels that we have exceeded the bounds of all reason, and I think there might be some justification [19180] for that conclusion, I am willing to object to any further testimony in response to that question.

TRIAL EXAMINER: I think we are getting too lengthy an answer. I am afraid it is going to create some difficulty in cross-examination. I think you had better proceed by putting further questions to the witness.

By MR. MYSE:

Q. As I understand it, the 83,000 kilowatts that we have been referring to consists of at least two components that you can identify: one is 28,000, which you said was for use of pondage, and the balance of 55,000 for all these other items which you called intangible items; is that right? A. That is correct.

Q. Now, as I understood your testimony up to this point, part of that 55,000 at least was added by you because of the value of the plants at Holtwood and Safe Harbor used in scheduling maintenance, is that right? A. That is right.

Q. Maintenance by whom? A. Maintenance by Safe Harbor, Penn Water and Baltimore.

Q. Does that include maintenance by any of the Pennsylvania customers? A. No, I have no cause here to deal with Pennsylvania customers.

Q. Well, I did not ask you that, Mr. Davis. My [19181] question was, did you in arriving at your 55,000 kw consider in any way the capacity value of the Safe Harbor and Holtwood plants to the Pennsylvania customers in scheduling maintenance? A. I do not know that I specifically considered any of them; when I mentioned scheduled maintenance, I was primarily referring to the value of the capacity to the Baltimore system for scheduled maintenance.

Q. And you were not referring to the value to the Pennsylvania customer system? A. No.

Q. As I recollect your testimony in connection with Exhibit 64 on this subject of allocating the dependable capacity as between Holtwood and Safe Harbor, you stated that the reason you allocated it in proportion to the installed capacity was because the dependable capacity was estimated and reported by Penn Water or Penn Water and Safe Harbor only on a combined basis; right? A. Well, that is the reason why I had to make an allocation, that is true.

Q. Now, that reason is no longer a valid one today, is it? A. There has been some testimony in the proceeding indicating a capacity for Holtwood alone.

* * *

[19182] THE WITNESS: The figure that I was referring to was one that I heard Mr. Watchorn give on cross-examination.

TRIAL EXAMINER: All right.

[19183] By MR. MYSE:

Q. That was 100,000 kw? A. Yes.

* * *

THE WITNESS: Which is not new. I had that before.

* * *

[19184] Q. Now, that 153,512 kw is a summation of certain demands that you used of the Pennsylvania customers plus

the [19185] Pennsylvania Railroad in Pennsylvania, plus 10 per cent, which demands you assumed all took place at the time of the area 6 system peak in 1946, right? A. The demands of P. P. & L., P. E. and M. E. Companies did take place or were reported to have taken place at the time of the system peak. For the railroad company, an average of the three highest is used, but is not one specific peak and only one of the three that I averaged, I believe occurred at the hour of system peak.

Q. Well, I think you are right. In any event, the figure of 36,557 kw appearing on line 14 of Table V-A of Exhibit 421 is not the actual peak demand of the railroad company in Pennsylvania during the time of the area 6 system peak. Am I right? A. Yes.

Q. Now, that area 6 system peak occurred at 6 p.m. December 19, 1946, right? A. That is correct.

Q. And that is shown on Exhibit 372, one of Mr. Spaulding's exhibits, is not that right? A. That is correct.

Q. Do you know what the actual demand of the Pennsylvania railroad was at 6 p.m. on December 19, 1946 limited to Pennsylvania? If I show you Exhibit 372, will that refresh your recollection any? [19186] A. The actual measured demand of the railroad in Pennsylvania at that hour is reported as 24,000.

Q. Kw? A. Yes.

Q. Now, Mr. Davis, if the actual Pennsylvania Railroad load in Pennsylvania at the time of the area 6 system peak at 6 p.m. on December 19, 1946 had actually been 36,557 kw—that is, 12,557 kw higher than the 24,000 we have just referred to—would not the load shown on your Exhibit 425 have been higher by 12,557 kw on that same peak hour?

* * *

THE WITNESS: That is probably true.

By MR. MYSE:

Q. In other words, you should have made the same adjustment or a similar adjustment to the adjustment you

made for the Metropolitan Edison requirements, is not that right? A. No, I do not believe that is comparable. The use of the 36,557 as an average load there is due entirely to the character of the railroad load. When you are taking some hour that is determined without any relation to the railroad load, you might at one time get a high peak and at another time a low at that particular hour, which is recognized in the method of billing the railroad company, and I think a more [19187] representative demand for the railroad company at that hour is obtained by using this average.

Q. Well, in using the figure of 36,557 kw, don't you assume that that is the average peak that the railroad demands on the Holtwood-Safe Harbor system during the peak week of the area 6 system peak? A. I am using that as a portion of the capacity required to serve those loads.

Q. Now, actually what you have done on Table V-A is deducted this estimated load of the railroad in Pennsylvania from what you found to be the dependable capacity at the time of the area 6 system peak, is not that right? A. That is correct.

Q. Now is it not a correct statement to say that if you had used that estimated peak load of the railroad in Pennsylvania instead of the actual peak load of the railroad in Pennsylvania at the time of the area 6 system peak in determining your dependable capacity, you would have come out with a higher figure for dependable capacity, is not that right? A. That is right, if it had been determined that way.

* * *

Q. And that higher figure would be 262,557 kw, is not that right? [19188] A. At that particular time, that is right.

Q. And correspondingly, the net dependable capacity available for load in line 9 of column 4 of Table V-A would be 242,773 kw, is not that right?

* * * *

THE WITNESS: If we added 12,557 onto that, that would have been 242,773.

By MR. MYSE:

Q. And correspondingly if there were no changes in the figure of 153,512 kw shown in line 15 of Table V-A, the figure of 102,488 kw would be increased to a figure of 115,045 kw, right? A. If you add the 12,557 to the 102,488 that is what you would get.

Q. Now, as I understand your exhibit, table V-A of Exhibit 421, Mr. Davis, the firm loads of the Pennsylyania customers during the time of the area 6 system peak which you show in lines 10 to 12, inclusive, and summarized at line 13 to a total of 103,000 kw, are the firm loads which you assume would be incurred under conditions of most adverse river flow of record, is that right? A. Those are the firm loads that are reported actually did occur in 1946.

Q. During the time of the area 6 system peak? [19189] A. Yes, sir.

Q. Would those same firm loads occur under conditions of most adverse river flow of record? A. I do not know of any reason why the loads of these customers would have been changed by minimum flow conditions so long as the M.E. steam line remained as it was at this hour.

Q. Well, you assume, then, that there would be no change under adverse-flow conditions, right? A. I see no relation between these loads and river flow.

Q. Well, is not that your assumption that there would be no change? A. That is true.

* * *

[19190] Q. Under the method you pursued in Table V-A of Exhibit 421, is it not a fact that you assumed that 74.85 per cent of the 104,000 kw which you show as the installed capacity in column 2, line 1 of Table V-A is dependable capacity?

* * *

[19191] A. That is what it seems to work out.

Q. And that means, does it not, that approximately 75 per cent of the 80,000 kw of 25 cycle capacity at Holtwood you also assumed to be dependable capacity, right? A. I did not make any distinction between 25 and 60 cycle.

Q. Well, is not that implicit in your method that approximately 75 per cent of the 80,000 kw of 25 cycle capacity at Holtwood is dependable capacity? A. That would be a logical conclusion.

• • •

[19192] Q. But under the method you have pursued, the net result is that you have allocated no capacity to Baltimore? A. Right.

Q. That means, does it not, that you are saying and you are assuming that Baltimore uses none of the capacity of Holtwood? A. I am assuming there is no dependable capacity of Holtwood left for Baltimore after the requirements of the Pennsylvania customers are supplied.

Q. Well, does not that mean, Mr. Davis, that you assumed under the method you pursued that there is no dependable capacity of Holtwood used by Baltimore Co.?

MR. GOLDBERG: What do you mean by "used"?

TRIAL EXAMINER: You may answer, Mr. Witness.

THE WITNESS: The dependable capacity which I have determined in accordance with the method shown in Table V-A is more than used up in supplying the obligations of Holtwood [19193] in Pennsylvania.

Q. I have not asked you that, Mr. Davis, if you will read the question.

• • •

THE WITNESS: I assumed that there was no dependable capacity as determined by this method that Baltimore could depend on. Baltimore uses capacity when the water is up, when conditions are good; but that is not dependable capacity.

• • •

[19195] Q. Mr. Davis, referring again to your Table V-A of Exhibit 421, as I understand it, your purpose in going through the calculations you did go through on that table, to get the figure of 102,488 kw, as the balance available to Baltimore from Holtwood and Safe Harbor, was to obtain the balance of dependable capacity available to Baltimore under most adverse flow conditions of record, from the Holtwood and Safe Harbor developments; is that right? A. One component of that is the load-carrying capability under most adverse conditions, which is modified by the addition of the 83,000 for some other factors or more capacity at times other than minimum flow, but the calculations have been gone through to obtain the balance available to Baltimore under the conditions which I have explained.

[19196] And those conditions are most adverse flow conditions of record; is that right? A. The basic load-carrying capability of 167,000 under most adverse flow conditions of record.

Q. Now, in order to arrive at that figure of 102,488 kw, you deducted the firm loads plus 10 percent of the Pennsylvania customers, plus the amounts you deducted for the Pennsylvania Railroad in Pennsylvania, on the assumption that those obligations, in terms of firm loads and Pennsylvania load in Pennsylvania, would obtain during most adverse flow conditions; is that not right? A. I attempted to develop the capacity that could be depended upon to carry those loads.

Q. Mr. Davis, can you tell me whether my statement is correct or not? A. Not quite.

Q. What is there that is incorrect about my statement? A. It is a little too narrow.

Q. In what respect? A. I was just about to tell you.

Q. All right, if you will, please.

TRIAL EXAMINER: Proceed.

A. The capacity which I have developed as dependable is the capacity that can be depended upon to carry those loads when they occur.

[19197] By Mr. Myse:

Q. Now, if they would not occur during adverse flow conditions, then, you should make some adjustment for that fact; is that right? A. Well, I have made some adjustment for probability of better than adverse flows in a part of the 55,000 kilowatts which I have added.

Q. Well, have you made any adjustment, however, to the firm loads plus 10 per cent of any of the Pennsylvania customers for the fact that under adverse flow conditions Holtwood and Saf. Harbor might not be obligated to furnish the actual firm loads at the time of the Area 6 system peak? A. I think I testified just before lunch that these were the actual peaks of the three customers, without adjustment.

Q. You are familiar with Exhibit 76, I take it, which is the contract between Pennsylvania Water and Power Company, Safe Harbor Water Power Corporation, on the one hand, and Pennsylvania Power and Light Company, on the other; isn't that right? A. Yes.

Q. As I recall from our cross-examination on Exhibit 64, you are also familiar with Section 2, Art. IV thereof, which defines the obligation of the generating companies, that [19198] is, Penn Water and Safe Harbor, during on-peak periods of days of low flow; is that right? A. You mean their obligations under an option?

Q. Well, Section 2 defines the obligations of Penn Water and Safe Harbor during the on-peak periods of days of low flow; isn't that right?

A. That is right.

Q. And it defines that obligation to be only 80 per cent of the Lancaster load requirements; isn't that correct?

A. That is what is defined there: "Generating Companies may at their option reduce their supply to Receiving Company to 80% of the Lancaster Load Requirements. * * *"

Q. And there is a similar provision in Section 3, is there not? A. That is right.

Q. And Section 3 also defines on-peak periods, and I won't trouble you to read it into the record, because the exhibit is in the record, isn't that right? A. That is right.

Q. And it also defines what are days of high flow and days of low flow; isn't that right? A. That is correct.

Q. In Exhibit 77, which is a supplement to Exhibit 76, there appear certain options; isn't that correct? [19199] A. That is true.

Q. And one of the options is to continue to operate under the provisions of Sections 2, 3, and 4 of Article IV of Exhibit 76; isn't that correct? A. That is right.

Q. And that is Option A? A. Option A; correct.

Q. Do you know at this time whether or not Option A is in effect? A. I understand that it has been in effect since early this year.

Q. And if you will refer to transcript 16636, line 12, which is part of Mr. Spaulding's testimony on direct on rebuttal, to refresh your recollection, it went into effect on February 15, 1947; isn't that correct? A. That is as I remember it, and that is what it says.

Q. With that option in effect, the fact is that whatever firm loads there are of Pennsylvania Power and Light, only 80 per cent of that firm demand is an obligation of Penn Water and Safe Harbor during adverse flow conditions; isn't that correct? A. I had understood that during 1946 there was no option in operation.

Q. Well, we will get to that, Mr. Davis. Will you answer my question? [19200] A. At the present time, that is true.

Q. That is true at the present time, is it not? A. Yes.

Q. In order that your Exhibit 421 may be applicable to the year 1947 and the future, you would have to take into consideration that reduction in the obligation of the peak demands of the Pennsylvania Power and Light Company under most adverse flow conditions, would you not? A. Well, if we could take into consideration also the actual de-

mands at that time, so that, if they should happen to increase 20 or 25 per cent, the 20 per cent reduction could be applied to the proper figure, that would be right.

Q. In other words, whatever the actual demands would be in the future, you would have to take only 80 per cent of those demands in working out your calculations; isn't that true? A. That is true.

Q. Is it your testimony that the demands that you show at line 10 of Pennsylvania Power and Light, or any of the firm load demands which you show at lines 10, 11, and 12 of Table V-A of Exhibit 421 cannot be used as the criterion for the demands of the future? A. No, I wouldn't say that you could use those as criterion for the demands of the future. When you come to [19201] use those for allocating costs, it doesn't mean that the company's revenue would be confined to these demands, if they should increase, or if they should decrease.

* * *

[19211] Q. Now, it is true, is it not, Mr. Davis, that the backfeed that Penn Water receives from Batlimore Company is a resource of Holtwood's which may be used for serving any of its customers, isn't that right? A. That is a resource which I have distinguished from—

Q. Well, now, Mr. Davis, I haven't asked you how you distinguished it. You have answered my question. It is a resource, is it not?

TRIAL EXAMINER: For what?

MR. MYSE: For use of any of Penn Water's customers. Isn't that right?

THE WITNESS: Sure, it is a supply by Baltimore to [19212] increase the resources of Holtwood's own plant.

By MR. MYSE:

Q. Likewise the interchange purchases by Penn Water or Safe Harbor are resources to them which may be used in serving their customers; isn't that correct? A. That is true.

Q. To the extent, then, that you have not included Baltimore backfeed and interchange purchases in the figure which you show at line 3, column 3 of Table V-B, of Exhibit 421, you have not included all of the Holtwood resources in that line; isn't that correct? A. I have included all—

[19213] Q. Now will you answer my question, please? I haven't asked you what you have included. I have asked you whether or not you have included all the resources of Holtwood in that particular line. A. I have.

MR. HALL: Mr. Myse, will you define what you mean by "resources"? Are you using that term in any different way than he has used it in connection with Table V-B?

MR. MYSE: Whatever way the witness has been using it.

THE WITNESS: The way I have been using it, Holtwood's resources are included in line 3.

By MR. MYSE:

Q. Then were you saying that Baltimore backfeed is not a resource of Holtwood, as you used the term "resources"? A. I used the term "Baltimore supply" for that backfeed, and I included—

Q. Well, now, will you answer my question, please? I haven't asked you where you have included it. A. I have not so interpreted it.

Q. You are now saying that the backfeed from Baltimore is not a resource of Holtwood as you use it. Is that your testimony? A. As I have used the term "Holtwood resources," it is not.

Q. Likewise, you are now testifying under oath that the [19214] interchange purchases that Penn Water receives are not a Holtwood resource, as you used the term? A. I have not so treated it.

* * *

[19215] Q. That figure of 615,636 mwh., which you label the balance of Holtwood resources, I take it we are to under-

stand that when you speak of Holtwood resources, there, you mean Holtwood resources as you have defined them a few moments [19216] ago—as excluding the backfeed from Baltimore and the interchange purchases? A. That is right.

Q. Where did the figure of 157,961 mwh. come from, which appears in line 8 of Table V-B, Exhibit 421 and is labeled "Backfeed on 220 kv. lines"? A. That comes from Form 1 report.

Q. Can you tell me where you got it from, in the Form 1 report? A. We used to get it in the Form 1 report, but it doesn't seem—

Q. As a matter of fact the Form 1 report, on Schedule 552, page 524, shows that the amount of interchange power received from Consolidated Gas Electric Light and Power Company is 159,482 mwh., or 159,482,000 kwh.; isn't that correct?

TRIAL EXAMINER: Received from Baltimore?

MR. MYSE: It doesn't say so. That is the total on both lines, is it not—220 kv. and 66 kv. Isn't that correct?

THE WITNESS: No. That is the total on the 220 kv.

By MR. MYSE:

Q. Where did you get the figure 157,961, then? A. I guess you are right. The 159,482 mwh. is the backfeed on the 220 kv. lines, plus the backfeed on the Highlandtown line.

* * * *

[19217] Q. Maybe this can help you, Mr. Davis, in order to save time. I am informed that there is a possibility, at least—we are not sure—that the figures you used are gross figures received at Safe Harbor. A. That is what they are; yes.

Q. Whereas the figures appearing in the Form 1 are the net hourly figures metered at Baltimore. Do you think that accounts for the difference? A. That probably will.

I can give you in just a minute the figures that we were using. The 157,961 is the gross [19218] backfeed received at Safe Harbor on the 220 kv. line.

Q. What is the 1,676 mwh. appearing at line 9 of Table V-B of Exhibit 421? A. That is backfeed on the Highlandtown line to Holtwood.

Q. Is it a gross metered figure or a net hourly figure, or what? And where is it measured? A. That is measured at Highlandtown.

• • •

[19220] Q. Where did you get the figure of 162,677 mwh. appearing in line 10 of Table V-B of Exhibit 421? A. That is the total delivery from Safe Harbor to Holtwood in excess of the 292,323,000 kilowatt hours representing Holtwood's entitlement from Safe Harbor.

Q. Well, "how did you compute it?" is my question. A. We computed it by deducting from the net generation at Safe Harbor the delivery to Baltimore over the 220 kv. lines, plus the delivery to the railroad for Maryland service, and then deducting from that balance the 292,323,000 of Holtwood's entitlements, leaving 162,687,000 delivered to Holtwood in excess of Holtwood's entitlement.

• • •

[19222] Q. What next did you do in order to arrive at the 162,677 mwh.? I take it you subtracted the 300,340 mwh. first, did you not? A. Well, I added that to the delivery to the railroad from Safe Harbor for Maryland service and subtracted the sum.

Q. How much was that? A. 121,628,000.

Q. 121,628,000, or 121,628 mwh., is the net delivered to the Pennsylvania Railroad at Perryville and Conowingo as part of the contractual supply of the electric companies, and by "electric companies," I mean Safe Harbor, Penn

Water, and Baltimore Company; is that correct? A. I don't know about that. This is the delivery [19223] from Safe Harbor, with a small amount added at Perryville.

• • •

[19224] THE WITNESS: I have been working all through the recess working up the figures of how I derived the 121,628 [19225] delivered to the railroad. That was the last question he asked me.

MR. MYSE: That is all right.

THE WITNESS: And that 121,628 mwh. is derived from a number of figures which are on the five sheets of special meter readings which I testified the other day were furnished by the company at our request in addition to the other data that was supplied.

TRIAL EXAMINER: May I see what you have tabulated during the recess?

THE WITNESS: Yes, sir. That is the data. That data is all furnished by special meter readings requested of the company.

TRIAL EXAMINER: What is "Cga"?

THE WITNESS: Conestoga.

TRIAL EXAMINER: Is there any objection to having the reporter copy that in the record?

MR. MYSE: No objection.

TRIAL EXAMINER: The witness may hand his tabulation to the reporter and the reporter may copy it in the record at this point.

(The tabulation is as follows:)

[19226] SUPPLY FROM SAFE HARBOR TO PENNSYLVANIA RAILROAD COMPANY FOR SERVICE IN MARYLAND

Gross 25-cycle generation at Safe Harbor		299,384
Station use		2,709
		296,675
Transfer 60-cycle to 25-cycle		109,846
Total 25-cycle output at Safe Harbor		407,746
Back feed		1,225
Net output 25-cycle from Safe Harbor		406,521
Delivery to Philadelphia Electric Co. in interchange at Perryville and Thorndale		75,809
Net to Railroad Company for Pennsylvania and Maryland		330,712
Net output on circuits P-7 and P-8 from Conestoga	129,774	
Diversion at Safe Harbor to Railroad 6254		
Diversion at Fishing Creek to Railroad 9003		
	15,257	
Balance delivered to Railroad for Maryland	114,517	
Net through "BB Meter" at Perryville	4,264	
	118,781	
Peak Transfer energy	2,847	
Total from Safe Harbor to Railroad in Maryland	121,628	

[19227] By Mr. Myse:

Q. Now, Mr. Davis, didn't you have to make a somewhat similar calculation to arrive at the figure of 121,628 mwh., which you say is the delivery to Baltimore for the railroad in Maryland, and appears on your work sheet? A. That is the way I arrived at the 121,628.

* * *

[19231] Q. Now, I don't think you have completed your statement as to how you derived the figure of 162,677 mwh. We got as far as the figure 121,628 mwh. that we have been referring to.

Does the work sheet entitled "Backfeed and Diverted Energy Supplied by Baltimore for Firm and Interchange Sales in Pennsylvania" show the derivation of that figure? A. Of the 162,000 figure?

Q. Yes. A. That is correct. I first deducted the sum of the delivery over the 220 kv. lines to Baltimore of 300,340 mwh.

Q. Well, I think it will save time, Mr. Davis, if we mark for identification, if we may, Mr. Examiner, the work sheet I have just referred to, as Exhibit 432.

[19232] Mr. Myse: Mr. Examiner, I am informed that the Commission Staff has a negative of Exhibit 432 for Identification, and if we can have the Examiner's permission we should like to use that negative for purposes of making the required additional copies.

Mr. Hall: We will be glad to furnish it, Mr. Examiner.

Trial Examiner: Yes.

The document handed the reporter may be marked Exhibit 432 for Identification.

(The document referred to was marked Exhibit 432 for Identification.)

* * *

[19233] Q. Mr. Davis, if you will put down on a piece of paper for me the net generation at Holtwood which appears on schedule 575 of the Form 1 report for 1946 filed by Penn Water in an amount of 758,801,000 kwh and add to it a number of figures, the first one of which is the amount shown by Penn Water in Schedule 551 entitled, "Purchased Power," appearing at page 552 of the Form 1 report as the kilowatt hours received from Safe Harbor Water Power Corporation in the amount of 583,171,000—am I right so far? A. That is the figure reported on page 523.

MR. HALL: For my own information, Mr. Myse, the first figure of 758,801,000, is that net generation of Holtwood for 1946?

MR. MYSE: That is correct, is it not, Mr. Davis?

THE WITNESS: Yes.

MR. HALL: Holtwood hydro or Holtwood steam?

THE WITNESS: Both.

By MR. MYSE:

Q. And also add to it the amount of backfeed purchased from Baltimore during the year 1946 as shown on schedule 552 of the Form 1 report filed by Penn Water, page 524, in the amount of 159,482,000 kwh. Am I right so far? A. 159,482,000?

[19234] Q. Yes, am I right so far? A. That is right.

Q. And also add to it the amount of other interchange purchases also appearing on the same schedule 552 shown in column K of that schedule which amounts add up, I believe, to 12,760,000 kwh for the year 1946, is that right?

TRIAL EXAMINER: Read that, will you, please?

(Question read.)

TRIAL EXAMINER: That is the amount you get by adding together the three figures you have given plus this interchange energy figure, or is the interchange energy figure that 12 million?

MR. MYSE: No, sir. It is the amount we get as the annual interchange purchases from other customers other than Consolidated by adding four figures as they appear in schedule 552, is not that right?

THE WITNESS: That is right.

By MR. MYSE:

Q. Is my addition correct? A. 12,760,000?

Q. That is right. Now, if you add these four figures, that is the net generation and the amounts shown in Penn Water's report as received from Safe Harbor, and the Baltimore backfeed and the other interchange purchases, you arrive at a figure of 1,514,214,000 kwh, is not that right? A. That is the arithmetic of it.

[19235] Q. And if you deduct the losses reported by Penn Water in its Form 1 report for 1946 in schedule 575 in the amount of 64,763,000 kwh, you will arrive at a balance of 1,449,478,000 kwh, is that right?

TRIAL EXAMINER: Your decimal is off, is it not? It is not a billion, is it?

MR. MYSE: Yes, I am saying subtract 64 million odd from 1,514,000,000—

THE WITNESS: 1,449,000,000.

* * *

[19236] Q. From which, if you subtract the 64,763,000 loss as shown by Penn Water, you arrive at a figure of 1,449,478,000 kwh for the year 1946, right? A. You arrive at 1,449,478,000.

Q. Kwh? A. Yes, sir.

Q. Now, if you will subtract from that figure of 1,449,478,000 kwh the firm load requirements of Pennsylvania as found by you in Table V-B of Exhibit 421, line 13, column 6 in the amount of 746,286,000 kwh, you will get a balance of 703,192,000 kwh. Is not that correct? A. That is right.

Q. Now, if you deduct from the 703,192,000 kwh we have just referred to, the amount of interchange sales shown on schedule 575 of the Form 1 report filed by Penn Water in the year 1946 in the amount of 204,424,000 kwh you will arrive at a figure of 498,768,000 kwh; is that right? A. That is right.

Q. Now, the 1,514,214,000 kwh which we arrived at by adding the first four figures represents, does it not, the total energy actually received by Holtwood from all sources in the year 1946, is not that right, as shown by the Penn Water Form 1 report? A. Those are the figures taken out of the Penn Water [19237] Form 1 report.

Q. Now, Mr. Davis, will you answer my question. My question is simply this: Is my statement correct? A. I do not know whether it is or not.

Q. You are unable to tell me whether it is correct, is that right? A. Yes.

* * *

[19244] Q. Now, if you will refer to your Table V-B, Exhibit 421, column 6, line 13, you show a figure of 746,286 mwh which is equivalent to 746,286,000 kwh as the firm load requirements in Pennsylvania. Now, my question is, that amount includes not only the firm supply to the three Pennsylvania customers that you show on Table V-A of your exhibit, but also an amount of energy supplied to the Pennsylvania Railroad; is that not correct? A. Right.

Q. Now, what is the figure for the firm energy requirements of the three Pennsylvania customers alone? [19245] A. That is 538,000,000 if I recall.

Q. Is that shown in Form 1? A. 532,804,000.

Q. And that is shown in Form 1, Schedule 530, page 513, is it not? A. Yes, sir.

Q. Now, how much does that leave, if you will do the arithmetic for me, as the amount which you show in the figure in column 6, line 13 of Table V-B of Exhibit 422, as furnished to the railroad in 1946? A. 213,482,000.

Q. Now, is it your testimony that that 213,482,000 was furnished to the railroad in Pennsylvania during the year 1946? A. Yes, sir.

Q. Where did you get the figure of 213,482,000 kwh? A. That is the balance of the output at Safe Harbor that we worked out a short time ago after deducting the 121 million that goes through to the Railroad Service in Maryland.

* * *

[19247] Q. Now, at line 14, column 6 of your Table V-B, Exhibit 421, you show an amount of 191,664,000 which you label as the total net interchange sales in Pennsylvania? A. That is correct.

Q. Now, those are net interchange sales and not gross sales? A. That is true.

Q. The actual gross sales in Pennsylvania of interchange energy are an amount derived by adding back 12,760,000 kwh, is not that right? A. That is right, and you get 204,424,000 kwh.

Q. Now, actually, a large proportion of those interchange sales are made by the use of energy generated at Safe Harbor, right? A. That is probably true.

Q. Mr. Davis, if you will now refer to column 10, line 14 of your exhibit, you there show a figure of 65,863,000 kwh as the amount of net interchange sales in Pennsylvania which [19248] you show as coming from what you call Baltimore supply; is not that right? A. Baltimore supply to Holtwood, that is right.

Q. Now, under the method you have pursued in arriving at that figure of 65,863,000 kwh, about half of that amount roughly comes from what you call diversion from Baltimore's two-thirds of Safe Harbor, is not that right? A. It may be, I do not see just how you figured that.

Q. Well, now, the 322,314,000 kwh appearing in column 4, line 11 of Table V-B was derived by adding the figures appearing in lines 8, 9, and 10, right? A. Yes, sir.

Q. And roughly half of that 322,314,000 kwh is what you call diversion from Baltimore's two-thirds of Safe Harbor, is that right? A. That is right.

* * *

[19249] Q. Well, if instead of adding the three figures in lines 8, 9 and 10 to the total of 322,314,000 you had transferred them over into column 4 and applied a percentage to the figure of 162,677,000 kwh which you call diversion from Baltimore's two-thirds of Safe Harbor, you would have roughly 17 per cent, would you not? A. Yes, sir.

Q. And if you followed out your calculations in exactly the same way with the difference of not adding the three figures appearing in lines 8, 9 and 10, you would find that you would have roughly 17 per cent of the total net interchange sales in Pennsylvania coming from the diversion from Baltimore's two-thirds of Safe Harbor generation, is not that right? A. That is right.

Q. And that would be roughly half of the figure of [19250] 65,863,000 kwh appearing in column 10, line 14 of Table V-B of Exhibit 421, is not that right? A. Yes, sir.

MR. HALL: Mr. Davis, are your last answers predicated upon the assumptions that Mr. Myse has made?

THE WITNESS: Yes.

* * *

[19253] Q. The next question, then, is: How did you derive the figure of 213,482,000 kwh as referred to by you on page 19245? We are unable to check it. A. In the table on page 19226 of the transcript, line 11, I have a figure of 330,712,000 kwh., which is the balance of the 25-cycle output from Conestoga after deducting interchange to Philadelphia Electric Company. That should be changed in the transcript.

Q. That is line 9. The word "Pennsylvania" should be changed to Philadelphia; is that it? A. That is right. Philadelphia Electric Company at Perryville and Thorn-

dale. That balance is available for the Railroad Company, both in Maryland and in Pennsylvania.

Then the amount of 121,628,000, which is the balance of energy delivered down the P-7 and P-8 circuits to the railroad, for service in Maryland, deducted from the 330,712,000 kwh., gives 209,084,000 kwh., which is increased by 4,398,000 to make the 213,482,000 kwh.

Q. Where did the 4,398,000 kwh. come from? A. That is the peak transfer energy which is deducted from the interchange sales to Philadelphia Electric Company and added to the railroad bill.

Q. But you show, in line 19, page 19226, which reads "Peak Transmission energy", which I understand should be [19254] "Peak Transfer Energy," as 2,847,000 kwh. A. Yes. I gave you that erroneously. That is a discrepancy that I could not account for in getting the Railroad Company bill as reported by the Holtwood Company. That figure of 2,847,000 kwh. is an adjustment figure that I cannot account for.

Q. Well, do I understand, then, that the figure of 2,847,000 kwh. appearing at line 19 of page 19226 of the transcript is not peak transfer energy? A. That is not peak transfer energy that I know of. It may be. It is a discrepancy between the result of applying the method used by the company in computing the railroad bill which differs by that amount from the bill as reported in the company's reports, and I don't know whether it is peak transfer energy or what.

Q. Well, I'm lost, Mr. Davis. I understood you to say yesterday that the calculation shown by page 19226 of the transcript was the kind of calculation used by you in determining the amount of 121,628,000 kwh. appearing at line 20 of that page. Was I right in that? A. Surely.

Q. Well, now, do I understand, then, that you arrived at that figure by adding some arbitrary amount to 118,781,000 to make it come out with some figure you say the company reported? [19255] A. That is right.

* * *

[19263] Q. Will you refer again, Mr. Davis to your Table V-B of Exhibit 421? [19264] A. Yes, sir.

Q. Am I correct in understanding that table to mean, referring more particularly to Column 11, that the figure of 502,485,000 kwh, shown in line 15 of that column is the total amount of energy which you regard as sold to the Baltimore Company? A. From Holtwood's resources; that is right.

Q. When you say from Holtwood's resources, you are using the term "resources" as you defined it yesterday; that is correct? A. That is correct.

Q. And that figure is made up of a delivery to Baltimore Company at Highlandtown shown in line 6 of an amount of 376,684,000 kwh—is that right? A. That is right.

Q. —and, in part, of a delivery—or shall I say a net delivery—of interchange energy, to the Pennsylvania customers, of an amount of 125,801,000 kwh. Now, which is it: net or gross? A. It is net delivery. It is the proportion of the total net of 191,664,000 kwh shown in Column 6.

Q. Now, as I understand your Exhibit 421, the summation of those two figures of 502,485,000 kwh, you regarded, by the method that you pursued on Table VI, as sold to Baltimore Company at 1.3 mills; is that right? [19265] A. I believe that is right, yes.

Q. And that shows in Footnote No. 3 to Column 4 of Table VI; is that right? A. That is right.

Q. And the cost of 1.3 mills that you show there is derived on line 27 of Table V; is that right? A. That is right.

Q. As I also understand your exhibit, the amounts shown in Column 12 of Table V-B, in two places, or specifically the amount of 256,451,000 kwh, is that portion of the firm load requirements of the Pennsylvania customers which you regarded as having been furnished from either Baltimore back feed or diversion from Baltimore's

two-thirds of Safe Harbor generation? A. Yes, that is right. That is what that figure represents.

Q. That means, does it not, that approximately half of the amount of 256,451,000 kwh was regarded by you as a firm power supply in Pennsylvania, coming from diversion from Baltimore's two-thirds of Safe Harbor output; is that right? A. That would be what would show if you prorated it separately on the items of backfeed and diversion.

Q. Yes.

TRIAL EXAMINER: What do you mean by that?

[19266] THE WITNESS: I have taken back feed and diversion of 322,314,000 kwh and developed the percent of the total supply at Holtwood at 34 percent, and the firm, the balance of it, as 65 percent. The 256,451,000 kwh is then prorated from that total. Mr. Myse says then that if I had prorated it separately from the back feed and from the diversion, each of which is approximately half of this 322 million, I would have gotten half of this 256,451,000 kwh as derived from diversion at Safe Harbor from Baltimore's two-thirds share.

TRIAL EXAMINER: I see.

By MR. MYSE:

Q. In your Table VI, Mr. Davis, of Exhibit 421, you have, in effect, have you not, credited Baltimore Company with that amount of 256,451,000 kwh at a rate of 4.7 mills; is that right? A. That is correct.

Q. So that means, does it not, you regard that amount of energy at that rate as having been bought from Baltimore Company? A. In allocating the costs I have regarded that amount as having been supplied by Baltimore Company to Holtwood, for which there are no costs in the figures that I have allocated—that is taken from Holtwood's reported costs. These costs, then, of this energy at 4.7 mills [19267] have been added to the costs

reported by Holtwood, and prorated over the energy supplied to the Pennsylvania customers.

Q. Is that 4.7 mills, in your view, supposed to represent the cost to Baltimore? A. Baltimore's average production cost.

Q. Well, actually, half of that 256,451,000 kwh, which you regarded as supplied from the diversion from Baltimore's two-thirds of Safe Harbor's output, does not cost anywhere near 4.7 mills at Safe Harbor, does it, in your view? A. At Safe Harbor, no. I don't consider that cost at Safe Harbor.

Q. Do you know what the cost of that energy was, which you regarded as having been diverted from Baltimore's two-thirds of Safe Harbor output? And when I refer to cost, I mean cost to Safe Harbor. A. No, I wasn't interested in that figure.

Q. You just don't have any idea at all of what the cost would be in terms of kwh? A. I didn't try to find out, no.

Q. Do you know whether it would be less or more than 4.7 mills? A. Oh, certainly, it would be less.

Q. Much less?

MR. GOLDBERG: For my own edification, are you referring [19268] to the assumption of what the energy would cost at Safe Harbor if generated by Safe Harbor; is that it?

MR. MYSE: Yes.

* * *

A. I don't know how much less, but I imagine it wouldn't have been so very far away from the average cost of 502 million kwh, although I don't know exactly what it would have been.

MR. MYSE: In other words, you think it would be somewhere near the 1.3 mills you found on Table V; is that right?

THE WITNESS: It would be nearer that than 4.7.

By Mr. Myse:

Q. You can figure it very easily from Table V, can you not? Will you turn to Table V? A. I have it.

[19269] Q. Let's look at Table V, line 20. You there show what you assume as the cost of power to Holtwood from Safe Harbor, do you not, in Column 1? A. That is right.

Q. In an amount of $1,007,185; isn't that right? A. That is right.

Q. Now, if you followed the same procedure that you followed on Table V, you would allocate 74.85 per cent of that amount to capacity, and the balance to energy, would you not? A. Yes.

Q. How much would those two capacities and energy components of cost be, if you did that? A. It would be somewhere around—

Q. Will you figure it on the slide rule, please? A. Somewhere around $750,000.

Q. I get $754,000. Does that check with you as a capacity cost? A. That is about right, yes.

Q. Is that right? A. That is right.

Q. That means that the energy costs allocated as you have allocated them on Table V for Safe Harbor alone would be approximately $253,000; isn't that right? A. That would be the balance of the total; that is [19270] right.

Q. Now, if you divide that amount of $253,000 by the amount which you show as Holtwood receipts from Safe Harbor in line 2, Column 3 of Table V-B of your Exhibit 421, in the amount of 292,323,000 kwh, what rate do you get? And I get a rate of .865 mills. Will you check that for me, please? A. That is probably about right.

Q. That means that the cost of Safe Harbor energy on that basis is approximately .865 mills per kwh; isn't that right? A. That is 25 percent of the cost.

Q. Well, so far as energy cost is concerned, that is the energy cost of Safe Harbor energy; isn't that right? A.

That is the component that I have allocated on an energy basis.

Q. And that is the comparable figure to the 1.3 mills you show in Table V-A, is it not? A. That is right.

* * *

[19276] TRIAL EXAMINER: Well, I want to know what it is.

THE WITNESS: The costs of that energy at Safe Harbor have nothing to do with the way I have allocated those costs, and the way I have credited the cost of that energy to Baltimore at Baltimore's average steam production cost.

TRIAL EXAMINER: Why did you credit it to Baltimore at its average steam production cost?

THE WITNESS: Because that energy at Safe Harbor is paid for in full by Baltimore Company, and, according to contract, Baltimore is entitled to have it delivered to Baltimore at whatever the cost is and whenever it allows it to be diverted for any other purpose it has to generate steam energy in Baltimore to replace it.

By MR. MYSE:

Q. Does it always have to generate steam energy in Baltimore at times that the energy from Safe Harbor is diverted, as you say? A. Any energy that it might receive from Safe Harbor and does not receive has to be replaced in Baltimore by steam generated energy.

Q. Are there any times when Baltimore diversion is transmitted to Pennsylvania customers as you view it, when Baltimore Company cannot use that same amount of that diversion during the same hour?

* * *

[19277] A. I think there are some times during good water periods and low load periods when Baltimore feels that it cannot reduce its steam generation to the point of taking all of that.

By Mr. Myse:

Q. So that means, does it not, that the amount which is diverted during those times does not cause Baltimore to generate any additional energy; is that right? A. That is true, to that extent.

Q. Did you make any investigation to determine the number of hours during 1946 when that does happen? A. Well, the amount of energy is reported in several of these exhibits. I didn't look to see in how many hours it happened.

Q. Where did you get the rate of 4.7 mills which you used in Table VI? A. That is from the reported costs of production of Baltimore Company.

Trial Examiner: Is that from the Form 1 report?

The Witness: That comes from the Form 1 report, yes.

Trial Examiner: That wouldn't be the pool report, would it?

The Witness: No, Baltimore Company's Form 1 report.

[19278] By Mr. Myse:

Q. Do you have Baltimore Company's Form 1 report before you, so you can show me just exactly where that figure came from? A. It is the average of three stations in Baltimore. I thought I had the figures added up so I could give it to you immediately, but it is the average cost reported from the Westport, Gould Street, and Riverside plants, divided by the net generation as reported—the 4.7 mills can be derived by adding the figures from those three plants and—

Q. Well, have you any calculation showing how you derived the figure of 4.7 mills? A. I thought I had those figures added up here.

Do you still want me to figure it?

Q. I would like to know where the figure came from, and if you have any calculations, I would like to see them.

A. The figure came from the Consolidated's Form 1 report for 1946, Schedule 579, Consolidated Gas Electric Light and Power Company's report for 1946, line 34, shows total production expenses for four plants. Three of them are the main generating stations. The other one is used more for steam heating than for generation, and it was omitted. The sum of the operating expenses reported on line 34 is $9,202,392.

[19279] On line 12 is shown the net generation, the sum of which for the three plants is 1,950,252,000 kwh. Dividing the dollars by the kilowatt hours results in approximately 4.7 mills per kilowatt hour.

Q. Do I understand, then, that you took the figures from this Consolidated Gas and Electric Company Form 1 report for 1946, and you didn't make any calculation similar to the one you made now, or you did? A. Yes, this calculation was made.

Q. Well, did you have it in the form of a working sheet at all? A. No. I didn't save anything like that. I had a statement that it was 4.7 mills.

Q. Did you make any investigation of the figures appearing in lines 22 to 33, inclusive, of Schedule 579 to determine whether or not any of them were proper expenses applicable to the steam plants of Consolidated Gas Electric Light and Power Company? A. I observed what those items were, and figured the average production cost on the basis of the totals.

Q. Well, answer my question, will you, please? A. Yes, I did.

Q. You did make an investigation of each and every item of costs shown in those lines that I have referred to to determine whether or not they were proper; is that [19280] your testimony? A. You mean to go back of this report and find the components of them?

Q. To determine whether each and every figure appearing in the report was a proper figure or not. Did you do that?

MR. GOLDBERG: Each and every figure appearing in the report involved in the matter you are referring to?

MR. MYSE: In the lines I have referred to, yes.

A. That is the total of all of the items of production expense? You mean did I go back in to the Company's books and see what items were charged into those various amounts?

By MR. MYSE:

Q. That is right. A. I did not.

Q. Did anyone under your direction do that? A. I didn't ask anybody to.

Q. So far as you know, you just took the figures from the report; is that right? A. That is right.

Q. You do know that Consolidated Gas Electric Light and Power Company has other business other than its electric business, do you not?

[19281] MR. GOLDBERG: I object to that as entirely immaterial and irrelevant, unless counsel can show what he is attempting to prove here through suggestion, which is not a proper way.

MR. MYSE: I am cross-examining on the figure of 4.7 mills.

MR. GOLDBERG: He has answered he didn't go behind those figures. He accepted them. They are furnished under oath.

* * *

TRIAL EXAMINER: If counsel knows what that business is he should put it in the form of a question. This is taking too much time.

MR. MYSE: Do I understand the objection is sustained?

TRIAL EXAMINER: It is in part. I am making a suggestion whereby you can put a proper question—which

the Examiner would deem a proper question—to the witness.

MR. MYSE: I would like to know, Mr. Examiner, what the ruling is.

TRIAL EXAMINER: You are not going to pin the Examiner down like you are doing the witness.

MR. MYSE: In order that it may be clear—this is very important to our case—I would like to repeat the question, Mr. Davis. Do you know whether or not Consolidated Gas Electric Light and Power Company of Baltimore does in fact conduct other business other than its electric business?

[19282] MR. GOLDBERG: I object, unless counsel specifies what other business.

TRIAL EXAMINER: Objection sustained.

By MR. MYSE:

Q. Do you know whether or not Consolidated Gas Electric Light and Power Company of Baltimore conducts a gas distribution business?

MR. GOLDBERG: I object, Mr. Examiner, unless a foundation is shown that such business would be reported in FPC Form 1, in connection with electric operating expenses and revenues.

TRIAL EXAMINER: Objection sustained.

By MR. MYSE:

Q. Do you know how the electric operating expenses shown in Schedule 579 of the Consolidated Gas Electric Light and Power Company Form 1 report for 1946 were derived?

MR. GOLDBERG: I object to that. The witness has testified that he accepted the figures and did not go behind them.

THE WITNESS: Did you say "revenues"?

MR. MYSE: No. Expenses. If I said revenues it should be corrected.

MR. GOLDBERG: I object to the question anyway.

* * *

TRIAL EXAMINER: This is the point I have in mind. I have [19283] observed, in the cross-examination of this witness, as I have in the cross-examination of other witnesses by other counsel, that too often there is a tendency to subject the witness to a type of questioning which, to use a military expression, resembles a creeping barrage or a box barrage. And I am opposed to it because of the time that has been consumed by that kind of thing in this hearing. I think that partly explains why this hearing has gone on and on through cross-examination for day after day.

Now, if counsel knows of anything that exists that invalidates the use of this Schedule 579, as he knows the witness has used it, let him put a direct question to the witness.

MR. MYSE: Do I understand, Mr. Examiner, that the objection to my last question is sustained?

TRIAL EXAMINER: Yes.

MR. MYSE: In reply to the Examiner's statement I would like to say this: That of the total number of days of cross-examination, approximately some one hundred days were consumed by cross-examination by Staff counsel.

By MR. MYSE:

Q. Now, Mr. Davis, do you know whether or not any of the expenses shown in lines 22 to 33, inclusive, of Schedule 579 of the Form 1 report to the Federal Power Commission for the year 1946 by Consolidated Gas Electric Light and Power [19284] Company of Baltimore were derived by allocation of joint expenses between the gas business of

that Company and its electric business? A. That does frequently happen in accounting for two classes of business. I accepted the figures here, which are reported as electric costs, as such, and, if any allocations were made, I have assumed that the proper proportion was allocated to electric costs.

Q. You did not determine whether or not the allocation was correct, did you?

MR. GOLDBERG: I object. The witness has testified to what he has done.

TRIAL EXAMINER: Objection sustained.

MR. MYSE: Mr. Examiner, I would like to point out that we are now being deprived of a very, very essential portion of our right of cross-examination upon the specific figure of 4.7 mills per kwh. used by this witness in arriving at the results in Exhibit 421, and, as shown by the testimony at this point, derived from a report by Consolidated Gas Electric Light and Power Company of Baltimore without further examination on his part. And we therefore make the point that we are being deprived of that right in violation of our rights under the Constitution of the United States.

MR. GOLDBERG: May I be heard, momentarily, Mr. Examiner?

TRIAL EXAMINER: Just a minute. I wish to point out [19285] this: You have three answers from this witness which are completely negative, as the Examiner sees it, in so far as any assignment of error as you have just made is concerned.

First, the witness testified that he took the table as he found it; second, that he made no investigation as to the computation of the data as it appears in the table, and, third, that there might be assignment of expenses as between different types of business.

And I have ruled the questions out on the grounds that the matter has been covered.

MR. GOLDBERG: Mr. Examiner, in connection with counsel's statement of deprivation of due process, I have been sitting here all morning wondering why all this cross-examination about the 4.7 mills when in Exhibit 369 Mr. Spaulding himself shows, for 1946, under the heading "Baltimore Company Average Monthly Production Cost Plus 10%," 5.10 mills per kwh.

Now, if you deduct the 10% from that there is no substantial difference between the 4.7 and the figure we would get after deducting 10% from 5.10. I just haven't been able to understand it.

MR. MYSE: All I can say to that is that there is no substantial similarity between the figures to which the mill rates were applied either between the two exhibits.

MR. GOLDBERG: Look at the description by Mr. Spaulding.

[19286] TRIAL EXAMINER: All right; proceed.

That mill rate in Exhibit 369 works out to 4.63, does it not?

MR. GOLDBERG: Something like that.

* * *

[19294] Q. Well, is it your testimony that that supply of interchange energy to the Pennsylvania customers benefits Baltimore? A. That, in effect, is Baltimore selling energy in Pennsylvania. It pays all the costs of it, it gets all the revenue from it.

Q. And that is in conformity with the testimony you gave once before on cross examination in connection with Exhibit 64; is that right? A. I think I said that same thing, yes.

Q. That means, does it not, that the greater the amount of interchange energy supplied to the Pennsylvania customers, the greater will be the back feed and diversion of Baltimore's two-thirds from Safe Harbor, as shown in line

11, column 4 of your Table V-B, Exhibit 421; isn't that correct? A. If all other conditions remain the same and the interchange is increased, that would require more back feed or diversion.

Q. And that would increase the percentage figure shown [19295] in your column 5, line 12, as 34.4 per cent, under those conditions; isn't that correct? A. With all other conditions remaining the same, and an increase in back feed and diversion, that percentage would increase.

[19296] Q. Well, to put it another way, the greater the amount of interchange supplied to the Pennsylvania customers, with the firm loads of those Pennsylvania customers remaining the same, the greater the percentage of available supply for firm and interchange sales in Pennsylvania, as shown in your columns 4 and 5, line 12, Table V-B of Exhibit 421. Isn't that correct? A. That would be correct if the generation at Holtwood and Safe Harbor remained the same and the load remained the same.

Q. Assuming all other conditions the same but interchange supply to Pennsylvania customers increased, it would have that effect, would it not? A. That is correct.

Q. And, as a result of that, if you therefore increased the amount of interchange supplied to the Pennsylvania customers, and all other conditions, as you show them on your Table V-B of Exhibit 421, remained the same, you would come out with, if you pursue your method of cost allocation as shown on Table VI, a higher weighted average cost of firm energy to Holtwood, as shown in your footnote 1 of Table VI. Is that correct? A. The amount of energy supplied from Baltimore would be increased and the additional charge at steam production cost would be increased, and the weighted average would [19297] therefore increase, that is correct.

Q. By a mere change or increase in the amount of interchange energy sold to the Pennsylvania customers; isn't that right?

MR. GOLDBERG: All other things remaining equal.

MR. MYSE: Yes.

THE WITNESS: That is correct.

* * * *

[19301] Q. Well, then, you are testifying that that rate of 4.7 mills represents, to you, the average cost of backfeed? Is that your testimony? A. I have so used it.

Q. Well, do you know whether it is the average cost of [19302] backfeed? A. Now you are asking me again if I have analyzed Baltimore's books to find out all the items in there.

Q. No, sir. A. I have not.

Q. Well, did you analyze any of the costs of Baltimore Company to determine whether or not the costs of just the backfeed energy supplied by Baltimore to Holtwood were any different from the average costs of production of energy?

* * * *

[19303] A. I have made no distinction. I applied the average cost to both back feed and diversion.

By MR. MYSE:

Q. All right. Now, the average cost of production of energy at the three plants which you referred to from the Consolidated Form 1 report does vary widely, doesn't it?

* * *

[19304] THE WITNESS: There is some variation in the average cost of one plant and another.

By MR. MYSE:

Q. And, as a matter of fact, the average production cost for the year 1946 for the Riverside plant was only 3.57 mills; isn't that correct? A. I don't have that in mind at the moment.

Q. Well, you can check it very quickly, can't you, from the same Consolidated Form 1 report? A. 3.57 mills.

Q. And, as a matter of fact, the average cost of energy

which Consolidated Gas Electric Light and Power Company received from Pepco in the year 1946 is only 3.68 mills; isn't that right? A. I don't know.

* * *

[19305] Q. Mr. Davis, don't you know, as a matter of fact, that a large proportion of the back feed energy furnished by Baltimore to Holtwood is generated and comes from the Riverside plant?

MR. GOLDBERG: I object to that, Mr. Examiner, as vague and indefinite. "Large proportion" is a relative term and there is no foundation laid as to what he means.

TRIAL EXAMINER: Objection overruled.

A. I don't know what proportion comes from the Riverside plant.

By MR. MYSE:

[19306] Q. I take it you made no study, then; is that right? A. That is right.

Q. You know that some comes from the Riverside plant? A. I assume that some comes from each of the plants.

Q. Do you know that a substantial proportion of the back feed energy furnished by Baltimore Company to Holtwood originates on the system of Pepco, and is purchased originally by Baltimore Company from Pepco at some mill rate which we will furnish later in the record? A. I knew that some back feed came from Washington. I didn't know how much.

* * *

Q. Mr. Davis, Table VI, Exhibit 421, Footnote (2). You show there a rate of $12 per kw, which you applied to the negative capacity supplied from Holtwood to Baltimore Company in arriving at a figure of $38,400, which you used in Column 6, Line 5, of your Table VI. My question is: where did you get the rate of $12? [19307] A. I used $12 as a conservative amount that would be considered reason-

able as a cost to the Pennsylvania customers, believing that it was not the full capacity cost.

* * *

Q. You say cost to the Pennsylvania customers? A. As an amount to be included in the cost of serving the Pennsylvania customers.

Q. Well, is that $12 per kw related in any way to costs of Baltimore Company? A. It is not definitely related —that is, mathematically—but, as I said, not attempting to charge what would be full capacity costs from Baltimore supply, but a reasonable addition to the cost of serving the Pennsylvania customers.

Q. Well, what factors did you consider in coming to the conclusion that $12 was that reasonable cost? A. I didn't consider any mathematical quantities.

Q. I am not asking you that. I haven't confined my question to mathematical quantities. I asked you generally what factors you considered. A. Just a general judgment of reasonableness, as a cost to be included in that of serving the Pennsylvania [19308] customers.

Q. Well, didn't you have anything in mind as a criterion of what is the measure of reasonableness? A. Knowing that steam generating costs are usually more than that, and knowing that the capacity or demand charges in contracts for sale of that power are considerably above that figure, I just put that in as a judgment figure to be very conservative and reasonable in adding to the Pennsylvania service cost.

Q. What studies of capacity charges and steam capacity cost did you make in order to arrive at that judgment figure? A. I just had in mind the demand charges that are made in contracts in this area.

Q. What contracts? A. Oh, a number of them.

Q. Well, can't you be specific? A. Well, you can take Holtwood's contracts with the Pennsylvania customers.

Q. What is the demand charge made by Baltimore to Pepco? A. I don't know.

Q. Didn't you consider that at all in arriving at your reasonable figure of $12? A. No, I didn't consider any definite quantities.

[19309] Q. Nothing definite at all? A. Just being sure that I got below actual cost.

* * *

[19312] Q. Where does the figure of $141,777 come from which you show as an adjustment of revenue received for special facilities from the Penn Railroad in accordance with the allocation of costs of special facilities? A. That is the amount of special facility cost collected by Holtwood on the energy ratio, which is in excess of the special facility costs that I have allocated to the railroad in Pennsylvania.

Q. How much special facility cost have you allocated? Is that shown on Table VI of Exhibit 421, line 4, column 5, as $94,038; is that what you mean by the special facility costs allocated to the railroad?

TRIAL EXAMINER: What table is this?

MR. MYSE: Table VI.

By MR. MYSE:

Q. Mr. Davis, I haven't asked you what you did. My question is: is the $94,038 the special facility cost you have just referred to in the testimony? A. That is the amount allocated to the railroad in Pennsylvania.

Q. Well, I show you a work sheet which is headed "Holtwood Cost and Revenue Collected for Special Railroad [19313] Facilities." Is that the work sheet that you furnished Respondents showing the derivation of the figure of $141,777 appearing on Table VI-A of Exhibit 421? A. That is right.

MR. MYSE: May we have the work sheet just described marked for identification as Exhibit No. 433 for identification?

TRIAL EXAMINER: The document handed the reporter will be marked as requested.

(Document marked Exhibit 433 for Identification.)

By MR. MYSE:

Q. Is it correct to say, Mr. Davis, that the first column of Exhibit 433 for identification shows the special facility charges to the railroad? A. That is as I understand it.

Q. Well, are those the charges that are provided for in the contract known as Exhibit 10 in this record? A. I believe so.

Q. Can't you be a little more positive? A. I think they are.

Q. And that is where you obtained the figures; isn't that right? A. Yes.

Q. The next column is headed "Collected by Holtwood." How did you arrive at those figures? [1931] A. Holtwood collects that portion of those costs represented by the proportion of the energy delivered to the railroad in Pennsylvania.

Q. How did you arrive at that ratio? A. The ratio of the total energy furnished to the railroad to the portion furnished in Pennsylvania.

Q. Do I understand you to mean that it is the ratio of energy furnished to the railroad in Pennsylvania to the total energy furnished to the Railroad? A. Well, yes, that is putting it properly.

Q. That would be the ratio of the figure—what figures did you use, can you tell me that? A. It is approximately 48 per cent, 47 and a fraction per cent, I believe. I used the figures that are shown in—I have forgotten the name of the exhibit. The tabulation of the Railroad Company's billing.

MR. GOLDBERG: Exhibit 423: is that the one you are referring to?

THE WITNESS: Yes.

By Mr. Myse:

Q. Let's be more specific as to which figures you used. A. The ratio of 451,843,000 kwh to 213,482,000 kwh.

Q. You mean just the reverse, do you not, the ratio of 213,000,000-some odd kwh to the figure of 451 some odd [19315] million kwh? A. Yes; that would be roughly 48 per cent, if I recall rightly.

Q. And those figures appear on one of the sheets in Exhibit 423, which is headed "Monthly charges to Pennsylvania Railroad Company;" isn't that correct? A. That is correct.

Q. In the third column of Exhibit 433 you show that none of the cost of the Benning frequency changer and the 110 kv line credit is allocated to the Pennsylvania Railroad in Pennsylvania; is that right? A. Yes.

Q. On the next line, as I understand your Exhibit 433, you allocate $36,973 to the railroad in Pennsylvania, on account of the Safe Harbor facilities used for the railroad; is that right? A. Yes.

Q. How did you arrive at that allocation? A. That is allocated on the basis of the ratios which are developed for the Conestoga Substation, and the Safe Harbor facilities, which is in one of my working papers.

Q. Well, as I understand that, you show that you find, in one of those working papers, 53 per cent of the use of the Conestoga Substation is for use of the railroad in Pennsylvania; isn't that right? [19316] A. Yes.

Q. Did you apply that 53 per cent to the total charges of $211,271 shown in the first column of Exhibit 433? A. Apparently not.

Q. Did you intend to? A. No, that is cost incurred by Safe Harbor, for which Holtwood paid only one-third.

Q. Well, actually the cost incurred by Safe Harbor to serve the railroad is incurred regardless of what Holtwood pays; isn't that right?

* * *

A. That is right.

By Mr. Myse:

Q. How did you arrive at the $36,973 shown in the third column of Exhibit 433, opposite Safe Harbor facilities for the railroad? A. That is supposed to be 53 per cent of one-third of the $211,271.

Q. Well, is it? A. It seems to be a dollar or two off.

Q. Well, assume it is what it is supposed to be: why do you take only one-third of $211,000 and apply 53 per cent to it? A. Because that is all the cost that Holtwood incurs.

[19317] Q. You mean Holtwood only incurs one-third of $211,271 as cost? Is that your testimony? A. That is right.

Q. Well, actually, that $211,271 isn't a cost at all: it is just a charge specified in Exhibit 10, the contract, isn't that right? A. That is a charge to the railroad company.

Q. So it isn't a cost; it is a charge specified in the contract; isn't that right? A. That is right.

Q. Have you determined whether or not the charges in the contract are related to costs? A. They are related to costs, yes. They are a fixed percentage of investment. They are not the same costs that were included in the bill of Safe Harbor to Holtwood.

Q. Well, do you think they are reasonable costs? I will withdraw that.

Do you think the charges specified in the contract represent reasonable costs? A. Well, I had no particular reason for judging whether they were or not. I was taking them as they were reported.

Q. Then, I understand your testimony to be that you do not know whether or not the charges specified in the contract, as listed in column one of Exhibit 433, [19318] actually represent reasonable cost? A. I don't know what you mean by "reasonable". I didn't attempt to decide whether they were reasonable or not.

Q. Then, actually, your third column in Exhibit 433, which is headed "Cost Allocated to the Railroad in Penn-

sylvania," should read "The Charges Specified in the Railroad Contract Known as Exhibit 10, allocated to the railroad in Pennsylvania;" isn't that a more correct statement? A. That would be all right, yes.

Q. And, as a result of that, your fourth column which is headed "Excess Collected over Cost Allocated to Pennsylvania," should read "Excess Collected over the Charges Specified in the Railroad Contract, Allocated to Pennsylvania"? A. Well, I called those costs.

Q. Well, isn't my statement correct, Mr. Witness?

* * *

A. This particular item, which is different from any of the others, is a cost allocated from the charge made by Safe Harbor.

MR. MUSE: Mr. Examiner, I haven't called for that.

MR. GOLDBERG: Let the witness finish, please.

[19319] TRIAL EXAMINER: No. Just a minute. Start off answering that question as directly as you can. Then, if you have to add anything to it, you may do so. It is impossible to evaluate the witness' answer as his answer now starts off.

THE WITNESS: May I have the pending question?

TRIAL EXAMINER: Yes.

(Question read.)

MR. GOLDBERG: That has been answered directly, Mr. Examiner. He has answered directly what that means there.

TRIAL EXAMINER: He may answer.

A. The items which I have taken as charges to the railroad, which are the Benning frequency changer and the Safe Harbor facilities, which are not in Holtwood costs, could be titled as you stated. The other two items are costs of Holtwood and the title that I have here would be more correct for them.

By Mr. Myse:

Q. Are you saying that the amount of $36,973 appearing in Column 3 is a cost of Holtwood, and is not merely an allocated portion of the charges specified in Exhibit 10, the railroad contract?

Mr. Goldberg: Mr. Examiner, I object to that unless there is a contention being made here that charges do not represent costs.

[19320] Mr. Myse: Well, certainly there is.

Mr. Goldberg: If anybody charges me anything and I pay for it, it is a cost, and counsel knows it.

Trial Examiner: All right. Just a minute.

Mr. Myse: I still don't think I got an answer to my question.

Trial Examiner: Just a minute. Isn't that the same question that you asked once before?

Mr. Myse: Only because, in attempting to argue with me, by his answer to the question, the witness hasn't answered the question. If the Examiner prefers I think he can have my question read back. It is a very simple question and can be answered yes or no. The question was: was my statement correct with respect to the heading in column 4.

Trial Examiner: Well, you check the transcript over the evening, because we have been over that $36,000 item.

Mr. Myse: I take exception to that, Mr. Examiner. I think it is clear he has not answered my question.

Trial Examiner: I don't think it is clear, and if, on reviewing the transcript, it develops he hasn't answered it, then, we will consider the question further.

By Mr. Myse:

Q. Mr. Davis, is the figure of $49,074 in column 3 of Exhibit 433, a cost to Holtwood Company? [19321] A. That

is the portion of Holtwood's cost for the Conestoga Substation allocated to the railroad.

* * *

Q. How did you compute it? A. The computation of the amount allocated to the railroad is based on the ratio developed in the working paper which was supplied.

Q. Is that the 53 per cent you referred to before? A. Yes.

Q. So you applied the 53 per cent to the figure of $93,474 in column 1, which is headed "Charges to the railroad;" isn't that right? A. That is right.

Q. So that what it is is a figure representing 53 per cent of a charge specified in Exhibit 10; isn't that right? A. That is right.

Q. Does that represent a cost to Holtwood? A. Yes, that is a portion of Holtwood's cost.

Q. How did you get the figure of $10,989 appearing in column 3 of Exhibit 433, opposite the designation "Perryville line"? [19322] A. That is developed in the same way, using the ratio of the Perryville line, which is—

Q. Is that the 9 per cent figure which you developed? A. 9 per cent for service to the railroad in Pennsylvania.

Q. So you applied 9 per cent to $122,100 appearing in column 1 of Exhibit 433? A. That is right.

Q. And that figure is also a charge specified in the contract, so that the figure of $10,989 represents 9 per cent of the contract charge; is that right? A. That is right.

Q. And you consider that a cost to Holtwood? A. Surely, it is a part of Holtwood's costs that are charged to the railroad.

Q. How did you arrive at the figure of $6,654 appearing in the third column of Exhibit 433, opposite the designation "Switch for railroad transformer"? A. That percentage is developed also in working papers supplied for the switching positions and switches, I believe, supplied for the railroad company transformers at Conestoga.

Q. Is it on the working paper I show you headed "Conestoga Substation" and "Safe Harbor Single Phase Equipment"? [19323] A. No, it is not on that sheet.

Q. What other working sheet is there relating to that? A. I find the work sheet in my notes here, but it hasn't been discovered in the photostatic copies as yet.

Q. Well, will you supply us with a copy of that working sheet? A. Certainly.

Q. What does the work sheet show, in the interim, as to how you arrived at the figure of $6,654 appearing in the third column of Exhibit 433? A. It starts with the total output of Conestoga Substation of 406 million kwh, deducting first the delivery over circuits P-7 and P-8.

Q. Of how much? A. 130,862,000 and then the net to Perryville, over Circuits P-5 and P-6 of 35,060,000, leaving a balance which had to go over Circuits P-2, P-3 and P-4, and out of the amount of that balance, which is 240,599,000, 45,013,000 went to Philadelphia Electric through Thorndale, leaving a balance of 195,586,000 as the use handled by these switching facilities, or 81.3 per cent of the total energy flowing over Circuits P-2, P-3, and P-4.

Q. Then, as I understand it, you applied the figure of 81.3 per cent, which you derived in the manner you have just described, to the figure of $8,184 appearing in column 1 [19324] of Exhibit 433, to get the $6,654; is that right? A. That is correct.

Q. Likewise, the figure of $8,184 is a contract charge; isn't that correct? A. That is correct.

Q. Do you consider that a cost to Holtwood? A. Yes, that is a part of Holtwood's cost.

TRIAL EXAMINER: What was the contract charge?

MR. MYSE: $8,184.

By MR. MYSE:

Q. That means, Mr. Davis, that your total of $103,690 is what you consider as the cost to Holtwood allocated to

the railroad in Pennsylvania; is that right? A. That is the way it is allocated, yes.

TRIAL EXAMINER: What makes up the $103,000 figure?

THE WITNESS: These four figures.

TRIAL EXAMINER: $6,654, $10,089, $49,074, and $36,963?

THE WITNESS: Yes.

* * *

[19339] Q. Referring to Table III of Exhibit 422, the fact is that the figures appearing in line 1 as hydro production costs, exclusive of purchased power, are comparable to the figures appearing in Table III of Exhibit 421, line 1, and do not include all of the hydro production costs. Isn't that right? A. That is exactly the same situation.

* * *

Q. That was that unfortunate situation. [19340] A. Unfortunate, indeed; yes.

Q. And to that extent Table III, line one of Exhibit 422, differs in your method which you used in arriving at the figures on the comparable tables in Exhibit 64 and the worksheet to Exhibit 292 which appears as Table I of Exhibit 351; isn't that right? A. That is correct.

Q. That should be the worksheet which appears as Table III in Exhibit 351. A. Yes.

* * *

TRIAL EXAMINER: You say this figure of 224,230 in your Exhibit 422 is computed on a different basis from the 357,980?

THE WITNESS: No. It is the 357,980 minus 133,750, Conowingo backwater payment, which in both 421 and 422 is deducted from hydro costs.

TRIAL EXAMINER: All right.

The 357,980 is hydro costs?

THE WITNESS: The total hydro costs reported.

TRIAL EXAMINER: Likewise in your 421 the total hydro cost reported was 402,895; is that it?

THE WITNESS: That is correct.

[19341] TRIAL EXAMINER: When you say "reported", that is in Form 1?

THE WITNESS: Yes, operating costs.

TRIAL EXAMINER: As I get it, then, the only difference between the latter Exhibits 421 and 422, and your Exhibit 64, is that in Exhibit 64 you did not deduct the Conowingo item.

THE WITNESS: That is right, in Exhibit 64 I did not.

TRIAL EXAMINER: All right.

By MR. MYSE:

Q. Nor in the worksheet to back up Exhibit 292. Isn't that right, Mr. Davis? A. That is right.

Q. The ratios that you show for allocating the various transmission facilities on Table III of Exhibit 422 differ from the ratios shown in the comparable table of Exhibit 64 and the worksheet supporting your Exhibit 292, which is shown as Table III of Exhibit 351, in the same manner as the ratios we referred to on Table I of Exhibit 422 insofar as such ratios on such table differ from the comparable tables in the other exhibits. A. That is true.

[19342] Q. Refer to Table IV of Exhibit 422, please, Mr. Davis.

First of all, Table IV differs from Exhibit 64 and the Table IV of Exhibit 351 which is the worksheet to your Exhibit 292 insofar as you have allocated a portion of the dollars which you label in line 2 "Bill for Safe Harbor Power." Isn't that correct? A. It differs from Exhibit 64, yes.

Q. And Table IV of Exhibit 351? A. Yes.

Q. Do I understand correctly that that allocation to Baltimore and to the Pennsylvania Railroad Company appearing at columns 4 and 5, line 2 of Table IV of Exhibit 422 was made on the comparable basis to the allocation appearing in Table IV, line 2, columns 4 and 5 of Exhibit 421? A. That is true. All the other allocations, also.

Q. I show you a worksheet headed "Pennsylvania Railroad Service Cost Allocation, Safe Harbor Facilities" which shows figures for 1944-1945. Is that the worksheet showing the allocation of the figures on columns 4 and 5, line 2, Table IV of Exhibit 422 as well as the derivation of the amounts of the two figures together? A. That is right—only the total of the two figures.

* * *

[19369] Q. Mr. Davis, at page 19,356 you agreed to furnish one or more tabulations showing how you arrived at certain figures referred to on that page, and also a revision of a table which had been copied into the record some time before. Is that right? A. That is correct.

Q. Do you have those tabulations available this morning? A. I do.

Q. May we have copies of them? A. This is a revision of the table which was copied into the record. That is the only copy I have.

Q. This is one entitled: "1946, Energy Delivered to Railroad in Maryland and Pennsylvania from Safe Harbor." Is that right? A. That is correct.

Q. Have you used any new figures in this particular table which you have handed me other than the ones that are already in the record and which we have asked you about? A. No; those are exactly the same figures except for the slight change to show the gross and backfeed and the net delivery from Conestoga. That was a little mixed up on the [19370] other table.

Q. The other table is on page 19226; is that correct? A. That is right.

MR. MYSE: I ask the permission of the Examiner to have the calculation just handed me by the witness copied into the record as if read.

TRIAL EXAMINER: Any objection?

(No response.)

TRIAL EXAMINER: The tabulation handed the Reporter will be copied into the transcript at this point.)

(The Table referred to above is as follows:)

ENERGY DELIVERED TO RAILROAD IN MARYLAND AND PENNSYLVANIA FROM SAFE HARBOR

Gross sendout from Conestoga		407,746
Backfeed to Conestoga		1,225
Net sendout from Conestoga		406,521
Delivery to P. E. Company		
Net north at Pv'l.	30,796	
Net east at Th.	45,013	
		75,809
Balance to R.R. in Pa. and Md.		330,712
Gross Delivery on P7 and P8	130,862	
Backfeed	1,088	
Net	129,774	
[19371] Less diversion at S. H..	9,003	
Less diversion at Fishing Crk..	6,254	
Total	15,257	
Bal. for service in Md.	114,517	
Add BB meter at Pv'l.	4,264	
Total to R.R. in Md.	118,781	
Adjustment to R.R. billing	2,847	
		121,628
Balance for R.R. in Pa.		209,084

Total peak transfer energy which is transferred from P.E. interchange to R.R. Co. and pro-rated to Md. and Pa.	4,398
Supply to R.R. incl. peak transfer:	
In Md.	121,628
In Pa.	213,482

* * *

[19375] Q. Will you refer to Table V-B of Exhibit 422 and line 15, wherein you report a figure of 104,182,000 kwh. as additional energy delivered to Baltimore from Holtwood in an average year? Is that right? A. Additional energy available to Baltimore from Holtwood in an average year?

Q. Is it delivered or isn't it? A. It was not delivered in 1944. It is an estimated increase which would have been available in an average year.

Q. Well, in column 11 where it is located you have it under the heading "Delivery to Baltimore." Is it a delivery or isn't it? A. It is a delivery which could have been made in an average year.

Q. Are you saying, then, that 1944 was below average and [19376] you had to adjust it for that reason? A. That is correct, I took the adjustment furnished by the company.

Q. You say you got that adjustment of 104,182,000 kwh. from the company? A. That is right.

Q. Does that appear any place in Form 1? A. That is right.

Q. Where in Form 1 does it appear? A. I might have to do a slight subtraction to get that figure.

Q. I think I can arrive at it. If you look at 513-A of the Form 1 for the year 1944 filed by Penn Water and page 2 of the notes to Schedule 530— A. That is where it comes from.

Q. Did you arrive at that figure by taking the figure of 131,000,000 kwh., which is reported as the estimated net

sales by respondent to Baltimore Company, with average river flow and deducting the figure of 26,818,000 kwh., which appears immediately above it? A. That is right.

Q. Those two figures you used in arriving at the figure of 104,182,000 are both reported by the Company as net sales, are they not? A. That is right.

[19377] Q. So the figure you used in Exhibit 422 is a difference of net sales and thus must be itself a net figure. Isn't that right? A. That is right.

Q. So it is not the gross energy available to Baltimore but it is the net amount of energy available to Baltimore from Holtwood during an average year. Isn't that right? A. It is the net additional, that is right, the same thing.

Q. It is possible to increase the net deliveries to Baltimore Company by reducing the backfeed under the computation as reported in the Form 1 report in the year 1944, is it not?

MR. GOLDBERG: Talking about the same type which resulted in the 104,182,000?

MR. MYSE: That is right.

THE WITNESS: May I have the question?

(Question read.)

THE WITNESS: If all other conditions remain the same, and the backfeed from Baltimore is increased, then the net delivery to Baltimore could be decreased by that amount.

By MR. MYSE:

Q. If in fact there had been available in the year 1944 a net amount of 104,182,000 kwh. as shown by you in your Table V-B of Exhibit 422, how do you know that that amount of energy [19378] would not have been applied to wipe out the figure of 92,662,000 which is shown by you in column 1 of line 10 of the same table? A. No one can tell, of course, exactly what would have happened if the river had been up to a point of generating 104,000,000 kilowatt-hours more than was actually produced. We can com-

pare the figures of 1944 with 1946 which was very close to an average year, and the diversion increased quite materially in 1946.

Q. Does that complete your answer? A. I was just going to say what the backfeed did but I do not see the figure right here. I believe the backfeed increased considerably in 1946 over 1944.

Q. Your Exhibit shows that it decreased in 1946 over 1944. Isn't that right, Mr. Davis? A. Yes, I see it now. It did decrease and the diversion increased.

Q. And the net interchange sales as you show them in Exhibit 421 for 1946 increased substantially over the same figures, or comparable figures, for the year 1944, did they not? A. They did.

Q. Are you testifying that if Holtwood had had available an additional 104,182,000 kwh. in the year 1944 under average river flow conditions it would have chosen to deliver that to Baltimore at a rate of 1.4 mills per kwh. and continue diverting 92,662,000 kwh. at a rate of 4.3 mills?

* * *

[19379] THE WITNESS: This 104,000,000 is from Holtwood resources only.

By MR. MYSE:

Q. Will you answer my question, please? A. I just want to get your question straight first. If Holtwood had had 104,000,000 more energy available from its own generation, and its one-third of Safe Harbor, if the firm loads had remained the same, then it would have had no choice in what to do with it except deliver it to Baltimore or sell it in interchange in Pennsylvania.

Q. Could it not have been used to reduce either the figure of 201,075,000 kwh., appearing in line 8, column 1 of Table V-B, Exhibit 422, or the figure of 92,662,000 kwh. appearing in line 10, column 1 of the same table?

MR. GOLDBERG: I object to that as argumentative. The [19380] witness answered the question, which is highly speculative, to begin with.

TRIAL EXAMINER: Objection is overruled.

THE WITNESS: If Holtwood had had 104,000,000 additional kilowatt hours that would mean that Safe Harbor would have had a proportionate amount in addition, and the backfeed could have been reduced, the diversion might have been reduced and it might not.

By MR. MYSE:

Q. The fact is you just don't know what would have happened under those conditions. A. I told you that in the first place.

* * *

[19381] Q. If under average river flow conditions the amount of energy shown by you as backfeed on the 220 kv lines, or the diversion from Baltimore's two-thirds of Safe Harbor, or both, had been reduced under average river flow conditions where there was an additional 104,182,000 kwh available, as you testified, the result would be that on your Table VI, the amount of credit to Baltimore at the rate of 4.3 mills for that energy would have been reduced. Isn't that right?

* * *

[19382] THE WITNESS: All that I can say is that if the energy delivered to Baltimore was less there would have been a smaller amount charged to Baltimore.

By MR. MYSE:

Q. And that would have had a material effect upon the amount of total costs which you charged against Baltimore in line 5, Table VI of your Exhibit 422. Isn't that right? A. I don't know about the material effect. The effect of reducing the amount of energy delivered to Baltimore would, of course, reduce the charge to Baltimore, and the amount of reduction—

Q. It would reduce the credit, would it not? You said "charge." A. It would have reduced the energy supplied from outside of Holtwood's system; if the amount was reduced the amount of energy which Baltimore would

be required to furnish would have been less, then the charge, or the credit, rather, which is based on [19383] the amount of energy coming from Baltimore resources would have been less.

Q. As a result of that the weighted average cost of 2.37 mills which you show in Table VI, note 1, would have been reduced under those conditions. Isn't that right? A. A weighted average cost will be reduced if the higher component of it is reduced.

Q. And that would be the effect under the conditions we have been speaking about. Isn't that right, Mr. Davis? A. If Baltimore furnished less energy there would be a smaller amount at the 4.3 mills.

Q. Mr. Davis, where did the figure of 4.3 mills come from which you show in footnote 1, Table VI of Exhibit 422? A. That is from the same source of 1944 data which the 4.7 comes from in 1946.

Q. That means, as I understand you, that it comes from a Form 1 report filed by Consolidated Gas Electric Light and Power Company of Baltimore for the year 1944. Is that right? A. That is right.

* * *

[19384] Q. In any event, as I understand your testimony with respect to the 4.7 mills rate, and which is used in your Exhibit 421, like that figure you take no responsibility for the accuracy of the 4.3 mills except to the extent that you take the responsibility for having computed it accurately from whatever data does appear in Consolidated's report. Is [19385] that right? A. That is true.

Q. Will you refer to Table VI-A of Exhibit 422, please? Am I correct in understanding the figure of $115,047 which appears in that table as an adjustment of revenue was derived in substantially the same manner as the comparable figure of— A. $141,777.

Q. $141,777 appearing in Table VI-A of Exhibit 421? A. That is correct, exactly the same way.

Q. And the figures have the same meaning? A. Same meaning, transferring the revenue in the way the costs were allocated.

Q. I show you what purports to be a worksheet which has been furnished us with a heading, "Adjustment to Bill to R.R. in Pennsylvania." Is that the worksheet used by you in arriving at the figure of $115,047? A. That is correct.

Q. For the year 1944? A. That is right.

Q. I note you have written on the year 1944 which did not appear on my photostat. A. That is correct.

* * * *

[19409] Q. Mr. Davis, in figuring your mill rate of 4.3 mills, did you take the net generation appearing on line 12 of that schedule 579 for the Westport, Gould Street and Riverside plants? A. That is right.

Q. You did not take the net generation for the Pratt Street plant? A. No.

Q. And you totaled those three figures and divided them into the total of dollars appearing on line 34 in columns B, C and D. Is that right? A. That is correct.

* * *

[19412] STANLEY W. ROLAND

* * *

DIRECT EXAMINATION

By MR. GOLDBERG:

Q. Have you made a study to determine whether or not the transmission facilities owned by Holtwood and Susquehanna Companies were used for the transmission of electric energy from a state to points outside thereof during the years 1945 and 1946? A. I have.

Q. Do these studies parallel the studies you made and testified to on May 2 and 3, 1946, for 1943 and 1944? A. Yes. The studies that I have made for 1945 and 1946 operations parallel the studies which I made and testified to on May 2 and 3, 1946, regarding 1943 and 1944 operations.

Q. What additional information did you obtain for purposes of your 1945 and 1946 studies? A. Monthly operating, sales, and billing data for the years 1945 and 1946, and data showing meter quantities by hours at various points on the system for certain days during 1946. In a conference with Messrs. Von Eiff and Watchorn of the Holtwood Company, I obtained data on river flow in 1946 and ascertained whether or not there had been any significant [19413] changes in system facilities and operations since my 1944 study.

Q. On transcript page 908 of your testimony, you introduced Exhibit 37, a map entitled "Transmission Lines and Interconnections of the Pennsylvania Water and Power Company and Susquehanna Transmission Company of Maryland." Has the company revised that map? A. Yes. According to the legend on a map bearing the same title and presented through Mr. Spaulding for identification as Exhibit 353, the map which is Exhibit 37 in this proceeding is stated as having been superseded by the map marked Exhibit 353.

Q. At transcript pages 908, 909 and 910, you testified that certain transmission lines shown on Exhibit 37 were owned and operated by Holtwood and Susquehanna. Would your testimony on those pages be any different if you were relating it to Exhibit 353? A. No.

Q. Would your testimony regarding the function of the lines shown on Exhibit 37 be any different if you were relating it to Exhibit 353? A. No.

Q. What are some of the differences, then, between Exhibits 353 and 37? A. Exhibit 353 states that the line which has been referred to in this proceeding as the "Gun-

powder Line" is "used" [19414] by the Baltimore Company, whereas on Exhibit 37 it states that this line is "leased" by the Baltimore Company. Exhibit 37 designates the points shown on the map by a circled "W-1" at Conowingo, Perryville and Takoma Park as "Point of Delivery for Account of Consolidated Gas Electric Light and Power Company of Baltimore"; on Exhibit 353, however, the first two of these three points of interconnection are designated by a circled "V" and are noted as "Interconnection with the Pennsylvania Railroad Company." Exhibit 353 designates the interconnection between Susquehanna and Potomac Electric Power, north of Takoma Park, by a circled "T" and denotes this as "Interconnection with the Potomac Electric Power Company." Other changes and additions were made in Exhibit 353 but none of them appear to be pertinent to my study.

Q. Did Holtwood, during 1945 and 1946, deliver energy to the same companies which you named at transcript pages 910 and 911 of your testimony? A. Yes.

Q. Were such deliveries in 1945 and 1946 made under the same contracts which you named on page 911? A. Yes, excepting that the contract under which deliveries were made to Edison Light and Power Company during 1945 was terminated on December 31, 1945.

Q. Did Holtwood Company receive delivery of electric energy during 1945 and 1946 from the companies you named on [19415] page 912? A. Yes.

Q. Did Susquehanna perform the same character of service in 1945 and 1946 that it did in 1944? A. Yes.

Q. Did Holtwood sell electric energy in 1945 and 1946, as you stated on page 912 that it did in 1944, to Baltimore Company, Pennsylvania Power and Light Company, Philadelphia Electric Company and Metropolitan Edison Company? A. Yes.

Q. Did Holtwood sell electric energy in 1946 under the contracts you named on page 911 to the Baltimore Com-

pany, Pennsylvania Power and Light Company, Philadelphia Electric Company and Metropolitan Edison Company for resale? A. Yes.

Q. Have you examined the billings under those contracts for 1946? A. Yes.

Q. Does Exhibit 353 designate the points at which Holtwood system interconnects with the facilities of the other companies? A. Yes.

Q. Did Holtwood make deliveries of energy in 1946 for the account of Baltimore? A. Yes.

[19416] Q. At what points? A. At points of interconnection of Susquehanna with the Pennsylvania Railroad at Conowingo and Perryville, Maryland, and at a point of interconnection of Susquehanna with Potomac Electric Power Company, northeast of Takoma Park, Maryland.

Q. Have you made studies to determine, for the years 1945 and 1946, the amounts of electric energy transmitted from Pennsylvania over the facilities of Holtwood and Susquehanna across the Pennsylvania and Maryland state lines to points of delivery in Maryland? A. Yes.

Q. Have you made studies to ascertain, for 1945 and 1946, the quantities of energy transmitted over the transmission facilities owned by Susquehanna and Holtwood from the Baltimore-Washington system to the Holtwood system in Pennsylvania? A. Yes.

Q. Upon what information are these studies based? A. They are based on information similar to that obtained for 1944 which was furnished to me by the Holtwood Company at my request.

Q. Have you prepared an exhibit showing the quantities so transmitted for 1945 and 1946? A. Yes.

MR. GOLDBERG: I would like to offer for identification a document entitled "Electric Energy Transfers Across Maryland- [19417] Pennsylvania Boundary over Facilities of Pennsylvania Water and Power Company and Susquehanna Transmission Company of Maryland by Months—Values in Megawatt Hours".

TRIAL EXAMINER: The document referred to may be marked for identification as Exhibit Number 436.

(The document referred to was marked for Identification as Exhibit Number 436.)

By MR. GOLDBERG:

Q. Referring to Exhibit 436, is that exhibit comparable to Exhibit 38? A. Yes, with the exception of the years covered and the amounts shown, the two exhibits are identical.

Q. Then is it correct to say that the explanation which you gave at transcript pages 917, 918 and 919 regarding Exhibit 38 also applies to Exhibit 436? A. Yes.

Q. On transcript pages 918 and 919, you referred to a one-line diagram entitled "Pennsylvania Water and Power Company One-Line Diagram of Main Metering Points on the Holtwood-Safe Harbor-Baltimore-Washington Interconnected System," which is Exhibit 39. Did you use that diagram for the same purpose and in the same way for your 1945 and 1946 studies that you did for your 1944 studies? A. Yes.

Q. On page 920, line 19 to page 921, line 14 and referring [19418] to Exhibit 38, you testified as to the amounts of electric energy transmitted across the Pennsylvania-Maryland boundary from Pennsylvania to Maryland and from Maryland to Pennsylvania over the 220 kv circuits. Do the corresponding amounts for 1945 and 1946 appear in Exhibit 436? A. Yes.

Q. On page 921, line 18 to page 922, line 18, you testified as to the amounts of energy transmitted from Holtwood to Highlandtown during each of the years 1943 and 1944; also with respect to the amounts of backfeed over these lines, is that correct? A. Yes.

Q. Do the corresponding amounts transmitted from Holtwood to Highlandtown for 1945 and 1946 appear in Exhibit 436? A. Yes.

Q. Exhibit 436 shows zero as the amount transmitted from Maryland to Pennsylvania over the 66 kv, 25 cycle lines. Can you explain that? A. Yes.

Q. Will you please do so? A. I was advised by the Holtwood Company that its records of monthly transfers of energy over the Highlandtown lines were on a net basis and since the amount of backfeed was relatively small, only one figure representing the net amount delivered to Highlandtown would appear on its records. It is for this reason [19419] that the transfers from Highlandtown to Holtwood appear as zero for each month of 1945 and 1946 on Exhibit 436.

Q. Actually was there backfeed over those lines in 1946? A. Yes. Mr. Spaulding testified at page 17085, line 11, that the net hourly backfeed over those lines totaled 1,673 megawatt hours in 1946.

Q. Have you shown the amount of energy transmitted from Pennsylvania to Maryland and from Maryland to Pennsylvania during 1945 and 1946 over the 220 kv and 66 kv circuits in graphic form? A. I have.

MR. GOLDBERG: I would like to offer for identification a document entitled "Electric Energy Transfers Across the Maryland-Pennsylvania Boundary over Facilities of the Pennsylvania Water and Power Company and Susquehanna Transmission Company of Maryland by Months."

TRIAL EXAMINER: The document referred to may be marked as Exhibit Number 437 for identification.

(The document referred to was marked for Identification as Exhibit Number 437.)

By MR. GOLDBERG:

Q. Is this bar chart similar to Exhibit 40? A. Yes.

Q. Is your explanation of Exhibit 40 on page 926, line 10, to page 927, line 8, applicable to Exhibit 437? A. Yes.

[19420] Q. To what extent was generation at Safe Harbor

and Holtwood hydro greater or less than average in 1946? A. The output of these two plants was greater than average by 31,000,000 kilowatt hours in 1946. Q. I show you Exhibit 216. Did you inquire of the Holtwood Company whether or not this exhibit correctly shows system facilities and connections as of 1946? A. I did.

Q. What were you informed? A. I was informed that no changes were made in system facilities and connections, subsequent to the preparation of Exhibit 216, which would make any significant change in the exhibit.

Q. During 1946, how much energy was transmitted from Conestoga substation across the Pennsylvania-Maryland boundary to Conowingo and Perryville, Maryland? A. During 1946 Holtwood delivered 56,657 megawatt hours to the facilities of the Pennsylvania Railroad at Perryville for the account of Philadelphia Electric Company, since it was for railroad service north of Perryville. Approximately 44,000 megawatt hours of this amount was transmitted from Conestoga over the two circuits designated as P-5 and P-6. The balance of the deliveries at this point for the account of the Philadelphia Electric Company was transmitted over the two circuits from Conestoga, designated as P-7 and P-8, or from [19421] Washington over the Railroad Company's lines.

In 1946 Holtwood transmitted 115,605 megawatt hours to the facilities of the railroad at Conowingo and Perryville over circuits P-7 and P-8 for the account of Baltimore Company.

Q. With respect to the amounts of electric energy which Exhibits 436 and 437 show as being transmitted by the Holtwood system from Pennsylvania to the Baltimore-Washington system in Maryland over the 66 kv circuits during the years 1945 and 1946, where was that energy generated? A. Most of that energy was generated at Holtwood hydro plant.

* * *

[19422] Q. With respect to the amounts of electric energy which Exhibits 436 and 437 show as being transmitted by the Holtwood system from Pennsylvania to the Baltimore-Washington system in Maryland, over the 220 kv circuits during 1945 and 1946, where was that energy generated? A. Most of that energy was generated at the Safe Harbor plant.

Q. With respect to the amounts of electric energy which Exhibits 436 and 437 show as transmitted from the Holtwood system in Pennsylvania to the Baltimore-Washington system in Maryland during 1945 and 1946, was that energy consumed at points outside the state of Pennsylvania? A. Most, if not all, of that energy was consumed at points outside of Pennsylvania.

Q. With respect to the amounts of electric energy which Exhibits 436 and 437 show was transmitted from Maryland to Pennsylvania during 1945 and 1946, in which state or states was that energy generated? A. That energy was generated in Maryland or in the District of Columbia.

Q. With respect to the amounts of electric energy which Exhibits 436 and 437 show was transmitted from Maryland to Pennsylvania, did you make any studies to ascertain whether or not any of that energy was sold by Holtwood for resale to other electric utility companies in Pennsylvania? [19423] A. Yes, I did.

Q. On page 935, beginning at line 21 and ending at line 6 of page 939, referring to Exhibit 41, you designated the points at which Holtwood sells electric energy to others in Pennsylvania at wholesale for resale. Now, referring to Exhibit 216, is it correct to state that the points of such sales for resale in 1946 were the same as those stated on the pages of your testimony which I have just specified? A. Yes.

Q. At page 939, line 12 to page 940, line 25, you described the facilities by means of which electric energy, shown on Exhibits 38 and 40, was transmitted from Mary-

land to Pennsylvania, can be transmitted to interconnection points which you described, using Exhibit 41 for reference purposes. Now, then, is it correct to state that this description applies to the energy transfers shown on Exhibits 436 and 437, using Exhibit 216 for reference purposes. A. Yes.

MR. GOLDBERG: I would like to have marked for identification a document consisting of 32 pages entitled: "Generation and Transmission of Electric Energy on Holtwood-Safe Harbor System and Transmission from Maryland to Holtwood's Resale Customers in Pennsylvania by Hours for 30 Days of 1946."

TRIAL EXAMINER: The document referred to may be marked as Exhibit Number 438 for Identification.

[19424] (The document referred to was marked for Identification as Exhibit Number 438.)

By MR. GOLDBERG:

Q. Did you prepare Exhibit 438? A. It was prepared by me and by my assistants under my direct supervision.

Q. What, in general, does it purport to show? A. Exhibit 438 shows the generation and transmission of electric energy on the Safe Harbor-Holtwood System as well as the amounts of electric energy transmitted from Maryland to Holtwood's resale customers in Pennsylvania during each hour of 30 days in 1946.

Q. Does it show the percentage of energy delivered to Holtwood's resale customers in Pennsylvania which is transmitted from Maryland? A. Yes. That is shown in Columns 14, 17 and 29.

Q. How were the 30 days chosen which you used in your study? A. On March 5, 1947, I called on Mr. Von Eiff, Interconnection Engineer, and Mr. Watchorn, Efficiency Engineer, of the Holtwood Company to discuss with them the matter of obtaining records of hourly watt hour

meter readings at various points on the Holtwood system during 1946. Mr. Von Eiff provided me with blue print copies of tabulations and graphs showing average daily river flow for the Susquehanna River, measured [19425] at Holtwood for the year 1946.

With the aid of these tabulations, and charts, and from an examination of the load dispatcher's log sheets and other data showing sendout from Safe Harbor over the 220 kv and 69 kv circuits, backfeed over the 220 kv circuits and interchange sales by months for 1946, I designated 30 representative days of the year for which I requested that hourly load data at various points on the system be furnished. I designated the week of December 16, which was the week of maximum load on the interconnected system; a week of low river flow in September, namely, September 15 through September 21; three high flow days; and 13 other days during which daily average flows ranged from 10,400 to 25,800 cubic feet per second.

Q. Do you have a tabulation showing Susquehanna River flow for 1946? A. Yes.

Mr. Goldberg: I would like to offer for identification a document entitled "Pennsylvania Water and Power Company—Susquehanna River Flow—24 Hour Average in Thousand C. F. S."

Trial Examiner: The document may be marked Exhibit Number 439 for identification.

(The document referred to was marked for identification as Exhibit Number 439.)

By Mr. Goldberg:

Q. Do you have a graph showing Susquehanna River Flow [19426] for 1946? A. Yes.

Mr. Goldberg: I would like to offer for identification a document entitled "Daily Discharge Curves—Susquehanna River at Holtwood, Pennsylvania—1946."

TRIAL EXAMINER: The document may be marked as Exhibit Number 440 for identification.

(The document referred to was marked for identification as Exhibit Number 440.)

By MR. GOLDBERG:

Q. Excluding the three high flow days, what was the highest river flow you designated for the remaining 27 days? A. 25,800 cubic feet per second.

Q. During 1946 on how many days was the river flow 25,800 cubic feet per second or less? A. 240 days.

Q. During what months in 1946 did they occur? A. During every month excepting March and June.

Q. Do you consider that energy flows on the Holtwood-Safe Harbor System, during the 27 days on which stream flow was 25,800 cubic feet per second or less, are reasonably representative of energy flows during the 240 days when stream flows were 25,800 cubic feet per second or less? A. Yes.

Q. On transcript page 946, line 22 through page 948, line [19427] 9, you testified with respect to the approximations and possible errors involved in your studies of the amounts of energy transmitted from Maryland to the Holtwood system in Pennsylvania and sold by Holtwood for resale in Pennsylvania. Does your testimony on those pages also apply to your studies for 1946? A. Yes.

Q. On transcript page 948, line 16 to page 956, line 11, and referring to Exhibit 42, you described how you computed the quantities of electric energy, if any, transmitted from Maryland to Pennsylvania Power and Light Company at Donegal Tap and at Lehman Farm, and to Pennsylvania Water and Power Company's Holtwood station, using some particular hour as an example. Does the testimony you gave at those pages also apply to Exhibit 438? A. Yes, with one exception, which is purely a matter of presentation. That is in Exhibit 42, column 12 shows total deliveries to Pennsylvania Power and Light Company via Donegal,

whereas in Exhibit 438, column 12 shows the firm deliveries, and column 12a shows other deliveries to Pennsylvania Power and Light Company via Donegal. The percentage figures shown in column 17, however, apply to the amounts shown in both columns 12 and 12a.

Q. In your studies of energy transfers for the 30 days, did you find hours when all the energy delivered to Pennsylvania [19428] Power and Light Company at Donegal and at Lehman Farm and all the energy delivered to Holtwood via Lehman Farm was transmitted from Maryland? A. Yes.

Q. How many such hours did you find? A. There were 240 hours representing 33 per cent of the total hours in the 30 days when all the energy delivered to Pennsylvania Power and Light Company at Donegal was transmitted from Maryland.

There were 218 hours representing 30 per cent of the total hours when all the energy delivered to Pennsylvania Power and Light Company at Lehman Farm, and 210 hours representing 29 per cent of the total hours, when all the energy delivered to the bus at Holtwood via Lehman Farm, was transmitted from Maryland.

Q. During how many hours of the 30 days did you find that there was no generation by the main 60-cycle generators at Safe Harbor? A. There were 302 such hours representing 42 per cent of the total hours.

Q. During how many hours of the 30 days did you find that all the energy supplied to the 13 kv, 60-cycle bus at Safe Harbor came from Maryland? A. There were 270 such hours representing 38 per cent of the total number of hours in the 30 days.

[19429] Q. Do you find it generally true, with respect to your 1946 study, when the hydro units at Safe Harbor are not generating energy, that energy is transmitted to Safe Harbor from Maryland? A. Yes.

Q. Were there some hours during the 30 days in 1946 when energy was transmitted from Maryland to Safe Har-

bor during the same hours when energy was generated by the main units at Safe Harbor? A. Yes.

Q. At transcript pages 960, line 24 to 966, line 17, you described how you determined the amounts of electric energy transmitted from Maryland to Safe Harbor, during the same hours when energy was generated by main units at Safe Harbor; which was sold to Pennsylvania Power and Light Company at Donegal and Lenman Farm, and what part, if any, was transmitted to the Holtwood bus. Did you employ the same method and assumptions described on those pages in preparing Exhibit 438? A. Yes.

Q. On pages 967, line 10 to 972, line 16, referring to Exhibit 42, you described what happened to the energy transmitted from Maryland to the 13 kv, 60-cycle bus at Holtwood. Does your testimony on those pages also apply to your 1946 study as shown in Exhibit 438? A. Yes. There is one difference of presentation, however, [19430] that should be pointed out. In Exhibit 42, column 31 shows total deliveries to Metropolitan Edison; whereas in Exhibit 438, column 31 shows the firm deliveries and column 31a shows other deliveries to Metropolitan Edison Company. The percentage figure in column 29, however, applies to the amounts shown in both columns 31 and 31a.

Q. During how many hours of the 30 days to which you have referred was electric energy transmitted from Maryland via Safe Harbor and Holtwood to Metropolitan Edison at York; to Pennsylvania Power and Light Company over circuit 18; to Philadelphia Electric Company at Coatesville; and to the 11 kv, 25-cycle bus through the frequency changer? A. Electric energy was transmitted from Maryland via Safe Harbor and Holtwood to Metropolitan Edison Company during 423 hours; to Pennsylvania Power and Light Company over circuit 18 during 351 hours; to Philadelphia Electric Company during 425 hours; and to the 60-cycle end of the frequency changer during 156 hours.

In terms of percentage of total hours in the 30 days, these amounts are 59, 49, 59 and 22 per cent, respectively.

Q. During how many hours of the 30 days was electric energy transmitted from Maryland via Safe Harbor and Holtwood to meet Metropolitan Edison Company's firm demands at York? A. There were 218 such hours representing 30 per cent of the total number of hours in the 30 days.

[19431] Q. On transcript pages 974, line 3 to 976, line 7, you explained how you derived the entries shown in columns 36 through 43 of Exhibit 42. Did you derive the entries in columns 36 through 43 of Exhibit 438 in the same way? A. Yes.

Q. On pages 976, line 11 to 977, line 23, referring to Exhibit 42, you testified with respect to the amounts of energy transmitted from Maryland to Pennsylvania Power and Light Company over Circuit Number 3 via Safe Harbor and Holtwood. Is the same method you described at those pages applicable to your study shown in Exhibit 438? A. Yes.

Q. During how many hours of the 30 days was some electric energy transmitted from Maryland via Safe Harbor and Holtwood or from Highlandtown to Pennsylvania Power and Light Company over Circuit Number 3? A. There were 226 such hours representing 31 per cent of the total hours in the 30 days. The amounts for some of these hours are very small.

Q. Did you find any hours during the 30 days when electric energy delivered to Pennsylvania Power and Light Company over Circuit Number 3 was electric energy transmitted from Highlandtown over Circuit Numbers 1, 2, 5 and 6? A. Yes. There were 92 such hours representing 13 per cent of the total hours in the 30 days.

[19432] Q. From the study you have made, do Pennsylvania Water and Power Company and Susquehanna Transmission Company of Maryland each own and operate facilities for the transmission of electric energy, which is trans-

mitted from one or more states and consumed at points outside thereof? A. Yes.

Q. Are the amounts of such electric energy so transmitted substantial? A. Yes.

Q. Does the transmission of such substantial amounts occur frequently? A. Yes.

Q. Generally speaking, what are the facilities for the transmission of such energy? A. The substations and transmission lines owned by Holtwood and Susquehanna as shown on Exhibit 353 are used for that purpose.

Q. Does Holtwood sell for resale electric energy so transmitted? A. Yes.

Q. To what companies does Holtwood sell for resale electric energy so transmitted? A. Baltimore Company, Pennsylvania Power and Light Company, Philadelphia Electric Company, and Metropolitan Edison Company.

[19433] Q. Do Holtwood and Susquehanna each own and operate facilities for such sales? A. Yes.

Q. Generally speaking, what are those facilities? A. Those facilities would include the substations and transmission lines owned by Holtwood and Susquehanna, as shown on Exhibit 353, together with metering and other equipment for billing and recording sales.

* * *

[19438] CROSS-EXAMINATION.

By MR. MYSE:

* * *

[19446] Q. Did you ever take a look at the Form 1 report to find out how much the company reported as being delivered to Baltimore Company in the year 1946? A. No, but I have shown in some of my exhibits here how much was delivered to the Baltimore Company. It was sold to them.

Q. You do show in your exhibit some place how much was sold to Baltimore Company, assuming delivery is the sale. A. Yes, I showed how much was delivered over the [19447] Highlandtown lines and what the sendout was

over the 220 kv lines from Safe Harbor. Some of that includes losses; losses are included in the figures.

Q. Are you saying all deliveries over those two lines was sold by Holtwood to Baltimore Company? A. I don't know what in a legal sense would be considered a sale, but in my opinion——

Q. I am not asking you in a legal sense but I am asking you in whatever sense you use the word "sell" in your testimony. A. Yes, I would say whatever was delivered to them was sold to them.

Q. In other words, everything which was delivered over the Highlandtown line by Holtwood to Baltimore and everything that was delivered over the 220 kv lines by Holtwood to Baltimore was sold by Holtwood to Baltimore. Is that your testimony? A. Yes.

Q. Are there any other deliveries by Holtwood to Baltimore over any other lines which you consider a sale by Holtwood to Baltimore? A. Yes, over the 132 kv lines, single-phase lines at Conowingo and Perryville.

* * *

[19454] Q. Did you consider all of the sales today to Metropolitan Edison Company other than interchange transactions as firm energy transactions? A. Not according to the usual definition of firm energy, but it is firm energy the way it is defined in the contract.

Q. According to the way you would normally consider firm energy transactions do you consider all of the transactions with Metropolitan Edison Company other than interchange transactions as firm energy transactions? A. Not according to the concept of firm energy I have had in the past.

Q. Well, let's have your concept of firm energy in the past. A. The definition which appears in Form 12 and I believe schedule 8. reads, "Firm power is power which is intended to be continuously available to the purchaser."

Q. To that extent, then, some of the energy transactions [19455] with Metropolitan Edison Company other

than interchange transactions are not firm energy. Is that right? A. Not according to that definition which I just gave you. It is a limited type of delivery which is not in conformity with the definition which I just gave you.

Q. Which of the energy supplied to M. E. other than the interchange transactions do you consider not to be a firm energy transaction under the definition you have referred to? A. I presume the energy above the steam line would be considered ordinarily as a firm obligation. The others have strings tied to them. There has to be a certain ratio of hydro and steam generation; it has to be supplied during certain hours. It is not unlimited service, in other words. It has a lot of strings tied to it which ordinarily you do not get with firm commitments in the ordinary sense, as the term is ordinarily used.

Q. Do I understand your testimony to be then, Mr. Roland, that the energy transactions with Metropolitan Edison Company other than the interchange transactions and other than the transactions relating to energy supply above the steam line are the energy transactions which you do not consider to be firm energy transactions within the meaning of the definition to which you have referred in the Form 12 report. Is that right? A. That is my offhand opinion on the thing, yes.

[19456] In my Exhibit 438 I listed it as firm, because that is the way the company designates it, as "firm." I did that in that exhibit.

Q. In other words, you anticipate me a little bit, Mr. Roland.

Exhibit 438, then, insofar as it divides up the energy supplied to Metropolitan Edison Company between interchange and firm, is not in accordance with your understanding of the division which should be made between the energy supplied to Metropolitan Edison Company. Is that right?

• • • •

THE WITNESS: I haven't given a great deal of thought to that question as to whether or not that is properly designated as firm or interchange; that is the A, B and C energies in the M. E. contract. You asked for my offhand opinion and I gave it.

In accordance with the definition that I gave you the part of that which is shown as firm energy in my opinion would not ordinarily be classified as firm.

By MR. MYSE:

Q. I am asking for your testimony and not what [19457] ordinarily would be done by somebody else. What is your opinion? A. That is what I am giving you.

Q. Then your offhand opinion is what you understand on it, is that right, Mr. Roland? A. Yes. That is all I can do, isn't it?

• • •

[19479] Q. Mr. Roland, at page 9 of your proposed testimony you stated that the 30 days used by you in Exhibit 438 were representative of the year, did you not? A. Yes.

Q. How many days out of the 30 did you include in your exhibit in which river flow was 25,800 C. F. S. or lower? If I recollect it was something like 27 out of 30, isn't that right? A. 26 days?

Q. 27. A. Including the 25,800 it would be 27.

Q. That means, does it not, that only the three highest flow days that you used in your Exhibit 438 are days in which the river flow was higher than 25,800 C. F. S.? A. Yes.

[19480] Q. That means you have included in your 30 days some 90 per cent, approximately, of days when the river flow was 25,800 C. F. S. or lower. Isn't that right? A. Yes, and for the reasons that I stated in connection with my Exhibit 42.

Q. Let's hold the reasons and stick to my question. Do you have any idea what the average number of days

are out of the 365 in the year when the river flow is 25,800 C. F. S. or lower? I have a figure of 210 days out of 365, or roughly 58 per cent. Does that help you any?

* * *

THE WITNESS: I would believe there would be more days than that when the flow was less than 25,800. I would say that it would be approximately 235 days. I am now using the curve furnished me by the company.

MR. GOLDBERG: Are we trying to ascertain during how many days in 1946 the river flow was 25,800 C. F. S. or less?

MR. MYSE: No. The question was what was the number of days when the river flow is 25,800 C. F. S. or lower under average flow conditions.

THE WITNESS: Under average flow conditions?

By MR. MYSE:

Q. Yes. A. It was 233 days in my count here for 1946 which is [19481] pretty close to an average year.

Q. Well, 233 is roughly what percentage? That would be 60 per cent, wouldn't it? A. Yes, it is fairly close to that.

Q. On an average water-flow year it would be slightly less than that, isn't that right? A. It depends upon where the deviation from the average occurred, whether it was in the low flows or the high flows. It would be in that neighborhood, however.

Q. Well, that is satisfactory to me. Do you happen to have an average flow duration chart with you? A. I think I have one here.

Q. You can get it off that, can't you? A. About 58 per cent.

Q. As a matter of fact, in your 30 days you included no days in which the river flow was between 26,000 and 65,000 C. F. S. Isn't that right? A. That is right. Three days in which the flow was 30,000 and over. That is all.

Q. None of those days happen to be days in which the river flow is between 26,000 and 65,000 C. F. S. Isn't that correct? A. That is right.

Q. Do you know what the average number of such days would be on an average flow duration chart on the Susquehanna River, [19482] that is days between 26,000 and 65,000 C. F. S.? A. About 100 days.

Q. 100 days out of 365. That gives you roughly 27 per cent, does it not? A. Yes. I had 28 per cent.

Q. What was it in 1946? A. 20 per cent.

Q. The figure of 65,000 C. F. S. represents full power house draft conditions, does it not? A. At Safe Harbor, yes.

Q. When you referred to the week of maximum load on the interconnected system in your testimony on page 9 of your prepared testimony you were there referring to the Area 6 system, were you not? A. Yes.

Q. You were not referring to the Penn Water-Safe Harbor system alone, were you? A. Only to the interconnected system load.

Q. That is the Area 6 system as you know it? A. Including the Pennsylvania customers, yes.

* * *

[19487] J. M. NEWLANDS.

* * *

[19488] DIRECT EXAMINATION.

By MR. HALL:

Q. Mr. Newlands, have you reviewed the facts with reference to the loss of materials and supplies amounting to $13,033.04 claimed by Penn Water in its original cost determination as shown by Schedule H of Exhibit No. 320? A. Yes.

Q. Did McCall Ferry Power Company take a physical inventory of supplies and materials at December 31, 1908? A. Yes.

Q. What quantity of cement was listed in that inventory? A. 17,246 barrels of Giant and Atlas cement and 18,490 barrels of Union cement.

Q. What was the cost of this cement to McCall Ferry Power Company? A. The Giant and Atlas cement cost $1.73 a barrel and the Union cement $1.18 a barrel, or a total cost of $51,653 for the cement on hand at December 31, 1908.

[19489] Q. What was the balance of the material and supplies account on McCall Ferry Power Company's books at December 31, 1908? A. The balance on the books was $35,421 at that date.

Q. What entry would be necessary to correct the books to agree with the actual physical inventory of cement at December 31, 1908? A. It would be necessary to reduce the recorded construction costs by $16,232 and to increase the material and supplies account by the same amount to reflect the return of the unused material to stock.

Q. Was any construction carried on between December 31, 1908, and the date the Receiver was appointed, July 17, 1909? A. No. There had been no construction work since the previous October.

Q. What amount of supplies were charged out from material and supplies account during the period from December 31, 1908, to July 17, 1909? A. Less than $500.

Q. Was any cement purchased during this period? A. No. There were no construction materials of any kind purchased during this period.

Q. Would the same adjustment of construction costs have been necessary at July 17, 1909, the date the Receiver was appointed for McCall Ferry Power Company, as was necessary [19490] at December 31, 1908, in order to account for the excessive materials charged to construction? A. Yes.

Q. Was this adjustment ever made on the books of McCall Ferry Power Company or any successor? A. No.

Q. Was any part of the 35,736 barrels of cement on hand at December 31, 1908, ever used in construction? A. The Receiver used 7,852 barrels of this old cement during 1909 and charged it to construction at a reduced cost due to its poor quality. Penn Water also used 8,626 barrels of this old cement during the last four months of 1910 and charged it to construction.

Q. Have you, in your original cost determination as reflected in Exhibit 51, allowed as plant costs the charges made to construction by the Receiver and by Penn Water for the portion of the old cement which was actually used in construction during 1909 and 1910? A. Yes.

Q. Have you found any evidence indicating that the balance of the old cement amounting to 19,258 barrels was ever used in construction work? A. No.

Q. Have you found any evidence indicating why the cement was not used? [19491] A. Yes, correspondence indicated that the cement had spoiled.

Q. What adjustment would be necessary to your original cost determination to remove the cost of the unused spoiled cement? A. It would be necessary to decrease the original cost by at least $16,232, the amount of the difference between the physical inventory of cement at December 31, 1908, and the book balance of the material and supplies account at the same date.

Q. In other words, in order to correctly account for the loss due to deteriorated cement it would be necessary to decrease your recommended original cost allowed by $16,232 instead of increasing it by $13,033 as Penn Water now proposes? A. Yes.

Q. When did the deterioration of the cement take place? A. Memoranda in the files indicate it occurred during the delay caused by the suspension of work.

Q. Did the Receiver or Penn Water purchase any Giant and Atlas or Union cement during 1909 or 1910? A. No.

Q. Did you, during your investigation, find any evidence which indicated that the firm of Harvey Fisk & Sons at any time controlled McCall Ferry Power Company? A. No. I found no such evidence or indication. The correspondence, documents and minutes of both McCall Ferry Power [19492] Company and Susquehanna Contracting Company and other records which I examined indicated only that the Fisk firm, after it came into the financing picture, shared in the control of McCall Ferry Power Company but did not dominate or control it either alone or with the aid of any other interest.

Q. Did the minutes of the Board of Directors or Executive Committee of McCall Ferry Power Company or of Susquehanna Contracting Company indicate in any way that Harvey Fisk & Sons or W. M. Barnum were to manage McCall Ferry Power Company or that they actually did manage the enterprise? A. No. There is not the slightest indication in any of the contemporary records to that effect. A search of the correspondence and other records disclosed no management activities by the Fisk firm or by W. M. Barnum; nor were there any communications from or to Harvey Fisk & Sons or W. M. Barnum dealing with the management of the project.

Q. What position did Mr. W. M. Barnum hold with McCall Ferry Power Company? A. Mr. W. M. Barnum was a member of the Board of Directors and the Executive Committee of McCall Ferry Power Company. He performed the duties of these positions in common with the other members.

Q. Who was the chairman of the McCall Ferry Power Company Executive Committee? A. There was no formal chairman, but Mr. Dimock, the [19493] president of McCall Ferry Power Company, was by far the most active member of the Committee. He was a member of most of the subcommittees created at various times to investigate particular problems. Reports and communications regarding management activities or problems were addressed to

Mr. Dimock. None were addressed to W. M. Barnum or to Harvey Fisk & Sons.

Q. To what extent do the minutes of the Executive Committee indicate that Mr. W. M. Barnum participated in the committee's activities? A. Mr. W. M. Barnum's attendance at Committee meetings was listed together with the other members present and appeared again when he resigned. Aside from this Mr. Barnum's name appeared in connection with the Committee's activities only four times in the entire minutes.

Q. Did Mr. W. M. Barnum state the conclusions of the Executive Committee as claimed by Mr. Gunn at page 7598 of the transcript? A. No. There is no indication that he did.

Q. What was the total number of Executive Committee meetings and how many were attended by Mr. Dimock? A. The Executive Committee held a total of 109 meetings all of which were attended by Mr. Dimock.

Q. How many of the Executive Committee meetings did Mr. Hutchinson attend in his capacity as Chief Engineer? A. Ninety-two meetings.

[19494] Q. How many Executive Committee meetings did Mr. W. M. Barnum attend? A. Eighty meetings.

Q. What did your investigation disclose as to the management of McCall Ferry Power Company? A. It disclosed that the active management of the company was in the hands of its officers, particularly Mr. Dimock, the President; Mr. Kirkland, the Vice-President and General Manager; and Mr. Hutchinson, the Chief Engineer.

Q. Who negotiated the contracts with Hugh L. Cooper and Sanderson & Porter for the construction of the project? A. These contracts were negotiated by Mr. H. F. Dimock and Mr. C. A. Coffin.

Q. How were the members of the Board of Advisory Engineers of McCall Ferry Power Company employed? A. On May 12, 1905, Mr. Hutchinson wrote to Messrs. H. L. Cooper, F. O. Blackwell and C. T. Main stating the

terms of their prospective employment. Mr. Hutchinson's arrangements were ratified and confirmed by the Executive Committee of McCall Ferry Power Company on September 20, 1905.

Q. Have you found any indication in the contemporary correspondence, documents or records that Harvey Fisk & Sons were entitled to or actually did receive 17,537½ shares of common stock of McCall Ferry Power Company? A. No. I found no such indication.

[19495] Q. Did you find any record of the transfer of any of the ten incorporators' shares of McCall Ferry Power Company from the names in which they were originally issued? A. The only transfer was recorded on June 22, 1906, when six of these shares were transferred to F. W. Walz.

Q. Where were construction expenditures charged on the books during the cessation period extending from November 1, 1907, to August 1909? A. To the regular detailed construction accounts of McCall Ferry Power Company.

Q. Why did McCall maintain its administrative and construction organization during the period of cessation? A. It wished to keep its trained construction team intact for the completion of the project?

Q. Was this goal achieved? A. No. Due to the long delay in obtaining additional financing the entire administrative and construction forces were finally discharged with the exception of a few watchmen and administrative employees.

Q. Did you find any evidence that the maintenance of this standby administrative and construction force during the period of cessation resulted in any reduction of the cost to complete the project through any saving or any necessary expenditure avoided when the project was finally completed by the Receiver and Penn Water? [19496] A. None whatever.

Q. Did you eliminate from the original cost of plant the cost of reestablishing the construction plant in 1908 for

the tailrace work or the cost of reopening the project incurred by the Receiver in 1909? A. No, I did not.

Q. Who had direct supervision of the limited amount of construction work done by McCall Ferry Power Company during 1908? A. Mr. J. B. Goodwin, an engineer on the payroll of McCall Ferry Power Company was placed in charge of the work.

Q. Did Mr. Hutchinson exercise any direct supervision of the construction work carried on in 1908? A. No.

Q. What was the nature of Mr. Hutchinson's work during the cessation period? A. His work was administrative in character such as planning the work suspension; budgeting the company's activities; planning for the future resumption of work and the eventual completion of the project; estimating plant costs, costs to complete, and prospective earnings; reporting on the progress of the work and the condition of the work, etc.

Q. Did you find any indication in the records that the work done by Hutchinson during the period of cessation resulted in any saving or the avoidance of any necessary expenditure [19497] when the work was finally completed by the Receiver and Penn Water? A. None whatever.

Q. Did Albert S. Crane and J. D. Mortimer prepare a report dated September 10, 1908 for Electric Bond and Share Company as to the condition of the work at McCall Ferry? A. Yes.

Q. How was the balance of the Cessation Account on the books of McCall Ferry Power Company described in that report? A. The balance was described as "Loss due to Stoppage of Work".

* * *

[19506] Q. Did Penn Water provide an office for Mr. Bushong during the period from 1912 to 1915? A. No.

Q. Did your investigation indicate whether Penn Water by March, 1916 had acquired all the flowage rights necessary for its flashboard installation? A. The correspondence indicated that the company believed it had the

necessary rights for its flashboards after the acquisition of the Woelpper property in March, 1916 and immediately took steps to replace the flashboard installation.

Q. Why did Penn Water acquire the Hiemenz, Heine and Harnish properties in 1920? A. These properties were acquired on the general [19507] recommendation of Carney and Lindemuth in their report of June, 1920 as a site for the river coal plant later built by Anthracite Production Corporation.

Q. Why did Penn Water acquire the Vandersloot, Colemanville Water and Power Company, Lancaster & York Furnace Street Railway Company, and Alice M. Tripple properties in 1921? A. To settle flashboard suits brought by these parties in the latter half of 1918.

Q. Did these suits ever come to trial? A. No.

Q. Were any flashboard suits filed after 1918? A. One suit was filed in 1929 and another in 1933.

Q. Why did Penn Water acquire the Hiemenz property in 1922 and the Rineer and Martin properties in 1923? A. To provide further area for the river coal recovery operations of Anthracite Production Corporation.

Q. Why did Penn Water acquire the Manor substation site? A. This site was acquired in connection with the Safe Harbor development.

Q. When did the owner of the DePue property bring suit against Penn Water? A. In November, 1924.

Q. How many flowage basin properties were acquired for the Holtwood project between 1926 and 1929? [19508] A. Only one property was purchased—the George B. Willson property acquired in 1927.

Q. Did Penn Water undertake any construction during the years 1916 to 1922? A. Only minor work. The company's major construction program was completed at the end of 1914.

Q. What transmission lines were built between 1916 and 1929? A. The Coatesville and York lines were built in 1923 and the Lancaster Line in 1925.

Q. Who acquired the rights of way for these lines? A. Penn Water employed several agents to acquire the rights of way.

Q. Were the salaries and expenses for these agents included as a cost of constructing the lines? A. Yes.

Q. To how many road and bridge relocations did Penn Water contribute from 1916 to 1929? A. Penn Water contributed to the replacement of the Otter Creek Bridge in York County in 1923 and to the relocation of a highway in Conestoga Township during the same year.

Q. Mr. Newlands, do you have a copy of Simpson, Thacher & Bartlett's bill for legal services which was attached to voucher 6892, referred to in the last paragraph on page 1 of Exhibit 239? [19509] A. Yes. I have a copy made from the original bill in the company's files.

Q. What does the bill indicate as to the distribution made by the company of the bill on its books? A. A handwritten notation on the bill distributes the total charge of $2,044.15 by assigning $1,000 to Bond Issue Expense, $44.15 to Flowage Basin, and $1,000 to Accounts Payable Suspense (Legal).

Q. Was this distribution entered on the company's books of account? A. Yes, but a later entry transferred the $1,000 originally charged to Accounts Payable Suspense (Legal) to Flowage Basin.

Q. What was the nature of the services which the company classified as Accounts Payable Suspense (Legal)? A. They were general legal services chargeable against income.

Q. What item is classified to Flowage Basin Account on the bill? A. An item is called "Consideration of the Woelpper injunction case."

MR. HALL: Mr. Examiner, I would like to have marked for identification a bill from Simpson, Thacher & Bartlett, dated December 20, 1915. It consists of two photostatic pages.

TRIAL EXAMINER: It will be marked for identification as [19510] Exhibit No. 444.

(The document above referred to was received and marked for identification as Exhibit No. 444.)

By MR. HALL:

Q. Did Simpson, Thacher and Bartlett handle the trial or preparation of the Woelpper injunction case? A. No. Mr. W. U. Hensel handled the entire case for Penn Water.

Q. Did Mr. Malone's bills to Penn Water, referred to in the second paragraph on page 2 of Exhibit 239, show the nature of the legal services rendered by him? A. No.

Q. Did the bills or vouchers show the basis for the distribution of the fees to flowage basin? A. No.

Q. Are there any records available showing the details of the work done and time spent by Mr. Malone for which he rendered these bills? A. I know of none and the company has given me none except a general statement by Mr. Bortner expressing his personal opinion as to what the charges represent.

Q. Have you found any record showing that Malone actually negotiated the purchase of any property for Penn Water? A. No.

Q. How did the company classify these legal fees in its [19511] original cost reclassification? A. As general overheads.

Q. Have you been able to determine from the Company's records any amounts charged to Flowage Basin subaccounts E, River Observations; 6, 6E and 6L, Engineering Expenses, or 6N, 6O or 6T, Office and Miscellaneous Expense, which resulted from and were necessary for the purchase of any of the properties acquired by Penn Water? A. No.

Q. Have company representatives presented to you any evidence relating the individual charges for engineering expenses in the Flowage Basin account to the purchase of any property, describing the work done, the cost, and explaining

the necessity of the expenditure for the acquisition of the property? A. None other than a statement made by Mr. Bortner expressing his personal opinion as to the general nature of the charges in Flowage Basin Account.

Q. Do you refer to Mr. Bortner's statement which has been offered by the Company as Exhibit 237 in this case? A. Yes.

Q. Where should the cost of hydrographic surveys, river observations, backwater observations, gauge readings, etc., be charged after the beginning of commercial operation? A. They should be charged to operating expenses.

Q. How should expenses incurred in connection with the [19512] investigation of and cost of defending against flooding and damage claims be treated on the books? A. As an operating expense.

Q. Did you ask Mr. Bortner the nature of the duties assigned to the Lancaster office? A. Yes, and the information he furnished me is contained in a memoranda dated December 12, 1945.

MR. HALL: I ask to have marked for identification a document consisting of five photostatic pages captioned "Memorandum—Re: Lancaster Office Expense," dated December 12, 1945.

TRIAL EXAMINER: It is marked for identification as Exhibit 445.

(The document above referred to was received and marked for identification as Exhibit No. 445.)

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[19517] Q. Have you investigated the items listed on Schedules K-1, K-2 and K-3 of Company's Exhibit 320? A. Yes.

Q. What is the character of the items listed in Schedule K-1? A. Except for Item No. 1, all the items on Schedule K-1 represent necessary repair and maintenance work involving replacement of individual parts of equip-

ment or structures. Item 1 represents the replacement of a minor one.

Q. Did the original entries made on the books for these transactions represent an accepted accounting practice at the time of the entry? A. Yes.

Q. Did the company in making its calculations of betterments on Schedule K-1 use current price quotations as at the date of replacement for the old parts being replaced? A. No. With the possible exception of one item, the company resorted to estimates arrived at by trending the cost of the old item to the year of replacement by means of commodity price indices. In some cases where the item being replaced represented a part of a machine bought as a unit, even the original cost of the old part had to be estimated.

Q. Are commodity price indices an accurate measure of the current price of replacement parts for old equipment? [19518] A. No.

Q. What is the character of the items listed on Schedule K-2? A. These items represent mainly straight maintenance and repair work but include some relocation and rearrangement work and a few replacements.

Q. Did the original entries made on the books for these transactions represent an accepted accounting practice at the time of the entry? A. Yes.

Q. Which items represent relocations or rearrangements of equipment? A. Items 6, 11, 18 and 20.

Q. Is the cost of relocating or rearranging equipment a proper charge to plant account? A. No.

Q. Has the company capitalized any part of the cost of relocation of Items 6, 11, 18 and 20? A. Yes, the company capitalized $2,900 of the cost of relocating the Low-Tension Bus Reactors and $11,000 in connection with the modification of the pull boxes.

[19519] Q. Were any substantial additions of new equipment made in connection with the relocation of Items 11 and

18? A. No, the material used was primarily to replace existing facilities.

Q. Do you recommend that any additional amount be added to plant account as a result of these relocations listed on Schedule K-2? A. No. If any adjustment is made the amount already charged to plant account should be materially reduced.

Q. Which items listed on Schedule K-2 are replacements of previously existing items of equipment? A. Items 4, 8 and 19.

Q. What is the proper accounting for the item of alterations to leased premises, Item 21? A. It was properly charged to operations when incurred.

Q. Were the construction plant buildings listed at Item 26 used in the company's operations? A. Yes, they were used in the company's operations until 1928 when they were replaced by permanent stores and shops buildings which were erected at that time.

Q. What do the rest of the items on Schedule K-2 represent? A. They are all maintenance and repair items.

Q. Do you recommend that the company be allowed to add to plant account the items listed on Schedules K-1 and K-2? [19520] A. No. They were properly treated as repair and maintenance items when incurred.

Q. Is there any precise accounting standard which determines what portion of minor replacements or repair and maintenance work, if any, shall be treated as a betterment or capital addition? A. No, the determination of what portion, if any, of items of this nature should be added to plant account is largely a matter of managerial judgment which varies from company to company and from period to period. So long as the policy adopted results in a reasonable statement of operating expenses and plant costs it is acceptable under accounting standards. As a general rule great caution should be exercised in the capitalization of items of this nature.

Q. In your opinion, is it proper accounting practice to review and change decisions of this nature made previously in accordance with accepted accounting practices and to adjust the books retroactively to agree with the latest policy. A. No, such reaccounting would seriously violate sound accounting principles.

Q. What is the character of the items listed on Schedule K-3? A. These items represent replacements of existing facilities made prior to the time the company began recording retirements of property on its books or during the period [19521] immediately following when the change to a retirement policy was being effected. Prior to the adoption of the policy of recording retirements, the cost of replacing facilities was charged by the company to the depreciation reserve or to operating expense in lieu of removing the cost of the old facility from plant account and adding the cost of the new.

Q. Did the entries made on the books for these transactions represent an accepted accounting practice at the time of the entries? A. Yes.

Q. Do you recommend that the items be reaccounted for as proposed by the Company? A. No. The items were accounted for properly when the entries were made and should not be subject to a later reaccounting. The original accounting for item 2, covering the repaving of tailbays 5 and 6 in order to fill in the eroded rock surface of the tailbays, and item 13, covering the relocation of the railroad track into the hydro station, is preferable to the reaccounting proposed by the company in Exhibit 320.

* * *

[19527] Q. I show you a tabulation entitled "Consolidated Balance Sheet, December 31, 1946, Per Books and As Adjusted." Was this statement prepared by you? A. Yes, this statement was prepared by me from the books and records of the Company.

MR. HALL: Mr. Examiner, I would like to offer this document entitled "Consolidated Balance Sheet, December 31, 1946, Per Books and As Adjusted" for identification.

TRIAL EXAMINER: The document may be marked as Exhibit Number 449 for identification.

(The Document referred to was marked for identification as Exhibit Number 449.)

By MR. HALL:

Q. Will you describe the statment just identified? A. The statement just identified is a consolidated balance sheet of Pennsylvania Water and Power Company and its wholly owned subsidiary, Susquehanna Transmission Company of Maryland, as at December 31, 1946, and shows the financial position of [19528] the companies at that date on a consolidated basis. The first column shows the balances per books. The second column shows the examiners' adjustments on a basis consistent with the adjustments made by the examiners at December 31, 1945 as shown by Exhibit 51. The third column shows the adjusted balances.

Q. I show you a tabulation entitled "Summary of Construction Work in Progress (Consolidated), as at December 31, 1946." Was this statement prepared by you? A. Yes, this statement was prepared by me from the books and records of the Company.

MR. HALL: Mr. Examiner I would like to offer this document entitled "Summary of Construction Work in Progress (Consolidated), As at December 31, 1946" for identification.

TRIAL EXAMINER: The document may be marked for identification as Exhibit Number 450.

(The Document referred to was marked for identification as Exhibit Number 450.)

By Mr. Hale:

Q. Will you please describe the statement just identified? A. The statement just identified contains a list of the construction work in progress at December 31, 1946, for Pennsylvania Water & Power Company and Susquehanna Transmission Company of Maryland as shown by the books.

* * *

[19561] Cross-Examination.

By Mr. King:

* * *

Q. Now, Mr. Newlands, will you please refer to the portion of your rebuttal testimony covering the loss in materials and supplies? I believe it is page 19488 of the transcript. Do you have that before you? A. No, I haven't.

Q. Would you secure a copy of the transcript so I can keep my copy before me? [19562] A. Yes, sir. I have it.

* * *

By Mr. King:

Q. Mr. Newlands, do you know that the 8,626 barrels of cement referred to by you at transcript 19490, line 11, were Union cement? A. The records that I saw didn't indicate clearly, but I think that was indicated by what I did have available.

Q. Are you aware of the fact that the mixer plant of the company was destroyed by fire on July 31, 1911? A. Yes.

Q. Are you aware of the fact that there were approximately 21,000 bags of Union cement destroyed by that fire? A. I was aware that there were 21,000 bags of cement. I was not aware that it was destroyed by fire, however. The correspondence indicates that the fire didn't harm the cement.

Q. Did not? A. That is right.

Q. I show you a document entitled "Schedule of property of Pennsylvania Water and Power Company, McCall [19563] Ferry, Pennsylvania, fire of July 31, 1911," and ask you to turn to page 3 of that document and ascertain whether or not the company claimed the loss of 21,000 bags of Union cement.

* * *

TRIAL EXAMINER: What is this document?

MR. KING: That is a copy, I believe, of the claim to the insurance company by the company in connection with the loss as a result of the fire which destroyed the mixer plant.

TRIAL EXAMINER: When was that filed with the insurance company?

MR. KING: July 31, 1911.

MR. GOLDBERG: Mr. Examiner, we object to the use of this document. On its face it does not show that it is a [19564] claim that was filed with an insurance company. It is merely entitled "Schedule of the property of Pennsylvania Water and Power Company." No foundation has been laid showing that the witness is familiar with this document, nor has there been any showing of relevance to the periods of time which the witness Newlands is dealing with. This is dealing with a fire of July 31, 1911, and referring to the testimony, the witness Newlands is referring to an inventory made at December 31, 1908. The other dates I see are the date of the appointment of the receiver, July 17, 1909, and both the dates I have referred to are long before July 31, 1911, and we submit there isn't any showing of relevancy.

TRIAL EXAMINER: What is Respondents' counsel's reply to that?

MR. KING: Might I ask a question or two more of the witness before I answer, your Honor? I think it may clear the situation up.

TRIAL EXAMINER: Yes.

By MR. KING:

Q. Mr. Newlands, where did you get the information that enables you to recollect a reference to 21,000 bags of Union cement? A. There are several letters in the file containing a reference to it.

[19565] Q. And did you examine that file yourself, personally? A. Yes, sir.

Q. From which those letters came? A. Yes.

Q. And was not the document that I have heretofore handed you included in that file? A. I don't recollect. It may have been.

Q. But you just didn't see it? A. I don't recall now.

Q. Whether you saw it or not? A. That is right.

Q. You do know, however, do you not, that there were 21,000 bags of Union cement destroyed by fire?

* * * * *

A. The correspondence I saw indicated that a claim had been made on the insurance company for damaged cement, and that the insurance company had protested it and said that the heat from the fire would not damage [19566] the cement, and that the company was willing to accede to that statement by the insurance company.

By MR. KING:

Q. Do you know whether there was a credit to the cement account?

* * *

A. No, I don't know.

By MR. KING:

Q. You don't know that? A. No.

TRIAL EXAMINER: How do you connect up the 18,490 barrels of cement included in the inventory of December 31, 1908, with the 21,000 bags or barrels contained in that insurance claim?

MR. KING: I was going to go ahead and do that, Mr. Examiner.

TRIAL EXAMINER: All right.

MR. HALL: Did you intend, Mr. Examiner, to refer to 35,736 barrels or only to the Union cement?

TRIAL EXAMINER: Only to the Union cement. The 21,000 related only to Union, didn't it?

MR. KING: Yes.

By MR. KING:

[19567] Q. Mr. Newlands, do you know how many barrels are represented by 21,000 bags of cement? A. It depends on the type of cement.

Q. Union cement. A. I believe it was three bags to a barrel, or 7,000 barrels.

Q. 7,000? A. Yes.

Q. Assuming that the fire did destroy 7,000 barrels of Union cement, should not your 19,258 barrels referred to at transcript 19490 be reduced by that amount, to 12,258 barrels?

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A. You are referring now to line 20 of page 19490?

By MR. KING:

Q. Line 21. [19568] A. No, I see no reason for reducing that 19,258 barrels by 7,000 barrels.

Q. Assuming that 7,000 barrels were destroyed by fire? A. Even assuming that the 7,000 barrels had been destroyed, which is contrary to the facts as I have found them.

Q. You wouldn't reduce, even though that were so, the 19,258 barrels?

• • •

A. I would not reduce that number of barrels.

By MR. KING:

Q. Why not, Mr. Newlands? A. Because there is no reason to.

Q. The 19,258 barrels includes both types of cement, namely, Union and Giant and Atlas, does it not? A. I presume it does, yes. There is not a very clear indication of what types of cement are left, or how much of each is left, but I presume that it includes both types.

Q. If it does include both types, and there was a loss of 7,000 barrels, why wouldn't it be deducted from your figure of 19,258 barrels?

[19569] MR. GOLDBERG: May I have the question?

TRIAL EXAMINER: Read it.

(Question read.)

A. I apparently don't understand what you are getting at.

By MR. KING:

Q. The 7,000 barrels should be a construction loss, should they not, assuming they were destroyed? A. Certainly not.

Q. What would you do with it? A. It had nothing to do with construction. It would be an operating loss.

Q. How would you handle the loss of 7,000 barrels? A. It would be charged off as an operating expense. Certainly it isn't a construction loss.

Q. At a time when the company was not operating? A. The company was operating in 1911.

Q. Assuming the company was not operating, would that be the manner in which you would handle the loss of 7,000 barrels?

* * *

[19570] A. Based on your assumption, I still do not believe that a loss of cement due to a fire is a proper construction cost.

By MR. KING:

Q. How would you handle it? A. In the first place, it should have been insured against, and insurance recovered, so there would have been no loss, if that were the

case. If there were such a loss, and the company were not operating, it would be a charge against surplus. All losses occurring during a construction period are not a construction cost.

Q. Now, Mr. Newlands, do you know how many barrels of cement were used by McCall Ferry Power Company for construction?

* * *

[19571] MR. KING: Beginning with the beginning of construction and continuing to July 16, 1909.

* * *

A. I believe the company has prepared some statistics in that regard, and I don't know whether it covered that particular period or not, but I believe it did.

By MR. KING:

Q. Do you know how many barrels were used in that particular period? A. Not offhand, no.

Q. In your opinion, what would be a reasonable percentage of loss due to spoilage and other causes on a [19572] project of this size and character? A. I don't know, but it certainly wouldn't amount to any such spoilage as occurred in this case.

Q. Have you any idea as to what a reasonable percentage of loss would be?

* * *

A. No, I have no exact percentage in mind, except that it would be relatively small. It would not be in any way comparable to the loss that occurred in this particular instance.

By MR. KING:

Q. What do you mean by "relatively small," Mr. Newlands? A. Not more than a few percent.

Q. I beg your pardon? A. Not more than a few percent.

Q. A few percent? A. That is right.

Q. What do you mean by "a few percent"? A. Oh, less than, say, 4 percent.

[19573] Q. Will you assume, Mr. Newlands, that during the period I mentioned to you, there were 263,000 barrels of cement used? Now, as I understand it, you believe that a reasonable loss for spoilage would be about 4 percent of that? How many barrels would that amount to? A. I said less than 4 percent.

Q. All right. How many barrels would you think would represent a reasonable spoilage of 363,000 barrels? A. Did you say 363,000 or 263,000?

Q. 263,000 barrels. Excuse me. A. In my opinion, not more than, at the most, a thousand bags, and that is considerably less than ½ percent.

Q. A thousand bags. How many barrels is that? A. Well, is your 263,000 barrels or bags?

Q. Yes, 263,000 barrels. A. Less than a thousand barrels. And that would be a very generous estimate.

Q. How many percent is a thousand barrels of 263,000 barrels? A. It is less than a half of 1 percent.

Q. Why do you think less than a half of 1 percent is a reasonable spoilage here, when you indicated a percentage of 4 percent a little earlier?

[19574] A. It depends a great deal on the amount of cement used. If a small amount of cement is used on jobs that are scattered all over, you will have a greater loss than otherwise. If you are using a great quantity of cement, spoilage can be kept down.

By Mr. King:

Q. Have you had any experience in the use of cement, Mr. Newlands? A. Well, I have had some knowledge of the construction of a reinforced cement building.

Q. Is that the only experience you have? A. That is right. The spoilage in cement, by the way, that would have occurred during a construction period, would have been included in the cement already charged to construc-

tion. It is not included in the 30,000-odd barrels that were left. That was good cement, supposedly, that was on hand, and was inventoried. But cement that had already spoiled during the construction period was charged to construction and is still in construction costs.

Q. Mr. Newlands, is it not a fact that some of the 19,258 barrels referred to by you may have been used in [19575] construction? A. No. I saw no indication that would indicate that that had ever been used in construction.

Q. Do you know that it wasn't used? A. I am pretty certain of it. There is nothing to indicate that it has been used.

Q. And is there anything to indicate that it had been used? A. There is nothing to indicate that that cement had been used. There is considerable correspondence to indicate that it had spoiled, and couldn't be used.

Q. Mr. Newlands, do you have Exhibit 320 for identification before you? A. Yes, I have it.

Q. Will you refer to Item 11, Schedule H? A. Yes.

Q. Do you dispute the fact that this loss in the amount of $8,970.34, shown there, was due to a writedown in value of the cement by the receiver from $1.73 per barrel to 58¾ cents per barrel?

* * *

[19576] A. The records of the receiver show that that cement had originally been set up on the books at $1.73 a barrel, and subsequently had been written down to, I think 58½ cents a barrel due to the fact that it was not in the best of condition.

By Mr. King:

Q. The amount of the reduction that you have just spoken of applied to 7,852 barrels of cement; isn't that true? A. That is correct.

Q. Do you dispute the fact that this cement was actually used in construction? [19577] A. No; the 7,852 barrels was used in construction.

Q. Mr. Newlands, will you please turn to the portion of your rebuttal testimony having to do with the arms' length transactions between McCall Ferry and Fisk? I believe it appears at transcript 19491. Rather it begins at that page. Do you have that before you? A. Yes.

Q. I direct your attention to that portion of your answer which appears on line 24 on that page, which is as follows: "No, I found no such evidence or indication."

Do you mean by that sentence that you determined whether or not there was any evidence in existence concerning this arms' length transaction? A. Which arms' length transaction are you talking about?

Q. The one you are talking about, beginning on page 19491. A. I don't know of any arms' length transaction here.

Q. The question was asked you, at line 21:

"Did you, during your investigation, find any evidence which indicated that the firm of Harvey Fisk at any time controlled McCall Ferry Power Company?" that was the question.

I want to know whether or not in that portion of the answer which I have just quoted you meant that you [19578] determined there was no evidence of that fact. Is that what you mean by that answer? A. That is right. The correspondence and the records I examined gave no indication that Harvey Fisk & Sons controlled McCall Ferry Power Company.

Q. You said you found no evidence of that fact. My question is: is that your opinion as to whether there was any evidence or not, alone? Or did you receive any legal advice from Mr. Goldberg or anybody else? A. No, that was my opinion.

Q. What do you mean by the word "evidence," Mr. Newlands? Are you referring to what has been introduced in this case when you refer to evidence? A. No, I am referring to all of the records and memoranda which I have examined. The fifteen filing cabinets and the minutes.

Q. Does that description "all of the evidence," include the evidence on original cost introduced in this proceeding? A. That is correct.

Q. When you made that statement to which I have just referred, namely, "I have found no such evidence or indication," did you have in mind Part 14 of Exhibit 27, in this case? And I will present that to you.

* * *

[19579] By Mr. King:

Q. Part 14 of Exhibit 27.

Trial Examiner: What is that?

Mr. King: That is a letter from Houseman to Messrs. Harvey Fisk & Sons, Bankers, New York, New York, dated April 18, 1905.

By Mr. King:

Q. Would you examine that, Mr. Newlands, and tell me whether you had that statement in mind when you made the answer I have just referred to? A. Yes, I had this letter in mind.

Q. I have particular reference to the next to the last paragraph of that letter, Mr. Newlands, on page 117 of Exhibit 27, which is to the effect that the writer, Mr. Houseman, states that he is writing this letter to Fisk & Sons somewhat in detail for the reason that Fisk's interests on the river are apparently in conflict "with our plans, which were being worked out on the river long before Dr. Hutchison had acquired any property rights there." [19580] That is the paragraph that I had reference to.

* * *

[19581] By Mr. King:

Q. Did you have that in mind when you made the statement that there was no evidence? A. Yes, I had that in mind. Houseman was in no position to know who controlled McCall Ferry Power Company.

Q. In your opinion, you mean? A. As shown by the records that I have examined and as shown by the other correspondence in the files.

Q. In your opinion? A. It would have to necessarily be my opinion.

Q. When you made that statement to which I have just referred, at line 24 of transcript 19491, did you have in mind the affidavits of Mr. Hutchison and Mr. Fisk, which appear in Exhibit 27? A. Yes, I had those in mind.

Q. Having them in mind, you still made the statement, at line 24, transcript 19491; is that correct? A. That is correct. I believe the actual records of the events as they happened in 1905 are a better indication than an affidavit made 30 to 40 years later by a man——

* * *

[19582] By Mr. King:

Q. You just stated that you thought other evidence was better than the Fisk and Hutchison affidavits. Is that what you mean by the quotation "I found no such evidence or indication"?

* * *

The Witness: My quotation indicates that there is no evidence that Harvey Fisk and Sons controlled McCall Ferry Power Company. It does not indicate that there is no evidence that Harvey Fisk and Sons didn't control it. As a matter of fact, there are letters in evidence which indicate that the control was a mutual affair by the five interests.

Mr. King: Might we have the question and answer read? I don't believe the answer is responsive, Mr. Examiner.

Trial Examiner: Yes.

(Question and answer read.)

Mr. King: I move the answer be stricken and the witness be directed to give a responsive answer.

TRIAL EXAMINER: Read the question, please.

(Question read.)

MR. KING: The point is, if your Honor please, that the [19583] prior statement indicates that the answer on line 24 is now a little incorrect.

TRIAL EXAMINER: I think the answer could be more responsive in form. Answer the question, Mr. Witness, with whatever explanation you deem necessary.

THE WITNESS: May I have the question again?

TRIAL EXAMINER: Yes.

(Question read.)

THE WITNESS: No, my quotation was not directed to answering a question such as the one you have just put to me. It was directed to the point that there was no evidence in the files that Harvey Fisk and Sons controlled McCall Ferry Power Company. There is evidence in the files that the five interests mutually controlled McCall Ferry Power Company.

By MR. KING:

Q. There is also evidence in the files in the form of the Fisk affidavit and Hutchison affidavit that Fisk did control the enterprise; isn't that correct? A. That was not contemporary evidence.

Q. I didn't ask you that.

MR. KING: Mr. Examiner, I ask that the witness be directed to answer responsively the question put.

MR. GOLDBERG: I think the difficulty is in the form of the question. Is he asking the witness whether the witness assessed one document against another document and decided [19584] that one, in his opinion, was entitled to more weight than the other one? If that is the question I think it will eliminate the difficulty.

MR. KING: I think that is a perfectly simple question.

TRIAL EXAMINER: You may answer, Mr. Witness.

THE WITNESS: There have been statements filed by the Company, obtained from these persons, to that effect which are at variance with the actual facts as I found them in the files.

By MR. KING:

Q. So, then, you have come to the conclusion, in giving the answer on line 24 of transcript 19,491, that those affidavits are not evidence and not entitled to any consideration; is that correct? A. I believe those affidavits do not correspond to the actual facts of the situation and therefore should be given no consideration.

Q. Did you take any legal advice in coming to that conclusion? A. No. That is my own opinion.

Q. Now, Mr. Newlands, in making the statement to which I have just referred, at line 24, transcript 19,491, did you [19585] have in mind the Hopkins affidavit, Part 24, of Exhibit 27? I believe you have Exhibit 27 before you. A. Yes, I had that affidavit in mind.

Q. And you considered that that was not proper evidence, in your opinion. Is that right? A. Well, I would have to read it to find what it states about control there.

Q. Will you please do so? A. Yes, sir. (Witness reads document.) Yes, I had that letter in mind.

Q. And you considered that was not proper evidence in coming to your conclusion at line 24 of transcript 19,491; is that right? A. I considered that it conflicted with the actual facts as I had discovered them.

Q. Did Mr. Hopkins' statement that Coudert Bros., as counsel, were replaced by Simpson, Thacher and Bartlett conflict with the actual evidence, in your opinion? A. I don't know what connotation the word "replaced", there, has. I know that Simpson, Thacher and Bartlett became

counsel for McCall Ferry Power Company—one of the counsel.

Q. But that doesn't conflict, then, with the evidence in the case; is that right? A. Coudert Bros. had never been counsel for McCall [19586] Ferry Power Company.

Q. Had they been for Hutchison? A. Semple had.

Q. Well, he was a member of the firm of Coudert Bros., wasn't he? A. He was associated with Coudert Bros. I don't know whether he was a member of the firm or not.

Q. You had that fact in mind when you made the statement we are discussing? A. Yes. A change in counsel doesn't indicate control, by any means.

Q. To you. Is that correct? A. It doesn't mean it to me, and it is my belief it doesn't mean it to anybody. But of course——

[19587] By Mr. King:

Q. Mr. Hopkins, who signed the affidavit now in front of you, Mr. Newlands, was a director of the Susquehanna Power Company, was he not? A. Yes, I believe he was.

Q. I'm sorry. I said Susquehanna Power Company. I meant Contracting Company. That is what you meant, too, wasn't it? A. Yes, I meant Contracting Company.

Q. And he owned, or held, one share of the stock of that Company, did he not? A. I believe that is correct.

Q. Mr. A. P. Bartlett held three shares of the stock of that Company, did he not? A. I believe he held some shares. I don't know the exact amount.

Q. And he was a brother of Mr. P. G. Bartlett of Messrs. Simpson, Thacher and Bartlett, isn't that correct? A. I don't know that.

Q. Mr. Newlands, do you know whether or not Mr. Fisk was present at the executive committee meeting at which the Cooper contract was approved and authorized to be executed? A. No, I don't know that.

Q. I show you page 4 of the minutes of the executive committee and ask you to examine them and tell me whether

or [19588] not they show that Mr. Fisk was present. A. The minutes of the executive committee of McCall Ferry Power Company, dated October 18, 1905, state that the president reported that pursuant——

Q. I only want to know whether they show that Mr. Fisk was present. That is a simple question, Mr. Newlands. A. You also asked me whether the particular minutes covered the approval of Mr. Cooper's contract——

Q. Will you answer the question, first, as to whether Mr. Fisk was present or not?

* * *

THE WITNESS: The minutes of the executive committee of McCall Ferry Power Company, dated October 18, 1905, state that the president reported that, "pursuant to the authority heretofore given, he and Mr. Coffin had agreed with Mr. Cooper upon the terms of a contract to be entered into for securing the services of the latter in the construction of a dam," etc., at McCall Ferry.

[19589] The minutes also indicate that Messrs. Dimock, Parsons, Coffin and Bertron, of the Committee, and, by request, Messrs. Fisk, Lane and Hutchinson—were present.

By MR. KING:

Q. You didn't read it all, Mr. Newlands. I hope you didn't fail to do so purposely.

The minutes also indicate that "the president is hereby authorized and directed to execute on behalf of this Company a contract substantially in the form submitted at this meeting." A. That is correct.

MR. GOLDBERG: He did try to read, but you didn't like it. Then, when he did read it, you thought he hadn't read enough.

MR. KING: That is right. I still didn't like it.

TRIAL EXAMINER: All right, that's enough.

By MR. KING:

Q. Until December 6, 1905, Mr. Newlands, the executive committee meetings were held at Fisk's New York office; is that correct? A. I don't know that to be the case.

Q. I show you the original minutes of October 4, 1905, and ask you if the first paragraph of them does not indicate that the meeting was held at No. 62 Cedar Street, New York City.

* * *

[19590] THE WITNESS: Yes, the minutes of October 4 indicate that that is so.

By MR. KING:

Q. Will you look through the book, from the minutes on October 4 on, and see if that same address does not appear until the minutes of December, 1905?

* * *

THE WITNESS: The minutes of the executive committee from October 4, 1905 to and including December 6, 1905—including some dozen or so [19591] meetings—apparently were all held at No. 62 Cedar Street.

By MR. KING:

Q. Will you turn to Exhibit 27, which you have before you, on pages 158 to 1[illegible]. Do you have that before you? A. Yes, sir.

Q. The first letter, on page 158 of Exhibit 27, is addressed to Harvey Fisk and Sons at 62 Cedar Street; isn't that correct? A. That is correct. That, of course, doesn't indicate that there weren't other firms at 62 Cedar Street besides Harvey Fisk.

Q. It indicates that he was at 62 Cedar Street, and these minutes indicate that the meetings were held at 62 Cedar Street. A. It doesn't indicate that that was Harvey Fisk and Sons' offices.

* * *

Q. Do you deny that Harvey Fisk's office was at 62 Cedar Street?

• • •

[19592] THE WITNESS: I have made no check as to exactly where Harvey Fisk was located. Some of the letters addressed to them are addressed to 62 Cedar Street.

By MR. KING:

Q. One of those appears at page 158 of Exhibit 27 that you have just looked at; isn't that correct? A. That is correct.

Q. Another one appears at page 160 of the same exhibit. That is correct, is it not? A. That is correct.

• • •

[19594] By MR. KING:

Q. Before lunch, Mr. Newlands, you made reference to five interests at McCall Ferry. Will you name the interests you had in mind? A. Harvey Fisk and Sons; Bertron, Storrs and Griscom; Lee Higginson and Company; C. A. Coffin and the Hutchinson interests.

Q. Did any of those five, except Fisk, have an office at 62 Cedar Street, New York? A. I don't know where their offices were located, with the exception of McCall Ferry Power Company, which had an office at 60 Wall Street late in the year.

Q. But not at 62 Cedar Street? A. Their general office was at 60 Wall Street.

Q. Will you please turn to transcript page 19,495? In line 5 thereof you referred to a Mr. F. W. Walz. Do you know, as a matter of fact, that he was associated with Harvey Fisk? [19595] A. No, I do not.

Q. Mr. Newlands, I show you a letter dated March 21, 1908, taken from the general letter book number 4 of the Company, and ask you to look at that and see if that does not indicate that that letter was written to Mr. F. W. Walz at Harvey Fisk and Sons, 62 Cedar Street, New York City. A. This letter apparently dated March 21, 1908, is from

H. F. Dimock to F. W. Walz, Esquire, Messrs. Harvey Fisk and Sons, 62 Cedar Street, New York City.

* * *

TRIAL EXAMINER: Is there any objection to copying that short letter in the transcript?

* * *

March 21, 1908.

F. W. Walz, Esq.,
Messrs. Harvey Fisk and Sons,
62 Cedar Street,
New York City, N. Y.

[19596] Dear Sir:

At William Henry Barnum's request I return you herewith the stock certificate book of the common stock of the McCall Ferry Power Company, and have signed, as he requested, in blank, two certified copies, 26 and 27, and have had the seal of the Company placed thereon.

/s/ H. F. DIMOCK,
President.

By MR. KING:

Q. Mr. Newlands, do you know whether Mr. Hutchinson exercised at any time during the construction of the McCall Ferry Power Company project any direct supervision of the work? A. No. The direct construction work was under the supervision of Mr. Value, as assistant of Mr. Cooper. He was replaced by Mr. J. B. Goodwin when Value left, in November of 1907.

Q. Isn't it a fact— Had you finished? A. Yes.

Q. Isn't it a fact, Mr. Newlands, that both Hutchinson and the administrative force at the McCall project both worked on drawings during the so-called cessation period?

* * *

[19597] THE WITNESS: No, that is not a fact.

By Mr. King:

Q. You say that is not a fact? A. No.

Q. Mr. Newlands, do you know, as a matter of fact, that Hutchinson and the administrative force worked on drawings in New York City, which drawings had to do with the construction of the project, during the cessation period? A. No, Hutchinson and the administrative force at New York City didn't work on drawings. The drawings were prepared by Cooper's force in New York City and Sanderson and Porter's force in New York City.

Q. And your position is that Hutchinson and his administrative force performed no work in connection with any of those drawings? A. Except as the drawings were completed they may have passed through their hands. They probably did. They might want to inspect them.

[19598] Q. What would these pass through their hands for? For checking, would they not, and correlating them, and O. K.'ing them? A. Not necessarily, no.

Q. What do you mean by "not necessarily"? Do you know, as a matter of fact, that Hutchinson and his administrative force never passed on the advisibility of these drawings, and never tried to correlate them? A. I have seen no indication that Hutchinson and his administrative force in New York passed on those drawings in detail after Cooper's force had finished with them.

Q. Did they pass on them in any way?

Mr. Goldberg: Just a minute. Let the witness finish.

A. I have seen indications that some of those drawings passed through the hands of Hutchinson. What he did with them, I don't know. But it is not my understanding that he actually inspected those drawings for final approval. As a matter of fact, it would be very improbable that he did inspect all the detailed drawings for final approval. All he would handle would be the general over-all plan.

By Mr. King:

Q. Do I understand you to mean that you found nothing that would indicate whether Hutchinson and his administrative force passed on these drawings or not? [19599] A. To the extent that I have mentioned that some of them passed through their hands, I have seen that.

Q. Will you please turn to transcript page 19,512? A. Yes, sir.

• • •

[19603] By Mr. King:

Q. Mr. Newlands, I refer to the question at line 24, transcript 19,517, where, in effect, you say that commodity price indices are not an accurate measure of the current price of replacement parts for old equipment. I want to know what you consider to be an accurate measurement. A. The actual price of the part itself. The market [19604] price.

Q. Suppose the duplicate of the part is not available. A. Then, I wouldn't attempt to capitalize anything in connection with a debatable item of this sort. That merely compounds a felony.

Q. You mean because there is no duplicate item available, you quit; is that right? A. No. I mean that items of this sort are of debatable worth in any case, as a capital item. That if you haven't got exact figures to indicate what portion should be capitalized, then, no portion should be capitalized.

Q. So your position is that if it should happen that there is not any duplicate of the original part available, you shouldn't capitalize anything; is that right?

• • •

A. I didn't say that. I said that these items are debatable capital items in any case, and that where you cannot have exact figures, you shouldn't attempt to capitalize any portion of them.

By Mr. King:

Q. Mr. Newlands, will you turn to page 50 of the Uniform System of Accounts of the Commission? I direct [19605] your attention to the last three lines of subparagraph 3 on page 50 reading as follows:

> "The excess cost of the replacement over the estimated cost at current prices of replacing without betterment, shall be charged to the appropriate electric plant account."

What do you understand the words "the estimated cost at current prices" to mean? A. That means the cost of replacement, using the actual cost of the old parts, plus the estimated labor cost of replacing, which would be very close to the cost of putting in, of course, the new part. That would be an exceedingly close approximation. It wouldn't correspond to price indices, however.

Q. What if a duplicate part were not available? What would this mean.

• • •

[19606] A. I have already stated my answer to that. I believe that in that case you shouldn't attempt to capitalize any portion of it.

By Mr. King:

Q. Do you think that is what the language I have just quoted you on page 50 of the Uniform System of Accounts means?

• • •

[19607] A. Yes, in my opinion, the estimated cost, under this provision, would have to be based on facts, no such a thing as price indices. And, as I mentioned before, the labor cost of actually replacing the new item would be a good estimate of the cost of replacing the old. But price indices are so far away from actual facts that they do not come under this estimated cost.

By Mr. King:

Q. Do the words "estimated cost" mean to you: facts? A. It means they have to be related to facts, very [19608] closely.

* * *

By Mr. King:

Q. You have examined the K-1 schedules attached to Exhibit 320, have you not, Mr. Newlands? A. Yes, I have looked them over.

Q. Do you know whether there is any labor cost capitalized in the K-1 schedules? A. I wouldn't know unless I examined it again. I didn't examine it with that specifically in mind.

* * *

[19609] Q. Now, I want to find out what is the difference between your idea of maintenance and repair and your idea of betterments.

* * *

A. A betterment would be such an alteration in a machine that it resulted in a substantial change in identity in the machine or the part, resulting in greater capacity, and so forth.

By Mr. King:

Q. Would you mind explaining what you mean by a change in identity? A. I mean that usually the function of the machine would have to be changed to some extent.

Q. The function? A. That is right.

Q. Can you give an example of what you mean? A. Well, adding a topping unit to a steam turbine would be a change of function.

Q. Will you turn to the Uniform System of Accounts of the Federal Power Commission, and find where there is [19610] any reference made to a change in function in connection with betterments?

* * *

[19611] TRIAL EXAMINER: In your testimony on page 19,517, Mr. Witness, did you have in mind the instruction referred to by Respondents' counsel on page 50 of the Uniform System of Accounts?

THE WITNESS: No, I had in mind the actual accounting practices and theory at that time. That is what governs these actions back there.

TRIAL EXAMINER: Where did you find the theory and practices of that time?

THE WITNESS: From my own experience, from accounting textbooks, from talks with other accountants who have done the same type of work.

TRIAL EXAMINER: As of what time are you referring to?

THE WITNESS: As of the time when the transactions on Schedule K-1 took place.

TRIAL EXAMINER: When was that?

THE WITNESS: From about 1924 to 1931, most of them, I believe.

TRIAL EXAMINER: 1924 to 1931?

THE WITNESS: Yes.

[19612] TRIAL EXAMINER: Well, does the instruction on page 50 accord with the accounting practices and principles of that time?

THE WITNESS: To some extent; not entirely. There was considerable variation in the practice, allowable practice, at that time.

TRIAL EXAMINER: What is the Respondents' theory in connection with the cross-examination that is now proceeding with reference specifically to this matter under discussion?

MR. KING: First of all, to show that the witness is clearly wrong in his conclusions, that the items in the

K Schedules represent repair and maintenance. That is his conclusion advanced for the first time in rebuttal and we are entitled to show that that is an erroneous conclusion, and we can't get to that point——

TRIAL EXAMINER: According to what standards?

MR. KING: That is what we are trying to find out. We can't get to that point until we find out this witness' conception.

TRIAL EXAMINER: Well, are you going on the assumption that the standards are contained in the Uniform System of Accounts?

MR. KING: No. Partially. I am asking him what he knows about the Uniform System of Accounts, and I was going [19613] to ask him the question that your Honor has already asked him, whether the accounting practice was different then from what it is now, and, as I understand it, he says no.

TRIAL EXAMINER: I think you had better develop a foundation for this.

MR. KING: I will be glad to.

By MR. KING:

Q. Mr. Newlands, will you turn to page 10 of the Uniform System of Accounts? In the back of the book, under this road and equipment, ICC, Section. Do you have that before you? A. Yes.

Q. What is the date of that, do you know? A. No, I don't.

Q. You have that on page 7, do you not, May 19, 1914?

A. There is an introductory letter on page 7 which is dated May 19, 1914, which apparently concerns this system of accounts.

By Mr. King:

[19614] Q. Page 5 of the Uniform System of Accounts contains the order of the Interstate Commerce Commission adopting these rules, does it not? A. Page 5?

Q. Yes. A. Yes, that is right.

Mr. Goldberg: I wish you would be more specific about saying page 5, because——

Mr. King: Page 5 of the back part of the Uniform System of Accounts, dealing with the ICC classifications.

A. Yes.

Mr. Goldberg: Let's call it Appendix Roman II.

By Mr. King:

Q. That was dated May, 1914; isn't that right? A. That is right; May 19, 1914.

Q. Now, the title of the classification appears at the beginning of the table of contents, does it not? A. What page is that?

Q. Page 1 of the ICC classification. A. Yes, page 1 shows the title of the classification.

Q. And it also says "Issue of 1914", does it not? A. That is right.

Q. Will you again turn to page 10 of the ICC classification, the third paragraph from the bottom, beginning with the word "Betterments." Do you have that before you? [19615] A. Yes.

Q. That states, does it not, Mr. Newlands, "Betterments are improvements of existing facilities through the substitution of superior parts for inferior parts retired" and so forth? That is correct, is it not?

* * *

By Mr. King:

Q. Mr. Newlands, was that a correct accounting provision at the time that you have just mentioned, 1924 to 1931?

* * *

[19616] A. It was an accounting principle authorized by the Interstate Commerce Commission and was correct in that regard. There were, of course, other ideas as to what should be capitalized as betterments—very many different opinions. This is only one.

By Mr. King:

Q. Now, will you turn—you say this is only one? A. That is right.

Q. Name some others that are different from this.

Mr. Goldberg: I object to that, Mr. Examiner.

Trial Examiner: If the witness knows, he may answer.

A. It was a general practice during that period to charge the betterments of the nature listed on K-1 to expense. They occurred because of repair and maintenance. Actually, the machine required repairing.

By Mr. King:

Q. I asked you to refer to some authority, not general practice. Can you refer to any authority? Of any kind? Accounting, legal?

Mr. Goldberg: Right this minute?

Mr. King: Yes.

A. Which gives a different definition of betterments?

By Mr. King:

Q. Yes, than that contained on page 10 of the ICC [19617] classification? A. Yes, I believe Kester probably contains a different definition.

Q. Kester? A. Yes.

Q. Any others? A. I imagine that a great many textbooks written back then would contain a somewhat different definition than this of betterments.

Q. What is the name of the textbook written by Kester that you referred to? A. "Advanced Accounting."

Q. Do you have a copy of the Uniform Classification of Accounts for Electric Companies, prescribed by the Public Service Commission of Pennsylvania, before you? A. Yes, I have a copy.

Q. Effective January 1, 1919? A. Yes.

Q. Do you have that? A. Yes.

Q. Will you turn to page 43, please? A. I have it.

Q. About the sixth paragraph from the top it reads as follows, does it not, Mr. Newlands: "Betterments are physical changes in structures or equipment, the object [19618] of which is to make the structure or equipment affected more useful or of greater capacity than they were at the time of their original installation or acquisition;" is that correct? A. That is correct, and that requires interpretation by the persons who are making the entry.

Q. Do you know whether this rule that we have just discussed, in the Pennsylvania System of Accounts, effective January 1, 1919, was in effect at the time the items in connection with the K Schedules were entered on the books of Penn Water? From 1924 to 1931, I believe is the period. A. Yes, and I believe the entries on the books were made in accordance with this definition. It is a question of managerial judgment.

Q. And that is the basis upon which you have concluded that these items in the K Schedules cannot be corrected; is that correct? A. I decided that the disposition made on the books had been done properly in the exercise of managerial judgment under the system of accounts in effect, and that cannot now be changed.

[19619] Q. Which system of accounts, in effect, are you referring to? A. The Pennsylvania system of accounts, for one.

Q. If they were not done in accordance with the Pennsylvania system of accounts referred to, is it your opinion that the entries could be corrected? A. No, I would say they still could not be corrected because it was a general

practice at the time to handle items of this nature the way the Company did.

Q. In other words, as I understand you, you take the position that even though the uniform system of accounts in effect at the time directs a Company to proceed one way, that if the Company does not proceed in that fashion they still cannot remedy the error? A. That is correct, if your assumption were correct.

Q. Then it is your position that once the entries are made they never can be corrected, under any condition; is that right? A. If they are made in accordance with accepted accounting practice they cannot be corrected later. That is correct.

Q. And there can be accepted accounting practices contrary to the provisions of the uniform system of accounts, under which a Company operates; is that correct? A. There can be, and a great many times the Public [19620] Service Commissions allow those entries, even though they are in contrast with what the uniform system of accounts says.

Q. Mr. Newlands, a little while back you described betterments as resulting in a functional change of a particular item. Does the word "functional" appear either in the ICC classification, attached to the FPC system of accounts, or in the uniform system of accounts effective January 1, 1919, of the Pennsylvania Commission?

* * *

[19621] THE WITNESS: Limited to those two paragraphs that are already in the record I think the word "functional" does not appear in those two definitions.

By MR. KING:

Q. Mr. Newlands, when did you first study accounting?

* * *

THE WITNESS: About 1920, I guess.

By MR. KING:

Q. Did you begin the practice of accountancy in 1920? A. No, I was studying it in school at that time.

Q. For what period of time between 1924 and 1931 were you actively engaged in the practice of accountancy? A. From about 1922 on, I believe.

[19622] Q. And in what capacity was your practice, from 1922 to 1931?

* * *

THE WITNESS: Prior to 1928 it was in a bookkeeping capacity for a plant, including the construction of the plant. After that it was it was in public accounting, until I came with the Commission.

By MR. KING:

Q. Mr. Newlands, do you have Exhibit 320 before you? A. Yes, I do.

Q. I direct your attention particularly, Mr. Newlands, to the K-1 Schedule. I believe they start at page 35 of Exhibit 320. A. Yes.

Q. Do you have that before you? A. Yes.

[19623] Q. Will you refer to Item 2 of the K-1 Schedule? Do you have that before you? A. Yes.

Q. Is it not a fact that the new copper cooling coils mentioned there are more durable than the brass coils which were replaced? A. I don't know. And at the time this entry was made I don't believe the Company was sure that it would be more durable. They were making an experiment.

Q. If you don't know, how do you know what the Company knew? A. The Company probably wouldn't know unless they had used copper coils. The Company started out using galvanized iron coils. They changed to brass and then to copper. They were developing their experience in regard to these transformer coils.

Q. Would you assume the Company changed to copper without knowing that that was beneficial? A. I assume they hoped it would be beneficial.

Q. Then your answer is that you don't know, as I understand it--whether it knew that copper coils were more

durable than the brass coils; is that correct? A. That is right.

Q. Now, will you refer to Item 3? Isn't it true that the copper cooling coils there mentioned, in Item 3, are more [19624] durable than brass coils, which were replaced, if you know? A. I don't know.

Q. Now, will you refer to Item 4? Do you know whether the copper cooling coils referred to in Item 4 are more durable than the brass coils which they replaced? A. No, I don't know that.

Q. Will you please refer to Item 5? Do you know whether the copper cooling coils mentioned there were more durable than the brass coils which they replaced? A. No. And I might say that even though they were proven more durable my treatment of these items would be the same. They are a proper maintenance and repair item.

Q. Now, Mr. Newlands, still referring to Item 5, isn't it a fact that replacement of the 10,000 kva coil with 15,000 kva coils represents a 50% increase in the capacity of this transformer? Do you know? A. If the repair were made correctly I should imagine, from the description given here, that it probably would result in a 50% increase in capacity.

Q. What do you mean by "repair," in your last answer? A. I mean that the coils were being repaired, at least partly, because they required repairing. They required replacement. When the replacement was done a 15,000 kva winding was put in the place of the former 10,000 kva winding.

Q. Will you refer to Item 6, still in the K-1 Schedule? [19625] Do you have that before you? A. Yes.

Q. Isn't it a fact that the new cab there referred to provides better visibility than the old one—if you know? A. No, I don't know. And it would make no difference to my treatment.

Q. Is it also a fact that the new controller is more useful than the old one—if you know? A. I don't know that

and it would make no difference in my treatment These are all minor items.

Q. Will you please refer to Item 7? Isn't it a fact that ¾-inch pipe made this high-tension bus more durable than the one-half inch copper tubing which was being replaced? A. No, I don't know, and it would make no difference in my treatment.

Q. Will you please refer to Item 8? A. Yes.

Q. Do you have that before you? A. Yes.

* * *

[19626] Q. Would your answer be the same with respect to Item 8 as it was with respect to Item 7?

MR. GOLDBERG: In what regard, so we will know exactly what it is you are referring to?

MR. KING: We apparently can't shorten it, then. I will ask the same question.

MR. GOLDBERG: I am willing to cooperate to shorten it. I am trying to be certain that when you get an answer we will know exactly what the answer means.

MR. KING: My question is: If I asked the witness the same question with regard to Item 8 as I did with regard to Item 7, whether his answer would be the same.

MR. GOLDBERG: The point is that in regard to Item 7 you asked if the high-tension bus had become more durable. That might apply to Item 8, but it wouldn't apply to Item 9 and Item 10. And as I understood the Examiner's wishes——

MR. KING: I am just talking about Item 8.

MR. GOLDBERG: —some general question of principle is involved.

TRIAL EXAMINER: The witness may answer.

THE WITNESS: Your question is whether the new rail would be more durable than the old?

By Mr. King:

Q. No, I am talking about Item 8 now. It is similar to Item 7? [19627] A. No, I don't know that, as a matter of fact, and it would not make any difference in my treatment.

Q. Now, with regard to Item 9, do you know whether it is a fact, Mr. Newlands, that 85-pound rail was more durable than the 60-pound rail? A. I should assume that that would be the fact.

Q. And also has a greater carrying capacity, does it not? A. I would say that you could run heavier trains over an 85-pound rail.

Q. Now refer to Item 10. Do you know whether or not it is a fact that the replacement of 800 Amp. parts with 1200 Amp. parts resulted in increasing the current-carrying and interrupting capacities of this oil circuit breaker referred to? A. The new parts themselves would carry greater amperage. I don't know whether the oil circuit breaker would. It would depend on the other parts of the breaker.

Q. Now, will you refer to Item 11? Do you know whether or not it is a fact that the new lower pedestal bearings for the operating shaft is more durable than the old one which was replaced? A. No, I don't know that as a matter of fact.

Q. Isn't it a fact that the rubber guide bearings with split ascaloy sleeve is much more durable than the old [19628] lignum vitae bearing and solid sleeve which it replaced? A. I don't know that to be the fact. I think I have seen some information in the Company's files to indicate they had better luck with the replaced bearings. It would make no difference in my determination, however.

Q. With regard to Item 12, do you know whether it is a fact that the aluminum compression joints eliminated the excess heating which had been experienced with the old twisted splices? A. No, I don't know that as a fact, and it would make no difference in my determination.

* * *

By Mr. King:

Q. Will you turn to Item 13, Mr. Newlands? Would your answer be the same as to Item 13 as it was with reference to Item 11? A. Yes.

[19629] Q. Would your answer be the same as to Item 14 as it was with respect to Item 11?

Mr. Goldberg: That is in connection with increased durability.

Mr. King: That is right.

The Witness: Yes.

By Mr. King:

Q. Will you please refer to Item 15? Would your answer be the same with respect to Item 15 as it was with respect to Item 10? A. So far as the second part of that Item 15 is concerned, yes.

Q. Please refer to Item 16. Do you know whether or not the new design of governor-restoring mechanizing system was more efficient than the old design equipment which was replaced? A. No, I don't know that as a fact, and it would have no effect on my determination.

Q. Will you please refer to Item 17? Do you know whether or not it is a fact that the change in connection with Item 17 resulted in increased capacity, as is stated in the description of this item? A. No, I don't know that that was a fact, and it would not change my determination.

Q. Now, would you turn to Item 18? Would your answer [19630] with respect to Item 18 be the same as it was with respect to Item 13? A. Yes.

Q. And the same for Item 19? In other words, your answer would be the same as to Item 19 as it was as to Item 13? A. Yes.

Q. Mr. Newlands, do you, as a result of your investigation, dispute any of the facts set forth in the items of the K-1 Schedules?

* * *

[19631] TRIAL EXAMINER: Have you checked the original job orders?

THE WITNESS: Not with these descriptions; no, sir.

MR. KING: Then you don't know if they are correct or not.

THE WITNESS: I was in Washington when this was presented to us, and I haven't been back to Baltimore since.

By MR. KING:

Q. Well, didn't you check the job orders during all the time you spent in Baltimore in preparation for this case? A. I didn't have this to compare with the job orders.

Q. That isn't what I asked you. You had the job orders, didn't you? A. We had the job orders.

Q. Didn't you check them? A. But I didn't check them in comparison with this. That is what you are asking me here.

Q. Did you check them at all? A. Yes.

Q. Did you make any notes as a result of that check? A. I made some notes; yes.

Q. Where are they? A. Most of them are here in Washington.

Q. Do you have them with you? A. I think some of them are.

* * *

[19632] By MR. KING:

Q. How did you characterize the items as maintenance and repair, Mr. Newlands, without some knowledge of the facts contained in the job orders? A. I have knowledge of some of the facts contained in the job orders.

Q. You do? A. I know that all of these items represented repair and maintenance and were so charged on the books.

Q. Now I ask you, in the light of the knowledge that you have, to point out to me where, in the K-1 Schedules,

there is a misdescription in connection with the facts, as to each one of the items.

• • •

[19633] THE WITNESS: I don't have such a detailed knowledge of all that is in these job orders—sometimes there are 20 or 30 pages—to enable me to determine whether the description shown here is exactly as is shown in the job order, or whether there isn't some further information in the job order which would make an adjustment of this description necessary.

By MR. KING:

Q. Now, will you turn to the K-2 Schedules, Mr. Newlands? A. Yes, sir.

Q. Will you give us your distinction between maintenance and repairs and additions? A. Additions is the outright addition of a new piece of property.

Q. New piece of property? A. That is right. Maintenance and repair is the process of keeping the present property in good operating condition, including replacements, alterations, and things of that nature.

Q. Is a topping unit an addition, Mr. Newlands, in your [19634] opinion? You referred to a topping unit a while ago. A. It would be a proper capital item.

Q. Is it an addition? A. Yes, it could be characterized as such.

Q. Now, will you refer to Item 1 in the K-2 Schedule? Do you know whether the guide vanes for this unit had been equipped with bushings of any kind before the work referred to here was done? A. I am not certain, but I know that the work that was here done was necessary because wear of the parts had made bushings necessary. And that is a customary repair job. It is done every day.

Q. Do you know whether or not the fulcrum pins were equipped with any kind of sleeve before the work referred to in this item was done? A. I don't know whether this particular item had sleeves prior to this time, but it is a

repair job because it is taking up wear on the item and bushing is necessary in order to do the job.

Q. Will you refer to Item 4? A. Yes.

Q. Do you know whether or not it is a fact, Mr. Newlands, that the flashboard sockets had previously been provided on 2'6" centers, over the entire crest of the dam, with the exception of the distance of 300 feet, over which they were [19635] on 5' centers until the remaining 60 sockets were installed on this job? A. No, I don't think that is correct. My information is that back in 1911 and 1912 the sockets were on two and a half feet centers the entire crest of the dam. Changes have taken place in those sockets in the intervening time. Portions of the crest of the dam have been repaired, for instance, which might mean elimination or replacement of those sockets.

Q. Do you know that to be a fact? A. I know that to be a fact—that a portion of the crest was repaired, including repairing of sockets.

Q. Will you turn to Item 7 and tell me what equipment described there could be considered as being a replacement of previously existing equipment, or as representing the cost of repairs to the existing equipment? A. This represents minor equipment attached to an existing unit and which the management, in its discretion, decided to charge to repairs and maintenance. That was customarily done during this period.

Q. But it is new equipment that was not theretofore installed; isn't that right? A. I don't know that as a fact. That is the claim that is made here. It may be so. I don't know.

Q. Then you don't know that it is incorrect, either, do you? The statement made here? A. No, I don't know that this statement is incorrect.

* * *

[19636] By Mr. King:

Q. Mr. Newlands, will you please turn to Item 9 on the K-2 Schedule? A. Yes, I have that item.

Q. Would your answer in connection with this item be the same as your answer in connection with Item 1? A. Yes, except that in some of these cases I think I could determine they had not been bushed before; I am not sure which one. That was part of the question you asked me.

Q. Would your answer to Item 12 be the same as your answer with relation to Item No. 9? A. Yes.

* * *

By Mr. King:

Q. Will you turn to Item 14? Do you know how many cables were used for the output of each of these exciters prior to the time the work described under this item was done? A. Yes, I believe it was two cables.

Q. Does that mean two per leg, four per exciter? A. I believe so.

Q. How many cables were used for each of these exciters after the work referred to in this item was done? A. The job order indicated that in repairing these cables an additional lead was put in when replacing the two older [19637] leads per leg.

Q. This fact resulted in an increase in capacity of the cables, did it not, speaking of this work? A. It did not increase the capacity of the individual cables, no. Current carrying capacity of three cables would be more than two cables if that is what you mean.

Q. That is what I mean.

Now, will you refer to Item 16? A. I have that item before me.

Q. Would your answer to that be the same as it was on Items 1 and 9? A. Yes.

Q. Will you refer to 17? Would your answer be the same as to Items 1 and 9? A. Yes, with this exception: That this present job order also covers installing washers to take up the play underneath the guide vanes but it is a similar operation to rebushing; in other words, it is something inserted to take up the play. In this case it happened to be stainless steel.

Q. Did I understand you to say rebushing? A. Well, I am not certain whether this particular one covered rebushing or whether this was a first installation of bushings and washer.

Q. Why did they bore the vanes if it was rebushed? A. Well, that might have been necessary if you put in [19638] a larger sized bushing. My impression is that this was the first bushing. I just am not certain.

Q. Will you refer to Item 21? A. Yes, I have that item.

Q. Do I understand you to say that additions made to leased property were charged as operating expense? A. Redecorating rooms on leased property is very often and very properly charged to expense immediately. As a matter of fact, this company has done it in later periods as they did here.

* * *

By Mr. King:

Q. Does this represent redecorating? A. Yes, to some extent.

Q. What do you mean to some extent? A. Redecorating covers, putting in walnut paneling, Cello-tex ceiling, linoleum, drapes, and so forth. That is commonly called redecorating a room.

Q. They were not there before, were they, the items you just spoke of? A. The walls were there; the ceiling was there and the floors were there.

Q. Panels, linoleum and Cello-tex ceiling were not there before, were they? [19639] A. No, but there was a wall there.

* * *

[19645] By Mr. King:

Q. Will you refer to transcript 19,506, your answer at the bottom of the page beginning with line 19? A. Yes, sir.

Q. Does your answer mean that flashboards were replaced as of March 1916? A. No, they started a month or two later, I believe, to work on replacement of the flashboards.

Q. A month or two later? A. I believe so. I do not have the exact time.

Q. Will you turn to page 62 of the schedules of Exhibit 51? You state there that the flashboards were not replaced [19646] until July 1917. A. That is right. They were not erected until July of 1917 but they started in June or July of 1916 to prepare the flashboards. They were going to experiment with a new swing gate and it required fabricating an entire new set of flashboards for that purpose.

Q. Will you refer to transcript 19,510? Do you have that before you? A. Yes.

Q. Did you make any investigation to determine the length of time over which the negotiations extended prior to the purchase of the property after 1916, that is the Woelpper and other properties?

* * *

THE WITNESS: It was my understanding the property was purchased in March of 1916. There would have been no negotiations necessary after that.

* * *

By MR. KING:

Q. Did you make any investigation as to any properties [19647] other than the Woelpper property as to the length of time over which negotiations extended prior to purchase?

* * *

THE WITNESS: I made no investigation in the case of each separate piece of property to find out exactly what period of time the negotiations covered. I did find in going through the accounts indications of the length of time. I made no attempt to note them, however.

* * *

By Mr. King:

Q. Did Mr. Bortner furnish you at your request a memorandum dated May 22, 1925? A. Is that one that is in the record? Q. No, it is not in the record. It is a list of docket entries involving a particular case. A. I believe it is over in a book on the table. May I look at that?

Q. Yes, indeed. A. Yes, I have a memorandum furnished by Mr. Bortner dated May 22, 1945, headed——

[19648] Q. That consists of how many pages? A. Four.

Q. Mr. Bortner also furnished you a subsequent memorandum, Mr. Newlands, to the one we have just been discussing, did he not, dated May 24, 1945? A. That is correct.

Q. How many pages are there in that memorandum? A. Five pages.

Q. What does that memorandum indicate, the one dated May 24? A. It is a description of various cases filed against Penn Water.

Q. And it indicates the length of time those cases pended, does it not? A. In some instances, yes. I have not checked the whole thing.

* * *

[19649] Trial Examiner: The documents referred to may be marked respectively Exhibit 451 and 452 for Identification.

* * *

[19650] By Mr. King:

Q. Did Mr. Bortner give you a memorandum showing docket entries in the case of Wilson Woelpper v. Penn Water and Power Company and Lancaster and York Furnace Street Railway v. Penn Water as well as Colemanville Water & Power Company v. Penn Water, Vandersloot against Penn Water, and Tripple v. Penn Water and Shoss v. Penn Water.

I will show you the copies we have. Maybe you can ascertain it from that.

• • •

[19651] By Mr. King:

Q. You have them? A. Yes.

• • •

(The document referred to above was marked Exhibit 453 for Identification.)

• • •

[19656] By Mr. King:

Q. Assume that the cement which we discussed yesterday was insured against fire loss, would the insurance premium be a proper charge to construction, in your opinion?

• • •

[19657] The Witness: During the original construction period that would be a proper charge to construction where it was obvious that the cement was going to be used for construction purposes, and nothing else.

By Mr. King:

Q. If the company takes the risk of the entire loss itself, you would not allow the loss as a construction cost, is that correct?

Mr. Goldberg: By that you mean, by "taking the risk itself" you mean they do not take out insurance on it?

Mr. King: Correct.

The Witness: That is right. I think that that is one of the things that a company should guard itself against. Of course, the circumstances in this case are a great deal different. The cement that we are talking about here, as is indicated clearly in the records had deteriorated and it is also indicated that the company did not consider that the fire had destroyed that cement.

By Mr. King:

Q. You think that a claim for allowance to the insurance company for cement damaged by fire is an indication that the company did not consider the cement was destroyed by fire? A. That is not what I said. I said the correspondence indicated that the company agreed with the insurance [19658] company that the fire had not destroyed the cement.

Q. Do you know, Mr. Newlands, as a result of the fire loss that actually the company recovered a portion of the loss from the Insurance Company? A. I know they recovered a portion of the total claim made against the insurance company.

Q. Now, Mr. Newlands, if the company were in commercial operation and had a loss due to bad cement, would such a loss be a proper charge to operating expenses?

* * *

The Witness: While I stated yesterday "operating expenses", it would not be in the classification of operating expenses as operating expenses are defined in the uniform system of accounts. It is not a strict operating expense but it would be charged to expenses.

By Mr. King:

Q. Mr. Newlands, did you ever examine the original stock certificates of the McCall Ferry Power Company?

* * *

[19659] The Witness: Yes, we examined what stock certificates were available.

By Mr. King:

Q. The stock certificates that you examined were endorsed in blank? A. I do not recall.

Q. Do you know the name of the holder of the original six shares referred to by you on page 19,495 of the transcript? A. Did you say do I know the name of the owner?

Q. The original holder and owner of the six shares. A. The names on the certificates are the names of the five nominees of Hutchinson. The shares were owned by Hutchinson according to the records.

Q. How about the other four shares? A. That is true of all ten shares, they were in the names of the five nominees.

Q. Do you know that the shares were endorsed in blank? A. I do not recall that but I would assume that to be the case since the shares were delivered to Hutchinson, although they were in the names of those five individuals. [19660] Q. Do you know one of the certificates which was endorsed in blank bore a date? A. They all bore dates.

Q. I am talking about a date for transfer, now. A. Well, there——

Q. On the back of the certificate—the date is on the back of the certificate, do you recall that?

Mr. Goldberg: You mean was there a date on the back of the certificate?

Mr. King: That is what I am asking him.

The Witness: No, I do not recall that detail.

By Mr. King:

Q. Now did you examine and consider in reaching your conclusions as to original cost, Exhibits 451, 452 and 453 for Identification?

• • •

The Witness: Yes, this is part of the material.

Mr. King: That you examined and considered?

The Witness: That is right.

By Mr. King:

Q. In your consideration of Exhibit 452 did you note that on the second page thereof Mr. John E. Malone's name [19661] appears as one of the counsel for the company in the John Edward Vandersloot v. Penn Water and Power

Company case? A. Yes, in the case of Vandersloot v. Penn Water and Power Company, a complaint filed because of flooding-damage claim—John E. Malone is mentioned as one of the counsel, with Stewart & Gerber for Penn Water and Power Company.

• • •

By Mr. King:

Q. I show you Exhibit for Identification 453 and ask you if you did not, in considering this exhibit see the name of Mr. Malone, one of the counsel in the Wilson Woelpper v. Penn Water and Power Company case, is that right? [19662] A. That is correct, but in that case I happen to know that Hensel handled that case alone entirely.

Malone came in only after Hensel died.

Q. You say Malone came in after Hensel died? A. Hensel died near the end of that case.

• • •

The Witness: That states the appearance of W. U. Hensel in writing filed.

By Mr. King:

Q. At the bottom of that same page under date of March 4, 1915, you note do you not the appearance of John E. Malone and John A. Newman, Esquire, in writing filed for defendants. A. Yes, sir.

Q. On the third page of the exhibit Mr. Malone's name appears as counsel for the Penn Water and Power Company in the case of Lancaster and York Furnace Street Railway Company v. Penn Water and Power Company, is that correct? A. That is correct.

Q. His appearance was entered according to this exhibit July 27, 1918, right? A. Yes, sir. That case was never tried.

Q. The suit was dismissed October 7, 1921, is that right? A. Yes, sir.

Q. On the next page of this same exhibit for [19663] identification Mr. Malone's name appears as attorney for

the Pennsylvania Water and Power Company in the case of Colemanville Water and Power Company v. Penn Water and Power Co., is that right? A. Yes, sir.

Q. And his appearance was entered on July 27, 1918, right? A. Yes, sir, and that case never came to trial.

Q. And that case was settled on October 7, 1921, is that right? A. Yes, sir.

Q. The next page of this same exhibit, namely 453, indicates that John E. Malone was attorney for Penn Water in the case of John Edward Vandersloot v. Penn Water and Power Company? A. Right.

Q. And Mr. Malone's appearance was entered September 16, 1918? A. That is correct, and that case never came to trial.

Q. And the docket entries show that case was settled October 8, 1921? A. Right.

Q. In the next case the exhibit indicates that Mr. Malone was attorney for the company in the case of Alice M. Tripple v. The Penn Water and Power Company, is that right, sir? A. Yes, sir.

[19664] Q. And Mr. Malone's appearance was entered September 13, 1918? A. Yes, and the case never came to trial.

Q. And the case was settled October 7, 1921? A. That is correct.

Q. When you say the cases never came to trial are you trying to indicate the lawyer performed no service? A. I am indicating that the lawyer did not perform as much service as he otherwise would.

Q. You mean if it went to trial? A. That is right.

Q. In the next case, this same exhibit indicates Mr. Malone's appearance was entered for the company in the case of Annie W. Shoff v. Penn Water and Power Company, is that correct? A. Yes, sir.

Q. Mr. Malone's appearance was entered April 8, 1929, is that correct? A. That is correct, and that case never came to trial.

Q. That case was settled October 4, 1933? A. That is correct.

• • •

[19665] By Mr. King:

Q. You testified concerning Mr. Bushong's services in connection with the organization of Holtwood Power Company, did you not? A. That is correct.

Q. That appears on transcript page 19,515? A. Right.

Q. You stated, did you not, that you found no evidence that Bushong organized Holtwood Power Company, is that correct? A. Yes, sir.

Q. And by the statement that you found no evidence that Bushong organized the Holtwood Power Company you meant, did you not, that in your opinion there was no evidence indicating that? You were not attempting to pass on the evidence as a matter of law, were you? A. No, the record indicated to me that the lawyers had [19666] organized the company.

Q. Did it indicate to you that Mr. Bushong had done nothing in connection with the organization of the Holtwood Power Company? A. Nothing of any moment. He did some clerical work in that connection which any officer or employee might do. For instance, the Lancaster Office paid for the recording of the charter and some of the other miscellaneous documents in that connection. Also Mr. Bushong was used as a go-between sometimes in transmitting requests to Malone in Lancaster but there is no evidence that he did any real work in connection with that organization.

Q. What do you mean by real work? A. That he had nothing to do with the organization itself. This incidental clerical work does not constitute organizing a company.

Q. Clerical work, in your opinion, does not constitute real work?

• • •

The Witness: Not of this nature.

By Mr. King:

Q. I show you a copy of a letter dated June 25, 1924 to Bushong from Mr. John A. Walls and ask you to look at that and tell me if you have seen that letter in connection with your investigation in connection with this case. I am going [19667] to ask leave to have it photostated but I have one extra copy for the Examiner. A. No, I have not seen this letter but it agrees with the records I have seen that Mr. Bushong's work was limited to mechanical work of a clerical nature.

Q. In other words, the letter accurately depicts the facts, is that correct? A. Yes, I believe it does.

* * *

Trial Examiner: The document handed the reporter may be so marked.

(Exhibit No. 454 is marked for Identification.)

* * *

By Mr. King:

Q. Mr. Newlands, I show you a copy of a letter dated June 28, 1924 to Mr. J. A. Walls from Marvin E. Bushong. I ask you to examine that letter and tell us whether or not you took that into consideration in connection with your investigation in this case and whether or not you have ever seen it before?

* * *

[19668] A. No, I have never seen it before so I did not take this particular letter into consideration, but I have seen most of the information that is here in the records, that is, regarding advertising in the papers and things of that sort.

Q. The letter correctly, in your opinion, reflects the fact? A. Yes, it reflects the fact that Mr. Bushong did some clerical work.

Q. That is not the question I asked you. I asked you if the letter correctly reflects the facts as you understand [19669] them.

* * *

TRIAL EXAMINER: He is asking as to whether those facts set forth in the letter are in accord with the facts you found in the files, without the supplementation of your opinion as to what the facts mean.

* * * *

THE WITNESS: Yes, I would say that that was so.

MR. KING: May we have the letter just referred to to Mr. J. A. Walls from Mr. Marvin Bushong dated June 28, 1924, marked for Identification as Exhibit 455?

TRIAL EXAMINER: It may be so marked.

(Exhibit No. 455 is marked for Identification.)

* * *

[19670] By MR. KING:

Q. Exhibit 455 on page 3, the last paragraph, states as follows, does it not, Mr. Newlands?

"There will, in all probability, be no necessity for a conference with Judge Stewart because Mr. Zimmerman will handle the work before the Public Service Commission and in the other offices in Harrisburg in Mr. Malone's absence."

That is correct, is it not, Mr. Newlands? A. That is what the letter states.

[19671] Q. You have heretofore stated on page 19516 of the transcript that you could find no evidence indicating what Mr. Zimmerman's charge for legal services represented, is that correct? A. That is correct. This is the first indication I have seen on that, of what Mr. Zimmerman did during that period. I presume he did other things than this.

* * *

[19695] Q. Mr. Newlands, will you refer to Exhibit for Identification 445? A. I have that.

Q. The second paragraph of that exhibit indicates that Mr. Bortner furnished you a memorandum dated May 23, 1945, [19696] does it not? A. Yes, sir.

Q. I show you a copy of that memorandum and ask you to examine it and tell me if that is an accurate copy of the memorandum furnished by Mr. Bortner to you? A. I will have to get another book over here.

Q. Did you find it? A. Yes, sir.

Q. Is the copy I showed you an accurate copy? A. From a hasty glance, it seems to be a correct copy.

Q. Did you take the memorandum that we are discussing into consideration in connection with your determinations in this case? A. Yes.

* * *

TRIAL EXAMINER: The document referred to may be marked for Identification.

(Exhibit No. 456 is marked for Identification.)

* * *

[19762] RE-DIRECT EXAMINATION.

By MR. HALL:

Q. Mr. Newlands, yesterday Mr. King questioned you regarding an insurance claim for fire losses in 1911. What was the total amount of Penn Water's claim as respected that schedule which he showed you? A. The total amount of the claim was $24,469.50.

Q. What amount did Penn Water receive in settlement of its total claim? A. $18,817.

Q. Was the total claim of $24,469.50 made up of numerous items? A. Yes, sir.

Q. What was the amount claimed by Penn Water for 21,000 bags of Union Cement? A. $5,460.

Q. Will you refer to page 19658 of the transcript, and specifically to your answer contained in lines 5 and 6? A. Yes, I have that.

Q. Do you mean by that answer to say that Penn-Water recovered its claim for loss of 21,600 bags of cement? A. No, I did not.

• • • •

[19763] By MR. HALL:

Q. Was the James E. Hopkins who you referred to at page 19587 of the transcript as being a director of Susquehanna Contracting Company, also a director or officer of McCall Ferry Power Company? A. No, he was not.

Q. Referring to the volume of Executive Committee Meetings which Mr. King had you examine for the limited period from October to December 6, 1905, will you state what that volume shows as to the place of the McCall Ferry executive meetings from the period December 9, 1905, to March 17, 1909? A. The meetings during that period were held at 60 Wall Street.

Q. Whose offices were located at 60 Wall Street, New York, during the period December 9, 1905, to March 17, 1909? A. The offices of McCall Ferry Power Company were located at 60 Wall Street during that period.

Q. In connection with those items in the K-1 and K-2 Schedules of Exhibit 320 where you were asked about the durability of the new items over the old, did you assume the new items were more durable in reaching your conclusions? A. Yes, I did.

Q. In other words, you accepted the company's claim in that regard? [19764] A. That is correct.

Q. Referring to the items listed in the K-1 and K-2 Schedules of Exhibit 320, is the work covered by those schedules properly characterized as repair? A. Yes, the work was made necessary because parts had worn out or failed in operation and it was necessary to repair them.

In repairing them the Company sometimes used better material which was available at that time.

Q. Referring to the items on Schedule K-1 and K-2 and assuming the work was performed today and the accounting therefor was pursuant to the present FPC system

of accounts, and further that those items were not capitalized, would you recommend that those items be reaccounted for and capitalized on the company's books? A. No, I would not. The management is allowed considerable discretion in items of that nature, and where the decision is made and it is a reasonable one, we do not seek to change it.

* * *

By Mr. Hall:

Q. Having considered Exhibits 454 and 455, would you [19765] consider any part of Mr. Bushong's salary or of the Lancaster office expense as chargeable to Holtwood steam plant construction account? A. No, I would not consider any part of it as a proper organization expense.

Q. Having examined Exhibit No. 455, does it afford you a basis for determining if any of Mr. Zimmerman's fees should be allowed as part of the Holtwood Power Company organization expense? A. No, the information given there does not afford me any basis for allocating Mr. Zimmerman's fee.

* * *

[19767] By Mr. Hall:

Q. Referring to transcript 19,589 and specifically to line 3 on that page where the reporter indicates that you were interrupted before you completed your answer to the Examiner's question, will you complete the answer which you intended to give? A. The words, "Were present," should be added at the end of that line, that is, it should read, "And by request Messrs. Fisk, Lane and Hutchinson were present."

* * *

[19773] DONALD L. WETZEL.

• • •

DIRECT EXAMINATION.

By MR. KING:

Q. Mr. Wetzel, you have heretofore been sworn and testified in this proceeding? A. Yes, sir.

[19774] Q. You are now employed by the Pennsylvania Water and Power Company? A. Yes, sir.

Q. In what capacity? A. Budget engineer.

Q. How long have you been employed by that company? A. Since 1936.

Q. Will you give us a brief summary of your experience to date? A. I was employed as an electrical tester by G. E. for a period of two years, testing locomotives and electric locomotive equipment, and by Duquesne Light Company for a period of one year testing instrument transformers.

I was employed as a material expediter in the construction of overhead transmission lines for a period of two years.

MR. GOLDBERG: By Duquesne Light Company?

THE WITNESS: Yes. I was employed as supervisor of the installation of heat insulation in connection with the construction of steam power plants and commercial steam generating facilities for Duquesne Light Company, the Allegheny Steam Heating Co., and Northern States Power Co. for a period of 2½ years, and I was employed as a cost analyst on underground transmission construction for a period of one year.

In 1934 I was employed by Safe Harbor Water Power Corporation as a material cost checker in connection with [19775] the installation of 25 cycle equipment at Safe Harbor and Conestoga Substation.

In 1936 I began my employment with Pennsylvania Water and Power Company as a material and time distribution checker, becoming thereafter a field-cost engineer.

Baltimore office cost engineer in charge of original cost studies and budget engineer in charge of the budget and cost section of the engineering department, which position I still hold.

By Mr. King:

Q. Will you give us a brief description of the scope of your duties as budget engineer? A. Yes, sir. It is the duty of my department to receive and put into proper form the construction budget items for the year, and for their presentation to the Board of Directors for approval, for the issuance of job orders authorizing the field to do construction work, to follow the costs incurred in job orders, to make an analysis of them, to procure inventories of structures and equipment installed on those jobs, and to associate them with the costs under such jobs, and then in general to follow the plant accounting of the company—and we have other work, of course, such as insurance, and so forth.

Q. Now, Mr. Wetzel, did you make an analysis of the job orders in the company's files in connection with the items listed on the K Schedules attached to Exhibit 320? A. Yes, sir.

[1977] Q. And the K Schedules represent the result of that analysis by you, right? A. It represents an analysis of the residue of what we refer to as the company claims which were not accepted by the FPC Staff Examiners.

Q. Some of the company's claims were accepted, is that correct? A. Yes.

Q. And those claims are of the same nature as the items in the K Schedule, is that right? A. I am not sure at the present time that they are all of the same nature, but they all are claims of the company.

Q. Are some of the items in the K Schedule of similar nature to items which the Commission Staff allowed? A. Yes.

[19777] CROSS-EXAMINATION.

By MR. GOLDBERG:

* * *

[19784] Q. Will you please specify which of the items accepted by the Staff of the Commission are, in your opinion, similar [19785] to those in the K Schedules of Exhibit 320? A. Oh, I believe the additions.

* * *

[19786] Q. Does Schedule K-1 of Exhibit 320 represent how the company treated the items or does it reflect your opinion of how the company should have treated the items? A. It represents not only my own opinion of how the company should have treated the items, but also the opinion of Mr. Gunn, Mr. Eichhorn, and so on, counsel.

Q. That means that the K Schedule reflects the opinions of the individuals you have named as to how the company should have treated the items, but does not reflect how the company did treat the items, right? A. That is correct.

Q. And that applies to Schedules K-2, K-3 as well, right? A. Yes, sir.

Q. Would you agree with me that the determination of whether the item represents an addition, betterment or replacement involves the exercise of judgment?

* * *

THE WITNESS: Yes, I would say many of them are very self-evident but they may require some exercise of judgment.

[19787] By MR. GOLDBERG:

Q. You will also agree with me, I think, that it is fair to state that there are no hard and fast rules or standards or clear lines of demarcation, as between additions, betterments and replacements? A. No, I cannot agree to that statement.

Q. Do you think there are clear lines of demarcation which one can follow in determining whether the item is

an addition, replacement, betterment or repair, is that right? A. Well, if I may, I would like to put it this way: That in the majority of instances the line of demarcation is very evident. In some instances it may be considered as an on-the-fence item. That is the only way I can characterize it.

Q. Would you say that there are on-the-fence items in the K Schedules? A. I believe not.

Q. You think in each of the instances reflected in the K Schedules the category is self-evident, is that right, and did not involve the exercise of judgment? A. I believe that is true with at least the very great majority of them.

Q. But you think there are a number of them where it is not true, is that right? A. No, I would say there are a few of them.

[19788] Q. Well, since you say there are only a few of them, where it is not true will you please specify those few? A. I would say Item 26 covering the construction plant buildings on page 6 of Schedule K-2 is argumentative.

Q. Is that the only one you can specify? A. That is the only one I can find offhand. I would have to make a rather thorough examination to identify them.

Q. Based upon your present examination and your knowledge of your determinations at this time, we can say as to the others that the classification as between addition, betterment, replacement or repair is self-evident and does not involve judgment? A. No. Let me put it this way: That as regards the specification as to whether or not the item belongs in K-1, K-2 or K-3 it is of no great importance, it was considered to be of no great importance in this series of schedules. What was to be considered of importance was the fact that the item was one of the three.

Q. That is, whether it should be capitalized or not, is that right? A. That is right.

Q. Now, then, let us go back to my question and having your explanation in mind will you take my question.

[19789] THE WITNESS: Well, the fact that the item is a capital improvement is self-evident.

By MR. GOLDBERG:

Q. Let me put it this way: Whether it is a capital charge, or not, which you say was the important thing, is a matter of judgment, right? A. Yes.

Q. There are no hard-and-fast rules or standards which you can apply in determining that, right? A. As I said before there are in some cases on-the-fence items but in the majority of cases it is self-evident that the items are of a capital nature.

Q. Well, now, is it your statement that there are hard and fast rules to determine whether it is a capital charge, or not? A. Yes, there are.

Q. There are? A. Yes.

Q. It doesn't require the exercise of judgment? A. Only in those cases where the question becomes [19790] debatable as to whether those hard and fast rules are hard and fast enough to cover the point.

* * *

Q. There are different rules for each of the items that you were dealing with in the case of the K Schedules? A. I will not say that there are some items here classified as betterments which may, in fact, not be—in Schedule K-1 —may, in fact, not be just as applicable under K-2 or K-3, depending on the treatment given.

Q. As you said the important thing is not whether it is K-1, K-2 or K-3, so I am directing myself to the important thing, whether it is a capital charge or a charge to operations. Did you apply the same rule to all of the items in the K-1 Schedules? A. I believe so, but we applied a general rule first.

Q. What was that general rule? A. The general rule was to the effect that if the property [19791] of the company, the physical property of the company did not accurately or was not accurately reflected in capital costs of the company, that certain adjustments should be made in-

cluding the writing-off of property which did not exist and the capitalizing of items of a capital nature which did exist but which were not on the books of account.

Q. That general rule I suppose you applied to the K-2 and K-3 Schedules as well, is that right? A. Yes, except in the matter of the K-2 Schedule, it was a fact that the company may have had the same property as it had on its books of account, but it had been added to since the item was first acquired.

Q. Is there any exception with respect to K-3 Schedules? A. The K-3 Schedules are sort of the same effect.

Q. As K-2? A. K-2 is marked "Betterments"; K-3 is marked "Replacements Involving Betterments".

Q. This general rule begins "If the physical property of the company was not accurately reflected in capital cost of the company;" how was it decided whether or not the physical property of the company was accurately reflected in the capital cost of the company as applied to the K Schedules? A. Well, as part of the original cost studies the company took a physical inventory of its property. It also made an analysis of the plant costs, then it reconciled the plant [19792] costs with the physical inventory of the property.

If the plant costs reflected the purchase of property which the physical inventory did not reflect, it was due to the fact, first, that the property may have been abandoned in which case it was written off the books; in the second place it may have indicated that the property was used in construction, that is, it was of an incidental nature in constructing the company's property, in which case it became an indirect cost.

Then there were items of equipment inventoried which could not be found in the analysis of the plant costs of the company. That indicated that the original charge, the original cost of that item had not been charged to plant costs, but elsewhere. If that were true a claim was made similar to these.

Q. Now, what standards did you apply in connection with the K-1 Schedules to ascertain whether there should be a re-accounting for the charge which had not originally been made to plant account? A. The standard was this: That if the physical inventory indicated that there was a purchase of one type of equipment, that there should be a purchase of one type of equipment but the actual purchase indicated otherwise, we had to justify the difference between the two and we very often found it was due to the betterment existing in the [19793] physical item that the original cost for the item and the description of physical inventory would differ.

Q. I have difficulty in following that. Could you take one of the items and illustrate what the last answer means? A. Well, take Item 6 of Schedule K-1, "Generator Room Controller and Cab". The physical inventory of the controller and cab on that generator room crane did not tally with the original purchase of the equipment. Therefore it was evident that some change had been made between the time of the original purchase and the time of the inventory. The claim for the two items identified here now makes it possible to reconcile physical inventory with the cost as adjusted.

Q. Now, then, in reaching your conclusions that the items in the K Schedules should be charged to plant account and that the company originally erred in not so treating the items, did you, yourself, apply the Standards of Accounting in the 1919 Pennsylvania System of Accounts?

* * *

THE WITNESS: I cannot answer your question directly, Mr. Goldberg. I will have to explain, if I may.

The decision to make claims to have the company's physical inventory of property and cost properly reconciled was made by Mr. Gunn, Mr. Eichhorn and counsel. It was my function to make those claims so that the inventory and cost would [19794] reconcile themselves.

In making that determination I was, of course, familiar with the fact that the property, in order to make the claim, should have inherent in it the increase in durability, increase in efficiency, and so forth, as prescribed by the Pennsylvania system of accounts, but I was in no way passing upon the original accounting.

Q. We are not to understand then that you are saying that the accounting followed by the company originally was erroneous under the 1919 Pennsylvania system of accounts, is that right? A. No, except as to this: When these claims were made after the decision to make such claims had been made and the claims had been made, they were reviewed by Mr. Gunn and Mr. Eichhorn as to the propriety of them and in so doing they may, or may not have passed on the former accounting, I do not know.

Q. Yes, but I am interested in your process and if I understand your answer you agree with me that you personally, in dealing with the items of the K Schedules and setting them up, did not reach any conclusions as to the propriety of the accounting followed by Penn Water under the system of accounts in force at the time, is that right? A. May I ask you if you mean by that question as to whether or not it was made upon managerial discretion, and so on, or whether it was incorrect as far as proper records are [19795] concerned? Which of those?

Q. Accounting. A. Accounting?

Q. Proper accounting for the items under the applicable system of accounts. A. The fact that it was incorrect accounting had already been established before I made these claims.

Q. So that you did not consider or concern yourself with the propriety of the accounting followed, right? A. No, that fact had already been established.

Q. Established by whom? A. Mr. Eichhorn, Mr. Gunn and counsel.

Q. But you reached no independent decision on that? You accepted their conclusion that the accounting had been

improper? A. Yes, but that did not give me authority to make any claim I wanted to make. I had to confine my claims to reconciling physical inventory with cost.

* * *

[19796] Q. Is not this the fact, that the job orders referred to in the K Schedules contain rather elaborate descriptions of the work done? A. In some cases, yes. I do not recall just the degree of description given in each of the job orders involved here.

Q. In some cases the job orders consist of many pages, sometimes as many as 20 pages, right? A. I believe so. That is the information contained in [19797] the job order folder; the job order itself is a single sheet of paper.

Q. Were there any instances where the job orders did not provide you with sufficient detail to reach your conclusions referring to items which you have included in the K Schedules? A. I believe that is true. We had to go to people in the company who knew the situation in order to find out the true facts in the matter.

Q. People in the company who had worked for Penn Water at the time the jobs had been done? A. Exactly so, and knew what work had been done, yes.

Q. They relied on their memories, did they not? A. No, there was very often other correspondence which related to the work, drawings, notes of men in the field, and things of that nature.

Q. Very often it was merely memory they relied on to supplement their information, right? A. I do not believe I can think of a case which is that vague, no.

Q. Did you personally secure the supplemental information? A. Most of it came to me in such form that I could readily determine whether it was proper or valid information.

Q. Do you know whether you had available to you in reaching your conclusions, regarding the items in the K [19798] Schedules all the information which Penn Water

had at the time the original determination was made as to how the items should be handled? A. I cannot answer that without having some specific item in mind. Can you point one out?

Q. Well, not having done the job myself you are putting the burden on me that is really on you. I just want to know if you can tell me right now, having in mind the items in the K Schedules, whether you had all the information available to you that the company had available to it at the time the original determinations were made? A. I do not know. I would say that I had the very great majority of the information available to me that the company had at the time it made its plans and charges.

Q. Do you have any reason to doubt that the company, at the time the entries were made, had as much information to go on as you did? A. I believe they had as much information as I did but they neither applied it consistently nor correctly.

Q. Do you have any doubt that they knew that the items in the K Schedules were more durable than the old items that were being replaced or repaired? A. You are now referring to betterments particularly, I assume?

Q. K-1 Schedules. [19799] A. At that time it was of no great consequence to the company whether it charged the capital accounts for betterments, or not. It was not a matter of rate base at that time or original cost, or reconciliation of original cost of items with inventory.

Q. That does not answer my question.

• • •

THE WITNESS: They may have known that they were more durable and decided to ignore it in view of the circumstances.

By MR. GOLDBERG:

Q. What did you mean when you said it was not a matter of rate base? A. At the time the entries were made

it did not matter to the company whether or not the items were capitalized.

Q. Why? A. It did not affect its earnings.

Q. Why didn't it? A. It was on an energy form of contract at that time.

Q. You were not then speaking of principles of regulation being involved, is that right? A. No, what I meant to indicate was it is of much more importance now to have the plant accounts reflect the property than it was at that time.

Q. And you think because of that reason the company [19800] at that time, the time the entries were made, was not so much concerned with correct accounting? A. Yes, sir.

* * *

[19801] RE-DIRECT EXAMINATION.

By MR. KING:

Q. Mr. Wetzel, the job orders which you analyzed in connection with the K Schedules, together with the file in which they were contained, were all made available to the Commission Staff, were they not? A. Yes, sir.

* * *

[19833] MR. GOLDBERG: "Johnson's Legal Opinion Re Organization of the Company;" Part 65, "Johnson's Legal Opinions Re Eminent Domain;" Part 8, "Lee's Affidavit." Part 24, "Hopkins' Affidavit."

I think Hopkins or Lee is still alive and was not produced for cross-examination.

TRIAL EXAMINER: Which one is alive?

MR. GOLDBERG: I think the record already shows which one Mr. Gunn thought was still alive.

MR. KING: It is Lee.

TRIAL EXAMINER: What is his condition? Where is he living and what is his physical condition?

MR. KING: He resides outside of Boston. He is a man in the late 80's, I believe, an elderly man. We have communicated with him and his doctor forbids him to leave his home.

TRIAL EXAMINER: I think I remember that.

MR. KING: You remember that.

TRIAL EXAMINER: Yes.

* * *

[19865] GEORGE H. DAVIS.

* * *

CROSS-EXAMINATION.

* * *

[19964] TRIAL EXAMINER: Just one other question I want to ask before we recess.

If I recall your testimony on either cross or direct with regard to the assignment of the Holtwood-Highlandtown line and Highlandtown substation, your basis for assigning them directly to Baltimore was a consideration of the amount of energy used in connection with the time-of-year use? Is that correct?

THE WITNESS: No, that energy and the time-of-year use, or the time of the year it was used was with reference to the 220 kv lines, not the Highlandtown line.

TRIAL EXAMINER: What was your basis for the [19965] Highlandtown line?

THE WITNESS: That Baltimore used substantially all of the energy that was carried over that line, or used all of the energy that was carried over that line, and I did not consider its use as a return, just a direct delivery to Baltimore.

* * *

[19972] RE-DIRECT EXAMINATION.

By MR. GOLDBERG:

Q. Mr. Davis, at transcript 19008, line 22, in answer to a question by Mr. Myse you testified that you are "not [19973] using in this allocation, the costs reported by Holtwood Company" and at transcript 19009, line 2, in response to another question by Mr. Myse you further testified that the $5,157,627 was not the total cost as reported by Holtwood.

Will you please explain what you mean by that testimony? A. Yes, I think it will be easier to understand if I use specific illustrations.

For example, the costs I have used contain an item of return based on a 5 per cent rate of return on the depreciated rate base whereas Holtwood Company reports costs of service computed on an undepreciated rate base at a rate of return in excess of 5 per cent.

Also the costs I have used in my allocation contain a figure for income taxes based on the income of a 5 per cent rate of return rather than on the income which is presently received by Holtwood Company.

These are the principal illustrations which result in a variance between the costs I have used and those reported by Holtwood Company.

Of course there are many instances where the costs I have used are the same as those reported by the company.

Q. At transcript 18975, Mr. Myse was questioning you regarding your statement that the methods followed by Mr. Spaulding of combining all Safe Harbor and all of Holtwood's cost of service results in the allocation of a greater ratio [19974] of Holtwood's cost to Baltimore than if he had developed the ratio for Holtwood alone, and in that connection you testified at that page that you were referring to the costs involved in supplying power and energy and special facilities.

Were you correct in testifying that you were referring to special facilities? A. No, my answer should have been confined to power and energy.

Q. And when you testified as you did at line 17 of transcript 18989, were you there speaking of power and energy only? A. Yes, I was.

* * *

Q. Have you checked the figure of $74,379 which you deducted for "fuel" and which is referred to at line 24 of transcript 19018 for the purpose of ascertaining whether it is an average figure? A. Yes.

Q. Is it an average figure? A. Yes, it is the average of the fuel in storage at the end of each month during the year.

Q. And at transcript pages 19039 to 19043 you were [19975] asked concerning the assignment of two-thirds of the 220 kv lines to Baltimore and one-third to pool and particularly concerning the energy use of the lines in 1946 as compared with 1944, which you said was one of the considerations you took into account.

Were there other considerations which influenced your determination? A. Yes, I considered the fact that in periods of low flow these lines provide the only dependable source of energy required to supply Penn Water's firm requirement in Pennsylvania during those hours when the water is being stored at the hydro plants, particularly if such low flow should occur in the peak load months.

This consideration, though not susceptible to mathematical determination, does indicate to me a greater use of the 220 kv lines for service to Pennsylvania customers than appears from a direct comparison of the energy actually transmitted over the lines in any one year.

TRIAL EXAMINER: What page was that?

THE WITNESS: 19043.

MR. GOLDBERG: 19039 to 19043.

TRIAL EXAMINER: Where did you stop on 19043? At the bottom of the page?

THE WITNESS: There is one question on 19044 that carries over there on the same subject.

[19976] TRIAL EXAMINER: All right.

By MR. GOLDBERG:

Q. During what month was backfeed used for the 220 kv lines a maximum in 1946? A. During the months of low flow and of maximum load on the interconnected system.

Q. During what months is there maximum use of the 220 kv lines for send-out from Safe Harbor to Baltimore? A. During the months of high river flow.

Q. Did these facts enter into your allocation of the 220 kv lines? A. Yes.

Q. At transcript pages 19,045 and 19,046, you testified that the Ellicott City-Takoma line is used for interchange purposes between Baltimore and PEPCO and for the purpose of supplying firm energy from Baltimore Company to PEPCO.

Are those the only uses of that line? A. No, they are not.

Q. What other use is made of that line? A. That line is used also for backfeed to Holtwood Company.

Q. Does that mean a portion of the backfeed from Baltimore to Safe Harbor comes over the Ellicott City-Takoma line? A. Yes, that is where part of it does come from.

[19977] Q. On page 19,067, line 9 you stated you treated the amount of firm energy billed to Metropolitan Edison Company as though it were actually the metered amount at Violet Hill. Did you mean when you so testified that firm energy was metered separately from interchange energy to M. E. Company at that point? A. No, the meter measures the total quantity received at that point without distinction and the interchange to M. E. Company, after adjustment for the portion delivered to Pennsylvania Power and Light Company through Metropolitan Edison Company, is that portion of the total in excess of the firm energy

as computed according to the terms of the contract, which is Exhibit No. 72.

Q. Is that what you had in mind in making your answer at transcript 19,066, line 20: Namely, that the meters do not distinguish the quantities registered as between firm and net interchange? A. Yes, that is right.

Q. Referring you to transcript 19,070, the question beginning at line 2, what did you understand Mr. Myse was referring to when he said "total resources"? A. Total energy resources, which was what we had been discussing at that time.

Q. And did you make your answer which appears on lines 5 to 7 of that transcript page 19,070 on that basis? [19978] A. Yes.

Q. At transcript 19,135 you were questioned by Mr. Myse regarding your use of 2 per cent in connection with operation of single phase equipment at Safe Harbor for railroad service.

Have you since your cross-examination checked the available data in connection with your use of 2 per cent? A. Yes, I have.

Q. What have you found? A. I have found that operating and maintenance expense applicable to water wheels, turbines, generators and accessory electrical equipment as reported by Safe Harbor for 1946, including an allocation of general and administrative expense, is approximately 2.2 per cent of investment in those facilities.

Q. At 19,215, line 21, you state in effect that there were two outlets for 25-cycle generation at Holtwood, namely to Lancaster and to Baltimore Company at Highlandtown. Is it not true that a part of the 25-cycle output at Holtwood can be transferred to Holtwood's 50-cycle system through the two frequency changers at Holtwood?

* * *

THE WITNESS: Yes, that is true.

* * *

[19980] Q. Referring you to transcript 19,233, lines 7 to 11, and your answer at line 12 of that page and considering Mr. [19981] Myse's definition of received at transcript 19,238, line 25, is the amount of 538,171,000 kwh the amount of energy actually received by Penn Water from Safe Harbor in 1946?

MR. MYSE: Now, I object to that question as not being proper rebuttal, because again I point out that the definition given on page 19,238 has no connection whatsoever with the testimony at page 19,233 which this question purports to examine anew.

TRIAL EXAMINER: The objection is overruled.

* * *

THE WITNESS: No, that is not the actual amount of energy delivered by Safe Harbor to Holtwood's facilities.

By MR. GOLDBERG:

Q. Why not? A. Because the total amount of Safe Harbor's output is delivered to Holtwood's facilities. In 1946 this amount was 876,968,000 kilowatt-hours.

Q. At transcript 19,201, line 24, to transcript 19,203, [19982] line 11, you were asked concerning the allocation of total hydro power cost to capacity and energy components, and you agreed that if 100 per cent of the installed capacity were dependable capacity, then by your method you would allocate 100 per cent of the hydro costs to the capacity components.

Did the type of contract known as H and I in this proceeding influence you in making the allocation to capacity and energy components as you did? A. Yes, it did. Consideration was first given to the net revenue to determine what, if any, part of it was a function of energy sales which would constitute a proper basis for allocating a portion of the costs including return, depreciation and income taxes to the energy component.

Examination of the contracts under which Holtwood operates revealed that the net revenues are independent of the amount of energy sold. In view of this condition, it appears that the hydro costs should be allocated to the capacity component in proportion to the dependable capacity of the hydro plants, which is the method which I have used.

Q. Do the same considerations which determined your method of allocating hydro costs also apply to the allocation of the fixed costs of steam generation to the capacity components? A. Yes, they do.

[19983] Q. Are these considerations responsible for the unit capacity costs developed in your studies? A. Yes, because these unit capacity costs are the direct result of a contract condition.

Q. Beginning at transcript page 19,110 to page 19,124, you were asked about your allocation of intangible and general plant, which in your study you assigned to the pool. Why did you assign this general and intangible plant to the pool? A. This was considered a jointly used property, and was therefore allocated from the pool on the basis of use.

Q. What other method could you have used in allocating general and intangible plant? A. Well, this property could have been allocated directly to transmission and production plant.

Q. Would this same method apply to general and administrative expenses? A. Yes, that could have been treated the same way.

Q. At transcript 19,098 you were asked concerning the total hydro operating cost as shown in the last column of Table III, Exhibit 421, which represents the total cost of hydro operating after deducting the $133,750 which Holtwood receives for allowing backwater from the Conowingo plant to reduce the head at its plant.

Could you have treated this payment in any other way?

[19984] A. Yes. The hydro costs could have been assigned to the pool without the deduction, and the deduction could

have been made in Table V after administrative and general expense had been allocated to the individual customers and the pool.

• • •

[19988] Q. Mr. Davis, at transcript 19,098, you were asked whether the amount $269,145 appearing in line 1 of Table III of Exhibit 421 shows the total costs of service as you or the Commission accountants found them; is that right? A. That is right.

Q. And is your answer to the question based upon the treatment you accorded the $133,750? A. Yes.

Q. And did you at transcript 19,099 testify that there seemed to be no satisfactory way of handling the $133,750 except to say that Penn Water had a cost net of only $269,000? A. That is right.

Q. Now, then, have you considered whether the $133,750 could have been treated in any way other than the manner in which you treated it in Exhibit 421? A. Yes, I had in mind another way. I had in mind another way at that time.

• • •

[19989] Q. When you say you had in mind another way at that time, what does "at that time" refer to? A. At the time when I set up the allocation as is shown in Exhibit 421.

Q. Now, did you consider that the hydro costs could have been assigned to the pool without the deduction, and the deduction could have been made in Table V after administrative and general expense had been allocated to the individual customers and to the pool?

• • •

THE WITNESS: Yes, I did consider that as an alternative method, and considered what effect it might have on the answer.

By Mr. Goldberg:

Q. What would have been the effect on the results of your study if you had treated this backwater payment in that way?

• • •

[19990] The Witness: It would have increased the total cost allocated from the pool by a small amount of administrative and general expense which would have been allocated to the $133,750, and it would have decreased the costs assigned to individual customers.

It would also have increased the proportion of administration and general expense allocated to hydro costs in the pool. The effect on the final result would have been small. I have not attempted to determine the effect of this change separately from that of transferring intangible and general plant from the pool to direct allocation in Table I, and of similarly transferring administrative and general expense in Table III.

By Mr. Goldberg:

Q. Well, what would have been the effect on the results of your study had you adopted the method of direct allocation of intangible and general plant, administrative and general expense and had used the total hydro costs in Table III and the first part of Table V?

• • •

The Witness: All three of these alternative methods cumulatively would have increased the total cost allocated to Baltimore by about $76,000 and decreased the costs allocated to [19991] Pennsylvania customers in the same total amount.

• • •

Q. At transcript 19,186, lines 5 to 10, you were asked this: "If the actual Pennsylvania Railroad load in Pennsylvania at the time of the area 6 system peak had actually been 36,557 kilowatts, would not the load shown in Exhibit 425 have been higher by 12,557 kilowatts on that peak

hour," and at transcript page 19,187, lines 14 to 19, you were asked if it [19992] would not be correct to say that if you had used that higher peak load at the time of area 6 system peak in determining your dependable capacity, you would have come out with a higher figure for dependable capacity.

You replied that that was correct if it had been determined that way. Was it determined that way? A. No, sir.

Q. How was it determined in so far as the railroad load entered into your determination? A. My determination was based on a consideration of the total area 6 peak load which included the combined railroad load in Maryland and Pennsylvania. Using 36,557 kilowatts for the load in Pennsylvania alone would not alter the total railroad load and therefore would not affect the result of my determination of dependable capacity.

Q. At transcript page 19,294, in reply to a question beginning at line 16 and ending at line 21, you stated at lines 22 to 24 at that same page that more backfeed or diversion would be required assuming all other conditions remaining the same, if interchange energy supplied to the Pennsylvania customers were increased.

Would not backfeed and diversion of Baltimore Comuany's two-thirds from Safe Harbor be increased assuming all other conditions remaining the same, if Penn Water's sale of firm energy to its Pennsylvania customers increased?

* * *

[19997] THE WITNESS: Yes, the same thing would be true if firm power sales increased as if interchange sales increased all other conditions remaining the same.

By MR. GOLDBERG:

Q. Would not backfeed and diversion of Baltimore's two-thirds from Safe Harbor also increase, assuming all other conditions remaining the same, if the river flow at

Safe Harbor and Holtwood was lower than experienced in 1946? A. Surely.

• • • •

[19999] Q. Mr. Davis, referring you to transcript 19,325, Mr. Myse put this question to you at line 13: "Now, which of the two figures $103,690 or $94,037 is the correct [20000] amount of the cost to be allocated to the Pennsylvania Railroad in Pennsylvania for special facilities"—implying that there was some inconsistency between the two amounts.

Is there an inconsistency between the two amounts in your use of them? A. No, one is costs allocated; the other is charges made to the railroad company.

Q. Will you explain why there is a difference between the $94,038 and the $103,600? A. The $94,038 is the total special facility cost allocated to the railroad in Pennsylvania and the $103,690 is the proportionate amount of the facility charges corresponding to the $94,038 of allocated cost and is used as the basis of adjusting the revenue collected by Holtwood from the Pennsylvania Railroad to conform to the allocation of cost.

• • •

[20005] STANLEY W. ROLAND.

• • •

FURTHER RE-DIRECT EXAMINATION.

By MR. GOLDBERG:

Q. I show you your testimony at 19449 and call your attention to your answer at line 17 where you say, "My answer [20006] at that point is wrong."

That answer that you make followed what is referred to by the reporter as "question and answer read." I wonder if you can tell us what you were rererring to when you said "My answer at that point is wrong" in the previous testimony you were referring to. A. I had reference to the answer at 19447, line 10; also the answer at 19447, line

17, and also on the same page at line 21. In each case the deliveries at Westport, Riverside, Takoma Park and at Conowingo and at Perryville are in part energy purchased by Baltimore Company from Safe Harbor at Safe Harbor and delivered by Holtwood to the Baltimore Company.

• • •

[20010] TRIAL EXAMINER: Very well. On page 19461, lines 21 to 23, Respondents' counsel attempted to put a question to the [20011] witness which was ruled out by the Examiner at 19466, lines 3 and 4.

In consulting the transcript I find that most of the testimony in evidence that I thought would support a finding that this particular question was repetitious, went to the matter of what the contracts provided, and I have not yet been able to find in the transcript that there has been any testimony directly on the point of whether Baltimore Company rendered a bill to the railroad covering only the so-called sale to the Railroad in Maryland, as a matter of practice. You may put that question to the witness if you wish.

MR. MYSE: Well, may we have an answer to the question, then, as put on page 19461, lines 21 to 23, as follows: "Does Baltimore Company render a bill to the Railroad covering only the so-called sales to the Railroad in Maryland?"

THE WITNESS: No, the bill covers sales by Baltimore Company in Maryland and Holtwood Co. in Pennsylvania. There is one bill.

By MR. MYSE:

Q. Is there anything in the bill where it says anything about sales by Holtwood and Baltimore in both Pennsylvania and Maryland?

• • • •

[20012] THE WITNESS: I do not believe it does.

By Mr. Myse:

Q. As a matter of fact, this bill covered sales by "Electric Companies," is not that right?

* * *

The Witness: If it is stated as it is in the contract, that is what it would state, but I have not seen the bill or I do not recall having seen it recently enough to recall whether or not it includes what was just stated.

* * *

[20014] JOHN M. NEWLANDS.

* * *

Further Re-Direct Examination.

By Mr. Goldberg:

Q. You are the same Mr. Newlands who has previously appeared and been sworn? A. Yes, sir.

Q. Do you have Exhibit 421 before you? A. Yes, sir.

Q. Can you take Exhibit 421 and referring to each of the tables indicate the figures you supplied to Mr. Davis?

* * *

[20016] The Witness: Yes, I can do so.

By Mr. Goldberg:

Q. Will you do so, please? A. On Table I of Exhibit 421 I supplied all the figures in column 7, with the exception of the 100 per cent at the end.

Mr. Myse: Just so we understand what you mean by column 7, it is the column headed, "Total Service," right?

The Witness: Yes, sir.

Mr. Myse: With what exception?

The Witness: The percentage figure at the end. On Table II, I supplied all the figures in the Total Service

column, Column 7 and the basic figures by lines from which Item 2, "Depreciation Reserve," was calculated.

I supplied depreciation reserve figures by lines. Mr. Davis took those figures and accumulated them by companies and made an allocation of the reserve applicable to general property to those companies.

• • •

[20017] THE WITNESS: On Table III I supplied the basic figures for operating expenses taken from the company's books from which the figures in the Total Service column, Column 7 were derived.

[20018] TRIAL EXAMINER: In other words, you supplied everything in the "Total Service" column?

THE WITNESS: Yes, the underlying figures. Mr. Davis has made combinations to arrive at these figures here. On Table IV I supplied the basic figures from which Item 4 "Depreciation Expense" was calculated by Mr. Davis. In other words, there again I supplied the depreciation by lines and he accumulated them and allocated the general depreciation by companies.

• • •

[20019] THE WITNESS: The figures in Column 7 of "Total Service" of Table IV check directly or can be derived from exhibits that [20020] are already in the record, Mr. Dunn's Exhibits 392 and 393.

On Table V I supplied the basic figures for line 7 "Depreciation Reserve" and there again Mr. Davis made an allocation of the general depreciation and added it to my basic figures to arrive at the figures on this schedule. I also supplied the figures shown at line 18 "Depreciation Expense" and Mr. Davis made the same allocation.

• • •

By MR. GOLDBERG:

Q. Referring to Exhibit 422, can you point out, by going through the tables, the figures you supplied to Mr. Davis? A. Well, they are similar figures to those that

I explained or just illustrated in Exhibit 421. Do you want me to go through this exhibit?

Q. No, I think that answer is sufficient.

* * *

[20052] R. L. THOMAS.

* * *

DIRECT EXAMINATION (in Rebuttal).

By MR. REIBLICH:

* * *

[20064] Q. How have the parties construed the two-thirds and one-third apportionment since the Safe Harbor plant went into commercial operation in 1932? A. Until after the beginning of these hearings, the three parties (i. e., the Baltimore, Holtwood and Safe Harbor Companies) have all considered and have repeatedly and consistently stated that the Baltimore Company purchases two-thirds, and Holtwood Company one-third, of the Safe Harbor output, and conversely that Safe Harbor Company makes these *sales*.

Q. Was this true after, as well as before, Safe Harbor Company became a party to the Pennsylvania Railroad, Lancaster, Coatesville and York contracts? [20065] A. Yes, it was. The signing of these contracts by Safe Harbor Company made no difference in the situation. Both before and after Safe Harbor Company became a party to them Holtwood Company has sold the electrical energy to the customers at Lancaster, Coatesville and York, and has collected and retained the charges. The amounts of these charges became deductions in computing Holtwood Company's bill to Baltimore Company as provided in Article III of the 1931 agreement between Holtwood and Baltimore Companies. Likewise Holtwood Company has made the sales to the Pennsylvania Railroad in Pennsylvania.

* * *

[20070] Q. Was this idea of avoiding double taxation by the direct sale of energy by Safe Harbor Company to the Pennsylvania customers ever carried out? A. No, it was not. The fact is that it was decided not to attempt to avoid double taxation, as I shall explain later. From the beginning of commercial operation until [20071] the end of 1942, Safe Harbor Co. paid to the State of Pennsylvania the gross receipts tax on every dollar of revenue received from the sale of one-third of its output to Holtwood Co. and Holtwood Co. paid the gross receipts tax on the entire amounts paid by the Pennsylvania customers and by the Pennsylvania Railroad for power and energy delivered in Pennsylvania, with the single exception of the year 1932 in which Holtwood Company claimed certain exemptions. Effective January 1, 1943, an amendment to the Pennsylvania Gross Receipts Tax Law exempted from taxation

> "gross receipts derived from sale for resale of electric energy to persons, partnerships, associations, corporations or political subdivisions subject to the tax imposed by this act upon gross receipts derived from such resale . . ." (Pennsylvania Act of May 21, 1943, P. L. 334.)

Nevertheless, Safe Harbor Company was still required to pay the gross receipts tax on revenue from that portion of Holtwood Company's one-third share of Safe Harbor's output which was calculated to be resold by Holtwood Co. to Pennsylvania customers other than the Pennsylvania Railroad, since Holtwood Co. did not pay the tax on such sales, and Holtwood Co. has paid the tax on the Pennsylvania portion of revenues received from the Pennsylvania Railroad.

* * *

[20072] Q. Can you explain what happened with reference to the inter-company consideration of whether Safe Harbor should sell directly, or jointly with Holtwood, to the Pennsylvania customers. A. Yes, I can. The method of ac-

counting for energy and the decision that Safe Harbor Company would continue to sell its entire output to the Baltimore and Holtwood Companies were the result of joint study of the question over a period of years and of mutual agreement by Baltimore Company and Holtwood Company. When the Pennsylvania Railroad began the work of electrifying its lines in Pennsylvania the question of whether Safe Harbor Company should sell directly or jointly with Holtwood Company the supply to the Railroad in Pennsylvania was taken up specifically by Holtwood and Baltimore Companies as set forth in a memorandum dated March 3, 1937, by the Operating Committee provided for in the contracts between the Holtwood and Baltimore Companies and between the Safe Harbor, Holtwood and Baltimore Companies. It had not been necessary to decide the question prior to that time as [20073] all of the energy for the Pennsylvania Railroad electrification was delivered either in Maryland or the District of Columbia for the electrification of the main railroad line from Perryville, Maryland, to Washington, D. C., and was recognized as a sale by Baltimore Co. alone.

Q. Is this the memorandum to which you refer? A. It is.

MR. REIBLICH: I ask to have this marked Exhibit 470.

(Exhibit No. 470 is marked for Identification.)

By MR. REIBLICH:

Q. What conclusion was reached by the Operating Committee? A. This memorandum reveals that the idea of joint sale by Holtwood and Safe Harbor Companies to the Railroad in Pennsylvania was rejected by the Committee as too complicated. After considering the respective merits of sale directly by Safe Harbor Company or directly by Holtwood Company, the Operating Committee recommended that Holtwood Company should sell directly to the Pennsylvania Railroad all of the latter's requirements de-

livered under this contract in the State of Pennsylvania. In considering these plans, the Operating Committee referred to the proposed direct sale by Holtwood Company as being treated in "exactly the same manner as sales to Lancaster, York and Coatesville." The recommendations of the Operating Committee were approved by Mr. Walls, [20074] President of the Holtwood Co., and Mr. Wagner, President of the Baltimore Co. by an exchange of letters dated September 9, 1937, which letters have been introduced into evidence by the Holtwood Company in this case and have been identified as Exhibit No. 11.

Although the Operating Committee's memorandum was written primarily in connection with the Pennsylvania Railroad electrification, it also discusses the treatment of sales to other customers in Pennsylvania, pointing out that substantial savings in gross receipts taxes in Pennsylvania could be effected if the Safe Harbor Company made direct sales to the Pennsylvania Railroad and the other Pennsylvania customers. However, the Operating Committee said on page 5 of their memorandum: "Nevertheless the tax saving (equal in amount to the gross receipts tax on one-third of the revenue received from the Pennsylvania customers) has never been considered sufficient to justify contractual changes and complications resulting from direct sale by Safe Harbor Company."

* * *

[20076] Q. Prior to these hearings, have the sales of electric energy by Holtwood Company to its Pennsylvania customers ever been considered as joint sales by Holtwood Company and Safe Harbor Company? A. No, the sales have never been considered as joint sales, but recognition has been given to the fact that the energy for these sales comes from an integrated system consisting of the resources of the Baltimore, Holtwood and Safe Harbor Companies. Such recognition is found in the fuel rate adjustment clauses of the Pennsylvania Railroad and Coatesville [20077] contracts.

The fuel rate adjustment formula for the Pennsylvania Railroad is specified in the original 1931 Agreement with that Company, but the formula for the Coatesville contract was not developed until 1944. Both formulae are based on the premise that the energy supply includes the generation of the Holtwood and Safe Harbor Hydro Plants and of the Baltimore and Holtwood Steam Plants and adjust for the increased cost of coal in Baltimore in the proportion that the Baltimore and Holtwood steam generation bears to the total generation of the Holtwood, Baltimore and Safe Harbor Companies. (In the Coatesville contract allowance is also made for certain interchange operations.)

Q. If Safe Harbor Company had not been made a party to the contracts with Holtwood Company's Pennsylvania customers, would the accounting and operations of the Safe Harbor, Holtwood and Baltimore Companies have been any different than they have been? A. They would not. If Safe Harbor had not been named as a party to any of the Pennsylvania contracts, including the Pennsylvania Railroad, no change would have been necessary in any operations, statistical or accounting records, or sales reported to public agencies; and the revenue received, expenses, taxes paid and net income of all three parties would remain unchanged.

[20078] For example, in the initial drafts of the 1946 contract with the Metropolitan Edison Company as submitted to Baltimore Company by Holtwood Company, it was proposed that Safe Harbor Company should continue to be a party as in the preceding 1935 agreement. When Baltimore Company questioned whether taxes had been saved through Safe Harbor Company's being a party to the existing contract and pointed out that no power and energy was actually sold by Safe Harbor Company to Metropolitan Edison Company, Holtwood Company agreed to the omission of Safe Harbor Company as a party to the renewal contract. This omission has caused no changes

in operation, accounting or billing. The accounting and reports of the three power companies have been consistently on the basis that Safe Harbor disposes of its entire output to Baltimore and Holtwood Companies.

Q. Will you please explain this? A. In 1932, when the Safe Harbor plant began commercial operation, it became necessary for the Baltimore, Holtwood and Safe Harbor Companies to agree on a method of accounting for energy sales and purchases even though this determination did not affect the inter-company billings. In 1932 the Operating Committee worked out and adopted a form, identified in this case as Exhibit No. 143, for the monthly determination of energy sales. This form, entitled "Energy Purchased by Baltimore and Holtwood Companies from Safe Harbor Company and [20079] Energy Purchased by Baltimore Company from Holtwood Company" has been used by all three companies from July 1932 to October, 1946. Every month from July 1932 to October, 1946, the form has been made out by Holtwood Company and sent to Baltimore Company. All three companies have used these statistical reports, or the data therein, in reporting energy purchases and sales to the Federal Power Commission, the Public Service Commission of Maryland and the Public Utility Commission of Pennsylvania.

[20080] Q. Mr. Thomas, I show you a tabulation showing the annual kwh figures for 1944, 1945 and 1946. Is this the same form you just referred to? A. Yes, it is. The form itself, and the figures typed thereon for 1944 and 1945, were made up by Holtwood Company and sent to Baltimore Company. The figures for 1946 were entered on the form in ink by Baltimore Company. Holtwood Company has not yet issued this report for 1946.

MR. REIBLICH: May I have the document handed to the reporter marked for identification as Exhibit 471?

TRIAL EXAMINER: The document handed to the reporter may be marked Exhibit 471 for Identification.

(Exhibit 471 was marked for Identification.)

By Mr. Reiblich:

Q. Do you wish to comment on this form? A. Yes. One of the items on this form (No. 20) which was needed and has been used for reports to the regulatory authorities is captioned "Energy Purchased by Baltimore Company from Safe Harbor Company." It is computed as two-thirds of the Safe Harbor net metered kwh sendout less a computed allowance for line losses. The companion item (No. 21) is captioned "Energy Purchased by Holtwood Company from Safe Harbor Company." It is computed as one-third of the net metered kwh sendout at Safe Harbor.

When Safe Harbor Company became a party to Holtwood [20081] Company's contracts with the Pennsylvania customers no change was made in Items 20 and 21 of the form, or elsewhere.

* * *

[20094] Q. Mr. Thomas, at transcript page 908 Mr. Roland identified as Exhibit No. 37 a transmission map of Holtwood [20095] Company, No. 130463, which was filed with Holtwood Company's Form 12 report to the Federal Power Commission for 1944. What does the symbol designation on this map at Perryville and Conowingo, Maryland, show? A. At Perryville and Conowingo there appears a symbol "W-1" which is identified in the legend as "Point of Delivery for Account of Consolidated Gas Electric Light and Power Company of Baltimore."

Q. Mr. Spaulding has introduced a revision of Map No. 130463 dated January 15, 1945, identified in this case as Exhibit 353. What designation is shown at Perryville and Conowingo on this map? A. The symbol "V," shown on the revised map at Perryville and Conowingo, is identified in the legend as "Interconnection with The Pennsylvania Railroad Company."

Q. In testimony regarding the revised map Mr. Spaulding testified as follows (transcript page 16588, lines 21 through 24):

"Q. (By Mr. Sparks) Was such designation as shown on Exhibit 37 a misstatement of the facts?

"A. Not in all instances, but it was an oversimplified representation."

Do you agree with the changes made on the map and with Mr. Spaulding's reasons for changing the designations on the map? [20096] A. No, I do not. Perryville and Conowingo are points of delivery of electric energy by Holtwood Company to Baltimore Company, that is, Holtwood Company physically delivers energy to the Railroad for the account of Baltimore Company.

* * *

[20102] Q. In Exhibit 319, page 4, Mr. Zinder has made the following statements:

"Furthermore, the joint nature of many of the operations serves to very closely knit Penn Water into the whole interconnected system. Lifting Penn Water out of this position and treating it as a self-contained whole, while contrary to its manner of operation, is possible in connection with the determination of Penn Water's cost of service to Baltimore Company.

"* * * A review of the facilities of Penn Water reveals that while the operations involved over the facilities may be very complex, particularly contractually, the actual purpose and use of the facilities is comparatively simple with reference to the services to Baltimore."

Do you agree with these statements? A. No, I do not. Holtwood Company cannot be treated as a "self-contained whole" in connection with any allocation of cost of service to any of its customers, and "the actual purpose and use of the facilities" is not "comparatively simple" with reference to the services to Baltimore. I particularly take exception to Mr. Zinder's attempt to "lift out" from the rest of the system Holtwood Company's 25-cycle facilities.

Q. Will you explain briefly your reasons for this answer?

[20103] A. * * * Holtwood Company is dependent upon the transmission lines from Holtwood and Safe Harbor to Baltimore not only to dispose of its energy during high river flow, but to receive energy during periods of low flow. All of these transmission lines are two-way streets. Furthermore, energy flows from Holtwood to Baltimore on the 25-cycle transmission lines at the same time that 60-cycle energy is flowing back from Baltimore Company to Holtwood Company or its Pennsylvania customers by way of the transmission lines connecting Baltimore with Safe Harbor. The system is operated like a single system to obtain maximum overall economy. Energy originating at the plants of the several companies is commingled and is allowed to flow around the various loops and over the variout transmission lines in accordance with the requirements of system characteristics and operating economy. One of the objectives of the 1931 inter-company contracts (Items E and H in this proceeding), was to avoid the necessity of identifying the kilowatt hours flowing around the various loops and over the various transmission lines and of segregating them for billing purposes.

* * *

[20105] Q. In Exhibit 319, pages 13 and 14, Mr. Zinder allocates 92% of the investment in Holtwood 25-cycle generating plant and substation to Baltimore Company. Do you agree that such allocation is reasonable? A. No, I do not. An analysis of the use that is made of the 25-cycle power generated at Holtwood shows that in any allocation the generating plant, frequency changers and 25-cycle substation should be charged to the pool, as they are used in connection with pool operations for the benefit of all customers.

Q. Have you had charts prepared to illustrate in particular the use that is made of the 25-cycle Holtwood output? A. Yes.

[20106] Q. Are these the charts to which you refer? A. Yes.

MR. REIBLICH: I offer these documents, Mr. Examiner, and ask that they be marked for Identification.

TRIAL EXAMINER: The documents are marked Exhibit 472 for Identification.

(The documents referred to above were marked Exhibit 472 for Identification.)

By MR. REIBLICH:

Q. These charts cover the week of September 16 through September 22, 1946. Will you please explain why you chose that week? A. There are several reasons: (1) That week has already been referred to in the cross-examination of Mr. Spaulding at transcript p. 3628; (2) this week illustrates operation during fairly low river flow, although the flow was still more than three times the minimum; (3) this week's operation demonstrates the fact that Holtwood 25-cycle energy is indirectly supplied to 60-cycle Pennsylvania customers at other than high flow, contrary to what was implied by Mr. Myse's questions and Mr. Davis' answers at transcript p. 11,932; (4) this week's operation illustrates well the various ways in which Holtwood 25-cycle capacity is used for the Pennsylvania load.

Q. Will you please describe this exhibit? A. First I should like to say that the ordinates are [20107] in units of thousands of kilowatts and each small division represents 5,000 kw. Each small division on the horizontal scale represents an hour and 24 hours are shown for each day of the week. Certain hours are shaded red, green and blue for easy reference. The actual daily flow for each of the seven days is shown under the day and date. Sheet No. 1 and Sheet No. 2 of the exhibit graphically illustrate how Holtwood's 25-cycle capacity is used. Sheet No. 3 shows energy flow on individual lines and other data that are useful in explaining the disposition of the energy.

Q. Starting with curve 1 on Sheet No. 1 and working up, will you please explain each curve? A. Curve 1 on Sheet No. 1 shows the Holtwood hourly 25-cycle generation. This generation is fairly typical of the hydro generation during the high load period of the day. On Friday the heavy generation extending into the evening hours is due to the upswing in flow. It may be seen that the average daily flow increased to 7,600 c. f. s. on Saturday and then dropped off to 6,300 c. f. s. on the following day. The shaded red hour, 11 A. M. on Wednesday, was the weekly peak load hour on the Safe Harbor-Baltimore-Holtwood pool. For that hour the 25-cycle generation at Holtwood was 65,000 kw.

Q. Mr. Thomas, will you explain curve 2? A. Curve 2, which looks almost like a straight line, illustrates the first way in which Holtwood's 25-cycle capacity is used for Holtwood Company's Pennsylvania customers. [20108] This curve shows that part of the Holtwood 25-cycle capacity which is used directly for the Pennsylvania load. For the 11 o'clock hour indicated, 5,000 kw. were delivered to Lancaster.

Q. What does curve 3 represent? A. Curve 3 represents the operation of the frequency changers at Holtwood. For the hour indicated in red, 14,000 kw. were being converted from 25-cycle energy into 60-cycle energy for the Pennsylvania customers. This is the second way that Holtwood 25-cycle capacity can be used for the Pennsylvania customers. It might be well to notice at this point that the output of the Holtwood frequency changers in general follows that of the Baltimore frequency changers, shown on curve 5, but is much less, as the capacity of the Holtwood frequency changers is about 14,000 kw. whereas the frequency changers on curve 5 have a capacity of about 90,000 kw.

Q. What is the significance of curves 4, 5 and 6? A. Curve 4 shows 25-cycle energy sent down to Baltimore from

Holtwood and received at Highlandtown. A third way of using Holtwood 25-cycle capacity for the Pennsylvania customers is to transmit 25-cycle energy to Baltimore, convert it there to 60-cycle by use of Baltimore frequency changers and then return it to Holtwood Company over the 220 kv. circuits. For the week shown most of the 25-cycle energy so received (or its equivalent, since there is a commingling of 25-cycle steam generation at Baltimore with the energy received at Highlandtown [20109] from Holtwood) was converted into 60-cycle energy.

Curve 5 shows the conversion of 25-cycle energy to 60-cycle and vice versa, by means of the frequency changers in Baltimore. Again for the week shown, most of the energy so converted (or its equivalent, since there is a commingling of 60-cycle steam generation at Baltimore with 60-cycle converter output) was sent back to Holtwood Company by way of Safe Harbor. This return of energy at 60 cycles to Holtwood Company is shown by curve 6 labeled "Net 60-cycle from Maryland to Pennsylvania" (as indicated by the footnote this curve, in addition to being the net of the two 60-cycle 220 kv. lines, also includes the transfer of single-phase 25-cycle energy at Perryville and Conowingo. This single-phase system has been included with the 60-cycle system to eliminate any objection that might be raised concerning the small amount of 60-cycle power that may be sent to Safe Harbor and then sent down the Safe Harbor-Perryville transmission line and used on the Maryland Section of the Pennsylvania Railroad).

Q. What was the magnitude of such power flow as you have described for this third way of using Holtwood 25-cycle capacity for the Pennsylvania customers at the 11 o'clock hour on Wednesday, September 18, 1946? A. This hour is indicated by the shaded red line through curves 4, 5 and 6 on sheet No. 1. 43,000 kw. of Holtwood 25-cycle power was delivered to Baltimore, which delivery [20110] accounted for part of the 55,000 kw. that entered the Baltimore frequency changers and was converted into 60-cycle

power. Of the 55,000 kw. of power so converted, curve 5 shows that 51,000 kw. of 60-cycle power was delivered by Baltimore back to Holtwood Company over the 60-cycle circuits for Pennsylvania customers.

Q. What is the fourth way that the Pennsylvania customers use Holtwood's 25-cycle capacity? A. The fourth method of using Holtwood's 25-cycle capacity for the Pennsylvania customers is by transmitting Holtwood power to Baltimore and, without the necessity of conversion, exchanging it for 60-cycle steam generation. This method of using Holtwood 25-cycle capacity for the Pennsylvania customers is illustrated by the 8 A. M. hour on Tuesday, September 17, 1946. This is the first hour of 25-cycle generation on that day as shown in curve 1. This hour is identified by the green shading. Here, while there was 17,000 kw. delivered at Highlandtown, none was converted to 60-cycle power, but instead 113,000 kw. of Baltimore 60-cycle steam generation was delivered to Holtwood Company for its Pennsylvania customers as shown in curve 6.

Q. What is the fifth way that Holtwood's 25-cycle capacity is used for the Pennsylvania customers? A. The fifth method of using Holtwood's 25-cycle capacity for Holtwood Company's Pennsylvania customers is by Holtwood [2011] Company receiving part and at times all of Baltimore's two-thirds of Safe Harbor's 60-cycle output in exchange for 25-cycle power delivered at Highlandtown. Referring to curve 7 on Sheet No. 2, this is illustrated clearly at 8:00 P. M. on Saturday, September 21, 1946 (the hour shaded blue) where 34,000 kw. of 25-cycle power was delivered to Highlandtown (curve 1, Sheet No. 1) at which time there was no net flow of 60-cycle power between Maryland and Pennsylvania (curve 6, Sheet No. 1), but all of Baltimore Company's two-thirds of Safe Harbor was delivered to Holtwood Company for use for Pennsylvania customers.

Q. Is there any other way that Holtwood 25-cycle power is used? A. Yes. A sixth type of operation is where Holtwood Company delivers 25-cycle power to Bal-

timore, but does not receive an equal or greater amount of 60-cycle power back in return, either as backfeed from Baltimore or as diversion of Baltimore Company's two-thirds of Safe Harbor output. This is illustrated by curve 8 on Sheet No. 2, labeled "Baltimore Company's Net Purchases from Holtwood Company." As may be seen, there were only a few off-peak hours on Friday evening and on Sunday, when Baltimore Company received net power from Holtwood Company. On the peak hour of the week Baltimore Company received a net amount of power equal to minus 60,000 kw.

[20112] Q. What does curve 8 further indicate? A. This curve indicates that the amount of Baltimore Company's net purchase from Holtwood Company for the week in question was a large negative figure—i. e., Baltimore Company actually supplied a much larger amount of energy to Holtwood Company than Baltimore Company received from Holtwood Company. The hourly values in curve 8 are computed in the same manner as the monthly and annual figures computed by Holtwood Company and shown in Item 22 of the inter-company energy accounting statement, Exhibit 143 and Exhibit 471. For the month of September, 1946, as a whole the net purchase by Baltimore Company from Holtwood Company was also a large negative figure.

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[20141] By Mr. Sturtevant:

Q. Mr. Thomas, Holtwood Company in its Form 12 report to the Federal Power Commission for 1945, Schedule 16, line 1-B shows the dependable hydro capacity of the Holtwood and Safe Harbor plants combined for 1945 as 295,000 kw.

[20142] Do you agree with this figure? A. No, sir; I believe it is entirely too high.

Q. What were the dependable hydro capacities of the Holtwood and Safe Harbor plants combined for the years 1944, 1945 and 1946? A. The actual dependable capaci-

ties as reported by Baltimore Co. in the so-called pool Form 12 report were, for 1944, 122,000 kw.; for 1945, 161,000 kw.; for 1946, 167,000 kw.

• • •

[20149] Q. Mr. Thomas, when the hearing was recessed yesterday afternoon, you had just testified with respect to dependable hydro capacity of the Holtwood and Safe Harbor plants. What do you mean by dependable hydro capacity? A. By dependable hydro capacity, I mean the dependable capacity as defined in paragraph 1-B of the instructions of Schedule 16 of the FPC Form 12 report.

• • •

[20150] Q. Mr. Thomas, is dependable hydro capacity the same thing as hydro capacity value? [20151] A. No, it is not, as Baltimore Company interprets that definition.

Q. What do you mean by the term "hydro capacity value"? A. By hydro capacity value I mean the amount of steam generating capacity which is replaced or rendered unnecessary in the system by the hydro supply.

Q. Will you explain the principal differences between dependable hydro capacity and hydro capacity value? A. Dependable hydro capacity, as I have defined it, is susceptible of reasonably exact determination and is largely independent of judgment.

On the other hand, the hydro capacity value involves consideration of various factors which are additive to what I might call the bare bones of dependable capacity under the most adverse flow conditions.

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[20169] Q. Mr. Thomas, are there any specific technical objections to Mr. Watchorn's study which he has submitted in this proceeding? A. There are some. One is the uncertainty as to the definition of forced outages of steam plants. Another is that Mr. Watchorn used his own estimates for load shape which were based on a past year, I believe, 1941 instead of actual recent load shapes.

• • •

MR. SPARKS: Now I would like to make one other statement, Mr. Examiner.

This witness is in the habit of launching into a long discursive answer every time he is asked a question, and it prevents Respondents from making a proper objection and it has happened all morning.

I think Your Honor should direct the witness to make his answers responsive, and not to launch into long, expansive discussions and debates about the subject.

[20170] TRIAL EXAMINER: I think this: I think that Respondents' counsel's objection to the character of the answers is well taken.

MR. GOLDBERG: Of course I might observe, Mr. Examiner, that Respondent's counsel had no objection to their witnesses making the same type of answers on cross-examination.

TRIAL EXAMINER: I cannot go back into the case.

• • •

[20175] By MR. STURTEVANT:

Q. At transcript page 16,682, lines 19 to 21 Mr. Spalding said that Baltimore Company has no obligation in connection with any of the firm power obligations of Holtwood Company to its Pennsylvania customers.

[20176] At transcript page 16,669, line 23, Mr. Spalding said, "Baltimore Company is one of several suppliers of supplemental energy, but I do not agree that as a supplier it is in any different position, in fact, than any of the other several interchange customers of Penn Water and there is no actual burden to Baltimore Company in so doing". Do you agree with these statements?

• • •

[20178] THE WITNESS: No, I do not. Baltimore Company has definite obligations to Holtwood Company to enable it to supply its firm-power customers and the Pennsylvania

customers do not have such obligations. As suppliers Baltimore Company and the Pennsylvania customers are entirely different.

By Mr. Sturtevant:

Q. Mr. Thomas, does your answer relate to the capacity as well as backfeed? A. Yes. Baltimore has obligations to supply both capacity and backfeed.

Q. What are the Baltimore Company's obligations to supply capacity in connection with the firm power obligations for the Holtwood Company to its Pennsylvania customers? A. Baltimore Company is obligated to supply such capacity as is required to enable Holtwood Company to meet its firm-power [20179] obligations. As a result of the contracts and the overall economic set-up Baltimore Company has the same obligations in that respect that a single utility would have if a single utility owned and operated all the facilities of the Baltimore-Holtwood and Safe Harbor Companies.

Q. When you refer to the contracts, do you mean the contracts designated as Items E to I in this case? A. Yes.

Q. Now, Mr. Thomas, as to this capacity obligation, can you be more specific as to the basis of your statement as to Baltimore Company's contractual obligation? A. The obligation of Baltimore Company to supply capacity is the result of the over-all contractual set-up that was made in 1931 when Baltimore Company assumed the obligations that go with the purchasing of the entire output not required to meet other customers' needs under contracts that have to be approved by the Baltimore Company. Baltimore Company under that supplemental agreement which is Items H and I in this case, purchases the entire output of Holtwood Co. not required for customers under contracts approved by Baltimore Co.

* * *

[20180] The Witness: Article V of the contract provides that Holtwood Company cannot make an investment of

over $50,000 without obtaining the approval of Baltimore Company; that it cannot dispose of or alienate property without Baltimore Company's approval and Baltimore Company's approval is required under Article IV of Holtwood Company's agreements for the purchase or interchange of electric and hydroelectric power, or before making any substantial modification in existing contracts. The over-all effect of all of this is that Baltimore Co. necessarily has to stand behind the system.

When I say that Baltimore Company is obligated to provide capacity I did not mean to say that all of that capacity has to be in Baltimore. If Holtwood Company, with Baltimore Company's approval, installs capacity Baltimore Company pays all the fixed and operating expenses and therefore incurs all of the costs and expenses the same as if the capacity was put in Baltimore.

* * *

[20185] Q. Please state whether or not any of the generating capacity installed by Baltimore Company since 1931 was for the purpose of enabling Holtwood Company to meet its firm power obligations in Pennsylvania? A. Yes, it was.

* * *

[20191] Q. Article 6 of the 1927 contract between Baltimore Co. and Holtwood which is Item H in this record, reads as follows:

> "Upon request of Power, Electric will supply to Power steam generated energy in excess of Electric's own requirements up to the limit of its available generating capacity, provided, however, that Electric is not obligated to start up a station which would not otherwise be operated. For all such energy Power will be billed for the daily net amount of such backfeed at actual cost plus 10 per cent. The costs to be used [20192] are those reported in Electric's monthly production statement covering the month during which steam energy was furnished to Power."

Now are your statements as to Baltimore Company's contractual obligations in any way based on the provision of Article 6 which I have just read? A. No. That article is a dead letter. No billing has been carried out under the ten per cent provision since 1932, I believe. The provision that Electric--which I call Baltimore Co.—is not obligated to start up a station which would not otherwise be operated, is a completely dead letter, and until I heard it quoted in this hearing the other day I had forgotten it was in there.

When I got back to Baltimore I tried it out on Mr. Greer and Mr. Brunner and one or two others and none of them remembered that was in there. The fact is that we have started up the Pratt Street standby station without any reference to that article to supply firm load to the firm power load of the Baltimore-Pennsylvania customers' system at the time when it was not needed for interchange. The station has been started up at other times when it was primarily for interchange.

Q. Now, did that article become a dead letter prior to or subsequent to the execution of the 1931 supplemental agreement?

* * *

[20193] THE WITNESS: Subsequent to the 1931 contract.

By MR. STURTEVANT:

Q. Why did it become a dead letter subsequent to the execution of the 1931 supplemental contract? A. Because those contracts gave Baltimore Company the obligation which I have previously explained to back up the Holtwood system.

* * *

[20325] By MR. REIBLICH:

Q. Mr. Thomas, at page 20058 of the transcript, you were asked a question, and I quote:

"Is Safe Harbor Company a party to certain contracts other than the contract with Baltimore Com-

pany and Holtwood Company identified as Items E, F and G?"

And you answered, "Yes, it is."
To what contracts were you referring?

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[20331] THE WITNESS: I was referring to the contracts with Pennsylvania Power and Light Company, Exhibit 76, I think; Philadelphia Electric Company, Exhibit 73, and Pennsylvania Railroad Company, Exhibit 10.

By MR. REIBLICH:

Q. Does the Safe Harbor Company sell any electric energy under these contracts?

MR. SPARKS: Now, I object to that, Mr. Examiner. That is the type of cumulative testimony that we argued about all day yesterday, Mr. Examiner.

TRIAL EXAMINER: Just a minute.

MR. REIBLICH: Mr. Examiner, it is a perfectly proper question. It was caused as a result of testimony that was stricken out on the pages to which we have already referred, and I do not see that it calls for an extended answer. It will not have an extended answer, but it certainly is a matter with reference to which we are entitled to have this witness testify in the record.

TRIAL EXAMINER: May I have the question?

(Question read.)

MR. REIBLICH: We are certainly a party in interest directly affected on that point.

MR. SPARKS: I think I can point out, Mr. Examiner, [20332] very simply, what it is. In the question beginning at line 16 on page 20058 there were certain quotations—you will see them at the bottom of the page. Then the question was: "Do you agree with

those statements?" which are in quotes. The witness said, "Yes, I do." And Your Honor struck that out.

TRIAL EXAMINER: The reason that answer was stricken was because that is not the proper way to introduce testimony. If the witness knows, he is entitled to say, and if he does know there is no necessity for referring to any other source for information.

MR. SPARKS: But it is purely cumulative, Mr. Examiner. That was one of the points in the motion to strike those portions all the way through.

TRIAL EXAMINER: Well, in view of the importance of the issue involved, the Examiner will permit the question to be put. Answer the question.

• • •

THE WITNESS: No, it does not. These contracts involve no rates or charges for the sale or transportation of energy by Safe Harbor Company.

By MR. REIBLICH:

Q. Referring to page 20067 of the transcript, Holtwood Company has introduced in this proceeding as Exhibit No. 163 [20333] an order of the Public Service Commission of Pennsylvania dated January 10, 1933, authorizing the Safe Harbor Water Power Corporation to sell electric energy or power to certain utility companies in Pennsylvania.

Why was this authority obtained?

MR. SPARKS: Now, just a minute, Mr. Examiner. I object to that. If you will look at the bottom of page 20067, beginning with line 20, that very answer which would be called for by this question, I assume, was stricken out.

TRIAL EXAMINER: Well, the Examiner made a statement in connection with its reintroduction in evidence. The objection is overruled.

THE WITNESS: This authority was obtained so that Safe Harbor Company might enter into Holtwood Company's contracts with the Pennsylvania customers in order to avoid double taxation under the Pennsylvania gross receipts tax law, and to simplify accounting and operating arrangements.

MR. SPARKS: Now, Mr. Examiner, I move to strike it. It is obvious that they are getting back in exactly what you struck out, because the witness read word for word from the transcript beginning at line 20 and ending at line 24 of page 20067.

TRIAL EXAMINER: The motion to strike is denied. The reason for the other ruling was that the question at line 16 at 20065 was no predicate for whatever might have been left [20334] in the answer if the sustaining of the motion to strike had been qualified to save a part of the answer which the witness has now restated.

By MR. REIBLICH:

Q. Has Safe Harbor Company ever exercised this authority?

MR. SPARKS: Just a minute. May I ask what the purpose of that question is?

MR. REIBLICH: To reinstate the rest of the answer, Mr. Examiner, which is related to the preceding question that I have just asked.

MR. SPARKS: May I ask counsel where it appears in the transcript?

MR. REIBLICH: At the bottom of page 20067.

MR. SPARKS: I do not see anything there in the answer relating to the question as to whether Safe Harbor—oh, I see it is at the bottom of the page beginning at line 24. I object to it for the same reason, Mr. Examiner, that the question calls for an exact answer apparently that is at the bottom of page 20067 beginning at line 24.

TRIAL EXAMINER: For the reasons previously stated by the Examiner the objection is overruled.

* * *

THE WITNESS: No, it has not.

* * *

[20711] GEORGE W. SPAULDING.

* * *

DIRECT EXAMINATION.

By MR. SPARKS:

* * *

[20772] Q. You are the same G. W. Spaulding who has previously been sworn and who has testified in this proceeding, are you? A. I am.

Q. At page 19876, line 6, Mr. Davis states that "emergency energy would be in the nature of firm power and if 21 million of that 72 were in the nature of firm power, by being emergency energy, it would change the allocation on the principle that I have used there, as a benefit to Metropolitan Edison and to the economy interchange." Mr. Spaulding, is it correct to consider emergency energy as firm energy?

* * *

[20774] THE WITNESS: No.

By MR. SPARKS:

Q. Is the term "emergency energy" used in interchange transactions only when the purchasing company has no alternate source of obtaining interchange energy?

* * *

THE WITNESS: No, interchange energy is frequently accounted for as "emergency energy" under our interchange contracts in connection with various kinds of interchange transactions, and is not limited to those transac-

tions where the receiving company had no other alternate source of supply.

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[20775] Q. Mr. Spaulding, in 1946 did Metropolitan Edison have other alternate sources of energy available to it during those hours when Penn Water reported emergency energy was supplied to Metropolitan Edison?

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THE WITNESS: Yes, they only obtained it from Penn Water because it was available from Penn Water at a lower cost than from any of their other several available sources.

By MR. SPARKS:

Q. Was the 21,951,000 kwh which was accounted for as emergency energy in 1946 transmitted by Penn Water to Metropolitan Edison Company over the Holtwood-Violet Hill transmission lines?

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[20776] THE WITNESS: No, a substantial part of such energy was transmitted over the Safe Harbor-Harrisburg tie to the Pennsylvania Power & Light Company.

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[20777] Q. In connection with Mr. Thomas' testimony relating to the history and development leading up to the contractual apportionment of Safe Harbor output, as he called it, he testified at page 20061, line 11, that the load and revenue studies indicated that, if Baltimore Company purchased part of Safe Harbor output and Holtwood Company the remainder, about the most Holtwood Company could risk taking was about one-sixth. Is it a fact that the load estimates made in 1930 of the future requirements of the Pennsylvania customers were materially different from the loads which have actually been experienced?

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THE WITNESS: No, the actual loads we have been experiencing are not materially different from those estimated in 1930.

By Mr. Sparks:

Q. Mr. Spaulding, at page 20076, Mr. Thomas testified that the fuel rate adjustment clause of the Coatesville contract was based on the premise that the energy supply included generation of the Baltimore steam plants which was a recognition that the energy for these sales came in part from the resources of Baltimore Company. Is this testimony of Mr. Thomas correct? A. No. The Coatesville fuel rate adjustment clause was not a recognition that the energy came in part from the resources of Baltimore Company. The fuel rate adjustment formula [20778] used in the Coatesville Power Supply Contract was merely lifted out of the Railroad Contract and modified in certain respects. The adjusted formula was used because it was found, after study, that it would provide an adjustment which would conform with variations in the operating expenses of Penn Water and Safe Harbor.

[20779] Q. Mr. Spaulding, at page 20078, Mr. Thomas testified that when the initial drafts of the 1946 contract with Metropolitan Edison Co. were submitted to Baltimore Company, in which it was proposed that Safe Harbor Company would continue to be a party, Baltimore Company questioned whether taxes had been saved through Safe Harbor Company being a party to the existing contract, and pointed out that no power and energy were actually sold by Safe Harbor Company to Metropolitan Edison Company, whereupon "Holtwood Company agreed to the omission of Safe Harbor Company as a party to the renewal contract." Is this a correct statement? A. It is not a correct statement.

Q. Will you please state what the facts were? A. An early draft of a proposed contract with Metropolitan Edison Company was submitted to Baltimore Company for their comment on July 17, 1945. In this draft Safe Harbor was a joint party in all respects with Holtwood Company in connection with the supply to Metropolitan Edison Company. Under date of August 3, 1945, Balti-

more Company, through Mr. Greer, addressed a memorandum to me as a member of the Operating Committee commenting upon this proposed draft of contract with Metropolitan Edison Company. There were five comments in this memorandum respecting this early draft, but there were no comments relating to Safe Harbor's joint participation or suggestions that it should not be a party to the proposed contract. On October 19, [20780] 1945, I submitted to Mr. Greer, a revision of the early draft of this Metropolitan Edison Contract, this draft being dated October 18, 1945. This draft did not contain Safe Harbor as a joint or participating party. During the interval between August 3 and October 19, 1945, there were no discussions with Baltimore Company about this proposed contract, other than relating to progress.

On October 27, I had a long discussion with Messrs. R. T. Greer and R. L. Thomas regarding this Metropolitan Edison Contract at which time many features and details were discussed. It was at this conference that Baltimore Company particularly urged certain further changes in this agreement.

These matters related to Baltimore's objection to the tax clause provision, to the fuel rate adjustment provision, and to the wording of the regulatory approval clause. Baltimore Company at no time suggested, or contended that Safe Harbor should or should not be a party to the Metropolitan Edison Contract. That decision was made solely between Penn Water and Metropolitan Edison Company.

Q. At page 20119, line 16, Mr. Thomas testified that your Exhibit 361 implied a relationship which did not exist between Baltimore Company's 25 cycle peak load and Penn Water's monthly 25 cycle peak deliveries at Highlandtown, because the data shown on your Exhibit 361 for each month were not coincident. Does the fact that Baltimore Company's [20781] 25 cycle load requirements and the 25 cycle peak deliveries for each month do not occur on the same hour in any way affect your testimony relating to Exhibit

361? A. No, it does not. In connection with my testimony I recognize that there is not always a coincidence of the monthly peak deliveries of 25 cycle service to Baltimore Company at Highlandtown with Baltimore Company's maximum 25 cycle system requirements. While the magnitude of the daily 25 cycle peak varies, had I shown on Exhibit 361 the actual deliveries at Highlandtown on the hour of the 25 cycle monthly peak requirements in Baltimore, this new curve would lie generally parallel to the peak delivery curve and slightly below it.

Q. Mr. Spaulding, is there a relationship between the 25 cycle delivery at Highlandtown and Baltimore Company's 25 cycle load? A. Yes, there is and it is not the fortuitous result of the flow of the Susquehanna River or the fact that a large part of the output has to go to Baltimore, that the deliveries at Highlandtown are scheduled in the present manner; rather it is because Penn Water's system was planned that way and is operated that way in order that Baltimore Company's own requirements may be delivered to it at the frequency and at the geographic location in Baltimore City where it is most useful to Baltimore Company.

* * *

[20782] Q. Does Holtwood Company at all times have to transmit a large part of its Holtwood hydro output to Baltimore Company? A. No, during the larger part of the year, Holtwood Company has an option as to the proportion of its 25 and 60 cycle hydro generation at Holtwood and as to its deliveries at Highlandtown and to its other customers. Penn Water's day to day choice of generation is in large part in consideration of Baltimore Company's 25 cycle requirements and in part for overall system economy. Baltimore's own 25 cycle generating capacity is the highest cost and most inefficient capacity operating on the system and Baltimore naturally desires to restrict its operation to the maximum extent possible.

* * *

[20784] Q. Mr. Spaulding, does Baltimore restrict its operation to the maximum extent possible?

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THE WITNESS: As a member of the Operating Committee and one who considers those matters with the operating people [20785] I know that Baltimore plans their operation in such a way as to restrict the operation of their 25 cycle capacity to a minimum.

MR. GOLDBERG: May I have the question and answer?

(Record read.)

THE WITNESS: By that, Mr. Examiner, I mean that they endeavor to keep their 25 cycle capacity shut down and to generate a minimum amount of energy with such capacity.

By MR. SPARKS:

Q. At page 20120, Mr. Thomas testified that Baltimore has 145,000 kw of 25 cycle generating capacity and about 70,000 kw frequency changer capacity, which capacity is far in excess of Baltimore Company's 25 cycle system peak. Could Baltimore Company supply its own 25 cycle system requirements without the assistance of 25 cycle service from Holtwood delivered at Highlandtown? A. No, it could not. Baltimore Company's 25 cycle distribution system was not provided to carry its 25 cycle load requirements without the assistance of capacity, energy and other electric services supplied by Penn Water at Highlandtown. Without Penn Water's services, Baltimore would be unable to maintain voltage or provide the expected degree of service reliability to its 25 cycle industrial customers.

• • •

[20787] Q. Mr. Spaulding, at page 20143, Mr. Thomas referred to the "Pool Report for the Combined PW-SH-Baltimore-Bethlehem Steel and Washington System" for 1946 filed with the Federal Power Commission by Balti-

more Company. Do you agree that the data shown and the statements accompanying Schedule 16 of this pool report are correct? A. No, I do not.

Q. Has Penn Water advised Baltimore Co. that it does not agree with this pool report? A. Yes, by letter dated June 20, 1947, and filed with [20788] the Federal Power Commission, as a part of the Penn Water-Safe Harbor System, Form 12 report for 1946.

Q. Did Penn Water or Safe Harbor participate in the preparation of this pool report? A. No, neither Penn Water nor Safe Harbor participated in nor were they consulted in connection with the preparation of this pool report by Baltimore Company.

Q. At page 20158, line 15, Mr. Thomas testified in respect to the valuation of drawdown as a capacity value of the hydro plants, that the operating men shun the idea of depending on drawdown because they do not want to get caught with a low pond. Will you state whether, notwithstanding Mr. Thomas' statement, the operating executives of Baltimore Co. did recognize and rely on such additional value of hydro capacity? A. Yes, Baltimore Co.'s management has recognized and relied upon the value of drawdown through the years, up to and including 1941, both in connection with contractual negotiations and renewals and in the evaluation of hydro service for all purposes.

Q. Has Baltimore Company ever indicated to the Federal Power Commission that it relied upon hydro capacity in excess of that available under most adverse river flow conditions experienced in each calendar month? A. Yes, under date of February 27, 1941, Baltimore Company wrote the Commission and therein stated that the [20789] available hydro capacity for the greater part of the time was equal to or greater than the amount of hydro capacity which I have used in Exhibits 35 and 378; and further stated that in the peak load season of November and December, the potential hydro capacity in nine out of ten years has been equal to or greater than the amount of dependable hydro capacity which I have used in Exhibits 35 and 378.

MR. SPARKS: At this time may the two letters which Mr. Spaulding just referred to be identified with the appropriate exhibit number?

TRIAL EXAMINER: The witness has referred to only one, has he not?

MR. SPARKS: Yes, sir. We have attached to the letter to which he has referred also the letter from the Federal Power Commission to Consolidated Gas Electric Light and Power Company requesting the data which was given in the letter to which Mr. Spaulding referred.

Now, we attached it merely for convenience, but we do not insist on the letter of the Federal Power Commission going in. We thought it would be proper.

TRIAL EXAMINER: The two letters are stapled together?

MR. SPARKS: Yes, sir.

TRIAL EXAMINER: The document handed the reporter may be marked Exhibit 500 for Identification.

(Exhibit No. 500 is marked for Identification.)

* * *

[20790] Q. I hand you the document which has been marked Exhibit 500 and ask you if the first letter which is part of that exhibit, and which is dated January 9, 1941, is a copy of a letter addressed to the Consolidated Gas Electric Light and Power Company by Leland Olds, Chairman, F. P. C.? A. Yes.

Q. I ask you whether the second letter to which are attached two tabulations, and which is dated February 27, 1941, and signed by F. E. Ricketts, Vice President, addressed to the Federal Power Commission, is the letter to which you [20791] have just referred? A. It is.

Q. Has Baltimore Co. ever reported to the Federal Power Commission a net dependable capacity available from the Safe Harbor and Holtwood Developments in ex-

cess of the figure testified to by Mr. Thomas and developed in his Exhibit 477? A. Yes, under date of February 10, 1942, Mr. R. T. Greer wrote to Mr. A. J. Kohler, who was the Senior Engineer in the Federal Power Commission's Baltimore Office at that time, advising them that after the adoption of certain changes in reporting capability of generating plants without deduction for station uses or transmission losses, the "net dependable capacity available from system hydro plants" would be 265,000 kw. This letter confirmed discussions with the Federal Power Commission held prior to the introduction of "Eastern War Time" and before the system load shapes were affected by the extended around-the-clock efforts in producing war materials.

MR. SPARKS: May we have marked as Exhibit 501 a three-page letter dated February 10, 1942, or rather a copy of a three-page letter addressed to Mr. A. J. Kohler, Associate Engineer, Federal Power Commission, and signed R. T. Greer, Director, Inter-System Power Utilization Bureau.

TRIAL EXAMINER: The document referred to is marked Exhibit 501 for Identification.

(Exhibit No. 501 is marked for Identification.)

* * *

[20793] Q. Mr. Spaulding, in your last answer before the mid-afternoon recess you referred to a letter from Mr. R. T. Greer to Mr. A. J. Kohler dated February 10, 1942.

I show you a document consisting of three pages, which has been marked Exhibit 501, and ask you if Exhibit 501 is the document to which you there referred? A. It is.

Q. At page 20168, line 2, Mr. Thomas referred to Mr. Watchorn's method of determining dependable hydro capacity by applying the theory of probability, and stated "It was not revealed to Baltimore Company until it was filed in this case although there were repeated discussions of hydro capacity [20794] value over the last two or three years." Is this a correct statement? A. It is not. Balti-

more Co., on several occasions during the spring and summer of 1946, discussed the capacity value of hydro with us. Mr. Thomas, on one occasion stated in effect that we must have used a "Probability Method" to get our dependable capacity figure of 295,000 kw, and I remarked to him that such an approach certainly was not new to him because he had at one time advocated such a method. His reply was to the effect that his people would never accept our figure however it was determined.

* * *

[20796] Q. Did Penn Water at any time offer to show Baltimore Co. Mr. Watchorn's determination of dependable hydro capacity using the theory of probability? A. Yes, at my direction Mr. Watchorn and an associate went to Mr. Greer's office to discuss this matter with Baltimore Company's representatives in connection with the 1945 [20797] pool report on FPC Form 12 early in 1946. My instructions to my associates were to give them a copy and explain in detail the derivation of the 295,000 kw. My associates reported to me after the conference that Baltimore Company's representatives raised no question as to our derivation of 295,000 kilowatts of dependable capacity.

Q. Mr. Spaulding, referring to the testimony beginning at line 24 of page 20,178 and continuing on page 20,179, Mr. Thomas states that Baltimore Co. is obligated to supply such capacity as is required to enable Holtwood Co. to meet its firm power obligations. He also states that as the result of the contracts and the over-all economic set-up, Baltimore Company has the same obligations in that respect as a single utility would have if a single utility owned and operated all the facilities of Baltimore, Holtwood and Safe Harbor Companies. Is Mr. Thomas' statement a fact? A. No.

Q. At page 20,185, Mr. Thomas testified that the "Generating capacity installed by Baltimore Company since 1931 was for the purpose of enabling Holtwood Company to meet its firm power obligations in Pennsylvania." Is that a cor-

rect statement? A. No, it is not, nor is it in accord with Baltimore's repeated statements through the years that they were the residual receiver under the hydro contracts, a position [20798] which they maintained up to these proceedings.

* * *

[20799] Q. Why do you say Mr. Thomas' statement is not correct? A. As the requirements of the Pennsylvania customers have increased since 1931, the capacity, energy and other electric service requirements of these customers have been met by Penn Water or by Penn Water and Safe Harbor with the result that less capacity and energy services are available for the use of [20800] Baltimore Company. Through the years, Penn Water and Baltimore Company have always recognized that this growth in Pennsylvania customer loads required Baltimore Company to provide additional capacity in Baltimore, in part due to growth in Baltimore's own system load and in part to replace the capacity services no longer available to Baltimore because of the increased requirements of the Hydro Companies' Pennsylvania customers.

Q. At page 20,192, Mr. Thomas testified that Article 6 of the 1927 Agreement is a "dead letter" and became a "dead letter" subsequent to the execution of the 1931 Supplemental Agreement. Prior to the time Mr. Thomas made that statement, had Baltimore Company ever to your knowledge taken the position in connection with Article 6 of the 1927 contract that it was no longer in effect? A. No.

Q. Subsequent to 1931, have Baltimore Company and Penn Water given consideration to the need for billing for backfeed under Article 6 of the 1927 Agreement? A. Yes, they have.

Q. In what connection? A. In September, 1941 the Operating Committee recognized that there had been a net amount of monthly backfeed received by Penn Water from Baltimore Company for the month of August, 1941.

[20801] After consideration, the Operating Committee, consisting of Mr. F. E. Ricketts and myself, went to Mr. E. M. Sturtevant, counsel for Baltimore Company, and discussed this matter of billing under Article 6.

Mr. Sturtevant advised the Operating Committee that Baltimore Co. need not bill Holtwood Company for net backfeed in August, 1941, because the effect of such billing on either Baltimore Co. or Penn Water would be unimportant and that no other parties would be affected. Based on Mr. Sturtevant's opinion, the Operating Committee agreed there would be no formal billing for the net monthly backfeed in August 1941. In those discussions between Mr. Sturtevant and the Operating Committee, neither Mr. Sturtevant nor either member of the Operating Committee indicated that Article 6 of the 1927 contract was no longer in effect.

Q. Are there any provisions in any of the contracts between Baltimore Company and Penn Water which provide for any operating responsibility of Baltimore Company to provide electric energy to Penn Water, other than whatever operating responsibility may be provided in Article 6 of the 1927 Agreement?

• • •

[20803] THE WITNESS: No, there are none.

TRIAL EXAMINER: Now, you are testifying there upon the basis of your knowledge of the operations conducted by the Respondents under those contracts?

THE WITNESS: Yes, sir, I am.

• • •

[20804] Q. Mr. Spaulding, is Mr. Thomas on record as stating that this Article 6 is still in force and effect? A. Yes, he is. In a letter dated November 2, 1933, addressed to Mr. George T. Hambright, re "Back-feed Steam", he stated as follows:

"Backfeed steam is purchased by Holtwood Company from Baltimore Company under the following Ar-

ticle 6 of the power agreement of December 31, 1927 between the Baltimore and Holtwood Companies (in this agreement 'Electric' means Consolidated Gas Electric Light and Power Company of Baltimore and 'Power' means Pennsylvania Water & Power Company):

"'*Steam Energy Purchased*—Upon request of Power, Electric will supply to Power steam generated energy in excess of Electric's own requirements up to the limit of its available generating capacity, provided, however, that Electric is not obligated to start up a station which would not otherwise be operated. For all such energy Power will be billed for the daily net amount of such backfeed at actual costs plus ten per cent (10%). The costs to be used are those reported on Electric's monthly production statement covering [20805] the month during which steam energy was furnished to Power.'

"This article still is in full force and effect because the Supplemental Agreement of June 1, 1931 did not modify this provision and specifically reaffirmed all provisions of the 1927 agreement not inconsistent with the 1931 Supplement."

Q. Mr. Spaulding, beginning at line 20 of page 20,193 and continuing on to page 20,194, Mr. Thomas gave as one of his reasons why he considered the results of your Exhibits 35 and 378 incorrect and without merit, that your exhibits were based on the combination of Holtwood and Safe Harbor and, therefore, do not have value in determining an allocation as between Holtwood and Safe Harbor. Have Baltimore and Penn Water ever considered or attempted to determine an allocation between Holtwood and Safe Harbor? A. No, Baltimore Co. and Penn Water have always considered Penn Water and Safe Harbor as a single operating unit for all purposes of determin-

ing or evaluating the service from these hydro companies to Baltimore Company.

* * *

[20814] CROSS-EXAMINATION.

By MR. GOLDBERG:

* * *

[20836] Q. Now, then, you state at transcript 20,782 that Penn Water's day to day choice of generation is in large part in consideration of Baltimore Company's 25 cycle requirements and in part for over-all system economy.

Can you be specific and tell us what "large part" means? Is it 70 per cent, or what figure? A. No, I don't believe I can put an evaluation on that, Mr. Goldberg, as a percentage.

Q. Can you put any type of an evaluation on it other than the phrase you used? A. Well, it happens that in supplying Baltimore's 25-cycle requirements by Holtwood hydro generation, it is assisting in the over-all system economy, so that I cannot differentiate between that part of the time when the choice is made for 25-cycle requirements and that part of the time that it is made solely for over-all system economy.

Q. Does your testimony mean that Baltimore Company [20837] could not at any time supply its own 25-cycle system requirements without 25-cycle service from Penn Water at Highlandtown? A. No, indeed.

Q. Under what circumstances, then, would you say that Baltimore Company could not supply its own 25-cycle system requirements without 25-cycle service from Penn Water at Highlandtown? A. When those requirements are of a magnitude such as is experienced during the daytime hours when industrial plants are operating. I did not mean to imply that they could not get along without services during the week-ends or during the midnight hours, although even

during those hours there is frequent demand on us for voltage regulation and power factor cooperation.

• • •

Q. Do you limit your testimony regarding the needed assistance of Penn Water's 25-cycle service at Highlandtown to maintenance of voltage or expected degree of service reliability to the industrial customers?

• • •

[20838] THE WITNESS: No, I did not intend to so limit it.

By MR. GOLDBERG:

Q. But speaking in those terms you intended to include energy services as well, is that right? A. Energy and capacity services.

Q. Can you please explain for us, particularly for me, what you mean by "expected degree of service reliability"? A. If there were no 25-cycle services delivered at Highlandtown, Baltimore's 25-cycle distribution system would not have sufficient capacity to meet the requirements of its customers during the higher load periods of the 25-cycle system with anywhere near the degree of reserve cable capacity, transformer capacity and otherwise, to assure continuity of service to those customers, without services from Holtwood.

A few years ago they did not even have cable capacity enough to meet their peak requirements, let alone have cable reserves. I haven't checked that matter in the last few years but there hasn't been much change in load and there has been no additional cable or transformer capacity installed so that I would expect the situation to be about the same with respect to that 25-cycle system.

Q. Then if I understand your testimony you mean that Consolidated might very well fail to meet the demands of its industrial customers if it was unable to secure from Penn Water the 25-cycle services at Highlandtown, is that it? [20839] A. That is right, during certain portions of the load cycle.

Q. What were those portions of the load cycle again? A. During the on-peak periods, roughly from 8 or 9 o'clock in the morning until 5 or 6 o'clock at night.

• • •

[20841] Q. Here is my difficulty, Mr. Spaulding. I thought it peculiar that you should have stopped with the year 1941. Now then, that leaves a gap, 1942 to 1943—let's take that gap because that is before this hearing started. In that period of time, 1942 to 1943, did Baltimore Company's management recognize and rely upon the value of drawdown? A. I am not in a position to know what the management [20842] recognized and relied upon after the spring of 1942, other than statements made to me by certain officers of Baltimore Company in which they professed that their change in reporting the value of drawdown did not change their reliance upon the actual conditions, and that the change was only being made during the war years when there was a marked change in load shape and when there was the uncertainty of how much additional load might be imposed on the system in the war effort by OWU and others.

I had been under the impression during that time that there was no change on their part, but certainly in their statements to the regulatory bodies—and by regulatory bodies I include the Federal Power Commission and OWU who was, in a way, a regulatory body during the war years—they placed less emphasis or, I should like to say, they deemphasized the value of drawndown, and for a very good reason during the war years, but they did not go back, as they had professed they would after the war was over, and give it the same recognition that they had given prior to the spring of 1942.

Now, what they had in their mind at that time I, of course, am not in a position to state.

Q. Is this the fact, that you cannot state whether or not Baltimore Company's management recognized and relied upon the value of drawndown during the period 1942

to 1943, inclusive? A. They told me one thing and they reported something [20843] else to the Government agencies. Therefore I don't know the degree to which they relied upon it.

Q. You cannot answer my question as to their reliance, then, in those years upon the value of drawdown, is that right? A. That is right.

Q. And that applies, does it not, to 1944, 1945 and 1946? A. I would say that situation did not change in 1944 and in 1945 and 1946 we were approaching the present proceedings and they did not change back to their former reliance upon it, so far as their published and formal statements were concerned to the regulatory agencies.

* * *

[20853] Q. Referring to Tabulation No. 1 which is attached to Consolidated's response, which is a part of Exhibit 500, it is there stated, is it not, that the values are based, in Columns 3 and 4, on "the present load shape," namely, 1941, isn't that so? A. It is.

Q. And is it your statement that your 295,000 Kw. is directly comparable to the values reported by Consolidated in that Tabulation No. 1 I have referred to, namely, Columns 3 and 4, having in mind the load shape basis for the values reported in Exhibit 500? A. No, they are not directly comparable.

Q. You state in your testimony regarding Exhibit 500 that Baltimore Company has indicated to the Federal Power [20854] Commission that it relied upon hydro capacity in excess of that available under most adverse river flow conditions experienced in each calendar year month. Now then, referring to Consolidated's response, which is a part of Exhibit 500, where does Consolidated state that it relies on those capacities? A. I think it is implied by the entire letter.

Q. You get it by implication, is that it? A. Yes.

Q. Having in mind that Consolidated in its answer to the Commission, which is a part of Exhibit 500, stated on

page 2 of its response that "These monthly hydro capacity figures are not on the same basis as that which is used to determine requirements for capacity installation and which is reported on FPC Form 64 in connection with the annual peak," would you say that your 295,000 Kw. is likewise not on the same basis as that which is used to determine requirements for capacity installation?

* * *

THE WITNESS: No, I would not.

By MR. GOLDBERG:

Q. Then if I understand that testimony your 295,000 Kw., you are saying, is on the basis of use to determine [20855] requirements for capacity installation? A. No, I did not say that, but I would not agree that likewise it is the same as the quotation on page 2, and that is the reason I answered as I did.

* * *

[20866] Q. Mr. Spaulding, will you refer to transcript 20797? At that point your attention is called to certain testimony of Mr. Thomas at line 24 of page 20178, which continues through page 20179, and you are asked whether Mr. Thomas' statement is a fact. You replied that it is not.

Will you please tell us why not?

* * *

A. Because although the facilities, including generating and [20867] transmission facilities of Baltimore, Holtwood and Safe Harbor are coordinated, each of those companies have certain contractual arrangements with others which are quite independent of such coordination, and because each of those companies are separate corporate identities, and in the case of Baltimore and Penn Water has its equity control in the hands of the public and not in the hands of the other company.

* * *

[20872] TRIAL EXAMINER: Have you made any determination in your own mind as to whether Baltimore's com-

mitments on other contracts are of such an extent that it would not enable Baltimore to meet any claimed obligations to supply capacity required to enable Holtwood to meet its firm power obligations if the claim were made under contracts E to I?

THE WITNESS: No, I am not testifying as to whether there are other obligations which wouldn't permit it; but rather they don't have any obligations under E, F and G, H and I to do so.

• • •

[20874] Q. It is by virtue of the coordination of Penn Water's operations that Penn Water was able to enter into its contracts to undertake those operating responsibilities that you referred to. Isn't that so? A. No, I do not agree.

Q. I see. In other words, you say Penn Water could have entered into those agreements and undertaken those operating responsibilities without having that coordination of operations provided for by Items E to I? A. Very definitely.

• • •

[20876] Q. Why do you say that that position has been maintained only through Mr. Thomas' testimony in Baltimore's presentation of their case in chief and not throughout this proceeding?

• • •

THE WITNESS: They have continually referred to their position as the residual receiver, and Mr. Thomas referred to that position in his direct testimony back in June a year ago, or May a year ago.

TRIAL EXAMINER: You are not implying that so far as you know they have changed that position since then?

THE WITNESS: Yes, I think that Mr. Thomas' testimony on rebuttal is very clear evidence of a somewhat different position when he refers to Baltimore operating these com-

panies as though they were all one. That is quite a different situation in my mind from considering themselves as the residual receiver.

* * *

[20881] Q. Counsel, through the witness Spaulding, brought into this record Exhibit 367. Do you have that before you? A. No, I do not.

Q. I will place it before you. Did that billing take place under Article 6? A. It did.

Q. Is it in strict conformity with Article 6? A. It is in conformance with Article 6, except as modified in small detail by agreement of the operating committee.

* * *

[20894] By Mr. Reiblich:

Q. Mr. Spaulding, at transcript 20782, lines 14 to 16, you testified that Penn Water's day to day choice of generation is in large part in consideration of the overall system economy. On cross-examination by Mr. Goldberg this morning I understood you to say that about one-third of the time in a year the river flow was such that Holtwood Company has no choice because the entire generating capacity is working at maximum output because of the river flow? [20895] A. That is about right.

Q. Isn't it also a fact that for approximately one-third of the days there is no choice during the heavy load hours of the day because all Holtwood hydro units are likewise operating?

* * *

The Witness: There would be another period of time. I don't know that I would say it was another one-third.

By Mr. Reiblich:

Q. Looking at the flow duration curve that you are using wouldn't it be approximately one-third? A. I think it would be a little less than an additional one-third of the time.

Q. Isn't it a fact that even during the rest of the time, the remaining one-third, approximately, the system must be operated in the interests of over-all maximum economy? A. The system is operated where possible in the [20896] interests of over-all system economy. That is the very reason that at times there is a larger amount of 25 cycle hydro generation at Holtwood than would otherwise be experienced. In other words, Holtwood's 60 cycle hydro is much more efficient than its 25 cycle hydro generating units, but at Baltimore it is the reverse. Baltimore's 60 cycle steam generation is very much more efficient than Baltimore's 25 cycle generation and therefore more 25 cycle hydro generation is used and sent to Baltimore in order to produce better over-all system economy.

* * *

[20983] By MR. GOLDBERG:

Q. Mr. Spaulding, at transcript 20908 you spoke of consideration being given to modernizing the Highlandtown substation in a very large degree. At the time you were referring to in that answer do you know whether any further consideration has been given to modernizing that substation since the [20984] Bailey-Oppenheimer and Greer-Von Eiff studies that you referred to in your answer?

* * *

THE WITNESS: I should like to answer it this way, that there have been no studies on the modernization of Highlandtown substation, to my knowledge, other than those that were given at that time but those studies extended, as I recall, into the year 1940.

* * *

[21013] EDWARD S. LOANE.

* * *

DIRECT EXAMINATION.

By MR. MYSE:

* * *

[21014] Q. Mr. Loane, do the corrections shown by Exhibit 509 include any of those previously shown in Exhibit 351 prepared as rebuttal of Exhibits 64, 249 and 292? A. They do not.

* * *

[21016] Q. Will you describe generally the changes or corrections in the assumptions used by Mr. Davis in his Exhibit 421 which were made in Exhibit 509? [21017] A. The capacity accounting shown in Table V-A has been made consistent with the energy accounting shown in Table V-B; and the costs based upon the costs of Safe Harbor as determined by Mr. Davis in his Exhibit 421 were applied to the services described by him as "diverted from Baltimore's two-thirds of Safe Harbor."

Q. Were any changes made in Tables I, II, III, III-A, IV, V, V-B and V-C? A. No.

Q. Do you take the responsibility for the accuracy of any of the data, the descriptions, or the methods employed by Mr. Davis in his Exhibit 421 as applied to Exhibit 509? A. No.

Q. Will you describe briefly what is shown in Exhibit 509? A. On Schedule X there are shown certain additional data derived from Tables V and V-B of Exhibit 421; also, on Schedule X is the adjusted revenue from Baltimore which takes the place of Table VI-A of Exhibit 421. Schedule Y shows a corrected Table V-A and Schedule Z shows a corrected Table VI.

Q. Will you describe what is shown by Schedule X? A. On Schedule X there is first determined the cost of capacity and energy supplied by what Mr. Davis described as "diversion from Baltimore's two-thirds of Safe Harbor." Such costs shown are based upon the costs in Table

V of Exhibit 421. The [21018] computation is self-explanatory. The calculation results in unit costs applicable to the services described as "diverted from Baltimore's two-thirds of Safe Harbor" of $14.27/kw and 0.867 mills/kwh. Schedule X also shows the determination of the division of what is described by Mr. Davis in his Table V-B as "supply by Baltimore" between backfeed and "diversion from Baltimore's 2/3 of Safe Harbor." This determination is based upon Table V-B of Exhibit 421. No alteration has been made in the basic data shown on such table. This calculation leads to the following result: Of the "total available supply for firm and interchange sales in Pennsylvania" 17.02 percent is supply by backfeed and 17.34 percent supply by "diversion from Baltimore's 2/3 of Safe Harbor."

At the bottom of Schedule X, there is also shown the adjustment of the revenue actually received from Baltimore Company. To provide a basis for comparison on Table VI and without agreement that it is a proper basis, the revenue from Baltimore is considered to be the revenue actually received from Baltimore plus the net interchange revenue received from the Pennsylvania customers. No adjustment, such as was shown in Table VI-A of Exhibit 421, has been made of Penn Water's division of the total revenue received from P. R. R.

Q. In your revision of Table V-B did you make any adjustment for the difference between actual conditions in the year 1946 and a year of average river flow conditions? [21019] A. No.

Q. What effect does a difference between actual conditions and conditions under a year of average river flow have on the assumptions and the data in Table V-B of Exhibit 421? A. With respect to any excess or deficiency in Holtwood generation approximately 70 percent of this amount would be reflected in changed deliveries at Highlandtown, shown on line 6 of Table V-B. It is not proper to assume that all of such excess or deficiency would

be reflected in an adjustment in the single item of backfeed. There would be an adjustment of about 5 percent of Holtwood's excess or deficiency in the amount of transmission losses on line 4 of Table V-B. There would be an adjustment of about 7 percent or 8 percent of the combined excess or deficiency at both Holtwood and Safe Harbor in the firm sales to M. E. Co. included in line 13 of Table V-B. With respect to any excess or deficiency at Safe Harbor there would be a change in line 2 of Table V-B equal to one-third of such excess or deficiency, and in lines 8, 10 and 14 of Table V-B of amounts that could only be determined by an hour to hour computation for the entire year.

Q. Why did you not attempt to adjust the figures on Table V-B for the difference between actual flow in the year 1946 and average river flow conditions? A. The proper amount of correction could only be determined by a long and detailed study of the hour by hour [21020] conditions, which we have not had an opportunity to make.

Q. Will you describe what is shown in Schedule Y of Exhibit 509? A. On Schedule Y certain data have been used which are the same as those shown on Table V-A of Exhibit 421. Principally these are the first nine lines of that table, which are being used for the purpose of this exhibit without change in the dependable capacity or allocation of losses and capacity among the several plants. Based on the amounts of "net dependable capacity available for load," shown in line 9, there is determined, in lines 10 to 13, the amount of "Holtwood resources of net dependable capacity," in a manner which parallels the computation in Table V-B of the "Holtwood resources" of energy. It is in the next line (line 14) of Schedule Y that the method that I have used departs from anything shown in Exhibit 421.

Q. How did you determine the amount of capacity delivered to Baltimore at Highlandtown as shown in line 14 of Schedule Y? A. That was determined by reference

to a diagram showing the relation of Holtwood generation, deliveries at Highlandtown, and system losses to the total PW and Safe Harbor hydro generation.

MR. MYSE: Mr. Examiner, I now hand the reporter a chart entitled "Relations of (1) Holtwood Hydro Generation, [21020-A] (2) 25 cycle Delivery to Highlandtown, and (3) P. W. & S. H. Transmission Losses and Station Uses to Total P. W. & S. H. Hydro Generation for the hours of System Peak Load (Area 6 & Pa. Cust) on All Days of 1945 and 1946 except Sat., Sun. and Hol. and Those Days on which Hydro Units (at Holt. or S. H.) were Out of Service for Maintenance," and ask that it be marked Exhibit 510 for Identification.

(The chart referred to was marked Exhibit No. 510 for Identification.)

By MR. MYSE:

Q. Will you describe Exhibit 510? A. There are plotted on this diagram certain data for the years 1945 and 1946, limited to the hours of daily peaks on the Area 6 plus Pennsylvania customers system, on all days except Saturdays, Sundays and holidays, days on which hydro units at either Holtwood or Safe Harbor are out of service for maintenance, and days on which the hydro generation on the peak hour was less than 200,000 kw. For all these daily peak hours there were recorded: (1) the Holtwood hydro generation, (2) the 25 cycle deliveries at Highlandtown, (3) the PW and Safe Harbor station uses and transmission losses.

These three items were plotted vertically against a horizontal scale showing the total hydro generation at Holtwood and Safe Harbor. Then on this plot straight lines were drawn through the data to represent the average relations [21021] shown by 1945 and 1946 experiences.

Q. How did you use the data shown on Exhibit 510 in determining the capacity delivered to Baltimore at High-

landtown, as shown on line 14 of Schedule Y? A. This diagram shows that for a total hydro generation of 250,000 kw which generation is equal to the total dependable hydro capacity as shown by Mr. Davis in Exhibit 421, that the average 25 cycle delivery at Highlandtown will be 53,000 kw. On any particular daily peak the delivery at Highlandtown may be more or less than 53,000 kw, just as the total hydro generation at that time may be more or less than 250,000 kw, but to the same extent that the entire system can count on 250,000 kw as dependable hydro capacity, Baltimore Company can count on the delivery at Highlandtown at the time of their peak of 53,000 kw.

Q. Will you state the significance of the data plotted in the upper part of Exhibit 510? A. The data on the upper part of this diagram, showing the relation between Holtwood hydro generation and the total hydro generation, were plotted as a check on the relation between the delivery at Highlandtown and the total hydro generation. The difference between Holtwood hydro generation and the delivery at Highlandtown appears to be about 37,000 kw, which difference is accounted for by (1) 60 cycle hydro generation—22 or 23 mw; (2) 25 cycle sendout to Lancaster—[21022] 5 or 6 mw; (3) station uses and loss on the 25 cycle circuits to Highlandtown—perhaps 7 or 8 mw. Finally, there may be a residual of 1 or 2 mw, accounted for by the relatively small use, on the average, of the Holtwood frequency changers.

Q. Will you state the significance of the data plotted in the lower part of Exhibit 510? A. The data at the bottom of this diagram, showing the relation between the Penn Water and Safe Harbor station uses and transmission losses and total hydro generation, show that on the average the losses are about 17,000 kw for a hydro generation of 250,000 kw. The scattering of points from which this average curve is drawn is to be expected. The losses are determined by the difference between a great many meter readings. Not all of these meters can be read exactly on

the hour and any small inaccuracies in these many meter readings causes a relatively large variation in the resulting difference, representing the system losses. It is possible to have recorded losses of as much as 25,000 kw or more, but such amounts are the results of meter reading inaccuracies and are not the actual losses being experienced on the system at that time.

Q. What part of the "Holtwood resources of net dependable capacity," shown in line 13 of Schedule Y, can be counted upon on the average to be delivered at Highlandtown? A. The 53,000 kw shown in line 14 as delivery to [21023] Highlandtown is about 35 percent of the "Holtwood resources" shown in line 13.

Q. What part of the "Holtwood resources of net dependable capacity" are available for use in Pennsylvania as shown by Schedule Y? A. After deducting the capacity delivered at Highlandtown, the balance available for use in Pennsylvania in meeting the demands of the Pennsylvania customers is 97,312 kw, or about 65 percent of the "Holtwood resources of net dependable capacity."

Q. Have you made any changes in the demands of the Pennsylvania customers as shown in Table V-A of Exhibit 421? A. Yes, there have been two changes made in these demands shown in Schedule Y as compared with Table V-A of Exhibit 421. The load for the Railroad used in Schedule Y is 47 per cent of the total actual Railroad load at the time of the system peak, instead of a portion of the total billing demand for the Railroad load in December. Also, in Schedule Y no reserve has been added to the demand of M. E. Co.

Q. Why did you use the actual demand of the Railroad instead of the billing demand for December as a basis for the figures in your Schedule Y? A. Because the actual demand of the P. R. R. is a component of the system peak load used in the purported determination of dependable hydro capacity. The deduction of the actual [21024] de-

mand of the P. R. R. from the available capacity is necessary to determine what capacity is left for other customers.

Q. Could a billing demand be substituted for an actual demand of the P. R. R. in the determination of the capacity available for other customers? A. Such substitution is not proper in my opinion. It could not be made without making necessary an adjustment in the purported dependable hydro capacity.

Q. What adjustment would be necessary? A. Because there is no separate billing demand for the railroad load in Pennsylvania, the figure shown by Mr. Davis in line 14 of Table V-A is 48 percent of the total December billing demand, amounting to 76,333 kw. This December billing demand is 11,333 kw greater than the actual railroad load at the time of the system peak. If the billing demand were substituted for the actual railroad load at the time of the system peak, that system peak would be about 11,000 kw greater with no change in the average system load. The dependable capacity shown by Mr. Davis in line 3 of Table V-A would then have been increased by 11,000 kw provided he followed the same procedure of computation explained in connection with Exhibit 425.

Q. Why did you not apply any reserve to the load of M. E. Co.? A. Operations under the M. E. contract are distinctly [21025] different from those under the PL and PE contracts. PW has no obligation to provide reserve capacity (other than spinning reserve) for the M. E. system and M. E. Co. considers no reserve (other than spinning reserve) to be available as a result of their operations with the Penn Water-Safe Harbor system.

Q. Will you describe what Schedule Z of Exhibit 509 shows? A. Schedule Z shows revision of Table VI of Exhibit 421. The form of the schedule and table are somewhat similar but the following differences should be noted: In Schedule Z there has been inserted a line (4a) to show the subtotal of Pennsylvania customers and P. R. R. in Pennsylvania. There has also been inserted lines 5a, 5b

and 5c, to show separately the following: line 5a—service to Baltimore and cost relating thereto; line 5b—supply by Baltimore and credits assumed in connection therewith; line 5c—net services and cost to Baltimore. The data shown in the ten columns are generally of the same character in Schedule Z and Table VI except in column 6.

The notes on Schedule Z show all the computations of data that cannot be obtained from other schedules of Exhibit 509 or on tables of Exhibit 421.

Q. Where did you obtain the costs of energy and capacity shown as "diverted from Baltimore's 2/3 of Safe Harbor" in notes (a) and (b) of Schedule Z? [21026] A. Those costs were determined on Schedule X.

Q. Why did you not make any change in the 4.7 mill rate applied to backfeed in Schedule Z? A. With the time available it has not been possible to complete the detailed computations necessary for the determination of the actual cost to Baltimore of backfeed from Baltimore and Washington.

Q. If you had carried out all the appropriate corrections made or suggested in Exhibit 351 in relation to Exhibit 421, would there have been any effect on the amounts shown in Exhibit 509 as the excess of revenues over allocated costs to Baltimore? A. Those amounts shown in line 5c, columns 9 and 10 of Schedule Z would have been further substantially reduced.

Q. What would be the effect if you had made corrections similar to those made in Exhibit 509 in relation to Exhibit 422? A. The amount and percentage shown, respectively, in line 5, columns 8 and 9 of Exhibit 422 would have been substantially reduced.

Q. Exhibit 482 shows that an adjustment was made to Exhibit 421 for an excess of generation in the year 1946 as compared with average river flow conditions, based upon the years 1917 to 1941, inclusive. Does Baltimore Company now compute the generation at Holtwood and Safe Harbor under [21027] average river flow conditions based upon the

years 1917 to 1941, inclusive? A. No, it does not. Neither Penn Water nor Baltimore Company now uses an average based upon such 25-year period. Both companies use, for all purposes connected with their expectations of average hydro generation, an average based on the 30 years from 1917 to 1946, inclusive. This longer record gives a more reliable indication of expected future conditions.

Q. Is there available any computation by Baltimore Company of the average generation based upon this 30-year period? A. Yes.

MR. MYSE: Mr. Examiner, I now hand the reporter a memorandum from R. L. Ashley to F. A Leslie dated January 6, 1947, the subject of which is "Revised Basis for Average Flow Hydro Generation," and ask that it be marked Exhibit 511 for Identification.

TRIAL EXAMINER: The Memorandum handed to the reporter may be marked Exhibit 511 for Identification.

(The document referred to was marked Exhibit No. 511 for Identification.)

By MR. MYSE:

Q. What does Exhibit 511 show? A. It shows that Baltimore Company now uses a 30-year average flow record and expects that the average gross hydro generation should be approximately 1,525,000,000 kwh per year.

[21028] Q. As compared with the actual gross hydro generation in 1946 was there a deficiency or an excess based upon Baltimore Company's expectation of generation under average river flow conditions? A. There was a deficiency of about 20,000,000 kwh in contrast with the excess of approximately 30,000,000 used in Exhibit 482.

* * *

[21029] MR. MYSE: Mr. Examiner, may the record show that I now distribute additional copies, in addition to those which were distributed the other day, of Exhibits 510 and 511?

TRIAL EXAMINER: Any further questions of the witness on direct?

MR. MYSE: Not at this time, Mr. Examiner.

TRIAL EXAMINER: Any cross-examination of the witness by Staff counsel?

MR. GOLDBERG: Does this complete the witness' direct testimony, Mr. Examiner?

MR. MYSE: No, sir, this is all we have ready at this time of this witness. We feel we have not had an adequate or sufficient opportunity to complete our research and prepare sur-rebuttal by the witness Loane.

TRIAL EXAMINER: The Examiner rules that the witness should pass for cross-examination.

MR. MYSE: We take exception to that ruling for the reasons stated yesterday or day before yesterday in connection with the same ruling in respect to the testimony of the witness Spaulding.

TRIAL EXAMINER: The Examiner rules that the Respondents have had an adequate time to prepare for their sur-rebuttal. You may cross-examine.

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[21039] CROSS-EXAMINATION.

By MR. GOLDBERG:

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[21040] Q. Now, will you tell us why, in your opinion, you believe that there should be deducted from the Holtwood resources the capacity delivered at Highlandtown in Table V-A of Exhibit 421? A. To make it consistent with V-B.

Q. Is it merely to make it consistent, or is there a reason in your mind why there should be this consistency? That is really what I am getting at. A. Certainly I think there should be a consistency between the two. Energy goes to Highlandtown, and so does the capacity, and are both used by Baltimore.

[21043] Q. Do you consider the capacity delivered at Highlandtown as dependable capacity? A. The 53,000 kw which I deducted in my exhibit, being delivered at Highlandtown, is dependable in the same extent and same degree that the 250,000 kw capacity is dependable that Mr. Davis used in Exhibit 421.

Q. Then you are saying that you have considered 53,000 kw as dependable capacity in asserting that there should be consistency between the energy accounting in Table V-B and the capacity accounting in Table V-A of Exhibit 421. Is that right? A. Yes, with this explanation: That 53,000 may not be all that I think is dependable and is delivered at Highlandtown.

Q. Now, then, let us assume for the sake of this question that the 53,000 kw is not dependable capacity. Under that assumption, would you still say that there is inconsistency between Tables V-B and V-A of Exhibit 421? A. I just cannot make that assumption, because I know it is contrary to the facts.

Q. Well, the fact that you answer on the basis of that assumption doesn't mean that you are agreeing with the assumption, Mr. Loane. But I would like to have an answer from you taking my assumptions for the sake of the question. A. I haven't considered it, and I don't know what my [21044] answer would be.

Q. Well, can you consider it now and tell me what your answer is?

* * *

THE WITNESS: There are so many other things that would have to change, Mr. Goldberg. In Exhibit 421, according to Mr. Davis there is only 27,000 of undependable Holtwood hydro capacity. I cannot conceive of 53,000 undependable capacity being delivered at Highlandtown.

By MR. GOLDBERG:

Q. You say, then, that you cannot give it that consideration you feel you would have to give it at this time in

answering my question? A. You would have to change a lot of other conditions.

Q. Do I correctly understand, then, that you say that you cannot give me an answer because you would not have on the witness stand sufficient time to consider all the [21045] ramifications that you say are involved. Is that right? A. O. K., that is right; I couldn't consider everything.

Q. Now, in saying that you have made the energy accounting and the capacity accounting in Exhibit 421 consistent, have you in any way departed from the theories and the principles employed by Mr. Davis?

* * *

THE WITNESS: I don't know, Mr. Goldberg.

* * *

[21059] Q. Isn't it a fact that when Baltimore's two-thirds of Safe Harbor's energy is diverted to the Pennsylvania customers, Baltimore Company is required to replace that diverted energy to meet its own requirements by generating steam electric energy?

MR. MYSE: Now, Mr. Examiner, I object to that. There is an assumption in there that there is some diversion from Baltimore's two-thirds, which is an assumption this witness has not made, and there is no foundation in the direct testimony of this witness for that question, and I therefore object to it as not within the scope of the direct, and immaterial and irrelevant.

MR. GOLDBERG: That I cannot fathom, Mr. Examiner, because all you have to do is glance at Exhibit 509, and it is inherent in the exhibit. He treats with the diversion.

MR. MYSE: I think if you glance at the exhibit you will see that in every place "diversion from Baltimore" is quoted, and it means as Mr. Davis used it.

Now, this witness hasn't taken any responsibility for it.

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[21060] THE EXAMINER: As the Examiner sees it the question goes to the matter of the witness applying certain costs to the so-called diverted energy. The question is therefore deemed to be proper.

THE WITNESS: Let me say it this way: When more Safe Harbor energy is used in Pennsylvania and less is sent to Baltimore, Baltimore has to generate more by steam.

By MR. GOLDBERG:

Q. Isn't it also a fact that such additional generation by steam costs Baltimore considerably more than the energy which is generated at Safe Harbor and diverted to Pennsylvania [21061] customers? A. Very likely.

Q. It is more than very likely, isn't it? It is a fact, isn't that so?

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THE WITNESS: The cost of steam generation in Baltimore is more than the 0.867 mills I used in Safe Harbor.

By MR. GOLDBERG:

Q. Is it fair to say it is considerably more? A. Yes.

Q. Now, then, in Exhibit 509 the credit to Baltimore Company is in an amount less than the costs incurred by Baltimore Company in generating the energy by steam, isn't that so? A. That is right.

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[21062] By MR. GOLDBERG:

Q. Well, in view of the fact that the credit is in an amount less than the cost to Baltimore generating the additional steam energy, doesn't it mean that the Pennsylvania customers receive the benefit of low cost hydro energy at the expense of Baltimore Company?

[21063] MR. MYER: I object to that question as being argumentative.

TRIAL EXAMINER: It is very close to the line but the Examiner will permit the question.

THE WITNESS: The Pennsylvania customers are charged with the cost of the energy from Safe Harbor. Baltimore Company's credit is the cost which it would have paid for the Safe Harbor energy if it received it, not the value of that energy to Baltimore.

By MR. GOLDBERG:

Q. Isn't the answer to my question yes? A. I don't know what you mean by the expense of Baltimore.

Q. That means you don't understand my question and therefore cannot answer it? A. No, I answered it, I think.

Q. I am trying to understand what you mean when you say that you don't know what I mean by the use of the word "expense." Does that mean you don't understand my question and therefore cannot answer it? A. What two conditions are you comparing? If there is a disadvantage to Baltimore you have to compare two things.

Q. I am giving you the comparison. The credit to Baltimore Company as against the cost Baltimore Company has to incur in generating the additional steam.

[21064] MR. MYSE: Mr. Examiner, I think the colloquy that has just taken place shows exactly what I said a moment ago that the entire line of questioning is argumentative.

TRIAL EXAMINER: I think so.

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Q. Mr. Loane, comparing the credit to Baltimore and the cost Baltimore incurs in generating the additional steam, the treatment in Exhibit 509 results in a disadvantage to Baltimore, right?

MR. MYSE: Same objection.

THE WITNESS: That is what I said initially, that if Exhibit 509 is compared with 421 there is more cost to

[21065] Baltimore, if that is what you mean by the expense to Baltimore.

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Q. Doesn't the treatment in Exhibit 509 mean that the costs of energy to the Pennsylvania customers do not properly reflect the cost of steam generation on the interconnected system?

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[21066] THE WITNESS: I don't want to say what they do not reflect. They do reflect the costs incurred in serving the Pennsylvania customers under the assumptions made herein.

By MR. GOLDBERG:

Q. Under the assumptions made in Exhibit 509——

A. And 421.

Q. —the costs of energy to the Pennsylvania customers do not properly reflect the cost of steam generation on the interconnected system, isn't that so? A. I won't say what they do not reflect, I will tell you what they do reflect.

Q. Do you mean you would rather not answer that question?

TRIAL EXAMINER: No, the witness is having difficulty, I think, with your insertion of the word "properly."

By MR. GOLDBERG:

Q. Well, shall we say do not reflect the costs of steam generation on the interconnected system, leaving aside for the moment whether it is proper, or not? A. That is right, they do not reflect the costs of steam generated energy on the interconnected system.

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[21080] Q. Will you agree that a company selling power and energy on a firm basis requires reserve generating capacity? A. Generally, yes, but there may be exceptions.

Q. Will you agree that all the firm customers should be

required to bear the cost of such reserve generating capacity?

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[21081] THE WITNESS: If the customer is provided with reserve he should pay the cost of it.

By MR. GOLDBERG:

Q. Isn't Metropolitan Edison that kind of firm customer? A. No.

[21082] Q. You say it is not? A. It is not.

Q. Isn't it a fact that it is that type of a firm customer in so far as it affects Penn Water's obligations to supply Metropolitan Edison Company's requirements above the steam line? A. No, I don't think it is.

Q. The requirements above the steam line you do not think are a firm obligation? A. There have been several definitions of firm supply and maybe according to the FPC definition the supply to M. E. Company would not be firm, but what is firm is defined in the M. E. contract.

Q. Isn't this the fact, that with respect to M. E.'s requirements above the steam line they are no different from P. P. & L.'s requirements under its contract with Holtwood? A. They are different.

Q. In what way are they different?

MR. MYSE: I object to that, Mr. Examiner. That is the point at which we launch off into a long investigation as to what Exhibit 72 shows. We have gone over that several times.

TRIAL EXAMINER: I think the form of the question is bad.

THE WITNESS: Maybe I can explain the difference relatively easy. P. P. & L. and P. E. Company in their reports [21083] of various kinds show as the capacity available from P. W. an actual demand plus a reserve. P. W. has to provide the reserve related to the Coatesville and Lancaster load; M. E. Company shows as available from P. W.

only the demand, they supply the reserve, that is the difference.

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Q. I am just interested in finding out if you can identify for us, for me at least, these reports. A. The reports that I referred to are capacity reports which we receive from the Pennsylvania-New Jersey Interconnection in connection with our coordinated operation with them. Now I understand that M. E. will follow the same thing in their FPC Form 12 report, but it is not available yet.

Q. You say you understand M. E. will do that in their FPC Form 12 report which has not been filed yet? A. I asked for it last week and it was not available upstairs.

Q. Was that the first report that will reflect operations under Exhibit 72? A. That is right.

Q. How did you ascertain that M. E. is going to do that? A. I asked Mr. Von Eiff, who is a member of the [21084] Operating Committee under that contract, to find out for me, and I believe he and Mr. Watchorn contact someone in the M. E. Company.

MR. MYSE: I don't think it is quite clear as to what you meant when you said that M. E. was going to do something in its Form 12. Can you be a little clear on that?

THE WITNESS: M. E. Company will show in their Form 12 the capacity available from P. W. as an actual demand without any addition of reserve, whereas in former years when we supplied York-Edison they showed the demand plus the reserve as being available from P. W.

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By MR. GOLDBERG:

Q. And you take that to mean that Penn Water provides no reserve for M. E., is that right? A. That is right.

Q. Have you yourself attempted to verify your conclusion that Penn Water does not supply any reserve to M. E.

under Exhibit 72 by making any reference to the terms of the contract? A. Oh, I know they supply a spinning reserve.

Q. Well, other than that, have you referred to the contract to verify your understanding? A. No, it is just the understanding of what the operations will be.

[21085] Q. What detailed computations would be necessary to determine actual cost to Baltimore of the backfeed from Baltimore and Washington? A. Well, you would have to set up the hour-to-hour schedule of what the backfeed is, some of it being for interchange and some of it being used in connection with the firm supply in Pennsylvania. Then the costs that relate to the interchange have already been determined as the basis of the interchange billing. It is the highest cost part of the backfeed that is related to the interchange, and it would be necessary hour-by-hour to determine the costs that relate to the backfeed or the part of the backfeed used in connection with firm supplies.

Q. When you say that the higher costs have already been determined as related to interchange, to what period of time do you have reference? When was this determination made? A. Whether it was the hour following, the day following or the week following, I don't know, but the interchange figure is determined currently.

Q. Oh, it is always ready as the operations of the company move along? A. Well, you have got to make out a bill for the interchange.

Q. I see. Now, what would you have to do to determine the costs of the firm? A. The costs of what?

[21086] Q. Of the firm portion. A. You mean the backfeed that is used to supplement Holtwood's and Safe Harbor's supply?

Q. Yes. A. Well, ordinarily we go to the Gas Company and ask them to cooperate in such a study, but I don't think we could under these circumstances.

Q. You haven't done that? A. We are proceeding without their cooperation.

Q. Now, is that determined as rapidly as the interchange costs are determined? A. Oh, no, there is no current determination of that.

Q. But you say such a determination is presently in process? A. We started it in connection with this rebuttal testimony.

Q. When did you start?

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[21087] THE WITNESS: Sometime last week. I couldn't be sure of the date.

By MR. GOLDBERG:

Q. What records have to be examined to ascertain the costs in connection with the firm portion? A. Well, a good many of the hourly load records will be necessary, the generation and deliveries at various places, and we have got to get the data which relates to the costs of generation at various places.

Q. I take it it has to be an hour-by-hour study. Is that right? [21088] A. For the most part, yes. Perhaps there will be times where you can group hours together and work out the costs for a group of hours.

Q. I understand your testimony to be that you have to determine what portion is for interchange and what portion is for firm. Right? A. Well, since the backfeed that is used for interchange has already been paid for, I wouldn't think that any costs relating to that use of backfeed would be charged to the backfeed used in connection with the firm supplies.

Q. Well, how do you determine what portion is for interchange and what portion is for firm? A. Well, the highest cost part has already been billed as interchange.

Q. That is the determination that the highest cost is for interchange?

TRIAL EXAMINER: I think the cross-examination is beginning to become highly general and not particularly relevant.

By MR. GOLDBERG:

Q. How close to completing the study are you? A. I don't know. It is being done in Baltimore, and I am only in telephone communication with it.

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[21216] TRIAL EXAMINER: Is there any further testimony to be offered by Respondents' counsel in sur-rebuttal?

MR. MYSE: Mr. Examiner, this is all the sur-rebuttal testimony we have been able to prepare for presentation in the wholly inadequate and unreasonable time we have been allowed for such preparation.

We want to make it clear, however, that this is not all of the evidence we would produce if we were to be accorded a reasonable opportunity to rebut the evidence presented against us in this proceeding by the Staff and the Intervenors.

We object strenuously to the summary nature of the action of the Commission, as represented by the Examiner, which thus deprives us of an adequate opportunity for hearing on such evidence presented by other parties to this proceeding.

The volume, detail and technical nature of the evidence recently presented by the other parties, combined with the almost continuous hearing sessions since September, 1946; the requirement of immediate cross-examination of hostile witnesses; the requirement of immediate re-direct examination of our own witnesses; the requirement——

TRIAL EXAMINER: Now, just a minute. All of this is a statement of the same character that the Examiner has listened to on every single occasion when the Examiner has directed Respondents' counsel, as he has directed every other counsel appearing in this case, to proceed with the [21217] examination of the witness that is then in order. I see no reason for counsel again going through all of this recitation.

MR. MYSE: Well, I would like to summarize, if I may, the reasons why we think we are being deprived of a fair hearing under the Constitution and the laws of the United States, and in addition I have an offer of proof at the end of the summary.

TRIAL EXAMINER: You may hand your summary to the reporter.

MR. MYSE: I do not have it in condition where I could hand it to the reporter. I have notes, but I have corrections to those notes which I would like to consider as I go along in making my statement.

TRIAL EXAMINER: In view of the fact that Respondents' counsel has had an opportunity every time that he has been called upon to state his objection, if he had any, to going forward at that time when called, and to state the grounds supporting that objection, and that the Examiner permitted a complete statement of counsel's position and the grounds in support of that position in connection with the ruling on Respondents' counsel's application for a recess in February to prepare for rebuttal testimony, and for a recess in June in order to prepare for the sur-rebuttal testimony, I see no reason for the Examiner to be compelled to listen to a restatement of all of those objections and the grounds supporting [21218] them, or any resume thereof.

Now, if Respondents' counsel is not prepared to go forward at this time with further sur-rebuttal testimony, and there is any condition of emergency attending his inability to proceed at this time, he may state that.

MR. MYSE: Mr. Examiner, we except to your ruling denying us the right to state our objections to the procedure adopted by the Commission, as represented by the Examiner, and state that we have not had an opportunity to fully state those objections.

I do at this time, however, desire to make an offer of proof, and although we have not completed our research and consideration in determining all of the rebuttal evi-

dence we would present if given an adequate and reasonable opportunity, we are able to state and hereby offer to prove——

TRIAL EXAMINER: Wait just a minute. What is the nature of this offer of proof?

MR. MYSE: I am just going to get to it.

TRIAL EXAMINER: I don't mean that. I think it is improper for counsel to make an offer of proof with respect to testimony which he states he has not had time to prepare. Now, if he has any testimony to present, an offer of proof is unnecessary. He may call his next witness.

MR. MYSE: I would like to state for the record, Mr. Examiner, that we do have in the process of preparation certain [21219] detailed testimony, and I would like to state just exactly what that is in order that the Examiner may know the nature of the testimony in further rebuttal that we intend to produce, and it is as follows: By the witnesses Spaulding and Loane——

TRIAL EXAMINER: Wait just a minute. If it is unprepared testimony, it is not properly the subject of an offer of proof. If it is prepared testimony, counsel may call his next witness.

MR. MYSE: Mr. Examiner, we want to have the record show just exactly and in detail the type of evidence which we are prepared to bring in if given an adequate opportunity, and it relates to testimony and evidence in direct rebuttal and refutation of many of the documents and evidence presented by Commission's Staff and by the other Intervenors in this case, and it is in the course of preparation. I think we should have an opportunity to state for the record just exactly the detail that we intend to come in with if given an opportunity.

TRIAL EXAMINER: I see no reason for counsel's being permitted to make any such statement at this time. If

counsel has been unable to prepare sur-rebuttal evidence under any condition involving an emergency, the Examiner will hear such a statement. But any other statement would appear to the Examiner to be out of order.

MR. MYSE: I don't understand what the word "emergency" [21220] means, but if I do understand it, this is an emergency, and it is as follows: That if we were able to prepare the testimony that I mentioned, we would be able to refute without a doubt Exhibit 421——

MR. GOLDBERG: Now, Mr. Examiner, may I interpose here? I understand that the Examiner has ruled that he will not listen to an offer of proof or will not hear an offer of proof with respect to testimony which is not prepared; that if it is prepared, he is willing to have the witness called.

What the Examiner will listen to is to a detailed specification of the material they say they are in the process of preparing.

MR. MYSE: That is exactly what I want to tell the Examiner at this time.

TRIAL EXAMINER: I do not think anything would be added to the record by receiving a detailed statement of what Respondents' counsel is in process of preparing if he is not now ready to present whatever testimony or evidence is in the process of preparation.

Once again, if there is any matter that has intervened since the Examiner first directed Respondents' counsel to put on his sur-rebuttal testimony and evidence that has prevented the regular course of preparation of that testimony and evidence, he may state what that was.

MR. MYSE: That is also what I intended to state by [21221] reciting in detail what the evidence would be, and pointing out why we have been unable to prepare it.

TRIAL EXAMINER: I think it can be assumed that whatever evidence is in course of preparation would relate to

the issues in this proceeding; but the time has come when this hearing must be brought to a conclusion. The time for the reasonable conclusion of this hearing has long since passed. Respondents' counsel, Intervenors' counsel and Staff counsel have each been given more than a reasonable amount of time in which to prepare any evidence that is now to be presented in this hearing.

MR. GOLDBERG: Mr. Examiner, may I be heard for a moment?

MR. MYSE: Before you do that, may I except to the Examiner's rulings?

MR. GOLDBERG: I for one am not willing to assume that what Mr. Myse was going to refer to is material or relevant or competent as far as the issues in this proceeding are concerned; and I submit, Mr. Examiner, that there would be no occasion under any circumstances at all to afford the Respondents any additional time—they have had more than ample time to prepare anything—even to prepare testimony that is incompetent, irrelevant and immaterial.

MR. MYSE: Mr. Examiner, I point out that because you have deprived us of an opportunity to state what that detailed [21222] evidence is, I don't see how anybody can tell whether it is material, relevant or competent, and I state to the Examiner that in our opinion it is material, relevant and competent.

TRIAL EXAMINER: The basis for the Examiner's ruling is that counsel has had an adequate time to bring forward now whatever sur-rebuttal evidence he may have, and in using the word "evidence" the Examiner is now calling for all material, competent, relevant testimony, and if counsel now states, whatever his statement should be, with regard to that relevance and materiality and competency, if he is not now prepared to go forward or state some emergency that would require the Examiner in all due rea-

sonableness to give him additional time, then counsel's proposed statement can have no effect whatever on the Examiner's ruling.

MR. MYSE: Do I understand, Mr. Examiner, that you will not permit me to state in detail what the evidence would be if we were permitted to prepare it in order to show the Examiner what the emergency is which requires additional time?

TRIAL EXAMINER: You may state what the emergency is, but I don't care to hear what it is if you are now in the course of preparing it. It makes no difference. Now is your time to come forward.

MR. MYSE: Well, the emergency is as follows: We require the additional time to prepare the testimony that I would have liked to refer to because of its nature, and its [21223] nature is as follows:

One, we would rebut and hereby offer to prove——

TRIAL EXAMINER: Wait just a minute. I think it is improper for counsel to make any statement as to what he is going to rebut.

MR. GOLDBERG: Apparently they arrive at their conclusion first and then prepare to meet that conclusion, Mr. Examiner.

TRIAL EXAMINER: Wait just a minute. Counsel apparently is again attempting to describe what his evidence would be, and the Examiner admonishes counsel to abide by the Examiner's direction and ruling.

MR. MYSE: Does that mean, Mr. Examiner, that you will not permit me to recite the evidence we would produce in order to show the Examiner the nature of the emergency that the Examiner referred to?

TRIAL EXAMINER: Will you read that statement, please?

(The statement was read.)

TRIAL EXAMINER: You can state the nature of the emergency without citing the evidence.

MR. MYSE: I state to the Examiner that I cannot state the nature of the emergency because the emergency depends upon the detailed evidence, and I am unable to go into any other detail than to recite the nature of the evidence in order to show that emergency.

[21224] TRIAL EXAMINER: I am certain that a recitation of the nature of the evidence is not necessary in order to conform with what the Examiner considers emergency to mean in the Examiner's ruling.

Now, if there has been any illness, or any incapacity of any witness or of counsel, or if records have been misplaced and counsel has been unable to locate them, or any other matter of that general nature and character, or any similar character, then counsel may state it. But if this is going to be a recitation of the fact that Exhibit 421 was first served on a certain date, was identified on a certain date, was received in evidence on a certain date, and testimony relating thereto was received between certain dates, there is no need to try to establish an emergency by making any such recitation.

MR. MYSE: I didn't intend to make any such recitation, Mr. Examiner.

TRIAL EXAMINER: If you would disclose what you are attempting to do, I would listen to you.

MR. MYSE: I can only do that by reciting in detail the evidence we propose to offer in this proceeding.

TRIAL EXAMINER: When you start your statement by saying, "We propose to rebut Exhibit 421," I don't think you are even making an attempt to comply with the Examiner's direction.

MR. MYSE: Do I understand the Examiner will not permit [21225] me to recite in detail the nature of the evidence we are now in the process of preparing and would produce

if given further opportunity in order that we may show the Examiner just why we need that further opportunity? Is that the Examiner's ruling?

TRIAL EXAMINER: I think it would be improper to listen to any description of the nature of the evidence under any attempt to evade the Examiner's ruling on an offer of proof.

MR. MYSE: Well, I state there is no intent on my part to evade any of the Examiner's rulings. I merely want to state to the Examiner the nature of the evidence we would produce if given an opportunity.

MR. GOLDBERG: Mr. Examiner, I submit that the Examiner has indicated what "emergency" means in his mind, and that Respondents' counsel should address himself to that directly.

TRIAL EXAMINER: Well, you may proceed to make a statement in conformity with the ruling of the Examiner.

MR. MYSE: We offer to prove, one——

TRIAL EXAMINER: Just a minute. You are not even attempting to comply with the Examiner's directions. The Examiner feels it would be improper to hear any offer of proof.

MR. MYSE: I except to Your Honor's ruling, and point out that we are thereby being deprived of a fair hearing under the Constitution and the laws of the United States.

MR. SPARKS: Mr. Examiner, I believe there are a few [21226] matters unfinished. At page 20730 and 20734——

TRIAL EXAMINER: Before we get into that matter, I understand that Respondents have no further sur-rebuttal testimony and evidence prepared and ready to offer at this time?

MR. SPARKS: It is in the course of preparation, as Mr. Myse stated to you, Mr. Examiner.

TRIAL EXAMINER: But you have none to offer at this time as you are now being called upon by the Examiner to proceed with your next witness or your next offer of evidence?

MR. SPARKS: We have none to present at this time, Mr. Examiner, for the reasons which Mr. Myse stated.

TRIAL EXAMINER: Would you be prepared to do so at 2 o'clock this afternoon?

MR. SPARKS: No, we would not, Mr. Examiner.

TRIAL EXAMINER: Would you be prepared to do so at 10 o'clock tomorrow morning?

MR. SPARKS: No, sir. Mr. Myse was attempting to state to Your Honor what we needed to do in the way of research and preparation in order to ask for a reasonable time, Mr. Examiner, and it would not be two or three days.

TRIAL EXAMINER: You might indicate how much time you do have in mind.

MR. MYSE: Well, I think, Mr. Examiner, that that requires knowledge of what we propose to offer, but I can say this: We would need at least three weeks from today to [21227] finish the research which has already been in progress, and some of which was testified to by Mr. Loane, I believe, yesterday.

TRIAL EXAMINER: All right. The Examiner merely observes you are now requesting as much time to prepare your remaining sur-rebuttal as you requested originally to prepare all of your sur-rebuttal.

MR. MYSE: That is correct, Mr. Examiner. We originally, as I recall it, requested three weeks. After, however, getting into the details of some of those matters, including those referred to by Mr. Loane yesterday, we found that the job was a much greater job, as Mr. Loane said, than we expected, and it required an analysis of hour-by-hour data for a considerable period covering the year 1946.

TRIAL EXAMINER: The Loane investigation is the principal basis for your request for three weeks' time?

MR. MYSE: No, sir, that is only one of several.

TRIAL EXAMINER: I might observe, since you mention the witness Loane, that the Examiner made a note the other day when that matter was developed on cross-examination——

MR. GOLDBERG: If the Examiner is referring to the matter that is in my mind the witness Loane stated the investigation began last week.

TRIAL EXAMINER: That is correct. That related to a determination of the cost of backfeed to Penn Water from [21228] Baltimore and Washington.

MR. MYSE: That is right, that is one of the studies which we are now engaged in and if permitted we would show that that cost of backfeed would be substantially less than 4.7 mills.

TRIAL EXAMINER: Yes, and you were served with the Staff witness' exhibit on May 23, as to Exhibit 421, and May 29 as to Exhibit 422, and more than two weeks have elapsed since Respondents were required to proceed with their sur-rebuttal testimony.

MR. GOLDBERG: Mr. Examiner, beyond that, the question of the mill rate to be used in connection with backfeed goes all the way back to Exhibit 64. In other words, the question of the propriety of any mill rate to be applied to backfeed—as to that, they have been on notice—that has been involved as long ago as when the hearing first began.

MR. MYSE: The record will show whatever that is to be the fact. I don't want to argue it, but I do want to point out that there was never any use of the 4.7 mill rate in the manner Mr. Davis used it until he used it as he did in his Exhibit 421.

I want to point out to the Examiner that we have other studies in the course of preparation in refutation of Exhibit 421 which, because of the limited staff we had available and the requirement of going ahead with cross-examination, required [21229] us to schedule these studies at intervals and that explains why the study relative to the refutation of the 4.7 mill rate was not begun until last week. We had these other studies in connection with Exhibit 421 in process of preparation for some time.

TRIAL EXAMINER: If this hearing goes on much further I think we will have to revise all of our exhibits to bring them up to date.

MR. GOLDBERG: When they say "limited staff," Mr. Examiner, that must be said with a smile. I know we have supplied at least as many as 20 copies of many of our exhibits for use by the Respondents' staff.

TRIAL EXAMINER: If the Examiner does not impose some restrictions on the hearing the Examiner is convinced, on the basis of the progress of this hearing to date, the hearing would go on for another year. You may proceed.

• • •

[21265] TRIAL EXAMINER: Is there anything further before the Examiner rules that the hearing shall now be deemed concluded as to the receipt of evidence in this proceeding?

MR. MYSE: Is that directed to us generally?

TRIAL EXAMINER: Any counsel may respond.

MR. MYSE: We have stated our position on that matter this morning and I won't burden the record by restating it. I refer to the offer to show the Examiner what we had in the way of further evidence. We take exception to any ruling closing the hearing at this time.

TRIAL EXAMINER: The Examiner will set a date for the filing of main briefs which will be 90 days after July 15,

which is the date set for the final determination of corrections. Main briefs, therefore, will be filed on or before Wednesday, October 15, 1947, and reply briefs will be filed on or before Monday, November 17, 1947.

The hearing is now concluded as to the receipt of evidence and the hearing is recessed to reconvene in this room on Tuesday morning, July 15, at 10 o'clock for the purpose of the final determination of corrections to the transcript.

(Thereupon, at 4:47 o'clock P. M., the receipt of evidence was concluded, and the hearing recessed until Tuesday, July 15, 1947, at 10 o'clock A. M.)

* * *

[21279] TRIAL EXAMINER: I understand this matter requires no ruling of the Examiner at this time. The Examiner's responsibility at this time consists of closing the record. Accordingly, under Section 1.155 of the Federal Power Commission's Rules of Practice and Regulations, effective June 1, 1938, as amended, the Examiner now declares the record in this proceeding closed, and there being nothing further to come before this hearing the Examiner proposes to adjourn sine die.

MR. SPARKS: I would like to state our exception, Mr. Examiner, to your closing the hearing at this time, on the basis stated by Mr. Myse on July 10, 1947, with regard to our offer of further proof.

TRIAL EXAMINER: The hearing is concluded and adjourned sine die.

* * *

Vol. VI

TRANSCRIPT OF RECORD

(Pages 2455 to 2682)

Supreme Court of the United States

OCTOBER TERM, 1951

No. 428

PENNSYLVANIA WATER AND POWER COMPANY AND SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND, PETITIONERS,

vs.

FEDERAL POWER COMMISSION ET AL.

No. 429

PENNSYLVANIA PUBLIC UTILITY COMMISSION, PETITIONER,

vs.

FEDERAL POWER COMMISSION

ON WRITS OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

PETITIONS FOR CERTIORARI FILED NOVEMBER 16, 1951

CERTIORARI GRANTED FEBRUARY 4, 1952

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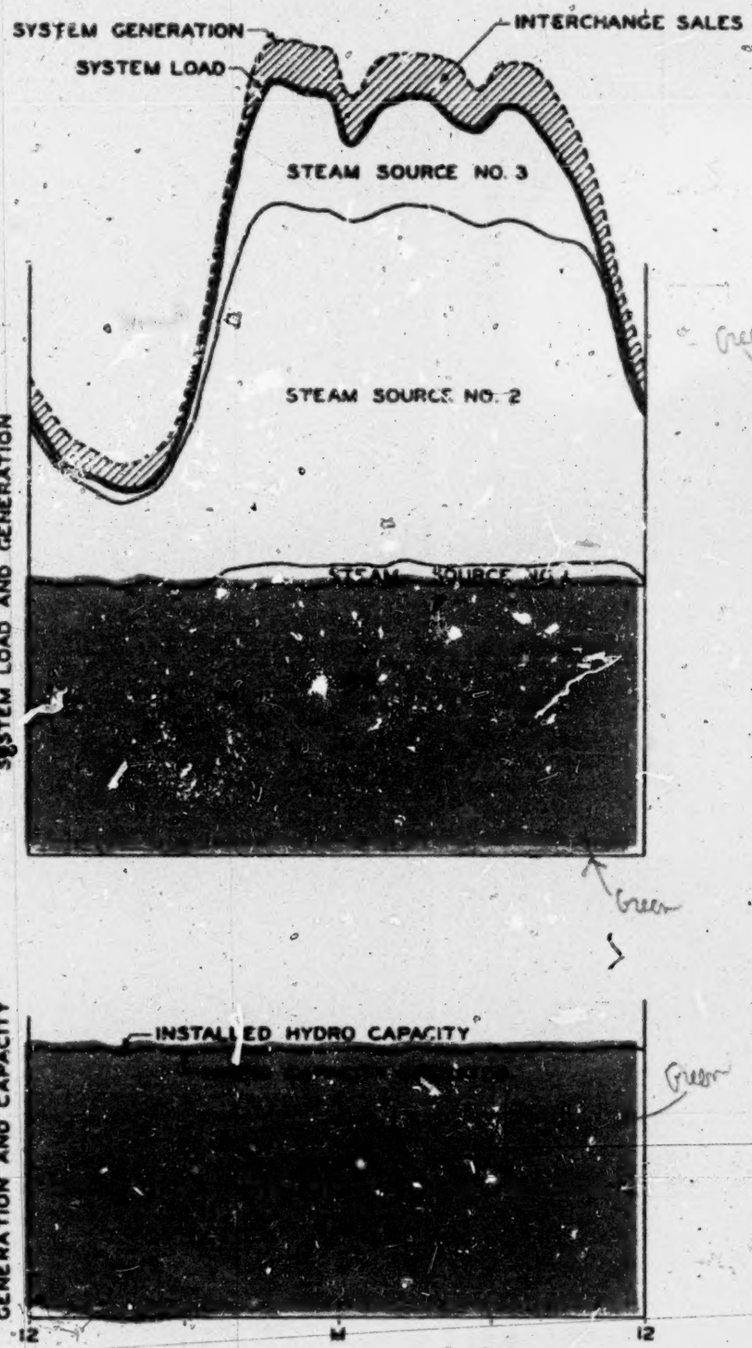
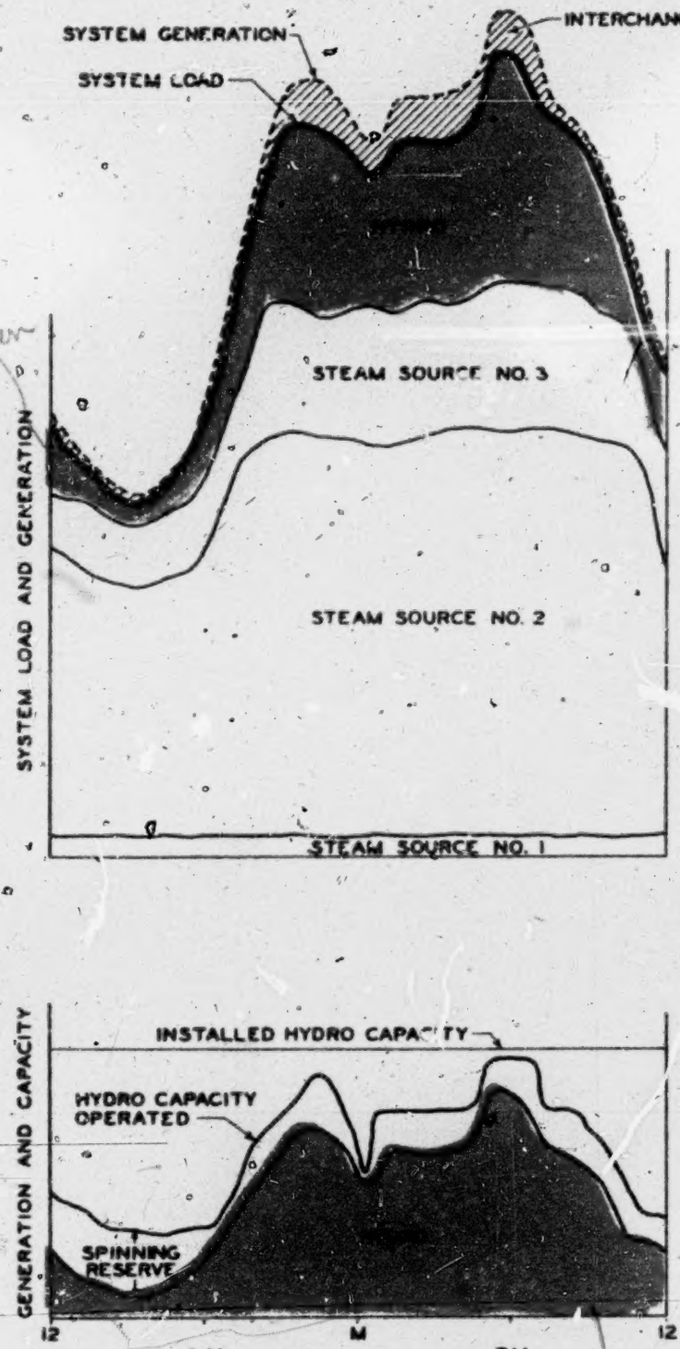
COORDINATED USE OF HYDRO RESOURCES ON THE INTERCONNECTED SYSTEM

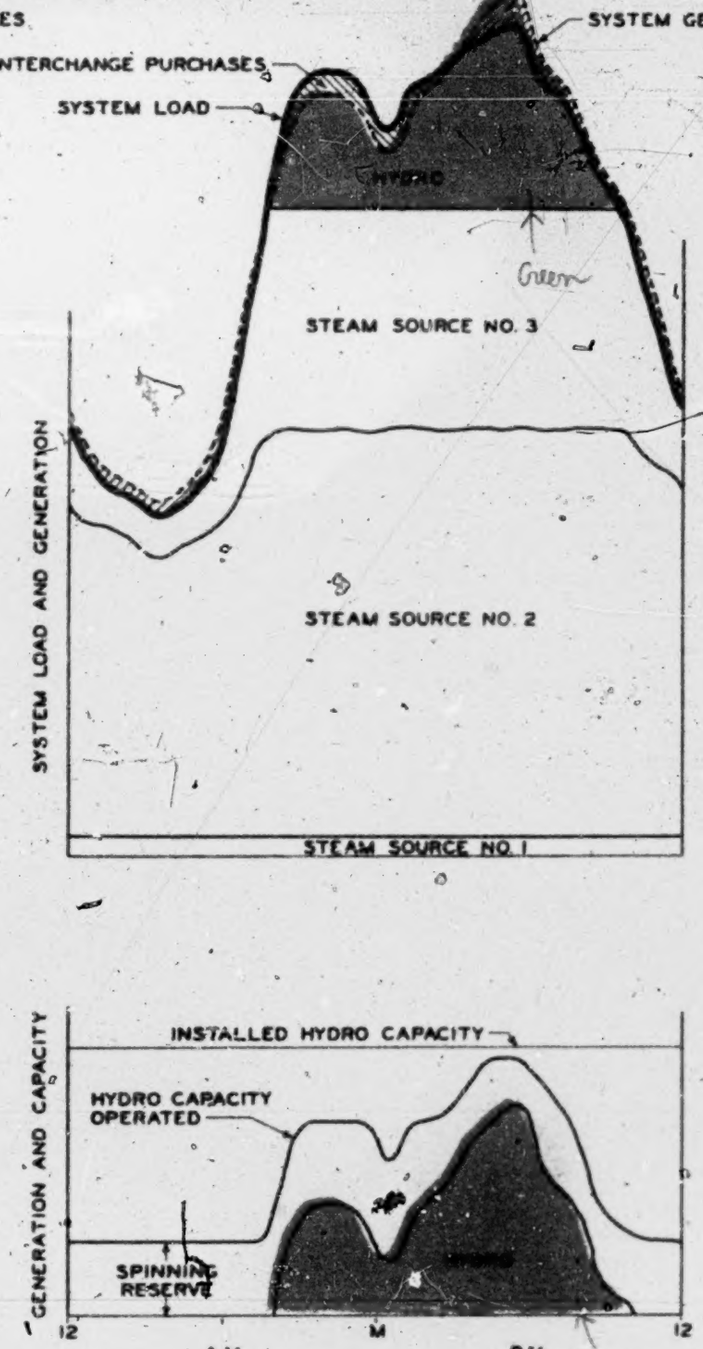
MAR. 19, 1946
ACTUAL FLOW 124,800 C.F.S.
ACTUAL GENERATION
ACTUAL LOAD



DEC. 20, 1945
ACTUAL FLOW 19,200 C.F.S.
ACTUAL GENERATION
ACTUAL LOAD



DEC. 5, 1945
ASSUMED FLOW 5,800 C.F.S.
ASSUMED GENERATION
ACTUAL LOAD



SA
4-10

PENNSYLVANIA WATER & POWER COMPANY

Kilowatthour Sales to and Revenue Received from Pennsylvania Firm Customers

Year	Kilowatthour Sales	Revenues Received (a)
1944	542,484,700	$ 3,531,520
1945	517,584,700	3,401,361
1946 (Estimated)	539,300,000	3,562,000

(a) Total revenues received including charges for all services rendered.

S-B
4-10

This composite form is the result of deletions, changes and additions to the original Power Contract of September 2, 19[illegible] in line with the specific intention of the Supplemental Agreement of August 15, 1934 and the Supplemental Agreement of June 22, 1938. It has been compiled as a working paper for ready reference from the formal agreements.

Certain footnotes have been added to clarify the text, which might otherwise be ambiguous in this composite form.

PREAMBLE TO ORIGINAL CONTRACT

This Contract, made this second day of September, 1931, by and between THE PENNSYLVANIA RAILROAD COMPANY, a Pennsylvania Corporation, hereinafter called "Railroad Company," and the CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE, a Maryland Corporation, the PENNSYLVANIA WATER & POWER COMPANY, a Pennsylvania Corporation, and the SAFE HARBOR WATER POWER CORPORATION, a Pennsylvania Corporation, hereinafter jointly referred to as "Electric Companies."

WHEREAS Railroad Company is electrifying certain railroad lines for which it desires to purchase electric power and energy, to be available if and when said lines will be ready for electric operation, and

WHEREAS Electric Companies are engaged in the generation, purchase and sale of electric power and energy and own and operate hydro-electric and steam-electric generating

stations and an interconnected transmission system, and desire, jointly and severally, to sell, and Railroad Company desires to purchase, a portion of the electric power and energy requirements for the lines that are now being electrified and that are to be electrified in the future.

NOW, THEREFORE, THIS AGREEMENT WITNESSETH: That for and in consideration of the mutual covenants and agreements hereinafter contained and of the sum of Five Dollars ($5.00) paid by each of the parties hereto to the other, receipt whereof is hereby acknowledged and of other valuable considerations, Railroad Company and Electric Companies, jointly and severally, do covenant and agree as follows:

PREAMBLE TO SUPPLEMENTAL AGREEMENT

DATED AUGUST 15, 1934

This Supplemental Agreement made this Fifteenth day of August, 1934, between THE PENNSYLVANIA RAILROAD COMPANY, a Pennsylvania Corporation, hereinafter referred to as "Railroad Company," the CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE, a Maryland Corporation, hereinafter referred to as "Baltimore Company," the PENNSYLVANIA WATER & POWER COMPANY, a Pennsylvania Corporation, the SAFE HARBOR WATER POWER CORPORATION, a Pennsylvania Corporation, the last mentioned three Companies hereinafter referred to as "Electric Companies," and the POTOMAC ELECTRIC POWER COMPANY, a Corporation of the District of Columbia, hereinafter referred to as "Washington Company," and the last mentioned four companies hereinafter referred to as "Supplying Companies."

WHEREAS under a contract dated September 2, 1931, between Railroad Company and Electric Companies, hereinafter referred to as "Railroad Contract," it has been agreed between the said parties to make available to each other from time to time, property and facilities for power transmission, communication, or other similar purposes for such joint use as may appear practicable and desirable, and

WHEREAS under an agreement entered into subsequent to the Railroad Contract, between Washington Company and Baltimore Company, dated June 16, 1932, and supplemental agreement of even date herewith, which two agreements are jointly referred to herein as "Takoma Agreement," it has been agreed between the said parties, to endeavor to coordinate their system planning and in particular their investments in generating and transmission facilities with the object of effecting maximum overall economy and service reliability, and

WHEREAS Railroad Company desires to change the location of a portion of the frequency changer equipment provided for in the Railroad Contract, from Loudon Park, Maryland, to Benning, D. C., in order to secure better protection to traffic south of Baltimore, improved voltage regulation and other advantages, which benefits were not available to Railroad Company until continuous parallel operation of the power systems of Electric Companies and of Washington Company had been established under the Takoma Agreement of June 16, 1932, and

WHEREAS Electric Companies are willing to agree to the change in location of a portion of the frequency changer equipment from Loudon Park, Maryland, to Benning, D. C., and

WHEREAS Washington Company is willing to provide the necessary equipment to furnish power to Railroad Company at Benning, D. C., and to operate and maintain same

for Railroad Company's use under the general direction of Electric Companies, and thereby become a party to the Railroad Contract, and

WHEREAS all parties hereto desire that some of the existing transmission lines, communication facilities and other equipment owned by them and certain additional interconnection facilities contemplated under this Agreement, shall be made available for the joint use of the parties hereto in order to secure greater economy in operation and improved service to the Railroad Company and to the public,

NOW, THEREFORE, THIS SUPPLEMENTAL AGREEMENT WITNESSETH: That for and in consideration of the sum of Five Dollars ($5.00) paid by each of the parties hereto to the other, receipt whereof is hereby acknowledged, and of other valuable considerations, Railroad Company, Electric Companies and Washington Company hereby agree to the following changes, additions and modifications of the Railroad Contract, all other terms and conditions of that contract not specifically modified hereinafter and not inconsistent with the terms and conditions of this supplemental agreement to remain in full force and effect:

PREAMBLE TO SUPPLEMENTAL AGREEMENT

DATED JUNE 22, 1938

This Supplemental Agreement made this Twenty-second day of June, 1938, by and between THE PENNSYLVANIA RAILROAD COMPANY, a Pennsylvania Corporation, hereinafter referred to as "Railroad Company," the CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE, a Maryland Corporation, the PENNSYLVANIA WATER & POWER COMPANY, a Pennsylvania Corporation, and the SAFE HARBOR WATER POWER CORPORATION, a Pennsylvania Corporation, the last mentioned three Companies hereinafter jointly referred to as "Electric Companies."

WHEREAS Railroad Company and Electric Companies heretofore entered into a contract dated September 2, 1931, for the supply of electric power and energy in connection with Railroad Company's main line electrifications and for the furnishing by Electric Companies of specified facilities required in connection with such supply, and

WHEREAS the said contract was supplemented by an agreement dated August 15, 1934, to which Potomac Electric Power Company, a corporation of the District of Columbia, was also a party; the said contract as so supplemented being hereinafter referred to as the "Railroad Contract," and

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WHEREAS Railroad Company and Electric Companies, the parties hereto, now desire to amend and modify certain of the terms and conditions of said Railroad Contract,

NOW, THEREFORE, THIS SUPPLEMENTAL AGREEMENT WITNESSETH: That for and in consideration of the sum of Five Dollars ($5.00) paid by each of the parties hereto to the other, receipt whereof is hereby acknowledged, and of other valuable considerations, Railroad Company and Electric Companies hereby agree to the following changes, additions and modifications of the Railroad Contract, all other terms and conditions of that contract not specifically modified hereinafter and not inconsistent with the terms and conditions of this supplemental agreement to remain in full force and effect:

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ARTICLE I

Duration of Agreement

This agreement shall become effective on the date of execution and shall remain in force until midnight of September 30th, 1960.

ARTICLE II

Amount of Power and Energy

Section 1. The amount of power and energy, hereinafter referred to as "contractual supply," which Railroad Company shall call for and which Electric Companies shall supply when called for by Railroad Company is defined as the entire electrification requirements for passenger, freight and switching service, as and when electrified, including such auxiliary services for signals, light and power in connection therewith as Railroad Company may elect to take, on the main line of the Philadelphia, Baltimore & Washington Railroad from Perryville, Md. to Washington, D. C., on the passenger and freight lines of the present Philadelphia Division between Thorndale, Pa. and Harrisburg and Enola, Pa., on the Columbia and Port Deposit Railroad from Columbia, Pa. to Perryville, Maryland, and yards adjacent thereto and supporting these services.

Section 2. Railroad Company may from time to time call upon Electric Companies for the supply of power and energy for additional services on the lines referred to in Section 1 of

this Article and/or for passenger, freight and switching services on additional lines in connection with extensions of electrification by Railroad Company, excepting, however, that in respect to such lines in the vicinity of, and within a radius of approximately 25 miles from Safe Harbor, Railroad Company shall call for and Electric Companies shall supply the entire power requirements of said lines, including such auxiliary services for signals, light and power in connection therewith as Railroad Company may elect to take. Electric Companies shall supply such additional power and energy when called upon under this Section, under the terms and conditions of this contract, and such additional power and energy, which may be furnished in part by additional single phase hydro generation referred to in Sub-Section 2(d) of Article VIII, shall then constitute a part of the "contractual supply" hereunder, provided, however, that for such additional supply, Railroad Company shall endeavor to give to Electric Companies written request for the supply at least eighteen (18) months in advance of the date when such energy will be required. If due to unforeseen circumstances, Railroad Company requests such additional supply on less than eighteen (18) months' notice, Electric Companies will use their best endeavor to provide such additional system capacity and/or special facilities as may be required, but in such event Electric Companies shall not be charged with any breach of contract for failure so to do within a period less than eighteen (18) months from receipt of the written request.

SECTION 3. It is understood and agreed that the above mentioned boundary or terminal points are approximate des-

ignations, the actual locations being the Railroad Company's substations in the vicinity of such points. The entire power and energy requirements for the above electrified line or lines, up to the capacity of Railroad Company's transmission lines to transmit the power and energy safely and with satisfactory voltage regulation, shall be supplied normally by Electric Companies at all times, commencing with the date when electric train service on the above mentioned railroad lines or any part thereof is inaugurated.

ARTICLE III

Facilities to Be Provided and Points of Supply

Electric Companies shall install, operate and maintain all generating, transmission and switching equipment, except the 110 kv. 60 cycle circuit described in Section 3 of Article III-A below, necessary to deliver at the points of supply hereinafter designated the amount of power and energy specified in Article II, including such special equipment and facilities provided for use of and at the request of Railroad Company, as may be called for from time to time under the provisions of Articles VIII and IX. The first and second frequency changer originally intended* for installation by Electric Companies at Loudon Park, Maryland, will be installed, operated and maintained by Washington Company at Benning, D. C.

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* *Under the terms of Original Contract of September 2, 1931, the frequency changers here referred to were to be located at Loudon Park, Maryland. This "original intention" has been changed by the terms of the Supplemental Agreement of August 15, 1934.*

Points of supply shall be at or near the terminals of the 25 cycle single phase generators of the frequency changers, located at Benning, D. C. and Loudon Park, Md.; at the terminals of Electric Companies' 132.0 kv. circuits at Perryville, Md.; at the low tension terminals of the Railroad Company's step-up transformers at Safe Harbor, Pa.; and at such high tension terminals of Railroad Company's step-down transformers as may be agreed upon between the parties. Railroad Company shall provide single phase transmission capacity between Perryville and Loudon Park sufficient to normally transmit not less than 25,000 kw. to the Railroad Company's lines south of the Baltimore tunnels and in addition shall provide for the general transmission use of Supplying Companies, a three wire 110 kv. circuit described in Section 3 of Article III-A below, two wires of which circuit may be used by Railroad Company in emergencies as a reserve 132.0 kv. single phase circuit.

ARTICLE III-A

Supply at Benning

Section 1. *Amount of Power and Energy Available:* Railroad Company is entitled to receive through the frequency changer equipment at Benning such power and energy as may be needed for its service requirements at Benning and as may be transmitted over the 230 kv. Baltimore supply connection through Takoma in excess of the firm peak service as defined in the Takoma Agreement and/or as may be transmitted over the 110 kv. connection on Railroad Company's right-of-way to Benning. Railroad Company shall be

further entitled to such additional power and energy as can be made available by Washington Company from its own steam generating stations at request of Baltimore Company in excess of Washington Company's system load to the extent that Baltimore Company is entitled to call for such power and energy under Articles IV and V of the Takoma Agreement. It is expressly understood and agreed that Washington Company for the purpose of this agreement shall not be required to install additional generating capacity at its own steam stations and that Electric Companies shall provide generating capacity sufficient to supply the full amount of "contractual supply" defined in Article II.

SECTION 2. *Voltage Regulation, General Operation, etc.:* Washington Company shall adjust the load and voltage on the 25 cycle side of the frequency changer equipment under the general direction of Electric Companies' load dispatcher, but may adjust the voltage on the 60 cycle side to suit best the requirements on its own generating and distributing system within such range as may not adversely affect the stability of interconnection and other characteristics of the combined power supply system or the 25 cycle output to Railroad Company. In addition to its primary purpose of power supply to Railroad Company and secondary purpose of 60 cycle voltage regulation, the frequency changer equipment at Benning, may be used for transmitting in conjunction with Railroad Company's 132.0 kv. circuits, power and energy to or from Washington Company's system to the extent of spare capacity available over such circuits in excess of Railroad Company's own service requirements, and in such manner

as will not materially affect Railroad Company's voltage regulation or transmission losses on the 132.0 circuits, provided however, that Railroad Company's Load Dispatcher may order curtailment or suspension of such interchange of power between Supplying Companies, in the event that Railroad Company's service is adversely affected by such operation. For the purpose of determining the contractual supply to Railroad Company, energy delivered on the 25 cycle side of the frequency changer equipment at Benning shall be combined with the energy delivered to Railroad Company by Electric Companies at the other points of supply, referred to in Article III.

SECTION 3. *Reserve Supply to Benning Frequency Changer:* In order to insure to the greatest possible extent availability of 60 cycle supply at Benning in excess of the spare capacity available on Washington Company's own system, Railroad Company hereby agrees to install and maintain in first class order at its own expense that portion of the Baltimore-Benning 110 kv., 60 cycle circuit located on Railroad Company's structures from a point at or near the Patapsco River, where Electric Companies' existing tower line crosses the Railroad, to the 60 cycle transformer station at Benning, D. C.; Supplying Companies providing the circuit extension and transformers connecting this 110 kv. circuit to the Westport and Benning station buses, as provided for in the Takoma Agreement.

The facilities referred to in this section shall be made available not later than the date for which Railroad Company

may request the second frequency changer set at Benning, D. C., as provided for in Article VIII; except however, that in respect to that portion of the Baltimore-Benning 110 kv., 60 cycle circuit located on Railroad Company's structures between Patapsco Crossing and Odenton, at which latter point Baltimore Company may connect this circuit to its own transmission system, Railroad Company if requested by Electric Companies shall provide such portion of this line in advance of the installation of the second Benning frequency changer unit, but not earlier than January 1st, 1936, and excepting further that Railroad Company if requested by Electric Companies shall provide the entire circuit between Patapsco Crossing and Benning at any time after January 1st, 1939. The request for these facilities before the installation of the second Benning frequency changer set shall be made in writing by Electric Companies not less than nine months in advance of the date when such facilities shall be required.

Except for the above mentioned connection to Baltimore Company's transmission system at Odenton, no connection of other facilities of Supplying Companies shall be made to the portion of the 110 kv. circuit located on the structures of, and owned by Railroad Company without the consent of Railroad Company.

SECTION 4. *Additional Services:* If during the terms of this agreement additional services or equipment covered by Railroad Contract other than those specified herein* or modifica-

* *Refers to terms and conditions of Supplemental Agreement of August 15, 1934.*

tions in such services or equipment are desired by Railroad Company from Washington Company, such additional services or modifications shall be arranged for from time to time by joint agreement between the parties hereto including Electric Companies. Additional services and modifications of equipment and services, as between Railroad Company and Electric Companies, referred to in the Railroad Contract which do not affect the terms and conditions of this supplemental agreement* as far as Washington Company is concerned, may be agreed upon from time to time between Railroad Company and Electric Companies without requiring Washington Company's consent.

ARTICLE IV.

Characteristics of Supply

All electrical energy supplied under this agreement shall be delivered in the form of single phase alternating current at a frequency of nominally 25 cycles per second, at a generating voltage of nominally 13,200 volts. The frequency shall not vary more than three per cent (3%) above or below normal.

The fields of the generators shall be designed and equipped with suitable voltage regulators so that the voltage may be automatically varied from 11,400 to 14,300 volts. Generators of the frequency changer sets at Benning and Loudon Park shall be capable of operating as synchronous condensers and as such shall have a capacity of not less than 60% of the kva. ratings specified for operation as generators.

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* *Refers to terms and conditions of Supplemental Agreement of August 15, 1934.*

ARTICLE V

Power Factor

The power and energy supplied and taken under this agreement shall be at a power factor as near to unity as practicable, consistent with the inherent characteristics of the electric system and apparatus employed and without special or additional appliances for power factor correction.

Each party shall adjust, maintain and operate its apparatus and circuits in such manner as will, to the greatest extent possible, maintain high power factor and avoid the interchange of wattless current, except when necessary to permit the greatest possible use of single phase generation produced by direct connected prime movers.

ARTICLE VI

Emergency Supply

During or following railroad wrecks, extraordinary load demands caused by storms, floods, blizzards, abnormally heavy railroad traffic, derangement of converting or transmitting facilities, failure of the Railroad Company's other source or sources of power supply, or any other emergency condition causing excessive draught on Electric Companies, said draught shall be considered an abnormal demand. The term "abnormally heavy railroad traffic" shall be considered to mean excessive or congested traffic beyond that usually carried by Railroad Company due to accidents, congestion, or failure of other connecting transportation line or lines or other sections of Railroad Company's system to furnish its

or their normal service, or any other emergency conditions causing excessive or congested traffic. Electric Companies, if they have sufficient generating, conversion and transmission capacity available at the time, shall supply such abnormal demand at the billing energy rates but without increasing the billing demand and charges for same under Article VII hereof, provided reasonable notice is given by Railroad Company to Electric Companies as far in advance as conditions will permit.

In case of breakdown of machinery and equipment of Electric Companies or other similar emergencies, Railroad Company agrees upon request to reduce its demand on Electric Companies during such emergency to the extent that it is able to do so without incurring expense thereby, by making use of the emergency facilities of its other sources of power supply.

It is understood and agreed that in thus rendering assistance to each other without charge for increased demand caused by such emergencies neither Railroad Company nor Electric Companies shall be required to render capacity service greater than the capacity of its available equipment or greater than it may be able to secure under other contractual arrangements nor shall either of them be required to subject its equipment or other services to undue hazard or disturbances as to the extent of which each party shall be the sole judge in respect to conditions on its own system. The party receiving assistance agrees to promptly reduce the emergency demand to the then normal demand upon notification from the

other party that such reduction is necessary in order to protect its equipment, preserve its other electrical services or meet the contractual obligations of its other sources of power supply.

ARTICLE VII

Rates for Power and Energy

Section 1. *Demand:* As soon as practicable after each calendar month Railroad Company's billing demand in kilowatts of electrical energy taken from or provided by Supplying Companies hereunder for such month in respect to the "contractual supply" specified in Article II, shall be ascertained in the manner hereinafter stated in this section.

From each of three days in the month, Sundays excepted, there shall be selected one even or clock hour which shall be the hour of greatest combined draught (in kilowatt hours) of the day from which it is taken; and said three days shall be such that the total draught of the three hours selected therefrom in the manner thus indicated shall be greater than the total draught of three hours similarly selected from any other three days in the month, Sundays excepted. One-third of the aggregate number of kilowatt hours drawn and consumed by Railroad during the three hours selected as aforesaid from each month shall be taken and considered as the number of kilowatts constituting the Railroad Company's billing demand for such month.

The term "greatest combined draught" (in kilowatt hours) as hereinbefore used is to be construed as representing a single quantity of energy, and the billing demand shall be

determined from the combined quantity of energ, taken hereunder at the various points of supply just as though the various quantities were measured as one quantity at one point.

For each month during the term of this contract or any extension thereof, the amount of electrical energy which Electric Companies shall stand ready to supply and which the Railroad Company shall be obligated to pay for, shall be not less than two-thirds of the greatest previous billing demand of the "contractual supply" exclusive of the power requirements of Railroad between Parkesburg and Thorndale, Pa.

For the billing demand Railroad Company shall pay at the rate of One Dollar and Fifteen and One-half Cents ($1.155) per kw. per month.

SECTION 2. *Energy:* The amount of billing energy shall be equal to the total energy metered as per Article XIII at the various points of supply and Railroad Company shall pay for the same at the rate of

Four (4.0) Mills per kwh. for First 5,500,000 kwh. per month.
Three and thirty-four hundredths (3.34) Mills per kwh. for excess above 5,500,000 kwh. per month.

SECTION 3. *Fuel Rate Adjustment:* The amount charged for steam generated energy supplied under this contract shall be subject each month to adjustment by increase or decrease according to the average cost of coal (in the bunkers) as reported monthly by the Consolidated Gas Electric Light and Power Company of Baltimore to the Public Service Commission of Maryland. This adjustment is based upon

changes in cost of fuel used for generating electricity by steam from a base price of $4.00 per net ton and shall be determined each month by the following formula:

$$\text{Adjustment in \$} = \frac{\text{Net Steam Gen. in kwh.}}{\text{Tot. Net Gen. in kwh.}} \times \text{R. R. Bill. Energy in kwh.} \times \text{Avge. Lbs. Coal per kwh.} \times \frac{\text{Variation in \$ per Net Ton}}{2000}$$

Net Steam Gen. in kwh.	=	Total kilowatt hours sent out at generator voltage from all steam generating plants of Electric Companies during the month.
Tot. Net Gen. in kwh.	=	Total kilowatt hours sent out at generator voltage from all the hydro and steam generating plants of Electric Companies during the month.
R. R. Bill. Energy in kwh.	=	Total energy in kilowatt hours billed Railroad Company during the month.
Avge. Lbs. Coal per kwh.	=	Average lbs. of coal used per kwh. (station sendout) in all the steam generating plants of the Consolidated Gas Electric Light and Power Company of Baltimore.
Variation in $ per Net Ton	=	Difference between base price of $4.00 per net ton in the bunkers and the actual cost of coal per net ton during the month as reported by the Consolidated Gas Electric Light and Power Company of Baltimore to the Public Service Commission of Maryland.

If at any time during the life of this contract fuels other than the type of fuel now burned are used by Electric Companies in their steam generating plants, the above fuel rate adjustment shall be modified to take care of changed conditions on an equitable basis.

SECTION 4. *Decrease of Billing Rates:* The energy rates specified in Sections 2 and 3 of this Article are to be regarded as maximum rates and it is the intent of this agreement, as provided for in this Section, that Railroad Company shall receive the benefit of lower cost of generation in the event that the average cost to Electric Companies of producing energy is lower than the rates specified in Sections 2 and 3 of this Article. Electric Companies will compute at the end of each calendar year the actual generating and operating costs of the items specified in Tables VII to X, inclusive, attached hereto and made a part of this contract, these items being those specified in the Classification of Accounts of the Public Service Commission of Pennsylvania as operating accounts for steam, hydro, substation and transmission expenses, the hydro costs herein referred to being those of the Safe Harbor and Holtwood plants. In place of the Classification of Accounts of the Public Service Commission of Pennsylvania, the corresponding accounts set up by the Federal Power Commission and/or the Public Service Commission of Maryland may be substituted in regard to those plants and equipment for which Electric Companies are setting up the accounts in accordance with the rules of the above mentioned regulatory bodies.

To this total annual operating cost there shall be added an amount representing an adjustment for excess annual charges on capital costs of the above mentioned hydroelectric plants, equal to the total output of Electric Companies' hydro plants in kwh., multiplied by 3.0 mills. The total figures thus

computed and divided by the total output in kwh. of all generating plants* shall represent the bus bar cost per kwh.

There shall be included in the above computation the amount and cost of purchased energy (other than intercompany supply of Electric Companies), and of supply secured from jointly owned or leased plants or through interchange with other sources of supply, including in such cost Electric Companies' apportionment of expense of operation and maintenance of tie lines and other facilities which are required in connection with such purchased energy or supply from sources other than specifically provided for in Tables VII to X, the intent of the inclusion of such energy and costs being to give Railroad Company the benefit of lower bus bar cost if such lower costs are actually secured by Electric Companies by reason of such purchased energy or supply from other sources.

To the above bus bar cost shall be added a percentage, representing the conversion losses on all energy supplied through frequency changer units at the various points of supply, equal to 12.5% multiplied by the ratio of the total annual output in kwh. of the 25 cycle end of such frequency changer units to the total energy in kwh. billed Railroad Company, to obtain the actual cost per kwh. of energy delivered to Railroad Company. When such actual cost in mills per kwh. so computed is found to be less than the average rate specified in Sections 2 and 3, then this lower value shall be the energy rate to be paid by Railroad Company for all energy supplied in that year.

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* Signed copy contains words "*and equipment*" at this point.

ARTICLE VIII

Annual Charges for Specified Equipment and Facilities

Section 1. At the written request of and upon reasonable notice by Railroad Company, Electric Companies shall install, operate and maintain single phase water wheel generators, converting equipment, cables, special 25 cycle bus for single phase supply to Railroad Company and switching equipment, step-up transformers and transmission lines under terms and conditions as herein specified. Railroad Company shall call on Electric Companies to provide additional single phase generating or converting capacity when the maximum integrated clock hour load of the "contractual supply" specified in Article II, exclusive of the power requirements of the Railroad between Parkesburg and Thorndale, Pa., and exclusive of any hour during which an abnormal demand occurs that would not be used in the determination of Electric Companies' billing demand under the provisions of Article VI, is equal to or greater than Electric Companies' total installed single phase capacity less the capacity of the largest of such units. Railroad Company however shall not be required to call for an increase in said single phase generating or converting capacity by reason of deficiency in flow at the hydroelectric generating plants of Electric Companies. Railroad Company shall endeavor to request the single phase water wheel generators and transmission lines not less than eighteen (18) months, and other equipment and facilities not less than fifteen (15) months in advance of the date when such equipment shall be required. If due to unforeseen circumstances, Railroad Company requests such facilities on

less than the above notice, Electric Companies will use their best endeavor to comply with Railroad Company's request, but in such event Electric Companies shall not be charged with any breach of contract for failure so to do within a period less than eighteen (18) months or fifteen (15) months as the case may be.

Railroad Company shall pay annual charges on such apparatus and equipment, including operation and maintenance thereof, as hereinafter specified and described in detail in Tables I to VI attached hereto and made a part of this contract.*

All such equipment shall be complete and adequate for the purpose intended regardless of whether all necessary details and parts are specifically mentioned in the tables. The equipment furnished also shall be adequate and suitable for the character of load and service of Railroad Company throughout the term of this contract, and should any part of such equipment at any time be found to be inadequate or unsuitable, as evidenced by frequent breakdowns or by interruptions to Railroad Company's service, caused by inadequacy or unsuitability of such equipment, Electric Companies shall replace the same without increasing the annual charges herein specified.

Electric Companies shall bill said annual charges pro rata each month commencing with the date specified in the

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** Tables I to VI being a part of the terms and conditions of the Original Contract of September 2, 1931, have been superseded by Tables I-A to VI-A under the terms of the Supplemental Agreement of August 15, 1934.*

written notice, provided that Electric Companies actually have such equipment ready for service, or commencing with such earlier date that equipment is ready and Railroad Company makes actual use of same.

The initial 25,000 kw. frequency changer and appurtenances to be located at Loudon Park as per Table I shall be located at Benning, D. C., and shall comprise the apparatus and equipment described in Table I-A; also one additional frequency changer set as per Table VI to be located at Loudon Park shall be located at Benning, D. C., and consist of the equipment described in Table VI-A. Tables I to VI are superseded by Tables I-A to VI-A attached hereto and made part of this supplemental agreement.*

Washington Company hereby agrees to lease to Railroad Company for the term of this agreement certain property owned by Washington Company adjacent to or near its Benning Power Station, of approximately one (1) acre to be used as a site for Railroad Company's transformer substation, also right-of-way across Washington Company's property from said substation site to the right-of-way of Railroad Company's Anacostia Branch for a transmission line consisting of poles or towers, three single-phase 132 kv. circuits and one 110 kv. three phase circuit, adaptable to 132 kv. single phase operation, with ground wires, etc., and Railroad Company shall have the right to occupy said substation site and transmission line right-of-way and right of access thereto

* *Tables I to VI being a part of the terms and conditions of the Original Contract of September 2, 1931, have been superseded by Tables I-A to VI-A under the terms of the Supplemental Agreement of August 15, 1934.*

at the nominal rental of One Dollar ($1.00) per year, provided, however, that location and layout shall be subject to the approval of Washington Company and shall comply with all laws and regulations pertaining thereto.

SECTION 2. The annual charges on the equipment which Supplying Companies provide shall be as follows:

Initial Equipment for Perryville-Washington Line:

(a) Equipment at Safe Harbor and at or near Benning, as per Table I-A, totaling 78,000 kw. capacity at an annual charge of.....$220,620.

(b) A single phase, 25 cycle step-up transformer substation of 80,000 kva. capacity with preparation of site for 160,000 kva. additional transformer capacity; together with a four circuit single phase 132 kv. steel tower line between Safe Harbor, Pa., and Perryville, Md., as per Table II-A, at an additional annual charge of.....$207,000.

Additional Equipment as Required:

(c) The first additional 25,000 kw. frequency changer set at Safe Harbor, as per Table III-A, at an additional annual charge of...$ 71,700. and each further additional 25,000 kw. frequency changer set at Safe Harbor, as per Table III-A at an additional annual charge of.....$100,800.

(d) An additional 28,000 kw. water wheel generator, as per Table IV-A, at an additional annual charge of.....$ 71,700.

(e) Each additional pair of 13 kv. switch positions at Safe Harbor (Conestoga Substation) with oil circuit breakers, etc., for connecting the low tension side of additional step-up transformers to the substation bus, as per Table V-A, at an additional annual charge of.....$ 4,500.

(f) Each additional 25,000 kw. frequency changer set, i.e., one additional at Benning and two at or near Loudon Park, as per Table VI-A, at an additional annual charge of.....$109,200.

SECTION 3. At the time of request by Railroad Company for the installation of equipment herein provided for, other apparatus and equipment may, if and when acceptable to Railroad Company be substituted, or variations in the quantities and arrangement of same may be made. Annual charges in all such cases are to be determined in the same manner as provided for in Article IX hereof.

SECTION 4. An adjustment shall be made in respect to the annual charges for the special equipment enumerated in this Article in the event that Railroad Company's written request for such equipment is not received by Electric Companies within sixty (60) days after the date of this contract. Such adjustment shall be made in accordance with the variation

in the price of electrolytic copper as quoted on the New York metal market and in the price of commercial grade steel billets as quoted on the Pittsburgh metal market. The base price of these commodities shall be taken as 8.952 cents per pound for electrolytic copper and $1.34 per hundred weight for steel billets, and adjustment shall be made for the average of the daily closing price quotations for the first full calendar month following written notice on the part of Railroad Company requesting additional special equipment. The percentages which copper and steel billets bear to the total cost are 15% and 55% respectively.

SECTION 5. In respect to the initial electrified operation of the Philadelphia, Baltimore and Washington Railroad, between Perryville, Md. and Washington, D. C., the following dates in lieu of the notice of eighteen months and fifteen months respectively, specified in Section 1 of this Article, are hereby agreed upon for Supplying Companies to have equipment ready for service and for Railroad Company to commence pro rata payments of annual charges:

January 1, 1935	$28,095.00	per month covering one hydro unit, one frequency changer set, 25 cycle, 13 kv. bus, connecting cables, step-up transformer substation, all at Safe Harbor and including the transmission line to Perryville.
June 1, 1935	$ 7,540.00	per month covering one 25,000 kw. frequency changer set at Benning.

SECTION 6. Supplying Companies further agree to supply without charge D. C. control current at or near the location of Supplying Companies' frequency changer stations for the

control of Railroad Company's switching equipment and to operate Railroad Company's outdoor substations at Benning, D. C., and Loudon Park, Maryland, (after such time as Railroad Company may request a frequency changer station at this location) and Safe Harbor, Pa., in accordance with the directions of the authorized representatives of Railroad Company, provided, however, that Railroad Company arranges with the supplying company for the installation and maintenance of such control circuits between said frequency changer station control room and Railroad Company's outdoor substations and provided further that Electric Companies do not assume any liability for damage to property and equipment or for injury to persons caused directly or indirectly in connection with the furnishing of these facilities and/or services under this Section, and that Railroad Company hereby agrees to indemnify Washington Company for damage to property and equipment or for injury to persons and employees caused directly or indirectly in connection with the furnishing by Washington Company of these facilitie and/or services under this Section.

SECTION 7. The annual charges to be paid by Railroad Company to Electric Companies under this Article shall be reduced by $6,000 which is the agreed upon amount of rental and Supplying Companies' share of the maintenance cost of the 110 kv. circuit described in Section 3 of Article III-A, said reduction shall commence, prorated, from the date the entire length of this circuit is made available between Patapsco Crossing and Benning, under the provisions of Section 3 of Article III-A and Section 2 of Article XII.

SECTION 8. At such time as Railroad Company shall call on Electric Companies to provide the first unit of additional single phase capacity at Safe Harbor under the provisions of Section 1 of this Article, Electric Companies shall have the option of providing either a 25,000 kw. frequency changer or a 28,000 kw. water wheel generator as specified in Items (c) and (d) respectively of Section 2 of this Article and described in detail in Tables III-A and IV-A.

SECTION 9. Railroad Company further agrees to supply without charge 100 cycle power at not more than four of its signal bridges along the east side of the Susquehanna River between Safe Harbor and Shocks Mills Bridge for the operation of Electric Companies' telemeter transmitters for remote water level indications, provided the amount of power supplied at each such point shall not exceed 250 watts and that the use thereof shall not adversely affect the signal facilities of Railroad Company.

ARTICLE IX

OTHER FACILITIES AND JOINT USE

SECTION 1. If from time to time it appears practicable and desirable to both parties to make use of each other's property and/or facilities for additional single phase hydro generation beyond the provisions of Article VIII, for power transmission, communication, or other similar purposes, or to make use of each other's engineering, construction and/or maintenance organization or special maintenance and construction equipment, it is agreed between the parties hereto that one party

will provide such facilities, do work or perform services for the other as agreed upon in detail at the time, at actual cost plus such percent to cover overhead charges as is customarily charged by the party doing the work.

SECTION 2. For such electrical equipment, transmission structures and circuits as are especially provided for Railroad Company's use by Electric Companies, the annual charges thereon shall be at the rate of 12.75% of the cost thereof in Maryland and 12.0% in Pennsylvania plus the cost of operation and maintenance; for hydraulic equipment including substructure and superstructure at the rate of 10.5% including the cost of operation and maintenance; and for real estate, right-of-way, cost of excavation and grading work of substation sites at the rate of 8.5%. The above rates are predicated on the use over an average period of 20 years and shall be adjusted by mutual agreement to take care of less than 20 years occupancy.

SECTION 3. Railroad Company will provide, operate and maintain as a consideration of this agreement,* communication, telemetering and control circuits in conjunction with its own telephone cable and plant facilities, including connections thereto, required directly or indirectly in the joint interest and/or for the joint use of the parties hereto, as specified and described in Table XI-A attached hereto and made a part of this contract. Electric Companies and Railroad Company shall each have the right to ask for modifications or rearrangements of the facilities so described in a manner as may better

* *Refers to Supplemental Agreement of August 15, 1934.*

meet their future requirements, provided that such modifications or rearrangements requested by Electric Companies shall not involve either additional wire circuits or additional expense without compensation to Railroad Company, and provided also that such modifications or rearrangements requested by Railroad Company can be effected under the then prevailing state of the art in a manner that will not curtail or impair Electric Companies' essential communication, telemetering and control services in the event that it becomes necessary for Railroad Company to withdraw for its own use some of the circuits described in Table XI-A.

ARTICLE X

Coordinated Operation of Power Supply.

Section 1. During the hours of peak loads on other sections of the railroad, and provided that such peak loads do not regularly occur during the hours of peak loads of the "contractual supply" specified in Article II, Railroad Company may call for and Electric Companies shall then furnish without demand charge additional loads in excess of the "contractual supply" up to the capacity of one unit rated at not more than 28,000 kw. but Electric Companies shall not be obligated to furnish energy in excess of 56,000 kwh. on days of high flow and 20,000 kwh. on days of low flow. For the purpose of this Article a day of high flow is defined as a 24 hour period from midnight to midnight during which water is discharged over or through the spillway openings at the Safe Harbor plant for more than two consecutive hours, all other days being days of low flow.

This additional supply furnished by Electric Companies in excess of the "contractual supply" is subject to Railroad Company complying with the following conditions:

(a) That Railroad Company secures the consent of third parties affected by the provisions of this Article (which parties are normally supplying those other sections of the railroad) or without such consent upon advice of Railroad Company that it has the right under its contract with such third parties to put into effect the method of operation herein described.

(b) That the capacity of the 25 cycle hydro and motor-generator units installed in accordance with Article VIII is sufficient.

(c) That there is no major breakdown to Electric Companies' generating equipment.

(d) That Railroad Company has installed the equipment necessary for putting into effect the method of operation herein described without causing undue disturbance to other services of Electric Companies.

SECTION 2. Said capacity and energy is to be furnished by Electric Companies either from a segregated unit at their hydroelectric generating plant or from the 25 cycle unsegregated units supplying normally the "contractual" load, or by a combination of these two methods of operation, as Railroad Company may elect; if furnished from unsegregated units, the load may be transferred from the other sections of the Railroad Company by means of suitable switching operations

carried out by Railroad Company on its own system, or may be furnished through parallel operation where such method of operation is provided for by separate agreement; if furnished from a segregated unit, Electric Companies may limit the duration of such supply to a continuous period of not over two hours per day and may furnish approximately full load of such segregated unit on days of high flow and not less than 7,500 kw. on days of low flow. All operations are to be carried out by Electric Companies as near as practicable in accordance with the load dispatching directions of Railroad Company, subject, however, to the limitations as to duration and amount of supply stipulated in this Article. Demand and energy furnished to Railroad Company in connection with said additional load shall either be metered separately by equipment installed by Railroad Company at its own expense or shall be computed by a method jointly agreed upon between Electric Companies and Railroad Company prior to the furnishing of such additional loads. For all energy delivered under the provisions of this Article in excess of the "contractual supply," Railroad Company shall pay a surcharge of one and sixty-six hundredths (1.66) mills per kwh.

ARTICLE XI.

Payments

Section 1. On or before the Fifth day of each month a bill for all charges under Articles VII to X inclusive, suitably prorated on a monthly basis, shall be rendered to Railroad Company by Consolidated Gas Electric Light and Power

Company of Baltimore for Supplying Companies jointly and Railroad Company shall pay same on or before the Twentieth day of each month without deduction for any amount in dispute. On those charges or credits for which final data are not available at the time when bill is rendered, a temporary method of billing shall be agreed upon subject to final correction the following month or months or at the end of each calendar year.

In rendering bills and receiving payment thereof, the Consolidated Gas Electric Light and Power Company of Baltimore is acting for itself and for the other companies, jointly referred to as Supplying Companies, and payment by Railroad Company to the Consolidated Gas Electric Light and Power Company of Baltimore in accordance with terms hereof shall be a full and complete discharge of its liability for payments to Supplying Companies hereunder.

SECTION 2. If at any time during the term of this contract Electric Companies shall supply electricity to any consumer at a lower rate than that hereinbefore given to Railroad Company hereunder and such lower rate shall not be justified by different conditions of service making the cost of production for and distribution to such other consumer relatively less than to Railroad Company, then and in that event and so long as such lower rate shall be given to such other consumer while this contract is in force, Railroad Company shall be entitled to a reduction in its said rate equal to so much of the amount of the difference between such lower rate and the Railroad Company's said rate as shall not be justified.

ARTICLE XII

Interruptions to Service, Cancellation of Contract, Non-Payment of Bills, Other Uses of Power

Section 1. It is expressly agreed that Supplying Companies shall not be held responsible or liable for any loss or damage on account of the non-delivery of all or any portion of the electrical energy herein contracted for, nor for any deduction or delay in such delivery caused by strike not due to the collusion of Supplying Companies, or fire, civil or military authority, insurrection or riot, the action of the elements or by any other cause beyond its control; and, on the other hand, it is agreed that if Supplying Companies shall at any time fail for any such cause to make delivery of any energy called for by Railroad Company to meet its requirements, such failure shall entitle Railroad Company to proportionate and equitable deduction from payment for demand and annual charges during the month in which such non-delivery occurred. Any such deduction or abatement shall be made as soon as practicable after the end of the month in which the failure of delivery occurred.

Section 2. It is recognized that Railroad Company must receive regular and uninterrupted service from Supplying Companies in order to make this contract of value to it, and if for any cause, not contributed to by Railroad Company or by equipment outside of Supplying Companies' control, interruptions to service to be furnished under this contract shall be so frequent or of such character or duration as to interfere materially with Railroad Company's operation of its

lines, then Railroad Company shall in writing notify Electric Companies thereof, specifying the reason for complaint; and Electric Companies shall forthwith proceed to remedy the trouble. If the trouble is not so remedied within thirty (30) days or such reasonable period as shall be mutually agreed upon, Railroad Company may by notice in writing to Electric Companies cancel this contract. Such cancellation shall take effect as soon thereafter as Railroad Company may be able to obtain elsewhere the necessary supply of energy, and in the interim Supplying Companies shall, under all terms and conditions of this contract, continue to supply for a reasonable time the energy necessary for Railroad Company's requirements, and Railroad Company shall state definitely in said cancellation the date when the supply of energy under this contract shall cease.

It is recognized that under the provisions of this agreement,* Electric Companies assume the responsibility of uninterrupted service to Railroad Company, including that portion of the service supplied by Washington Company. Washington Company hereby expressly agrees to use due diligence and cooperate with Electric Companies for the purpose of maintaining satisfactory and uninterrupted service to Railroad Company. In the event that disturbances to service causing complaint by Railroad Company are due to conditions arising on Washington Company's system, the correction of such conditions shall be undertaken by Washington Company at Electric Companies' request. If the correction of such conditions, prior to the installation of the 60 cycle tie line facilities

* *Refers to Supplemental Agreement of August 15, 1934.*

between Westport and Benning, is beyond Electric Companies' control, but can be effected by providing these facilities, either Electric Companies or Railroad Company shall have the right to call upon the other parties to provide their respective portion of the 60 cycle tie-in facilities referred to in Section 3 of Article III-A irrespective of the installation dates provided for in that section, and the right of Railroad Company to cancel this contract on account of interruptions on that portion of the service supplied by Washington Company shall be suspended for the period required to provide these facilities. Such right of cancellation, however, shall be reinstated within a reasonable time after these facilities are in operation, in the event that Electric Companies, after being notified in writing by Railroad Company of service complaints as provided in the foregoing paragraph, have failed to remedy the trouble.

SECTION 3. Should Railroad Company fail to make payment due under Article XI within thirty (30) days after receipt of a bill therefor, Electric Companies shall have the right to discontinue for that cause the supply of electrical energy hereby agreed to be furnished by them, after having given Railroad Company ten (10) days' notice in writing of its intention so to do and the cause therefor. In case the supply of electrical energy shall be discontinued on account of the non-payment of any bill rendered by Electric Companies, Railroad Company shall, nevertheless, be obliged to pay and shall pay to Electric Companies, during the period of such discontinuance, the demand and annual charges in force at the time of such discontinuance. During such period of discontinuance and before the life of the contract shall have

been terminated, Railroad Company may procure resumption of the electrical service hereunder upon and by the payment to Electric Companies of all moneys at the time due to them hereunder, with interest on such moneys at the rate of six per cent (6%) per annum from the time they become due until the time of payment, but in any such period of discontinuance Electric Companies may, at their option, give written notice to Railroad of their intention to terminate this contract, and in case such notice be given, this contract shall terminate at the expiration of thirty (30) days after the giving of such notice, unless before such expiration Railroad Company shall have made the payments entitling it to the resumption of service as above provided.

SECTION 4. Upon the expiration of the full contract period as stipulated in Article I, or in the event that Railroad Company shall terminate this contract under Section 2 of this Article, Railroad Company shall have the right to purchase from Electric Companies the step-up transformer station at Safe Harbor and the transmission line connecting said step-up station to Railroad Company's 132.0 kv. switching station at Perryville.

In the event that Electric Companies shall terminate this contract under Section 3 of this Article, Railroad Company shall be obligated to purchase from Supplying Companies all the property and equipment that may have been provided by Supplying Companies up to that time for Railroad Company's use, as per Article VIII and IX hereof; except for hydro generators and single phase bus at Safe Harbor for

which Railroad Company shall pay to Electric Companies a sum of money to be agreed upon as representing a fair division, as between the parties, of the original or replacement cost of such equipment.

Upon the expiration of the full contract period as stipulated in Article I, Electric Companies shall promptly remove, if requested by Railroad Company, any portion of the transmission line from Safe Harbor to Perryville which may be located on Railroad Company's right-of-way or property, referred to in Table II of this agreement, and, likewise, if requested by Supplying Companies, Railroad Company shall promptly remove any portion of its equipment which may be located on Supplying Companies' property.

The purchase price to be paid by Railroad Company to Supplying Companies for property and equipment as may be involved either at the expiration of this contract or at the earlier termination thereof, shall be determined by appraisal and agreement, giving due consideration to the original and/or replacement cost, obsolescence, depreciation, and all other factors affecting the then value of the said property and equipment, all of which purchases are conditioned upon the approval of any regulatory authorities within their respective powers and jurisdiction.

SECTION 5. Supplying Companies agree that Railroad Company shall have the right, during the term of this contract, to sell or transmit portions of the electrical energy supplied to it by Supplying Companies under this contract, to any other railroad within the zone specified in Article II, which

railroad it now controls or hereafter may control or which is affiliated with it, and which railroad now constitutes or may hereafter constitute a portion or portions of the system of Railroad Company; also, that Railroad Company shall have the right under this contract to supply electrical energy for traction and other railroad operation and maintenance purposes consumed by itself and/or other railroads or companies in yards, terminals and on lines used jointly with connecting railroads, within or adjacent to the electrified zone and to resell such energy to said other users, but Railroad Company shall not have the right to sell or transmit any portion of such electrical energy to any parties other than the above, either for electric traction requirements or for any other purpose.

ARTICLE XIII

METERING

SECTION 1. All electrical energy furnished under this contract for Railroad Company shall be measured, both as to maximum demand and as to kilowatt hours, by meters to be installed and maintained by Electric Companies at their own expense, at the points of supply specified in Article III or at such other more convenient locations as may be agreed upon between the parties, including a suitable adjustment to be applied to the measurement to correct for differences caused by such change in location.

SECTION 2. Railroad Company shall install and maintain metering equipment in the 132.0 kv. transmission lines at Perryville and/or at such other points as may be found

necessary, for the purpose of carrying out the provisions of Article X.

SECTION 3. The instruments to be installed by Electric Companies and Railroad Company shall be of a standard type and manufacture, and shall accurately measure the energy in electrical units and in periods of time as required by the terms of this agreement. Railroad Company shall have the right to install at its own expense, check meters in series with Electric Companies' meters, using separate current and potential transformers whenever convenient. Both parties shall have the right to be represented at the readings of, and in the checking, adjusting, or changing of billing and checking meters.

All meters shall be kept under seal. Railroad Company agrees to provide, without charge, at its substations, suitable and necessary space and supports acceptable to Electric Companies for the erection, maintenance and testing of Electric Companies' meters and the necessary auxiliary apparatus for the said meters.

SECTION 4. All meters shall be tested and calibrated by comparison with accurate standards at regular intervals as may be mutually agreed upon. If as a result of any test, a meter shall be found incorrect, or inaccurate, it shall be restored to an accurate condition or a new meter shall be substituted. In case either Electric Companies or Railroad Company shall at any time believe that any meter registers incorrectly, the party holding such belief shall have the right to require that an extra test outside the regular schedule be made of such meter. The party desiring such test shall make

request therefor in writing upon the other party, and thereupon such meter shall be tested and calibrated, and if it shall be found inaccurate it shall be restored to an accurate condition or a new meter shall be substituted. If as a result of any test, any meter shall be found to register in excess of two per cent (2%) either above or below normal, then the readings of the check meter if available and if found correct within two per cent (2%) shall be substituted. If no check meter is available then the readings of the normal billing meter previously taken shall be corrected according to the percentage of inaccuracy so found, but no such correction, either in respect to maximum demand or kilowatt hours drawn and consumed, shall extend back beyond thirty (30) days previous to the day on which such inaccuracy shall be discovered by such test, and if during such previous thirty (30) days one or more prior tests shall have been made under provisions hereof, then no such correction shall extend back beyond the date of the last of such prior tests.

ARTICLE XIV

Arbitration

It is the intent of this agreement that disputes which may arise regarding its provisions shall be amicably settled between the parties hereto but in case any dispute cannot be thus settled within a reasonable time it shall be referred to a Board of Arbitration consisting of three competent disinterested persons experienced in the particular matter which is the subject of dispute, upon service of written notice by either party to the other.

The first member of said Board shall be chosen by the party complaining, the second member by the other party, and the third member by the first and second members. Should the second or third member remain unselected at the expiration of thirty (30) days after notice of arbitration is given, then upon the request of the complaining party, and upon notice thereof having been given to the other party, the second or third member, or both, of the Arbitration Board shall be selected by the then Chief Judge of the Court of Appeals of Maryland, or, in the event of the said Judge's disinclination or failure to act within sixty days after original notice of arbitration, said selection shall be made by the then Chairman of the Public Service Commission of Maryland.

The Board of Arbitration shall proceed at its earliest convenience to hear and determine the questions at issue after having given each party hereto not less than five days' notice of the time and place of the first meeting.

Each party shall be permitted to be represented by counsel before the Board of Arbitration, and to present in full, by competent witnesses, all facts, figures and statements which might aid the Board of Arbitration to give a final and fair judgment as to the questions in dispute.

The determination of the Board of Arbitration, or a majority thereof, shall be made within sixty days after the submission to said Board, unless prevented by circumstances unforeseen, and the decision of the Board of Arbitration or a majority thereof, shall be final and conclusive upon the parties hereto and said parties shall abide by such decision.

All expenses in connection with such arbitration, including a reasonable compensation for the arbitrators, shall be divided equally between the parties, with the exception of expenses of counsel, witnesses and employees of the parties, which expenses shall be borne by the parties incurring them.

All notices herein provided for may be given by serving the same in writing, or by sending the same by registered mail addressed to the party interested, at its principal place of business.

ARTICLE XV

Approval of Regulatory Authorities

The provisions of this contract and supplemental agreement are subject to the approval of regulatory authorities within their respective powers and jurisdiction under the Constitution and Laws of Pennsylvania, Maryland, the District of Columbia, and the United States, and all parties hereto shall cooperate in obtaining such approval.

ARTICLE XVI

Assignment

This contract shall enure to and be binding upon the successors and assigns of the respective parties hereto, but no such assignment shall be made by either party hereto without the written consent of the other.

TABLE I-A

Initial Converting Equipment at Benning

Adjacent to or within the Benning Generating Station in the northeast section of the District of Columbia, Washington Company will provide, operate and maintain a frequency changer station, consisting of one 60/25 cycle frequency changer of 25,000 kw., 80% p.f., single phase rating on 25 cycle side, with cable connection between the 60 cycle side of this machine and the main 60 cycle Benning Station Bus, and including the cable leads, oil circuit breaker, and disconnecting switch on the 25 cycle side of the frequency changer, said switches being located in and made a part of Railroad Company's 13 kv. bus.

Railroad Company's transformer substation, 25 cycle single phase, 13 kv. bus, and such direct 132 kv. and 110 kv. circuit connections as may be required from said substation to the Railroad Company's own right-of-way, will be located on property owned by Washington Company, and Railroad Company may occupy same at the nominal rental of One Dollar ($1.00) per year. The annual charge on said equipment shall be..... $90,480.

Initial Generating and Converting Equipment at Safe Harbor

Electric Companies will provide, operate and maintain in and adjacent to the Safe Harbor Hydro-electric Plant at Safe Harbor, Pa., one 25 cycle water wheel generator, 28,000 kw., 80% p.f., single phase rating; one 60/25 cycle frequency

changer, 25,000 kw., 80% p.f., single phase rating on 25 cycle side, with cable connection between the 60 cycle side of this machine and the main station 60 cycle bus; single phase cables together with oil circuit breakers, disconnecting switches, control and other appurtenant equipment for connecting both 25 cycle machines to a 13 kv. outdoor, 25 cycle single phase bus located in a substation near the mouth of Conestoga Creek, at an annual charge of..... $130,140.

Total annual charges to be paid by Railroad Company as stipulated in Article VIII, Section 2, Item (a)... $220,620.

TABLE II-A

Initial Substation at Safe Harbor

Electric Companies will provide, operate and maintain at Safe Harbor a 13 kv. outdoor, 25 cycle single phase double bus located in a substation near the mouth of Conestoga Creek; four single phase step-up transformers each rated 20,000 kva., 13.2/132 kv., 25 cycle, together with 13 kv. oil circuit breakers, disconnecting switches and other appurtenant equipment for connecting these transformers on the low tension side to the 13 kv. outdoor bus and the necessary high tension air break switches, control and protective equipment for connecting these transformers on the high tension side to four 132 kv. transmission lines; including also the necessary auxiliary substation equipment.

The substation site shall be graded and improved for an ultimate transformer capacity of 240,000 kva. including transfer and handling tracks, on which site Electric Company shall permit Railroad Company to install additional transformers and substation equipment. When so occupied Railroad Company shall pay a nominal rental of One Dollar ($1.00) per year. Additional transformer capacity, foundations, structures and equipment, to be provided, operated and maintained by Railroad Company. This initial substation shall be provided at an annual charge of..... $84,900.

Initial Transmission Facilities

Electric Companies will also provide, operate and maintain a four circuit single phase 132 kv. steel tower transmission

line connecting said transformer substation to a 132 kv. switching station of Railroad Company at Perryville, Md., adapted to lateral connections with Railroad Company's step-down substations adjacent to the C. & P. D. R. R. tracks at or near Conowingo, Md., and Holtwood, Pa., respectively, at which latter point Electric Companies shall permit Railroad Company to occupy land owned by Electric Companies for a transformer station at a nominal rental charge of One Dollar ($1.00) per year, Railroad Company furnishing without charge such locations for towers and supporting structures on its own right-of-way and on adjacent real estate owned by Railroad Company, where Electric Companies may find said locations necessary without interfering with Railroad Company's other necessary uses of said right-of-way or property, all at an annual charge of..... $122,100.

Total annual charges to be paid by Railroad Company as stipulated in Article VIII, Section 2, Item (b)..... $207,000.

TABLE III-A

Additional Conversion Equipment at Safe Harbor

Electric Companies will also provide, operate and maintain at Safe Harbor a total of three additional 60/25 cycle, frequency changers, 25,000 kw., 80% p.f., single phase rating on 25 cycle side with cable connection between the 60 cycle side of these machines and the main station 60 cycle bus, together with single phase cables, oil circuit breakers, disconnecting switches, control and other appurtenant equipment for connecting these frequency changers to the 13 kv. outdoor 25 cycle single phase bus located in the transformer substation, including such extensions to the 25 cycle double bus as may be required, at additional annual charges as follows:

For the first of such three frequency changers as stipulated in Article VIII, Section 2, Item (c) of.....$71,700.

For the second and third of such frequency changers as stipulated in Article VIII, Section 2, Item (c) of....$100,800.

TABLE IV-A

Additional Water Wheel Generator at Safe Harbor

Electric Companies will also provide, operate and maintain at Safe Harbor one additional 25 cycle water wheel generator, 28,000 kw., 80% p.f., single phase rating to provide direct 25 cycle, single phase generation, together with single phase cables, oil circuit breakers, disconnecting switches, control and other appurtenant equipment for connecting this machine to the 13 kv. outdoor 25 cycle single phase bus located in the transformer substation, including such extensions to the 25 cycle double bus as may be required, at an additional annual charge as stipulated in Article VIII, Section 2, Item (d) of.....$71,700.

The above annual charge is based only on the difference in cost between a 25 cycle and a 60 cycle generator and appurtenant equipment, adjusted to equalize the annual charges for this additional water wheel generator and the first additional 25,000 kw. frequency changer described in Table III-A, as referred to in Section 8 of Article VIII.

TABLE V-A

Additional 13 Kv. Transformer Switching Equipment at Safe Harbor

Electric Companies will provide, operate and maintain at Safe Harbor, additional switch positions in pairs, on the 13 kv. outdoor 25 cycle double bus, including such bus extensions as may be required together with oil circuit breakers, disconnecting switches and control for same, for connection to the low tension side of additional step-up transformers to be installed by Railroad Company in this substation up to an ultimate installed transformer capacity at this substation, including the initial installation, of 240,000 kva., at an additional annual charge for each pair of such switch positions as stipulated in Article VIII, Section 2, Item (e) of.....$4,500.

TABLE VI-A

Additional Conversion Equipment at Benning and Loudon Park

Supplying Companies will also provide, operate and maintain at or near Benning one additional frequency changer and at or near Loudon Park a total of two frequency changers, all to be 60/25 cycle, single phase and of 25,000 kw., 80% p.f., single phase rating each on 25 cycle side, fed by cables connecting the frequency changer stations to the Benning Generating Station bus and to the Westport Switching Station bus, respectively, and including necessary cable with one oil circuit breaker and disconnecting switch on the 25 cycle side of each frequency changer unit, said switches being located in, and made a part of, Railroad Company's 13 kv. bus, at an additional annual charge for each frequency changer as stipulated in Article VIII, Section 2, Item (f) of.....$109,200.

TABLE VII

Operating Accounts for Steam Stations Now Owned or Hereafter Acquired or Built by Electric Companies

Acct. No.	
350	Superintendence.
351	Boiler Labor.
352	Engine Labor.
353	Electric Labor.
354	Other Labor.
355	Fuel.
356	Sale of Ashes.
358	Water.
359	Lubricants.
360	Boiler Plant Supplies.
361	Boiler Plant Expenses.
362	Other Power Plant Supplies.
363	Other Power Plant Expenses.
364	Superintendents and other Employees Expenses.
365	Maintenance of Power Plant Structures.
366	Maintenance of Railroad Sidings and Trestles.
367	Maintenance of Boiler Plant Equipment.
368	Maintenance of Steam Engines and Turbines.
369	Maintenance of Turbo-generators.
370	Maintenance of Other Electric Generators.
371	Maintenance of Other Electric Equipment.
372	Maintenance of Coal Storage and Weighing Equipment.
373	Maintenance of Other Power Plant Equipment.

TABLE VIII

Operating Accounts for Holtwood and Safe Harbor Hydro Stations

Acct. No.	
374	Superintendence.
375	Hydro Labor.
376	Electric Labor.
377	Other Labor.
379	Lubricants.
380	Supplies and Expenses.
381	Other Power Plant Expenses.
382	Superintendents and Employees Expenses.
383	Maintenance of Dams.
384	Maintenance of Structures.
385	Maintenance of Railroads, etc.
386	Maintenance of Turbines.
387	Maintenance of Generators.
388	Maintenance of Other Electric Equipment.
389	Maintenance of Other Power Plant Equipment.
*	Miscellaneous Operation and Maintenance of other than Plant (Village, Radio, Truck, Tractor, Motor Boat).

* Account Number to be determined.

TABLE IX

Operating Accounts for 70 Kv. and 220 Kv. Switching Station at Safe Harbor, 70/13.2 Kv. and 220/33/13.2 Kv. Stepdown Stations at Baltimore

Acct. No.	
415	Substation Superintendence.
418	Substation Labor.
423	Substation Supplies & Expenses.
427	Maintenance of Substation Structures.
434	Maintenance of Substation Equipment.

55

TABLE X

Operating Accounts for the 220 Kv. and 70 Kv. Lines Between Safe Harbor, Holtwood and Baltimore, and the 33 Kv. Tie Cables in Baltimore

Acct. No.	
415	Transmission Systems Superintendence.
416	Overhead Transmission System Labor.
417	Underground Transmission System Labor.
419	Telephone System Labor.
420	Other Transmission System Labor.
421	Supplies and Expenses of Overhead Transmission System.
422	Supplies and Expenses of Underground Transmission System.
424	Telephone System Supplies and Expenses.
425	Transmission System Rent—Underground.
426	Other Transmission System Supplies and Expenses.
428	Maintenance of Tower Lines.
429	Maintenance of Overhead Conductors.
430	Maintenance of Overhead Telephone System.
431	Maintenance of Underground Conduits.
432	Maintenance of Underground Conductors.
433	Maintenance of Underground Telephone System.
*	Energy losses at 3.0 mills/kwh. between 13.2 kv. Bus of Hydro Stations and Low Tension Bus of Stepdown Stations.

* Account Number not authorized—to be computed from actual operating records.

TABLE XI-A

A. Communication Facilities

Railroad Company will provide, operate and maintain the following communication circuits or channels, loaded as may be necessary, in conjunction with its own telephone cable and plant facilities, together with such wire, telephone and turret connections, protective and other telephone plant equipment as may be required to provide communication between the various operating and dispatching offices involved.

(1) One circuit connecting to each of the following points: Safe Harbor operator, Electric Companies' Baltimore load dispatcher, Washington Company's load dispatcher and Railroad Company's Baltimore power director.

(2) One additional circuit connecting to each of the following points: Railroad Company's Philadelphia load dispatcher, Safe Harbor operator, Electric Companies' Baltimore load dispatcher, Washington Company's load dispatcher and Railroad Company's Baltimore power director.

(3) One circuit connecting to each of the following points: Railroad Company's Philadelphia load dispatcher, Philadelphia Electric Company's load dispatcher, Electric Companies' Baltimore load dispatcher and Railroad Company's Baltimore power director.

(4) One circuit connecting the Safe Harbor and Holtwood hydro plant operators.

(5) One circuit connecting the Safe Harbor operator and Railroad Company's Perryville Tower, with intermediate patrol box connections for use of Electric Companies' transmission line patrolmen and with additional connections to the Conowingo and Holtwood plant operators.

(6) One circuit connecting the Safe Harbor operator and Railroad Company's Harrisburg power director.

(7) One circuit connecting the Safe Harbor operator with patrol box telephones on the Railroad right-of-way between Safe Harbor and Shocks Mills Bridge, for use of Electric Companies' river observers.

B. Telemetering Facilities

Railroad Company will provide, operate and maintain the following telemetering circuits or channels in conjunction with its own telephone cable and plant facilities, together with such wire and protective facilities as may be required to provide suitable telemetering facilities between the various operating and dispatching offices involved.

(1) [*Deleted.*]

(2) [*Deleted.*]

(3) One circuit between the Benning control room, Electric Companies' Baltimore Load Dispatching office and the Safe Harbor control room.

(4) Three additional circuits between the Benning control room and Electric Companies' Baltimore Load Dispatching office.

(5) Three additional circuits between the Safe Harbor control room and Electric Companies' Baltimore Load Dispatching office.

(6) One circuit between the Safe Harbor control room and the Holtwood Plant control room.

(7) Five additional circuits between the Holtwood Plant control room and Electric Companies' Baltimore Load Dispatching office.

(8) One circuit between the Safe Harbor control room and terminal boxes on the C. & P. D. R. R. right-of-way at or near Section Rapids, Creswell and Columbia.

C. Supervisory and Control Facilities

Railroad Company will provide, operate and maintain the following control circuits in conjunction with its own telephone cable and plant facilities, together with such wire and protective facilities as may be required to provide suitable pilot wire relaying circuits between the various points involved.

(1) One pilot wire relay circuit between the Benning control room and Railroad Company's Perryville Substation.

(2) [*Deleted.*]

(3) Two pilot wire relay circuits between the Safe Harbor and Holtwood Plant control rooms.

September 9, 1937

MEMORANDUM TO MR. H.A.WAGNER
MR. J.A.WALLS

RE: ALLOCATION OF P.R.R. LOAD BETWEEN MARYLAND AND PENNSYLVANIA:

On March 3, 1937, we submitted to you a memorandum entitled "Arrangements Among the Aldred Companies with Respect to Pennsylvania Railroad Electrification Extension" in which we recommended that power and energy delivered to the Pennsylvania Railroad in Pennsylvania be considered as sold to the Railroad by Holtwood Company, and that power and energy delivered to the Railroad in Maryland and the District of Columbia be considered as sold by Baltimore Company. We also recommended that the total revenue from the Railroad Company (including charges for special facilities) be divided between Baltimore Company and Holtwood Company in proportion to the Kwh. delivered to the Railroad in Maryland (including the District of Columbia) and Pennsylvania, respectively.

After the electrification extension in Pennsylvania is in service, under normal operation as now proposed two 132 Kv. circuits from Safe Harbor to Perryville will be connected to the Railroad Company's 132 Kv. circuits running south from Perryville and will also be connected to the Fishing Creek Substation of the Railroad in Pennsylvania and to the Railroad Company's step-down transformers supplying the trolleys at Safe Harbor, without any other high tension connection to circuits supplying the railroad load in Pennsylvania. The energy supplied to Maryland can then be obtained by reading the send-out meters at Safe Harbor on the two Perryville circuits just mentioned and substracting from these readings the amount of energy tapped off at Fishing Creek and Safe Harbor for supply to the trolleys in Pennsylvania. This can be done at the end of the month without much trouble by reading the meters at Fishing Creek and Conestoga Substations. However, to obtain the data for hourly and daily allocations between states would require the installation of printometers and the sending

of men daily to the unattended and isolated Fishing Creek Substation and to the step-down transformer portion of Conestoga Substation. In other words, the records required for such allocation would be inaccessible except at considerable cost and inconvenience to the Railroad's operating organization, who would themselves have no need for, nor interest in, such records. Furthermore, if the 132 Kv. Railroad circuits south of Perryville should be connected to the 132 Kv. circuits north of Perryville, or with the circuits to Harrisburg or Parkesburg, the allocation of the energy between the states would have to be estimated, unless a large expenditure is made for high tension metering. Any inaccuracy in this estimate would not affect the bill to the Railroad Company and would affect only the gross revenues and not the net revenues (except slight changes in taxes) of the Baltimore and Holtwood Companies.

This metering question was brought to our attention early in the summer and was discussed with the engineers of both companies. It was the unanimous opinion that the expense and complication of arranging for hourly, daily and weekly allocations were not justified; that for the purpose of statistical records of hourly, daily and weekly loads the entire supply to P.R.R. should be treated as a separate unit, not included in the load of any of the three Aldred Companies, and that the allocation of railroad load as between Maryland and Pennsylvania be made only every month for the purpose of dividing the P.R.R. payment between Baltimore Company and Holtwood Company.

If any change is to be made in this metering plan, or in the plan for division of railroad revenue recommended on March 3rd as referred to in the first paragraph above, it is important that those concerned be advised at an early date, because any provisions for additional metering equipment and meter reading procedure, if necessary, must be made at once.

OPERATING COMMITTEE:

(Signed) F. E. Ricketts
F. E. RICKETTS

FER MS
RLT

(Signed) R. L. Thomas
R. L. THOMAS

C
O
P
Y

CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY
OF BALTIMORE

Baltimore, Md.

Office of the President

September 9, 1937.

Mr. J. A. Walls, President,
Pennsylvania Water & Power Company,
Lexington Building, Baltimore, Md.

Dear Mr. Walls:

Referring to yours of September 9, I had read the Operating Committee's report of September 9 on the "Allocation of the P.R.R. Load Between Maryland and Pennsylvania." The conclusions arrived at therein and the recommendations of the Operating Committee in their memorandum of March 3, 1937, are acceptable to our Company. I will send my approval to the Operating Committee with yours. This will involve some changes in our Income Account and Load Reports, but I think we can handle this matter without difficulty.

My trip to Europe was a most pleasant one in every respect, but I am very glad to get home.

Very truly yours,

(Signed) Herbert A. Wagner

President.

HAW:W

COPY

September 9, 1937

Mr. Herbert A. Wagner, President,
Cons. Gas Electric Light and Power Company
Baltimore, Md.

Dear Mr. Wagner:

I have the Operating Committee's Report of September 9th on the "Allocation of the P.R.R. Load Between Maryland and Pennsylvania." The conclusions arrived at therein and also the recommendations of the Operating Committee in their memorandum of March 3, 1937 are acceptable to P.W. & P. Company.

I don't know whether you have yet had time to study the recommendations but if you have gone into the matter and approve of it, I will then send in my approval to the Operating Committee. If you should like to discuss this I will be at your convenience.

Hope your trip to Europe was a pleasant one even though you had to cover a good deal of ground in a short time.

Yours very truly,

(Signed) J. A. Walls

J. A. Walls
President

JAW'F

SERVICES TO PENNSYLVANIA RAILROAD UNDER RAILROAD CONTRACT AND DIVISION BETWEEN MARYLAND AND PENNSYLVANIA

Year	Energy Delivered in Maryland Kwh.	Energy Delivered in Pennsylvania Kwh.	Total Energy Delivered Kwh.	Maximum Monthly* Demand Billed Kw.
1944	256,895,000	194,082,000	450,977,000	78,000
1945	250,030,000	194,937,000	444,967,000	77,000
1946 (Estimated)	238,100,000	216,675,000	454,775,000	79,000

*Total P.R.R. demand in Maryland and Pennsylvania.

INSTALLED SINGLE PHASE CAPACITY FOR RAILROAD SUPPLY

Type of Equipment	Capacity-Kw.	Location	Ownership
Frequency Changer	25,000	Benning, D.C.	Potomac Electric Power Co.
Frequency Changer	25,000	Safe Harbor, Pa.	Safe Harbor Water Power Corp.
Water Wheel Generator	28,000	" " "	" " " " "
Water Wheel Generator	28,000	" " "	" " " " "
Total Single Phase Capacity	106,000 kw.		

S-F
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TOTAL REVENUES RECEIVED FROM PENNSYLVANIA RAILROAD
FOR JOINT SERVICES IN PENNSYLVANIA & MARYLAND
AND DIVISION OF REVENUES RECEIVED BY PENN WATER

Year	Total Revenues	Division of Total Revenues Paid by Baltimore Co. to Penn Water
1944	$ 3,380,903.29	$ 1,455,513.99
1945	3,269,251.66	1,432,348.44
1946 (Estimated)	3,388,500.00	1,615,800.00

SPECIFIED FACILITIES AND OTHER SPECIAL FACILITIES
PROVIDED UNDER TERMS OF
RAILROAD CONTRACT

Item	Location	Ownership	Contract Charge Included in Revenues Received from P R R by Baltimore Co
Initial Converting Equipment One 25,000 kw. Frequency Changer	Benning, D. C.	P.E.P Co.	$ 90,480 00
Initial Converting and Generating Equipment One 25,000 kw. Frequency Changer One 28,000 kw. Water Wheel Generator	Safe Harbor, Pa.	S.H.W P Corp.	130,140 00
Additional Water Wheel Generator One 28,000 kw. Water Wheel Generator	Safe Harbor, Pa.	S.H.W P. Corp.	81,131.28
Initial Transmission Facilities Four Circuit 132 kv. Line	Safe Harbor, Pa. to Perryville, Md.	P.W.& P.Co. and S.T.Co. of Md.	122,100.00
Initial Substation Four 20,000 kva. Transformers	Safe Harbor, Pa.	P.W.& P.Co.	84,900.00
Additional 13 kv. Transformer Switching Equip. Three Additional Switch Positions	Safe Harbor, Pa.	P.W.& P.Co.	8,184.00
Other Special Facilities	Safe Harbor, Pa.	P.W.& P.Co.	8,574.24
			$ 525,509.52
Rental and Maintenance of 110 kv. Benning Circuit Patapsco Crossing to Benning, D. C.	On P.R.R. Right-of-Way	P.R.R.	(-) 6,000.00
			$ 519,509.52

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Exhibit No. 14

2523

PENNSYLVANIA WATER & POWER COMPANY

Total Interchange Sales to and Interchange Purchases from Pennsylvania Customers

	Total Interchange Sales		
Year	Kilowatthours	Revenues	Penn Water's Share of Savings
1944	160,309,000	$810,137	$ 150,164
1945	201,259,000	873,578	180,563
1946 (Estimated)	143,800,000	612,900	125,100

	Total Interchange Purchases		
Year	Kilowatthours	Payments	Penn Water's Share of Savings
1944	39,709,000	$181,270	$ 21,162
1945	16,051,000	61,444	3,455
1946 (Estimated)	19,200,000	75,700	7,300

PAYMENTS MADE BY PENN WATER AND BALTIMORE CO.
TO SAFE HARBOR WATER POWER CORP.

Year	Payments made by Penn Water	Payments made by Baltimore Co.
1944	$1,214,554	$2,429,107
1945	1,231,772	2,463,545
1946 (Estimated)	1,188,603	2,377,206

January 8, 1945

MEMORANDUM TO: Mr. H. L. Gruehn, Sec'y., Consolidated Gas Electric Light and Power Company of Baltimore
Mr. Jas. L. Rintoul, Vice Pres., Pennsylvania Water & Power Company
Mr. C. A. Lappe, Treas., Safe Harbor Water Power Corporation

SAFE HARBOR COMPANY'S BILL TO BALTIMORE COMPANY AND HOLTWOOD COMPANY FOR THE YEAR 1944

(a)	7% on Accumulated Actual Investment of $30,150,326.27 as of Dec. 31, 1943		$ 2,110,522.84
(b)	Payment on net additions during 1944 at rate of 7% per annum		(1,481.16)
(c)	Expenses		
	1. Operating Expense	$ 265,515.92	
	2. Maintenance	125,668.79	
	3. General Expense	258,942.09	
	4. General Taxes	136,871.53	
	5. Federal Normal Tax and Surtax	371,431.48	
	6. Federal Excess Profits Tax	202,419.76	
	7. Depreciation (Annuity only) 1944	174,010.53	
	Total Expenses		1,534,860.10
(d)	Sum of (a) + (b) + (c)		$ 3,643,901.78
(e)	Rent from Electric Property		241.20
(f)	Net Bill for Year 1944 (d) - (e)		$ 3,643,660.58
(g)	Net Bill to Baltimore Company 2/3 of (f)		$ 2,429,107.05
(h)	Gross Amount billed to Baltimore Company for first eleven months of 1944		2,205,254.94
(i)	Net Balance due from Baltimore Company for December 1944		$ 223,852.11
(j)	Net Bill to Holtwood Company 1/3 of (f)		$ 1,214,553.53
(k)	Gross Amount billed to Holtwood Company for first eleven months of 1944		1,102,627.48
(l)	Net Balance due from Holtwood Company for December 1944		$ 111,926.05

R. T. Greer

R. T. Greer

C. W. Spaulding

RTG:K
CWS
S-L
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January 8, 1946

MEMORANDUM TO: Mr. H. L. Gruehn, Sec'y., Consolidated Gas,Electric Light and Power Company of Baltimore
Mr. Jas. L. Rintoul, Vice Pres., Pennsylvania Water & Power Company
Mr. C. A. Lappe, Treas., Safe Harbor Water Power Corporation

SAFE HARBOR COMPANY'S BILL TO BALTIMORE COMPANY AND HOLTWOOD COMPANY FOR THE YEAR 1945

(a)	7% on Accumulated Actual Investment of $30,128,852.54 as of Dec. 31, 1944.		$ 2,109,019.67
(b)	Payment on net additions during 1945 at rate of 7% per annum		246.00
(c)	Expenses		
	1. Operating Expense	$ 283,288.92	
	2. Maintenance	127,963.48	
	3. General Expense	285,615.34	
	4. General Taxes	127,209.29	
	5. Federal Normal Tax and Surtax	371,431.48	
	6. Federal Excess Profits Tax	216,748.64	
	7. Depreciation (Annuity only) 1945	173,962.59	
	Total Expenses		1,586,219.74
(d)	Sum of (a) + (b) + (c)		$ 3,695,485.41
(e)	Rent from Electric Property		168.00
(f)	Net Bill for Year 1945 (d) - (e)		$ 3,695,317.41
(g)	Net Bill to Baltimore Company 2/3 of (f)		$ 2,463,544.94
(h)	Gross Amount billed to Baltimore Company for first eleven months of 1945		2,241,797.57
(i)	Net Balance due from Baltimore Company for December 1945		$ 221,747.37
(j)	Net Bill to Holtwood Company 1/3 of (f)		$ 1,231,772.47
(k)	Gross Amount billed to Holtwood Company for first eleven months of 1945		1,120,898.80
(l)	Net Balance due from Holtwood Company for December 1945		$ 110,873.67

R. T. Greer

G. W. Spaulding

RTG
GWS:K

April 11, 1946

ESTIMATE OF SAFE HARBOR COMPANY'S BILL TO BALTIMORE COMPANY AND HOLTWOOD COMPANY FOR THE YEAR 1946

(a)	7% on Accumulated Actual Investment of $30,136,866.86 as of Dec. 31, 1945		$ 2,109,580.68
(b)	Payment on Net Additions during 1946 at rate of 7% per annum		3,375.00
(c)	Expenses		
	1. Operating Expense	$ 311,800.00	
	2. Maintenance	153,300.00	
	3. General Expense	240,000.00	
	4. General Taxes	122,957.75	
	5. Federal Normal Tax and Surtax	449,830.51	
	6. Depreciation (Annuity only) 1946	175,165.00	
	Total Expenses		1,453,053.26
(d)	Sum of (a) + (b) + (c)		3,566,008.94
(e)	Rent from Electric Property		200.00
(f)	Estimated Net Bill for Year 1946 (d) - (e)		$ 3,565,808.94
(g)	Estimated Bill to Baltimore Company, 2/3 of (f)		$ 2,377,205.96
(h)	Total Amount paid by Baltimore Company January to March, Incl.		$ 589,455.09
(i)	Estimated Bill to Baltimore Company April to December, Incl. (g - h)		$ 1,787,750.87
(j)	Estimated Bill to Baltimore Company per Month		$ 198,638.99
(k)	Estimated Bill to Holtwood Company, 1/3 of (f)		$ 1,188,602.98
(l)	Total Amount Paid by Holtwood Company January to March, Incl.		$ 294,727.56
(m)	Estimated Bill to Holtwood Company April to December, Incl. (k - l)		$ 893,875.42
(n)	Estimated Bill to Holtwood Company per Month		$ 99,319.49

RTG
GWS:K

January 8, 1945

MEMORANDUM TO: MR. H. L. GRUEHN
MR. JAS. L. RINTOUL

HOLTWOOD COMPANY'S BILL TO BALTIMORE COMPANY FOR DECEMBER 1944

The reference letters used below correspond to the Paragraph letters under Article III of the Supplemental Agreement of June 1, 1931, as amended by Supplemental Agreement of September 29, 1939.

(a)	NET POWER REVENUE OF HOLTWOOD COMPANY			
	1. 1930 Revenue Adjusted to Avg. River Flow		$ 2,832,259.75	
	2. Decrease in Revenue from Cust. other than Balto. 1931 compared with 1930		70,080.06	
	3. Base Net Revenue			$ 2,762,179.69
(b)	PAYMENTS ON NET ADDITIONS AT 10.25% & 9.5%			895,713.19
(c)	EXPENSES			
	1. *Operating Exp. (Excl. Power Purchased)		963,079.44	
	2. Maintenance		335,902.79	
	3. General Expense		500,594.38	
	4. General Taxes		334,125.59	
	5. Federal Normal Tax and Surtax		930,245.37	
	6. Federal Excess Profits Tax		298,477.22	
	7. Depreciation	$ 355,146.73		
	Less. Adj. for Auto Depreciation	3,624.06	351,522.67	
	8. Total			3,713,947.46
	*Power Purchased shown in Item (d)			
(d)	HOLTWOOD COMPANY'S PAYMENTS FOR POWER PURCHASED			
	1. Metropolitan Edison Co.		26,050.79	
	2. Philadelphia Electric Co.		105,039.66	
	3. Pennsylvania Power & Light Co.		50,179.73	
	4. Safe Harbor Water Power Corporation		1,214,553.53	
	5. Total			1,395,823.71
	SUM OF (a), (b), (c) and (d)			8,767,664.05
(e)	HOLTWOOD COMPANY'S REVENUE FROM PARTIES OTHER THAN BALTO.			
	1. Pennsylvania Power & Light Co. (Firm Power)		2,166,823.11	
	2. Philadelphia Electric Co., Coatesville		986,360.03	
	3. Edison Light & Power Co., York		368,904.43	
	4. Pioneer Electric Light Co.		9,432.84	
	5. Metropolitan Edison Co.		323,044.35	
	6. Philadelphia Electric Co. (Via P.R.R.)		196,778.33	
	7. Pennsylvania Power & Light Co. (Interchange)		290,314.66	
	8. Pennsylvania Railroad Company		1,455,513.99	
	9. Conowingo Backwater Payment		133,750.00	
	10. Rent from Electric Property, etc.		35.50	
	11. Total			5,930,957.24
(f)	INTEREST ON INCREASE IN RESERVE FOR DEPRECIATION			199,154.43
(h)	REDUCTION AS PER SUPPLEMENTAL AGREEMENT OF SEPT. 29, 1939			600,000.00
(x)	MISCELLANEOUS CREDITS			9,703.62
	TOTAL DEDUCTIONS - SUM OF (e), (f), (h) and (x)			6,739,815.29

S-M
4-10

(i)	NET BILL FOR YEAR 1944	$ 2,027,148.76
(j)	TOTAL AMOUNT BILLED FOR FIRST ELEVEN MONTHS OF 1944	1,742,471.76
(k)	BALANCE DUE FOR DECEMBER 1944	$ 285,377.00

OPERATING COMMITTEE

R.T. Greer

R.T.GREER FOR CONS. GAS ELECTRIC LIGHT & POWER CO. OF BALTIMORE

C.W. Spaulding

C.W.SPAULDING FOR PENNSYLVANIA WATER & POWER COMPANY

RTG
CWS/K

January 8, 1946

MEMORANDUM TO: MR. H. L. GRUEHN
MR. JAS. L. RINTOUL

HOLTWOOD COMPANY'S BILL TO BALTIMORE COMPANY FOR DECEMBER 1945

The reference letters used below correspond to the Paragraph letters under Article III of the Supplemental Agreement of June 1, 1931, as amended by Supplemental Agreement of September 29, 1939.

(a)	NET POWER REVENUE OF HOLTWOOD COMPANY			
	1. 1930 Revenue Adjusted to Avg. River Flow		$ 2,832,259.75	
	2. Decrease in Revenue from Cust. other than Balto. 1931 compared with 1930		70,080.06	
	3. Base Net Revenue			$ 2,762,179.69
(b)	PAYMENTS ON NET ADDITIONS AT 10.25% & 9.5%			899,456.97
(c)	EXPENSES			
	1. *Operating Exp. (Excl. Power Purchased)		956,195.28	
	2. Maintenance		346,734.79	
	3. General Expense		625,541.55	
	4. General Taxes		317,248.94	
	5. Federal Normal Tax and Surtax		937,305.66	
	6. Federal Excess Profits Tax		266,470.56	
	7. Depreciation	$ 355,146.73		
	Less: Adj. for Auto Depreciation	2,728.97	352,417.76	
	8. Total			3,801,914.54
	*Power Purchased shown in Item (d)			
(d)	HOLTWOOD COMPANY'S PAYMENTS FOR POWER PURCHASED			
	1. Metropolitan Edison Co.		4,836.90	
	2. Philadelphia Electric Co.		33,537.27	
	3. Pennsylvania Power & Light Co.		23,069.83	
	4. Safe Harbor Water Power Corporation		1,231,772.47	
	5. Total			1,293,216.47
	SUM OF (a), (b), (c) and (d)			8,756,767.67
(e)	HOLTWOOD COMPANY'S REVENUE FROM PARTIES OTHER THAN BALTO.			
	1. Pennsylvania Power & Light Co. (Firm Power)		2,053,740.12	
	2. Philadelphia Electric Co., Coatesville		939,107.73	
	3. Edison Light & Power Co., York		397,325.85	
	4. Pioneer Electric Light Co.		11,187.23	
	5. Metropolitan Edison Co.		353,508.27	
	6. Philadelphia Electric Co. (Via P.R.R.)		249,795.37	
	7. Pennsylvania Power & Light Co. (Interchange)		270,274.13	
	8. Pennsylvania Railroad Company		1,432,348.44	
	9. Conowingo Backwater Payment		133,750.00	
	10. Rent from Electric Property, etc.		None	
	11. Total			5,841,037.14
(f)	INTEREST ON INCREASE IN RESERVE FOR DEPRECIATION			220,275.48
(h)	REDUCTION AS PER SUPPLEMENTAL AGREEMENT OF SEPT. 29, 1939			600,000.00
(x)	MISCELLANEOUS CREDITS			11,238.38
	TOTAL DEDUCTIONS - SUM OF (e), (f), (h) and (x)			6,672,551.00

(i)	NET BILL FOR YEAR 1945	$ 2,084,216.67
(j)	TOTAL AMOUNT BILLED FOR FIRST ELEVEN MONTHS OF 1945	2,014,007.00
(k)	BALANCE DUE FOR DECEMBER 1945	$ 70,209.67

OPERATING COMMITTEE

R.T. Greer

R.T.GREER FOR CONS. GAS ELECTRIC LIGHT AND POWER CO. OF BALTIMORE

G.W. Spaulding

G.W.SPAULDING FOR PENNSYLVANIA WATER & POWER COMPANY

RTG
GWS:K

April 11, 1946

ESTIMATE OF HOLTWOOD COMPANY'S BILL TO BALTIMORE COMPANY FOR THE YEAR 1946

(a)	NET POWER REVENUE OF HOLTWOOD COMPANY			
	1. 1930 Rev. Adjusted to Avg. River Flow		$ 2,832,259.75	
	2. Decr. in Rev. from Cust. other than Balto. 1931 compared with 1930		70,080.06	
	3. Base Net Revenue			$ 2,762,179.69
(b)	PAYMENTS ON NET ADDITIONS AT 10.25% & 9.5%			897,500.00
(c)	EXPENSES			
	1. *Operating Exp. Excl. Power Purchased		$ 1,111,900.00	
	2. Maintenance		432,700.00	
	3. General Expense		760,000.00	
	4. General Taxes		299,207.00	
	5. Federal Normal Tax and Surtax		987,470.70	
	6. Depreciation	$ 355,146.73		
	Less Adj. for Auto Depr.	2,000.00	353,146.73	
	7. Total			3,944,424.43
	*Power Purchased shown in Item (d)			
(d)	HOLTWOOD CO.'S PAYMENTS FOR POWER PURCHASED			
	1. Metropolitan Edison Co.		$ 10,800.00	
	2. Philadelphia Electric Co.		42,300.00	
	3. Penna. Power & Light Co.		22,600.00	
	4. S.H.W.P.Corp.		1,188,602.98	
	5. Total			1,264,302.98
SUM OF (a), (b), (c) and (d)				$ 8,868,407.10
(e)	HOLTWOOD CO.'S REV. FROM PARTIES OTHER THAN BALTO.			
	1. P.P.& L.Co. (Firm Power)		$ 1,932,400.00	
	2. Philadelphia Elec. Co. (Firm Power)		976,100.00	
	3. Metropolitan Edison Co. (Firm Power)(Incl.Y.E.)		641,500.00	
	4. Pioneer Elec. Light Co. (Firm Power)		12,000.00	
	5. Metropolitan Edison Co. (Interchange)		234,500.00	
	6. Philadelphia Elec. Co. (Interchange)		206,000.00	
	7. P.P.& L.Co. (Interchange)		172,400.00	
	8. Pennsylvania Railroad Company		1,615,800.00	
	9. Conowingo Backwater Payment		133,750.00	
	10. Rent from Electric Property		100.00	
	11. Total			$ 5,924,550.00
(f)	INT. ON INCREASE IN RES. FOR DEPRECIATION			239,700.00
(h)	REDUCTION AS PER SUPPLEMENTAL AGREEMENT OF SEPT. 29, 1939			600,000.00
(x)	ESTIMATED MISCELLANEOUS CREDITS			16,300.00
	TOTAL DEDUCTIONS - SUM OF (e), (f), (h) AND (x)			$ 6,780,550.00
	ESTIMATED NET BILL FOR YEAR 1946			$ 2,087,857.10
	TOTAL AMOUNT PAID JANUARY TO MARCH, INCL.			$ 555,013.98
	ESTIMATED BILL APRIL - DECEMBER, INCL.			$ 1,532,843.12
	ESTIMATED BILL PER MONTH APRIL - DECEMBER, INCL.			$ 170,315.90

RTG
GWS:K

CONSOLIDATED STATEMENT

SHOWING

ORIGINAL COST OF ELECTRIC PLANT

AS OF

DECEMBER 31, 1945

OF

PENNSYLVANIA WATER & POWER COMPANY

AND

SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND

(A Wholly Owned Subsidiary)

PENNSYLVANIA WATER & POWER COMPANY
and Susquehanna Transmission Company of Maryland, A Wholly Owned Subsidiary

Consolidated Statement Showing Original Cost of Electric Plant as of December 31, 1945

Item No.	Account No.	Account Title	Combined Total Pennsylvania Water & Power Company and Susquehanna Transmission Company of Maryland			Pennsylvania Water & Power Company			Susquehanna Transmission Company of Maryland		
			Total as of 12/31/45 (d + g)	As of 12/31/36 (Per Original Cost Studies) (e + h)	Net Additions 1/1/37 to 12/31/45 (f + i)	Total as of 12/31/45 (e + f)	As of 12/31/36 (Per Original Cost Studies)	Net Additions 1/1/37 to 12/31/45	Total as of 12/31/45 (h + i)	As of 12/31/36 (Per Original Cost Studies)	Net Additions 1/1/37 to 12/31/45
			(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
		I - ELECTRIC PLANT IN SERVICE									
		Intangible Plant									
1	301	Organization	$ 671,861.86	$ 672,434.76	$ (572.90)	$ 668,530.28	$ 669,103.18	$ (572.90)	$ 3,331.58	$ 3,331.58	$
2	302	Franchises and Consents	64,004.61	64,004.61		64,004.61	64,004.61				
3	303	Miscellaneous Intangible Plant	63,936.18	63,936.18		58,267.70	58,267.70		5,668.48	5,668.48	
4		Total Intangible Plant	$ 799,802.65	$ 800,375.55	$ (572.90)	$ 790,802.59	$ 791,375.49	$ (572.90)	$ 9,000.06	$ 9,000.06	$ -
		Production Plant									
		(A) Steam Production									
5	310	Land and Land Rights	$ 2,000.00	$ (Note A)	$ 2,000.00	$ 2,000.00	$	$ 2,000.00	$	$	$
6	311	Structures and Improvements	1,214,709.65	1,095,948.08	118,761.57	1,214,709.65	1,095,948.08	118,761.57			
7	312	Boiler Plant Equipment	1,866,969.04	1,355,814.27	511,154.77	1,866,969.04	1,355,814.27	511,154.77			
8	314	Turbo-Generator Units	806,225.51	784,598.65	21,626.86	806,225.51	784,598.65	21,626.86			
9	315	Accessory Electric Equipment	401,463.87	303,494.65	97,969.22	401,463.87	303,494.65	97,969.22			
10	316	Miscellaneous Power Plant Equip.	303,434.28	114,236.11	189,198.17	303,434.28	114,236.11	189,198.17			
11		Total Steam Production	$ 4,594,802.35	$ 3,654,091.76	$ 940,710.59	$ 4,594,802.35	$ 3,654,091.76	$ 940,710.59	$ -	$ -	$ -
		(B) Hydraulic Production									
12	320	Land and Land Rights	$ 4,248,416.69	$ 4,163,067.11	$ 85,349.58	$ 4,248,416.69	$ 4,163,067.11	$ 85,349.58	$	$	$
13	321	Structures and Improvements	4,958,608.57	4,802,778.06	155,830.51	4,958,608.57	4,802,778.06	155,830.51			
14	322	Reservoirs, Dams and Waterways	4,020,318.28	3,555,925.71	464,392.57	4,020,318.28	3,555,925.71	464,392.57			
15	323	Water Wheels, Turbines & Generators	3,458,956.95	3,399,437.36	59,519.59	3,458,956.95	3,399,437.36	59,519.59			
16	324	Accessory Electric Equip.	1,529,177.69	1,401,855.72	127,321.97	1,529,177.69	1,401,855.72	127,321.97			
17	325	Miscellaneous Power Plant Equip.	194,521.60	149,059.71	45,461.89	194,521.60	149,059.71	45,461.89			
18	326	Roads, Railroads & Bridges	71,916.58	72,055.37	(138.79)	71,916.58	72,055.37	(138.79)			
19		Total Hydraulic Production	$18,481,916.36	$17,544,179.04	$ 937,737.32	$18,481,916.36	$17,544,179.04	$ 937,737.32	$ -	$ -	$ -
20		Total Production Plant	$23,076,718.71	$21,198,270.80	$ 1,878,447.91	$23,076,718.71	$21,198,270.80	$1,878,447.91	$ -	$ -	$ -

PENNSYLVANIA WATER & POWER COMPANY
and Susquehanna Transmission Company of Maryland, A Wholly Owned Subsidiary

Consolidated Statement Showing Original Cost of Electric Plant as of December 31, 1945

Item No.	Account No.	Account Title	Combined Total Pennsylvania Water & Power Company and Susquehanna Transmission Company of Maryland: Total as of 12/31/45 (d + g) (a)	As of 12/31/36 (Per Original Cost Studies) (e + h) (b)	Net Additions 1/1/37 to 12/31/45 (f + i) (c)	Pennsylvania Water & Power Company: Total as of 12/31/45 (e + f) (d)	As of 12/31/36 (Per Original Cost Studies) (e)	Net Additions 1/1/37 to 12/31/45 (f)	Susquehanna Transmission Company of Maryland: Total as of 12/31/45 (h + i) (g)	As of 12/31/36 (Per Original Cost Studies) (h)	Net Additions 1/1/37 to 12/31/45 (i)
		I - ELECTRIC PLANT IN SERVICE (CONT'D.)									
		Transmission Plant									
21	340	Land and Land Rights	$ 2,716,243.48	$ 1,957,820.23	$ 758,423.25	$ 807,106.97	$ 634,065.76	$ 173,041.27	$1,909,136.51	$1,323,754.53	$ 585,381.98
22	341	Clearing Land & Rights-of-Way	252,880.87	179,292.18	73,588.69	116,266.66	86,207.63	30,059.03	136,614.21	93,084.55	43,529.66
23	342	Structures and Improvements	695,785.92	548,181.29	147,604.63	330,844.45	239,921.19	90,923.26	364,941.47	308,260.10	56,681.37
24	343	Station Equipment	3,497,294.88	2,927,340.76	569,954.12	2,781,223.79	2,244,016.80	537,206.99	716,071.09	683,323.96	32,747.13
25	344	Towers and Fixtures	2,274,805.62	1,794,844.56	479,961.06	1,102,909.39	967,691.66	135,217.73	1,171,896.23	827,152.90	344,743.33
26	345	Poles and Fixtures	11,382.69	1,128.06	10,254.63	10,892.12	1,128.06	9,764.06	490.57	-	490.57
27	346	Overhead Conductors & Devices	2,226,629.26	1,735,362.77	491,266.49	989,514.12	832,013.90	157,500.22	1,237,115.14	903,348.87	333,766.27
28	349	Roads and Trails	66,036.26	49,468.31	16,567.95	36,748.88	23,919.68	12,829.20	29,287.38	25,548.63	3,738.75
29		Total Transmission Plant	$11,741,058.98	$ 9,193,438.16	$ 2,547,620.82	$ 6,175,506.38	$ 5,028,964.62	$1,146,541.76	$5,565,552.60	$4,164,473.54	$1,401,079.06
		General Plant									
30	371	Structures and Improvements	$ 254,958.16	$ 193,086.47	$ 61,871.69	$ 248,014.49	$ 176,015.86	$ 71,998.63	$ 6,943.67	$ 17,070.61	$ (10,126.94)
31	372	Office Furniture & Equipment	119,306.44	80,016.18	39,290.26	135,090.02	75,826.09	39,263.93	4,216.42	4,190.09	26.33
32	373	Transportation Equipment	55,590.03	24,599.74	30,990.29	56,664.58	24,599.74	32,064.84	(1,074.55)	-	(1,074.55)
33	374	Stores Equipment	15,215.68	10,271.92	4,943.76	13,958.27	9,041.55	4,916.72	1,257.41	1,230.37	27.04
34	375	Shop Equipment	32,688.11	14,661.53	18,026.58	31,761.36	13,734.78	18,026.58	926.75	926.75	-
35	376	Laboratory Equipment	49,427.76	36,888.29	12,539.47	49,186.46	36,729.37	12,457.09	241.30	158.92	82.38
36	377	Tools & Work Equipment	125,554.17	114,881.76	10,672.41	118,635.49	109,590.27	9,045.22	6,918.68	5,291.49	1,627.19
37	378	Communication Equipment	145,569.49	125,143.74	20,125.75	104,969.20	85,007.34	19,961.86	40,600.29	40,436.40	163.89
38	379	Miscellaneous Equipment	17,668.31	16,003.85	1,664.46	17,668.30	16,003.85	1,664.45	.01	-	.01
39	393	Donations in aid of Construction	(19,326.28)	(590.27)	(18,736.01)	(3,373.68)		(3,373.68)	(15,952.60)	(590.27)	(15,362.33)
40		Total General Plant	$ 796,651.87	$ 615,263.21	$ 181,388.66	$ 752,574.49	$ 546,548.85	$ 206,025.64	$ 44,327.38	$ 68,714.36	$ (24,636.98)
41		Total Electric Plant in Service	36,414,232.21	31,807,347.72	4,606,884.49	30,795,602.17	27,565,159.76	3,230,442.41	5,618,630.04	4,242,187.96	1,376,442.08
42		Adjustments Admitted by Co. in Agreement with FPC Auditors	(24,850.28)	(24,850.28)	-	(9,916.92)	(9,916.92)	-	(14,933.36)	(14,933.36)	-
43		TOTAL ELECTRIC PLANT IN SERVICE AFTER ADJUSTMENT	$36,389,381.93	$31,782,497.44	$ 4,606,884.49	$30,785,685.25	$27,555,242.84	$3,230,442.41	$5,603,696.68	$4,227,254.60	$1,376,442.08

PENNSYLVANIA WATER & POWER COMPANY
and Susquehanna Transmission Company of Maryland, A Wholly Owned Subsidiary

Consolidated Statement Showing Original Cost of Electric Plant as of December 31, 1945

Item No.	Account No.	Account Title	Combined Total Pennsylvania Water & Power Company and Susquehanna Transmission Company of Maryland			Pennsylvania Water & Power Company			Susquehanna Transmission Company of Maryland		
			Total as of 12/31/45 (d + g)	As of 12/31/36 (Per Original Cost Studies) (e + h)	Net Additions 1/1/37 to 12/31/45 (f + i)	Total as of 12/31/45 (e + f)	As of 12/31/36 (Per Original Cost Studies)	Net Additions 1/1/37 to 12/31/45	Total as of 12/31/45 (h + i)	As of 12/31/36 (Per Original Cost Studies)	Net Additions 1/1/37 to 12/31/45
			(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
		II - OTHER ELECTRIC PLANT									
44	100.3	Construction Work in Progress	$ 237,406.26	$ 1,577,715.57	$(1,340,309.31)	$ 236,833.45	$ 998,585.91	$ (761,752.46)	$ 572.81	$ 579,129.66	$ (578,556.85)
45	100.4	Electric Plant Held for Future Use	77,918.28	78,343.06	(424.78)	73,556.49	74,034.53	(478.04)	4,361.79	4,308.53	53.26
46		TOTAL OTHER ELECTRIC PLANT	$ 315,324.54	$ 1,656,058.63	$(1,340,734.09)	$ 310,389.94	$ 1,072,620.44	$ (762,230.50)	$ 4,934.60	$ 583,438.19	$ (578,503.59)
47		GRAND TOTAL	$36,704,706.47	$33,438,556.07	$ 3,266,150.40	$31,096,075.19	$28,627,863.28	$2,468,211.91	$5,608,631.28	$ 4,810,692.79	$ 797,938.49

( ) Indicates Red Figure

Note A - All of the structures and equipment of the steam production plant are located on land originally acquired for the hydraulic production plant.

HISTORY OF THE HOLTWOOD DEVELOPMENT

TO THE

BEGINNING OF COMMERCIAL OPERATION

OCTOBER 1, 1911

DG:mrh
7/30/40

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I - GENERAL DESCRIPTION OF THE SUSQUEHANNA RIVER AND ITS EARLY UTILIZATION

General Description of Susquehanna River

The Susquehanna River drains the largest area of any river on the Atlantic Coast, south of the St. Lawrence. The main branch rises in the State of New York, the west branch in the easterly slope of the Alleghenies along the northern line of the State of Pennsylvania. The river flows in a south and southeasterly direction, emptying into the Chesapeake Bay within the State of Maryland. The total drainage area is approximately 27,500 square miles of which 26,786 lie above the site of the Holtwood dam.

The river flows through a territory of much diversity. In the State of New York it is rolling and sometimes rather broken. Its bed is composed of sand and gravel, with an occasional rock ledge. Passing into Pennsylvania, its course is very tortuous as it winds among the ranges of hills. In the Wilkes-Barre region it passes through the anthracite coal district and carries from there to the lower reaches of the river, fine particles known as "river coal."

Description of Lower Portion of Susquehanna

The descent of the river is gradual except in the lower fifty miles which, in its natural state, was a succession of rapids, the average fall being approximately five feet per mile. Here it passed through a valley with precipitous hillsides rising from 200 to 400 ft. above the channel, composed in general of mica schist, and in places of a very excellent granite. In this lower section, the valley varies in width from a few hundred yards to more than two miles. The channel in many places is filled with small rocky islands, some of which were covered with

alluvial soil and were under cultivation.

Early Canals

The river flow is subject to extreme fluctuations, the maximum recorded flow at Holtwood (1936) being approximately 860,000 cubic feet per second and the minimum seven day average being 2,100 cubic feet per second. This wide variation in flow, combined with the rocky and irregular character of the river bed, necessitated the construction of artificial waterways or canals along the banks in order to provide navigation facilities. Between 1784 and 1802, a canal nine miles long was built on the lower east bank of the river in Maryland by a company called The Proprietors of the Susquehanna Canal. In 1836, construction of a canal was started between Wrightsville, Pa., and tidewater along the west bank. It was completed in 1840, the Pennsylvania portion being known as the Susquehanna Canal, the Maryland portion, as the Tidewater Canal, and was popularly referred to as the Susquehanna and Tidewater Canal. Use of the canals decreased, and after 1890 they were little used and were in bad disrepair.

Water Power Developments

Concurrently with the development of the canals a number of small water power mills were built on tributaries of the lower Susquehanna. Two paper mills were built along the Susquehanna itself, one at York Haven, Pa., and one at Shuresville, Md., both having low wing-dams in the river. The conversion of these mills and the construction of others for the production of electricity by water power and its long distance transmission to commercial centers was considered by several individuals about 1894. Construction had been started on the hydroelectric project at Niagara Falls and considerable publicity seems to have been given the possibilities of high voltage alternating current transmission over distances previously

considered impracticable and uneconomical when using direct current.

Early Hydroelectric Development

By 1900 several small hydroelectric plants were in operation on these lower tributaries and a number of engineers and financiers had made studies toward the development of the main river between tidewater and Columbia, Pa. Several hydroelectric companies had been formed and both these and individual promoters had been acquiring land and water power rights along this section. One company had actually started construction at Wrightsville but, following an ice jam and flood, the project had been abandoned. The competition for the acquisition of land which soon developed between the various interests, resulted in high prices being demanded for property which had had very little value prior to the awakening to the power possibilities.

Three Major Interests on the River

The greatest competition for water power rights, markets and financing was among three major interests and continued for several years. Just above the mouth of the river at Shuresville, the old paper mill had been acquired by a group headed by B. Harvey Welch which had obtained a charter for their company to engage in hydroelectric production. Another group, hereinafter referred to as Harlow-McGaw, held property adjacent to the Welch development and certain rights as far upriver as Wrightsville. These upper rights were in territory held largely by the Hutchinson interests. Regarding land and water rights, Welch and Harlow-McGaw were opposing interests but not Welch and Hutchinson. All three were competitors for financing and power markets.

It was generally recognized that the first group to successfully finance and develop a project would secure the most desirable markets and would probably force the others to postpone construction for many years.

The overlapping of separately controlled properties presented a stumbling-block for financing, for each interest seemed unwilling to release any property essential to another's development unless their entire holdings were purchased at a profit, or unless the parties selling were given a substantial interest in the buying company.

As a result of the efforts of the various groups to secure financing and power contracts, several of the country's most eminent engineers made investigations of the developments proposed by the different interests.

Power Market

For a number of years following the turn of the century, the growing railway and electric companies of Baltimore presented the best market for hydroelectric power from the Susquehanna. While it was known that other markets were available, it was recognized that the first group to secure the Baltimore market stood the best chance of success; conversely, the group first to secure the necessary land and financing would probably obtain contracts for delivery of power in Baltimore.

II - EARLY ACTIVITIES OF THE HARLOW-McGAW GROUP

Acquisition of Property by Harlow-McGaw

James H. Harlow and George K. McGaw were among the first to take an active part in investigating the hydroelectric possibilities of the lower Susquehanna and in acquiring lands and water power rights for such developments. They, and their associates, (hereinafter referred to as Harlow-McGaw) organized several companies for this purpose, made surveys along the river, studied river flow, selected sites, estimated costs and purchased numerous parcels of land. Their most important single acquisition was the purchase from the Reading Railroad Company of the stock of The Proprietors of the Susquehanna Canal, the property of the Tidewater Canal, and the rights and franchises of the Susquehanna Canal Company. As the two latter canals extended along the west bank of the river from Havre de Grace to Wrightsville, ownership of them vested the owner with substantial control of the river so far as competing developments were concerned. On the other hand, ownership of the canals alone was not sufficient to permit Harlow-McGaw to construct a plant at any point without acquiring miscellaneous parcels held by competing interests.

Water Power Companies Formed by Harlow-McGaw

After acquisition of the canals, Harlow-McGaw continued their efforts to develop the river. In 1902 they had the old Susquehanna Canal Company reorganized as the Susquehanna Canal and Power Company, thus perpetuating their canal rights in Pennsylvania. The same year they also formed nine water power companies in Pennsylvania townships adjacent to the river and merged them into three companies. These were in addition to three other township water power companies they had previously incorporated in that state.

III - EARLY ACTIVITIES OF THE HUTCHINSON GROUP

Hutchinson's First Contact with Development of the Susquehanna

John Bogart was one of the engineers who, in 1899, had investigated Harlow-McGaw's proposed development. Assisting him was C[illegible] T. Hutchinson, an electrical engineer. Following his work with Bogart, Hutchinson was retained to investigate the possibilities of the electrical reduction of iron ore for three Lancaster men - William F. Beyer, George B. Willson and Frederick Shoff.

Electrical Reduction of Iron Ore Considered

Beyer and Willson owned two small hydroelectric plants on Conestoga Creek which were supplying power to Lancaster. They, together with Shoff and two others, had formed a co-partnership in 1899, naming it the York Furnace Power Company. The purpose of the partnership was to acquire property and rights on the Susquehanna near York Furnace incident to the development of hydroelectric power for iron ore reduction. Shoff appears to be the member who controlled the ore deposits. In 1900 this group also formed The York Furnace Electric Company, a corporation presumably to construct and operate the proposed electric plant in connection with the ore reduction. About this time, Hutchinson made his investigation which disclosed the impracticability of the electrical reduction of this iron ore.

Hutchinson Becomes Interested in York Furnace Development

As a result of his investigation for Beyer and Willson, Hutchinson became personally interested in developing power at York Furnace and, on

a partnership basis, arranged with George S. Morison, a consulting engineer to investigate the possibilities of generating and selling power. Hutchinson obtained an option on the property held by the York Furnace partnership. The results of the studies made did not appear sufficiently favorable to warrant a development at the York Furnace site and investigations were continued downriver.

Selection of McCall Ferry Site

A more favorable location was found near McCall Ferry and preliminary studies showed that an economical development of substantially greater capacity could be made there. Property held by the York Furnace partnership was still useful for a project at McCall Ferry and the option was kept alive. Hutchinson at once began the acquisition of property between McCall Ferry and York Furnace. In addition, he acquired various scattered parcels below McCall Ferry in order to interfere with any development by Harlow-McGaw. He also bought out Morison's interest in their partnership arrangements.

(See Exhibit No. 1)

Opposition between Harlow-McGaw and Hutchinson

It was about this time that Harlow-McGaw attempted to form the Susquehanna Canal and Power Company and thus perpetuate their canal rights in Pennsylvania. Hutchinson made an unsuccessful attempt to prevent this reorganization. Shortly after the incorporation of Harlow-McGaw's nine water power companies, Hutchinson formed two similar companies in townships adjacent to the site of the proposed dam at McCall Ferry. Harlow-McGaw unsuccessfully opposed the granting of charters to these Hutchinson companies.

Formation of Predecessors of
Pennsylvania Water & Power Company

On July 17, 1902, applications were made on behalf of the Hutchinson interests for charters for The Hillside Water and Power Company and Susquehanna Water and Power Company.

The Hillside Water and Power Company was formed for the purpose of

> "the storage and transportation of water and water power for commercial and manufacturing purposes in Lower Chanceford Twp., York Co., Pa., and the supply of the same to the public and to such persons, partnerships, and corporations residing therein as may desire the same; and in order that the water and water power may be supplied to the public to the best advantage in furtherance of its corporate purposes, the development by the use of the same of electric current, and power to the public, individuals, firms and corporations, at any place or places at such prices as may be agreed upon."

Susquehanna Water and Power Company had identical purposes except the location was "in the Twp. of Martic, Co. of Lancaster, Pa."

A protest against granting these charters was filed by the Harlow-McGaw interests. A hearing was held on August 28th, but on September 2nd letters patent were issued for both companies, granting perpetual life.

The capital stock of each company was $500., consisting of five shares. Both companies had the same incorporators, stockholders and directors as follows:

Jacob Hill Byrne	1 share
W. F. Jack	1 share
George B. Willson	1 share
Walter M. Franklin	1 share
W. F. Beyer	1 share

Beyer was elected President of both companies and Willson, Secretary.

The Pennsylvania Water & Power Company subsequently became a successor of these companies after they had been merged to form McCall Ferry Power Company.

IV - DIVISION OF INTERESTS ON THE RIVER

Attempt to Revoke Canal Charter

Although Harlow-McGaw had acquired the rights of the canal companies which owned the canal along the west bank of the river, Hutchinson, either through direct ownership or by option on the York Furnace properties, was the actual or potential owner of practically all of the property along the canal which would be affected by the proposed dam at McCall Ferry. He therefore attempted, early in 1903, to have the canal charter rescinded. At one time it seemed certain enough that he would accomplish this result that Harlow-McGaw were willing to enter into an agreement with Hutchinson for a division of interests along the river, provided the latter would abandon his attempts to have the canal charter revoked.

Agreement between Harlow-McGaw and Hutchinson

The agreement was signed April 14, 1903 by M. H. Houseman and J. H. Harlow, representing the Harlow-McGaw interests, and R. R. Quay, representing the Hutchinson interests. This agreement provided:

1. Upon request within six months, Harlow McGaw were to transfer to Hutchinson:
   - A. All shares of capital stock of the Susquehanna Falls Power Company.
   - B. All title and interest in all lands, water rights and easements held for the benefit of the above company. (This company resulted from the merger of two of Harlow-McGaw's nine water power companies, the two having been formed in the same townships as Hutchinson's two companies.)
   - C. A permit from the Susquehanna Canal and Power Company, in so far as that company's rights were concerned, for the erection and maintenance of a dam about one mile below McCall Ferry.

2. In addition, Harlow-McGaw agreed to have the Susquehanna and Tidewater Railroad Company locate its proposed road-bed so as not to interfere with the construction and operation of a plant at McCall Ferry (instead of on the tow-path of the canal as originally proposed).

3. Hutchinson agreed to provide right of way for that railroad through any property he might own along the west bank which was not essential to his development.

4. Hutchinson agreed to install and operate, gratis, locks for the passage of canal vessels and permit their passage through the pool flooding the old canal.

5. Hutchinson agreed to reimburse Harlow-McGaw for all moneys expended by them for the organization of the Susquehanna Falls Power Company and in making plans, surveys, etc., for that company and for acquisition of all lands and water rights for it, together with interest, which amounts were not to exceed in the aggregate $20,000.

6. Hutchinson agreed to convey to Harlow-McGaw all land and interests held by himself or his associates in Peach Bottom, Drumore and Fulton Townships, upon reimbursement of the cost thereof with interest, but not to exceed $8,000.

7. Harlow-McGaw agreed not to interfere with Hutchinson's development between Shenk's Ferry and a point a mile below the proposed dam.

8. Hutchinson agreed to withdraw his interference at all other places on the river.

(See Exhibit No. 2)

Attempt to Finance Harlow-McGaw Development

The April 14th Agreement broke the previously existing deadlock which had prevented either Harlow-McGaw or Hutchinson from going ahead with their proposed developments. An attempt was then made to finance a company that would acquire Harlow-McGaw's interests on the Susquehanna for immediate development of a hydroelectric plant and also the Welch properties for a future plant. Due apparently to general financial conditions, the necessary funds were not raised.

Inactivity during 1904

While the Hutchinson group made some effort to perfect their organization, there seems to have been no serious attempt at this time to secure financing for the development at McCall Ferry. By mutual consent, the provisions of the April 14, 1903 agreement were not carried out within the six months' period but the time limit was extended to May 15, 1905. (See Exhibit No. 2) Neither group seems to have made any further attempt to secure financing until the end of 1904.

V - DIMOCK-BERTRON-BARNEY UNDERWRITING FOR McCALL FERRY DEVELOPMENT

Parsons' Report on McCall Ferry Development

Following the purchase by Hutchinson of Morison's interest in their partnership arrangements for investigating and developing the Susquehanna, Hutchinson retained Morison as consulting engineer until the latter's death in July 1903. Subsequently, Hutchinson engaged William Barclay Parsons as consulting engineer. Parsons submitted a report, dated January 13, 1905, on the proposed development at McCall Ferry. His recommendation for the McCall dam was elevation 155 and his estimate of cost for the dam, power house, hydraulic and electrical equipment, substations and three transmission lines to Philadelphia was $4,041,000. Everything seems to have been included in this figure except land, water rights, promoters' fees and certain overhead costs. The plant could deliver 37,500 kw. in Philadelphia during an average year on all but thirty days and during a dry year on all but one hundred days. An additional investment of not more than $1,000,000. in steam auxiliary would have been required to have enabled the plant to deliver 37,500 kw. at all times in Philadelphia. (See Exhibit No. 3)

Early Preparation for Underwriting

The submission of Parsons' engineering report to Hutchinson instituted a new stage of activity for the McCall enterprise, as early in February 1905 Hutchinson began seeking legal advice on the organization of corporations in Pennsylvania and the preparation of an underwriting agreement. The counsel who rendered the opinions in these matters was John G. Johnson of Philadelphia. This was followed immediately by getting William F. Beyer, a Lancaster attorney, who had been one of the

York Furnace partners, and who had also been agent for Hutchinson in some of his property negotiations up to this time, to look into the requirements for organizing a company with the requisite charter powers for the purpose desired. During this time, a preliminary form of underwriting agreement had been prepared, for on February 15th it was sent to Hutchinson for approval.

Beyer immediately undertook the formation of a company with the requisite charter powers. The state law, in effect at that time, permitted a company incorporated for the supply of light, heat and power by electricity to supply the same only in the borough, town, city or district in which it might be located. It was this circumstance that was the basis of Johnson's suggestion to form electric power companies in each township lying between the location of the plant on the river and the proposed point of delivery, these companies to be later consolidated into one company. Extensive correspondence and many conferences transpired before the legal complications were smoothed out satisfactorily. Proposed changes in laws were among the many suggestions brought forward by the organizers in an effort to solve the knotty problems confronting them.

Hutchinson Plan for Financing, February 1905

Lorenzo Semple of Coudert Brothers was Hutchinson's personal attorney and had advised him throughout his activities on the Susquehanna. On February 8, 1905, Semple wrote to Johnson asking his opinion on their proposed plan. A summary of the situation was given which, in effect, stated that

> Cary T. Hutchinson was the owner of lands on each side of the Susquehanna River in York and Lancaster Counties at McCall's Ferry. He either owned in fee or had releases from damages from the owners in fee of all property above and below McCall's Ferry along the River on each side, which would be affected by the erection of a dam across the River at that point to an elevation

of 160 above tidewater. Harlow-McGaw owned the bed of the old Susquehanna Canal and had also organized water power companies on each side of the River and projected a line of railroad upon one side of the River. All of these properties would have been affected by the proposed development of Cary T. Hutchinson; therefore, an agreement was made with Harlow-McGaw by which all opposition upon their part, by reason of the ownership of the above, was to be removed.

A tentative plan of organization was presented to Johnson and approved by him but differed in many respects from the plan finally adopted. (See Exhibit No. 4)

Formation of Syndicate

Soon after Hutchinson had started his acquisition of land and water power rights, he had received financial assistance from and through his father-in-law, Henry F. Dimock. In the latter part of February 1905, Hutchinson and Dimock submitted their proposition to S. Reading Bertron, of Bertron, Storrs and Griscom, whereby Hutchinson was to receive not less than one-half of the common stock of the proposed company and $750,000. in cash. This was for his efforts, and monies invested, and as a means of enabling him to pay off his obligations and for expenses, legal fees, etc., incurred to that date. (See Exhibit No. 1) Pursuant to this understanding, Bertron formed a syndicate to underwrite the finances required. The syndicate managers were Dimock, Bertron and Charles T. Barney, President of Knickerbocker Trust Company of New York.

Dimock-Bertron-Barney Prospectus

A combined Prospectus and Underwriting Agreement was prepared, dated March 1, 1905. The Prospectus presented a general description of the proposed work, gave its approximate location and referred to engineering studies which had been made up to that time. The proposed first development was for 50,000 horsepower, but it was further stated that 75,000 and even 100,000 horsepower was ultimately possible. The proposed markets for power were given and the estimated cost of construction was stated as shown in the following schedule:

Estimate of W. B. Parsons for dam, power house, all hydraulic and electric equipment, including 3 transmission lines to Philadelphia, with substation	$ 4,041,000.
Cash for property and rights of way, in addition to stock to be issued by the company	1,000,000.
Interest during construction	450,000.
Total Cost, without steam plant	$ 5,491,000.
Auxiliary steam plant, maximum capacity of 30,000 hp.	1,200,000.
	$ 6,691,000.
Working Capital	509,000.
Total Estimated Cost of Construction	$ 7,200,000.

The basis for earnings was next set forth as shown herewith:

Receipts

25,000 horsepower at $25.	$ 625,000.
25,000 horsepower at $30.	750,000.
Total	$ 1,375,000.
Total operating expense (Estimated at a greater cost for a plant of 50,000 hp. than the cost at Niagara for a plant of 100,000 hp.)	320,000.
Net earnings from operation	1,055,000.
Special reserve fund to provide against extraordinary contingencies, failure to sell full output during first five years of operation, etc., and to provide sinking fund for bonds after first five years	175,000.
Balance	$ 880,000.

Fixed Charges

5% on $8,000,000. bonds	$ 400,000.
Net Income	$ 480,000.
Dividend, 5% on $4,000,000. preferred stock	200,000.
Surplus applicable to common stock	$ 280,000.
Equal to 7.0 per cent on $4,000,000. common stock	

The capacity of the plant was stated as being capable of being increased to 75,000 hp. for a comparatively small additional cost. This increase in capacity would cause but a slight increase in operating expenses and fixed charges while, at the same time, it would greatly increase earnings. It was estimated that this would increase the surplus available for common stock to $580,000.

The financial plan called for an issue of $10,000,000. of bonds of which $8,000,000. were to be underwritten at 90 per cent and the balance held in the treasury for future needs. The proceeds of the underwriting were to be used to construct the first 50,000 hp. development. The company was to have an authorized capitalization of $10,000,000. stock, one-half of which was to be five per cent cumulative preferred, and the other half, common. $4,000,000. of each class of stock was to be issued, making a total capitalization as follows:

Five per cent Sinking Fund Bonds	$ 8,000,000.
Cumulative five per cent Preferred Stock	4,000,000.
Common Stock	4,000,000.
Total	$16,000,000.

(See Exhibit No. 5)

Dimock-Bertron-Barney Underwriting Agreement

Although the Underwriting Agreement was dated March 1, 1905, there is some correspondence available which indicates that it was not completed in final form until after March 9, 1905.

The underwriting agreement provided that Henry F. Dimock, S. R. Bertron and Charles T. Barney were to be the "Managers," with Knickerbocker Trust Company as the proposed "Trust Company," and Susquehanna Securities Company (to be incorporated later) as the proposed "Securities Company."

It was intended to secure underwritings for $8,000,000. of First Mortgage Bonds at ninety per cent of par of a corporation to be organized and to be called McCall's Ferry Power Company, and to arrange whereby the Trust Company would advance on the bonds so underwritten seventy-five per cent of par.

1. Subscribers were to receive a bonus of 50% in preferred stock.
2. Payments were to be 10% of par at date of allotment, 5% of par on March 1, 1906, and balance on maturity of loan provided in agreement.
3. Trust Company was to loan to Securities Company, as required, amounts not to exceed in total the unpaid balances on the subscriptions at the rate of 6% per annum with a commission of 1% on the two year loan. Each subscriber was to guarantee to the Trust Company his balance of unpaid subscription.
4. Managers reserved the right to sell the bonds subscribed for at not less than 90% of par with a bonus of preferred stock of not more than 15% of par and such sales would reduce subscribers' amounts pro rata.
5. Managers were to have control of funds paid in by subscribers for the construction of the Power Company plant.
6. Managers might, in their discretion, provide for a Voting Trust to cover the stock of the company which would also include the stock issued under the Underwriting Agreement.
7. Subscriptions to $6,000,000. of bonds were needed before agreement would become effective.

(See Exhibit No. 5)

This underwriting was never completed and the Underwriting Agreement for the McCall project, as finally adopted, had different Managers as well as differing in some of its other provisions.

Susquehanna Securities Company

As mentioned in the Underwriting Agreement, the Susquehanna Securities Company was to be the organization through which the Managers would carry out their plans to develop the McCall project. A form of charter was drafted of which the following are the major points of

interest in summary:

1. Purpose - To aid in the formation, promotion and organization of other corporations and in marketing, guaranteeing or disposing of securities. To purchase and deal in securities of other corporations. To carry on the business of contracting and construction in all of its branches. To build, construct, etc., plant and development for the utilization and distribution of water power and generation and transmission of electricity and electric power, but not to operate the same. To deal in real and personal property.

2. Capital Stock - 15 shares of $100. par value each.

3. Directors - Cary T. Hutchinson, Benjamin Barker and Howard Thayer Kingsbury.

4. Subscribers to Stock -

Cary T. Hutchinson	13 shares
Benjamin Barker	1 share
Howard T. Kingsbury	1 share
Total	15 shares

5. Directors shall have power without assent of stockholders to make By-Laws.

6. With the consent in writing of the holders of a majority in interest of the stock issued and outstanding, the Board of Directors shall have power and authority to sell, assign, transfer or otherwise dispose of all the property, rights, and franchises of the corporation.

(See Exhibit No. 6)

Lee, Higginson & Company Solicit Subscriptions for Dimock-Bertron-Barney Underwriting

Under date of March 10, 1905, Gardiner M. Lane of Lee, Higginson & Company addressed a letter to Robert Fleming of London, England, which contained the following points:

1. C. A. Coffin, President of General Electric Company, had brought the proposed development to the attention of Lee, Higginson & Company some time prior to the date of the letter.

2. Lee, Higginson & Company had given considerable time and attention to studying the proposed development and thought well of it, although a study of a water power project at a lower point on the river ten years previous had been considered by them as not worth taking up at that time.

3. Lee, Higginson & Company believed that there was no question whatever of there being a sufficient demand for the McCall power within a satisfactory distance at a profitable price.

4. The figures of the estimates were considered most conservative by Coffin and others. Coffin had given a good deal of attention to the figures.

5. Five per cent cumulative preferred stock in the amount of $4,000,000. was to go with the $8,000,000. of bonds to be underwritten and was to be profit to the Underwriters. The Syndicate Managers believed that they would be able to sell the bonds at the proper time without giving any of the preferred stock.

6. In addition to the issue of preferred stock, there would be an issue of common stock, all of which would be used in acquiring the rights from the promoters, who had been out a large sum of money for several years.

(See Exhibit No. 7)

Failure of Dimock-Bertron-Barney Underwriting

While Semple and Beyer were busy with the legal matters, important changes were taking place in the financial interests backing the enterprise. Bertron soon concluded that the proposition was more than his firm could complete. He thereupon suggested that the matter be placed before Harvey Fisk & Sons of New York City and that that firm be asked to head a new syndicate. (See Exhibits Nos. 1 and 8) This change probably occurred between March 10th and 25th, 1905.

Apparently about one half of the necessary subscriptions had been obtained under the Dimock-Bertron Barney underwriting plan. Of these subscriptions, approximately $2,500,000. were secured by Lee, Higginson & Company, the remainder being evidently obtained by Coffin and Bertron, Storrs & Griscom. If the financing could not be completed, the Hutchinson interests were confronted with the prospects of an indefinite delay in securing release of funds expended on the enterprise during the previous four years, as well as the possibility of the interests on

the lower river securing sufficient financing to construct their plant and gaining the desirable markets for power. They chose the course of securing immediate financing even though it entailed relinquishing control of the enterprise.

(See Exhibits Nos. 1 and 8)

VI - HARVEY FISK & SONS' UNDERWRITING FOR McCALL FERRY DEVELOPMENT

Harvey Fisk & Sons Obtain Control from Hutchinson

Harvey Fisk & Sons agreed to undertake the formation of the new syndicate and save the underwriting, but insisted as consideration for their efforts that a majority of the common stock of the proposed development corporation be issued to them or their nominees. Of the 50,000 shares of common stock to be issued under the Harvey Fisk & Sons' plan which is detailed hereinafter, the bankers were to receive 30,000 shares. Practically all of the remaining shares plus $750,000. in cash were to be given to Hutchinson to be utilized for the same purpose as under the Bertron plan. Hutchinson considered this to be a rather exorbitant demand, but because of the impending failure of Bertron's attempt to finance the project and, particularly, in view of the large amounts which he had already invested in the enterprise and the demands made upon him by those to whom he was indebted, it was finally agreed to accept the proposition as submitted by Fisk.

The Fisk firm took over and headed the financing and dominated the entire picture from the date they first decided to participate, and thereafter dictated the policies and all important decisions. They undertook to act in two capacities in the matter. As bankers, they underwrote the issue and arranged for the sale of approximately $8,000,000. of bonds. In addition to this, they undertook to manage the project while it was being built.

In Pliny Fisk's opinion, the value of the banking services of the Fisk firm was at least $250,000. This estimate was based upon Harvey

Fisk & Sons acting as syndicate managers and actually selling approximately one-half of the $8,000,000. bond issue. It was Fisk's opinion that the management services performed by his firm were of a value of not less than $150,000. The primary responsibility for supervising the construction of the project, the selection of personnel and the selection of experts, engineers and contractors was imposed upon Harvey Fisk & Sons. (See Exhibits Nos. 1 and 9)

Harvey Fisk & Sons Underwriting Agreement

The essential points of Harvey Fisk & Sons Underwriting Agreement dated March 25, 1905, were as follows:

1. The agreement was between the Subscribers severally and Harvey Fisk & Sons, Bankers, and the proceeds were to be used for the purpose of developing a power plant of 50,000 hp. capacity on the Susquehanna River near McCall s Ferry, Pennsylvania. The name of the company in this agreement was Susquehanna Power Company. (This name was finally changed to McCall Ferry Power Company on March 29th because of the possibility of confusion of the former name with a company of the same name organized in Maryland.)

2. Capitalization was as follows:

Common Stock	$ 5,000,000.
5% Cumulative Preferred Stock	5,000,000.
Thirty Year 5% First Mortgage Gold Bonds (with a sinking fund provision of $160,000. per annum)	10,000,000
Total	$ 20,000,000.

3. All of the bonds and stock, except $2,000,000. of bonds and $1,000,000. of preferred stock were to be issued for acquiring property and rights, for providing for the construction of the dam and other works, for the needed transmission and distribution system, for all profits in connection with the bringing together and turning in of the said properties, for financial assistance except as otherwise stated in the agreement, and for organization, corporate, legal and other proper expenses in connection with the acquisition of lands and interests and said construction.

4. Bankers agreed to take subscription contracts and secure loans thereon.

5. Price was $900. for $1,000. of bonds with $450. in par of preferred stock. Installments were not to exceed 20%; the first was due five days after allotment, and the others upon call of Bankers on twenty days' notice. Subscribers were to be credited with interest at 5% upon all installments.

6. Subscribers had option of deferring for three years all installments after the first, upon guaranteeing interest and commission on the loan to be secured by the Bankers, to the extent of the amount deferred.

7. All interest and commissions were to be paid as part of the cost of producing plant and equipment.

8. Bankers were to secure loans upon pledge of deferred Subscribers' purchase agreements, together with stocks and bonds to be purchased thereby up to the aggregate amount of the deferred payments. Cost of loans was not to exceed 6% interest on amounts actually loaned plus commission of one-half of 1% per annum on the amounts agreed to be loaned.

9. Bankers had option to repurchase from Subscribers all or any part of said bonds at 90% of par on 30 days' notice.

(See Exhibit No. 10)

Under the provisions of this proposed plan, the cash which could be raised was $7,200,000. The total cost of constructing the proposed works, as estimated by Wm. Barclay Parsons, was $5,041,000., which included a steam auxiliary plant but apparently omitted the cost of land, water power rights, interest during construction, other overhead items and promoters' fees. The estimate prepared by Parsons was supplemented in the preliminary Underwriting Agreement dated March 1, 1905, with other items to total $7,200,000., the amount to be raised by this issue and was generally considered to be quite conservative.

Changes Resulting from Fisk Control

The law firm of Simpson, Thacher and Bartlett, which was retained by Harvey Fisk & Sons for the McCall deal, replaced Coudert Brothers and took control of all legal matters relating to organization and property. However, John G. Johnson continued to advise on matters

of major importance. Harvey Fisk & Sons became Syndicate Managers in joint account with Bertron, Storrs & Griscom and the latter took part in some of the important negotiations. William M. Barnum represented the Fisk firm in the management of the McCall Ferry project. Charles A. Coffin became prominent in the affairs of the company which was soon formed for the development. Lee, Higginson & Company took a large portion of the new underwriting and through Gardiner M. Lane became actively interested in the company. Although Hutchinson and Dimock had lost control of the enterprise, they continued to be connected with the development.

Dimock-Bertron-Barney Subscribers Participate in Harvey Fisk & Sons' Underwriting

Lee, Higginson & Company had obtained approximately two and a half million dollars of subscriptions under the Dimock-Bertron-Barney Syndicate Agreement. Approximately an additional million and a half had been obtained by that syndicate elsewhere. Harvey Fisk & Sons were desirous of retaining the subscriptions already obtained under the March 1st agreement. Accordingly, they agreed to provide these with the 50% bonus of preferred stock instead of the 45% stated in the Fisk Underwriting Agreement and thus continued in force these earlier subscriptions. (See Exhibits Nos. 8 and 11)

Stock Distributed to Bankers

The issue of common stock under the March 25th plan was increased to 50,000 shares, of which the Bankers were to receive 30,000 and the Hutchinson interests 20,000. The Bankers' shares were divided as follows:

Harvey Fisk & Sons	17,537½ shares
Bertron, Storrs & Griscom	7,462½ shares
Lee, Higginson & Company	5,000 shares
Total	30,000 shares

The only preferred stock issued for services was 1,875 shares to Harvey Fisk & Sons. This preferred stock and the 17,537½ shares of common issued to the Fisk firm were compensation for both banking and management services, whereas the stock going to Bertron, Storrs & Griscom and Lee, Higginson & Company was for banking services only.

VII - HARVEY FISK & SONS ACQUIRE CONTROL OF LOWER SUSQUEHANNA

Pullen Negotiations with Harlow-McGaw

It seems that some time prior to February 22, 1905, Charles D. Pullen became interested in promoting the hydroelectric development of the Susquehanna River, for on that date Harlow-McGaw communicated to Pullen the terms under which they would agree to Pullen's plan of promotion. These terms provided among other things for Pullen's obtaining options on Hutchinson's project at McCall Ferry and the Welch or Susquehanna Power Company development at Shuresville. These negotiations by Pullen culminated in an agreement with Harlow-McGaw, executed on February 28, 1905, the chief provisions of which were as follows:

1. Provided Pullen was successful in his efforts to consolidate all properties and rights under one united ownership by July 1, 1905, Harlow-McGaw would sell all their properties along the Susquehanna River for $500,000. cash and $1,000,000. par value in stock of the controlled corporation. Property and rights which were to be transferred by Harlow-McGaw included the following:
   - (a) All outstanding stock of Susquehanna Canal and Power Company.
   - (b) All property and rights of old Tidewater Canal Company.
   - (c) All outstanding stock of Proprietors of Susquehanna Canal.
   - (d) 400 shares of stock of Conowingo Land Company.
   - (e) All lands, islands, rights, etc., controlled by Harlow-McGaw.
   - (f) Cooperation of Conowingo Bridge Company was to be secured by Harlow-McGaw.
   - (g) Harlow-McGaw were to prepare plans showing any other lands needed.
2. Pullen was to continue his efforts to effect united ownership.
3. Provision for extension past July 1, 1905, if material progress had been made.

(See Exhibit No. 12)

Pullen Negotiations with Welch Group

On March 21, 1905, Pullen executed an agreement with the stockholders of the Susquehanna Power Company, or Welch interests, in which he secured an option on their rights along the River. A summary of the major provisions of this option is set forth:

1. Pullen represented to Welch, et al, that he had arranged to acquire the following properties:

   (a) Property known as the McCall's Ferry Development, owned and controlled by Cary T. Hutchinson and others.

   (b) All the property owned and controlled by Geo. K. McGaw, James H. Harlow, George R. Harlow, M. H. Houseman, Conowingo Land Company, Susquehanna Canal Company, Tidewater Canal Company, and Old Maryland Canal Company, both in Maryland and Pennsylvania.

   (c) All the property owned and controlled by Susquehanna Power Company or Welch, et al.

2. Welch, et al, to sell all their stock in Susquehanna Power Company, totaling 3,612 shares, to Pullen at its par value, payable July 1, 1905, amounting to $361,200.

3. Provision was made for renewals of the option, if substantial progress had been made by July 1, 1905.

4. Stock of Welch, et al, was to be placed with Joel H. De Victor to be held in trust by him, and all payments of money for said stock were to be likewise made to De Victor in trust and were to be applied by him, first, in liquidation of certain outstanding obligations of Susquehanna Power Company, with the balance going to Welch, et al.

5. Welch, et al, to lend Pullen all maps and briefs of title.

6. Sale of stock by Welch, et al, conditioned upon Pullen's first purchasing the properties and rights of Harlow-McGaw.

7. If settlement was not made, the Trustee was to return the stock to Welch, et al.

8. Each depositor of stock with the Trustee was to be charged a pro rata portion of the obligations of Susquehanna Power Company.

(See Exhibit No. 12)

New Option on Harlow-McGaw Properties

The first option, obtained from Harlow-McGaw, was contingent on Pullen's ability to obtain control of the Hutchinson-Dimock and Susquehanna Power Company properties. The second one, obtained from Welch, et al, was contingent only on his ability to acquire the Harlow-McGaw holdings. In the third option, which he secured from Harlow-McGaw, the condition of obtaining control of the Hutchinson-Dimock properties was omitted. A memorandum, dated April 4th, relating to this new option contains the following language:

> "The understanding which we have of the movements of the Hutchinson development indicates that if no time is lost that we are in a good position to carry out our own development on the Peach Bottom, and in the raising of any funds for this purpose the Welch proposition will be easily taken care of."

(See Exhibit No. 13)

This agreement of April 5th between Pullen and Harlow-McGaw provided as follows:

1. The transfer of all the lands and rights mentioned in the first agreement (February 28, 1905) to the Susquehanna Canal and Power Company by Harlow, McGaw and Houseman.

2. Harlow, McGaw and Houseman were to receive 10,000 shares ($500,000. par value) of Canal and Power stock for these properties, etc.

3. Pullen was to exercise the second option (March 21, 1905) to obtain Susquehanna Power Company stock and then transfer it to the Susquehanna Canal and Power Company.

4. Pullen was to receive 10,000 shares ($500,000. par value) of Canal and Power stock in full payment therefor.

5. Susquehanna Canal and Power Company capital stock was to be increased to 30,000 shares ($1,500,000.).

6. This stock was to be issued and placed in trust until lands and rights were transferred to the Canal and Power Company.

(See Exhibit No. 12)

This new agreement in effect cancelled the first agreement, for it excluded the Hutchinson holdings. It provided for the transfer of the Harlow-McGaw holdings to a corporation (Susquehanna Canal and Power) designated by Pullen and thus paved the way to exercise his second option to obtain the Susquehanna Power Company stock for the Canal and Power Company. This placed Pullen in potential control of all river holdings except that of the McCall area.

Harlow-McGaw Propose Consolidation with McCall Company

Although Pullen had by this time given up the idea of including the McCall development in his plans, Houseman of the Harlow-McGaw group made a further attempt to bring the entire River area under one management by suggesting a plan to Harvey Fisk & Sons on April 18, 1905, for consolidating all interests. He gave a general description of the plans of the Susquehanna Canal and Power Company (the company to be used in the Pullen and Harlow-McGaw agreement of April 5th) covering its proposed canal from tidewater to Wrightsville-Columbia with a large storage pool, docks and wharves at Columbia where connections with the Pennsylvania Railroad and Reading Railroad were to be made. He then referred to the general development of the 200 feet of fall in the river for hydroelectric purposes and mentioned the Harlow plan for five developments on this section of the river. He mentioned the power markets that his associates were negotiating with and other potential markets. He finished his letter, suggesting the consolidation of interests in the following language:

> "I am writing this letter somewhat in detail to your house, for the reason that your present interests on the river are apparently in conflict with our plans, which were being worked out on the river long before Dr. Hutchinson had acquired any property rights there. We feel sure that the merits of the enterprise are worthy of very careful consideration and investigation

by your house, with a view to harmonizing and adjusting the conflicting plans for the development of the entire water power of the River.

"The writer, therefore, respectfully asks that someone connected with your house read over carefully these papers, and as he expects to be in New York the latter part of this week will take the liberty of calling upon you, and if by that time you have determined that this matter is not of sufficient interest to warrant a conference he would be pleased to have you return the papers to him. Otherwise, if you desire to join with him and his clients in an effort to adjust this unnecessary complication, he desires to offer his services to that end."

(See Exhibit No. 14)

Harvey Fisk & Sons Purchase
Harlow-McGaw Interests

The letter written by Houseman to Harvey Fisk & Sons indicated that the Harlow-McGaw interests were deeply concerned about the progress of the McCall development. It was generally considered that only one development would be economically possible along the river at the time and there was no question whatever but that the first development on the river would gain a great advantage. It will be recalled that the agreement of April 14, 1903, had been extended to May 15, 1905. It appears that after the original signing, the Harlow-McGaw interests were not anxious to put this plan into effect. The McCall group, however, did not desire to pool their project with anyone else, and were insisting on carrying out that agreement.

On April 27, 1905, Harlow-McGaw disposed of all their properties, rights and other assets composing their interest on the Susquehanna to Harvey Fisk & Sons. This was done through the medium of two separate agreements. The first was between Harvey Fisk & Sons and Harlow-McGaw and was made subject to Pullen's prior options from Harlow-McGaw and, therefore, could be carried out only if Harvey Fisk & Sons purchased Pullen's options or waited for them to expire.

Terms of Harlow-McGaw Sale

Under the terms of this agreement, Harlow-McGaw agreed to sell to Harvey Fisk & Sons, subject to the Pullen option:

1. All lands, easements and water rights along the river owned or controlled by Harlow-McGaw.
2. C. R. McConkey's interest in contracts for purchase of the Burkin's tract and the John Bair Estate.
3. All the rights and property of the old Tidewater Canal Company.
4. All the outstanding stocks of:
   (a) Proprietors of the Susquehanna Canal
   (b) Susquehanna Canal and Power Company
   (c) Susquehanna Falls Power Company
   (d) Susquehanna River Power Company
   (e) Susquehanna Storage Lake & Power Company
5. Two-thirds of the issued capital stock of the Conowingo Land Company.
6. An agreement executed by the Susquehanna Canal and Power Company, with the consent of every stockholder, whereby that company would consent to the construction and operation of one or more dams and water power plants at any point or points on the Susquehanna and the resultant flooding of the canal, without any compensation to the Canal and Power Company.
7. A similar agreement executed by the Tidewater and Susquehanna River Railroad regarding its proposed right of way.
8. An option to purchase at $20. per share all capital stock of the Conowingo Bridge Company, owned or controlled by Harlow-McGaw.
9. All property to be unencumbered and all stocks to be accompanied by resignations of all directors.

In return Harvey Fisk & Sons agreed to pay Harlow-McGaw:

1. $200,000. in cash.
2. $250,000. par value of McCall Ferry Power Company Bonds.
3. $100,000. par value of McCall Ferry Power Common Stock.

(See Exhibit No. 15)

Delivery of the deeds and stocks and payment therefor were to be made June 1, 1905, at the office of Simpson, Thacher and Bartlett.

The stocks of five other river companies controlled by Harlow-McGaw were not included in this Harvey Fisk agreement. However, by the second agreement of April 27th, McGaw was to sell to Bertron all the stock owned or controlled by the former of his associates in the following:

1. All the outstanding stock of Susquehanna Construction Company of Baltimore City.
2. All the outstanding stock of Sowego Water and Power Company except that owned by Susquehanna Electric Power Company.
3. All the outstanding stock of Lower Chanceford Water and Power Company.
4. An unstated number of shares of Susquehanna Electric Power Company.
5. An unstated number of shares of the Martic Water & Power Company.

(See Exhibit No. 15)

Delivery was to be made at Simpson, Thacher and Bartlett's offices on June 1, 1905.

A letter from P. G. Bartlett to McGaw, Harlow and Houseman, dated May 1, 1905, sets forth what was purported to be an oral agreement made at the time of execution of the Harvey Fisk purchase of the Harlow-McGaw properties. It states: "Said contract was so delivered upon the express understanding that a certain other contract of the same date, made by George K. McGaw - and S. R. Bertron - was a part of the same transaction and that the obligation of said Harvey Fisk & Sons under said first mentioned contract are conditioned upon the performance of both the aforesaid contracts." It further recited that the two contracts were intended to include a complete transfer of all Harlow-McGaw interests and rights along the river. (See Exhibit No. 15) There was a mortgage of $25,000. on the property of the Conowingo Land Company not owned by Harlow-McGaw which was obtained from R. F. Emory on November 2, 1906.

Pullen Rights Purchased

In order to remove the possibility of Pullen's exercising his options, they were purchased from him by Harvey Fisk & Sons through Bertron, Storrs & Griscom on April 29, 1905. The consideration was $10,000. cash and 150 shares of McCall Ferry Power Company common stock. (See Exhibit No. 12) On May 15th, Harvey Fisk & Sons reimbursed Bertron,

Storrs & Griscom for their $10,000. advance with $22.22 interest, charging the total amount against funds received from the bond subscribers.

With the acquisition of the Harlow-McGaw property and the Pullen option, the possibility of enforcing the agreement of April 14, 1903, had been eliminated.

VIII - COMPLETION OF ORGANIZATION

Incorporation of McCall Ferry Power Company

An Agreement of Merger and Consolidation between The Hillside Water and Power Company and Susquehanna Water and Power Company to form the McCall Ferry Power Company (sometimes hereinafter referred to as McCall Company) was executed under the date of April 1, 1905. The same group of persons which had formed the consolidating companies comprised the incorporators of the McCall Company. The purpose of the McCall Company was that of the two predecessor companies combined, namely:

> "for the purpose of the storage and transportation of water and water power for commercial and manufacturing purposes, in the Townships of Lower Chanceford, York County and Martic, Lancaster County, Pennsylvania, and the supply of the same to the public and such persons, partnerships and corporations residing therein as may desire the same; and in order that the water and water power may be supplied to the public to the best advantage, in furtherance of its corporate purposes, the development by the use of the same of electric current, and power to the public, individuals, firms and corporations, at any place or places at such prices as may be agreed upon."

The capital stock of the McCall Company was to consist of ten shares of $100. par value each. The stock of the merging companies was to be exchanged on a share for share basis for stock in the new or McCall Company.

Directors and Stockholders

W. F. Beyer	2 Shares
Geo. B. Willson	2 "
Jacob Hill Byrne	2 "
W. Frank Jack	2 "
Walter M. Franklin	2 "

Officers

President	- W. F. Beyer
Secretary and Treasurer	- Geo. B. Willson

Although this Agreement of Merger and Consolidation was dated April 1, 1905, it was not filed by Beyer until April 6th and was recorded in the office of the Secretary of the Commonwealth on April 11th. Letters Patent were issued on April 14th.

On May 22, 1905, the first meeting of the stockholders of the McCall Company was held. The only business of this meeting consisted of the election of Directors and a Secretary-Treasurer. On the same date the Directors held their first meeting. They elected Wm. F. Beyer, President, established an office at 33 N. Duke Street, Lancaster, Pennsylvania, and set dates for regular Board Meetings.

Eminent Domain - Act of April 13, 1905

On April 13, 1905, a new Pennsylvania law was passed dealing with the subject of eminent domain and provided:

> "That no water company hereafter incorporated under any law, shall have power or exercise the right of eminent domain as respects the appropriation of the streams, rivers or waters of this Commonwealth or any of them, nor the land covered thereby."

When in December of 1905 the McCall Company seriously began to consider condemnation of the Robert F. Fry tract because of high price, this law became highly important.

The way in which it became important was by reason of the date of the law. The questions arose as to what was the extent of the law and what effect the law would have on McCall Company by reason of its date of passage. Johnson was of the opinion that water companies no longer held rights of eminent domain after the passage of the Act. On the point of whether the law would say that the McCall Company was formed on April 1st by reason of being a merger or on April 14th, date of Letters Patent, it appears that there was serious doubt about the question, but

Johnson believed that the Court would hold McCall Ferry Power Company was formed on April 14th.

There was some difference of opinion on whether the change in the law applied only to water and lands covered by water, thereby still permitting them the rights of eminent domain so far as property for buildings, dams and water works were concerned.

Classes of Bond Subscriptions

The immediate requirements of the McCall Company apparently had been determined by the end of April so that under the date of May 3, 1905, notices were sent to Bond Subscribers informing them of their respective allotments. There were different forms for the deferred and non-deferred subscribers.

Those subscribers who elected to defer payment were, like the non-dererred subscribers, required to make a first payment of twenty per cent based on the net amount of the price of the bonds at ninety. All of the first 20 per cent payments were evidently made promptly, for on May 15th Harvey Fisk & Sons recorded the amount of $1,440,000. to the credit of the proposed Susquehanna Contracting Company. Calls were subsequently made periodically upon the non-deferred subscribers in amounts of ten per cent each. Interest at the rate of five per cent per annum was to be credited upon the amounts paid until the delivery of the bonds and stocks, after final payment had been made. The deferred subscribers were granted until November 1, 1908, to make their final payment of eighty per cent.

Harvey Fisk & Sons' Loan Arrangement with Knickerbocker Trust Company

In accordance with the provisions of the Bond and Stock Purchase Agreement, Harvey Fisk & Sons, on May 15th, made arrangements for loans

from the Knickerbocker Trust Company totaling $4,424,400., the amount of the unpaid deferred subscriptions. The Trust Company was to make installment advances as called for from time to time beginning June 1, 1905. The terms of this arrangement, as contracted for between Harvey Fisk & Sons and Knickerbocker Trust Company, were as follows:

1. Loans to bear six (6) per cent interest per annum.
2. $6,145,000. of bonds and purchase agreements were to be pledged as collateral for $4,424,400. loan.

   The basis of this ratio is better explained in the following schedule:

Total Deferred Subscriptions to Bonds	$ 6,145,000.
Less 10% Discount	614,500.
Net Amount at 90 due from Subscribers	$ 5,530,500.
Less 20% First Payment upon Call	1,106,100.
Balance due from Subscribers, the Amount of Loan by Knickerbocker Trust Company	$ 4,424,400.

3. Loans were to mature at the end of the year in which made, but could be extended for one or two annual renewals to the end of the third year.
4. In addition to interest, the Trust Company was to receive a commission of one-half of one per cent on the full amount agreed to be loaned, viz: $4,424,400. for each year the agreement was in force.
5. Loans to be made to the Susquehanna Contracting Company, then in the formative stage, and through which securities of the McCall Company were to be issued.

(See Exhibit No. 16)

Incorporation of Susquehanna Contracting Company

The necessary ground work for the execution of the major agreements of the McCall Company was completed by the middle of June 1905. Susquehanna Contracting Company was incorporated June 12th. It was a New York Company formed for the following purposes:

1. To acquire or construct hydroelectric developments along the Susquehanna River.
2. To do a general contracting business.

3. To purchase, lease, etc., rights and interests in respect to real estate and water.

4. To acquire and sell machinery, supplies, merchandise, etc.

5. To acquire, use and dispose of rights in respect to construction, manufacture, etc.

6. To acquire, pledge and sell securities of any corporation and to issue in exchange therefor its own securities.

The capital stock consisted of five shares with a par value of $100. each.

Incorporators, Directors and Stockholders

A. P. Bartlett	3 shares
James E. Hopkins	1 share
Ross A. Mackey	1 share

Officers

A. P. Bartlett	President
Ross A. Mackey	Secretary-Treasurer

Harvey Fisk & Sons Assign Loan Arrangement to Contracting Company

On June 14th, Harvey Fisk & Sons executed an agreement with the Contracting Company which, in effect, assigned their loan arrangement of May 15th with the Knickerbocker Trust Company. In addition to the assignment, the agreement contained the following provisions:

1. Harvey Fisk & Sons assigned to Contracting Company the bond and stock purchase agreements and all their rights thereunder, except the right of Harvey Fisk & Sons to repurchase the bonds at ninety.

2. Contracting Company agreed to discharge all obligations of Harvey Fisk & Sons under the bond and stock purchase agreements and appointed Harvey Fisk & Sons its agent for the performance of all obligations assumed by it. It agreed to deliver to Harvey Fisk & Sons all bonds and stock necessary for delivery to Subscribers under the purchase agreements, authorized Harvey Fisk & Sons to call for and receive further installments of Purchase price and to deliver bonds and stock to Subscribers entitled thereto.

3. The powers vested by this instrument in Harvey Fisk & Sons were stated as being irrevocable because of being coupled with

the interest of Harvey Fisk & Sons in the following:

A. The option to repurchase the bonds.
B. The contract for the sale of the bonds.
C. The loan arrangement.

4. It was understood that the bond and stock purchase agreements of Subscribers who had elected to defer payment of installments, after the initial payment would be assigned by Harvey Fisk & Sons to Knickerbocker Trust Company as security for the loans to be obtained under the loan arrangement.

(See Exhibit No. 16)

Loan Agreement between Contracting Company and Knickerbocker Trust Company

The loan arrangement was consummated by an agreement executed on November 1, 1905, between Susquehanna Contracting Company and Knickerbocker Trust Company. The maximum loanable amount was increased approximately $60,000. over the amount stated in the Harvey Fisk & Sons' loan arrangement. This agreement contained the following provisions:

1. For the immediate payment by the Contracting Company to the Trust Company of $22,410., being the first annual payment of one-half of one per cent commission on the maximum amount of the loan. A like payment was required for each year the loan continued.

2. The Contracting Company could borrow on five days' written notice up to $4,482,000. at any time until November 1, 1908.

3. Interest was to be 6% per annum.

4. The Contracting Company was to give its note for each loan, and deposit with the Trust Company a bond and stock purchase agreement (on which 20% of the purchase price had been paid) whose unpaid 80% would be the amount of the loan. In addition, the McCall Company bonds and stock covered by the purchase agreement were to be deposited with the Trust Company.

(See Exhibit No. 17)

Agreement with Susquehanna Contracting Company for Financing McCall Ferry Power Company

On June 13th, the day following the incorporation of the Contracting Company, an agreement was executed, providing for the transfer of certain properties and a sum of money by the Contracting Company in exchange for sub-

stantially all of the preferred and common stocks to be issued and about $8,000,000. of bonds of the McCall Company. The provisions of the agreement follow:

Susquehanna Contracting Company agreed:

1. To secure the transfer to McCall Company of all the lands, water power rights, or other interests in land, along the Susquehanna River belonging to the following persons:

   Cary T. Hutchinson
   William F. Beyer
   George B. Willson
   York Furnace Power Company (partnership)
   George K. McGaw
   James H. Harlow
   George R. Harlow
   Chas. R. McConkey - rights to certain properties
   Wm. H. Bayless - rights to certain properties

   Also all the canal rights, property and franchises of the old Tidewater Canal Company, (the Maryland Section of the Susquehanna Canal).

2. To secure transfer of the shares of stock of the following companies:

Proprietors of the Susquehanna Canal	-All outstanding stock	(75 sh.)
Susquehanna Canal and Power Co.	- " " "	(2,478 sh.)
Susquehanna Falls Power Company	- " " "	(6 sh.)
Susquehanna River Power Company	- " " "	(9 sh.)
Susquehanna Storage Lake and Power Company	- " " "	(12 sh.)
Conowingo Land Company	-Two-thirds " "	(400 sh.)

   All other stocks in corporations interested in the development of the river that Contracting Company might be able to obtain under its arrangements then existing.

3. To obtain an option for McCall Company to purchase a majority of stock of the Conowingo Bridge Company at $20. per share. Also to obtain an option to all the rights assigned by Chas. D. Pullen on April 29, 1905. (McCall Company never exercised these two options.)

4. To obtain flowage releases from the following companies:

   Susquehanna Canal and Power Company
   Tidewater and Susquehanna River Railroad Company
   Conowingo Bridge Company

5. To pay to McCall Company $6,400,000.

McCall Ferry Power Company agreed:

1. To issue to Contracting Company $8,483,000. principal amount of first mortgage thirty year 5% gold bonds of a total authorized issue of $10,000,000.

2. To issue to Contracting Company $4,116,500. in preferred stock and $4,999,000. in common stock.

(See Exhibit No. 18)

The bonds and stocks were to be transferred to Contracting Company at the time McCall Company received the deeds, transfers and other instruments vesting in it the property, rights, etc., obtained for it by the Contracting Company. The $6,400,000. was to be paid in cash installments to McCall Company over a period of three years as and when called for. It was understood that the Contracting Company might obtain part of the necessary money by pledging the bonds and stock. Interest coupons were to be paid as they matured, but the Contracting Company was to refund to McCall Company the excess of bond interest received over interest and commissions paid by the Contracting Company in obtaining loans. This arrangement was to cover the period from the date of the bonds until full payment of $6,400,000. had been made by the Contracting Company to McCall Company.

Increase of McCall Company Indebtedness and Capital Stock

On the same day but prior to the execution of the preceding agreement, a Directors' Meeting of McCall Company had been held at which this contract was presented for approval. The officers were authorized to execute the agreement, pending the authorization by the Stockholders of an increase in the Company's indebtedness and capital stock to cover the contract requirements. The Stockholders, at a meeting held later in the day, gave their approval to the following increases in bonds and stocks:

Security	From	To
First Mortgage Five Per Cent Gold Bonds due June 15, 1935	None	$10,000,000.
Preferred Stock - $100. par value (5% Cumulative after June 15, 1909)	None	$ 5,000,000.
Common Stock - $100. par value	$1,000.	$ 5,000,000.

The Directors passed another resolution stating that the Contracting Company should be entitled to any profits that might result from this agreement. They also confirmed the contract at a later meeting held on the same day following the Stockholders' Meeting in which the increases in bonds and stocks were approved. The Stockholders also adopted By-Laws at their meeting held on this date.

Acquisition of Hutchinson Interests by Susquehanna Contracting Company

On the next day, June 14th, the Contracting Company made an arrangement for the purchase of all the property, rights and interests of Cary T. Hutchinson. A summary of this agreement follows:

1. Hutchinson was to cause to be conveyed to McCall Company all lands, water power rights and other interests in lands along the Susquehanna River between Columbia, Pennsylvania, and Havre de Grace, Maryland, belonging to any of the following:

   Cary T. Hutchinson
   William F. Beyer
   George B. Willson
   York Furnace Power Company (partnership)

2. Contracting Company was to deliver to Hutchinson:

Preferred Stock (Par Value)	$ 400,000.
Common Stock (Par Value)	4,884,000.
Cash	750,000.
Total	$ 6,034,000.

(See Exhibit No. 19)

The foregoing agreement with Hutchinson shows a very substantial consideration passing to him. From Hutchinson's affidavit and other

records, it can be shown that he was only the temporary recipient and not the beneficiary of much of this consideration. It will be shown later that the $400,000. of preferred stock went to the bankers, either for themselves or for use in adjusting the bonus stock of those subscriptions which had been obtained under the March 1st agreement calling for 50% bonus, instead of 25%. Regarding the common stock, Hutchinson's affidavit states that he and his associates received for their use 18,840 shares and that Harvey Fisk & Sons received 30,000 shares for the banking interests.

On June 20th, Hutchinson executed an agreement with the Contracting Company which provided for the perfecting of titles of the properties conveyed. (See Exhibit No. 19) These properties and rights passed to McCall Company under the agreement between that company and the Contracting Company, dated June 13, 1905.

Acquisition of Harlow-McGaw Interests by McCall Company

Harvey Fisk & Sons had acquired the Harlow-McGaw properties and rights on April 27th, and on June 14th transferred them to the Susquehanna Contracting Company which assumed the obligation of payment to Harlow-McGaw. (See Exhibit No. 15) A confirmatory agreement between the Contracting Company and Harlow-McGaw was signed June 15th. (See Exhibit No. 15) These properties and rights passed to McCall Company under the agreement between that company and the Contracting Company dated June 13, 1905. The Pullen option was transferred by Bertron, Storrs & Griscom to the Contracting Company on June 16th. (See Exhibit No. 12) As this option expired July 1, 1905, it was not assigned to McCall Company.

Mortgage with Knickerbocker Trust Company as Trustee

The McCall Company, having promised to deliver bonds to the

Susquehanna Contracting Company under the terms of the June 13th agreement, created a mortgage dated June 15, 1905, with the Knickerbocker Trust Company as Trustee, on all of its property then held or to be acquired. It provided for an issue of $10,000,000. of First Mortgage Five Per Cent Gold Bonds with a provision for an immediate issue of $8,483,000. upon the property to be acquired from the Contracting Company by the terms of the June 13th agreement. The remaining $1,517,000. of bonds could be issued if the proceeds were to be used for acquiring additional property or making new construction, improvements or additions to the mortgaged property. The mortgage was to run until June 15, 1935, when the bonds were to be redeemed.

Permanent Directors and Officers Elected

The Directors, after approving an increase in the number of members on the Board from five to fifteen on July 31, 1905, proceeded at a meeting held August 8th to fill all existing vacancies with the resulting Board composed of the following members:

Wm. M. Barnum	H. F. Dimock
A. C. Bedford	Pliny Fisk
S. R. Bertron	Rodman E. Griscom
E. J. Berwin	J. J. Hope
Wm. F. Beyer	Cary T. Hutchinson
W. Marriott Canby	Gardiner M. Lane
C. A. Coffin	Wm. Barclay Parsons
Geo. B. Willson	

On the same date, this new Board held a meeting at which the following were elected to the Executive Committee:

H. F. Dimock	Gardiner M. Lane
C. A. Coffin	Wm. M. Barnum
Wm. Barclay Parsons	

The following Officers were elected about this time:

President	- Henry F. Dimock
Vice-President	- J. A. Keppelmen
Secretary and Treasurer	- Wm. H. Barnum
Chief Engineer	- Cary T. Hutchinson

Voting Trust

A voting trust was created under the following provisions of a Stock Deposit Agreement, dated January 20, 1906:

1. Harvey Fisk & Sons were to be depositaries of the McCall Company stock.
2. To be effective until November 1, 1908, unless commercial operation began sooner.
3. Might be terminated by depositors of two-thirds of stock.
4. Harvey Fisk & Sons were to vote stock as directed by Voting Committee.
5. Voting Committee was to consist of:

   Henry F. Dimock
   William M. Barnum
   S. Reading Bertron

6. Vote of two required for acts to be effective.
7. In case of death of any member, the remaining two were to choose his successor.
8. Harvey Fisk & Sons and Voting Committee were to act without compensation.
9. Both Harvey Fisk & Sons and members of the Voting Committee might also be depositors.

(See Exhibit No. 20)

IX - VALUE OF McCALL COMPANY SECURITIES

Securities Issued for Property or Services

The increase in authorized securities by McCall Company placed it in a position to carry out the agreement of June 13, 1905, with the Contracting Company whereby McCall Company was to acquire substantially all the property and cash necessary to proceed with its hydroelectric development. Hereinbefore have been recorded the major purchases of property, services, etc., by the Susquehanna Contracting Company for the McCall Ferry Power Company. The McCall Company, a predecessor of Pennsylvania Water & Power Company, was the first company to devote these properties to public service and therefore it is necessary to determine cost of all acquisitions by McCall Company. Inasmuch as payments were made in several instances in cash and securities, it has been necessary to ascertain the cash value of the securities issued for this purpose in order to comply with the provision of Instruction 3-D of Electric Plant Accounts of the Federal Power Commission, which states:

> "When the consideration given for property is other than cash, the value of such consideration shall be determined on a cash basis."

The McCall Ferry Power Company went into receivership before any of its securities reached the open market and therefore it has been impossible to determine their values by means of market quotations. The only information pertinent to these values which has been located among old records is summarized herewith.

Value of McCall Bonds

1. The McCall Company's bonds were sold to the underwriters at 90 with a bonus of 45 or 50% in preferred stock. Harvey Fisk & Sons had the right to repurchase the bonds at 90 unaccompanied by any bonus stock. Pliny Fisk has stated that

his firm considered this option an obligation to relieve the underwriters from making long time investment. (See Exhibits Nos. 8, 9, 10 and 16)

2. James H. Harlow, in sworn testimony in connection with condemnation proceedings of the Susquehanna Power Company in 1906-07, stated that while he did not think he could get 90 for the bonds alone, he would not be willing to sell them for less than par. He had received no preferred stock with his bonds and when testifying was a witness for those whose interest lay in placing a low value on McCall securities. (See Exhibit No. 21)

3. Bertron, Storrs & Griscom recorded these bonds at 90 in November, 1908, which was the only record of value carried on their books. (See Exhibit No. 22)

Since most of the above sources of information are in agreement as to the $900. value of a $1000. par bond this amount has been determined to be the cash value in cases where bonds were issued as part consideration in the acquisition of property.

Value of McCall Preferred Stock

1. Bertron, Storrs & Griscom's records show the following book values for 1,875 shares of preferred stock:

(a) November 21, 1906 - at $10. per share
(b) December 31, 1906 - from $10. to $40.
(c) April 1, 1907 - held at $50.
(d) December 31, 1907 - held at $25.
(e) December 28, 1908 - held at no value

(See Exhibit No. 22)

Confirming a previously expressed verbal opinion, J. O. Adams, Secretary-Treasurer of Bertron, Griscom & Company stated on January 8, 1940:

"Due to the fact that I was not in the employ of Bertron, Storrs & Griscom at the time of the McCall Ferry Power Company transaction, it is impossible for me to state which, if any, of the recorded amounts represented the appraisal by the firm as the actual value of the stocks when received. It would appear to me that the partners placed various arbitrary amounts in the McCall Ferry Power Company stock accounts, as well as in other stock accounts, probably in accordance with understandings or agreements between them."

(See Exhibit No. 23)

Rodman E. Griscom, who has been head of the firm since Bertron's death, was asked to make a statement which would clarify these entries but replied,

"So many years have elapsed that I have no recollection that would justify me in making and swearing to any statement such as you ask."

(See Exhibit No. 23)

From the records it is apparent that Griscom was in the Philadelphia branch during the McCall Ferry period and that Bertron handled most of the firm's matters in connection with the project.

Because of the variance and unreliability of the foregoing figures, Pliny Fisk, who was senior partner of Harvey Fisk & Sons in 1905, was consulted in the matter. He expressed the opinion that the preferred stock had a value of approximately $50. per share in 1905, when his firm received 1,875 shares for services. (See Exhibit No. 9) As the Fisk firm presents the only case where preferred stock was used as payment for services or property, this value has been used in computing original cost.

Value of McCall Common Stock

1. Bertron, Storrs & Griscom's records show the following book values for the common stock:

   (a) November 21, 1906 - 12,462½ at $1. per share
   (b) December 11, 1906 - 5,000 shares charged out to Lee, Higginson & Company at $1. per share and increase of remaining 7,462½ shares from $1. to $2. per share
   (c) December 31, 1906 - 7,462½ shares from $2. to $10.
   (d) August 9,1907 - Purchase of 150 shares from Pullen at $5. per share
   (e) December 31, 1907 - Increase 150 shares from $5. to $10. per share.
   (f) December 28, 1908 - No value

   (See Exhibit No. 22).

2. James H. Harlow, in his 1906-07 testimony, placed a value of $10. per share on the common stock. (See Exhibit No. 21)

3. The prospectus attached to the March 1st underwriting agreement showed estimated earnings based on Parsons' report of January 13, 1905, equal to 7% on the proposed issue of $4,000,000. par of common stock. (See Exhibit No. 5)

The comments of Griscom and Adams regarding the values shown by Bertron, Storrs & Griscom records have been given under the heading of "Value of McCall Preferred Stock." Harlow's testimony was given as a witness for those whose interest lay in placing a low value on McCall securities. An estimated return of 7% on the par value of common stock does not fix any specific value on that stock. Because of the variance and unreliability of the foregoing figures, statements as to stock values have, therefore, been obtained from persons closely associated with the development of McCall Company, who accepted this stock as compensation for property or services. Before presenting the results of these statements, it seems desirable to give a resume' of the distribution of McCall stocks so that a clearer understanding may be had as to the things of value received for them.

Distribution of McCall Preferred Stock

Under the terms of the agreement between McCall Company and the Contracting Company dated June 13, 1905, McCall Company issued 41,165 shares of preferred stock to the Contracting Company. Of this amount, 4,000 shares were assigned to Hutchinson under his agreement with the Contracting Company dated June 14, 1905. Of the remaining amount, 36,337½ shares were given as the 45% bonus with the bonds and 100 shares were assigned to H. C. Frick for an unknown reason. The balance, 727½ shares, was held by the Susquehanna Contracting Company.

It has been previously mentioned that arrangements had been made to retain the subscribers to the March 1st underwriting by giving

them 5% additional preferred stock bonus, making their bonus 50% as called for under that plan of underwriting. Of the 4,000 shares of preferred stock mentioned in the Hutchinson-Contracting Company agreement, 2,125 were used to provide this additional bonus and the remaining 1,875 shares went to Harvey Fisk & Sons as part of their compensation for banker and management services.

Distribution of McCall Common Stock

At the time of merger of The Hillside and Susquehanna Water and Power Companies to form McCall Ferry Power Company 10 shares of McCall stock were issued in exchange for the stock of the merging companies. Subsequently 4 of these were held by Hutchinson and 6 by Harvey Fisk & Sons under the arrangements whereby the Fisk firm purchased control from Hutchinson. Under the terms of the McCall Company-Contracting Company agreement of June 13th, 49,990 shares of McCall common stock were issued to the Contracting Company. This accounts for the original issuance of the total 50,000 shares.

The Contracting Company used 1,000 shares in carrying out its agreement with Harlow-McCaw and 150 shares for its agreement with Pullen. The balance, 48,840 shares, was required in connection with the agreement with Hutchinson. Of this amount 30,000 shares actually went to the bankers, leaving Hutchinson 18,840 for himself and for settlement of his obligations.

The 30,000 shares going to the bankers were divided as follows:

Harvey Fisk & Sons	17,537½ shares
Bertron, Storrs & Griscom	7,462½ shares
Lee, Higginson & Company	5,000 shares
Total	30,000 shares

The complete distribution of Hutchinson's 48,840 shares is not known, due to the fact that it was made in the form of Voting Trust certificates and no record of the issuance of these certificates could be found.

Summary of Distribution of McCall Stock

Name	Shares of Preferred Stock	Shares of Common Stock
Original Incorporators (10 sh. common)		
(a) Hutchinson		4
(b) Harvey Fisk & Sons		6
Harlow-McGaw		1,000
Pullen		150
Hutchinson Contract		
(4,000 sh. preferred)		
(48,840 sh. common)		
(a) Hutchinson et al		18,840
(b) Harvey Fisk & Sons	1,875	17,537½
(c) Bertron, Storrs & Griscom		7,462½
(d) Lee, Higginson & Company		5,000
(e) Bond Subscribers (5% bonus)	2,125	
Deferred Bond Subscribers	27,810	
Non-deferred Bond Subscribers	8,527½	
H. C. Frick (additional)	100	
Held by Contracting Company	727½	
Unissued	8,835	
Total	50,000	50,000

Value of Services Rendered for Stock

As previously mentioned, in order to determine the proper value to assign to the McCall common stock, statements of recipients have been obtained.

1. Hutchinson has stated that at the time the common stock was issued he and others, who were fully informed concerning the enterprise, were of the opinion that the stock was worth from $20. to $30. per share. (See Exhibit No. 1)

2. Fisk has stated that his firm's banking services had a value of not less than $250,000. and the management services at least an additional $150,000. For these services his firm received 1,875 shares of preferred and 17,537½ of common stock.

His value for the common stock was arrived at by the following process:

Banking Services	$250,000.
Management Services	150,000.
Minimum Total	$400,000.
Less 1,875 preferred shares at $50.	93,750.
Minimum Value of 17,537½ shares of common	$306,250.

Or approximately $18. per share.

(See Exhibit No. 9)

3. George C. Lee has stated that an examination of his firm's records showed that 5,000 shares was the total compensation received for Lee, Higginson & Company's participation in the underwriting. He has also stated that he had carefully reviewed the results of his firm's underwritings between 1900 and 1908 and found that on participations comparable to the McCall Ferry proposition, his firm customarily earned 5 points or more in cash on the par value of bonds handled.

   Furthermore, his firm would not have participated in the McCall Ferry proposition unless they believed their stock compensation had a total value of at least $125,000. at the time they agreed to accept the stock in lieu of a cash commission. This would make the stock worth $25. per share. It was his opinion that a division of the firm's assets, as in the case of a change in members, immediately following the acceptance of this stock as compensation, would have been based on a value of not less than $25. per share for this stock.

   (See Exhibits Nos. 8 and 11)

4. Coudert Brothers received from Hutchinson $20,000. in cash and 1,000 shares of common stock for legal services which James E. Hopkins, a member of that firm, has valued at not less than $50,000. This is equivalent to placing a value of at least $30. per share on the common stock. (See Exhibit No. 24)

Instruction 3-D of Electric Plant Accounts provides for the determination on a cash basis of the value of the consideration given when other than cash instead of the determination of the cash value of the things received. Inasmuch as the foregoing different values for the stock were arrived at by means of a valuation of services rendered, it was necessary to establish one value for the stock in order to determine

the cost of these services to the company. Based upon all the foregoing information, the common stock has been valued on a cash basis at $25. per share.

Original Cost of Property and Services Acquired with McCall Securities

The original cost to McCall Company on a cash basis of property and services acquired in whole or in part with securities is computed herewith, as that company first devoted them to public service.

1. Hutchinson properties and rights:

Cash	$ 750,000.00
18,840 shares common at $25.	471,000.00
Total	$1,221,000.00

2. Harlow-McGaw properties and rights:

Cash (per contract)	$ 200,000.00
Cash (interest)	432.00
250 bonds at $900.	225,000.00
1000 shares common at $25.	25,000.00
Total	$ 450,432.00

3. Pullen option:

Cash (per option)	$ 10,000.00
Cash (interest)	22.22
150 shares common at $25.	3,750.00
Total	$ 13,772.22

4. Harvey Fisk & Sons services:

1,875 shares preferred at $50.	$ 93,750.00
17,537½ common at $25.	438,437.50
Total	$ 532,187.50

On the basis of Pliny Fisk's estimate, 3/8 of the total was for management services and 5/8 for banking services.

Management services	$ 199,570.31
Banking services	332,617.19
Total	$ 532,187.50

5. Bertron, Storrs & Griscom's services:

7,462½ shares common at $25. $ 186,562.50.

6. Lee, Higginson & Company's services:

5,000 shares common at $25. $ 125,000.00

7. Miscellaneous acquisitions.

It is not known what was acquired by the following issuance of stock, therefore no computation as to cost has been made:

H. C. Frick 100 shares preferred

X - CONSTRUCTION PRIOR TO FAILURE OF McCALL COMPANY

Dam, Crest Elevation of 185 Recommended

The original Advisory Board of Engineers of McCall Company consisted of:

Wm. Barclay Parsons, Chairman
Charles T. Main
F. O. Blackwell
Hugh L. Cooper
Cary T. Hutchinson

This Board issued a report dated August 7, 1905, a part of which is quoted herewith:

"This project, as originally undertaken, was to construct a dam at or near McCall's Ferry, Pennsylvania, having a crest elevation of 155 feet above mean sea level which, with the necessary power house and equipment, will have a capacity to deliver 50,000 horsepower to Philadelphia or Baltimore, or any point within the tributary territory. It was understood at the outset that it was possible to build a larger plant; no representations, however, were made for the larger plant, since the building of the higher dam necessary was dependent upon the consent of The Pennsylvania Railroad Company to the elevation of the tracks of the Columbia and Port Deposit Railroad, owned by it, to a height of about forty feet above the present grade. Immediately after the project was placed, this matter was taken up with The Pennsylvania Railroad Company, with the result that the Company has consented, informally to elevate its tracks to the required height, at the expense of your Company. The Chief Engineer of The Pennsylvania Railroad Company estimates the cost of this work to be $580,000. a sum only $180,000. in excess of the amount included in the original estimates for the dam at an elevation of 155 feet necessary to protect the tracks of the Railroad at their present elevation from floods.

"This unexpectedly favorable estimate by the Pennsylvania Company makes it necessary to consider the construction of the higher dam; it is the principal object of this report to give costs of this undertaking for three heights of dam, that is elevation at 155, 170 and 185 feet."

* * * * * * * * * * *

"Our estimates of the total cost of the project, including all property, construction and equipment, right-of-way for pole lines to Philadelphia and to Baltimore, transmission lines and buildings all complete for delivery of power to Philadelphia or Baltimore, but excluding auxiliary steam plant in all cases, including interest during construction, are as follows:

Elev. 155	$ 6,750,000.
Elev. 170	7,600,000.
Elev. 185	8,500,000.

***** we recommend strongly that the dam be now built to a crest elevation of 185."

(See Exhibit No. 25)

Bids for Construction

A call for bids for construction was made on August 11, 1905, based on unit prices of excavation and concrete for a dam and power house, the estimated quantities being for a dam with crest elevation 185 as recommended by the Advisory Board. Invitations were extended to eight companies, five of which submitted bids which were opened September 2nd.

The proposed form of contract required completion of the concrete work as specified by December 1, 1907, with a $1,500. daily penalty for failure to complete by that date. The risk of damage or delay due to floods on the Susquehanna coupled with the penalty clause, caused some of the bidders to add about $500,000. to the price they would have bid without the penalty clause.

The Board of Advisory Engineers then reported:

> "Under a contract this Company is compelled to pay for the sum total of all possible accidents, that is, it binds itself to pay the maximum cost under the worst conditions, whereas in all human probability such a succession of accidents and contingencies as are implied in this excessive sum will not occur, the Company, therefore, cannot possibly come out advantageously by such an arrangement, and gives up all chance of benefits that would accrue to it from the average conditions which have existed for the last fifteen years."

Therefore, the Board recommended that the Company do the work itself by selecting some constructor of ability and experience and paying him a fixed bonus.

(See Exhibit No. 26)

Negotiations for Relocation of C. & P. D. Railroad

In the meantime a conference had been held on August 22nd with A. J. Cassatt, President of The Pennsylvania Railroad. Cassatt overruled the informal arrangements which had been made by his chief engineer and not only demanded that all expense incidental to a double track road-bed be borne by the McCall Company, but also that the maximum new grade be .3% instead of .42% as originally planned. This increased the estimated cost of relocation to $1,772,500. and it was felt this would probably preclude building the higher dam.

The change in attitude of the railroad company when its president set aside its chief engineer's more liberal offer, eventually caused McCall Company to write Cassatt on November 1, 1905, in part, as follows:

> "Our scheme was financed on the theory that we should build the lower dam. When subsequently we saw an opportunity to build a higher dam, if your railroad was moved, we, of course, found that the cost of the dam itself would be very much increased, but when we received the estimates of your chief engineer, as to what your present railroad could be duplicated for in the new place, we made up our mind that we should still have money enough to build the increased dam, and pay the amount he indicated as the cost. Your present idea would add so much to that sum that we could not bring it within our means, and there is no way that we could raise enough money, even if we thought it was well to do so to enable us to accomplish this."

(See Exhibit No. 27)

After some delay, Cassatt made an offer on December 6th to the effect that the railroad would make a refund of $200,000. whenever it utilized the second track road-bed. The estimated cost for a double track road-bed with single track laid was given as $1,437,520. (See Exhibit No. 27)

Cooper to Manage Hydraulic Construction

Following the recommendation of the Advisory Board that the company select some construction superintendent to manage the work, Hugh L. Cooper resigned from that Board in order to submit a proposition

whereby he would be in charge of construction. His original offer was subsequently revised and resulted in a contract dated October 18, 1905, embodying the following provisions:

1. Cooper was to be "Hydraulic Engineer" and "Manager of Construction."
2. He was to prepare plans and specifications for the works, which would be subject to the approval of the Chief Engineer.
3. He was to superintend the building of the dam, power house and other buildings, embankment walls, protecting walls, the railroad changes, and all work near McCall's Ferry incidental to the development of a complete hydroelectric plant but not including design or superintendence of the electrical equipment, transmission lines, or substations.
4. The term of the agreement was to be until the completion of the dam, buildings and all hydraulic works of the plant, ready for permanent operation.
5. Cooper agreed to supply such part of his organization then working at Niagara Falls as was necessary to carry on the work at McCall Ferry, including Beverly R. Value.
6. Value was to be "Engineer in Charge" and his salary paid from Cooper's fee.
7. All other employees under Cooper were to be selected by him but paid by the McCall Ferry Power Company, the latter having the right to dismiss any of Cooper's employees.
8. Salaries, wages, contracts for labor and materials or any other obligations incurred by Cooper for the account of the company, were subject to the approval of the Chief Engineer whose decision was final.
9. If the higher dam (170 to 185) were built, Cooper was to receive:
   A. $125,000. in twenty-five monthly installments of $5,000. each.
   B. $50,000. bonus in monthly installments of $5,000. each if his work was completed by January 1, 1908, to the extent that the dam was finished to crest line, power house substructure completed and all walls, embankments and incidental work done so a flood giving ten feet of water on the dam crest would cause no damage.
10. If the lower dam (155 to 170) were built, Cooper would receive:
    A. $100,000. in $4,000. monthly installments.
    B. $30,000. bonus for completion, as defined in 9B.
11. The foregoing payments were to be net to Cooper and Value, all other expenses of office force, draftsmen, travel and assistants were to be paid by the McCall Company.

(See Exhibit No. 28)

Sanderson & Porter to Superintend Electrical Construction

On October 25, 1905, an agreement was signed by McCall Company and Sanderson & Porter whereby the latter firm was employed as "Superintendent of Electrical Construction."

1. The term of the agreement was to be until the installation of all the electrical equipment, including transmission lines and substations, was complete but not longer than until January 1, 1909.
2. Sanderson & Porter was to prepare the plans and specifications for the electrical work as well as purchase the materials and machinery, employ labor, test, install and supervise, all subject to approval of the Chief Engineer.
3. The firm was to keep a complete set of books and vouchers.
4. Sanderson & Porter was to receive a fee of $50,000. in thirty-eight equal monthly installments.
5. The McCall Company agreed to pay all salaries of engineers, draftsmen or clerks employed on the power company work but no general office expenses.

(See Exhibit No. 29)

Acquisition of Additional Property and Rights

About the time that negotiations with the Railroad had caused consideration to be given to building a dam with crest elevation of 185, an opportunity arose to acquire a group of flowage releases on property which would be affected by a dam at that height. These were acquired in August 1905 from John M. Witmer. Several other parcels, deemed essential to the dam and power house as finally located, were subsequently purchased. Details of these transactions will be presented in Parts XIV and XV, dealing with the acquisition of land and water rights and the ultimate disposal of those not used for the Holtwood development.

Agreements for Relocation of C. & P. D. Railroad

On February 16, 1906, an agreement was executed between McCall Company and the Railroad Company providing for the relocation of the C. & P. D. tracks for a dam crest elevation of 185. The work was to be

done by the Railroad Company and the costs were to be borne by McCall Company. This was superseded by an agreement dated April 14, 1906, whereby McCall Company or its appointee was to do the work instead of the Railroad Company.

On this latter date an agreement was executed between McCall Company and H. S. Kerbaugh providing for the relocation work to be done by Kerbaugh for a fixed sum. Inasmuch as it was later decided to build the dam to elevation 165 instead of 185, new agreements were executed with both the Railroad and Kerbaugh.

McCall Ferry Supply Company Formed

On January 29, 1906, the McCall Ferry Supply Company was incorporated in New York with an authorized capital stock of $10,000., only $500. of which was ever issued. The McCall Ferry Power Company owned this stock and in addition advanced the Supply Company $40,000. on the Supply Company's notes. While it had broad charter powers, it never did more than operate general merchandise stores, dining rooms and the temporary living quarters incident to the construction of the McCall project.

Construction Begins

Construction was started on October 24, 1905, by a clearing gang of 25 or 30 men and was followed by the construction of the temporary camp buildings, railroad sidings, permanent houses for the operators and the erection of construction equipment.

Under the contract with Kerbaugh for railroad relocation work for a dam at elevation 185, McCall Company had reserved for itself grading in the vicinity of the dam and began work on this section in March 1906. During April, Kerbaugh was getting his equipment placed and started con-

struction on May 8th. However, on May 12th he was asked to suspend operations due to a change in plans which might call for a lower dam.

Factors against Dam at 185

It is not evident just what factors were considered in abandoning the idea of a dam at elevation 185. It should be recalled that the relocation of the railroad, as contracted for, would exceed the original estimate by approximately $1,000,000. However, in relocating the railroad for the higher dam, the proposed new location would require acquisition of Paul Heine's hotel. Heine would make only one offer: that he would sell his hotel and 140 acres of land for $165,000. According to good information, it had cost Heine less than $40,000.

Another factor against the higher dam was the cost of acquiring the small hydro plants on Pequea and Conestoga Creeks, the operation of which would be affected by a dam at 185. In his estimate of December 18, 1905, Hutchinson had allowed only $100,000. for all the railroad right of way, another $100,000. for Conestoga Creek properties and damages but nothing for the Colemanville plant on Pequea Creek. Boyd Ehle, Hutchinson's assistant, stated the Pequea Creek rights including the Colemanville plant could be acquired for from $230,000. to $280,000. and that Conestoga Creek rights would cost about the same. It has been reported that, at the final showdown, a price greatly in excess of these figures was demanded for the Pequea Creek properties.

Estimates for Six Different Plants

Under date of June 4, 1906, Cooper prepared a schedule of estimated cost and earnings for six different plants: two at Fry Island site with dam crest at 165 and one at the same location with dam at 185; three at Cully's Falls site, all having dams at 165.

Subsequently, Cooper was asked to make revised estimates based on a different number of units, namely: seven units installed for delivery of 50,000 hp. with provision for three future units for an additional 25,000 hp. A comparison of figures, submitted by Hutchinson on June 19, 1906, showed the following:

Estimate	Hp. Delivered	Total Cost	Cost per hp.
1. Prospectus - March 1, 1905 - (155 dam)	50,000	$5,491,000.	$ 110.
Add for Harlow-McGaw Purchase	-	450,000.	
Total	50,000	$5,941,000.	$ 119.
2. Hutchinson - December 18, 1905 - (185 dam)	50,000	$8,265,000.	$ 165.
Add for extra	25,000	500,000.	
Total	75,000	$8,765,000.	$ 117.
3. Cooper - June 18, 1906 - (165 dam)	50,000	$8,859,000.	$ 177.
Add for extra	25,000	533,000.	
Total	75,000	$9,392,000.	$ 125.

Regarding this, Hutchinson commented:

"* * * * * in spite of the very great increase in the cost of railroad elevation, of property, and sundry expenses, the present estimate, using Mr. Cooper's figures as a basis, (which are unquestionably maximum figures), shows substantially the same cost per horse power as did the original estimate; the proposition is, however, now based on 75,000 horse-power, whereas it was originally based on 50,000 horse-power, - thus insuring materially greater net earnings.

"The conclusion to be drawn from this is that the merits of the original proposition were much understated, and that under existing conditions, the proposition is better than at the outset."

(See Exhibit No. 30)

On the same day (June 19th) Parsons submitted a report to Dimock commenting on Cooper's estimates in part as follows:

"* * * Mr. Cooper has used plans with somewhat larger sections than those heretofore considered by the Board of Engineers, giving a dam of much greater weight, in order to provide an additional margin of safety, and foundations for a power-house on a somewhat larger scale in order to carry the greater power. For the moment it would seem wise to accept Mr. Cooper's enlarged sections, for if there is any error, it is an error on the safe side. The details of Mr. Cooper's

estimates have been gone over very thoroughly, and it would seem that he has included an exceedingly liberal margin for all possible contingencies. The Board may accept, therefore, Mr. Cooper's total estimate as the maximum cost of a dam at elevation 165 feet at McCall Ferry.

" * * * unless some extraordinary contingency occurs, the actual cost should be considerably below Mr. Cooper's estimate, --possibly as much as $500,000."

(See Exhibit No. 30)

Dam Crest Fixed at 165

Cooper recommended suspending work at the Fry Island site and building the dam about a mile farther down river at Cully's Falls. Cooper's drawings had been submitted to Ehle by Hutchinson for comment and criticism. Ehle strongly opposed the Cully's Falls location. Parsons recommended constructing a dam at an elevation of 165 at the Fry Island site. This recommendation was concurred in by Hutchinson and Blackwell. The Executive Committee authorized the execution of these recommendations at its meeting June 19, 1906.

Final Agreements with Railroad for Relocation of C. & P. D.

The change in elevation of the crest of the dam to 165 necessitated new contracts covering the relocation of the C. & P. D. Railroad. After some delay an agreement was signed by the Railroad and McCall Companies, dated August 13, 1906, containing among others the following provisions:

1. The existing C. & P. D. single track would be relocated on a double track road-bed between Safe Harbor and Fishing Creek about 12½ miles with the alignment not less favorable than the old location nor would it be required to be more favorable. Grades must not be more than 0.3% equated for curvature.

2. The McCall Company was to pay for a double track road-bed with a single new track laid and all necessary stations, telegraph lines, sidings, culverts, etc., and also reimburse the Railroad Company for all costs in connection with the acquisition of right of way over property not owned by McCall Company.

3. Between Fishing Creek and Benton, a distance of about 1-1/6 miles, a run-off to the old track was to be permitted on a 0.5% grade, until January 31, 1913, pending construction of another dam downstream. If such construction were not undertaken by that date, this grade would have to be reduced to 0.3% at McCall Company's expense.

4. The Railroad Company was to acquire the right of way for the new location between Safe Harbor and Peach Bottom on terms and at prices approved by McCall Company except where the right of way would be across land owned by the McCall Company.

5. All work to be done in accordance with the plans and specifications of the Railroad Company and subject to approval by the Chief Engineer of the Railroad Company.

6. Whenever the Railroad Company made use of the road-bed for a second track between Safe Harbor and Benton, it was to pay McCall Company $200,000.

7. McCall Company agreed to execute a bond for $250,000. for faithful performance of the contract.

(See Exhibit No. 31)

A supplementary agreement bearing the same date was also signed by these parties providing for the deposit of $250,000. cash with the Knickerbocker Trust Company in lieu of a bond. Acknowledgment of the receipt of $250,000. from McCall Company was made by Knickerbocker Trust Company on August 29th with the understanding that interest would be allowed at the rate of 4½% and would be credited semiannually. A few days later an agreement was signed between McCall Company and Knickerbocker Trust Company whereby the former agreed to "indemnify and hold harmless the Trust Company against any loss or expense occasioned by any controversy" between McCall Company and the Railroad.

Final Agreements with Kerbaugh for Relocation of C. & P. D.

About the time the final contract was signed with the Railroad Company, negotiations were resumed with Kerbaugh for a new contract due

to the decision to build McCall Ferry dam to elevation 165 and relocate the railroad for that elevation. Two contracts were signed by McCall Company and Kerbaugh, both dated August 27, 1906. The main provisions of the first one were:

1. Kerbaugh agreed to do all work and furnish all materials in connection with the relocation of the C. & P. D. R. R. as provided for in the contract between McCall Company and the Railroad Company, dated August 13, 1906, a copy of which was attached. This included all culverts, bridge substructures for double track and superstructures for single track; grading and road-bed for double track; a complete single track railway with necessary sidings; telegraph lines and stations.

2. Kerbaugh was not required to furnish or pay any expense of procuring any part of the right of way.

3. Kerbaugh was not required to bear the expense of removing, repairing or reconstructing any roads incident to the railroad relocation except as directed and for which he was to receive actual cost of the work plus 10%.

4. Except as noted in Items 2 and 3, Kerbaugh agreed to do the entire work acceptable to the Chief Engineer of the Railroad Company for a lump sum of $1,250,000.

5. McCall Company was to be permitted to do the excavation one-half mile above and one-half mile below the dam for which they were to deduct 80 cents per cubic yard from the $1,250,000.

(See Exhibit No. 32)

The second contract signed August 27th between Kerbaugh and McCall Company provided that there should be no lien filed against the relocation work or extra work provided for in the main contract.

Because of difficulties and delays in securing the necessary right of way, the railroad relocation work moved slowly until the middle of November 1906. However, good progress was made after that time and on September 11, 1907, Kerbaugh substantially completed the relocation

of the C. & P. D. R. R. and the Railroad Company resumed operations September 12th.

Contract for Cully's Cut

The Board of Advisory Engineers had recommended, on July 31, 1906, that a cut be made through Cully's Falls which would lower the level of tail water approximately seven feet and that the necessary crib wall be built to utilize this cut for a tailrace. The estimated cost was $300,000. The Executive Committee approved this recommendation on August 8th with the understanding that a contract for the excavation would be made if satisfactory terms could be secured.

A contract for this excavation was executed by McCall Company and Kerbaugh on August 15th, the main provisions being:

1. Kerbaugh agreed to furnish all material, equipment and labor necessary for excavating the "rock canal" shown on the accompanying drawings. This involved removal of approximately 135,000 cu. yds. of rock.

2. Kerbaugh agreed to dispose of the spoil in the locations shown on the drawings adjacent to the cut except such part as McCall Company wished to use which Kerbaugh would load on McCall cars without extra charge.

3. McCall Company agreed to pay Kerbaugh $1.50 per cubic yard of solid rock excavated as specified as full compensation for furnishing all material, equipment and labor.

4. McCall Company agreed to pay Kerbaugh cost plus 10% for all incidental work that McCall's chief engineer ordered Kerbaugh to do.

(See Exhibit No. 33)

The cofferdam which Kerbaugh built across the lower end of Cully's Cut proved inadequate during the higher river flows with the result that backwater not only prevented work on the Cut during these periods but also flooded the excavation for the power house. On January 1, 1907, with the excavation of Cully's Cut considerably less

than half completed, the river reached flood stage to the extent that it passed over the main cofferdam above the dam. For the next month the river continued high enough to keep the tailrace area flooded and it was not until after the middle of February that the area was unwatered so Kerbaugh could remove his equipment and wait for more favorable conditions.

Kerbaugh Abandons Cully's Cut

On April 2, 1907, Cooper wrote to Hutchinson that he believed the excavation of Cully's Cut should be taken from Kerbaugh who had failed to complete it by January 1st as planned, and that McCall Company should complete it under Cooper's supervision. He believed the work would have to be done intermittently, depending on both stream-flow and the dam and power house work.

By April 9th, an arrangement had been made with Kerbaugh whereby McCall Company would take over Kerbaugh's construction plant and complete the tailrace excavation.

McCall Company worked on the Cut from the latter part of April until early July 1907, when it became necessary to open the main cofferdam in the Lancaster channel in order to close the one in the York channel. This flooded Cully's Cut when still less than half completed and no further work was done there until April 1908.

Miscellaneous Contracts

In addition to the major contracts already mentioned a number of contracts, exclusive of those for permanent equipment, were made from time to time. These included contracts for clearing the flowage basin, relocation of township roads necessitated by moving the C. & P. D. tracks, sand, cement, construction equipment, etc. In the cases of sand and crushed rock, the company merely obtained the right to remove the material

and set up its own sand plant and rock crushers. Major contracts for permanent equipment were made with I. P. Morris Company for turbines and General Electric Company for generators, transformers and switchboards.

Construction Expenditures as of October 1, 1906

A statement of McCall Company was prepared, showing expenditures to September 30, 1906, together with estimates of amounts to complete the development with six units and eighty miles of transmission lines. The expenditures included only those items chargeable against the $6,400,000. cash provided for, under the agreement of June 13, 1905, with the Contracting Company.

	Already Spent	Estimated To Be Spent	Total
Real Estate	$ 37,014.	$ 365,000.	$ 402,014.
Hydraulic Construction	1,133,240.	2,300,000.	3,433,240.
Improvement of Tailrace	-	225,000.	225,000.
Electric Construction (6 units)	205.	1,322,000.	1,322,205.
Relocation C. & P. D.	10,375.	1,239,625.	1,250,000.
Removal of Highways	-	50,000.	50,000.
Admin. & Gen'l. Expenses	234,868.	536,000.	770,868.
Net Interest during Const'n.	424,150.	175,850.	600,000.
Total	$1,839,852.	$6,213,475.	$8,053,327.

Available Resources

Cash	$ 578,151.
Susquehanna Contracting Company	3,699,175.
McCall Ferry Supply Company	40,000.
Knickerbocker Trust Company (Money in Escrow)	250,000.
1,517 Bonds in McCall Company Treasury (to be sold at 90)	1,365,300.
Total	$5,932,626.

(See Exhibit No. 34)

It was evident at this time from the above tabulation that approximately $280,000. was required in addition to available resources.

Status of Construction at End of First Year - November 1, 1906

Cooper's program for prosecuting the work had provided for construction of the cofferdam across the Lancaster channel during the winter of 1905-06 and complete installation of entire construction plant during the same period. Actually the first crib was not built until March 1906, and the cofferdam was not completely closed until the middle of July, thus resulting in considerable loss of time during low water season when excavation and concreting could be carried on. Cooper attributed this delay to the difficulty of getting his organization together and of getting experienced crib men from Canada.

The proposed source of sand from Chesapeake Bay proved inadequate and a new source was located at Charlestown. The first sand to arrive from the former source was on September 24, 1906, and in the meantime a local sand bar had to be utilized. Rock was first crushed at the quarry on August 23, 1906.

By November 1, 1906, approximately one year after construction had been started, a considerable amount of work had been done but the project was behind schedule. The cofferdam from the Lancaster shore to Fry Island was in place and the Lancaster channel unwatered, excavation for the dam in Lancaster channel was complete and ready for concrete and some excavation had been done at the power house; the construction bridge was complete along the power house and had been started along the dam; the temporary camp and construction buildings were complete and in use; the twelve permanent residences had been finished, water lines and sewers had been laid, telephone service installed and a temporary electric light plant was in service, one power house and two bridge pelican cranes were in use.

Court Upholds McCall Company's Right to Construct Dam

A Bill in Equity was filed by the Attorney General of Pennsylvania against McCall Company on October 24, 1906, asking for a perpetual injunction restraining McCall Company from constructing and maintaining a dam without adequate provision for the future navigation of the river by canal and without adequate provision for the passage of fish. It further requested a perpetual injunction, preventing McCall Ferry Power Company, Susquehanna Canal and Power Company and Susquehanna and Tide-Water Railroad Company from carrying out their agreements of release and conveyances.

The filing of this Bill was the culmination of agitation which had been started in March 1906, by a group of fishermen and fishery owners of York County.

The case was heard January 14, 1907, and the decree handed down, providing that the right of McCall Company to construct and maintain a dam was to be subject to its making and maintaining adequate provision for the passage of fish and further subject to the installation and maintenance of proper locks whenever the State or Federal government improved navigation of the Susquehanna in such way as to otherwise secure continuous navigation between Columbia and Havre de Grace. (See Exhibit No. 35)

Power Contracts

As early as June 1905, negotiations had been started by McCall Company for a power contract in Baltimore. For almost two years these negotiations continued, during which time many studies were made and various proposals were submitted by the interested parties. Finally, on March 13, 1907, a contract was executed with the Consolidated Gas Electric Light and Power Company of Baltimore. Under the terms of this contract an

annual standby charge of approximately $80,000. was made for 4,000 kw. plus two mills per kwh. taken up to that maximum. The contract was to run for ten years from date of initial delivery of power. A new contract with minor revisions was executed on June 4, 1907. (See Exhibit No. 36)

On June 28, 1907, a contract was executed with United Railways and Electric Company of Baltimore which was to run for ten years from date of initial delivery of power. Under the terms of this contract an annual standby charge of approximately $200,000. was made for 10,000 kw. plus two mills per kwh. taken up to that maximum. (See Exhibit No. 37)

Concurrently with negotiations in Baltimore, power market surveys were being made in towns and cities of Pennsylvania within a sixty-mile radius of McCall Ferry. Tentative arrangements were made with a proposed distributing company for a large portion of that section whereby that company would ultimately purchase approximately half of the McCall output. However, before a formal agreement was executed, McCall Company encountered financial difficulties and further negotiations were suspended.

Additional Financing Considered

It has already been stated that the original financing for McCall Company had been based on estimates of cost for a 50,000 hp. plant with a dam elevation of 155. In June 1906, the decision was made to fix the dam crest at 165 and build a plant to deliver 75,000 hp. In August, it was decided to make the tailrace cut which would add about 20,000 hp. capacity. At both times, it was known that the company would need more cash than had been arranged for and on November 30, 1906, it was estimated that about $1,646,000. additional cash would be required.

On May 8, 1907, a new estimate was made of the total cost of

the project, including purchases of land made subsequent to the original acquisition, interest during construction, and all other expenses up to January 1, 1909, when the plant would have operating 50,000 hp. This total of $9,815,000. exceeded the October 1, 1906 estimate by $526,000. due mainly to the fact that in the latter estimate it had been assumed the plant would be in operation September 1, 1908, and the additional period of time increased both administration and interest costs. The cost of four additional units, making a total of ten, would be $600,000. more. Against this estimate, the Company was expected to have earned by January 1, 1909, $48,000. interest on bank balances and $200,000. from operating the units as they were placed in service between June 1, 1908, and January 1, 1909.

At the anticipated rate of expenditure, the company's cash resources would carry only until the first of October 1907, and in order to continue with the work thereafter, it would be necessary to have available the proceeds of the sale of the Treasury Bonds.

Various plans were considered for selling the Treasury Bonds but apparently actual underwriting was to be delayed until available cash was exhausted.

Knickerbocker Trust Company Failure

Just before the cash available to McCall Company under its agreement with the Contracting Company had been exhausted, the Knickerbocker Trust Company failed on October 21, 1907, as a result of the panic of 1907. At the time of its closing, the McCall Company had no funds on deposit there except the $250,000. which had been made to indemnify the Pennsylvania Rail Road Company in case of failure to complete the relocation of their tracks. The closing did, however, interfere with the arrangements of the McCall Compa-

ny for getting further money immediately for carrying on the work. At that time, approximately $345,000. remained unpaid on the loan arrangements which had been made. The failure of the Trust Company precluded immediate payments under the loan arrangements, and the general financial conditions resulting from the panic made any additional financing impossible at this time.

Status of Construction at End of Second Year - November 1, 1907

McCall Company's current liabilities exceeded the current assets at the end of October by approximately $77,000. Prompt curtailment of construction resulted. On October 23rd, estimates showed that to complete the plant with six units and transmission lines to Baltimore for 50,000 hp. would require the sale at 90 of the $1,517,000. of bonds in McCall Company and $158,000. in Susquehanna Contracting Company's treasuries and also $1,350,000. additional cash. On the first of November, the full working force was reduced to approximately 100 men, and the last of January 1908, work was practically suspended.

Hutchinson made a report on the "Condition of the Work at McCall Ferry on November 1, 1907." An accompanying tabulation of the work done as a percentage of the total showed:

Concrete	
Dam and Abutments	75%
Powef House Sub-structure	74%
Power House Super-structure	42%
Sundry	47%
Total	72%
Steel	
Power House Super-structure	8.5%
Rock Excavation	
Tailrace	40.5%
Sundry	79.0%
Total	59.5%

The expenditure of money as a percentage of the estimated total required is as follows:

Expenditures for Construction	
Construction Plant and Preliminary Work	100%
Dam and Power House Sub-structure	71.5%
Power House Super-structure	16.8%
Hydraulic Equipment	22.4%
Electrical Equipment	0
Tailrace Improvement	47.6%
Elevation C. & P. D. Tracks	92.5%
Total	67%

Making allowance for the time and money spent in preparatory work, Hutchinson estimated the work as a whole, exclusive of equipment, was at least 80% complete.

(See Exhibit No. 38)

Balance of Loan Obtained

By arrangement with the Receivers of the Knickerbocker Trust Company the balance of the loan, approximately $345,000., became available to McCall Company early in 1908. With this money construction proceeded and transmission line rights of way were acquired.

$400,000. Loan Obtained

In the summer of 1908 consideration was given plans for securing additional financing for McCall Company, but because of general financial conditions, nothing definite was done at that time. Satisfactory arrangements apparently could not be made for the sale of additional McCall bonds and the possibilities of utilizing the treasury bonds to secure a loan were considered. On October 2, 1908, Simpson, Thacher & Bartlett sent letters to Lee, Higginson & Company, Harvey Fisk & Sons, C. A. Coffin and Bertron, Storrs & Griscom, setting forth the plan for obtaining a loan. The assets of the Contracting Company were:

1.	Due from McCall Company	$130,000.
2.	Conowingo Land Company Mortgage and Interest	30,000.
3.	Land and rights at cost and interest	50,000.
4.	McCall Company Bonds (Par Value)	158,000.
5.	Cash	2,000.

The McCall Company was in need of an estimated $62,000. for construction work and to maintain its organization until some new arrangements could be made. It was, therefore, proposed to have McCall Company acquire the first three items and $62,000. in cash from the Contracting Company by issuing to the Contracting Company $544,000. par value of McCall bonds at 50. This would give the Contracting Company possession of a total of $702,000. par value of McCall bonds with which it would secure a loan of $400,000. Additional security for the loan would be obtained by having McCall Company pledge its equity in the $250,000. deposit for the railroad relocation and also in the Conowingo Land Company $25,000. mortgage which it would be receiving from the Contracting Company. The consideration the Contracting Company gave to McCall Company for pledging this additional security was the right to purchase at or prior to maturity of the loan the $702,000. par value of bonds by payment of the principal and interest of the loan.

The essence of the proposition was submitted by the Contracting Company to McCall Company on October 20th and accepted by the latter on the 22nd. (See Exhibit No. 39) This $400,000. loan was obtained on October 28, 1908, under four notes executed by the Contracting Company, each for $100,000. in favor of the following:

1. Harvey Fisk & Sons
2. Lee, Higginson & Company
3. Bertron, Storrs & Griscom
4. C. A. Coffin

The $702,000. McCall Company bonds, equity in the $250,000. deposit and the Conowingo Land Company mortgage, were pledged as collateral.

(See Exhibit No. 40)

Knickerbocker Trust Company Extends Loans on Bond Purchase Agreements

The loans aggregating $4,449,600. which the Contracting Company had obtained from Knickerbocker Trust Company fell due on November 1, 1908. These were secured by the bond and stock purchase agreements and the McCall bonds and preferred stock which the agreements covered as heretofore stated. The deferred subscribers were credited with interest on their initial payments and thus the total payments due from them on November 1st would fall short of paying the principal on the loan by $192,816. and after making adjustments for accrued bond interest from June 15th to November 2, 1908, the balance would still fall $74,366. short of the required amount. Arrangements had been completed on October 6th whereby the Trust Company would extend part of the loans on bond and stock purchase agreements for one year. This involved another payment of 20% of the purchase price by the subscribers and execution of notes by the individual subscribers dealing directly with the Trust Company and not through the Contracting Company.

Summary of Work Done by McCall Company

By November 1908, the funds available to McCall Company were exhausted. At this time, except for the tailrace excavation, the plant stood about as it was when work had shut down early in 1908. It was estimated the plant was about 85% completed, with various portions as follows:

Power house	80%	complete
Main Dam	82%	"
Deflection Wall	56%	"
Tailrace Excavation	100%	"
Forebay	98%	"
Ice Protection	95%	"

(See Exhibit No. 41)

More specifically, the physical status was as follows:

Power House: The substructure was complete including the concrete part of the draft tubes but not the steel portion. Between the units, the concrete had been poured to about elevation 420. The operating tunnel floor was complete except for the finished slab. Between the generator room and the gate house, the rheostat gallery arches were complete and the wall carried up to the level of the generator room crane for the entire length of the building. In addition, this wall was finished over the first three units to the level of the gate house crane. Between the generator room and the transformer house, the wall was complete for the length of the building to the height of the generator floor. From the river end to the center line between the exciters and Unit 6, it was finished to the level of the generator room crane and over Units 1, 2 and 3 it had been carried up to the level of the gate house crane. The roof columns, trusses and purlins had been placed over the first four and one-half units. Piers for the submerged intake arches had been placed for the first three units and some concrete poured for the arches.

Main Dam: The Lancaster channel part was complete to full height except for seven of the 40 ft. sections left at about elevation 420 for flood openings. All Fry Island sections were finished, and the York Channel portion was complete except for eight flood openings and approximately the last 200 ft. adjacent to the York County shore. The abutment itself had not been placed.

Deflection Wall: This was complete to approximately elevation 130 except the last portion about 150-200 feet long on Piney Island which was carried to full height.

Forebay and Ice Protection: The skimmer wall was complete and the connecting bulkhead finished to about elevation 160. The two crib foundations for the ice boom piers had been placed but no concrete added. The concrete work on the L-shaped pier at the end of the ramp was about half finished. The rock fill on the ramp was practically complete.

Equipment: The six main turbines and two exciter turbines being built by I. P. Morris Company were approximately 50% completed although no shipments had been made.

Under contracts with the General Electric Company:

1. One generator was completed.
2. One generator was over 60% completed.
3. The remaining four were in various stages, some parts being finished, while others were in the rough. In general, exclusive of material, over 20% of the work had been completed.
4. The transformers were between 50% and 60% completed.
5. Other apparatus, such as compressors, small motors, air tanks, etc., were 100% completed.
6. The switchboard was about 80% completed.

(See Exhibit No. 42)

XI - REORGANIZATION OF McCALL COMPANY

Formation of Bondholders' Committee

As mentioned under the preceding heading, the funds available to McCall Company were exhausted by November 1908. Since the middle of that year various plans had been considered for securing enough additional financing to complete the project, some of which included a reorganization of McCall Company. Various interests not previously identified with the development had been asked to investigate it and submit plans for its completion.

Realizing that the company would have to default on its bond interest due December 15, 1908, notices dated December 7th were sent to bondholders. These notices were issued by the following group:

Harvey Fisk & Sons
Lee, Higginson & Company
Bertron, Storrs & Griscom
H. F. Dimock
C. A. Coffin

In substance, the notice contained the following:

1. The undersigned had been engaged for some time in efforts to secure completion of the McCall project in a manner satisfactory to the bondholders.

2. McCall Company would not have sufficient funds to pay bond interest due December 15, 1908.

3. With the approval of "holders of a large portion of the bonds outstanding" the following had been asked "to act as a Committee in the interests of the holders of bonds and preferred stock" and to continue negotiations to perfect a plan for financing completion of the enterprise:

   William M. Barnum
   A. C. Bedford
   S. Reading Bertron
   Charles A. Coffin
   Gardiner M. Lane

4. To strengthen the committee's hands in the pending negotiations, immediate deposit of all bonds and preferred stock was requested under a preliminary agreement.

5. Bondholders could withdraw their bonds if they did not approve the final plan when presented.

(See Exhibit No. 43)

The preliminary agreement accompanying the foregoing notice was also dated December 7, 1908, and provided for:

1. Deposit of bonds and preferred stock with the Knickerbocker Trust Company or the City Trust Company of Boston to be held subject to order of a majority of the Committee.

2. Continuance by the Committee of negotiations to perfect a plan for financing completion of the project.

3. Submission to the depositors of a plan before June 30, 1909.

4. Privilege of withdrawal from the final plan during a period of at least 30 days after submission.

5. The depositors to give the Committee full power of attorney regarding the bonds and stock until the formation of the plan.

6. The Committee to serve without compensation.

(See Exhibit No. 44).

The group referred to themselves merely as the "Committee" although in effect it was a "Bondholders Protective Committee." Numerous references appear to the "Reorganization Committee."

Negotiations for Reorganization

Negotiations for obtaining additional financing were conducted with the following:

Electric Bond and Share Company
J. E. Aldred - President of Shawinigan Water & Power Company in Canada.
Joseph B. McCall - of the Philadelphia Electric Company.
W. R. Warren and his friends - (Warren was a partner in Warren-Scharff Co., General Contractors of New York.)
James B. Colgate & Co. - Private Bankers, New York.
Randall Morgan - Vice-President and General Counsel for The United Gas Improvement Company.

Aldred has stated that about the latter part of October 1908, Coffin, the President of General Electric Company, had arranged for him to meet with some of the people who were attempting to work out a plan to salvage the McCall Ferry enterprise. He devised several programs during his examination of the Company s affairs to determine the one which would be acceptable to the old bondholders and yet be liberal enough to insure success of the sale of securities for the necessary new money.

Memorandum of Understanding with Aldred

After considering the various plans offered, the Bondholders Committee accepted the one submitted by Aldred after certain modifications had been mutually agreed upon. On April 24th, Aldred attended a meeting of the Committee at which a "Memorandum of an Understanding" was signed by the two parties. This embodied the following:

1. Either a new company would be formed or the old one continued.

2. Capital stock to be $8,500,000

3. $12,500,000. of First Mortgage 30 year 5% Gold Bonds, dated July 1, 1909, to be authorized, of which $7,500,000. were to be issued for refinancing

4. The $8,325,000. of old McCall bonds to be exchanged for:
   a. 40% new bonds ($3,330,000.)
   b. 60% new stock ($4,995,000

5. To be used for construction and other corporate purposes:
   a $4,000,000 of new bonds
   b $3,500,000 of new stock

6. Proceeds from sale of $170,000. of new bonds to be used by the Committee in meeting reorganization expenses and in making settlement with the floating debt of the Company reported as not exceeding $250,000 Any balance to be turned over to the reorganized company.

7. Aldred would endeavor to sell $4,170,000 of the new bonds at 90

8. $3,500,000. of new stock to go to Aldred for use in connection with the sale of the $4,170,000. of bonds, or otherwise, as he might determine

9. The old bondholders to have the privilege of subscribing to $1,000,000. (or to any part thereof) of the new bonds at 90 with a stock bonus equal to 50% of the par of the bonds.

10. All stock to be placed in a voting trust until November 1, 1912.

11. Aldred to nominate two of the trustees of the voting trust, and the Committee, the remaining one.

12. Provision was to be made for the payment of the loan to the Susquehanna Contracting Company of $400,000. and the security thus released, consisting of the following, would be assigned to the reorganized company:

    a. $702,000. of McCall bonds (to be cancelled upon release)
    b. $250,000. indemnification deposit in Knickerbocker Trust Company.
    c. $25,000. Conowingo land mortgage.

(See Exhibit No. 45)

In connection with the negotiations leading up to the foregoing "Memorandum of an Understanding," Aldred has stated the following:

"The Committee desired to secure my services until the plant was in successful operation. The various plans submitted for consideration had caused a difference of opinion and considerable opposition from some of the bondholders and particularly from the common stockholders. It was, therefore, deemed expedient by the Committee to temporarily concentrate control in a voting trust and so far as practicable to bring in new personnel familiar with this type of project.

"In addition to the common stock for bonus for the new money bonds and that necessary for the bankers compensation, as provided in the above capitalization, the Committee stipulated as a part of my plan that I, in consideration of 5,000 shares of stock, would become the active manager of the Company during construction and until the expiration of the proposed voting trust, by which time it was expected that the first group of units would be in service and satisfactory power contracts obtained for their output. I delivered a relatively small amount of the 5,000 shares to engineers whom I had consulted on the feasibility of completing the development and making it a profitable enterprise. Inasmuch as my compensation was to be in common stock and my reputation was staked on the outcome of the project, it was agreed that I should have the right to select two of the three members of the voting trust."

(See Exhibit No. 46)

Aldred's Preparations for Underwriting

Aldred's associates in the reorganization plan were E. R. Wood, Vice President of the Dominion Securities Corporation of Toronto, and H. S. Holt, President of the Montreal Light, Heat & Power Company. After Aldred, Wood and Holt had carefully considered the situation, they became convinced that it would be difficult to underwrite all the new money bonds promptly in America. The old bondholders subscribed to only half a million par of the new bonds.

Aldred therefore proposed that Kitcat & Aitken of London form a syndicate to underwrite $1,835,000. par value of the new bonds at 90. For these services they were to receive $457,500. par value of stock in addition to the 50% bonus to accompany the bonds. Aldred, Wood and Holt were to secure underwriting for an equal amount of bonds with a like stock bonus and receive a similar fee in stock. These two underwritings, together with the $500,000. of bonds purchased by the old bondholders which likewise carried a 50% stock bonus, but no underwriting fee, accounted for the total $4,170,000. of bonds sold to raise the additional money.

English Underwriting Agreement

Kitcat & Aitken's Underwriting agreement, dated May 27, 1909, offered participation on the basis of bonds at 90 with a bonus of 40% in stock. Initial payment was to be 10% of par and arrangements could be made to defer the balance until July 1, 1910. Loans on the deferred subscriptions could be made at 5% plus all expenses of stamps. Deferred subscribers would receive only 30% stock bonus instead of 40%. (See Exhibit No. 47)

Canadian Underwriting Agreement

Aldred, Wood and Holt grouped their underwriting under the

name of Montreal Trust Company. Under the terms of the purchase agreements between the Trust Company and the subscribers, the latter purchased bonds at 90 with a bonus of 50% in stock. Calls were to be made as follows:

10% August 1, 1909
15% October 1, 1909
25% Maximum amount of subsequent calls on 30 days' notice

(See Exhibit No. 48)

Final Plan and Agreement for Bondholders

At a meeting of the Committee held on May 27th, a proposed Circular and a Plan and Agreement were approved for solicitation of McCall bondholders. This was the plan which effected the reorganization of the McCall Company. Under date of May 28, 1909, this "Plan and Agreement" was issued over the names of the members of the Bondholders' Committee. The plan contained the following provisions:

1. Either the McCall Company or a new company was to be vested with the McCall property and with cash as provided therein. (A new company was ultimately formed which was called Pennsylvania Water & Power Company)

2. $12,500,000. of bonds were to be authorized of which at least $4,920,000. were to remain in the treasury after the Plan was carried out.

3. $8,500,000. of stock of one class was to be issued.

4. The old McCall bonds were to be exchanged for:
   a. 40% new bonds.
   b. 60% voting trust certificates for new stock.

5. All such new stock to be deposited under a voting trust until November 1, 1912.

6. The Voting Trust to provide for three voting trustees, two to be nominated by those furnishing the new money, and one by the Bondholders' Committee.

7. From $4,170,000. to $4,750,000. of the new bonds and $3,500,000. of the new stock were to be sold to realize 90% of par of the bonds.

8. The Committee was to have legal title to all McCall bonds and stock deposited, and have full power to carry out the Plan, including the rights to:
   a. Acquire at public or private sale the property and rights of the McCall Ferry Power Company.
   b. Take any action for foreclosure of the mortgage.
   c. Issue Receiver's Certificates.
   d. Employ agents or attorneys.
   e. Adjust and settle any indebtedness of the McCall Company.
   f. Dispose of any new bonds and stock not required for exchange or reserved for the treasury.
   g. Pay a reasonable commission for any underwriting.
   h. Borrow money for Committee expenses or cash payment required at sale.
   i. Organize the new company.
   j. Resume construction.
   k. Make contracts on behalf of the new company prior to its organization.

9. The Committee members were to receive reasonable compensation, the amount to be approved by the directors of the new company.

10. The Committee could abandon the Plan and return the bonds and stock or submit a new plan for approval.

(See Exhibit No. 49)

Of the $3,500,000. of capital stock referred to in 7 above, $500,000. par value was issued to Aldred as compensation for management services as explained in his comments on the "Memorandum of an Understanding." Aldred was referring to $100. par value stock, although the first issue of stock by the new company (Pennsylvania Water & Power Company) was actually $50. par value per share which was immediately exchanged for $100. par value stock.

Opposition to Reorganization Plan

There was some opposition to the Bondholders' Committee which sought the deposit of bonds under the December 7, 1908 and May 28, 1909 Plans and Agreements. Under the date of June 25, 1909, Sanderson and Porter, who owned about $200,000. in bonds and had been retained by McCall Company as managers for the installation of electrical equipment

sent out a letter to the bondholders recommending that all bonds be withdrawn from deposit with the Committee. They claimed that the plan of the Committee was inequitable and might prove disastrous to the former McCall bondholders. (See Exhibit No. 50)

This opposition of Sanderson and Porter was answered by a letter from the Bondholders' Committee on June 28th. It was stated in this reply that, although another plan than the one stated in the May 28th agreement had been suggested, it had later been withdrawn. This reply of the Bondholders' Committee was apparently successful in counteracting the Sanderson and Porter notice, for the Bondholders' Committee continued to act for the bondholders. (See Exhibit No. 51)

There was, however, a minority group which continued to oppose the Aldred plan. An inquiry from Beyer to Semple was answered by the latter on June 29th in part as follows:

> "Hutchinson tells me that Mr. Colgate who is an underwriter to the extent of $250,000., as are also Sanderson & Porter, are backed by substantial financial interests, but of course, I cannot tell whether they are strong enough to prevent the plan advocated by Barnum from being carried out."

(See Exhibit No. 52)

Beyer replied that he had reason to believe that Brown Bros. & Company and Gen. S.B.M. Young had not deposited their bonds. These amounted to $110,000. Hutchinson and Dimock also had not deposited their bonds which totaled $167,000. Subsequently, all these acquiesced and deposited their bonds.

Bonds Deposited with Committee

The Bondholders' Committee had secured a deposit of 80% of the bonds by July 1st, as required by the May 28th Plan. It should

be noted that July 1st was the date after which bonds already deposited could not be withdrawn. Therefore, as of this date, there resulted an irrevocable acceptance of the reorganization plan and the elimination of the interests of all preferred and common stocks. Subsequently, there were sent out circulars granting successive extensions for depositing the outstanding 20% of bonds. On July 6th the Committee notified the Knickerbocker Trust Company that the bond interest due December 15, 1908, had been unpaid for a period of six months. They stated that they represented more than a majority in interest of the bondholders and elected that the entire sum of principal and interest on bonds became due at once. They, therefore, demanded that the Knickerbocker Trust Company foreclose on the mortgage. (See Exhibit No. 53)

Aldred Appointed Receiver

The Knickerbocker Trust Company, acting upon the order of the Bondholders' Committee, instituted foreclosure proceedings in the Circuit Court of the United States for Eastern District of Pennsylvania on July 13th, and requested the appointment of a Receiver. Similar bills were filed in federal courts in Maryland and New York on July 19th and July 28th, respectively. The McCall Company admitted the allegations in the Bill and consented to the appointment of a Receiver. The Bondholders Committee immediately (July 13th) requested the appointment of J. E. Aldred as Receiver. Aldred was appointed Receiver by the Circuit Court of the United States for the Eastern District of Pennsylvania on July 17th. (See Exhibit No. 54) This order was ratified by the Maryland and New York Courts on July 19th and 28th, respectively.

Construction Resumed by Aldred

It was necessary that a certain amount of time would elapse

between the appointment of a Receiver and the reorganization of the Company. In order to get the plant in operation as soon as possible, Aldred settled various claims and personally entered into a number of contracts whereby both construction and the manufacture of needed equipment would be resumed. Among these were contracts for cement, sand and stone for construction, as well as a contract with the Empire Engineering Corporation to carry on the construction work. (See Exhibit No. 55) In addition, he made personal contracts with I.P. Morris Company for completion of the turbines; with General Electric Company for work on the generators, switchboard and transformers, and with the York Bridge Company for intake gates. These contracts were subsequently turned over to Pennsylvania Water & Power Company. All of these services were rendered by Aldred, not as receiver but as Manager of the enterprise, for which he received 5,000 shares of stock.

Committee Arranges Loans

On September 8, 1909, the Bondholders' Committee entered into an agreement with Knickerbocker Trust Company whereby the McCall Bonds deposited with the Committee were placed in trust with the Knickerbocker Trust Company as collateral for loans to be made to the Committee by the Syndicate. (See Exhibit No. 56)

On October 6, 1909, the Committee secured the first of a series of loans from Montreal Trust Company and the Bank of Scotland, the total of which aggregated $1,100,000. The funds were used chiefly by Aldred toward the completion of the plant and by the Committee to purchase the Susquehanna Contracting notes of $400,000. The remainder was used to defray current expenses of the Committee.

Distribution of Pennsylvania Water & Power Company Securities

Under the Final Plan and Agreement for Bondholders, provision was made for the exchange of all the McCall bonds outstanding ($8,325,000.) on a par basis for 40% new bonds and 60% new stock. In addition, $4,170,000. of bonds and $3,500,000. of stock were to be used in acquiring additional money and in payment of services. This resulted in the following distribution of securities:

Explanation	Bonds	Stock
For Exchange of $8,325,000. McCall Bonds	$3,330,000.	$4,995,000.
New Money Bonds (50% bonus)	4,170,000.	2,085,000.
Banking Services		
Kitcat & Aitken		457,500.
Aldred		155,000.
Wood		152,500.
Holt		150,000.
Aldred Management Services		500,000.
	$7,500,000.	$8,495,000.

There were $66,000. of the McCall bonds which were not deposited with the Committee but were purchased for cash. This resulted in $26,400. of Pennsylvania Water & Power Company bonds and $39,600. of stock of the above securities becoming available as treasury bonds and stock.

Value of Pennsylvania Water & Power Company Stock

Inasmuch as bankers' services and management services were acquired by the issuance of stock, it is necessary to determine the cash value of the stock at the time it was issued.

The first evidence of values is revealed in the Company's minute book where Aldred s letter dated March 3, 1910 to the Pennsyl-

vania Water & Power Company accounts for certain expenditures made by him personally. One of these was the purchase of the $66,000. McCall bonds not deposited with the Committee. Regarding their purchase at an aggregate cost of $49,040., Aldred stated:

> "I considered the aggregate price paid for bonds to be probably below rather than above what might be expected to be the fair value of the equivalent new securities at, or soon after, their issue."

(See Exhibit No. 57)

On the basis of exchange, the $66,000. bonds were equivalent to:

$26,400. par value of P.W. & P. Co. bonds (40%)
$39,600. par value of P.W. & P. Co. stock (60%)

The use of a value of 90 for the bonds (the price at which they were sold) would result in a value of approximately $64. per share for the stock.

The first known sale of stock was 100 shares at 38 on January 20, 1911. The next sale was March 1, 1911 - 100 shares at 62½ - and for three months thereafter, thirteen sales, totalling 1,189 shares, were made within the range of 59-5/8 to 63-3/4. Therefore, $60. per share has been used as representing the fair cash value of the stock at the time it was issued for services.

Foreclosure and Sale of McCall Company Property

On October 12, 1909, a decree of foreclosure and sale was obtained in the Pennsylvania Court against the McCall Company. Similar decrees were secured in New York and Maryland on October 15th and 20th, respectively.

On December 1, 1909, a Committee meeting was held at which the action to be taken at the foreclosure sale of the McCall Company was discussed. It was decided to bid $2,000,000. for the property, and as much more as might be necessary to purchase the same in case of com-

petitive bidding, but not to exceed the amount of principal and interest due on the bonds and the debts and expenses of the Committee. They decided that if any qualified bid by another was made in excess of this amount, he should be permitted to purchase the property.

On December 7, 1909, the property of the McCall Company was sold to Wm. M. Barnum, acting for the Bondholders' Committee, for $2,000,000. (See Exhibit No. 58) On December 18th, the order of the Pennsylvania Court, confirming the sale, was issued, (See Exhibit No. 59), and there followed four days later similar orders from the Maryland and New York District Courts.

XII - COMPLETION OF CONSTRUCTION BY PENNSYLVANIA WATER & POWER COMPANY

Formation of Pennsylvania Water & Power Company

On January 13, 1910, a meeting for the reorganization of McCall Ferry Power Company was held in Philadelphia. All the members of the Bondholders Committee were present. The following officers and directors were elected to serve until the first Monday in May 1910:

J. E. Aldred	- President and Director
W. Marriott Canby	- Director
Fayette B. Dow	- Director
John H. Kelly	- Director
Frank C. McCown, Jr.	- Director
Kenneth M. Spence	- Director

The name, Pennsylvania Water & Power Company, was then adopted.

The authorized capital stock was determined to be 170,000 shares of $50. par value each for a total of $8,500,000. Approval was given for the issuance to the Committee of $7,580,000. of one year unsecured bonds and 169,900 shares of stock, in exchange for the property and other assets of the former McCall Ferry Power Company, the benefits of the Committee's expenditures in respect of the property, the remaining cash in the hands of the Committee and other miscellaneous assets. All agreements not fully performed by the Bondholders Committee were to be carried out by the Company. Meetings of the directors and stockholders necessary to complete the organization of the Company were held the same day.

(See Exhibit No. 60)

In February 1910, the number of shares of stock was reduced to 85,000 and the par value of each increased to $100.

Status of Work at Organization of Pennsylvania Water & Power Company

During the period from July 17, 1909, when Aldred was appointed Receiver, to January 13, 1910, when the McCall property was purchased from the Bondholders Committee by the newly-formed Pennsylvania Water & Power Company, additional construction had been carried on, chiefly by Empire Engineering Corporation under its contract with Aldred

Power House: The metal draft tube throats and shell castings for the water wheels were placed for the first five units and concreting brought up to subgrade of the generator room floor for the first four units. The side walls for the first three units and at the river end of the power house were completed and roof tile laid on this area. The wall between the transformer house and generator room had been brought up to the crane level to Unit 7. The submerged intake arches had been completed and concrete poured to the level of the gate house floor as far as Unit 6.

Main Dam: The York County end and abutment had been completed, leaving only 14 flood openings in the whole dam. The seven flood openings on the Lancaster side had been raised ten feet

Deflection Wall: The section between the construction bridge and the skimmer wall had been completed.

Forebay: The connecting bulkhead had been brought up to its full height.

Increase in Indebtedness

On January 22nd, a meeting of the Directors of Pennsylvania Water & Power Company was held for the purpose of securing approval of an

increase in the Company s indebtedness They approved an increase to $12,500,000. subject to stockholder ratification. The Stockholders approved the increase on January 25th, and authorized the execution of a mortgage and deed of trust on the Company s property for the same amount. On January 27th, a mortgage was executed with Knickerbocker Trust Company, as Trustee, effective January 1, 1910, covering the issuance of $12,500,000. of bonds.

Voting Trust

On January 27, 1910, a Voting Trust was formed, the Trustees being Aldred, Barnum and C. E. F. Clarke, Treasurer of the Company. Because of the change in par value of the stock from $50. to $100. per share a new Trust with the same Trustees was formed on February 7, 1910. (See Exhibit No. 61)

Receiver s Report Filed

Aldred, as Receiver for McCall Company, filed his report on February 21, 1910. This showed that he had received cash of $173,166.27, which included $100,000. from the $250,000 original deposit with Knickerbocker Trust Company in connection with indemnification for railroad relocation His disbursements were $33,722 91, leaving a balance of $139,443 36 to be turned over to the Pennsylvania Water & Power Company (See Exhibit No. 62) The Court discharged the Receiver on March 18, 1910.

Bondholders Committee Report

At a meeting of the directors on March 3rd, a report was received from the Bondholders Committee showing the receipts and disposition of all moneys received by it to March 1, 1910 and by Aldred as Manager of the enterprise.

1 - McCall Company Bondholders' Committee

Summary Cash Statement

Receipts		Expenditures	
Proceeds of Committee's Notes	$1,100,000.00	Payment of Committee's Notes principal and interest	$1,103,763.88
Proceeds of Bonds - $2,222,000. par value at 90 and int.	2,007,405.50	Payment of cash to Pennsylvania Water & Power Co. on a/c	750,000.00
		Advances to J.E. Aldred, Receiver, for use in construction	600,000.00
		Purchase of Susquehanna Contracting Co. Notes at par and int.	422,983.32
		Payment to Special Master under decree in foreclosure suit	15,000.00
		Settlement of claims against McCall Ferry Power Co.	51,874.14
		Reorganization Expense: Payments to counsel, depositaries, Secretary, Montreal Trust Co., and for travelling expenses, printing, etc. $38,064.77	
		Committee's compensation 40,000.00	78,064.77
		Balance of cash on hand (of which amount the Committee proposes to turn over to the Pennsylvania Water & Power Co. $62,658.30 and to retain for future disposition 23,061.09)	85,719.39
	$3,107,405.50		$3,107,405.50

II - J. E. Aldred in Account with Bondholders Committee on Account of Pennsylvania Water & Power Company

Debit

For Disbursements		
Engineering		
R. S. Kelsch	$ 2,683.49	
J. A. Walls	50.00	
Cement Tests	1,532.03	
Empire Eng. Corp.	13,328.81	$ 17,594.33
Material, Labor, etc.		
McCall Ferry Dis'bts.	$146,749.35	
Water Wheel Contract	100,000.00	
Stone	10,336.73	
Insurance	822.79	257,908.87
Interest on advance payments on bonds		28,197.60
Cash funds transferred to P.W.&P.Co.		163,060.25
		$466,761.05

Credit

Cash advanced	$600,000.00	
Bank interest	288.04	
Insurance rebate	139.18	
Interest (estimated)	1,222.60	
	$601,649.82	
Total credit		$601,649.82
Total debit		466,761.05
Balance due Committee		$134,888.77

III - Cash Advanced by J. E. Aldred Personally and Expended as Manager

C. & P. D. R.R. Relocation

Right of Way	$ 47,075.00	
Construction	35,051.17	$ 82,126.17

Purchase of $66,000 McCall Bonds

Cash for bonds	$ 49,040.00	
Legal Services	2,500.00	51,540.00
Interest (estimated)		1,222.60
Total		$134,888.77

Aldred accompanied his statement with an account of his activities both on behalf of the Bondholders' Committee and on his own initiative as Manager of the enterprise.

At this meeting all of the contracts which Aldred had entered into in connection with the McCall development were assumed by Pennsylvania Water & Power Company. The actions and expenditures of both the Committee and Aldred were also approved and accepted.

(See Exhibit No. 57)

Full Board of Directors Elected

The terms of the original directors expired May 2, 1910. On this date the following directors were elected:

J. E. Aldred
R. M. Aitken
Wm. M. Barnum
A. C. Bedford
C. E. F. Clarke
W. M. Canby
A. V. Davis
R. E. Griscom
H. S. Holt
G. M. Lane
S. L. Lewis
F. C. McCown, Jr.
M. E. Olmsted
E. R. Wood
W. R. Warren

On February 7, 1911, Canby and McCown were replaced by J. A. Walls and F. D. Carney.

Consolidated Company Power Contract

A new power contract was executed with the Consolidated Gas Electric Light and Power Company of Baltimore on August 29, 1910, on terms more favorable to Pennsylvania Water & Power Company than the old McCall Company contract had been. Under its terms the amount of power to be taken for a ten year period was two-thirds of the Consolidated Company's peak load of each preceding year. For the first year of the contract 13,333 kw. were to be taken with a minimum of 70,000,000 kwh. The rate to be paid for energy taken was four mills per kwh. Delivery of power under this contract was started on October 23, 1910, with but

one unit in service. (See Exhibit No. 63)

United Railways Power Contract

A new power contract was executed with United Railways & Electric Company of Baltimore on February 8, 1911, effective for fifteen years from that date. Under its terms 12,000 kw. was to be available at all times, for which an annual charge of $24. per kw, would be made. Enough additional power was to be supplied to carry the entire load of the Railways between 10 P.M. of one day and 1 P.M. of the next as well as all day Sundays. For this additional power an energy charge of three mills per kwh. would be made. (See Exhibit No. 64)

XIII - TRANSMISSION COMPANIES

Willis & Homer Retained

As hereinbefore stated the contract with the Consolidated Gas Electric Light and Power Company which was signed on March 13, 1907, provided for delivery of power in Baltimore by McCall Company. At the time, details of a contract with United Railways and Electric Company were being worked out and actual signing of the contract was merely a matter of time. During the period of these negotiations, consideration had been given to the organization of transmission and distributing companies. Surveys and investigations for rights of way for the proposed transmission lines were started the latter part of 1906 and actual acquisition began in June 1907. At this time Willis & Homer, who had previously been appointed attorneys for McCall Company's interests in Maryland, were requested to acquire right of way and incorporate companies necessary for a transmission line from McCall Ferry to Baltimore.

Maryland Pole Line Companies

The Susquehanna Pole Line Company of Baltimore County was incorporated on June 27, 1907, for the purpose of obtaining right of way in Baltimore County and, on August 13, 1907, the Susquehanna Pole Line Company of Harford County was incorporated for the same purpose in Harford County. Each company had authorized capital stock of $50,000. of which only five shares of $100. par value each were issued. The ten shares of outstanding stock of the two companies were owned by McCall Company and the directors for each company were selected from the respective counties with a view of assisting in the acquisition of rights of way.

Pennsylvania Pole Line Companies

Lower Chanceford Township Transmission Company and Peach Bottom Electric Transmission Company were incorporated in Pennsylvania on November 18, 1908, the primary purpose being to provide transmission lines through these townships from the McCall plant to the Maryland state line. Each company had authorized capital stock of $5,000. of which only five shares of $100. par value each were issued. The ten shares of outstanding stock of the two companies were owned by McCall Company.

Rights of Way and Construction

Between June 1907 and December 1908, when McCall Company defaulted on its bond interest, advances totalling approximately $100,000. secured by notes, were made to Willis & Homer for the account of the Pole Line Company of Baltimore County. Expenditure of these funds by Willis & Homer was made for the benefit of all the pole line companies in acquiring rights of way and for surveys. In January 1910, Pennsylvania Water & Power Company resumed the acquisition of rights of way and began construction of the transmission line. The line was constructed by October 1910.

Merger of Pole Line Companies

The two Pole Line Companies in Maryland were consolidated on April 19, 1910, to form the Susquehanna Transmission Company of Maryland and the two companies in Pennsylvania were merged on April 26, 1910, to form the Susquehanna Transmission Company of Pennsylvania. Two shares of stock of the predecessor companies were exchanged for one share of stock of the merged companies.

Financing of Transmission Companies

In 1907-08 McCall Company had advanced approximately $100,000. to the Pole Line Companies. In 1910 Pennsylvania Water & Power Company advanced additional funds on open account for completion of acquisition of right of way and construction. In March 1911, Susquehanna Transmission Company of Pennsylvania issued $183,000. of 5% First Mortgage Bonds at 90 to Pennsylvania Water & Power Company covering practically all advances made to the Transmission Company up to that time. In September 1911, Susquehanna Transmission Company of Maryland issued $1,031,000. of 5% First Mortgage Bonds at 90 to Pennsylvania Water & Power Company covering substantially all of the advances made the Maryland Company up to that date. Additional bonds were issued from time to time to cover other advances.

Both the bonds and the stocks of the Transmission Companies were pledged by Pennsylvania Water & Power Company as additional collateral under its mortgage.

XIV - HISTORY OF ACQUISITION OF PROPERTY AND RIGHTS

General

The following is a summary of the acquisition of property and rights prior to the beginning of commercial operation on October 1, 1911, and disposition of those not needed for the Holtwood development. No attempt has been made to present all property acquisitions but the major ones which are explained, represent practically all of the properties and rights essential to the Holtwood development. In conformity with the scope of the general history, this explanation of property acquisitions has been limited to transactions occurring prior to the beginning of commercial operation.

Resume' of Previously Detailed Acquisitions

Upon the failure of the Dimock-Bertron-Barney Underwriting, Harvey Fisk & Sons acquired all of the Hutchinson property and rights on the Susquehanna! The Fisk firm also purchased all the rights and interests of Harlow-McGaw. These two acquisitions (shown on the accompanying map) constituted substantially all the property needed for a development at McCall Ferry as well as considerable property and rights above and below the area required for the McCall project. Most of this excess property was necessary for other developments along the river, and its retention prevented its use by competing interests and thus gave an opportunity for McCall Company to secure the desirable power markets.

Robert Fry Property

About the first of November 1905, the McCall Company was in the early stages of construction, clearing of the site having been started on October 24th. Robert T. Fry at that time was holding his property, which

was necessary for the development, for an exceedingly high price. Due to the urgency of obtaining this Fry property, Simpson, Thacher and Bartlett obtained an opinion from John G. Johnson on the matter of the McCall Company's power of condemnation.

Our records indicate that as early as 1902, the subject of the right of eminent domain for water power companies had been given serious consideration and much study. Opinions were rendered by Beyer, Semple and Johnson and the consensus was that, while these companies could appropriate the waters of rivers and streams, they must be the owners of land on both sides at the point of erection of a dam and must not injure the rights or privileges of private owners of property on the river. There was thought to be no limitation upon water power companies as to obtaining a supply of water, or acquiring land for their requisite buildings and works, but even this apparent right to condemn for the erection of works had not been tested in the courts.

On October 31, 1905, Simpson, Thacher and Bartlett submitted the question to Johnson and on November 3rd received a reply that the company had such rights as respects terminal and construction purposes. They desired to institute condemnation proceedings as soon as possible since the Fry tract was required for construction buildings, storage sidings, for the abutment of the east end of the dam and to form a portion of the storage reservoir. McCall Ferry Power Company, through Wm. F. Beyer, filed a petition for this purpose in the latter part of November. The hearing was postponed to the latter part of December due to the full Court Docket. During this period of waiting, Johnson was asked to handle the matter because of the importance of the case and the papers in the case were sent to him. Beyer later gave him all of

the details at a personal interview. As a result of this interview, Johnson learned that the McCall Company was incorporated on April 14, 1905, one day after the right of eminent domain to water companies had been further restricted. This new information changed Johnson's opinion in the matter so that he then thought that no right of eminent domain existed for water power companies incorporated after April 13, 1905. His new idea was to stretch the case out over a long period of time and negotiate for a private purchase. In the meantime, commitments had been made, predicated upon the ownership of this tract and immediate possession by the company was necessary. This fact, and Johnson's doubt as to the probable outcome of the condemnation case, very likely were the reasons for the renewal of negotiations to obtain the Fry property by purchase. The parties finally came to an agreement upon a price of $28,000. on January 13, 1906, although Fry had demanded $35,000. in December. The condemnation case was dropped and, consequently, the application of the principle of eminent domain to the McCall Ferry Power Company was never settled. Their doubt as to this right probably had a material effect on the prices later paid for properties, and undoubtedly was a primary cause of the subsequent abandonment of the consideration of a dam at 185 elevation. (See Exhibit No. 65)

Piney Island

In September 1905, the owners of Piney Island, which was situated just below the site of the proposed dam, began negotiations for the sale of the island to McCall Company and threatened to bring suit for damages unless the island was purchased. This island was the upper one of a chain of islands which separated the proposed tailrace from the main river and the one upon which a deflection wall from the

main dam would have to abut. After more than a year of negotiations, Piney Island was purchased for $27,000.

Witmer Properties

The Witmer properties consist of land in fee and flowage releases extending from the Mt. Atlas Tract to Long Level, in York County, and from Safe Harbor to Washingtonboro, in Lancaster County, but the properties are not contiguous on either side of the River. The group of properties had been assembled by John M. Witmer, in conjunction with John F. Brimmer and John W. Holman, who were apparently working under some sort of an understanding with the firm of Pepper & Register.

The properties were acquired between the years 1900 and 1902 and title was taken in the name of Witmer. The firm of Pepper & Register did not exercise its option, so that by agreement dated August 25, 1905, Witmer sold these properties and rights to the Susquehanna Contracting Company, for a consideration of $40,000., of which $7,500. was paid at the time of the signing of the agreement and the balance ($32,500.) on January 22, 1906 upon delivery of the deeds. These properties were acquired because they were deemed necessary for a project having a dam crest elevation of 185, which was the elevation contemplated at the time of this acquisition.

Miscellaneous Properties

In addition to the foregoing properties and rights, various other minor acquisitions were made to complete the requirements for flowage basin, railroad relocation, etc.

XV - DISPOSAL OF NON-USEFUL PROPERTY AND RIGHTS

Consolidation of 1908

It has been mentioned in "I General Description of the Susquehanna River and Its Early Utilization," that there were three major interests competing in the development of the river. In addition to McCall Company these were Susquehanna Electric Power Company and Susquehanna Power Company. Harlow-McGaw had been associated with the Electric Power interests but the properties they sold to McCall Company had been held in their individual names. In addition to these properties, the Electric Power Company held certain properties and rights which did not pass to McCall Company. Following the sale, Harlow became Chief Engineer of Susquehanna Power Company.

In July 1906, Susquehanna Power Company instituted condemnation proceedings in order to acquire certain properties of McCall Company in Maryland. Subsequently similar proceedings were instituted against Susquehanna Electric Power Company. McCall Company made an unsuccessful attempt to secure an injunction restraining Susquehanna Power Company.

The McCall interests had no particular objection to the amount of damages which the juries had awarded in August and September 1906, but were primarily concerned with preventing any competing company from acquiring sufficient property for a development. Their entire handling of the matter in subsequent proceedings shows an effort to deny the right of condemnation to the Susquehanna Power Company and to delay the result as long as possible in order to permit the McCall Company to complete power contracts for desirable markets. By requesting new trials, transfers to other courts and appeals to higher courts, McCall Company succeeded in preventing a final decision.

After an unsuccessful attempt to acquire control of Susquehanna Power Company, Bertron, Storrs & Griscom secretly secured control of Susquehanna Electric Power Company in April 1907, but notified McCall Company of the fact. (See Exhibit No. 66)

Realizing that the condemnation proceedings were becoming costly and that the final outcome was uncertain, Susquehanna Power Company proposed a consolidation of what it still believed were three competing interests, for the development of the river below McCall Ferry. At a meeting of the McCall Company Executive Committee held February 5, 1908, a consolidation of interests of Susquehanna Power Company, Susquehanna Electric Power Company and McCall Company was approved and the firm of Bertron, Storrs & Griscom was appointed to represent the McCall interests. It should be recalled that the Susquehanna Electric Power Company interest had passed to Bertron, Storrs & Griscom in 1907 and consequently in arranging the consolidated agreement they represented two of the three parties. This fact was unknown to Joel H. De Victor, who represented the Susquehanna Power Company.

The Consolidation Agreement was signed February 20, 1908, between

1. Joel H. De Victor for the Susquehanna Power Company
2. John Henry Miller and Wm. H. Surratt for the Susquehanna Electric Power Company
3. Bertron, Storrs & Griscom for the McCall Ferry Power Company

The agreement called for the pooling of all holdings by the three companies between Cully's Falls (elevation 103) and elevation 12 in the river. The proration of shares of the pooled interests was on the basis of original control of river property in terms of feet of fall of the river past the property in question. On the basis of 103' 12' =

91' fall, the division of holdings was determined to be:

1.	Susquehanna Power Company	30/91
2.	Susquehanna Electric Power Company	23/91
3.	McCall Ferry Power Company	38/91

(See Exhibit No. 67)

All property in Maryland was transferred to the Susquehanna Power Company and that in Pennsylvania to the Sowego Water and Power Company, all of whose common stock was owned by the Susquehanna Power Company. The Susquehanna Power Company had been selected as the vehicle by which the merger of interests was to be effected, as at that time it had broader corporate power than any of the other companies.

Distribution of Susquehanna Power Company's Securities

All the outstanding capital stock of the Susquehanna Power Company was issued to the three parties of the agreement as follows:

Susquehanna Power Company	1,319 shares
Susquehanna Electric Power Company	1,011 shares
McCall Ferry Power Company	1,670 shares
Total	4,000 shares

In addition to the common stock, each of the three parties received its proportional share of the 5% First Mortgage Gold Bonds, the division being:

1.	Susquehanna Power Company	$ 600,000.
2.	Susquehanna Electric Power Company	460,000.
3.	McCall Ferry Power Company	760,000.
	Total	$1,820,000.

Except for such shares of common stock of the Susquehanna Power Company as might be required to qualify directors, all stock was to be transferred to a holding company having a nominal capital, and the stock of this holding company was to be divided on the same foot-fall of river basis, namely, 30/91, 23/91, 38/91.

McCall Properties Transferred to Susquehanna Power Company

The following securities and properties were transferred to the new Susquehanna Power Company and its subsidiaries by McCall Ferry Power Company as the result of this agreement:

Capital Stock	No. Shares Outstanding	No. Shares Owned and Transferred
Proprietors of the Susquehanna Canal	75	75
Conowingo Land Company	600	400
Susquehanna Construction Company	10	10
Susquehanna River Electric Company	1,000	985
Susquehanna Electric Power Company	81,568	1,760
Susquehanna River Power Company	9	9

Canal Properties

Tide Water Canal Company

Canal rights, property and franchises from Maryland-Pennsylvania State Line to Havre de Grace.

Included 29 town lots in Havre de Grace, eleven with improvements.

Archers Island.

Subject to right of way grant to Tide Water and Susquehanna River Railroad Company.

Susquehanna Canal and Power Company

Consent to construction of dam and release of damages to all property, rights, etc., below foot of Cully's Falls.

Other Companies: Consents and Releases

Conowingo Bridge Company.
Tide Water and Susquehanna River Railroad Company.

Other Properties and Releases

River frontage		
East Bank, Penn.	approx. 24,550 ft.	
West Bank, Penn.	" 23,000 ft.	47,550 ft.
Acreage in Maryland (additional)		112 A.
River bed in Maryland		1,395 A.
Islands in Pennsylvania		6

(See Exhibit No. 67)

In return for the aforegoing property and rights, the McCall Company received $760,000. of Susquehanna Power Company 5% First Mortgage Gold Bonds and 1,670 shares of Susquehanna Power Company common stock. The latter were exchanged for stock of the Susquehanna Properties Company described hereinafter. Subsequently, McCall Company used $57,000. par of the bonds and 170 shares of stock of Susquehanna Properties Company in connection with payment of legal services for these proceedings.

The original consolidation agreement dated February 20, 1908 was modified on June 30, 1908, chiefly for the purpose of issuing additional bonds to cover preliminary expenses. (See Exhibit No. 67)

Condemnation Cases Dismissed

The execution of the agreement of February 20, 1908, permitted the delay of argument of the pending cases successively to the April and October Terms of the Maryland Court of Appeals when they were dismissed by request of McCall Company.

Incorporation of Susquehanna Properties Company

On June 6, 1908, the Susquehanna Properties Company was formed as the "holding company" mentioned in the consolidation agreement of February 20th. Susquehanna Properties Company stock, having a par value of $1.00 per share, was issued in exchange for the Susquehanna Power Company stock on a share for share basis.

Harlow-McGaw Properties

Under the provisions of the consolidation agreement of February 20, 1908, all the property and rights of McCall Company lying below the foot of Cully's Falls were transferred to Susquehanna Power Company and its subsidiary Sowego Water and Power Company. Substantially all of this property had been acquired from Harlow-McGaw. The net consideration to

McCall Company was $703,000. par value of bonds of Susquehanna Power Company and 1,500 shares of Susquehanna Properties Company stock. By an agreement dated March 12, 1912, Pennsylvania Water & Power Company surrendered the bonds and stock for the sum of $200,000. in cash and the assumption by the purchasers, Bertron, Griscom & Jenks, of the benefits and obligations remaining in the McCall Company under certain agreements with Pennsylvania Railroad dated July 2, 1906 and August 13, 1906. (See Exhibit No. 68) These properties had a fair market value of approximately $163,000. at the time they were transferred to the Susquehanna Power and Sowego Companies.

At the beginning of commercial operation on October 1, 1911, the portions of the property and rights acquired from Harlow-McGaw which lay above the Holtwood pond were no longer useful for that development. In June 1930, they were sold to Safe Harbor Water Power Corpo ration for $61,740. As of beginning of commercial operation of the Holtwood plant, these properties had a fair market value of approximately $29,000.

Witmer Properties

The Witmer properties and rights were acquired at the time that a dam to elevation 185 was contemplated. The subsequent decision to build to 165 rendered practically all of these properties useless to the Holtwood project and, except for flowage rights over that part of the Mt. Atlas Tract located south of the Safe Harbor dam and 15 flowage releases at Washingtonboro, these properties which had cost approximately $39,000., were sold to Safe Harbor Water Power Corporation in June 1930 for $96,230. The sale price was based on fair market value as of the date of transfer and was approved by the Federal Power Commission and the Pennsylvania

Public Service Commission.

Miscellaneous Properties

Certain of miscellaneous properties and rights which had been acquired at a cost of $5,537. in connection with the proposed 185 dam were not useful for the dam at 165. In June 1930, these were sold to Safe Harbor Water Power Corporation, on a basis of fair market value, for $35,575.

XVI - STATUS ON OCTOBER 1, 1911, THE DATE OF BEGINNING OF COMMERCIAL OPERATION

Financial

On the date of beginning of commercial operation, October 1, 1911, the Pennsylvania Water & Power Company and its wholly-owned transmission companies had the following securities outstanding:

	P.W.&P.Co.	S.T.Co.of Md.	S.T.Co.of Pa.
Capital Stock	$8,495,000.	$ 500.	$ 500.
Less: Treasury Stock	37,100.	-	-
Net Capital Stock	$8,457,900.	$ 500.	$ 500.
First Mortgage 5% Bonds	$7,580,000.	$1,031,000.	$ 183,000.
Less: Treasury Bonds	15,000	-	-
Net First Mortgage 5% Bonds	$7,565,000.	$1,031,000.	$ 183,000.

All of the stocks and bonds of the transmission companies were owned by the Pennsylvania Water & Power Company, the bonds having been issued to Pennsylvania Water & Power Company at 90 against advances for construction of the Baltimore transmission line and substation.

At this date all the funds obtained from the sale of bonds had been used in furthering the development. Subsequently, additional bonds were issued from time to time up to 1915 to obtain funds to complete the original project.

Ownership of Other River Companies

In addition to the transmission companies, the Pennsylvania Water & Power Company at this time owned the following securities of other companies along the river:

A - Stocks

Company Name	Number of Shares Owned	Outstanding
Lower Chanceford Water and Power Company	10	10
McCall's Ferry Company	200	200
Susquehanna Canal and Power Company	2,478	2,478
Susquehanna Falls Power Company	6	6
Susquehanna Storage Lake and Power Co.	12	12
York Furnace Electric Company	24	24
Martic Water and Power Company	1,637	1,900
Susquehanna Properties Company	1,500	4,000

B - Bonds

	Principal Amount
Susquehanna Power Company	$703,000.

The Tidewater and Susquehanna River Railroad Company, which had been controlled by Harlow-McGaw from its formation until 1905, remained under the control of Houseman thereafter. Since this company had granted flowage rights to both McCall Company and Susquehanna Power Company, it no longer presented any obstacle to a development by either of these companies.

Physical Status of Plant

As of October 1, 1911, all of the plant necessary for commercial operation was complete. This included the dam, power house substructure, deflection and wing walls, ramp, ice booms, etc. The power house superstructure had been completed for the generator room and transformer house to the center line between Units 6 and 7 where a temporary end wall had been installed. The gate house superstructure extended to the center line between the intakes for the exciters and Unit 6. The status of the equipment will be described in the succeeding section.

Difficulties Encountered in Beginning Commercial Operation

It has previously been mentioned that the first unit of the

plant began the delivery of power to Consolidated Gas Electric Light and Power Company on October 23, 1910.

Although this unit remained in almost continuous operation until the end of 1912, it was kept in operation part of the time with considerable difficulty. Trouble developed with the bearings, the exciter, the relays, and the governors. Eventually the generator had to be rewound due to faulty insulation.

Repeated delays on the part of I.P. Morris, General Electric, and Standard Roller Bearing Company resulted in all units being installed weeks or months behind schedule. Number 2 Unit was tried out on November 5, 1910 but immediately developed bearing trouble. It was not until the middle of October 1911 that this unit was in anything like continuous service. Early in 1913 this unit also had to be rewound.

Unit 3 was placed in service March 25, 1911, Unit 4 on May 18, 1911, and Unit 5 on July 25, 1911. Unit 2 was still out of service; thus, only four of the five original units were serviceable. However, two of the five transformers had burned out and it was not until the latter part of November 1911 that all five units were in operating condition, with sufficient transformer capacity available to take care of their output. This condition lasted only until February 19, 1912, when two transformers broke down. During 40% of the entire year of 1912 there were less than five transformers available for service.

Early in September 1911 four of the five units were in service, with sufficient transformer capacity available. As a result of the study of the early operation of the plant, October 1, 1911 has been taken as the date of termination of the original construction period. Although sufficient equipment had been installed for commercial operation to begin October 1, 1911, the original project consisting of eight 25 cycle units was not actually completed until December 31, 1915.

CHRONOLOGY OF HOLTWOOD DEVELOPMENT

		Page
1894	Harlow-McGaw began formation of companies and acquisition of properties.	5
July 1896	Sale of Canals to Harlow-McGaw.	5
Spring 1899	Hutchinson assisted Bogart in investigation of a proposed development on the lower Susquehanna.	6
9/28/99	Partnership of York Furnace Power Company organized by Beyer & Willson.	6
1900	Several small hydroelectric plants in operation on lower tributaries of Susquehanna River.	3
8/15/00	York Furnace Electric Company incorporated.	6
Fall 1900	Hutchinson consulted in regard to effort of Beyer & Willson to develop power for use in iron ore reduction near York Furnace.	6
1901	Beginning of competition between three major interests.	3,
June 1901	Hutchinson became personally interested in York Furnace Development.	6
10/1/01	Hutchinson obtained option on property held by York Furnace partnership.	7
4/3/02	Susquehanna Canal Company reorganized as Susquehanna Canal and Power Company.	5
5/23/02	Muddy Creek, Pequea, Chanceford, Conestoga, Lower Windsor, Manor, Drumore, Fulton and Peach Bottom Water & Power Companies incorporated.	5
8/14/02	Susquehanna Falls Power Company, Susquehanna Storage Lake and Power Company and Susquehanna River Power Company formed as consolidations of various township companies.	5
9/2/02	The Hillside and Susquehanna Water and Power Companies incorporated.	8
3/2/03	Bill introduced in Pennsylvania Legislature to have Susquehanna Canal and Power Company charter revoked for non-user.	9

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4/14/03	Agreement between Hutchinson and Harlow-McGaw, providing for elimination of conflicting interests.	9
1/13/05	Wm. Barclay Parsons submitted engineering report on McCall Development.	12
2/8/05	Hutchinson's plans submitted to Johnson for approval.	12,13
2/28/05	Agreement between Chas. D. Pullen and Harlow-McGaw for Pullen to consolidate all interests on the river.	26
3/1/05	Prospectus and underwriting agreement of Dimock-Bertron-Barney.	14
March 1905	Acquisition of control of McCall development by Harvey Fisk & Sons upon failure of Dimock-Bertron-Barney underwriting.	19,21
3/21/05	Agreement between Pullen and Susquehanna Power Company for Pullen to consolidate all interests on river.	27
3/25/05	Underwriting Agreement of Harvey Fisk & Sons.	22
4/5/05	Agreement between Pullen and Harlow-McGaw to place in control of Susquehanna Canal and Power Company, all property of Harlow-McGaw and Susquehanna Power Company.	28
4/13/05	Pennsylvania passed law further restricting right of eminent domain for water power companies.	35
4/14/05	Incorporation of McCall Ferry Power Company through consolidation of The Hillside and Susquehanna Water & Power Companies.	34
4/18/05	Houseman proposed to Harvey Fisk & Sons a consolidation of Harlow-McGaw interests with McCall Ferry Power Company.	29
4/27/05	Agreement by Harlow-McGaw to sell to Harvey Fisk & Sons all their interests on the river.	30
	Geo. K. McGaw individually sold to S. R. Bertron stock control in certain companies.	32
4/29/05	Assignment by Pullen to Bertron, Storrs & Griscom of three agreements to consolidate Harlow-McGaw and Susquehanna Power Company interests.	32
5/15/05	Arrangement by Harvey Fisk & Sons with Knickerbocker Trust Company for loans on bond and stock purchase agreements.	36

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5/22/05	First corporate meeting of McCall Ferry Power Company.	35
6/12/05	Incorporation of Susquehanna Contracting Company.	37
6/13/05	McCall bond and stock increase authorized.	41
	Agreement between Susquehanna Contracting Company and McCall Ferry Power Company to finance McCall Development and transfer properties to McCall Ferry Power Company.	39
6/14/05	Agreement dated April 27, 1905 between Harlow-McGaw and Harvey Fisk & Sons assigned to Susquehanna Contracting Company.	43
	Agreement for sale of Hutchinson properties, etc., to Susquehanna Contracting Company.	42
	Harvey Fisk & Sons assigned bond and stock purchase agreements and loan arrangement to Susquehanna Contracting Company, and were appointed its agents to carry out the provisions of the purchase agreements.	38
6/15/05	McCall Company mortgage executed with Knickerbocker Trust Company as Trustee.	43
	Agreement between Susquehanna Contracting Company and Harlow-McGaw verified obligations transferred by assignment of Harvey Fisk & Sons' agreement to Susquehanna Contracting Company.	43
6/16/05	Assignment of Pullen option from Bertron, Storrs & Griscom to Susquehanna Contracting Company.	43
6/20/05	Agreement between Hutchinson and Susquehanna Contracting Company for removal of title defects.	43
8/7/05	Dam crest elevation of 185 recommended.	55
8/8/05	New Board of Directors and officers elected.	44
8/11/05	Call for bids for construction.	56
10/2/05	Witmer properties acquired.	105
10/18/05	Contract with Cooper to manage hydraulic construction.	57
10/24/05	Construction began.	60
10/25/05	Contract with Sanderson & Porter to superintend the electrical construction, and manage accounts.	59

11/1/05	Loan agreement of Susquehanna Contracting Company with Knickerbocker Trust Company.	39
1/13/06	Purchase of Robert Fry property.	104
1/20/06	Agreement for deposit of stock with Voting Committee.	45
1/29/06	Incorporation of McCall Ferry Supply Company.	60
2/16/06	Agreement with Pennsylvania Railroad for relocation of C. & P. D. R. R. based on elevation 185.	59
4/14/06	Contract with Kerbaugh for railroad relocation work based on elevation 185.	60
6/19/06	Dam crest fixed at elevation 165.	63
July 1906	Condemnation suits instituted against McCall Ferry Power Company by Susquehanna Power Company.	106
8/13/06	Agreement with Pennsylvania Railroad for relocation of C. & P. D. R. R. based on elevation 165.	63
8/15/06	Contract with Kerbaugh for Cully's Cut.	66
8/27/06	Contract with Kerbaugh for railroad relocation work based on elevation 165.	64
12/21/06	Purchase of Piney Island.	104
1/14/07	Court Order authorizing construction of dam.	70
3/13/07	Contract executed for sale of power to Consolidated Gas Electric Light and Power Company.	70
April 1907	McCall Company took over excavation of Cully's Cut.	67
5/22/07	Bertron, Storrs & Griscom obtained control of Susquehanna Electric Power Company.	107
6/27/07	Incorporation of Susquehanna Pole Line Company of Baltimore County.	99
6/28/07	Contract executed for sale of power to United Railways & Electric Company.	71
Summer 1907	Additional financing considered.	71
8/13/07	Incorporation of Susquehanna Pole Line Company of Harford County.	99
10/21/07	Knickerbocker Trust Company went into receivership.	72

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11/1/07	Curtailment of construction.	73
January 1908	Balance of loan from Knickerbocker Trust Company became available.	74
2/20/08	Consolidation agreement executed by McCall Ferry Power Company, Susquehanna Electric Power Company and Susquehanna Power Comparv.	107
April 1908	Construction work resumed on Cully's Cut.	67
6/6/08	Susquehanna Properties Company incorporated.	110
6/30/08	Amendment to consolidation agreement between McCall Ferry Power Company, Susquehanna Electric Power Company and Susquehanna Power Company.	110
10/20/08	Agreement between McCall Ferry Power Company and Susquehanna Contracting Company providing for additional funds for financing.	75
October 1908	Condemnation suit by Susquehanna Power Company dismissed.	110
	Negotiations begun for refinancing McCall Development.	74
10/28/08	Susquehanna Contracting Company obtained loans of $100,000. from each of the following - Harvey Fisk & Sons, Lee, Higginson & Company, Bertron, Storrs & Griscom and C. A. Coffin.	75
11/1/08	McCall Company funds exhausted.	76
11/2/08	Knickerbocker Trust Company renews loans to deferred subscribers upon payment of an additional 20% installment.	76
11/18/08	Incorporation of Lower Chanceford Township Transmission Company.	100
	Incorporation of Peach Bottom Electric Transmission Company.	100
12/7/08	Bondholders' Committee sent out notice of impending default on bond interest.	79
	Preliminary agreement for deposit of bonds.	80
12/15/08	McCall Ferry Power Company defaulted on bond interest.	79, 87
4/24/09	Aldred submitted proposed plan to Bondholders' Committee which was accepted.	81

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5/27/09	Kitcat & Aitken underwriting agreement.	83
5/28/09	Final plan and agreement between Bondholders' Committee and bond depositors.	84
6/25/09	Opposition by Sanderson & Porter to plan of May 28, 1909 of Bondholders' Committee.	85
6/28/09	Answer of Bondholders' Committee to Sanderson & Porter's opposition.	86
7/1/09	Final plan and agreement became effective.	86
7/6/09	Demand by Bondholders' Committee that Knickerbocker Trust Company foreclose McCall Ferry Power Company mortgage.	87
7/13/09	Suit for foreclosure of McCall Ferry Power Company mortgage instituted by Knickerbocker Trust Company.	87
7/17/09	Aldred appointed Receiver.	87
7/27/09	Montreal Trust Company underwriting agreement.	83
8/16/09	Agreement with Empire Engineering Company for construction.	88
10/6/09	First loan by Bondholders' Committee.	88
10/12/09	Decree of foreclosure and sale.	90
11/16/09	Purchase of $400,000. Susquehanna Contracting Company notes reported to Bondholders' Committee.	88
12/7/09	Property of McCall Ferry Power Company purchased by Bondholders' Committee for $2,000,000. at foreclosure sale.	91
12/18/09	Court Order confirming sale.	91
1/13/10	McCall Ferry Power Company reorganized as Pennsylvania Water & Power Company.	92
	Pennsylvania Water & Power Company authorized the issuance of securities to Bondholders' Committee in return for conveyance of McCall Ferry Power Company assets to Pennsylvania Water & Power Company.	92
1/25/10	Bonded indebtedness of Pennsylvania Water & Power Company increased to $12,500,000.	93
1/27/10	Voting Trust Agreement executed.	94

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1/27/10	Mortgage executed with Knickerbocker Trust Company, Trustee.	94
2/7/10	New voting trust agreement due to change in par of stock.	94
2/21/10	Receiver's report filed.	94
3/3/10	Reports of Bondholders' Committee and Aldred as to their receipts and disbursements accepted by Pennsylvania Water & Power Company.	94
3/18/10	Aldred, Receiver, discharged.	94
4/19/10	Susquehanna Pole Line Companies of Baltimore and Harford Counties consolidated to form Susquehanna Transmission Company of Maryland.	100
4/26/10	Lower Chanceford Township Transmission Company and Peach Bottom Electric Transmission Company consolidated to form Susquehanna Transmission Company of Pennsylvania.	100
5/2/10	Full Board of Directors replaced temporary board.	97
8/29/10	Power contract signed with Consolidated Company.	97
10/23/10	Delivery of power started.	97
2/8/11	United Railways' power contract signed.	98
March 1911	Susquehanna Transmission Company of Pennsylvania issued $183,000. of bonds at 90 to Pennsylvania Water & Power Company in payment of advances for construction.	101
September 1911	Susquehanna Transmission Company of Maryland issued $1,031,000. of bonds at 90 to Pennsylvania Water & Power Company in payment of advances for construction.	101
10/1/11	Beginning of commercial operation.	115

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TRANSCRIPT OF RECORD

(Pages 2683 to 3204)

Supreme Court of the United States

OCTOBER TERM, 1951

No. 428

PENNSYLVANIA WATER AND POWER COMPANY AND SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND, PETITIONERS,

vs.

FEDERAL POWER COMMISSION ET AL.

No. 429

PENNSYLVANIA PUBLIC UTILITY COMMISSION, PETITIONER,

vs.

FEDERAL POWER COMMISSION

ON WRITS OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

PETITIONS FOR CERTIORARI FILED NOVEMBER 16, 1951

CERTIORARI GRANTED FEBRUARY 4, 1952

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Hutchinson's Affidavit

STATE OF FLORIDA)
SS:
COUNTY OF DADE)

Personally appeared before me, a Notary Public in and for the State and County aforesaid, DR. FRANZ HAHR STEWART, who upon oath, deposes and says that he is the physician for Cary T. Hutchinson, who is now residing at 1818 Granada Boulevard, Coral Gables, Florida, and that he has been advised that on January 13, 1939, Cary T. Hutchinson affixed his signature in the form of a cross mark to an affidavit, and that the signature was witnessed by Hollis Rinehart, Jr., and made before Clyde E. Pendley, a notary public; that on the date of the above signature Mr. Hutchinson was capable of understanding the purport of his actions; that several of Mr. Hutchinson's vertebrae show x-ray evidence of some metastatic process, probably a malignancy, and one vertebra is seriously damaged by the process, which has resulted in a paralysis extending below the waist, a weakened physical condition, which has not yet affected his mind or his mental facilities.

Franz Hahr Stewart

Subscribed and sworn to before me, this 14th day of January, A. D. 1939, at Miami, Florida.

Evelyn Marik
Notary Public, State of Florida at large

My commission expires:
Nov 10 1941

STATE OF FLORIDA)
SS:
COUNTY OF DADE)

Personally appeared before me, a Notary Public in and for the State and County aforesaid, HOLLIS RINEHART, JR., who upon oath, deposes and says that Mr. Donald Gunn, representing the Pennsylvania Water & Power Company, conferred with him in Miami, Florida, for several days with reference to information and in particular a statement to be obtained from Mr. Cary T. Hutchinson of Coral Gables, Florida; that during the several conferences with Mr. Gunn, Affiant went over in detail the data and information to be obtained from Mr. Hutchinson and prepared an affidavit setting forth in detail information which Mr. Hutchinson was in a position to give; that Affiant at the time was not only serving as Mr. Hutchinson's personal counsel, but had been acquainted with Mr. Hutchinson and his family for many years; that on January 13, 1939, Affiant conferred with Mr. Hutchinson at his home in Coral Gables, at which time he read to him the aforesaid affidavit and after due discussion Mr. Hutchinson endeavored to subscribe his name to the instrument; that he was unable to do so, but then and there did affix his signature in the form of his cross mark, which was witnessed at the time by Affiant and by Clyde A. Pendley, notary public; that at the time Mr. Hutchinson was thoroughly capable of understanding the contents of said affidavit and was thoroughly informed of the statements contained therein.

Hollis Rinehart Jr.

Subscribed and sworn to before me at Miami, Florida, this 14th day of January, A. D. 1939.

Evelyn E. Marik
Notary Public, State of Florida at large

My commission expires:
November 10, 1941.

STATE OF FLORIDA)
SS:
COUNTY OF DADE)

Before me, the undersigned authority, personally appeared CARY T. HUTCHINSON of 1818 Granada Boulevard, Coral Gables, Florida, who upon oath deposes and says:

1.

That this affidavit is given principally for the purpose of assisting the Pennsylvania Water & Power Company in establishing the original cost of its properties under the requirements of Public Utility Regulatory Authorities. In this connection, Affiant has held numerous conferences in Miami, New York and Baltimore with representatives of the aforesaid corporation, reviewed and examined pertinent data and records, including the pertinent records and data of McCall Ferry Power Company, and thoroughly refreshed his mind and memory in connection therewith.

2.

That during the year 1899, Affiant first became interested in the possibilities of power development on the Susquehanna River; Affiant, in cooperation with John Bogart, a hydro-electric engineer, undertook a study of these possibilities on behalf of Charles Fairchild, a private banker in New York. Following this, Affiant, through a Mr. Coho, who had been associated with Affiant in the General Electric Co., met Messrs. Beyer and Willson. These latter gentlemen were seeking advice in connection with the reduction of iron ore through the use of electricity, and were members of the York Furnace Partnership, which had been acquiring property on the Susquehanna River in the vicinity of York Furnace for a small hydro-electric development. As a result of the contacts thus established, Affiant became

personally interested in the development of electrical power from the Susquehanna River. Affiant's investigations established the fact that the reduction by electricity of the iron ore available in that vicinity would not prove feasible, but Affiant purchased from the York Furnace Partnership, with his own funds, an option on the partnership's holdings in that vicinity, including land and water power rights acquired by the Partnership, in contemplation for use in connection with the reduction of iron ore, being personally impressed with the possibilities of creating power from the Susquehanna River in that vicinity. Following this, Affiant in partnership with Mr. George S. Morison undertook to buy up and acquire sites and other properties on the Susquehanna River near McCall's Ferry, having reached the opinion that the York Furnace site was not the most desirable. Mr. Morison withdrew from the partnership and Affiant, using his own funds, took over his interest therein. The Affiant's funds were exhausted and Affiant's father-in-law, Mr. Henry F. Dimock, undertook and did lend his own funds and obtained other financial aid for Affiant in the furtherance of the project. During this period, Affiant conferred with his attorney, Mr. Lorenzo Semple of Courdert Brothers, on both the legal and business phases of the enterprise. Affiant found Mr. Semple an able attorney and of inestimable help on the business phases of the project.

3.

After protracted negotiations Affiant secured properties near McCall Ferry known as the Fry Tracts. Messrs. Harlow, McCaw & Houseman owned the canal rights on the Susquehanna River near McCall Ferry, thereby blocking Affiant's efforts to develope power in that locality. As a result, Affiant found it necessary in order to protect his position at the McCall Ferry site to acquire property in the lower section of the River. The competition in the purchase of land and water power rights offered by Messrs. Harlow, McCaw & Houseman and others resulted in a

material increase in prices demanded for the properties and brought about legal difficulties which were handled by counsel and concerning the details of which Affiant has no recollection at this time. Several attempts were made to buy out the opposing interests, to consolidate with them or to sell to them, but these negotiations were consistently unsuccessful. After numerous delays, a compromise arrangement was finally reached, which resulted in Messrs. Harlow, McGaw & Houseman withdrawing their opposition to the development proposed by Affiant. Affiant recalls, however, that as a result of these negotiations and legal entanglements, he had incurred by the year 1905 large expenditures in the purchase of the land, water power rights, legal and engineering fees and services, etc. and in addition Affiant had not only devoted practically all of his own time and efforts to the enterprise, but it had required much time and effort on the part of others. It became apparent, as the situation then stood, that Affiant's investments and committments could not be recovered unless his holdings were sold or additional monies were obtained for the development of the project.

4.

By the early part of the year 1905, Affiant had completed his preliminary designs for the proposed development and employed William Barclay Parsons, a consulting engineer, to verify his plan for the development. Following this Affiant and his father-in-law, Mr. Dimock, placed the matter before Mr. S. R. Bertron, a private banker in New York City, who undertook to form and head a syndicate to finance the project. At this time it was contemplated by Bertron for the bankers, that upon the formation of a corporation to take over the development project, not less than one half of the common stock and $750,000.00 in cash would be issued and delivered to Affiant as compensation for his efforts and monies invested, and as a means of enabling Affiant to pay off

and meet his obligations and for expenses, legal fees, etc. incurred to that date. Pursuant to this understanding, Mr. Bertron formed a syndicate to underwrite the finances required. Mr. Bertron soon concluded, however, that the proposition was more than his firm could complete, he thereupon suggested that the matter be placed before Harvey Fisk & Sons of New York City and that that firm be asked to head a new syndicate. The Fisk firm agreed to undertake the formation of the new syndicate and save the underwriting, but insisted as consideration for its efforts that a majority of the common stock of the proposed development corporation be issued to Harvey Fisk & Sons, or its nominees. Affiant recalls that of the 50,000 shares of common stock to be issued under the Harvey Fisk & Sons plan, the bankers were to receive 30,000 shares and that the remaining shares, plus $750,000.00 in cash, were to be given to Affiant to be utilized for the same purpose as under the Bertron plan. Affiant considered this to be a rather exorbitant demand, but in view of the impending failure of Bertron's attempt to finance the project and particularly in view of the large amounts which Affiant had already invested in the enterprise and the demands made upon him by those to whom he was indebted, it was finally agreed to accept the proposition as submitted by Fisk. Following the arrangement then agreed upon, an agreement dated June 14, 1905, was entered into by Cary T. Hutchinson, the Affiant, and Susquehanna Contracting Company, a corporation organized under the laws of the State of New York, under the terms of which agreement, Affiant conveyed to McCall Ferry Power Company, a corporation organized under the laws of the State of Pennsylvania, all of the lands, water power rights, etc. which had been acquired to date in connection with the proposed development project. The ultimate consideration to Affiant arising out of the above negotiations was agreed upon to be $750,000.00 in cash and the delivery to Affiant of 18,840

shares of the common stock of McCall Ferry Power Company, which stock was so delivered to Affiant. As previously stated, Affiant had incurred expenses and obligations for which he considered himself personally responsible in connection with the development of the enterprise. In addition to repayments in cash, which exhausted the entire $750,000.00, Affiant used about 50% of this stock in McCall Ferry Power Company in payment of attorneys' fees, engineering and other fees, and in the payment of obligations arising out of the purchase of land, water power rights, etc.

5.

Following the completion of negotiations with Harvey Fisk & Sons and execution of the foregoing contract, the total sum of $750,000.00 was paid to Affiant in the form of two checks. One check was in the sum of $155,500.00, which Affiant endorsed to the order of Messrs. Beyer & Willson in payment of option acquired by Affiant known as the York Furnace Option. The other check in the sum of $594,500.00 was deposited by Affiant to Affiant's account with the Mercantile Trust Company of New York City. This latter sum was disbursed by Affiant in the repayment with interest of monies loaned to Affiant which had been used for the acquisition of land and water power rights and was further disbursed in payment of legal and engineering fees, travelling and office expenses and other obligations incurred in the development of the project. Affiant has not been engaged in active business for many years and has no longer available any records of his expenditures, obligations, etc. incurred by him in connection with the enterprise, nor of the disbursement of monies received as herein set out. Affiant has requested of the successors of the Mercantile Trust Company of New York City that a search be made for cancelled checks and other records evidencing the disbursements above set out, but has been advised by the Bankers Trust Company, present successor to the Mercantile Trust Company, that the records for June, 1905, are no longer in existence.

Affiant further states that in addition to the above sum of $594,500.00, it was necessary to utilize, as heretofore stated, a large portion of the 18,840 shares of the common stock of McCall Ferry Power Company to pay off and meet the obligations incurred by him in connection with the project, so that as a result the interest which he was able to retain for himself in the project was a much smaller interest than he considered his services and his financial investment to justify, particularly in view of the risks assumed by Affiant and the obligations incurred prior to the date of the sale to Susquehanna Contracting Company. That at the time, Affiant was of the opinion, based on his knowledge of the project as an engineer, that the common stock should return a dividend of from 2% to 3% of its par value, which would make it worth from $20.00 to $30.00 per share, based on earnings alone. This opinion was concurred in by those who were fully informed concerning the enterprise.

The financing was successfully completed by Harvey Fisk & Sons, and the organization of McCall Ferry Power Company was completed and the plan for development of the enterprise which has been worked out by Affiant was adopted and Affiant was offered and accepted the position of chief engineer of the corporation. Affiant from that time on devoted his abilities to the design and construction of the plant and was not concerned with the financial and legal aspects of the business. It was decided to increase the capacity from 50,000 H. P. to approximately 100,000 H. P., which required more financing than had been originally provided and Affiant so reported. Due to delays in arranging for the additional finances, the monies originally provided became exhausted. This occurred at a time when the market had become unfavorable for the raising of money and

resulted in a receivership and reorganization of the corporation. Affiant opposed the plan of reorganization sponsored by Harvey Fisk & Sons, but foreclosure proceedings were consummated so hurriedly as to render it impossible for him to formulate an effective opposition within the time available.

Witness as to mark

His X Mark
Cary T. Hutchinson

Subscribed and sworn to before me, this 13th day of January, A. D. 1939.

Clyde E. Pendley
Notary Public, State of Florida at large

My commission expires:
Notary Public, State of Florida at Large
My Commission Expires Aug. 7, 1940

STATE OF FLORIDA)
) ss.
COUNTY OF DADE)

I, E. B. LEATHERMAN, Clerk of the Circuit Court of the Eleventh Judicial Circuit, in and for said County, the same being a Court of Record, having a seal, and also Recorder of said County, do hereby certify that I am legal custodian of the records wherein is recorded commissions of Notaries Public, and that

Clyde E. Pendley

by whom the foregoing acknowledgment was taken, and whose name is subscribed thereto, was, at the time of taking the same, a Notary Public residing in said County, duly commissioned and sworn, and authorized by the laws of said State to take the proof or acknowledgment of deeds and other instruments in writing, and to administer oaths or affirmations in said County; and that his commission as said Notary Public is of record in said County. I further certify that the laws of Florida do not require an impression of the seal to be on file in this office, and, verily believe that the signature attached to the annexed instrument is his genuine signature.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official Seal, which is the Seal of said Court, at Miami, Florida, this 14 day of January, A. D., 1939.

E. B. LEATHERMAN,
Clerk, Circuit Court.

By M. Swift
Deputy Clerk.

Agreement Between Hutchinson Interests and Harlow-McGaw Providing for Elimination of Conflicting Interests

THIS MEMORANDUM, made this 14th day of April, 1903, by and between ---------- and ---------- parties of the first part, and ----------, party of the second part, SHOWS:

The parties of the first part represent that they own and control all the shares of the capital stock of the Susquehanna Falls Power Co., a corporation existing under the laws of Pennsylvania and formed and organized under the corporation act of 1874, and its supplements; that they own and control a majority of the shares of the capital stock of the Susquehanna Canal & Power Co., a corporation organized and existing under the laws of Pennsylvania; that they own and control a majority of the shares of the capital stock of the Susquehanna & Tidewater Co., a corporation organized and existing under the laws of Pennsylvania; that they and their associates own and control certain lands water-rights and easements, and have options upon other lands, located in Martic Township, Lancaster County, and in Lower Chanceford Township, York County, which have been secured in the interest of the Susquehanna Falls Power Co; and that they have also procured and have had assigned to such company, releases from various persons, of damages which may be caused by it upon lands located in said township.

And whereas, the party of the second part, and his associates for whom he is acting, contemplate erecting, or causing to be erected, a dam and water-power plant, in the Susquehanna River, about one mile below McCall's Ferry and thereby raising the level of the water in said river, between such dam and a point in said river, at or near Shenk's Ferry, about six miles above the proposed dam; and the parties of the first part are willing to aid and facilitate the construction, and maintenance of the proposed dam and water-power plant upon conditions hereinafter named:

NOW THEREFORE IT IS AGREED AS FOLLOWS:

The parties of the first part, for one dollar and other valuable considerationsunto them paid, by the party of the second part, the receipt of which is acknowledged, agree that they will upon request, at any time within six months from the date hereof, assign or cause to be assigned unto the party of the second part, or as he shall direct, all of the shares of the capital stock of the Susquehanna Falls Power Co., and that they will convey or cause to be conveyed and assigned, unto the party of the second part, or as he sha ll direct, all their right,title, interest and claim in and to the lands, water-rights and easements, owned and held by them and their associates and intended for the benefit of the Susquehanna Falls Power Co., free from all incumbrances created by the grantors, PROVIDED, that they shall then be reimbursed all moneys expended by them, in and about the organization of the Susquehanna Falls Power Co., and in making surveys and plans, etc., with respect to its proposed plant or works; and also be reimbursed all moneys expended by them, and their associates, in procuring lands and releases of damages, intended for the benefit of the Susquehanna Falls Power Co., together with interest on all such sums, which amounts shall not exceed in the aggregate, $20,000.00 and for all of which vouchers shall be submitted; AND PROVIDED: that the subscribers and holders of the shares of the capital stock of the Susquehanna Falls Power Co., shall be indemnified against all liability with respect to the unpaid subscription thereon; AND PROVIDED FURTHER that at the same time, or at such earliest time as the same shall be requested, the party of the second part shall convey or cause to be conveyed unto the parties of the first part, or as they shall direct, all the right, title, interest and claim of the associates of the party of the second part, in and to the lands water-rights and easements, acquired by them and located in and near the Susquehanna River, in Peach Bottom Township, York County, and Drumore and Fulton Townships, Lancaster County, free of incumbrances created by them, upon

upon their being reimbursed the cost thereof, with interest, which will amount to a sum not exceeding $8,000.00 and for which vouchers shall be submitted.

The parties of the first part further agree that they will cause or procure, the Susquehanna Canal & Power Co., by means of lawful corporate action, on its part, to enter into a contract with the party of the second part and his associates, or such corporation as shall hereafter be formed in their behalf, for the purpose of constructing, maintaining and operating a dam and water-power plant, about one mile below McCall's Ferry, as before mentioned, in pursuance of which contract, the Susquehanna Canal & Power Co., will consent and agree to the construction, maintenance and operation of such dam and water-power plant, UPON CONDITION, that if the level of the water shall be raised by reason of such dam above that of the present canal the Susquehanna Canal & Power Co., its successors and assigns, shall have the right of passage for vessels along the route of said canal, and within the pool formed by such dam, and that the persons owning or operating such dam and water-power plant, shall at its or their expense, make provision, in accordance with good engineering requirements, for and shall lock or otherwise move vessels in and out of such pool and to the end that the canal and water-way may be successfully operated for transportation purposes. In case any controversy arises at any time or times, with respect to whether or not the provision made for locking or otherwise moving vessels in and out of said pool, and past said dam, is in accordance with good engineering requirements, thereupon either party interested therein shall have the right to have said controversy arbitrated and upon giving a written notice to the other party with respect thereto, it shall be the duty of each of the parties to select an arbitrator and the two so chosen shall immediately select a third, and all of such arbitrators shall be disinterested and be civil or hydraulic engineers, of good repute.

Such arbitrators shall without delay make full investigation with respect to the matter in controversy and the award in writing signed by such arbitrators, or a majority of them, shall be binding upon the parties.

The parties of the first part further agree that they will cause the Susquehanna and Tide-water Railroad Co., by proper corporate action, to locate its route along the west bank of the Susquehanna River, opposite the pool caused by the erection of the proposed dam at an elevation above the level thereof, and so as not to interfere with the plant or works of the Water Power Co., upon condition that the party of the second part or his associates, or the company owning or controlling the proposed dam, will without further or other consideration, grant unto the said Railroad Company, and its successors and assigns, the right of way for its tracks, through over and upon the lands now or hereafter belonging to or held in the interest of the said water-power company.

The parties of the first part agree that they will not attempt to construct any dam and will not interfere with the party of the second part, or his associates, at any point between the lower end of the tail race of the proposed dam, (which shall not exceed one mile in length) and Shenk's Ferry and the party of the second part and his associates shall not attempt to construct any dam nor interfere with the parties of the first part, at other places upon said river.

This instrument is executed in triplicate and either thereof may be deemed the original.

This agreement shall be binding upon and inure to the parties hereto, their executors, administrators, and assigns, respectively.

Witness the hands and seals of the parties,

_____ Seal.

_____ Seal.

_____ Seal.

1st Extension M. K. & T.
S C + P Co-16 Probably
(9) 10/9/03 (CB)

It is hereby stipulated and agreed in consideration of the sum of one dollar that the contract dated April 14th 1903 between M. K. Houseman and James H. Harlow of the first part and R. R. Quay of the second part be and hereby is extended to and including November 15th 1903 and the options therein contained can be exercised until said Nov. 15, 1903.

M. K. Houseman
James H. Harlow
per M. K. Houseman Atty.
R. R. Quay
by Lorenzo Semple

SC+PC-16

(9)

WHEREAS a certain Memorandum of Agreement was made and signed under date of April 14th, 1903, by and between James H. Harlow and M. H. Houseman, as parties of the first part, and R. R. Quay, as party of the second part, a copy of which is hereto annexed as a part hereof;

AND WHEREAS it is now the understanding and agreement between said parties and their respective associates, that the options, terms and provisions of said agreement will be extended for a further period of time until May 15th, A.D. 1904:

Now to that end this Agreement witnesseth:

That for and in consideration of the premises, and of the sum of one dollar and other valuable considerations, each to the other paid, it is mutually covenanted and agreed between the parties hereto, for themselves, their associates, successors and assigns,

That the options, terms and provisions of the said Agreement dated April [redacted] 1903, be and the same are hereby extended to and including the fifteenth day of May, A.D. 1904, and the said Agreement is operative and in full force, and the options therein stated and contained can and may be exercised until said May 15th, 1904.

WITNESS the hands and seals of the parties.

Witness: James H. Harlow (SEAL)

S J Caldwell M H Houseman (SEAL)

Chas A McKee R R Quay (SEAL)

WHEREAS a certain Memorandum of Agreement was made and signed under date of April 14th, 1903, by and between JAMES H. HARLOW and M. H. HOUSEMAN, as parties of the first part, and R. R. QUAY, as party of the second part, a copy of which is hereto annexed, as a part hereof;

AND WHEREAS the options, terms and provisions of said agreement were further extended until May 15th, 1904,

NOW THIS AGREEMENT WITNESSETH:

That for and in consideration of the premises and of the sum of One Dollar and other valuable considerations each to the other paid, it is mutually covenanted and agreed between the parties hereto for themselves, their associates, successors and assigns, that the options, terms and provisions of the said agreement dated April 14th, 1903, be and the same are hereby extended to and including the 15th day of May, 1905, and the said agreement is operative and in full force and the options therein stated and contained can and may be exercised until said 15th day of May, 1905.

WITNESS the hands and seals of the parties.

Witness:

Chas. L. McConkey
Austin J. Lieb
Chas. A. McKee

James H. Harlow (SEAL)
M. H. Houseman (SEAL)
R. R. Quay (SEAL)

REPORT

ON

POWER DEVELOPMENT OF SUSQUEHANNA RIVER

AT

McCALL'S FERRY, PENNSYLVANIA

WM. BARCLAY PARSONS
Consulting Engineer
320 Broadway. - New York City

JANUARY 13, 1905

WM. BARCLAY PARSONS
CONSULTING ENGINEER
320 Broadway

New York, January 13, 1905

Report on Power Development of Susquehanna River at McCall's Ferry, Pennsylvania

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Dr. Cary T. Hutchinson,
56 Pine St.,
New York City.

Dear Sir.—In compliance with your request, I have made an examination of the data collected with regard to the Susquehanna River, and beg leave to submit the following report on the water power development to be located at McCall's Ferry, Pennsylvania.

This is a project to dam the Susquehanna River near McCall's Ferry, Pennsylvania, about ten miles north of the Maryland State line; to build a water power plant to generate electricity; and to transmit the current to places where a market can be found.

McCall's Ferry is situated in Pennsylvania, about 60 miles from Philadelphia, 40 miles from Baltimore, 35 miles from Harrisburg and 15 miles from Lancaster. In addition to these places, there are within a radius of 45 miles from the site the cities of Lebanon, Reading, Wilmington, Chester and York. The location is favorable to the transmission of power. The territory between Philadelphia and Harrisburg is being developed by electric railways and small electric lighting plants. There can be no question that all the power generated at this site can be readily sold.

The general plan of the development is to build a concrete dam across the river, with a power-house at one end equipped with water wheels and electric generators. The surveys and plans on which this project is based were made by the late George S. Morison, M. Am. Soc. C. E., and are the results of examinations extending over a period of nearly three years. The proposed site was chosen as a good location for a dam; and also because the topography of the river at this point makes it reasonably certain that it will be practically free from disturbance from ice. Above the dam site the river narrows and also bends, while at the proposed site the river widens and is straight. When the ice gorges above break, the floes are discharged through the "Neck" broken into small pieces, and owing to the bend are deflected to the side of the river away from the power-house.

The heaviest ice gorge known occurred during the Spring of 1904. Observations and photographs taken during that period show that the expectations were justified, and that the power-house side was practically free from ice during the period.

The records of the river for the last fourteen years are available, having been kept for that period by the U. S. Geological Survey. In addition, the observations that have been made at the

site have added materially to the knowledge of the flow of the river, and the regimen of the river may be considered a known quantity. There is some dispute, however, as to the minimum flow in the dryest year. You have taken this to be 3,000 cubic feet per second at McCall's Ferry, while there is some evidence that it may be greater. In this report I accept your figure of 3,000 cubic feet per second, as it is unquestionably safe. The maximum flood discharge has been estimated from various data and in all probability is between 650,000 and 760,000 cubic feet per second. I have used the larger figure in determining the depth of water on the crest of the dam during maximum floods.

The dam will have an elevation of 155 feet above the mean sea level at Havre de Grace; a length of approximately 2830 feet; a maximum height above tail water of 55 feet; and an average height of about 32 feet above the rock surface.

The dam will be of monolithic concrete construction. At the east end the power-house will be located, the elevation of the power-house floor being placed above the maximum flood level. Vertical shaft turbines will be used, with direct-connected electric generators; and the electric current will be transmitted in the usual way to Philadelphia, Baltimore or any other points that may be determined.

The situation is such that as the flow of the river increases the tail water below the dam will rise more rapidly than the depth of water flowing over the crest. This increase of rise of back water will diminish the head, but the discharge of the river increases so rapidly that there is more than an abundance of water to develop the power required. The maximum head will be 54 feet and the minimum head, occurring in the average flood season, will be approximately 30 feet. Turbines will be set in having a capacity to deliver the maximum power contemplated under a head of 30 feet; and will, of course, have excess capacity under the higher heads.

The pond formed by the dam will have an area of approximately 60,000,000 square feet. The water contained in one foot depth of this pond is sufficient to deliver about 50,000 horse-power (the proposed capacity of the development) for 75 minutes; and the storage is sufficient to provide for the load fluctuations such as will obtain in Philadelphia or Baltimore, having an average load equal to half of the maximum.

There is a further possibility of damming two small streams and impounding enough water to avoid the necessity of the auxiliary steam plant mentioned below.

Some question has been raised as to the feasibility and practicability of a dam of the character described, on a river subject to great floods. However, a concrete dam of similar construction, of slightly greater length and somewhat greater height at Betwa, India, has passed a flood calculated to be 970,000 cubic feet per second, with a depth of water on the crest of the dam equal to 16.4 feet.* The amount of water per foot of length of dam was greater than it would have been at the McCall's Ferry dam, assuming a repetition of the extraordinary conditions producing the great flood of 1889. In my opinion, a dam at McCall's Ferry is practicable, and can be built without unusual difficulty for the amount stated in the estimates.

The following estimate of the cost of construction is based on the surveys and examinations made by the late George S. Morison, and is substantially a repetition of the figures given by him. I have gone over his data in detail and have checked his conclusions.

The estimate provides for the delivery of 50,000 horse-power at the low pressure side of the transformers in Philadelphia; it includes the cost of construction of the dam, power-house, tail-channel cut, embankment for railroads, and some minor work in the river; complete hydraulic equipment of the power-house, with wheels having a capacity of 75,000 horse-power at full discharge and electric generating equipment of 42,500 kilowatts; three separate transmission lines to Philadelphia of a total length of 200 miles, and the equipment for three sub-stations.

* See Water Supply and Irrigation Paper No. 87, U. S. Geological Survey, Page 179.

These costs, exclusive of land, will be:

1. Dam, power-house, superstructure and sub-structure, tail-race channel, protection to railroad, all permanent construction, and three sub-station buildings	$1,724,000
2. Complete hydraulic equipment, having a capacity of 60,000 h. p. on the shaft at 30 ft. head, including governors, shafts and all appliances	500,000
3. Complete equipment of power-house, capacity of 42,500 k.w. and of three sub-stations, having a total capacity of 50,000 h. p. output	950,000
4. Three complete transmission lines, each 67 miles long	500,000
	$3,674,000
Unclassified and Engineering at 10%	367,000
Total	$4,041,000

Owing to the variable flow of the river, there are years in which 50,000 horse-power cannot be delivered at, say, Philadelphia, although in some years there is more than enough water for this purpose. The records for the last fourteen years, which include two periods of very low water, show that in the average year it will be necessary to supplement the water power for thirty days, and in the dryest year for one hundred days.

The size of the steam plant necessary to supplement the water is determined by the minimum flow of the river,—that is, by the power that the steam plant must deliver when the river is lowest. This will depend somewhat upon the distribution of load during the twenty-four hours. The minimum flow of the river occurs in summer, at which time the maximum demand for power will probably be the least. A steam plant having a maximum capacity of 25,000 horse-power will be ample for the purposes. The rated capacity of such a steam plant, used for short periods, need not be more than two-thirds of its maximum,—that is a steam plant having a rated capacity of 17,000 horse-power will probably be sufficient. Such a steam plant could be of a simple character, and need not be designed for high economy. It would not cost more than $1,000,000, bringing the total cost of the project, equipped to deliver 50,000 horse-power under all conditions, to $5,041,000. This steam plant could be used to supplement the water power plant in case an extraordinary flood should lower the head so that sufficient power could not be obtained from the water, although it is not expected that such use will be necessary.

To deliver 50,000 horse-power in the average year, at 50 per cent. load factor, it will be necessary to supply 2.3 per cent. of the total power by means of steam. For different amounts of power delivered the proportion of the total that must be made by steam would be as follows:

50,000 horse-power	2.3%
60,000 " "	3.7
75,000 " "	6.0

This table indicates that it might be economical to develop a power for delivery of over 50,000 horse-power. This increased development can be made at a cost per horse-power less than that used for the above estimates of cost, since it requires only an increase in the size of the power-house and in the equipment, but no increase in the cost of the dam or river works.

It would be possible, at a comparatively slight increase in investment, to install at any time surplus generating equipment in addition to that covered by the above estimates for 50,000 horse-power, so as to utilize, say, 75,000 horse-power for nine months of the year. This would mean an electrical installation of 25,000 horse-power additional, which would not be available for use during, say, three months of low water.

Yours respectfully,

(Signed) Wm. Barclay Parsons.

Johnson's Legal Opinion Re: Organization of Company

McCJ/C-91

(2)

Susquehanna Electric Power Development.

February 8th, 1905.

John G. Johnson, Esq.,

Land Title Building,

Philadelphia, Pa.

My dear Mr. Johnsoon:

In order to refresh your memery as to the facts relating to the development of power on the Susquehanna River at McCall's Ferry, I beg to call your attention to the standing of the matter in May, 1903, which conditions exist, as I am informed, at the present.

You will remember that Mr. Cary T. Hutchinson is the owner in fee of lands on each side of the Susquehanna River in York and Lancaster Counties at McCall's Ferry. He either owns in fee or has releases from damages from the owners in fee of all property above and below McCall's Ferry along the Susquehanna River on each side which will be affected by the erection of a dam across the said River at that point to an elevation of 160 feet above tide water. Houseman and Harlow owned the bed of the old Susquehanna Canal and had also organized Water Power Companies on each side of the River and had also projected a line of railroad upon one side of the River. All of these properties would have been affected by the proposed development of Mr. Cary T. Hutchinson.

We have an agreement with Houseman and Harlow under the terms of which all opposition upon their part, by reason of their ownership of the above, will be removed.

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You advised us in May, 1903, that in your opinion Water Power Companies organized in the townships on each side of the Susquehanna River and owning in fee the lands affected thereby had authority under the laws of Pennsylvania to erect and construct a plant in the two townships in which they are authorized to transact their business and as owner of the adjoining lands on the Susquehanna River to erect and construct a dam across the said River subject to the provisos contained in the Mill Dam Act and that upon the completion of said plant the said Company would only have power to supply water power for commercial and manufacturing purposes within the two townships in which they are authorized to transact business.

That the said Company would also have power to develop electric power for commercial purposes by means of water power and to supply current and power to the public and to distribute the same, but that its power to distribute and transmit and sell current might be confined to the two townships within which it was authorized to transact business.

Your opinion as to this latter limitation was based upon the case of Fly v. Mt. Pocr Water Co., 197 Pa. 97, though the phraseology of the Act of 2nd July, 1897, would lead one to believe that such Companies might furnish electric power without limitation as to the territory.

Is there not a distinction between Companies organized to

supply water to the public and Companies organized to supply water power for commercial and manufacturing purposes, and does not the Act of 2nd of July, 1895, (P. L. 425) confer upon the latter Companies power to distribute electric current to any place or places and thus eliminate the territorial limits placed upon Companies for the supply of water to the public?

You advised us, however, that this territorial limitation in any event could be eliminated by establishing a line of Water Companies in different townships through the territory intended to be served by electric power.

You also advised us that the Act of the 8th of May, 1889, (P. L. 136) provides for the incorporation of Companies for the supply of light, heat and power, or any of them, to the public by electricity, and that the Merger Act of the 29th of May, 1901, (P. L. 349) is operative in the case of this class of incorporation and that it would be possible by merger to have the corporation which could supply electric power through all the districts covered by the different merged companies.

We desire that our proposed Company shall be authorized to issue eight millions of capital stock, one-half preferred and one-half of common, and eight millions of bonds.

The Water Power Company will own in fee all of the lands on each side of the Susquehanna River affected by the dam; it will also own flowage rights and releases of damages from such

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lands as are not owned in fee; it will own the dam, power house and development plant. If we are compelled to organize Electric Power Companies, then all of the capital stock of the merged electric power company will be owned by the water power company, and this stock could be also used as security for the bonds issued under the mortgage of the Water Power Company.

The Act of March 24, 1887, (P. L. 39) Provides that gas and water companies may borrow money and issue bonds to an amount not exceeding in the aggregate one-half of the capital stock of such Company paid in.

The Act of May 21st, 1889, (P. L. 257) provides: "It shall be lawful for all corporations to borrow money or to secure any indebtedness created by them by issuing bonds with or without coupons attached thereto and to secure the same by a mortgage or mortgages to be given and executed to a trustee or trustees for the use of the bondholders upon their real estate and machinery, or on their real estate alone to an amount not exceeding one-half of the capital stock of the corporation paid in and at a rate of interest not exceeding six per cent. Provided, that it shall be lawful for such corporations as belong to the classes named in Clauses 4, 5, 6, 7, 9 and 11 of Corporations for Profit of the second class as set forth in section two of the Act, of which this is a supplement, and also for such corporations as belong to the

class named in Clause 24, Section 2 of the Act of Assembly, approved April 17, 1876, so to borrow and so to secure the payment of the same by a mortgage or mortgages on its property and franchises to an amount not exceeding double the amount of the capital stock of the corporation actually paid in and at a rate of interest not exceeding six per centum.

Clause 9 of the Corporation Act of 1874 reads: "The supply of water to the public or the supply, storage and transportation of water and water power for commercial and manufacturing purposes."

Clause 11 of the same Act reads: "The manufacture and supply of gas or the supply of light, heat and power by means of electricity or the supply of light, heat and power to the public by any other means."

The original Corporation Act of 1874 was amended by Act of May 16, 1889 (P. L. 226) so as to include water and water power companies. It will be noted that the Act of May 21st, 1889, just quoted, which authorized Companies to borrow double the amount of their capital stock was not passed until five days after the incorporation of water power companies had been inserted in the water company clause so that this right to issue bonds applies to water power as well as water companies. It also applies to electric light and power companies.

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Will you advise me whether the statutes above referred to would authorize our proposed water power company to issue bonds equal to the amount of the stock paid in and issued?

Pardon me for having gone so much in detail, but I thought that I could save you trouble by putting the matter before you in this way.

The plan I now propose for your consideration and opinion as to its legality is as follows:

1. The Pennsylvania Power Company, a corporation formed by the merger of the two Companies organized under the Act of 1824, and the supplements and amendments thereto, now has a capital stock of $10,000; increase the capital stock of this Company to a total authorized issue of $8,000,000., one-half preferred and one-half common stock, and have this Company by proper proceedings authorize the issue of bonds to the extent of $8,000,000.

2. Organize a chain of electric power companies covering the territory from McCall's Ferry to Lancaster, Pa., and from McCall's Ferry to Philadelphia, Pa., merge these corporations into one company and have this company sell to the Pennsylvania Power Company its capital stock in consideration of an agreement by the Power Company to erect and construct a complete transmission line and plant for delivering electric power to Lancaster and Philadelphia, and such other places as may be necessary.

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3. Cary T. Hutchinson will then make a contract with the Pennsylvania Power Company under the terms of which, in consideration of the issue and delivery by the said Company to the said Hutchinson of capital stock of the par value, of say, $3,000,000. of preferred and $3,000,000. of common stock, and bonds secured by mortgage upon its franchise and all of its property of the par value of $6,000,000. The said Cary T. Hutchinson would convey to the said Pennsylvania Power Company all of the real estate, riparian rights, releases of damages, &c., which would be owned by him at and about McCall's Ferry along the Susquehanna River, which would be affected by the erection of a dam on the Susquehanna River to a elevation of 160 feet above tide water and would agree to construct the said dam, buildings, machinery, appliances, reservoirs, &c. for a complete electric water power plant and to erect poles, wires &c. for the transmission of electric power to Philadelphia and Lancaster and Baltimore, or such places as might be necessary in accordance with the plans and specifications to be attached to the said contract.

4. The remaining stock and bonds in the treasury of the Company, which it is authorized to issue, shall be used in the future to acquire, if deemed advisable, all of the other water power rights along the Susquehanna River to tide water.

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5. We desire at the very earliest possible moment to prepare an underwriting agreement to be signed by underwriters of the bonds of the Company proposed to be organized, the details of which we will explain to you as soon as you can give us an appointment.

Yours very truly,

O P I N I O N.

My opinion has been asked in connection with the Susquehanna Electric Power development, concerning certain matters which will appear hereafter. This opinion is intended to be supplementary to an opinion heretofore rendered in letters bearing date 5th, 9th and 13th May, 1903, and is given subject to what is said in those letters.

I assume that the Water Power Companies organized in the townships on each side of the Susquehanna River, were organized for the purpose of supplying water and water power for commercial and manufacturing purposes with this additional right:-

"In order that the water and water power may be supplied to the Public to best advantage, in furtherance of its corporate purpose, the development by use of the same, of electric current and power to the public, individuals, firms and corporations at any place or places at such price as may be agreed upon."

I am still of the opinion heretofore expressed, that the Companies organized for the purpose of supplying water and water power were organized under such circumstances as preclude them from exercising their powers outside of the limits of the townships specified in their charters.

Had these Companies been organized under the 18th Clause of the Corporation Act of 1874, as finally amended by the Act of 9th July, 1901 (P. L. 624), it is probable that they would not have been territorially limited. Had they been thus incorporated, they would have

been organized "for the storage, transportation and furnishing of water, with the right to take rivulets and lands and erect reservoirs for holding water, for manufacturing and other purposes, and for the creation, establishing, furnishing, transmission and using of water power therefrom."

As I recall the charters, such were not the powers inserted therein, and the probability is that they will be taken as being in existence under the 9th Section of the Corporation Act of 1874, amended by the Act of 21st May, 1889 (P.L. 259), and as finally amended by the Act of 9th July, 1901 (P.L. 624).

The Act of 2nd July, 1895 (P.L. 425) granting the right to develop electric power for commercial purposes, is applicable to Pennsylvania corporations organized "for the purpose of supplying water power to the public and other corporations owning or controlling water power."

I think this Act is applicable to corporations created under amended section 18 of the Corporation Act; but there can be no doubt that it is applicable to corporations created under amended section 9 of said Act, because under that section there is an express authorization of the incorporation of companies "for the supply • • • of water and water power for commercial and manufacturing purposes."

The Legislature of Pennsylvania has confused the subject of Water Power Companies to such an extent, by almost simultaneously, by Acts of 16th and 21st May, 1895, amending Sections 9 and 18 by allowing incorporations for purposes which interlace, that it may not be amiss to incorporate into this opinion, before giving my conclusions, a recapitulation and summarization of the law upon the subject.

The Corporation Act of 1874 contained two clauses of Section 2nd, relating to Water Companies, viz:

"IX. The Supply of Water to the Public."

"18. The carrying on of any mechanical, mining or manufacturing business, including * * * * the storage and transportation of water, with the right to take rivulets and land and erect reservoirs for holding water."

The Act of May 16th, 1889, (P.L. 226, amended Clause 9, so that it read:

"IX. The supply of water to the public, or the supply, storage or transportation of water and water power for commercial and manufacturing purposes."

The Act of May 21st, 1889 (P.L. 259) amended Section 18, so that it read:

"Section 18. The carrying on of any mechanical, mining, quarrying or manufacturing business, including * * * * companies for the storage, transportation and furnishing of water, with the right to take rivulets, and lands and erect reservoirs for holding water for manufacturing and other purposes; and for the creation, establishing, furnishing, transmission and using of water power therefrom."

Section 34 of the Act of 1874, defined the powers of Water and Gas Companies, and under the language of this section, the Supreme Court of Pennsylvania, in the case of

Bly v. White Deer,&c. Water Co., 197 Pa. 81,

held that a Water Company had no authority to supply water or condemn property outside

"the town, borough, city or district where they may be located."

There does not appear to be in the Act of 1874 any language relating to companies incorporated under the 18th Clause of Section 2nd for the storage and transportation of water, similar to the

language which the Supreme Court has held to be a restriction in the case of Water Supply Companies, and the reference to the companies for the storage and transportation of water in Clause 4 of Section 34, of the Act, seems to differentiate them from companies for the supply of water to the public, in respect to their privileges.

It will be seen from the above that under the Act of 1874, there were two classes of Water Companies authorized, one under Clause 9 of Section 2nd, for the supply of water to the public, and one under Clause 18 for the storage and transportation of water, and that the Supreme Court has held that the first class are restricted to the particular municipality in which the Company is located, but has not made any similar decision with regard to companies for the storage and transportation of water; and further, that there does not appear to be any language in the Act which would lead to the probability of such a decision.

It will be seen also that in 1889, the Legislature added Water Companies to both clauses of Section 2 of the Act of 1874, namely, to Clause 9 and to Clause 18, so that companies for the supply of water power may be incorporated under either clause. Whether a Water Power Company, incorporated under Clause 9 of the Act of 1874 is restricted in locality to the same extent as the Water Supply Companies incorporated under that Clause, has not been expressly determined, although the language of the Court in Bly vs. White Deer &c. Co., already quoted, seems to intimate this. The opinion of the Attorney General, hereinafter referred to, is to the same effect. There would seem to be no reason for supposing that Companies incorporated for the supply of water power, under Clause 18 of the Act

of 1874, as amended, are restricted as to locality.

The Act of July 2nd, 1895 conferred on corporations organized under the laws of Pennsylvania "for the purpose of supplying water power to the public", and on "other corporations owning or controlling water power", the right to develop electric power for commercial purposes, by means of water power, and to supply current and power to the public, individuals, &c. This Act seems to be broad enough to include corporations, whether formed under Clause 9, or formed under Clause 18.

In an opinion of the Attorney General, delivered February 5th, 1904,

Portland Water & Power Co., 29 C. Ct. Reps. 180,

the question of the classification of water and water power companies was reviewed by him, and he reached the conclusion that there were three classes of Water Companies, namely;

1. The supply of water to the public, which companies might be incorporated under Clause 9 of the Act of 1874, as amended;

2. The supply of water and water power for manufacturing and commercial purposes, which companies might be incorporated under Clause 9, as amended;

3. Companies for the storage, transportation and furnishing of water for manufacturing and other purposes, and for the creation, establishing, furnishing, transmission and using of water power therefrom, which companies could be incorporated under Clause 18, as amended.

He comes to the conclusion that although two of these clauses overlap each other, so that companies for the furnishing of water power may be incorporated under Clause 9 or Clause 18, yet that the classes of corporations are distinct. He also reaches the conclusion that companies either for the supply of water, or for the furnishing of water power, if incorporated under Clause 9, are restricted as to locality, while companies incorporated for water power under Clause 18 are not restricted as to locality.

In my opinion the Attorney General is right in saying that it is permissable, under the laws of Pennsylvania, to organize Water Power Companies under amended section 18 which will not be obliged to be limited in their extent to any township or other territorial sub-division.

After reflection I retain the opinion heretofore expressed as to the propriety of organizing Electric Power Companies in each township, to be merged subsequently into one company. I find no Act of Assembly which will authorize the creation of an Electric Power Company unrestricted as to territory. I think there can be no possible doubt under the case of

Hey v. Springfiled Water Co., 207 Pa. 44

that these local Electric Companies can be so merged that the merged corporation will possess the right of supplying electric power within all the districts covered by the special powers of the merging companies.

Under the opinion of the Attorney General it would be well to consider whether or not it would be well to re-cast the scheme so that a company shall be created under amended Section 18 of the Cor-

poration Act, unrestricted as to territory, which will be organized "for the storage, transportation and furnishing of water, with the right to take rivulets and lands and erect reservoirs for holding water, for manufacturing and other purposes, and for the creation, establishing, furnishing, transmission and using of water power therefrom," but for the fact that such company would probably be restricted in its power to mortgage. Such company might also have difficulty in acquiring the properties belonging to the Houseman Water Power Company. I do not at present recall, although I made no special search, any Act authorizing such Water Power Companies to sell their property.

This brings me to the question of a right of Water Power Companies to mortgage their franchises and other property, and the relations which must necessarily be established between the bonded indebtedness authorized and the stock of the corporation.

I still retain the opinion expressed in my former letters, to the effect that it is not advisable to interpret the Act of 1901 as destroying the relations theretofore established between the amount of Bonds and capital stock of corporations.

In this connection I will give a summarization of the legislation which is pertinent.

The Act of March 24th, 1877 (P.L. 39) authorized any Gas or Water Company, incorporated under the Act of 1874, to borrow money not exceeding one half of the capital paid in, secured by a mortgage of "all its real and personal property, rights, privileges and franchises."

This Act enlarged the capacity of Gas and Water Companies, not as to the amount of the money to be borrowed, but as to the amount

of property which could be included in the mortgage, and gave such companies the right to include all their real and personal property and franchises.

The Act of May 21st, 1889, page 257, amending the 13th Section of the Act of 1874, authorized all corporations to borrow money, to the extent of one half of the capital stock paid in, secured by a mortgage on the real estate and machinery, or the real estate alone,

> "Provided, That it shall be lawful for such corporations as belong to the classes named in clauses four, five, six, seven, nine and eleven of corporations for profit, of the second class, as set forth in section two of the act of which this is a supplement, and also for such corporations as belong to the class named in clause twenty-four, section two, of the Act of Assembly approved April seventeenth, one thousand eight hundred and seventy-six, so to borrow money and so to secure the payment of the same, by a mortgage or mortgages on its property and franchises, to an amount not exceeding double the amount of the capital stock of the corporation actually paid in, and at a rate of interest not exceeding six per centum, and this section shall not be construed to prevent mortgages for a greater amount and at a higher rate of interest, where the power to make the same is expressly given by the terms of this statute to certain classes of corporations accepting this act, or in the statutes under which certain other classes thereof are by the provisions of this statute to be controlled, governed and managed."

This Act of May 21st, 1889 was entitled "Supplement to the Act of April 29th 1874." It enlarged the powers of certain corporations, so as to give them power to mortgage their franchises and property for a debt not exceeding double the amount of the capital stock paid in. Among these corporations were the corporations named in clause 11 of the Act of 1874, viz: Corporations formed for "the supply of water to the public." The enlarged power was not given to corporations formed for the storage and transportation of water under clause 18 of Section 2 of the Act of 1874.

As has been already stated, clause 11 was amended May 16th, 1889, five days before the Act extending the power of the mortgage so as to include corporations for "the supply, storage or transportation of water and water power for commercial and manufacturing purposes; and on May 21st, 1889, the same date as the Act enlarging the power to mortgage, clause 18 was amended so as to include companies "for the storage, transportation and furnishing of water, with the right to take rivulets and land and erect reservoirs for holding water for manufacturing and other purposes, and for the creation, establishing, furnishing, transmission and using of water power therefrom."

With regard to Water Power Companies incorporated under clause 18 of the Act of 1874, as amended May 21st, 1889, the question as to their right to borrow money on mortgage, depends upon whether they are within the terms of the Actof March 24th, 1877. They are clearly not within the terms of the enlarging Act of May 21st, 1889, as they are not formed under the clause therein specifically referred to.

The Act of March 24th, 1977 is entitled an Act "to authorize Gas and Water Companies to borrow money and secure the same by bond and mortgage", and it confers the powers of borrowing on "any Gas Company or Water Company incorporated under the provisions of the Act of the General Assembly of this Commonwealth, entitled "An Act to provide for the incorporation and regulation of certain corporations, approved 29th day of April, A. D. 1874." The sole question under this Act is whether the powers conferred by it are confined to companies for the supply of water to the public incorporated under the 9th clause of Section 2 of the Act of 1874,

or companies for the storage and transportation of water, incorporated under the 18th clause of Section 2; or whether its provisions include water power companies the creation of which was first authorized by the two Acts of 1889, amending clauses 9 and 18 respectively. The question is not entirely free from doubt, since the Water Companies which were grouped in the Act of 1874, under the head of "Water and Gas Companies" are evidently the companies for the supply of water to the public, and it may be a question whether the Act of 1877 was intended to include other companies, such as companies for the storage and transportation of water, and it is still more doubtful whether it was intended to include companies for the supply of water power, the creation of which was not authorized until twelve years later, namely in 1889. At all events, companies for the furnishing of water power, under the 18th clause of Section 2 of the Act of 1874, as amended in 1889, if theu are within the Act of 1877, can only mortgage to the extent of one half their paid up capital, and if they are not within the Act of 1877, they can only mortgage their real estate and machinery.

With regard to Water Power Companies incorporated under the 9th clause of Section 2 of the Act of 1874, the question arises as follows:-

The Act of May 21st, 1889, which extended the power of certain corporations, was entitled "A supplement to the Act of April 29th, 1874," and it confers the powers on corporations by reference to the clauses of Section 2 of the Act of 1874, in which they are set forth, its language being:

"It shall be lawful for such corporations as belong to the classes named in clause four, five, six, seven, nine and

eleven of corporations for profit, of the second class, as set forth in section two of the act of which this is a supplement."

Section 2nd of the Act of 1874 was amended by the Act of April 17th, 1876. This Act, however, made no changes in clauses four, five, six, seven, nine and eleven, although it did make some changes in some of the other clauses, by adding to those clauses additional members of the classes included therein. It also added four additional classes, among which was the class included in Clause 24 of the Act of 1876, namely, the formation and operation of inclined planes for the transportation of passengers and freight.

The Act of 1889, after conferring the extended mortgage powers upon the corporations in clauses four, five, six, seven, nine and eleven of Section 2 of the Act of 1874, conferred the same powers on the corporations in Clause 24, Section 2 of the Act of April 17th, 1876, so that the Act of 1889, specifically referred to certain corporations, identifying them as the corporations which belonged to certain classes named in certain clauses of the Act of 1874, and to the class named in another clause added in the amending Act of 1876. Subsequently to 1874, by Act of 16th of May, 1889, the Legislature added to Clause 9 of Section 2 of the Act of 1874, corporations for the "supply, storage or transportation of water and water power for commercial and manufacturing purposes." The question therefore is, whether the addition of these Water Power Companies to Clause 9 of the Section 2 of the Act of 1874, brings them within the extended powers conferred by the Act of 1889, on corporations "belonging to the class" "named in Clause 9" of Section 2 of the Act of 1874.

In my opinion Water Power Companies under this clause do have the power conferred by said Act.

On the 16th May, 1889 the Corporation Act was so amended as that, after said date, it read as though originally drafted in the amended form. I think, therefore, that when the Act of 21st May, 1889 was passed, it necessarily included all corporations within the classes as they then existed.

I think the Pennsylvania Power Company, a corporation formed by the merger of the two companies organized as Water Power Companies under Section 9 of the Act of 1874, may increase its capital stock, issuing one-half preferred and one-half common, in payment of property at a reasonable value to such extent as such valuation will justify.

I think a chain of Electric Power Companies covering the territory from McCaul's Ferry to Lancaster, Pennsylvania, and from McCaul's Ferry to Philadelphia, may be created which may be merged into one corporation.

I am also of the opinion under the Act of 2nd July, 1901 (P.L. 603) the Power Company "may purchase, hold, sell, assign, transfer, mortgage, pledge or otherwise dispose of the shares of the capital stock or any bonds, securities or evidences of indebtedness created by" any of said Electric Power Companies.

I am not so clear that the Power Company will have authority "to erect and construct a complete transmission line and plant for delivering electric power to Lancaster and Philadelphia and such other places as may be necessary." The merged Electric Power Company, however, may create a bonded indebtedness within the limits

authorized by our Statutes, and may issue its shares of stock for the purpose of creating such line and plant. The Pennsylvania Power Company can purchase such bonds and stock and may include them within the premises it will mortgage. Perhaps it will be advisable to include in the large mortgage which is to be created an actual lien upon the electric power plant.

I think it will be legal for Mr. Carey T. Hutchinson to make a contract with the Pennsylvania Power Company in consideration of the issue, and deliveryto him by said Company, of its stock and bonds secured by mortgage upon its franchises and property, to convey at a reasonable valuation all the real estate, riparian rights, releases of damages, etc. owned by him, he agreeing further to construct the necessary dam, buildings, machinery, appliances, reservoirs, etc.

If it is deemed advisable to put a mortgage upon the electric power plant, this can be done under a contract between Mr. Hutchinson and the merged Electric Power Companies covering the purpose.

24th February, 1905. John G. Johnson

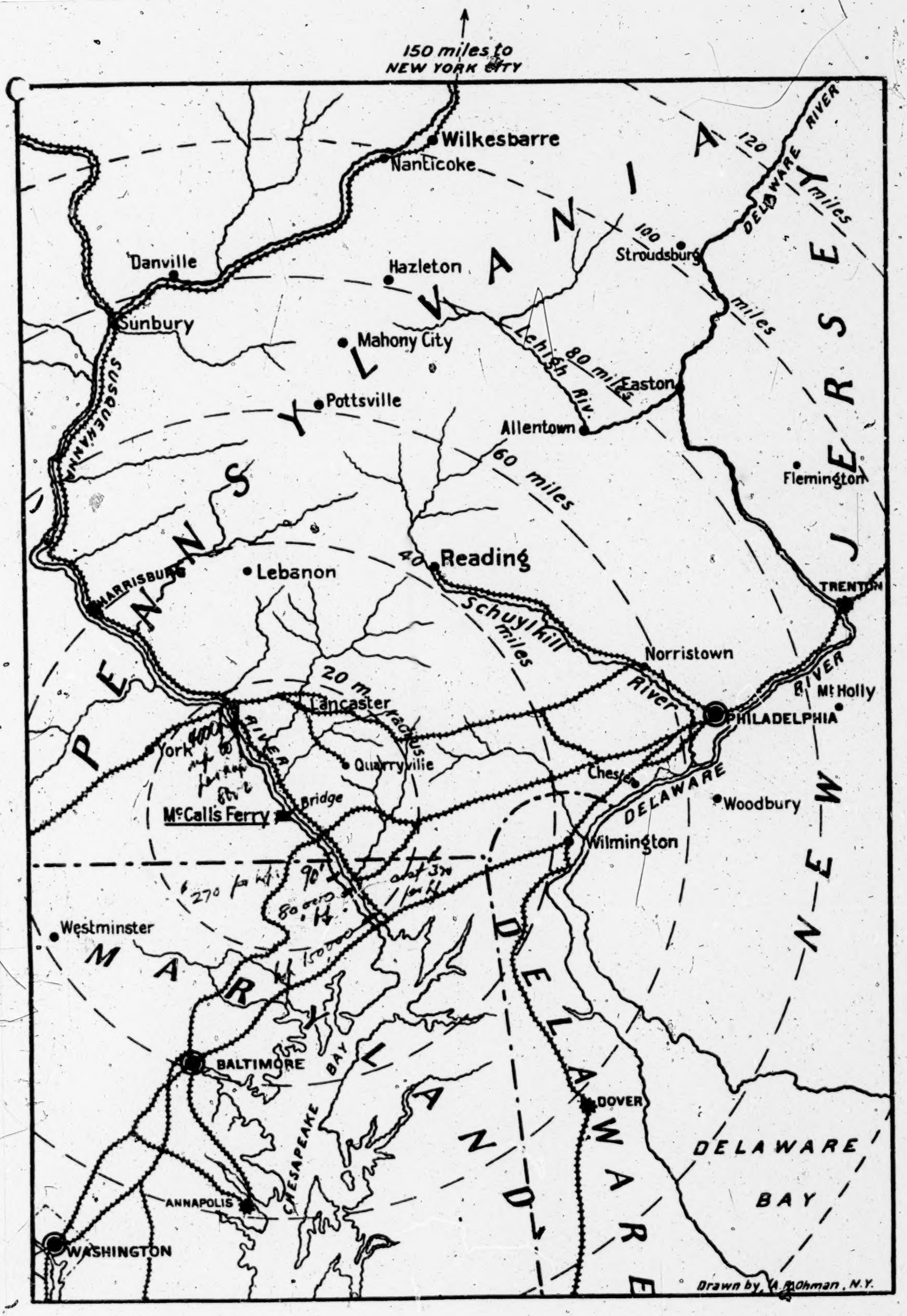
PROSPECTUS

AND

UNDERWRITING AGREEMENT

OF

McCALL'S FERRY POWER COMPANY


150 miles to NEW YORK CITY
Wilkesbarre
Nanticoke
Danville
Hazleton
Stroudsburg
Sunbury
Mahony City
Pottsville
Allentown
Easton
Flemington
Reading
Lebanon
HARRISBURG
Lancaster
York
Quarryville
McCall's Ferry
Bridge
Norristown
PHILADELPHIA
Mt Holly
TRENTON
Woodbury
Wilmington
Westminster
BALTIMORE
DOVER
ANNAPOLIS
WASHINGTON
SUSQUEHANNA RIVER
Lehigh Riv.
80 miles
60 miles
40
20 miles
120
100
Schuylkill River
DELAWARE RIVER
DELAWARE
CHESAPEAKE BAY
DELAWARE BAY
PENNSYLVANIA
MARYLAND
NEW JERSEY
Drawn by A. Ohman, N.Y.

PROSPECTUS

OF

McCall's Ferry Power Company.

At a point near McCall's Ferry, on the Susquehanna River, in the State of Pennsylvania, a favorable site for the development of a large water power plant to generate and transmit electric power has been located.

The engineering features have been investigated for the past three years under the direction of the late George S. Morison and by Cary T. Hutchinson; more recently the whole matter has been gone over thoroughly and reported upon favorably by William Barclay Parsons; these reports are subject to inspection.

The statistics of the flow of the river are well known, Government records having been kept for fourteen years; there are many local records supplementing the official records; the drainage area is about 27,000 square miles. The site is free from ice troubles; Mr. Parsons reports:

"The proposed site was chosen as a good location for a dam; and also because the topography of the river at this point makes it reasonably certain that it will be practically free from disturbance from ice. Above the dam site the river narrows and also bends, while at the proposed site the river widens and is straight. When the ice gorges above break, the floes are discharged through the "Neck," broken into small pieces, and owing to the bend are deflected to the side of the river away from the power-house. The heaviest ice gorge known occurred during the Spring of 1904. Observations and photographs taken during that period show that the expectations were justified, and that the power-house side was practically free from ice during the period."

It is proposed to make a first development for 50,000 horse-power at this site; 75,000 and possibly 100,000 horse-power can be developed economically.

The first development will have capacity to deliver 50,000 horse-power to any point within a radius of 100 miles of the site. The estimates are based on the delivery to Philadelphia as the largest market for power, but within a radius of 100 miles are the cities of Washington, Baltimore, Wilmington, Chester, Philadelphia, Harrisburg, Reading, Wilkesbarre, Lancaster, Allentown, Bethlehem, Trenton, and many others of less importance. Within the 100 mile radius are included the entire States of Maryland, Delaware and the District of Columbia, together with a large part of New Jersey, and all that part of Pennsylvania south of Wilkesbarre and east of Huntingdon; the aggregate population of this district exceeds five million; New York City, 150 miles distant, is well within the

limit of commercial transmission. There are more than 150 electric light and power plants of various kinds, with an aggregate capacity greater than 100,000 horse-power, in this territory excluding Philadelphia and the other large cities. These plants are in general uneconomical, and are all possible users of this power. The market for the sale of this power is without equal in the United States; within the territory tributary to this development there is at present more than 500,000 horse-power in use. The question of there being sufficient demand for the power developed, within a satisfactory distance, at a profitable price, is conceded by all who have investigated the subject.

The legal status has been investigated and favorably reported on by John G. Johnson, Esq., of Philadelphia and by Coudert Brothers of New York.

The estimated cost of this development, equipped to deliver 50,000 horse-power to Philadelphia, is:

1. Estimate of W. B. Parsons for dam, power house, all hydraulic and electric equipment, including three transmission lines to Philadelphia, with sub-station	$4,041,000
2. Cash for property and rights of way, in addition to stock to be issued by the Company	1,000,000
3. Interest during construction	450,000
Total cost, without steam plant	$5,491,000
4. Auxiliary steam plant, maximum capacity of 30,000 horse-power.	1,200,000
	$6,691,000
5. Working capital	509,000
	$7,200,000

A considerable portion of this expenditure, as for the dam, is applicable to an enlarged development, which can on this account be made for a comparatively slight additional cost per horse-power.

Operation

The total cost of operating this plant, including general expenses, labor, supplies, maintenance of plant, stoppages, taxes, insurance and cost of auxiliary steam power, is estimated at $320,000 yearly. This includes a greater cost of operation for a plant of 50,000 horse-power than it costs at Niagara for a plant of 100,000 horse-power; it can probably be operated for considerably less.

Basis of Earnings

In estimating the gross earnings, on a basis of 50,000 horse-power only, it is assumed that 25,000 horse-power will be sold in Philadelphia at the very low price of $25 per year; the other 25,000 horse-power can be sold at figures ranging from $30 to $40 per horse-power. A conservative figure for this 25,000 horse-power is $30 per horse-power.

The operating account of the plant will then be:

RECEIPTS

25,000 horse-power at $25	$625,000
25,000 horse-power at $30	750,000
Total	$1,375,000
Total operating expense, as above	320,000
Net earnings from operation	$1,055,000
Special reserve fund to provide against extraordinary contingencies, failure to sell full output during first five years of operation, etc., and to provide sinking fund for bonds after first five years.	175,000
Balance	$880,000

FIXED CHARGES.

5% on $8,000,000 bonds	$400,000
Net income	$480,000
Dividend, 5% on $4,000,000 preferred stock	200,000
Surplus applicable to common stock	$280,000

Equal to 7.0 per cent. on $4,000,000 common stock.

The plant is capable of considerable increase in capacity; for a comparatively small additional cost per horse-power 75,000 horse-power can be delivered to Philadelphia for a lighting and power load; or it is possible to utilize the surplus power for eight or nine months in the year for electro-chemical purposes. Such increase in the plant will involve a slight increase in the operating expenses and fixed charges, but the earnings would be largely increased. A conservative estimate of increase in net earnings for the additional 25,000 horse-power will be $300,000, making the total surplus applicable to common stock dividends, after deducting fixed charges on additional investment, of $580,000.

FINANCIAL PLAN.

An issue of $10,000,000 five per cent. gold sinking fund bonds will be authorized, of which not more than $8,000,000 will now be underwritten at 90 per cent., and issued. The proceeds of this underwriting will be sufficient to complete the construction of the first 50,000 horse-power development, including auxiliary steam plant, transmission lines, substation, with all equipment necessary to deliver power to Philadelphia. It will also provide interest on bonds during construction, and leave sufficient margin for working capital. Strict provision will be made regarding the issuance of additional bonds.

The company will have an authorized capitalization of $10,000,000 stock, one-half of which will be cumulative five per cent. preferred stock; the cumulative period to begin in the year 1909. Of this, not more than $4,000,000 will now be issued. There will also be $5,000,000 in common stock, of which $4,000,000 will now be issued.

This Agreement, made at the City of New York, this first day of March, 1905, between Henry F. Dimock, S. R. Bertron and Charles T. Barney, President of Knickerbocker Trust Company (hereinafter called the "Managers"), and Knickerbocker Trust Company, a corporation organized under the laws of New York, or such other trust company, bank or financial institution as the Managers may select (hereinafter called the "Trust Company") and Susquehanna Securities Company (hereinafter called "Securities Company"), a corporation organized or to be organized under the laws of the State of New York, and the undersigned subscribers hereto (hereinafter called the "Subscribers").

WHEREAS, it is intended to secure underwritings for Eight million Dollars ($8,000,000) par value of the First Mortgage sinking fund thirty year Five per cent. Gold Bonds of a corporation to be organized and to be called McCalls Ferry Power Company or some other suitable name (hereinafter called the "Power Company") at Ninety per cent. of their par value, and to arrange whereby the Trust Company will advance on the bonds so underwritten Seventy-five per cent. of their par value as herein provided;

NOW, THEREFORE, THIS AGREEMENT WITNESSETH:

That the Subscribers, in consideration of the premises and of the sum of One Dollar to each of them paid by the Securities Company and by the Trust Company, the receipt whereof is hereby acknowledged, hereby severally but not jointly agree with the Securities Company to purchase the bonds of the Power Company, of the said issue to the amounts set opposite the Subscribers, several signatures hereto respectively (or such lesser amounts as shall be allotted to them by the Securities Company) at the price of Ninety per cent. (90%) of the par value thereof, upon the following terms and conditions:

First.—Each accepted subscription for Ten thousand Dollars ($10,000.) of such bonds shall entitle the Subscriber therefor to receive that amount of bonds and Five thousand dollars ($5,000.) par value in the cumulative Five per cent. (5%) preferred stock of the Power Company or voting trust certificates therefor, cumulative from 1909. Subscriptions for larger or smaller amounts shall participate in like proportion.

Second.—Subscriptions hereunder shall be payable as follows:-Ten per cent. (10%) of the par value of the bonds allotted shall be payable to the Trust Company for the account of the Securities Company within ten (10) days after notice of allotment is mailed by the Securities Company to the Subscribers at their respective addresses, as given below, or if no such addresses are given, to their last known post-office addresses; and five per cent. additional one year from this date, upon similar notice, if the Securities

Company elect to make such call; the balance, being Seven Hundred and Fifty Dollars ($750) per bond with accrued interest, shall be payable upon the maturity of the loan herein provided for.

Third.—The Trust Company agrees to advance to the Securities Company from time to time as called for the unpaid balance of the allotted subscriptions hereunder, being Seven Hundred and Fifty Dollars ($750) for each bond subscribed for, upon the pledge of all the bonds and shares of preferred stock to which the subscribers are respectively entitled, such advances to be repayable two years from the date of the first advance with interest at six per cent. (6%) per annum, payable semi-annually, with a commission of one per cent. (1%) on the amount that the Trust Company agrees to loan; and the Securities Company is to have the right to a further extension of one year at the same rate of interest, with an additional commission of one-half of one per cent. Each Subscriber, in consideration of such advance, hereby guarantees to the Trust Company the repayment of a *pro rata* proportion of such advance with interest. The amount of each such guarantee, however, shall not exceed the unpaid proportion of the Subscriber's respective subscriptions, being Seven Hundred and Fifty Dollars ($750) per bond with accrued interest.

Fourth.—The Subscribers agree that the Managers shall have a right, prior to the maturity of said loan, or its extension, to sell the bonds subscribed for, or any part thereof, for the account of the subscribers, *pro rata*, at not less than Ninety per cent. (90%) of the par value thereof and accrued interest, with a bonus of the preferred stock of the Power Company not to exceed Fifteen (15%) per cent. of the par value of the bonds so sold, and the Trust Company shall deliver said bonds or any part thereof so sold and the stock bonus when and as directed by the Managers upon receipt of such moneys as the Managers shall in writing certify to the Trust Company to be the net purchase price of the bonds sold. The proceeds of all sales of bonds shall be credited upon the said loan, and the amount of such credit shall *pro rata* reduce the Subscribers' several guaranties hereunder.

Fifth.—Payment by the Subscribers to the Trust Company of the amount of their several guaranties shall relieve them of liability to the Securities Company upon their several subscriptions. Such payment may be made in advance of the maturity of the loan at the option of the Subscribers, and upon such payment being made, the Trust Company shall deliver to the respective Subscribers, making the said payments, the bonds and shares of stock held for their respective accounts. The Subscribers making such payment shall upon delivery of the bonds, execute and deliver an agreement in such form as shall be required by the Managers, that the bonds so delivered will not be sold or disposed of until the power plant shall have been in operation for one year except on such terms as shall be fixed by the Managers.

Sixth.—The installments paid by the Subscribers and the moneys advanced by the Trust Company hereunder shall be deposited with the Trust Company and held by it for the account of the Securities Company, to be disbursed only under the authority of the

Managers for the purposes of paying for properties to be acquired by the Power Company, construction and improvement of the Power Company's plant and transmission lines, payment of legal and other expenses, commissions and interest upon advances, reasonable compensation of the Managers, working capital for the Power Company, and such other purposes of the Power Company and of the Securities Company as the Managers in their discretion may deem proper. The certificate in writing of the Managers shall be conclusive upon all concerned as to the propriety of payments made upon their direction, and the Trust Company shall be under no obligation to see to the application of moneys so paid.

Seventh.—The Trust Company may from time to time detach and collect coupons upon the bonds held by it, applying the coupon interest so collected upon the interest due or to grow due on the said loan.

Eighth.—The right is reserved to the Securities Company to reduce or reject any subscription and after allotment in their discretion to reduce all accepted allotted subscriptions by an amount not exceeding twenty per cent. (20%) and no Subscriber shall be released because of the reduction or rejection of the Subscription of any other Subscriber hereunder. It shall not be necessary for a Subscriber whose subscription has been so reduced to resign this agreement for the reduced amount, but his subscription shall be in force for such reduced amount as shown by the allotment of the Securities Company.

Ninth.—In case any Subscriber shall fail to pay the installments as and when called for, the Securities Company shall have the option of excluding such Subscriber from all interest in this agreement and in the profits thereof, without any proceeding at law or in equity, and new subscriptions may be taken in the place of such defaulting Subscriber.

Tenth.—In case any Subscriber shall make default in the payment of the amount guaranteed by him or any part thereof, the Trust Company may, upon ten days' notice in writing by mail, addressed to such defaulting Subscriber at his address as given below or if no such address is given to his last known post-office address and in such manner as it may determine, either at broker's board or at public or private sale, sell the bonds and shares of stock to which such Subscriber would be entitled upon making full payment, applying the net proceeds to the payment of the guaranty of such defaulting Subscriber and accounting to such Subscriber for the surplus if any. Upon any such sale the Managers or the Trust Company may become the purchaser of any bonds and shares of stock sold, free of any equity of redemption of the Subscribers. In case of any deficiency after such sale the Subscriber for whose account such sale may have been made promises to pay to the Trust Company the amount of such deficiency forthwith with legal interest.

Eleventh.—The Managers shall not be liable under any provision of this agreement or in any matter herewith connected or incidental thereto except for fraud and wilful negligence. They may be subscribers hereunder and may be otherwise interested in the Power Company in the Securities Company or in property to be sold to the Power

Company and in any other matters connected with the enterprise. In case of the death, resignation or refusal to act of a Manager or Managers, his or their successor shall be named by the remaining Managers or Manager and such successor or successors shall have all the powers of a Manager hereunder. In case of the death, resignation or refusal to act of all the Managers, then the Trust Company shall name their successors and such successors shall have all the powers of Managers hereunder. The Managers assume no responsibility for the statements of fact in the annexed prospectus and reports though they believe that such statements are true.

Twelfth.—The Trust Company is not to be responsible for any informalities in or invalidity of the bonds or shares of stock nor for any of the acts of any of the other parties hereto and no Subscriber shall be released from his guaranty because of any such matter or for any defense to the obligations of this agreement which he may have against any of the other parties hereto.

Thirteenth.—Pending the engraving or lithographing of the definitive bonds or shares of stock, temporary or interim bonds or shares of stock may be executed and deposited with the Trust Company in lieu thereof. The Managers may in their discretion provide for a Voting Trust for the shares of stock of the Power Company herein referred to, and for the shares of stock held by any other person or persons, and in such event the term "shares of stock" as herein used shall in all cases be construed to mean Voting Trust Certificates issued upon the deposit of such shares.

Fourteenth.—The Subscribers hereby severally appoint the Managers their respective agents and attorneys to do and perform all acts and execute and deliver all instruments which said Managers may deem necessary to carry out the purposes of this agreement.

Fifteenth.—This agreement shall not become effective until subscriptions for Six Million Dollars ($6,000,000) of the bonds of the Power Company shall have been received, accepted and allotted by the Securities Company.

Sixteenth.—Nothing in this agreement shall be so construed as to constitute the Subscribers jointly and the Managers or either of them co-partners in this enterprise.

Seventeenth.—The audit of the President of any Bank or Trust Company in the City of New York shall conclusively establish the correctness of any accounts the Managers may render hereunder and settlement in accordance therewith shall operate to discharge them of all liabilities.

Eighteenth.—This agreement may be signed upon a number of counterparts with the same effect as if all the signatures hereto were upon one instrument. It shall bind and is for the benefit of the parties hereto and for their respective successors, executors, administrators and assigns, but no Subscriber shall be released from his obligations as a guarantor by any assignment of his interest herein.

IN WITNESS WHEREOF, this agreement has been executed the day and year above written.

_____

By _____

President.

Attest:

_____

Secretary.

_____

_____

_____

Managers.

By _____

President.

Attest:

_____

Secretary.

Susquehanna Securities Company Draft of Certificate of Incorporation

CERTIFICATE OF INCORPORATION

OF

SUSQUEHANNA SECURITIES COMPANY.

WE, THE UNDERSIGNED, ALL being persons of full age, and citizens of the United States, and residents of the State of New York, desiring to form a stock corporation pursuant to the provisions of the Business Corporations Law of the State of New York, do hereby make, sign and acknowledge this Certificate for that purpose as follows:

FIRST. The name of the proposed corporation is "SUSQUEHANNA SECURITIES COMPANY."

SECOND. The purposes for which it is to be formed are as follows:

To do any and all of the things hereafter set forth to the same extent as a natural person might or could do, as principal, agent, contractor or otherwise, either alone, or associated with other corporations or natural persons, and in any part of the world, and to receive, have and exercise all the rights, powers and privileges of natural persons in connection therewith.

To aid in the formation, promotion, organization and carrying on of other corporations, and in the marketing, un-

guaranteeing

~~underwriting~~ or in any wise disposing of their bonds, stocks, or other obligations or securities.

guarantee

To ~~underwrite~~, subscribe for, purchase or otherwise acquire, for cash, or otherwise, to hold, sell, assign, transfer, mortgage, pledge, or otherwise deal in or dispose of, the stocks, bonds and other obligations or securities of any other corporation or corporations, domestic or foreign, and while holder or owner thereof, to exercise all the rights, powers and privileges of ownership including the rights to vote on all stocks or other securities of other corporations held or owned by it.

To issue in ~~exchange for~~ the stocks, bonds, and other obligations or securities of other corporations, its own stocks, bonds, or other securities or obligations.

~~To purchase or otherwise acquire for cash or otherwise, its own stock, after the same shall have been issued and fully paid according to law, and to sell or otherwise dispose of the same when so acquired, for cash or otherwise, and at any price whatever whether greater or less than the par value of said stock.~~

To carry on the business of contracting and construction in all its branches.

To build, erect, promote, construct, provide, acquire,

repair, equip, develop, improve, sell, lease, let, license to use, and otherwise dispose of all necessary or convenient dams, bridges, tunnels, viaducts, roads, ways, reservoirs, acqueducts, buildings, plant, machinery, fixtures and apparatus, for the utilization and distribution of [redacted] water power, and the generation and transmission of electricity and electric power, but not to operate the same or any of them.

To make, enter into, carry out, and perform all lawful contracts with any individuals, associations or corporations, in furtherance of or connection with its corporate purposes as herein set forth.

To buy or otherwise acquire, to hold, own, use, occupy, rent, lease, mortgage, pledge, sell or otherwise deal in or dispose of real property to any amount in any part of the world, and any and all manner of personal property, except bills of exchange and other commercial paper, gold and silver bullion and foreign coins.

To carry on any and every lawful business which may be necessary, profitable or convenient in connection with business and purposes of the corporation as herein set forth.

None of the objects and purposes herein specified shall be in anywise limited or restricted by reference to or inference from the terms of any other clause or paragraph, but

each and every object and purpose shall be regarded as independent and separate.

All of the powers herein specified are to be regarded as in furtherance and not in limitation of the powers conferred by the laws and statutes of New York upon corporations generally.

THIRD. The amount of the capital stock is fifteen hundred DOLLARS.

FOURTH. The number of shares of which the capital stock shall consist is fifteen SHARES of one hundred DOLLAR each, and the amount of capital with which said corporation will begin business is fifteen hundred DOLLARS.

FIFTH. Its principal business office is to be located in the Borough of Manhattan, in the County, City and State of New York.

SIXTH. Its duration is to be PERPETUAL.

SEVENTH. The number of its directors is to be THREE.

EIGHTH. The names and post office addresses of the directors for the first year are as follows:

NAMES.	POST OFFICE ADDRESSES.
CARY T. HUTCHINSON,	56 Pine St. & 4 Cal[illegible]
BENJAMIN BARKER,	" "
HOWARD THAYER KINGSBURY,	71 Broadway "

NINTH. The names and post office addresses of the subscriber to this Certificate, and the number of shares of stock which each agrees to take in the corporation, are as follows:

NAMES.	POST OFFICE ADDRESSES.	NUMBER OF SHARES
CARY T. HUTCHINSON,		13
BENJAMIN BARKER,		1
HOWARD THAYER KINGSBURY,		1

TENTH. The Board of Directors of the corporation shall have power, without the assent or vote of the stockholders, to make, alter, amend and rescind By-Laws for the regulation of the affairs of the company, ~~to fix the amount to be reserved as working capital, or to be held as a reserve fund, and, except as otherwise provided by law, to determine whether and to what extent and at what times and places and under what conditions and regulations the accounts and books of the corporation, or any of them, shall be open to the inspection of the stockholders. No stockholder shall have the right to inspect any accounts, books, or documents of the corpora-~~

tion, except as provided by statute or authorized by the directors,

With the consent in writing of the holdersof a majority in interest of the stock issued and outstanding, the Board of Directors shall have power and authority to sell, assign, transfer or otherwise dispose of all the property, rights and franchises of the corporation.

The Board of Directors may, by a resolution duly passed and adopted by vote of a majority of the whole Board, desig-nate of their number to constitute an Executive Committee which Committee shall, whenever the Board of Directors is not in session, have and exercise all the powers in the management of the business and affairs of the corporation, which may lawfully be delegated to such Committee either by such resolution, or by the By-Laws of the corporation, and shall have power to authorize the seal of the corporation to be affixed to any and all instruments requiring it.

The Board of Directors shall have power to appoint all officers, agents, representatives and employees of the corporation, to prescribe their duties, and to fix their compensation.

The Board of Directors, in addition to the powers and authority by statute and by this certificate expressly conferred

upon them, may exercise all such powers and do all such acts and things as may be exercised or done by the corporation, subject, nevertheless, to the provisions of the statutes and of this certificate, and to any regulations that may from time to time be made pursuant to a vote of a majority in interest of the stockholders, provided that no regulations so made shall invalidate any provisions of this certificate, or any prior acts of the Board of Directors which would have been valid if such regulations had not been made.

The corporation may, by a resolution duly adopted by vote of the stockholders, confer additional powers upon the Board of Directors, and prescribe the number necessary to constitute a quorum of the Board of Directors.

IN WITNESS WHEREOF, We have made, signed and acknowledged this Certificate in duplicate, this day of March, in the year One thousand nine hundred and five.

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STATE OF NEW YORK,)
: ss:
COUNTY OF NEW YORK,)

ON this day of March, 1905, before me personally came, CARY T. HUTCHINSON, BENJAMIN PARKER and HOWARD THAYER KINGSBURY, to me personally known and known to me to be the persons described in and who executed the foregoing Certificate, and severally duly acknowledged to me that they executed the same.

Letters by Lee, Higginson & Company Re: McCall Development

M'CFPC0-11

OFFICE OF
LEE, HIGGINSON & CO.
44, STATE STREET,
BOSTON.

L. March 10, 1905

PER S. S. ST. PAUL

Robert Fleming, Esq.,
London, England.

My Dear Mr. Fleming:

We have given a good deal of time and attention to studying a proposed development of water-power on the Susquehanna River at McCall's Ferry. Ten years ago I looked into a water-power at a lower point on the river, I studied the possibilities for the sale of power in Baltimore where it was intended to take it, and concluded, after a week's work, that this power was not worth taking up at that time. Some time ago, Mr. Coffin, President of the General Electric Company, brought the McCall's Ferry power to our attention. This power is about forty miles distant from Baltimore, and about sixty-five miles from Philadelphia. McCall's Ferry is in Lancaster County, or on the borders of Lancaster County. This is one of the richest agricultural sections in the United States. The surrounding country is full of trolley cars and electric light companies.

This is not a new project. It has been under investigation for some years. Mr. George S. Morrison, now deceased, who was very well known to us, and was one of the most eminent engineers in this country, investigated the project most thoroughly and made plans for the dam, etc. Mr. William Barclay Parsons, who was the chief engineer of the Rapid Transit Commission of New York, and who is now the consulting engineer of

R.F.-S. March 10,1905.

the Interborough Rapid Transit Company, took up the work where it was left by Mr. Morrison, and has completed it. In general I will say that the engineers report that there is no difficulty in building the dam, that there can be no danger of ice and that in every way the project is feasible.

The cost of the development has been figured by Mr. Parsons, by Mr. Morrison, and in part by Mr. Coffin and other officials of the General Electric Company. The cost of the dam, power house, all hydraulic and electric equipment, including three transmission lines to Philadelphia, with sub-station is estimated at $4,041,000

Cash for property and rights of way, in addition to stock to be issued by the Company,	1,000,000
Interest during construction,	450,000
Total cost without steam plant	$5,491,000

This development will be for 50,000 horse-power.

In the territory tributary to this development there is at present more than 500,000 horse-power in use. There is, in our opinion, no question whatever of there being sufficient demand for the power developed within a satisfactory distance at a profitable price.

The figures given to us are much larger than the actual estimates of the engineers. They have been increased in every possible way in order to make them most conservative. Mr. Coffin has, himself, given a good deal of attention to these figures. He thinks them very conservative.

In Mr. Parsons's report, of which I enclose a copy, you will find full statements in regard to the sufficiency of water.

The estimate of receipts and fixed charges of the Company is

R. F., -3.

as follows:

Receipts.

25,000 h. p. at $25	$ 625,000
25,000 " " $30	750,000
Total,	$1,375,000
Total operating expense,	320,000
Net earnings from operation,	$1,055,000
Special reserve fund to provide against extraordinary contingencies, failure to sell full output during first five years of operation, etc., and to provide sinking fund for bonds after first five years,	175,000
Balance,	$880,000

Fixed Charges.

5% on $8,000,000 bonds	400,000
Net income,	$480,000
Dividend, 5% on $4,000,000 preferred stock	200,000
Surplus applicable to common stock	$280,000

Equal to 7.0 per cent. on $4,000,000 common stock.

We believe that it will be possible to sell a great deal of this power at a good deal over $30 per horse-power, but for our own purposes we should prefer to estimate all the receipts from horse-power at $25 per horse-power. This will make the surplus applicable to the common stock $125,000 less than that above stated.

It is proposed to issue $10,000,000 five per cent. gold sinking fund bonds, of which not more than $8,000,000 will now be underwritten at 90 per cent. The underwriters will be called upon for 10 per cent. of their underwriting, possibly for 5 per cent. in addition. It is not expected that they will be called upon for more than 15 per cent. in all. We see no reason why it will not be possible

R. F., -4.

to sell these bonds from time to time while this development is under construction, or after it has been completed. An arrangement has been made with a Trust Company to advance all such funds as may be necessary with the exception of the 15 per cent. to be paid in by the underwriters.

With the $8,000,000 of bonds underwritten will go $4,000,000 of 5 per cent. cumulative preferred stock. This will be the profit to the underwriters. The syndicate managers believe that they will be able to sell the bonds when the proper time comes without giving any of this preferred stock.

In addition to this issue of preferred stock there will be an issue of common stock, all of which will be used in acquiring the rights from the promoters, who have been out a large sum of money for several years.

The authorized issue of bonds will be $10,000,000, the authorized issue of preferred stock $5,000,000, and the authorized issue of common stock $5,000,000. Two million of bonds, $1,000,000 of preferred and $1,000,000 of common stock will remain in the treasury of the company.

The engineers estimate that two years will be required to complete this development. We think, ourselves, that it is safe to estimate three years. We do not believe that the transmission lines to Philadelphia will ever be built, because it seems as if a market will be found for all the power developed near McCall's Ferry long before the development is completed.

This is the only considerable water-power between New York and Washington, with the exception of a possible later development on the Susquehanna River at a lower point. The McCall's Ferry Power

R. F., -5.

Company is obtaining rights to this other power.

There is a small power above McCall's Ferry near York on the Susquehanna River. This has been developed, and all the power is now used in York. The dam at this point has withstood heavy ice, though it is not nearly so well constructed as will be the dam at McCall's Ferry.

We propose to take a block of this underwriting for ourselves. We hope that you will feel like taking some also. Please cable us upon receipt of this letter.

Very truly yours,

Enc. (Signed.) Gardiner M. Lane

P.S. Mr. Higginson thinks very highly of this undertaking, and thinking that it would interest you, he asked me to write you regarding it.

OFFICE OF
LEE, HIGGINSON & CO.,
44, STATE STREET,
L. BOSTON

PER S.S. OCEANIC. March 13, 1905.

Robert Fleming, Esq.,

London, England.

Dear Mr. Fleming:

In looking over my letter to you of March 10th, I regret to find that the estimate of cost, through a stenographic mistake was given in part only. The following is a correct statement of the estimated cost:

1.	Estimate of W. B. Parsons for dam, power house, all hydraulic and electric equipment, including three transmission lines to Philadelphia, with sub-station, . .	$4,041,000
2.	Cash for property and rights of way, in addition to stock to be issued by the company, ...	1,000,000
3.	Interest during construction, ...	450,000
	Total cost, without steam plant,	$5,491,000
4.	Auxiliary steam plant, maximum capacity of 30,000 horse-power, ...	1,200,000
		$6,691,000
5.	Working capital, ...	509,000
		$7,200,000

You will see from this that the estimate of cost of auxiliary steam plant and working capital were omitted from my letter of the 10th.

Very truly yours,

(Signed.) Gardiner Martin Lane.

This letter confirms our cable of this date on the same subject.

Lee's Affidavit

STATEMENT

of

GEORGE C. LEE, A PARTNER OF LEE, HIGGINSON & CO.

At the request of Mr. Donald Gunn, representing the Pennsylvania Water and Power Company, I have placed a value on 5,000 shares of McCall Ferry Power Company common stock which Lee, Higginson & Co. received as compensation for placing more than $2,000,000 par value of McCall Ferry Power Company bonds.

I was a member of the firm of Lee, Higginson & Co. at the time these bonds were placed and had been a member since September, 1900. I was first associated with the firm in 1894.

It is difficult for me to place a value on this stock, because of the long lapse of time since the transaction and also because the enterprise passed through a receivership and the stock untimately became worthless. I have examined the documents which were submitted to me; I have also examined my firm's records of the McCall Ferry development and have made a careful analysis of the underwritings immediately prior and following the McCall Company transaction. My investigation of this matter has developed the following facts concerning my firm's connection with this enterprise.

(1) About 1898 the development of the Susquehanna River for hydro-electric purposes came to the attention of our firm, and we employed Stone & Webster to make an examination and report independently of other engineers whose reports had been submitted to us. After receiving the report of Stone & Webster, my firm decided against taking action in the matter at that time.

(2) About 1903, Charles A. Coffin, then President of the General Electric Co., called our attention to the proposed development at McCall Ferry on the Susquehanna River. At that time and for a year following, the market for that type of security was rather weak and no attempt was made to underwrite the project until early 1905.

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(3) A report on the proposed development at McCall Ferry was made in January 1905 by William Barclay Parsons, a well-known engineer. His estimates were reviewed by Mr. Coffin and both men believed the estimates conservative and the proposition sound. — Our firm participated in underwriting under the syndicate managed by Henry F. Dimock, S. Reading Bertron and Charles T. Barney. This underwriting agreement was dated March 1, 1905. We obtained approximately two and a half million dollars of subscriptions, but the other interests in the underwriting had not been successful in obtaining the remaining necessary subscriptions and the financing encountered difficulties.

(4) The Syndicate managers then decided to ask Harvey Fisk & Sons to head a new Syndicate. The Fisk firm agreed to head a new Syndicate to complete the financing. The Fisk underwriting agreement provided for a 45% bonus of preferred stock with the bonds, while our commitments had been made on a basis of 50% bonus. Harvey Fisk & Sons were desirous of retaining the subscriptions already obtained under the Dimock-Bertron-Barney underwriting. Accordingly, they agreed to provide our subscribers with a 50% bonus, thus continuing in force the agreements between our firm and our customers. Our firm became a subscriber to Harvey Fisk & Sons' underwriting to the extent necessary to cover our subscriptions. This had the effect of our firm and not our customers being directly liable to Harvey Fisk & Sons for over two and a half million dollars of underwriting.

(5) Our records show that our total compensation was 5,000 shares of common stock and that it was based on handling $2,000,000 par value of bonds. We actually handled a few additional bonds besides the firm's own subscription, but did not receive additional compensation. I have carefully reviewed the results of my firm's underwritings between 1900 and 1908 and find that on participations comparable to the McCall Ferry proposition we customarily earned 5 points or more in cash on the par value of bonds handled.

(6) My firm would not have participated in the McCall Ferry proposition unless they believed their stock compensation had a total value of at least $125,000 at the time they agreed to accept the stock in lieu of a cash commission. This would make the stock worth $25 per share. It is my opinion that a division of the firm's assets, as in the case of a change in members, immediately following the acceptance of this stock as compensation, would have been based on a value of not less than $25 per share for this stock.

(7) Subsequent to the original financing, apparently the plans were changed to increase the capacity of the plant which necessitated obtaining more money. In the summer of 1907 it was decided to sell another half million of bonds, and it was suggested that my firm handle $100,000 par value of them. Before they were placed, the financial market became unfavorable and was followed by a financial panic in the fall of 1907.

(8) Toward the close of 1907, construction work was suspended. In view of the obligations of Lee, Higginson & Co. in connection with the loan on the bond purchase agreements of its customers, we asked Stone & Webster to make an investigation of the McCall Ferry Power Co. project. It soon developed that a very lengthy investigation would be necessary. As this entailed more time and expense than we had anticipated, we terminated the proposed investigation. However, in July 1908, our firm joined with Harvey Fisk & Sons and the General Electric Company in sharing the cost of an investigation by Electric Bond & Share Co.

(9) In October 1908 our firm was one of four each of whom loaned the McCall Ferry enterprise $100,000. In November, 1908, default on the notes of the enterprise which were held by the Knickerbocker Trust Company, made the deferred bond subscribers liable for the principal. By arrangement, an additional payment by the deferred bond subscribers of 20% of the price of the bonds was made and new notes were drawn in the names of the subscribers.

This resulted in my firm incurring an obligation of 60% of the purchase price on $2,350,000 par value of bonds. In December 1908, McCall Ferry Power Co. defaulted on its bond interest and a bondholders committee was formed on which my firm was represented by Gardiner M. Lane, the member who had represented us in the McCall Ferry Power Company affairs. In the fall of 1909, this committee redeemed the note for our loan of $100,000. A reorganization followed and the assets of the McCall Company passed to the Pennsylvania Water & Power Company, an exchange of McCall bonds having been made for securities of the new Company.

July 10, 1939.

Geo C. Lee

Commonwealth of Massachusetts)
County of Suffolk) ss. July 10, 1939.

Then appeared before me GEORGE C. LEE who made oath that the above statement is true to the best of his knowledge and belief.

George Millett
Notary Public

My commission expires Dec 15, 1941

Examination of PLINY FISK by W. D. Cole at the Memorial Hospital, 106th Street and Central Park West, New York, N. Y., held on the 29th day of December, 1938, at 1:30 o'clock P.M., before Wilton D. Cole, Notary Public.

Q. What is your name?

A. Pliny Fisk.

Q. What is your business?

A. I am retired from business. From 1884 to 1923 I was associated with the firm of Harvey Fisk & Sons, a banking firm which was organized by my father, Harvey Fisk, and of which I became a senior partner in or about the year 1890. From that time until 1923 I was the active head of the firm and controlling partner.

Q. What was the business of Harvey Fisk & Sons?

A. It was started as a private banking firm by my father, but from about 1890 until 1923 it was one of the leading Government Bond investment houses in New York, and for many years the outstanding firm in that field.

Q. Did your firm also engage in the underwriting and origination of new issues for private companies?

A. Yes.

Q. Do you recall financing of the McCall Ferry Power Company?

A. Yes.

Q. About what year did that financing take place?

A. In the year 1905.

Q. Do you recall the details of that financing?

A. Naturally my recollection of this business had been dimmed due to the many years that have elapsed since 1905, but during the past six months my recollection has been refreshed. In June, 1938, a representative of the Pennsylvania Water and Power Company, Mr. Donald Gunn, called on me and asked for permission to examine the records of my old firm relating to the McCall Ferry Power Company. I told Mr. Gunn that I would be very glad to have my son, Pliny Fisk, Jr., and my personal attorney, W. D. Cole, make a search for these records. That was the only occasion upon which I spoke with Mr. Gunn. My son, Pliny Fisk, Jr., and Mr. Cole made a very thorough search for records of the old company. Their search established the fact that all of the

records of Harvey Fisk & Sons relating to the McCall Ferry Power Company deal had been destroyed. However, I have examined the photostatic copies hereto attached and identified by my initials, which photostatic copies I believe are true and correct copies of the original documents or of true and correct copies thereof.

Q. As a result of your examination of the records and papers connected with the above, would you explain the manner in which this business originated?

A. This business was brought to my attention by William M. Barnum, a partner in my firm. He had, as I recall, about a 15% interest in the profits of the firm. His interest was either second or third largest interest of any of my partners. I had a great deal of respect for Mr. Barnum's ability and judgment, both as to business matters and as to legal matters, and during the time that he was with my firm I placed confidence and reliance upon him with respect to the matters he was handling.

I took very little active interest in the McCall Ferry Power Company management or supervision. I turned the matter over to Mr. Barnum to handle and gave him complete authority and discretion in the handling of this deal. It was the practice of our firm for partners who were handling matters such as the McCall Ferry Power Company to meet weekly or oftener with the other partners for a general discussion of them. This practice was followed with respect to the McCall Ferry Power Company matter. Mr. Barnum managed the affairs of the company and reported weekly or oftener at these general partners' meetings, and discussed with the other partners the policies to be followed. The execution of these policies with respect to the McCall Ferry Power Company deal was left with Mr. Barnum.

Q. During what period did Mr. Barnum represent the firm of Harvey Fisk & Sons with respect to the management of McCall Ferry Power Company deal?

A. During a period of more than three years, that is, from the organization of the company until the affairs of the company were taken over by the Reorganization Committee, which, as I recall, was some time in 1908.

Q. I hand you this paper. Are you familiar with it?

A. Yes, this is the underwriting agreement, dated March 25, 1905, between Harvey Fisk & Sons and the subscribers for the bonds and preferred stock of the McCall Ferry Power Company.

Q. Is this the agreement under which the McCall Ferry Power Company was financed?

A. Yes.

Q. Will you describe briefly the substance of this financing?

A. My firm took over and headed the financing, and dominated the entire picture from the date we first decided to participate in the business and dictated the policies and all important decisions. Subscription agreements were obtained from subscribers in the form of this agreement to the amount of approximately $8,000,000. Under this agreement each subscriber received one $1,000 par value bond and $450 par value preferred stock of the McCall Ferry Power Company for a consideration of $900. The total consideration paid by subscribers under these subscription agreements totalled approximately $7,200,000, which were the funds estimated as necessary to adequately finance this project.

Q. What did your firm agree to do in connection with the financing of the McCall Ferry Power Company and what compensation did you receive?

A. My firm undertook to act in two capacities in connection with this matter. As bankers we underwrote the issue and arranged for the sale of the approximately $8,000,000 of bonds and the preferred stock. In addition to this, however, my firm also undertook to manage the project while it was being built. I am unable at this date to give an exact statement of the total compensation to my firm for acting in both of these capacities, and I cannot give any exact segregation between the portion of the consideration applying to the banking services and the portion applying to the supervisory services. However, it would have been the custom of my firm for services of these natures to demand and receive at least 51% of the common stock of the enterprise on behalf of my firm and other banking interests in the deal. I certainly do not recall that there was any exception made in the case of McCall Ferry Power Company and I believe that my firm and banking interests in this deal initially received more than half of the common stock. It is my opinion that the value of the banking services of my firm was at least $250,000. This estimate is based upon Harvey Fisk & Sons acting as syndicate managers and actually selling approximately one-half of the $8,000,000 bond issue. In my opinion, the management services performed by my firm for the McCall Ferry Power Company were of a value of not less than $150,000. The primary responsibility for supervising the construction of the project, the selection of personnel, and the selection of experts, engineers and contractors was imposed upon Harvey Fisk & Sons. Mr. William M. Barnum, one of my principal partners, as I have pointed out, devoted a very considerable portion of his time to this project and was, in fact, in active charge of and had full responsibility for the entire project. Mr. Barnum's share of my firm's profits averaged $115,000 per year. This represented his share of net profits after deduction of overhead and expenses and would indicate that my firm would charge for his time on a considerably higher basis.

Q. Do you consider that such management services by your firm were services of a banking nature?

A. No. They clearly were not. The services of a banking firm such as Harvey Fisk & Sons at that time in connection with this project would ordinarily have involved only the underwriting and sale of the securities, as I have just stated to you, and our responsibility, as bankers, would at most have been only to keep familiar with the development and operations of the project. We would not have undertaken the far greater responsibility of actual supervision and management merely for the banking fee and without substantial additional compensation.

Q. Do you consider that the above mentioned sum of $150,000, which you have estimated for such management services, is in addition to the sum of $250,000 for banking services?

A. Yes We could not and would not have undertaken such management responsibility without additional compensation at least in the amount that I have stated.

I have read the foregoing questions and answers and the same are true to the best of my knowledge and belief.

Pliny Fisk

Subscribed and sworn to before me this 29th day of December, 1938.

Notary Public

WILTON D. COLE
NOTARY PUBLIC

FORM MD 55

PENNSYLVANIA WATER AND POWER COMPANY

FILE M-1711.3952
Referred to
Note, Advise
Check, Answer
Return to
Reopen

January 9, 1939.

Re: Determination of Original Cost -
Pennsylvania Water & Power Company.

Mr. Wilton D. Cole,
233 Broadway,
New York City.

Dear Sir:

Under separate cover I am sending you today a copy of our story of Harvey Fisk & Sons' connection with the McCall Ferry development, together with a substantial volume of exhibits. The latter are mostly photostats of original documents in our files here in Baltimore. We will appreciate your arranging for Mr. Pliny Fisk, Sr., to go over our story of his firm's connection with the McCall Ferry Power Company and indicate such changes as are necessary to bring it into conformity with his memory and judgment.

The exhibits accompanying our write-up cover all the important documents we have been able to locate. Because many essential facts in this story are not now available, we have found it necessary to draw freely upon suppositions and conjectures. We desire Mr. Fisk to give us the benefit of his memory and judgment as to how these events transpired without regard to whether his statements may or may not conflict with our suppositions.

Mr. Fisk will remember some of the facts and circumstances recited in our version of the McCall Ferry financial history, but many of them he will not recall. Regarding the facts and transactions which Mr. Fisk does not recall, we will greatly appreciate his giving us the benefit of his judgment as to the conclusions we have drawn. It will be helpful if he will, in his comments and remarks, distinguish between the things he recollects and those on which he gives us his judgment.

There are a number of important points in the history of the McCall Ferry financing as we have developed it on which we are uncertain and particularly desire Mr. Fisk's opinion. These are as follows:

1. How did Harvey Fisk & Sons look upon the arrangement through which they became interested in the McCall Ferry proposition? Did they consider the transaction a purchase of control from the Hutchinson-Dimock interest? Was it a partnership arrangement between Harvey Fisk & Sons and the Hutchinson-Dimock interests, or was it some other kind of relationship?

2

Mr. Wilton D. Cole
New York City.

January 9, 1939.

2. What relationship did S. R. Bertron of the firm of Bertron, Storrs & Griscom bear to Harvey Fisk & Sons under the financing and management plan for the McCall Ferry development?

3. Why was Harvey Fisk & Sons willing to have only one of three positions on the Voting Trust under the Stock Deposit Agreement, thus risking possible loss of voting control of the enterprise?

4. How was Harvey Fisk & Sons' control over the McCall Ferry enterprise actually exercised?

5. How did Harvey Fisk & Sons plan to exercise control over the enterprise after the expiration of the Stock Deposit Agreement on November 1, 1908?

6. How, or through what arrangement was Harvey Fisk & Sons represented in the McCall Ferry enterprise after Wm. Barnum resigned from the firm in July, 1908?

7. Did Harvey Fisk & Sons look upon their option right to repurchase the McCall Ferry Power Company bonds at 90 as an asset or a liability?

8. Was the 80% loan on the bond subscription agreements made by Knickerbocker Trust Company considered a privilege or an obligation by the Trust Company?

9. Why was the stock transfer agency changed from Harvey Fisk & Sons to the Knickerbocker Trust Company in November, 1908?

10. What form of compensation did Harvey Fisk & Sons receive for the services they rendered the McCall Ferry development?

11. What did Mr. Fisk consider the common stock of the McCall Ferry Power Company worth when he accepted it?

We realize that our requests in this matter are going to be very burdensome to Mr. Fisk, and that we probably cannot get as much of his time as we might like to have. While we are, of course, anxious to complete this work, we want Mr. Fisk to take as much time as he is willing to devote to this matter. Anything that he can add to our story, or any particular in which he feels it should be changed, will add materially to its authenticity.

It is desirable that we have an authentic record of Mr. Fisk's recollections and comments. We have left a wide margin on the copy of our version of the McCall Ferry financial history, and hope that he will record his notes in this margin. It is also desirable that he initial the exhibits. We suggest that any answers he may be able to give us to the specific questions in this letter be witnessed.

Yours very truly,

DG/H

Donald Gunn

cc: Messrs. J. A. Wells, Jas. L. Rintoul.

WILTON D. COLE

233 BROADWAY
NEW YORK

January 28, 1939

Pennsylvania Water & Power Company,
Lexington Building,
Baltimore, Maryland.

Attention: Mr. Donald Gunn.

Dear Mr. Gunn:

Pursuant to your letter of January 9, 1939, I have had several talks with Mr. Fisk, during which I have read to him and discussed with him the 23-page summary of McCall Ferry financing and Harvey Fisk & Sons connection with it, with the attached exhibits, which you forwarded to me with your letter.

We had, of course, discussed most of the facts set forth in such summary on a number of occasions during the past four months and he confirmed to me that the story seemed to him a fair statement of the deal as he recalled it and of his firm's position in it.

I am returning herewith such summary to you with his comments on page 23 thereof.

I also discussed with Mr. Fisk the points referred to by you in your above letter and in accordance with our discussions, prepared the enclosed summary of his comment on them. The statement, of course, is in my words, not his, but sets forth accurately, I believe, his views. I read such statement to him and he signed it, after stating his approval of it. I also enclose such statement herewith.

Very truly yours,

Wilton D Cole

Memorandum of Comments of Pliny Fisk to Points Raised in Letter from Donald Gunn, dated January 9, 1939

1. In financing projects such as this with appreciable development risk and particularly where the Bankers' compensation was principally or entirely in the form of stock, Harvey Fisk & Sons would certainly insist on having control. We considered the deal a "buy-out" of the Hutchinson-Dimock interests by ourselves and Bertron, Storrs & Griscom. We certainly did not have, in any sense, a partnership relationship with the Hutchinson-Dimock interests.

2. As S. R. Bertron of Bertron, Storrs & Griscom brought the McCall Ferry deal to Harvey Fisk & Sons in a partially financed condition, Bertron, Storrs & Griscom were joint account with Harvey Fisk & Sons but, because of our greater prestige, their name did not appear on the subscription agreements. We dealt with S. R. Bertron as representative and principal partner of Bertron, Storrs and Griscom.

3. The interests of Bertron, Storrs & Griscom and Harvey Fisk & Sons were identical in financing the McCall deal. We were both bankers and Harvey Fisk & Sons knew that Bertron, Storrs & Griscom would vote with Harvey Fisk & Sons on all matters of policy. Harvey Fisk & Sons thus clearly held control of the McCall Ferry Power Company under the voting trust arrangement.

4. The three banking interests; ourselves, Bertron, Storrs & Griscom, and Lee, Higginson & Co. held a majority of the

common stock and, as the principal banking interest, Harvey Fisk assumed responsibility for the management of the company. Under the circumstances it was clear that we would and did have no difficulty in exercising such control. Such control was actually exercised by us through our partner, Mr. William M. Barnum.

5. We believed that even after expiration of the voting trust, the banking group, in view of their large holdings, would have no difficulty in retaining working control.

6. Wm. M. Barnum continued to represent Harvey Fisk & Sons in the McCall Ferry enterprise after his withdrawal from the firm. There had been no trouble or dissension which caused him to leave the firm and he continued on excellent terms with me.

7. We considered options of this type as obligations to the subscribers to take them out of their investment. If we failed to do so, as in this case, we felt it was harmful to the reputation and interests of the firm.

8. I don't know.

9. Have no idea as to the reason for it, except convenience.

10. Stock only: common stock, in my opinion at least as much as the 12,000 odd shares that went to Bertron, Storrs & Griscom and probably the difference between that amount and the 30,000 shares represented by one of the two large certificates issued; also apparently the 1800 odd shares of preferred stock that went to my firm.

11. I have already figured that the value of services of my firm in handling the financing of this deal was $250,000. and in undertaking the responsibility for management during the construction and development period was not less than $150,000. It is difficult for me to fix at this time a value for this stock, particularly, because of the later developments. But I am of the opinion that the common and preferred stock of the McCall Ferry Power Company, at the date we received it, had a value in our judgment of at least $400,000. Otherwise we would not have undertaken the financing. I am of the opinion, therefore, that the preferred stock we received might be figured at 50, or a value of about $95,000., leaving $305,000. as the value of the common stock we received, or approximately $18. a share.

approved

Witness 1/28/38
Wilton W. Cole

Henry Tatt

Susquehanna Power Company.

Bond and Stock Purchase Agreement.

Agreement, dated March 25, 1905, between the Subscribers, severally, of the one part, and HARVEY FISK & SONS, Bankers, of the City of New York, hereinafter called the "Bankers," of the other part:

WHEREAS, a plan has been devised for acquiring certain riparian lands and interests on the Susquehanna River, in the Counties of Lancaster and York, in the State of Pennsylvania, near McCall's Ferry, and for developing the power and storage capacity thereof which it is estimated will produce a supply of at least fifty thousand (50,000) horse-power, which plan is acceptable to the owners of said lands and interests, and is as follows:

PLAN.

A corporation, hereinafter called the "Power Company," is to be formed, with the name "SUSQUEHANNA POWER COMPANY," or other appropriate name, capitalized as follows, namely:

(1) Five million dollars ($5,000,000) of common stock;

(2) Five million dollars ($5,000,000) of preferred stock entitled, in preference to the common, to par on distribution, and to dividends of five per cent. per annum, which dividends shall be cumulative after four years from the organization;

(3) Ten million dollars ($10,000,000) of thirty-year five per cent. Gold Bonds, secured to be paid by a mortgage which shall be a first lien (either directly or by pledge of stocks representing the unencumbered ownership thereof) upon such lands and interests, easements, water rights, dam, power plant, equipment, lines for distribution of electric current and other property as shall be acquired or produced by or for the Power Company in consideration of the issue of its said stocks and bonds, such mortgage to require the payment of one hundred and sixty thousand dollars ($160,000) annually after five years into a sinking fund for retiring the bonds;

All of said bonds and stock, except two million dollars of bonds and one million dollars of preferred stock, which are to be reserved for other corporate purposes, are to be issued in acquiring said riparian lands and interests, and in providing for the construction of the dam and other works estimated to be necessary to produce a continuous supply of fifty thousand horse power and equipping the same with the lines of transmission and distribution deemed requisite to render such power marketable, for all profits in connection with the bringing together and turning in of the said properties, for compensation for financial assistance except as hereinafter stated and for organization, corporate, legal and other proper expenses in connection with the acquisition of said lands and interests and the said construction;

WHEREAS, the Bankers have been requested and are willing to aid in financing the said Plan to the extent of taking agreements from the Subscribers for the purchase of bonds and preferred stock of the Power Company, of acquiring the bonds and stocks for delivery under such purchase, and of making or procuring the loans hereinafter mentioned;

NOW, THEREFORE, each Subscriber hereby agrees with the Bankers, upon the terms and conditions hereinafter stated, to purchase from them bonds and preferred stock of the Power Company to the amount written after his signature hereto, or such smaller amount as they may allot, and to pay therefor at the price and times hereinafter mentioned.

The price is nine hundred dollars, and accrued interest, if any, for each one thousand dollar bond, together with preferred stock of the par value of four hundred and fifty dollars, and is payable to the Bankers at their office No. 62 Cedar Street, New York City, in instalments of not more than twenty per cent. each, the first upon five days' notice on or after allotment, and the others upon call of the Bankers on twenty days' notice. Subscribers are to be credited with interest at five per cent. per annum upon all instalments from times of payment until delivery of bonds and stock.

Subscribers have the option, by signing a copy of this agreement which so provides by its last clause, to defer for at least three years call and payment of all instalments after the first, and each Subscriber so electing and signing hereby guarantees payment of interest and commissions upon as much of the loan or loans hereinafter provided for as the total amount of the instalments of his purchase price so deferred.

It is understood that all interest and commissions herein mentioned will be paid as part of the cost of producing the plant and equipment.

Upon the pledge of these purchase agreements of Subscribers so deferring payment, together with the bonds and stocks to be taken thereby, the Bankers will, as money shall be required for construction and equipment, procure a loan or loans up to the aggregate amount of such deferred payments, at a cost of not exceeding interest at six per cent. per annum upon the amounts actually loaned, and a commission of not over one-half of one per cent. per annum upon the amounts agreed to be loaned, as and if required, and such Subscribers hereby severally authorize such pledge.

In case, after allotment, less than the above-mentioned issue of bonds should be found requisite, each Subscriber consents to a proportionate reduction of the amount of his allotment hereunder.

Appropriate receipts of the Bankers, negotiable in the manner therein provided, will be issued for all payments, calling for delivery of bonds and stock when ready.

after full payment, and not later than one year after completion of construction for producing and distributing power; such receipts to be expressly subject to the option hereinafter provided. No assignment, transfer or other disposition of any such receipt shall discharge or diminish any obligation of any Subscriber hereunder.

The Bankers have the option at any time before final delivery of bonds and stock to re-purchase from the Subscribers all or any part of said bonds at ninety dollars for each one hundred dollars of aggregate principal amount, upon thirty days' notice mailed to holders of receipts at their last known addresses. In case of such purchase of less than all the bonds taken by the Subscribers hereunder, the same shall be made from all the Subscribers proportionately. Upon maturity of such notice all interest payable to Subscribers shall cease, to the extent of interest on the purchase price so to be repaid, and all receipts must be surrendered in exchange for such price and for new receipts calling only for the remainder, if any, of the bonds and for the preferred stock.

No partnership or joint relation of any kind results from this agreement, nor do the Bankers assume any fiduciary relation of any kind, or any obligation to cause the plan aforesaid to be undertaken or carried out.

The Subscribers intend their agreements herein to be relied upon by the Bankers in their arrangements to acquire the bonds and stock hereby agreed to be purchased from them, and severally waive notice of acceptance.

Signatures to this agreement, though made upon different papers, some of which differ from the others in the last clause, shall be deemed signatures of one agreement, and the Bankers may be Subscribers.

The Subscribers to this paper **do not elect to defer payment,** as hereinbefore provided, of installments after the first.

NAME	AMOUNT	ADDRESS

1.7
G

Susquehanna Power Company.

Bond and Stock Purchase Agreement.

SAFE PAPER
No. 91-7
RETURN PROMPTLY
P. W. & P. CO.
1611 LEXINGTON BLDG.
BALTIMORE, MD.

Correspondence Re: Lee, Higginson & Company's Compensation as Bankers

BERTRON, STORRS & GRISCOM,
Bankers.
LAND TITLE BUILDING, PHILADELPHIA. 40 WALL STREET, NEW YORK.

New York, March 25, 1905.

Messrs. Lee, Higginson & Co.,
44 State St.,
Boston, Mass.

Gentlemen:-

We agree that you shall receive through us or the Bankers, Messrs. Harvey Fisk & Sons, 25% of common stock on the SUSQUEHANNA WATER POWER Underwriting on $2,000,000 subscriptions to be furnished by you, or $500,000 par value of the same, together with 5% of preferred stock, making the total amount of preferred stock 50% of the subscriptions, instead of 45% as called for in this subscription. The same to be transferred to you as soon as issued.

Very truly yours,

A. Bertron Storrs & Griscom

BERTRON, STORRS & GRISCOM.
Bankers.
LAND TITLE BUILDING, PHILADELPHIA. 40 WALL STREET, NEW YORK.

New York, March 28, 1905.

Messrs. Lee, Higginson & Company,

44 State St.,

Boston, Mass.

Gentlemen:-

We have your letter acknowledging receipt of ours in reference to the common and preferred stock due you on completion of your Underwriting.

In addition we would say, that on the additional $500,000 allotted you, making you $2,500,000 in all, Messrs. Harvey Fisk & Sons have agreed with us that you are to have the whole 50% of preferred stock to go with this Underwriting, the 5% in addition to the 45% called for in the subscription to be supplied by us.

Very truly yours,

A.

BERTRON, STORRS & GRISCOM,
Bankers.
LAND TITLE BUILDING, PHILADELPHIA
40 WALL STREET, NEW YORK

New York, March 30, 1905.

Messrs. Lee, Higginson & Co.,

44 State St., Boston, Mass.

Gentlemen:-

I have arranged with Messrs. Harvey Fisk & Sons to provide you with an additional $50,000 subscription on the subscription basis, namely 45% percent of preferred stock, but will also secure the additional 5% for you later.

I am glad to have been of this service to you. For your own information I would say that Mr. Frick is among the Underwriters.

Very truly yours,

A.

BERTRON, STORRS & GRISCOM

BANKERS

40 WALL STREET, NEW YORK — LAND TITLE BUILDING, PHILADELPHIA

New York, March 8, 1906.

Messrs. Lee, Higginson & Company,

44 State St.,

Boston, Mass.

Gentlemen:-

Would you be good enough to send us a memorandum of the amount of common stock which is due you on the McCALL FERRY POWER proposition, according to your memorandums, as we desire to get this matter straightened out with Messrs. Harvey Fisk & Sons.

Thanking you in advance for your kindness, we are,

Very truly yours,

A.

...ch 9, 1906.

Messrs. Bertron, Storrs & Griscom,

40, Wall Street, New York, N. Y.

Dear Sirs:

We beg to acknowledge the receipt of your letter of March 8th in reference to the amount of common stock which it was agreed to allow us on account of our underwriting of Susquehanna Water Power.

We quote from your letter of March 25th, 1905, as follows:

"We agree that you shall receive through us or the bankers, Messrs. Harvey, Fisk & Sons, 25% of common stock on the Susquehanna Water Power Underwriting of $2,000,000, subscriptions to be furnished by you, or $500,000 par value of the same, etc. . . . The same to be transferred to you as soon as issued."

The total underwriting taken by us is $2,620,000, on $500,000 of which it is clearly stated in the letter of your Mr. Bertron to our Mr. Lane of March 25th, 1905, that you could not allow us any commission in common stock. On the balance of $120,000 we do not find any memorandum as to whether we were to receive a commission in common stock.

Our inference is that $500,000 in common stock covers the ... to be allowed to us.

Yours very truly,

Agreement for Acquisition of Pullen's Options by Susquehanna Contracting Company

ASSIGNMENT and AGREEMENT, dated April 29, 1905, by and between CHARLES D. PULLEN, of the City of New York, (hereinafter called "Assignor"), and BERTRON, STORRS & GRISCOM, Bankers, of the City of New York, (hereinafter called "Assignees").

Assignor, in consideration of ten thousand dollars ($10,000), receipt whereof is hereby acknowledged, and in consideration also of the agreement of Assignees hereinafter stated, hereby assigns, transfers and sets over absolutely unto Assignees, their successors, heirs and assigns, forever, a certain agreement between Assignor as party of the first part, and George K. McGaw, James H. Harlow and M. H. Houseman, parties of the second part, (a copy whereof is hereunto annexed marked "A"), and also a certain agreement between Assignor as party of the first part and B. Harvey Welsh and others, parties of the second part, dated March 21, 1905 (a copy whereof is hereunto annexed marked "B"), and also a certain agreement between Assignor, party of the first part, and said Harlow, McGaw and Houseman, parties of the second part, dated April 5, 1905 (a copy whereof is hereunto annexed marked "C"), and all and every right, title and interest, claim, demand, option, privilege, advantage and opportunity belonging to, vested in, enjoyed by, conferred upon or arising or existing in or in favor of Assignor by, under or pursuant to, or that may arise or grow out of, any or all of the said contracts or any of the provisions thereof.

Assignor hereby authorizes and empowers Assignees, their successors, heirs and assigns, in his or their names, but at their own cost and charge, to do and perform every

thing, exercise every right, option, privilege, advantage and opportunity which Assignor might or could do under or pursuant to, or in carrying out, the said contracts or any thereof, or any provision of any thereof, if this assignment were not made.

Assignor states and represents that this assignment conveys and transfers to Assignees every right, title and interest of the Assignor either in land, water, easement, option, corporate stock or of any other character connected with or relating to the Susquehanna River between Columbia, in the State of Pennsylvania, and Havre de Grace in the State of Maryland, or connected with, or that might be useful or of advantage to own in connection with, any development of water power or water storage of said part of said river, or in or in connection with transmission of power therefrom; and in case it should be found that the Assignor has any right, title or interest which does not pass by the assignment hereinbefore made, then for the same considerations aforesaid Assignor hereby assigns, transfers and sets over absolutely to Assignees, their successors, heirs and assigns, forever, every such right, title and interest, and hereby agrees to make, execute and deliver ~~every~~ such further instrument of assignment or transfer as may be reasonably required to vest title to every such right, title and interest in Assignees; and Assignor further states and represents that none of said contracts hereby assigned, nor any right, title or interest therein has been assigned or in any way encumbered by him or in his behalf, and that he has good right and clear title to assign and transfer the same as he does hereby.

In consideration of the assignments of Assignor hereinbefore stated, Assignees hereby agree, in addition

to the cash payment hereinbefore mentioned, to cause to be transferred and delivered to Assignor fifteen thousand dollars ($15,000) in aggregate par value of the common stock of the corporation described in the Bond and Stock Purchase Agreement hereto annexed, marked "D", as the company "to be formed with the name Susquehanna Power Company or other appropriate name"; such stock to be delivered as soon as such corporation has been capitalized as in said agreement set forth and its common stock is ready for issue to others.

IN WITNESS WHEREOF said parties have hereunto set their hands and seals the day and year first above written.

Chas. D. Tullis (L.S.)

[illegible] (L.S.)

In consideration of $10,022.22 and of the agreement of the assignees hereinafter stated, Bertron, Storrs & Griscom, called assignees in the agreement and assignment hereto prefixed, hereby assign, transfer and set over to Susquehanna Contracting Company, a corporation of the State of New York, the said assignment and agreement, and all rights, titles and interests of said Bertron, Storrs & Griscom therein or thereunder.

In consideration of the foregoing assignment, the Susquehanna Contracting Company hereby assumes and agrees to perform the obligation of Bertron, Storrs & Griscom under the assignment and agreement aforesaid to cause to be transferred and delivered to Charles D. Pullen $15,000 in aggregate par value of common stock.

IN WITNESS WHEREOF said parties have executed this instrument this 10th day of June, 1905.

Susquehanna Contracting Co.
by A. P. Bartlett
President.

Attest
Rose A. Hackey
Secretary

Bertron Storrs & Griscom

Maurice Joseph

A Feb. 28, 1905

THIS AGREEMENT, made by and between CHARLES D. PULLEN, of the City of New York, party of the first part, and GEORGE K. McGAW, JAMES H. HARLOW, and M. H. HOUSEMAN, of Baltimore, Maryland, parties of the second part;

W I T N E S S E T H :

THAT, WHEREAS the said party of the first part has been engaged for sometime in efforts to acquire the ownership and control of certain lands, water rights and easements located in and along the Susquehanna River, within the Counties of York and Lancaster in the State of Pennsylvania and in the Counties of Harford and Cecil in the State of Maryland, with a view to causing the same to be conveyed, transferred and assigned to a suitable corporation, and thereupon cause the stock and bonds of such corporation to be financed in order to pay for said lands and other properties and to cause the same to be developed by the construction and establishment of one or more hydro-electric works thereon, within and along said river, for the benefit of the stock- and bondholders of said corporation; and

WHEREAS the said parties of the second part hereto own and control a portion of the said lands, water rights and easements necessary to be acquired for said project, which they have agreed to convey, transfer and assign to a proper corporation in order to carry ont said enterprise, on terms and conditions as hereinafter set forth; and

WHEREAS the said party of the first part claims the ability on his part to acquire upon reasonable terms, for such corporation, the ownership and control of all the lands and other properties now owned and controlled by Cary T. Hutchinson and his associates in and along said River in Pennsylvania, and also all of

the lands and other properties owned and controlled by B. Harvey Welch and his associate Stockholders, in the Susquehanna Power Company, and located in and along said River in Maryland, whether the title papers to said last mentioned necessary lands and properties now stand in the name of the said Susquehanna Power Company or otherwise;

NOW, THEREFORE, THIS AGREEMENT FURTHER WITNESSETH:

THAT for and in consideration of the premises and of the sum of One Dollar by each party to the other paid, the receipt whereof is hereby acknowledged, it is agreed by the parties hereto as follows: That if the said Pullen is successful in his efforts to combine under one united ownership and control all of the necessary lands, water rights, easements and properties located within and along said Susquehanna River as now contemplated, at any time before the first day of July 1905, thereupon the parties of the second part hereby agree to sell, convey, transfer and assign to such proper corporation as he, the said Pullen or his assigns may direct, all the lands, water rights, easements and properties now owned by the said parties of the second part jointly or as individuals, and located in and along the said Susquehanna River, in consideration of the payment of the full sum of Five Hundred Thousand Dollars ($500 000.) in cash and One Million of Dollars ($1 000 000.) par value of the stock in the united or controlling corporation which is to be ~~organized and~~ used for the carrying out of said project; said lands and property which are to be so conveyed, transferred and assigned by the said parties of the second part being more particularly designated as follows:

a. All of the Capital Stock at that time issued and outstanding of the Susquehanna Canal and Power Company, a corporation of Pennsylvania, which owns

-2-

and controls the canal and water power rights thereunto belonging, extending along the western bank of said Susquehanna River between Wrightsville, Pennsylvania, and the Maryland and Pennsylvania State Line, a distance of Thirty (30) miles, more or less.

b. All the canal rights and property of the Old Tide-Water Canal Company in Maryland now held by Geo. K. McGaw and James H. Harlow in trust for said Susquehanna Canal and Power Company, being the canal lands and property extending along the West bank of the Susquehanna River from the Maryland and Pennsylvania State Line to Havre de Grace, Maryland, a distance of Fourteen (14) miles, more or less.

c. All of the Capital Stock issued and outstanding of the "Proprietors of the Susquehanna Canal" in Maryland, a corporation owning and possessing the canal lands and property, including the special and exclusive water power rights granted to said corporation by several special Acts of the General Assembly of Maryland, which said Canal lands and property extend within and along the Eastern shore of said Susquehanna River a distance of Nine (9) miles, more or less.

d. Four Hundred (400) Shares of the Capital Stock of the Conowingo Land Company of Cecil County, out of a total issue of Six Hundred (600) Shares, which carried the control of all that certain tract of land located in Cecil County, Maryland, containing Eight Hundred and Fifty (850) Acres, more or less, and having a frontage of about Six Thousand Two Hundred (6 200) feet along the east shore of said Susquehanna River.

And also all the lands, islands, river bed and shore-rights now owned or controlled by said Harlow and McGaw, whether by deed in fee or release or under contract of option or otherwise.

f. That the said McCaw and Harlow, by reason of their ownership and control of a majority of the Capital Stock of the Conowingo Bridge Company, hereby agree to cause the said Bridge Company to co-operate in any reasonable manner with any such water power company, in connection with the construction, operation and maintenance of its hydro-electric works, and they further agree with the said Pullen that he shall have the option, until July 1st, 1905, to purchase all of the Stock which they now own in said Conowingo Bridge Company, which is more that a majority, at the price of Twenty Dollars ($20.) per Share; provided that the purchase of the properties are made as herein contemplated.

g. The said parties of the second part further agree to at once cause to be made a map showing the River frontage of all the lands and properties now owned and controlled by them, and which they have hereby agreed to sell, convey and transfer as aforesaid, and they will also cause to be shown on said map such other lands and properties lying in and along the said River, located between the lands and properties of the said Hutchinson and others on the North, and the said Welch and others on the South, which may be deemed necessary to be acquired by said Pullen from the various owners thereof, for the purposes of carrying out the said project; and in this connection the parties of the second part further agree to co-operate with and assist the said Pullen in negotiating for and acquiring any of said lands and properties, whenever they may be able to aid him in that behalf.

And the said Pullen, party of the first part hereto, hereby agrees to continue to devote his best efforts and energies to the consummation of the said plans for the carrying out of said project, and in that connection to co-operate with the parties of the second part hereto.

It is further understood and agreed that if the said project has not been carried out to the extent of the conveyance, transfer and assignment of all of the said lands and properties by the said parties of the second part hereto, and the receipt by them of the money and Stock in payment therefor, as contemplated to be made and paid, on or before July 1st, 1905, and if in the meantime material progress has been made by the parties hereto towards the completion of the things to be done and accomplished under this agreement, and if an extension of time, beyond said first day of July, 1905, is required in order to enable the said Pullen or his assigns to carry out the terms of this Agreement, then upon the written request so to do made by the said party of the first part or his assigns, together with the payment therewith to the parties of the second part hereto of Twenty Per Cent. (20%) of the full cash price herein named, being One Hundred Thousand Dollars ($100 000.), thereupon an Agreement in writing granting an extension of Ninety (90) days will be given by the parties of the second part to the said party of the first part, and if any other or further like extension of time be so required and requested and granted in writing, a like amount of money shall be paid therefor; It being further understood and agreed that if any such extension or extensions of time are so granted, the money paid from time to time therefor shall be applied to and credited on account of the purchase price named in this Agreement, but in the event of the failure by the said party of the first part, or his assigns, to make and complete the full and final payments of the said Five Hundred Thousand Dollars ($500 000.) of purchase money to the said parties of the second part, on or before December 31st, 1905, then and thereupon the entire sum of money theretofore paid for extensions and otherwise, is forfeited, to the said parties of the second part, and the right, title and possession of any and all lands, properties and stock, or other interests therein, which may have been previously conveyed, transferred or assigned

by them under this Agreement, shall likewise be forfeited and returned to and vested in the said parties of the second part, and thereupon this Agreement shall be null and void.

It is further understood and agreed that the payment and delivery of the One Million Dollars ($1 000 000.) of Stock to the parties of the second part by the party of the first part, shall be waived until the said lands and properties have been conveyed, transferred and assigned, under this Agreement, as aforesaid, or otherwise the time for payment and delivery of said Stock shall be extended until such time as Stock of such controlling corporation is ready to be issued to other persons as Stockholders therein.

This Agreement shall be binding upon the heirs, executors, Administrators, successors and assigns of the respective parties hereto.

WITNESS the hands and seals of the persons herein named as parties of the first and second parts hereto, respectively. "Dated Feby 28th 1905"

Written by Chas. D. Mullen on copy in SAS file

Witness to the signatures of the parties hereto
Chas. R. McConkey
Austin J. Lilly

Chas. D. Mullen (SEAL)

J. K. McGee (SEAL)

James H. Harlow (SEAL)

[illegible] (SEAL)

"B"

MEMORANDUM OF AGREEMENT made this Twenty first day of March A. D. 1905, by and between CHARLES D. PULLEN, of the City of New York, in the State of New York, hereinafter called the party of the first part, and B. HARVEY WELCH and C. WILLIAM WODDROP, individually and trading as Woddrop & Welch, of Hughesville, in the State of Pennsylvania, L. H. WODDROP, SAMUEL MASON, HENRY W. STOKES, JONATHAN EVANS, individually and as Trustee, and JOEL H. DeVICTOR, all of the City of Philadelphia, in the State of Pennsylvania, THOMAS H. SAVERY, WILLIAM H. SAVERY and PUSEY & JONES COMPANY, of Wilmington, in the State of Delaware, being stockholders of the Susquehanna Power Company, hereinafter called the parties of the second part, WITNESSETH, that

WHEREAS, the said Charles D. Pullen is engaged in acquiring the ownership and control of certain lands, water-rights, easements, etc., in and along the Susquehanna River, from McCaul's Ferry, in the State of Pennsylvania, to tide water in the State of Maryland, with the view of having the same conveyed, transferred and assigned to a corporation hereafter to be selected by him.

AND WHEREAS, the said Susquehanna Power Company is the owner of a certain portion of said lands, water-rights and easements in the State of Maryland, near Conowingo, necessary to be acquired in connection therewith.

AND WHEREAS, the said party of the first part has represented to the parties of the second part that he has arranged to acquire all the following properties:

(a) Property known as the McCaul's Ferry Development, owned and controlled by Carry D. Hutchinson and others.

(b) All the property owned and controlled by George K. McGaw, James H. Harlow, George R. Harlow, M. H. Houseman, the

Conowingo Land Company, the Susquehanna Canal Company, the Tide Water Canal Company, the Old Maryland Canal Company, both in Maryland and Pennsylvania.

(c) And also all the property owned and controlled by the parties of the second part.

NOW THIS AGREEMENT WITNESSETH,

FIRST. That for and in consideration of the premises and of the sum of One dollar, by each party to the other in hand paid, the receipt whereof is hereby acknowledged, the parties of the second part, for the consideration hereinafter mentioned, hereby agree to sell, assign and transfer to the party of the first part all their capital stock of the said Susquehanna Power Company standing in the names of the several parties of the second part on the books of said Company at the date and time of this agreement, as follows:

NAME:	SHARES:
Woddrop & Welch,	1887
B. Harvey Welch,	5
C. William Woddrop,	5
L. H. Woddrop,	3
Joe' H. DeVictor,	100
Henry W. Stokes,	388
Jonathan Evans,	333
Pusey & Jones Company,	499
Samuel Mason,	321
Thomas H. Savery,	165
William H. Savery,	1
Jonathan Evans, Trustee,	4
Hanson H. Haines, Henry W. Stokes and Samuel Mason,	1
	3612

And the said party of the first part hereby agrees to purchase and pay for the said stock at its par value, to wit, the sum of One hundred dollars per share, on or before July 1st, 1905.

SECOND. It is further agreed that in case the party of the first part is, for any reason, unable to pay for said stock, in full, on or before July 1st, 1905, and shall tender and pay in cash to the parties of the second part at least Twenty per cent. of the par value thereof, then this agreement shall be extended for a period of ninety days from July 1st, 1905, and in the event of any further extension being asked for, an additional Twenty per cent. of the par value of said stock shall be paid to the parties of the second part and applied by them on account of the purchase thereof, and so on upon the same conditions until three extensions of ninety days each have been made, provided, however, that the party of the first part shall pay legal interest to the parties of the second part on all unpaid purchase money on and after July 1st, 1905. And in the event of the failure of the party of the first part to pay the balance on said stock at the expiration of the third extension as aforesaid, then all payments made by him on account of said stock shall be forfeited to the parties of the second part as liquidated damages, and this agreement shall be considered cancelled and of no effect.

THIRD. It is further agreed that the title or titles to the properties owned by the said Susquehanna Power Company, or which may be in the name of any individual but understood by the parties of the second part to comprise the land or lands belonging to the Susquehanna Power Company, as shown by their property maps, are to be good and marketable and clear of all incumbrances

FOURTH. It is also understood and agreed that all rights or easements owned by the said Susquehanna Power Company upon and

along said river as aforesaid, are included in this agreement of sale.

FIFTH. It is further agreed that the stock of the said Susquehanna Power Company now held and owned by the said parties of the second part, shall be placed in the hands of Joel H. De Victor, of 505 Chestnut Street, in the City of Philadelphia, to be held IN TRUST by him for all parties in interest, named in the within agreement, and further IN TRUST to carry out all the provisions of this agreement, and that all payments of money provided for herein shall be made to the said Trustee IN TRUST to be applied by him as follows:

(a) In the payment of taxes chargeable upon the property of the said Susquehanna Power Company.

(b) In payment of the principal and interest of any and all obligations legally owing by said Company of record or otherwise, when so directed by a majority of said stockholders.

(c) And the balance to the several stockholders named herein as the parties of the second part, or to such person or persons as may be designated by them as justly and legally entitled to receive the same, in proportion to their stockholdings in said Susquehanna Power Company.

SIXTH. It is further agreed that the parties of the second part shall at once loan to the party of the first part all maps and briefs of title now in the possession of the said Susquehanna Power Company relating to its said property, for the purpose of aiding in the investigation of the title thereto.

SEVENTH. It is further agreed that the sale of the stock of the parties of the second part is conditioned upon the securing by the party of the first part, by purchase, within the time

limit of this agreement, the following properties, to wit: All the property, or as much thereof as may be agreed upon by them, on the Susquehanna River and adjacent thereto, owned and controlled by George K. McGaw, James H. Harlow, George R. Harlow, M. H. Houseman, the Conowingo Land Company, the Susquehanna Canal Company, the Tide Water Canal Company, the Old Maryland Canal Company, both in Maryland and Pennsylvania.

EIGHTH. It is further agreed and understood that in case settlement is not made for said stock on or before the First day of July, 1905, nor extensions made at the dates and times herein provided, then the said Trustee shall, within fifteen days after any failure on the part of the party of the first part to comply with the provisions of this agreement, return said stock so held by him IN TRUST as aforesaid to the several owners thereof, or to such person or persons they may designate to receive the same.

NINTH. It is further agreed that in case any of the stockholders of the Susquehanna Power Company shall fail or refuse to sell their stock to the party of the first part, such failure or refusal shall in no way affect or interfere with the carrying out of all the conditions and provisions herein agreed to be kept and performed by the parties hereto who have executed the same, provided, however, that upon the delivery of their said stock to the party of the first part and settlement therefor by him, the sum to be received by each of the parties hereto shall be par value for the number of shares of stock standing opposite his or their name or names herein, less the pro rata of the indebtedness of the said Company, which shall be distributed pro rata against the entire capital stock, and to determine such indebtedness an accurate and complete itemized list thereof verified under oath shall be produced and attached to this agreement

at the time of settlement, which said indebtedness is approximately $125,000.00.

TENTH. It is further agreed that all conditions herein contained or agreed to be kept and performed by the said parties hereto, shall extend to the heirs, Executors, Administrators, successors and assigns of the said parties of the first and second parts.

WITNESS the hands and seals of the persons herein named who compose the parties of the first and second parts the day and year first above written.

WITNESSES AT SIGNING:

Chas D Sellin (Seal)

B. Harvey Welch (Seal)

B. Harvey Welch (Seal)

Thos. H. Savery (Seal)

Thos. H. Savery (Seal)

Wm H. Wadsworth (Seal)

Wm H. Wadsworth (Seal)

Jno. Mason (Seal)

Jno. Mason (Seal)

Henry W Stokes (Seal)

Jonathan Evans (Seal)

Jonathan Evans Trustee (Seal)

Joel V. DeVictor (Seal)

Thomas H Savery (Seal)

William H Savery (Seal)

The Pusey & Jones Company (Seal)

Thomas H Savery President

Witness - Samuel C. Biddle

Witness

Witness -
Samuel C. Biddle.
Secretary

C IV

THIS AGREEMENT, Made this Fifth day of April, A. D., 1905, by and between CHARLES D. PULLEN, of the City of New York, party of the first part and JAMES H. HARLOW, GEORGE K. McGAW, and M. H. HOUSEMAN, of Baltimore, Maryland, parties of the second part,

WITNESSETH:

THAT WHEREAS the said party of the first part, by virtue of a certain Agreement made and entered into by him with the said parties of the second part under date of February 28th, 1905, has purchased and acquired certain lands, water-rights and easements located in and along the Susquehanna River within the States of Pennsylvania and Maryland, for the uses and purposes as in said Agreement stated and set forth, a copy of which said Agreement is hereto attached and referred to as a part hereof, marked "A".

AND WHEREAS the said Pullen has also made and entered into a certain other Agreement, dated March 21st, 1905, with B. Harvey Welch, et al., as Stockholders in the Susquehanna Power Company, a corporation of the State of Maryland, under which he agreed to acquire by purchase the capital stock of said Susquehanna Power Company, and thereby own and control certain other lands, water-rights and easements lying in and along the said Susquehanna River, belonging to said Power Company, within the State of Maryland, as in said Agreement is more fully stated and set forth a copy of which Agreement is likewise hereto attached and referred to as a part hereof, marked "B".; and

WHEREAS the said parties of the second part hereto own and control the capital stock of the Susquehanna Canal and Power Company, a corporation which owns and is possessed of the canal property, water-rights and easements connected therewith, extending along the western bank of said River between Wrightsville,

Pennsylvania and the Maryland and Pennsylvania State Line, formerly known as the Susquehanna Canal; and

WHEREAS the said parties of the second part hereto now propose to cause to be increased the capital stock of said Susquehanna Canal and Power Company up to One Million Five Hundred Thousand Dollars ($1 500 000.), the same to be hereafter issued in Thirty Thousand (30 000) shares of the par value of Fifty Dollars ($50.) each, for the purpose, inter alia, of acquiring or causing to be acquired from said Pullen and others, for and on behalf of said Canal and Power Company, certain additional lands, canals, canal properties, water-rights, franchises and easements located in and along said river, including those mentioned and described in said two Agreements marked "A" and "B", as therein proposed to be purchased and acquired by said Pullen from Harlow, et al. and from Welch, et al., respectively; and also to hereafter acquire or organize proper corporations with charters possessing the necessary franchises and rights for the making of one or more Hydro-Electric developments on said River; and

WHEREAS to that end the said Pullen has agreed and is willing to sell, assign, transfer and set over to the said Susquehanna Canal and Power Company, all of the lands, water-rights, franchises and easements and other property, including the capital stock of the said Susquehanna Power Company and other Companies and corporations purchased and acquired or to be acquired by him, including all his rights under and by virtue of said two agreements heretofore marked and designated as "A" and "B", for the consideration as hereinafter set forth:

NOW, THEREFORE, THIS INDENTURE WITNESSETH:

That for and in consideration of the premises and of the sum of One Dollar by each party to the other paid, the receipt whereof is hereby mutually acknowledged, it is agreed by the parties hereto as follows:

FIRST: The said Pullen hereby agrees and binds himself that upon the signing of this Agreement by the parties hereto, he has thereby sold, assigned, transferred, set over and delivered to the Susquehanna Canal and Power Company, its successors and assigns, all his rights, interests and claims, granted to and possessed by him under the said two agreements hereinbefore referred to as a part hereof, and designated as "A" and "B", respectively.

SECOND: The said parties of the second part hereto will proceed without unnecessary delay, under the advice of Counsel to cause the capital stock of the Susquehanna Canal and Power Company to be increased to an authorized issue of Thirty Thousand (30 000) shares of the par value of Fifty Dollars ($50.) per share.

THIRD: The said parties hereto will co-operate with each other promptly in causing to be sold, conveyed, transferred, assigned and delivered to or for the use and benefit of the said Susquehanna Canal and Power Company, its successors and assigns all the lands, water-rights, franchises, easements and properties covered by and included in the said agreement marked "A", in consideration of the payment and delivery to and for the use and benefit of said parties of the second part hereto of Ten Thousand (10 000) Shares of the capital stock of said Susquehanna Canal and Power Company, said lands and water-rights, franchises, easements and properties which are to be so sold, conveyed, transferred, assigned and delivered being more particularly described and designated as follows:

All the canal rights and property of the Old Tide Water Canal Company, in Maryland, now held by George K. McGaw and James H. Harlow, in trust for said Susquehanna Canal and Power Company, being the canal lands and property extending along the west bank of the Susquehanna River from the Maryland and Pennsylvania State Line

to Havre de Grace, Maryland, a distance of Fourteen miles more or less.

All of the capital stock issued and outstanding of the "Proprietors of the Susquehanna Canal" in Maryland, a corporation owning and possessing the canal lands and property, including the special and exclusive water power rights granted to said corporation by several special Acts of the General Assembly of Maryland, which said canal lands and property extend within and along the eastern shore of said Susquehanna River a distance of nine miles, more or less.

Four Hundred (400) shares of the capital stock of the Conewingo Land Company of Cecil County, out of a total issue of Six Hundred (600) shares, which carries the control of all that certain tract of land located in Cecil County, Maryland, containing Eight Hundred and Fifty (850) acres more or less, and having a frontage of about Sixty-Two Hundred (6200) feet along the east shore of said Susquehanna River.

And also all the lands, islands, river bed and shore rights, now owned or controlled by said Harlow and McGaw, whether by Deed in fee or Release, or under Contract of Option, or otherwise.

That the said McGaw and Harlow by reason of their ownership and control of a majority of the Capital stock of the Conowingo Bridge Company, hereby agree to cause the said Bridge Company to co-operate in any reasonable manner with the said Susquehanna Canal and Power Company, its successors and assigns, in connection with the construction, operation and maintenance of any such Hydro-Electric works that may hereafter be constructed and maintained on that part of the said Susquehanna River, which will cross over or under or affect the said Bridge of said Company, or the approaches thereto; and they further hereby agree that the said Susquehanna Canal and Power Company shall have the option until July 1st, 1905, to purchase all of the Stock which they now own in said Conowingo Bridge Company, which

is more than a majority, thereof, at the price of Twenty Dollars ($20.) per share;

And it is further understood and agreed by and between the parties hereto that the Tide Water and Susquehanna River Railroad Company, a corporation of the States of Maryland and Pennsylvania, which has heretofore caused to be located its proposed railroad tracks on, over and along portions of the lands and properties of the said Susquehanna Canal and Power Company, and the lands and property formerly owned by the Old Tide Water Canal Company on the western side of said River between Havre de Grace, Maryland and Wrightsville, Pennsylvania, will so construct, maintain and operate its said railroad so that it shall not interfere with the use of said canal property as a transportation canal, when reconstructed, widened, deepened, enlarged and otherwise improved and established for navigation purposes, nor with the development, establishment and use of water power plants, water works, Hydro-Electric works and other works for the storage, transportation, conveyance and supply of water and water power, or structures connected therewith, which may be developed and established in and along said Susquehanna River by the said Susquehanna Canal and Power Company, or its Lessees, Successors or assigns.

FOURTH: The said Pullen, party of the first part hereto is hereby granted the right and option, until the first day of July, 1905, to purchase and acquire the shares of the capital stock of the Susquehanna Power Company, together with all of the lands, water-rights, franchises and easements owned by said Company, as described and optioned to him under agreement "B", as aforesaid, and to sell, assign, transfer and deliver the same to and for the use and benefit of the said Susquehanna Canal and Power Company, its successors and assigns, free and discharged from all debts and liens, claims and incumbrances whatsoever, and thereupon the said Pullen shall be entitled to receive as full consideration and in full payment therefor, the delivery in trust (as hereafter designated) for the use and benefit of

himself, his heirs and assigns, Ten Thousand (10 000) shares of said capital stock of said Susquehanna Canal and Power Company, or in the event that he is unable to deliver that portion of said capital stock of said Susquehanna Power Company now owned and held by H. H. Haines, and not included in said option covered by Agreement "B", then two shares of said Susquehanna Canal and Power Company's Stock shall be withheld and not paid and delivered to said Pullen for each share of the said Haines' stock which he fails to acquire and deliver to said Canal and Power Company.

It is further understood and agreed by and between the parties hereto that they will co-operate with each other during the life of this Agreement, in all steps taken in the promotion of the interests of the present and future Stockholders of the Susquehanna Canal and Power Company, and in the event that the said Pullen has not, on or before the 15th day of June, 1905, acquired and delivered the stock and property of the Susquehanna Power Company to the Canal and Power Company, he hereby Agrees to make to said Canal and Power Company a report in writing, setting forth in full the then status of his negotiations for the money with which it is his purpose, under this agreement, to pay for the capital stock of the Susquehanna Power Company, in order to enable him thereby to deliver the same over to the ownership and control of the Susquehanna Canal and Power Company, as is intended to be done under the option granted to him by this Agreement.

FIFTH: It is further understood and agreed that the capital stock of the Susquehanna Canal and Power Company, when increased and issued as provided for under this Agreement, shall be placed in the hands of a Trustee or Trustees, to be hereafter selected and designated, for the purpose of acquiring, uniting, and holding the valuable properties, franchises, water-rights and easements of said Company under one control and management, and thereby enable all parties in interest to cause to be effectively carried out their purposes and intentions for the estab-

lishment of a number of Hydro-Electric works in and along said Susquehanna River.

THIS AGREEMENT shall be binding upon the heirs, executors, administrators, successors and assigns of the respective parties hereto.

WITNESS the hands and seals of the persons herein named as parties of the first and second parts hereto, respectively; dated the day and year aforesaid.

witness the signatures of the parties hereto
A. Kelly
Chas R. McConkey

Chas D Pullin (SEAL)

James H. Harlow (SEAL)

Geo K McGann (SEAL)

M St Houseman (SEAL)

Memorandum on River Situation, April 1905

Cont. Trust Co.

RECEIVED

APR 4 1905

ANS'D

TENTATIVE MEMORANDA.

Charles D. Fullen is the owner of two options to purchase property on the Susquehanna River, one know as the Peach Bottom and the other as the Conewingo property.

The Continental Trust Company and Alex. Brown are owners of other parts of the River and of other interests in connection therewith.

Certain other properties along the River must be purchased.

It is desirable that the properties be purchased for, and the options be exercised for and in the name of, a corporation instead of an individual.

The tentative agreement made between Houseman, Harlow and Quay must be definitely agreed upon and settled. It is desirable that this be done between corporations instead of individuals.

The Harrisburg agreement finally arranged, the Hutchinson development defined as to its boundaries, the entire of the River to be dealt with in the name of a corporation. The proposed corporation to be used will be a clearing holding Company. All of its stock to remain in the hands of a Trustee. Stockholders in said Company will participate in the future profits of promotion.

The proposal is as follows:

Use the Susquehanna Canal & Power Co Company, which is now owned and represented in the options above named, increase the Stock of said Company to one million and a half dollars. The Officers and Directors of said Company will be the Stockholders who will be few in number. These will select a Trustee, which will be, for instance, the Colonial Trust Company or some other such institution. Or if it is thought best, an individual may act as Trustee. The Trustee will receive with the Trust detailed instructions as to

ownership. (None of the Stock will be delivered except to the Trustee).

Pullen to agree to transfer or assign to said corporation both of his options now held by him. Corporation agrees to purchase the Peach Bottom and all other properties named in the option signed by McGaw, Harlow, Houseman and Pullen, paying therefor $.; and Pullen to agree to assign said option to the said corporation.

Corporation agrees to purchase from Pullen the options on the Conowingo and the Harlow or Walch properties, paying therefor $50 000. in its stock.

Corporation to set aside $115 000. of its Capital Stock to purchase the interest now owned by the Continental Trust Company and Alexander Brown as proposed by Mr Warfield in N.Y.

Corporation to issue to Patrick Calhoun $50 000. of its capital stock for services rendered.

All of the foregoing will amount to $1 115 000. There will then remain in the Treasury of the Corporation $385 000. of its capital stock. It is proposed to use the stock remaining in the Treasury for the purpose of acquiring the assistance of able Counsel, as well as to acquiring of other lands along the shores of the River and perhaps the purchase of charters which it may be deemed desirable to own.

The Stock in the Treasury of the Company will also furnish new money when required.

McGaw, Harlow and Houseman contingent to have control in the Board of Directors.

The Trustee need not be given the power to vote the Stock.

It is thought the foregoing cleans up the situation and places all the interests under one head, (the Directors of the corporation) and that the corpor-

ation owning what are known as the Harlow properties and the Warfield-Brown properties, having stock or cash to purchase the additional necessary properties, and owning the op ion to purchase the Welch properties, will be in a strong position for carrying out any attempt, or desired plan/[redacted]

Regarding the option on the Welch property, it runs to July 1st, with no provision for payments until July 1st; and it appears that having three month in which to negotiate, and having cleaned up the entire of the River, with the settlement of the Harrisburg agreements and the taking over of all these other interests [redacted] the actual cash to be paid [redacted], as it now stands in the Welch option being about $296 000., [redacted] this can be arranged either by paying the parties to the option in stock, or by raising the necessary money to carry out the option.

The understanding which we have of the movements of the Hutchinson development indicate that if no time is lost that we are in a good position to carry out our own development on the Peach Bottom, and in the raising of any funds for this purpose the Welch proposition will be easily taken care of.

If, however, on July 1st, nothing has been accomplished other than this general organization of all interests, there is only 20% of the purchase price on the Welch option due to be paid at this time, for which we acquire 90 days' extension. And its seems to be clearly evident that a situation such as this will be for all interests much stronger than any other that could be obtained at the same price. The present owners being the corporation managers.

There seems to be no reason why this corporation should not continue to be a holding Company, and when the money for a development is raised or a sale of the development property contemplated, it can dispose of it in parcels instead of as a whole. It is in this way it would appear that the profits accruing would be much larger than from any heretofore contemplated action.

Letter From Harlow-McGaw Proposing Consolidation With Harvey Fisk & Sons

M. H. HOUSEMAN,
ATTORNEY AT LAW,
No. 3 E. LEXINGTON STREET.

BALTIMORE, MD. April 18th, 1905.

Messrs. Harvey Fiske & Sons, Bankers,
New York, N. Y.

Gentlemen:

A number of printed copies of a plan or underwriting agreement have been submitted to some of our friends in Philadelphia and Baltimore within the past two weeks. This agreement bears date March 25th, 1905, and purports to be between Subscribers on the one part and Harvey Fiske & Sons, Bankers, on the other part. The corporation named therein is "Susquehanna Power Company", which purports to be capitalized with $5,000,000 of Common Stock, $5,000,000 of Preferred Stock, and $10,000,000 of 30 year 5% Gold Bonds, etc.

A mistake seems to have been made in this matter by some person to us at present unknown, as the name given therein is the same as that of one of our Water Power corporations which has been established for the past five years on the Susquehanna River in Maryland, where it owns extensive property and water-power rights.

A number of Bankers and Brokers, representing investors in Philadelphia, Wilmington, Baltimore and some of the other Cities and towns in Pennsylvania were inclined to subscribe to this enterprise, thinking it was a part of the comprehensive project which has been worked out on the Susquehanna River, under the ownership and direction of the Susquehanna Canal and Power Company.

Under the plans of the Susquehanna Canal and Power Company its canals extending along the Susquehanna River southward from Columbia and Wrightsville, Pa. to the head of Chesapeake Bay, are being widened, deepened, enlarged and otherwise improved, so as to extend the tide-water navigation of the Chesapeake Bay northward along the Susquehanna River to the large storage dam or pool at Columbia, Pa., where docks and landings will be established, and direct connections made with the main line of the Pennsylvania Railroad System, as well as with the Reading Railroad System. In connection with this general slackwater in navigation improvement, there has also been adopted a plan for the development of the more than 200 feet of fall in the river for Hydro-Electric purposes, all of which is described more in detail on a small sketch or plan, and in a communication from James H. Harlow, President and Chief Engineer of the Susquehanna Canal and Power Co., under date of April 6th, 1905, which I enclose herewith for your information.

This comprehensive project for the development of the extensive water power of the Susquehanna River has, as you will see, been carefully worked out under the supervision of Mr. Harlow, in connection with this important canal or water-way extension. These plans show that 250,000 Electrical H.P. can be developed at the Five powerhouses, as proposed, a large part of which current is expected to be utilized in the City of Baltimore, Md. and vicinity, as well as in Wilmington, Del. and Chester and Philadelphia, Pa. Negotiations are pending with the Baltimore & Ohio Railroad Company as well as with the Pennsylvania Railroad Company, in connection with the utilization of a part of this current for operation of their respective railroads through the tunnels in the City of Baltimore. It is also in contemplation to supply power for use at their terminals within the adjacent territory, and for suburban use from Philadelphia, from Baltimore, and from Washington, D. C.

In connection with investigations which the writer has been working out with the Westinghouse people, we find that the proposed underground railways and terminals of the Pennsylvania Railroad System in New York, as well as the demand for electric

M. H. HOUSEMAN,
ATTORNEY AT LAW,
No. 3 E. LEXINGTON STREET.

Messrs. H. F. & Sons, No. 2. 4/18/05 BALTIMORE, MD.

light and power purposes generally within the City of New York, bring it entirely within the probabilities that a large portion of the current and power from the Susquehanna River can be used there to advantage.

It is also proper to suggest to you that a large amount of that power will be used for industrial works along the River, the same as are now established for diversified uses in connection with the Niagara Falls Power developments.

It is further proposed by my clients to establish a high-class electric railway on, over and along the old canal towing path on the western shore of the River for use as a connecting railroad between these various industrial works and the Pennsylvania and B. & O. Railroads, where they cross the River at Havre de Grace, Maryland, and also with the main line of the Pennsylvania Railroad system at Columbia, Pa., and likewise with the Reading Railroad system, thus affording first-class Railroad facilities, as well as tide-water navigation for the handling of raw materials to those works and the finished product to the general markets.

I am writing this letter somewhat in detail to your house, for the reason that your present interests on the river are apparently in conflict with our plans, which were being worked out on the river long before Dr. Hutchinson had acquired any property rights there. We feel sure that the merits of the enterprise are worthy of very careful consideration and investigation by your house, with a view to harmonizing and adjusting the conflicting plans for the development of the entire water power of the River

The writer therefore respectfully asks that someone connected with your house read over carefully these papers, and as he expects to be in New York the latter part of this week, will take the liberty of calling upon you, and if by that time you have determined that this matter is not of sufficient interest to warrant a conference, he would be pleased to have you return the papers to him. Otherwise, if you desire to join with him and his clients in an effort to adjust this unnecessary complication, he desires to offer his services to that end.

Respectfully yours,

M. H. HOUSEMAN.

JAS. M. HARLOW,
PRESIDENT AND CH'F ENGINEER.

GEO. K. McGAW,
TREASURER.

CHAS. R. McCONKEY,
SECRETARY.

SUSQUEHANNA CANAL AND POWER COMPANY, -15

ROOM 207, No 2 PLEASANT STREET.

BALTIMORE, MD. April 6th, 1905.

Taken fr McCall Ferry Co. - Copies of 20 1905 - 1909

Mr. M. H. Houseman,

Counsel for Susquehanna Canal and Power Company,

Baltimore, Md.

Dear Sir:--

I desire to submit for consideration a brief history, covering the general plans of the Susquehanna Canal and Power Company for the development of the water power on that portion of the Susquehanna River between Wrightsville and Columbia, Pennsylvania, on the north, and Tide Water in Maryland, on the south; and also the relation of the same to the present McCall's Ferry project, together with the serious damages which will accrue to the vested interests of the Canal and Power Company and others in the event that the McCall's Ferry dam is actually constructed at the point of its proposed location.

The proposed works, power-houses and plants of the Susquehanna Canal and Power Company were all located upon the River pursuant to detailed surveys and soundings, etc., prior to the date of the so-called "Harrisburg Agreement", which was made and signed in the month of April, 1903.

The Attorneys and Agents who arranged this Agreement on behalf of Dr. Cary T. Hutchinson and others, had been engaged during the entire session of the Pennsylvania Legislature in endeavors to obtain legislation repealing the Charter of the Susquehanna Canal and Power Company, and also to secure special rights, powers and privileges to enable them to appropriate to their own use by condemnation proceedings the property and rights of said Canal and Power Company and its associate corporations, notwithstanding the fact that these plans had been prepared and the locations made, long prior to the time when Dr. Hutchinson and his associates had purchased or acquired any property on the river.

A brief statement of the property rights and plans of the Canal and Power Company may be made as follows:

(1). The total fall of the Susquehanna River between the top of the old Columbia Dam of the Canal and Power Company and Tide Water in Maryland, is 231 feet.

(2). The Canal and Power Company has the legal right to raise the old dam to about El. 233 feet above Tide.

(3). Our plans for the development of the water power of the river assume that there would be some losses in this head between Columbia and Tide Water in connection with the several developments, and that possibly not more than 210 or 215 feet of this fall can be utilized.

(4). It was deemed advisable to divide 200 feet of this fall into five developments of an average of 40 feet each, with a possible head of say 45 feet at two of said power houses.

Mr. H. H. H. No. 2. 4/6/05/

(5). Then, at these locations of the several dams, while we would develop under a nominal head of 40 feet, the maximum head upon our wheels during low water may equal about 48 feet, and the minimum head in high water may be cut down to from 32 to 35 feet, all of which can be regulated for a uniform operation by the adjustment of the electrical machinery within the usual 10% allowance above or below the normal.

(6). The location of the five developments have been heretofore made on the ground with plans prepared for construction, as follows:

"A" is the down-stream location, with the power house near the Village of Conowingo, Maryland.

"B" is the power-house location on the westerly side of the River near to the Maryland and Pennsylvania State Line with the dam extending from the eastern shore of the River at the lower end of the Peach Bottom Pool, and diagonally across and down the river to the head-race wall, a short distance above power-house "B"; the tail-race from power-house "B" extending down the river into Maryland, so as to utilize the same water for the operation of the machinery in passing through power-house "A".

"C". The head of the dam for this development extends from the eastern shore of the river, at a point about 3000 feet more or less below McCall's Ferry across the east channel of the river at that point to a chain of islands, thence extending over said islands and over the bed of the river down stream to the head of Road Island, thence with an embankment still down the river through and over Road Island and Upper and Lower Bear Islands, to a point about 4000 feet above the mouth of Muddy Creek on the westerly shore of the river, where power-house "C" will be located, extending between the said embankment and the westerly shore across the head-race or dam thus formed, thence a short tail-race from power-house "C" will discharge the water into the head of the Peach Bottom Pool.

"D" & "E". Power-houses "D" and "E" are designed in combination with a dam extending from the easterly side of the Susquehanna River from a point below "Turkey Hill with the said dam extending across and down the river toward the westerly shore to a point in conjunction with a head-race wall, which head-race wall is continued down the river parallel with the western shore to a point at or near "Lockport", where power-house "E" is located, then with a tail-race embankment from said power-house "E" extending further down stream parallel with the westerly shore of the river to a point a short distance above Shenk's Ferry where power-house "D" is located upon this canal; then with a short tail-race from power-house "D", which discharges the water into Pool "C".

In this manner the five power-house developments have been designed and located in conjunction with the proposed work to widen, deepen, enlarge and otherwise improve the transportation canal of the Susquehanna Canal and Power Company, to permit the passage of vessels between the head of Chesapeake Bay and Columbia and Wrightsville, Pennsylvania, located at the head of the large storage dam or pool above power-house "E", some 40 miles further north than present tide-water navigation; and also, in this connection, the various water-power corporations

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which have been chartered and organized in the States of Pennsylvania and Maryland have arranged to work in conjunction with the development plans of the Susquehanna Canal and Power Company in the construction of necessary locks around the several dams and power-houses for the passage of vessels, and as you are aware, these several development corporations have heretofore proceeded to acquire by purchase, as well as by appropriation proceedings, necessary lands, water-rights, and easements for their respective power-house developments.

Under this general plan the Susquehanna Falls Power Company of Pennsylvania was organized for the purpose of constructing, owning and operating the power-house and development hereinabove designated as "C", and prior to the "Harrisburg Agreement" of April, 1903, had acquired a large part of the necessary lands, islands, water-rights and easements for that purpose, and proposed to develop its water-power canal in connection with the transportation canal of the Susquehanna Canal and Power Company, and its surveys, soundings and plans had also been worked out in detail and a large expenditure of money had been made and much time had been consumed by its Engineers and Experts in the study and preparation of said plans; and in connection therewith the said Dr. Cary T. Hutchinson, as an Electrical Engineer and Expert for certain New York Bankers, acquired his first knowledge of the proposed development of the water-power of the Susquehanna River sometime prior to 1903, when these preliminary plans were submitted to him at the instance of the said Bankers during their consideration of a proposition for financing the project; and it was sometime thereafter, when Dr. Hutchinson and his associates, having acquired certain lands and water-rights on the river, between the locations of dam and power-house "C" and power-house "D", that the attempt was made in the Legislature at Harrisburg, at the January Session of 1903, to repeal the charter of the Susquehanna Canal and Power Company and to appropriate its property and water-rights as above referred to. This attempt was finally defeated and this expensive contest resulted in the signing of the "Harrisburg Agreement", as a tentative Agreement or plan for the adjustment of the interferences and differences between the prior plans and locations of the Susquehanna Canal and Power Company, the Tide-Water and Susquehanna River Railroad Company and the Susquehanna Falls Power Company on the one part, and such corporation as might thereafter be organized to carry out the alleged plans of Dr. Hutchinson and his associates for a Hydro-Electric development near McCall's Ferry, on the other part. The undersigned and yourself were present at Harrisburg and, acting together, constituted the "parties of the first part" who signed the "Harrisburg Agreement", with Mr. P. P. Quay as "the party of the second part", who at that time purported to represent the said Dr. Hutchinson and his associates, and likewise the corporation to be thereafter formed in their behalf for the purpose of constructing, maintaining and operating the proposed dam and water-power plant near McCall's Ferry, as above mentioned, etc. In this connection I quote from the said "Harrisburg Agreement" as follows:

"The parties of the first part further agree that they will cause, or procure, the Susquehanna Canal and Power Co., by means of lawful corporate action, on its part, to enter into a contract with the party of the second part and his associates, or such corporation as shall hereafter be formed in their behalf for the purpose of constructing, maintaining and operating a dam and

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(Extract from Harrisburg Agreement Cont.)

water-power plant, about one mile below McCall's Ferry, as before mentioned, in pursuance of which contract, the Susquehanna Canal & Power Co., will consent and agree to the construction, maintenance and operation of such dam and water-power plant, UPON CONDITION, that if the level of the water shall be raised by reason of such dam above that of the present canal, the Susquehanna Canal & Power Co., its successors and assigns, shall have the right of passage for vessels along the route of said canal, and within the pool formed by such dam, and that the persons owning or operating such dam and water-power plant, shall at its or their expense, make provision in accordance with good engineering requirements, for and shall lock or otherwise move vessels in and out of such pool and to the end that the canal and water-way may be successfully operated for transportation purposes. In case any controversy arises at any time or times, with respect to whether or not the provision made for locking or otherwise moving vessels in and out of said pool and past said dam, is in accordance with good engineering requirements, thereupon, either party interested therein, shall have the right to have said controversy arbitrated and upon giving a written notice to the other party with respect thereto, it shall be the duty of each of the parties to select an arbitrator, and the two so chosen shall immediately select a third, and all of such arbitrators shall be disinterested and be civil or hydraulic engineers, of good repute.

"Such arbitrators shall without delay make full investigation with respect to the matter in controversy and the award in writing signed by such arbitrators or a majority of them, shall be binding upon the parties.

"The parties of the first part further agree that they will cause the Susquehanna and Tide-Water Railroad Co., by proper corporate action, to locate its route along the west bank of the Susquehanna River, opposite the pool caused by the erection of the proposed dam at an elevation above the level thereof, and so as not to interfere with the plant or works of the Water-power Company, upon condition that the party of the second part or his associates, or the company owning or controlling the proposed dam, will without further or other consideration, grant unto the said Railroad Company, and its successors and assigns, the right of way for its tracks, through, over and upon the lands now or hereafter belonging to or held in the interest of said water-power company.

"The parties of the first part agree that they will not attempt to construct any dam and will not interfere with the party of the second part, or his associates, at any point between the lower end of the tail-race of the proposed dam (which shall not exceed one mile in length) and Shenk's Ferry and the party of the second part and his associates shall not attempt to construct any dam nor interfere with the parties of the first part, at other places upon said river.

I further deem it proper to suggest that at the time we signed the Agreement in April, 1903, we were both aware that the plans for a water-power development then said to be in contemplation by Dr. Hutchinson and his associates, had been submitted to and disapproved by a number of the best known Hydraulic Engineers

Mr. M. - H. No. 5. 4/6/05/

to be found in this country; and you will no doubt recall that it was with a knowledge of this fact in view, that we caused to be inserted in that Agreement, by the Attorney for Mr. Shay who drew it, the above quoted paragraph, making the provision for submitting the whole question of location and heighth of dam and method of construction, maintenance and operation of the said proposed McCall's Ferry power plant to a Board of Arbitrators, composed of disinterested Civil and Hydraulic Engineers of good repute, before the Susquehanna Canal and Power Company and the Tide Water and Susquehanna River Railroad Company could be called upon to provide the necessary plans and surveys to change the location and grades of the transportation canal and water way of the Canal and Power Company on the one hand and the right of way and railroad tracks of the Railroad Company on the other hand, and this for the very manifest reason, that if such a dam, Fifty (50) feet or more in heighth is actually to be constructed and maintained on the location as now claimed by the McCall's Ferry Company, then it will necessitate very extensive changes of location and grade of these works for a distance of five or six miles or more of both the transportation canal and water way and the railroad, on the western side of the river, and it will also interfere with the present location and grade of the Pennsylvania Railroad on the eastern side of the River, and in the latter connection will cause a general shifting and change of plans for all of the other water-power developments along the river, so as to develop the remaining water power and also prevent their interferences with the Pennsylvania Railroad tracks, as well as with the transportation canal and railroad tracks on the wester. side of the river, throughout the entire distance above and below McCall's Ferry.

I deem it essential also to call your attention in this connection to the fact that the original proposed plans and locations for the works and powerhouses heretofore designated as "A", "B", "C", "D", and "E" have met with the approval of the foremost Hydraulic and Electrical Engineers of the country, and the same when carried out would develop and utilize all of the water-power of the river between Columbia and Wrightsville on the north and Tide-Water on the south, and such plans for the said uniform and comprehensive development would not interfere with and damage the Pennsylvania Railroad on the eastern side of the River, nor with the transportation canal and water-way and railroad locations, as aforesaid, on the western side of the River.

It may also be further suggested that if the water-power of the River is owned, controlled, developed and operated under the uniform system as originally designed and laid out, as above stated, then the large storage pools formed by the dams to be constructed in accordance with developments "B" and "E" could be so utilized as to store and supply the water during the low seasons, and thereby furnish a uniform supply of current and power for distribution, without the necessity of resorting to the expensive construction and maintenance of steam supplemental plants, at least until the entire output of 250 000 electrical H. P., capable of being developed on the river is in actual use, after which time the advisability of supplementation by steam power could be considered, and it seems to me that it might be found advisable to either locate and distribute the steam auxiliary stations at the several centres of distribution and thus save transmission losses, or it might perhaps be found advisable to locate the same in one large central plant at some one point on the river, with proper railroad facilities for the handling of coal and so that it could also be under the more direct management and control of those in charge of the river power plants; and further, by postponing this question of steam installation, the operating Company owning the river power-plants will have by that time learned what kind of a power curve it has to meet, and also how much of its power curve and peak-loads can be supplied from the large storage pools along the River.

Mr. H. H. H. No. 6. 4/6/05/

I call your attention to the fact that the proposed high dam development at McCall's Ferry will entirely obliterate and destroy the usefulness of the works and power house development designated as "C", and it will also very seriously impair the head and fall of the works and power-house designated as "D".

Therefore, one of the questions to be first determined by this Board of Hydraulic Engineers under the arbitration as suggested, will be to determine the extent of the serious damage thus caused to the property and plans originally designed for the Susquehanna Canal and Power Company, in the event that this unnecessary interference and damage is permitted to be done and caused to its developements "C" & "D", as well as the amount of increased cost which will thereby be placed upon all of the proposed power-house developments by reason of their forced change of plans, which will thereby also cause serious interference thereafter with the location, grades, maintenance and operation of the Pennsylvania Railroad for a distance of 40 miles or more on the eastern bank of the river, as well as with the Susquehanna Canal and Power Company's transportation canal, and the Railroad location and grades and right of way of the Tide Water and Susquehanna River Railroad, for a like distance on the western shore of the River.

It would therefore seem that this unnecessary increased cost and damage when added to the cost and damage which will accrue by reason of the total destruction of "C" and the serious impairment of "D", would certainly cause the Bankers and investors to at least hesitate until these questions are determined by competent Engineers as Arbitrators, how this vast water power can best be developed as one uniform system of works, and with the least possible damage to all other vested interests.

I deem it proper to suggest that you are authorized to take the necessary steps for the full protection of our rights in the premises, whether by peaceable negotiations and arbitration, or otherwise, as may become necessary in the premises.

All of which is respectfully submitted.

(Signed) JAMES H. HARLOW,
President and Chief Engineer.

P. S. Since writing the above, I have seen and read over the report made by Mr. Wm. Barclay Parsons, on the proposed McCall's Ferry project, as well as a copy of the Underwriters Agreement alleged to have been prepared and signed, for the financing of said single project, in connection with which it has been stated to me that almost all of the $20 000 000. of securities therein provided for have been appropriated for use by the Bankers and others, in order to secure the necessary money to

Mr. M. H. H. No. 7. 4/6/03/

construct and complete this one Hydro-Electric Works under the construction plans as reported upon by Mr. Parsons.

It is therefore very evident to me that neither Mr. Parsons or the Bankers have made a personal inspection of the Susquehanna River before compiling this report and signing the underwriting agreement, and it is likewise evident that they were not furnished with the full information and data covered by the detailed plans, showing the surveys, soundings and locations of our proposed works and power houses as hereinabove stated and set forth. And indeed it is quite probable that they were not made aware of any of the material facts connected with the property and plans of the Susquehanna Canal and Power Company on the river, and of the unnecessary interference therewith which would be caused by the development of the McCall's Ferry proposition.

I might further suggest in connection with this financial proposition for the disposition of stock and bonds valued at $20 000 000. that we would be entirely willing to undertake the construction and completion of at least three of our proposed developments on the river, with the three power-houses connected therewith, containing an installation of machinery for the production of 50 000 H.P. each, aggregating an installation of 150 000 H.P., for a gross expenditure of less than $20 000 000., and also settle and adjust with the lawful owners of all vested property rights and interests which would be damaged by the building and construction of such works; and we further believe that if Mr. Parsons were made fully aware of our prior plans as above set forth he would join with us in their approval.

(SIGNED) J.H.H.

Agreement for Acquisition of Harlow-McGaw Properties by Susquehanna Contracting Company

A G R E E M E N T, made this 27th day of April, 1905, between GEORGE K. McGAW, JAMES H. HARLOW and M. H. HOUSEMAN, all of Baltimore, Maryland (hereinafter called "Vendors"), parties of the first part, and HARVEY FISK & SONS, Bankers, of the City of New York (hereinafter called "Purchasers"), parties of the second part,

Vendors, in consideration of the agreements of Purchasers hereinafter stated, hereby agree to sell and transfer, make and deliver, or cause to be sold and transferred, made and delivered to Purchasers, or to their nominee or nominees, the following properties, stocks and contracts:

1. All lands, islands, river bed, interests in lands, easements, shore and riparian rights now owned by the Vendors or by any of them within the State of Pennsylvania or Maryland in and along the Susquehanna River from Columbia to Havre de Grace, including all so-called "releases of damages" so owned. Also all the right, title and interest of one Charles R. McConkey under contracts for the purchase of the Burkins tract and John Bair Estate tract, in the district known as "Peach Bottom". A schedule and map showing said properties in detail is hereto annexed marked "A".

2. All the canal rights, property and franchises of the old Tide Water Canal Company, being the canal and property extending along the west bank of the Susquehanna River from the Maryland and Pennsylvania state line to Havre de Grace.

3. All the capital stocks issued and outstanding of the following named corporation of Maryland:

Proprietors of the Susquehanna Canal chartered under Chapter 23 of the Laws of Maryland, A. D., 1783;

and of each of the following corporations of Pennsylvania:

Susquehanna Canal and Power Co.

Susquehanna Falls Power Co.

Susquehanna River Power Co.

Susquehanna Storage Lake and Power Co.

4. Two-thirds of the issued capital stock (being all of that owned by any of Vendors) of the Conowingo Land Company of Cecil County, a corporation of Maryland.

5. A valid agreement duly executed by the Susquehanna Canal & Power Company above named, with the consent of every stockholder thereof, whereby said Company shall consent and agree to the construction, maintenance and operation by the company which makes and issues the bonds hereinafter mentioned as to be delivered to Vendors or by any company which Purchasers may organize or use for that purpose, of a dam or dams and water power plant or plants at any point or points upon the Susquehanna River selected by such Company, and of such character and extent as may be determined upon by it, and to the impounding of, and flooding by, water and other consequences of such construction, maintenance and operation, and whereby said Company shall waive and release all claims of or for damage or expense of any kind to its property or rights by reason of such construction, maintenance or operation; a valid agreement to the same effect, to be executed in like manner and with like consent by the Tide Water and Susquehanna River Railroad Company, a corporation of Penn-

sylvania and Maryland; and a valid agreement to the same effect, to be executed by the Conowingo Bridge Company below named, the latter agreement and consent, however, to be conditioned upon the other party thereto agreeing that in case any such water power development should interfere with the existing bridge or its approaches, then all cost and expense of alteration or reconstruction attributable to such development or its consequences shall be paid by such party.

6. An agreement vesting in Purchasers the same option to purchase all the capital stock of said Conowingo Bridge Company owned or controlled by Vendors, or any of them (being a majority of such stock), that is contained in a certain agreement dated April 5, 1905, between Charles D. Pullen, of the City of New York, as first party, and Vendors as second party.

All Vendors' agreements herein to sell, transfer and deliver, and all transfers and deliveries and instruments thereof, made pursuant hereto, are and are to be subject to the agreement with Charles D. Pullen last above mentioned, a copy whereof is hereto annexed marked "C".

It is understood and agreed that in the case of each company, all of whose capital stock is hereby agreed to be sold and transferred by Vendors, such capital stock shall represent and carry the ownership of all the properties, rights and franchises of such corporation free and clear of lien, incumbrance or debt; and it is further understood and agreed that together with the transfer of such stocks there shall be delivered to Purchasers or their nominees, resignations of all officers and directors of such corporations.

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In consideration of the agreements hereinbefore stated, Purchasers hereby agree, upon being satisfied as to titles, corporate organizations and forms of agreement as hereinafter stated, and subject to the abandonment of the enterprise as hereinafter stated, to pay and deliver, or cause to be paid and delivered, to Vendors at the time hereinafter stated, and upon delivery of everything as hereinbefore provided, (a) $200,000 in money, (b) $250,000 in aggregate principal amount of bonds out of the issue of $10,000,000 in aggregate principal amount described in the "Bond and Stock Purchase Agreement", a copy whereof is hereto annexed, marked "B", and (c) $100,000 in par value of the common stock of the Company so to issue said bonds; and Purchasers further agree, upon such delivery, to assume and perform, or cause to be assumed and performed the aforesaid agreement, copy whereof is hereto annexed, marked "C".

The time and place for delivery and payment hereunder shall be the first day of June, 1905, at the office of Simpson, Thacher & Bartlett in the City of New York.

Vendors are to provide and secure to Purchasers and their attorneys forthwith access to all books and corporate records of the corporations hereinbefore mentioned, and to all briefs and abstracts of title and all other papers and documents pertinent to an inquiry into titles and corporate history, standing and stock issues; and it is understood and agreed that titles to the properties set forth in Schedule A, hereto attached, and the validity of the corporate organizations, franchises and stock issues of the corporations hereinbefore named, shall be satisfactory to Purchasers and their counsel; otherwise the obligations hereof to cease.

It is further understood that if, prior to the consummation hereof, Purchasers should abandon the carrying out of the Plan set forth in said agreement marked B, hereto attached, then all obligations of both parties hereunder shall cease.

It is further agreed that in case the bonds and stock agreed to be delivered by Purchasers to Vendors should not be issued or ready for delivery at the consummation hereof, then Vendors shall accept in lieu thereof the agreement of the Purchasers to cause such bonds and stock to be issued and delivered to them on or before September first, 1905, interest at the bond rate from time of consummation hereof to date from which bonds carry interest, to be paid to Vendors.

IN WITNESS WHEREOF said parties have hereunto set their hands and seals the day and year first above written.

GEO. K. McGaw, (L. S.)

JAMES H. HARLOW, (L. S.)

M. H. HOUSEMAN, (L. S.)

HARVEY FISK AND SONS, (L. S.)

For valuable consideration the undersigned hereby assigns to Susquehanna Contracting Company the foregoing contract, and all right, title and interest of the undersigned therein and thereunder.

Dated, New York, June 14th, 1905.

HARVEY FISK & SONS.

It is further understood that if, prior to the consummation hereof, Purchasers should abandon the carrying out of the Plan set forth in said agreement marked B, hereto attached, then all obligations of both parties hereunder shall cease.

It is further agreed that in case the bonds and stock agreed to be delivered by Purchasers to Vendors should not be issued or ready for delivery at the consummation hereof, then Vendors shall accept in lieu thereof the agreement of the Purchasers to cause such bonds and stock to be issued and delivered to them on or before September first, 1905, interest at the bond rate from time of consummation hereof to date from which bonds carry interest, to be paid to Vendors.

IN WITNESS WHEREOF said parties have hereunto set their hands and seals the day and year first above written.

Geo K McGann (L.S.)
James H Harlow (L.S.)
M H Thomsen (L.S.)
Henry Titus Oertel (L.S.)

of the corporations hereinbefore named, shall be satisfactory to Purchasers and their counsel, otherwise the obligations hereof to cease.

It is further understood that if, prior to the consummation hereof, Purchasers should abandon the carrying out of the Plan set forth in said agreement marked B, hereto attached, then all obligations of both parties hereunder shall cease.

It is further agreed that in case the bonds and stock agreed to be delivered by Purchasers to Vendors should not be issued or ready for delivery at the consummation hereof, then Vendors shall accept in lieu thereof the agreement of the Purchasers to cause such bonds and stock to be issued and delivered to them on or before September first, 1905, interest at the bond rate from time of consummation hereof to date from which bonds carry interest, to be paid to Vendors.

IN WITNESS WHEREOF said parties have hereunto set their hands and seals the day and year first above written.

IT IS HEREBY MUTUALLY AGREED that the time for delivery and payment under the agreement, of which the foregoing is a copy, be, and the same hereby is, further changed from the first day of June, 1905, to the 15th day of June, 1905, at the same place, with the same effect in all respects as if the words "the 15th day of June, 1905" had been written in said contract in the second paragraph on page "4" thereof, in place of the words "the first day of June, 1905."

Dated, June 6th, 1905. Earl L. Gilbert
James N. Harlow
M. T. Heinemann

Harvey Fisk & Sons
by Simpson Thacher & Bartlett
attys.

Above time further extended to and including June 16th 1905

Earl L. Gilbert
James N. Harlow
M. T. Heinemann

Harvey Fisk & Sons
by Simpson Thacher & Bartlett

WHEREAS the aforesaid agreement of sale and purchase dated April 27th, 1905, require the delivery of a consent and release made by the Conowingo Bridge Company, and

WHEREAS the undersigned have not as yet procured the execution and delivery thereof:

NOW THEREFORE, for the same considerations mentioned in the foregoing agreement between the undersigned and Purchaser, the undersigned further agree to cause such a consent and release in the form hereto annexed to be duly and lawfully executed by said Conowingo Bridge Company and delivered to Purchaser on or before July 1st, 1905.

Geo. K. McGaw,
James H. Harlow,
M. H. Houseman.

CONSENT AND RELEASE, made this day of June, in the year one thousand nine hundred and five, by the CONOWINGO BRIDGE COMPANY, a corporation of the State of Maryland, to McCALL FERRY POWER COMPANY, a corporation of the State of Pennsylvania, WITNESSETH:

In consideration of five dollars and other valuable considerations, the receipt and benefit whereof are hereby acknowledged, the Conowingo Bridge Company consents and agrees to the construction, maintenance and operation by said McCall Ferry Power Company, and by any other corporation or corporations authorized so to do by said McCall Ferry Power Company, and by the successors and assigns of them and each of them, of a dam or dams and water power plant or plants and appurtenances, at any point or points upon the Susquehanna River selected, and of such character and extent as may be determined by said McCall Ferry Power Company, or by the corporation or corporations so authorized by it; and further consents to the impounding of water and flooding of any of its property, and to all other consequences of the construction, maintenance and operation of such dams, water power plants and appurtenances, and does hereby waive, release and forever discharge the said McCall Ferry Power Company and every corporation so authorized by it, and the successors and assigns of them and of each of them, of and from all damages, expenses, costs, actions, causes of actions, suits, controversies, claims, demands and liabilities whatsoever, of every kind and nature, both in law and in equity (except the costs and expenses hereafter agreed to be paid by said McCall Ferry Power Company) which

may arise by reason of such construction, maintenance or operation of dams, water power plants and appurtenances in, along or across the said Susquehanna River, or by any thereof.

The said McCall Ferry Power Company, for itself, and for and on behalf of every Company authorized by it to construct or maintain or operate any such dam or dams, or water power plant or plants, hereby agrees that in case any such water power development should interefere with the existing bridge of said Conowingo Bridge Company, or its approaches, then said McCall Ferry Power Company will promptly pay or cause to be paid all costs and expenses of alteration or reconstruction attributable to such development or its consequences.

It is intended that this Consent and Release shall be relied upon by said McCall Ferry Power Company in acquiring properties and rights for such dams, ponds, water power, hydro-electric plants and appurtenances, and the maintenance thereof, and by others in acquiring any such properties with the object of conveying the same to said McCall Ferry Power Company.

IN WITNESS WHEREOF, the said Conowingo Bridge Company has caused its corporate seal to be hereunto affixed, and attested by its Secretary, and these presents to be signed by its President the day and year first above written.

A G R E E M E N T, dated April 27th, 1905, between GEORGE K. McGAW, of Baltimore, Maryland, hereinafter called Vendor, party of the first part, and S. R. Bertron hereinafter called Purchaser, party of the second part.

In consideration of one dollar and other valuable considerations, receipt whereof is hereby acknowledged, Vendor agrees to sell, transfer and deliver, or cause to be sold, transferred and delivered to Purchaser at his option, and for the same considerations aforesaid, all the capital stock of each of the following corporations: The Susquehanna Construction Company of Baltimore City, a Maryland corporation, The Sowego Water & Power Company and Lower Chanceford Water & Power Company, corporations of Pennsylvania, and shares of the capital stock of the Susquehanna Electric Power Company, a Maryland corporation, and shares of the capital stock of the Martic Water & Power Company, a Pennsylvania corporation, said amounts of stock respectively being all of the stock owned or controlled by Vendor or his associates.

It is understood, however, that in case the stock or any thereof of the aforesaid Sowego Water & Power Company is owned by the aforesaid Susquehanna Electric Power Company, then to the extent that such stock is so owned, Vendor shall not be obligated hereby to deliver the same.

Vendor further agrees upon delivery of such stocks as hereinafter provided, to turn over to Purchaser or his

nominees resignations of all the officers and directors of such corporations (except that as to the Susquehanna Electric Power Company the resignations are to be only of a majority of the directors, and of Vendor, such officers as are in his employ), and the corporate books and records thereof.

Delivery of all of the foregoing is to be made at the office of Simpson, Thacher & Bartlett in the City of New York on the first day of June, 1905, provided Purchaser has theretofore notified Vendor of his election to exercise this option.

IN WITNESS WHEREOF, said parties have hereunto set their hands and seals the day and year first above written.

IT IS HEREBY MUTUALLY AGREED that the time for delivery and payment under the agreement, of which the foregoing is a copy, be, and the same hereby is, changed from the first day of June, 1905, to the eighth day of June, 1905, at the same place, with the same effect in all respects as if the words "the eighth day of June, 1905" had been written in said contract in the last paragraph but one thereof in place of the words "the first day of June, 1905."

Dated, May 25, 1905.

Above time further changed to 15th of June, 1905, at the same place.

Dated, June 5th 1905.

SCB-20-8 PGB/MMB

Ex II

May 1, 1905.

George K. McGaw,
James H. Harlow and
O. H. Housman, Esqs.,
Baltimore, Md.

Dear Sirs:

On behalf of Messrs. Harvey Fisk & Sons, parties of the second part to an agreement made with yourselves, as parties of the first part, dated April 27, 1905, we write this letter pursuant to the oral understanding that we should do so, at the interview at which said contract was delivered.

Said contract was so delivered upon the express understanding that a certain other contract of the same date, made by George K. McGaw, as party of the first part, and S. R. Bertron, as party of the second part, was a part of the same transaction, and that the obligation of said Harvey Fisk & Sons under said first mentioned contract are conditioned upon the performance of both the aforesaid contracts; and upon the further express understanding that the two contracts in question cover and agree to transfer all the property interests, whether in or in respect to lands or water rights, or corporate stock or interests, or other rights, useful or valuable in the development of the water power

of the Susquehanna River between Columbia and Havre de Grace, or which might be prejudicial thereto, if not so transferred, which the said parties of the first part in said contracts or any of them or of their associates, now own or control.

As above stated, this letter merely confirms the oral understanding had at the time of delivery, and is sent pursuant to the statement then made by the writer that such a letter would be written and sent.

Very truly yours,

S T & B 55 55

A G R E E M E N T, dated June 15th, 1905, between GEORGE K. McGAW, JAMES H. HARLOW and M. H. HOUSEMAN, all of Baltimore, Maryland, hereinafter called "Vendors", parties of the first part, and SUSQUEHANNA CONTRACTING COMPANY, a corporation of New York, hereinafter called "Purchaser", party of the second part.

W H E R E A S Vendors heretofore made with Harvey Fisk & Sons an agreement of sale and purchase, dated April 27, 1905, a copy whereof is hereunto attached, which agreement has been extended until this date and assigned to Purchaser and is now about to be carried out; and

W H E R E A S it has been agreed that this present agreement shall be made as a part of such sale and purchase.

N O W T H E R E F O R E, in consideration of the premises and for the considerations of said sale and purchase, and to induce the same, Vendors hereby jointly and severally guarantee and agree to and with Purchaser as follows:

1. That Vendors have, and each of them has, good right, title, power and authority to convey and transfer, or cause to be conveyed and transferred, to Purchaser or its nominees, all the lands, corporate stocks and other properties described in said agreement of sale and purchase, which Vendors are conveying or transferring, or which any of them is conveying or transferring, or causing to be conveyed or transferred, to Purchaser or its nominees in carrying out said sale and purchase in form and manner as the same are so being conveyed or transferred.

2. That the Susquehanna Canal and Power Company, all of whose stock is among that being transferred to Purchaser in carrying out said sale and purchase, retains, and shall continue to have until July 1st, 1905, the option that is contained in a certain agreement dated April 5, 1905, between Charles D. Pullen, of the City of New York, as first party, and Vendors as second parties, to-wit, the option to purchase all the stock of the Conowingo Bridge Company, a corporation of Maryland, which on said 5th day of April, 1905, was, or now is, owned or controlled by Vendors or any of them (being a majority of such stock) at the price of twenty dollars per share.

3. That the conveyances and transfers now being made by Vendors or any of them cover and transfer to Purchaser all the property interests in or in respect to lands or water rights or corporate stocks or interests or other rights useful or valuable in the development of the water power of the Susquehanna River between Columbia and Havre de Grace, or which might be prejudicial thereto if not transferred, which the Vendors or any of them or of their associates now own or control.

In consideration of the premises and of the said conveyances and transfers by Vendors, Purchaser agrees:

1. That all transfers and deliveries and instruments thereof made by Vendors or any of them to or for account of Purchaser pursuant to or in carrying out the said agreement of sale and purchase, are and are to be subject to the agreement between Charles D. Pullen and Vendors, a copy whereof, marked "C", is annexed to said agreement of sale and purchase, and Purchaser hereby as-

sumes and agrees to perform the obligations of Vendors under the said agreement marked C.

2. That inasmuch as the bonds and stock forming part of the purchase price to be paid Vendors under said agreement of sale and purchase are not ready for delivery, Purchaser will, on or before September 1, 1905, procure and obtain the same, to-wit, $250,000 in aggregate principal amount of such bonds and $100,000 in aggregate par value of such stock, and transfer and deliver, or cause to be transferred and delivered the same and all thereof to Vendors.

IT IS UNDERSTOOD AND AGREED that the making and delivery hereof does not discharge, extinguish or negative any obligation, agreement or guaranty of any of the parties hereto in, by or under the said agreement of purchase and sale dated April 27th, 1905, or implied by law.

The properties and stocks so being conveyed and transferred to Purchaser, or some of them, are, however, subject to debts, taxes and other matters or defects as set forth in the schedule hereto attached, all of which Vendors are to cause to be paid, discharged and cleared off on or before September 1st, 1905.

All obligations and provisions hereof are binding upon and for the benefit of and enforceable by the heirs, representatives and assigns of Vendors and the successors and assigns of Purchaser.

IN WITNESS WHEREOF Vendors have hereunto in duplicate set their hands and seals, and Purchaser the signature of its President and its seal, attested by its

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Secretary, the day and year first above written.

Geo K McGee L.S.
James H. Hardenbergh L.S.
M. H. Housman L.S.

Susquehanna Contracting Co.
by A. P. Bartleff
President.

Attest.
Geo A Hackley
Secretary.

FOR VALUE RECEIVED the undersigned hereby guarantee to Vendors, their personal representatives and assigns, the performance by Susquehanna Contracting Company of its agreements stated in the foregoing instrument.

Dated, New York, 1905.

Harvey Fisk & Sons

SCHEDULE TO BE ATTACHED TO AGREEMENT DATED JUNE 15, 1905, BETWEEN GEORGE K. McCAW, JAMES H. HARLOW AND M. H. HOUSEMAN, PARTIES OF THE FIRST PART, AND SUSQUEHANNA CONTRACTING COMPANY, PARTY OF THE SECOND PART.

Property of Old Tide Water Canal Company in Harford County, Maryland.

1. Pay proper proportion of any local taxes due.

2. Furnish information about leases and adjust rents.

Proprietors of The Susquehanna Canal.

1. Pay proper proportion of any local taxes due.

2. Pay any current debts due.

3. Furnish information about leases and adjust rents.

Susquehanna Canal and Power Company.

1. Have certificate for four shares of stock standing in the name of C. R. McConkey duly endorsed by him for transfer in blank.

2. Make report to State of Pennsylvania for State taxes accrued and pay same.

3. Pay any current debts of Company due up to June 15,1905, and arrange for surrender of lease of Baltimore office.

4. Record deed from S. Johnson Poe and George L. Van Bibber, Receivers, to E. J. D. Cross, and from E. J. D. Cross to Susquehanna Canal and Power Company, in Lancaster County.

5. Have certificate for three shares of stock issued to J. H. Harlow countersigned by McConkey as secretary and have transfer on back of certificate duly signed by J. H. Harlow.

6. Pay sums, if any, due for local taxes.

7. Furnish information about leases and adjust rents.

8. Adjust bills of local counsel who examined titles.

Lower Chanceford Water and Power Company.

1. Get resignation of G. W. Rupp, director.

2. Have G. W. Rupp assign his right to subscribe for one share of stock of the Company.

Properties conveyed by J. H. Harlow, George K. McGaw and others, individually.

SWEIGERT TITLE, Tract No. 4 East.

Obtain conveyance from guardian of Effie G. Fry under order of Orphans' Court.

McCARTY TITLE, Sicily Island, Tract No. 35 East.

Litigation now going on between H. E. Gerhard as plaintiff and Ella J. McCarty and James H. Harlow as defendants, to be adjusted between the parties to the foregoing agreement.

DANIEL F. LANDIS, Tract No. 12 West.

Have Fred R. Williams obtain and file satisfaction piece of mortgage to Lydia A. Castner for $200.

A. RANDOLPH KILGORE, Tract No. 32 West.

The deed from George F. Sanbel to A. Randolph Kilgore is not under seal. The deed should be re-executed, with the seal of the Orphans' Court attached, or a proper deed of confirmation should be obtained.

EMILIE M. F. SECHLER, Tract No. 4 East.

Title to be satisfactory to Simpson, Thacher & Bartlett.

GRACE SHURE, Tract No. 22 West.

Title to be satisfactory to Simpson, Thacher &

Bartlett.

TAYLOR SPROUT, Tract No. 13 East.

Obtain affidavit showing that all the heirs of John J. Kreider joined in 1898 in transfer of mortgage from William Blair and wife to John J. Kreider.

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Pay proper proportion of any local taxes due on all the properties conveyed by J. H. Harlow, George K. McGaw and others individually.

Peach Bottom Water & Power Company.

1. The original minutes thereof.
2. Its corporate seal.

Drumore Water & Power Company.

1. The original minutes thereof.
2. Its corporate seal.

Fulton Water & Power Company.

1. The original minutes thereof.
2. Its corporate seal.

Susquehanna River Power Company.

1. The original minutes thereof.
2. Its corporate seal.
3. Either an endorsement by Herbert F. Harris of his certificate for ~~an assignment of~~ the three shares of stock of the Company in his name, or an assignment and Power of Attorney to transfer said shares signed by him.
4. Payment of all taxes to June 15, 1905.

Manor Water & Power Company.

1. The original minutes thereof.
2. Its corporate seal.

Chenoceford Water & Power Company.

1. The original minutes thereof.

2. Its corporate seal.

Lower Windsor Water & Power Company.

1. The original minutes thereof.

2. Its corporate seal.

Susquehanna Storage Lake & Power Company.

1. The original minutes thereof.

2. Its corporate seal.

3. Either an endorsement by Mr.Herbert F. Harris on his certificate for ~~an assignment of~~ the four shares of stock of the Company in his name, or an assignment and Power of Attorney ~~or~~ to Transfer said shares signed by him.

4. Payment of all taxes to June 15, 1905.

Susquehanna Falls Power Company.

1. The original minutes thereof.

2. Its corporate seal.

3. Either an endorsements by Mr.Herbert F. Harris on his certificate for ~~an assignment of~~ the two shares of stock of the Company in his name, or an assignment and Power of Attorney ~~or~~ to Transfer said shares signed by him.

4. Payment of all taxes to June 15, 1905.

Muddy Creek Water & Power Company.

Its corporate seal.

Pequea Water & Power Company.

Its corporate seal.

M. S. T. Houseman
James H. Harlow

IT IS UNDERSTOOD AND AGREED that the time fixed in the agreement between us, dated June 15th, 1905, for the delivery of certain stock and bonds of McCall Ferry Power Company is hereby extended to October 2, 1905 and including

Sept 6, 1905.

George K. McGaw
James H. Parker.
M. St. Horseman
By M. St. Horseman.
Attorney.

Susquehanna Contracting Co.
by
Simpson Thacher & Bartlett, Atty.

The above time is hereby further extended to and including October 6th. 1905.
Sept. 29. 1905.

Sec. 209

Knickerbocker Trust Company

66 Broadway

New York, May 31, 1905.

SUSQUEHANNA POWER CO. LOAN

Messrs. Harvey Fisk & Sons,

62 Cedar Street,

New York City.

Dear Sirs:-

We duly received your favor of the 29th inst. and would have replied earlier were it not for the absence of our President for a few days.

The change that you suggest, i.e., reducing the loan by $72,000. - making the total amount borrowed, - $4,337,600.- is quite agreeable to us.

Very truly yours,

(signed) Wm. B. Randall,
Trust Officer.

IT IS UNDERSTOOD AND AGREED that the time fixed in the Agreement between us, dated June 15th, 1905, for the delivery of certain stock and bonds of McCALL FERRY POWER COMPANY, is hereby extended to and including October 5th, 1905.

DATED, September 29th, 1905.

George K. McGaw
James H. Harlow
M. H. Wiseman
By M. H. Wiseman
Attorney

Sugar Lawn Contracting Co.
by
Simpson, Thacher & Bartlett
Attorneys

Agreement Between Susquehanna Contracting Company and Knickerbocker Trust Company for Loans

(Copy of agmt. as executed)
Marked for indentification, Jan. 26. 1906
Rec'd. Nov. 1st 1905 Chas A. Peabody Secy.

AGREEMENT dated Nov. 1st, 1905, between KNICKERBOCKER TRUST COMPANY, a corporation of New York, (hereinafter called "Lender"), party of the first part, and SUSQUEHANNA CONTRACTING COMPANY, also a corporation of New York, (hereinafter called "Borrower"), party of the second part:

In consideration of the sum of $22,410, receipt whereof from Borrower is hereby acknowledged, and in consideration further of the agreements of Borrower hereinafter expressed, Lender hereby agrees:

To loan to Borrower for the times, at the rate of interest and upon the terms and conditions hereinafter specified, such amounts, not exceeding the aggregate of $4,482,000 at any one time, as Borrower may in writing request (at least five days in advance) at any time and from time to time within three years from the first day of November, 1905.

Every such loan is to bear interest at the rate of six per cent. per annum for the whole period thereof, is to be evidenced by note of Borrower (substantially in the form hereto annexed) for the amount thereof, and is to be secured by pledge of (a) Bond and Stock Purchase Agreements (first instalment of twenty per cent. paid) out of those listed in the Schedule hereto annexed marked "A", aggregating, in total purchase price, one hundred and twenty five per centum of the principal amount of such loan, and (b) the whole amount of first mortgage bonds of McCall Ferry Power Company (secured by mortgage to Lender dated June 15th, 1905) and of preferred stock of said Power Company agreed to be purchased by the Bond and Stock

M E M O R A N D U M.

Harlow, McCaw and Houseman, by their agreement of April 27th, 1905, agreed to transfer, inter alia, "all lands, inlands, river bed, interests in lands, easements, shore and riparian rights now owned by the Vendors or by any of them within the State of Pennsylvania or Maryland in and along the Susquehanna River from Columbia to Havre de Grace, including all so-called "release of damages" so owned."

By their agreement of June 15th, 1905, they further agreed as follows: "That the conveyances and transfers now being made by Vendors or any of them cover and transfer to Purchaser all the property interests in or in respect to lands or water rights or corporate stocks or interests or other rights useful or valuable in the development of the water power of the Susquehanna River between Columbia and Havre de Grace, or which might be prejudicial thereto if not transferred, which the Vendors or any of them or of their associates now own or control."

Arrangement by Harvey Fisk & Sons for Loans From Knickerbocker Trust Company

A G R E E M E N T, dated June 14th 1905, between HARVEY FISK & SONS, Bankers, of the City of New York, hereinafter called "Bankers," parties of the first part, and SUSQUEHANNA CONTRACTING COMPANY, a corporation of New York, hereinafter called "Contracting Company", party of the second part.

W H E R E A S, Bankers hold agreements hereinafter called "purchase agreements", substantially in the form of "Exhibit A", hereto attached, for the purchase of bonds and stock of the proposed Company described therein, to the aggregate amount of eight million dollars of principal of such bonds; and

W H E R E A S, Bankers have, pursuant to said purchase agreements, arranged for loans from the Knickerbocker Trust Company of New York City, hereinafter called "Trust Company", as set forth in the correspondence, a copy whereof is hereto attached, marked "Exhibit B"; and

W H E R E A S, Contracting Company represents that it has made arrangements with the owners of the riparian lands and interests on the Susquehanna River mentioned in said purchase agreements and with the owners of the other properties hereinafter mentioned, as follows: said riparian lands and interests and other riparian lands and interests, corporate stocks, contracts, options, rights, privileges and franchises of value to the enterprise are to be transferred to Contracting Company or its assignee, for considerations agreed upon, and Contracting Company has agreed with McCall Ferry Power Company, hereinafter called "Power Company," a corporation of

Pennsylvania having appropriate powers, to convey and transfer to it all the aforesaid lands, interests, stocks, contracts, options, rights, privileges and franchises, and to pay to it a sum of money sufficient, according to estimate (a) to construct the dam and other necessary works and equip the same with transmission lines, and (b) to pay all interest, commissions, organization, corporate, legal and other expenses which will remain payable by said Power Company, all as stated in the "plan" set forth in said purchase agreements, (all other compensations and all profits mentioned in said Plan being covered under the aforesaid arrangements of Contracting Company for obtaining from the present owners said lands, interests, corporate stocks, privileges and franchises) for all of which said Power Company has agreed to issue eight million four hundred and eighty-three thousand dollars in aggregate principal amount of bonds, and four million one hundred and sixteen thousand five hundred dollars in aggregate par value of preferred stock, both of the character described in said Plan, and all its unissued common stock;

NOW, THEREFORE, each in consideration of the premises and of the agreements of the other herein, said parties hereby agree as follows:

Bankers hereby assign and transfer unto Contracting Company, all the said purchase agreements and all Bankers' rights and interests therein and thereunder, except, and reserving, Bankers' right and option as in said purchase agreements set forth, to purchase the bonds covered thereby at 90, and subject to the pledge of cer-

tain of said purchase agreements to the Trust Company as hereinafter provided, and Bankers also assign and transfer to Contracting Company the aforesaid arrangement for loans made with said Trust Company, and all the rights and interests of Bankers thereunder, and also assign and transfer to said Contracting Company all moneys due and to become due (including all heretofore paid) on or under any and all of said Purchase agreements.

Contracting Company agrees to obtain from Power Company, pursuant to the arrangements hereinbefore recited, bonds and preferred stock of Power Company sufficient for delivery to all Subscribers under said purchase agreements, and hereby assumes and agrees to perform and discharge all the obligations and liabilities of every kind of Bankers, now existing or that may hereafter properly arise, under said purchase agreements, both to Subscribers and for interest, commissions or expenses, and hereby constitutes and appoints Bankers its agents for the performance of all obligations so assumed by it, and agrees to deliver to them all bonds and stock necessary for delivery to Subscribers under said purchase agreements, and authorizes and empowers Bankers to make calls for and receive further instalments of purchase price, and to make deliveries of bonds and stock to Subscribers entitled thereto, and Contracting Company further agrees to do and carry out all that is required from it by or under the aforesaid arrangement with the Trust Company for loan or loans, and execute all contracts, agreements, notes and other instruments that may reasonably be required in that regard.

-4-

IT IS UNDERSTOOD that the powers hereby vested in Bankers are irrevocable, being coupled with the interest of said Bankers in the subject matter thereof, both as holding the option upon said bonds and as having contracted for the sale thereof and in reference to the loan arrangement aforesaid.

IT IS FURTHER UNDERSTOOD that the purchase agreements aforesaid of Subscribers who have elected to defer payment of all instalments after the first will be assigned by Bankers to said Trust Company, in pledge, as security for the loans to be obtained under the loan arrangement aforesaid.

All provisions hereof shall be binding upon and are for the benefit of, and shall be enforceable by the successors, heirs, representatives and assigns of Bankers, and the successors and assigns of Contracting Company.

IN WITNESS WHEREOF, said parties have respectively duly executed this agreement the day and year first above written.

Harry Bates

Iroquois Contracting Co.
by A. P. Bartlett
President

Attest.
Lois A. Mackey.
Secretary.

IROQUOIS CONTRACTING COMPANY INC.

COPY

Sec. 20-9

EXHIBIT B.

III

May 15, 1905.

Knickerbocker Trust Company,
Charles T. Barney, Esq., President,
66 Broadway, New York City.

Dear Sir: Referring to the conversation between yourself and our Mr. Barnum, we beg to say:

As we have explained to you, a Power Company is now being formed to develop the water power at or near McCall's Ferry, in the Counties of York and Lancaster, in the State of Pennsylvania, which will issue securities in accordance with the Plan set out in the stock and bond purchase agreement, dated March 25, 1905, a copy of which agreement we herewith enclose.

Of the bonds which it is proposed said Company shall issue, namely $10,000,000. of Thirty-year, five per cent. Gold Bonds, secured by a mortgage, either directly or by pledge of stocks, upon the lands, water rights, power plant equipment, etc. of the Power Company, we have sold bonds for the principal sum in the aggregate of $6,145,000 at the price and upon the terms set forth in said agreement of March 25, 1905, and bonds for the principal sum in the aggregate of $1,855,000 at the same price and upon the same terms, except that the purchasers thereof elect not to defer their payments.

We understand it to have been agreed upon between us that the Knickerbocker Trust Company will make loans or ad-

See

vances up to an aggregate of $4,424,400 as money may be called for, at any time and from time to time within three years from the first day of June, 1905, on the following terms:

The loans are to bear interest at the rate of six per cent. per annum, and are to be secured by the pledge of, (a) bonds of the Power Company issued in compliance with the said Plan, for the principal sum in the aggregate of $6,145,000, and (b) agreements to purchase such bonds in the form of that enclosed, to the amount of $6,145,000; the bonds and bond purchase agreements pledged to be proportionately less than $6,155,000 if the loans shall aggregate less than $4,424,400.

The loans are to mature at the end of the year during which they are made, but may be extended, at borrower's option by one or two yearly renewals, as the case may be, to the end of the third year, provided that sixty days' notice of the intention to renew be given in each case.

In addition to interest, the Construction Company is to pay the Trust Company a commission of one-half per cent. upon the full amount agreed to be loaned, viz: $4,424,400, for each year during or for which any loan or renewal shall be made, and this agreement shall be in force.

The whole or any part of said loan may be paid off at any time on thirty days' notice.

lcc 20-7

K.T. Co. -3-

The loan or loans are to be made to the Construction Company which is being formed to carry on the work of construction and equipment, and through which securities of the Power Company will be issued.

It is understood that as soon as this Company is organized, a formal agreement between such Company and the Trust Company will be made embodying the terms hereof and providing for th pledge of the bonds and the said agreements of purchase.

We shall be glad of a note from you confirming the terms hereof, if your understanding of the agreement between us corresponds with ours as stated herein.

Meantime, we remain,

Very truly yours,

LCCo 20-9

COPY

May 15, 1905.

Charles T. Barney, Esq., President,

66 Broadway, New York City.

Dear Sir:-

In addressing you the letter with reference to loan on Susquehanna Power bonds, the draft of which letter, we understand, has been approved by you, we have taken the liberty of changing the amount of the loan by a reduction of $14,400. This comes about through a request made by one of the subscribers that he be permitted to change from a deferred payment subscriber to a non-deferred payment subscriber, to which we have acceded.

Trusting that this change will be acceptable to you, we remain,

Very truly yours,

COPY

KNICKERBOCKER TRUST COMPANY
66 Broadway, New York, May 16, 1905.

Messrs. Harvey Fisk & Sons
62 Cedar Street,
New York.

Dear Sirs:

Refering to your letters of the 15th inst., in reference to the Susquehanna Power Company, the terms of the loan, as expressed in your letter, conform to our understanding.

It is of course understood that the underwriters are to be satisfactory to us, and we have no doubt that they will be so. We also understand that we are to be Trustee under the mortgage.

We should be glad if you would send, at your convenience, a draft of the mortgage and other papers to Mr. Cornell (of Messrs. Davies, Stone & Auerbach) for approval on our behalf.

Very truly yours,

(signed) Wm. B. Randall,
Trust Officer.

COPY

Sec. 209

May 29, 1905.

Charles T. Barney, Esq., President,
Knickerbooker Trust Company,
66 Broadway, New York.

Dear Sir:-

Confirming our understanding, and referring to our letters of May 15th, we beg to request that you will change the amount of the loan on Susquehanna Power bonds by a reduction of $72,000., making the total amount to be borrowed $4,337,600.

As we have already explained to you, this reduction is made in order to permit the United Electric Securities Company, of Boston, who have been given an underwriting through Mr. C. A. Coffin, to make their payments as called, instead of being placed on the deferred list.

Kindly confirm, and oblige,

Yours very truly,

Purchase Agreements so pledged. Every such loan is to mature on the first day of November following the date on which it is made, but may be extended, at Borrower's option, by one or more renewals, as the case may be, to November first, 1908, provided that sixty days' notice of the intention to renew be given by Borrower to Lender in writing in each case. The whole or any part of any such loan may be paid off at any time on thirty days' notice in writing by Borrower to Lender.

In consideration of the foregoing agreements of Lender, Borrower herewith pays to Lender the sum of $22,410 for the year ending November 1st, 1906 (being the same sum receipt whereof by Lender is hereinbefore recited), and agrees to pay to Lender the further sum of $22,410 for each of the other two years during which this agreement shall be in force and during or for which any loan or renewal shall be made hereunder, and hereby represents and guarantees to Lender that said McCall Ferry Power Company has been formed, capitalized and vested with properties in all respects in conformity with the "Plan" set forth in said "Bond and Stock Purchase Agreements", and that its said first mortgage bonds and preferred stock are the bonds and stock agreed to be purchased by said agreements, and that Borrower is the corporation referred to as "the Construction Company" in a letter dated May 15th, 1905, relating to the subject matter of this agreement, from Messrs. Harvey Fisk & Sons to Lender.

All obligations hereof shall be binding upon, and enforceable by, the successors and assigns of the parties hereto respectively.

IN WITNESS WHEREOF, hereunto in duplicate, in the

City of New York, said parties respectively have affixed their seals, duly attested, and their signatures, the day and year first above written.

Signed by both parties with Schedules and form of note attached, the latter being attached hereto

PROMISSORY NOTE

PURSUANT TO

KNICKERBOCKER TRUST COMPANY—SUSQUEHANNA CONTRACTING COMPANY LOAN AGREEMENT.

No. 100 Amount $.....

Dated..... Due.....

Remarks:

.....

.....

.....

Total amount outstanding notes, including foregoing,

$.....

No. 100 $_____

PROMISSORY NOTE

PURSUANT TO

KNICKERBOCKER TRUST COMPANY—SUSQUEHANNA CONTRACTING COMPANY LOAN AGREEMENT.

NEW YORK, , 190

FOR VALUE RECEIVED, on the first day of November, 190 , the undersigned SUSQUEHANNA CONTRACTING COMPANY promises to pay to the order of Knickerbocker Trust Company, at its office, No. 66 Broadway, New York City, _____ dollars, with interest at the rate of six per cent. per annum, having deposited with said Trust Company as collateral security

$_____ in aggregate purchase price (first instalment of twenty per cent. paid) of agreements for purchase of bonds and stock of McCall Ferry Power Company;

$_____ in aggregate principal amount of first mortgage bonds of said McCall Ferry Power Company;

$_____ in aggregate par value of preferred stock of said McCall Ferry Power Company;

and said Trust Company is hereby authorized, in case of the non-performance of this promise, to sell in such manner as it may determine, either at brokers' board or at public or private sale, and without notice if such sale is public, the whole or any part of said collaterals, applying the net proceeds to the payment of this note, including interest, and accounting to the undersigned for the surplus, if any.

The undersigned hereby consents and agrees that upon any such sale of any collateral held hereunder, said Trust Company may become the purchaser thereof, and shall hold the same thereafter not as pledgee, but in its own right and absolutely.

In case of deficiency after sale hereunder, the undersigned promises to pay to said Trust Company the amount thereof forthwith, with legal interest.

All collaterals held under this loan and the proceeds thereof shall be held and treated as collateral security for any and all other debts or claims held against the undersigned by said Trust Company and which may be outstanding and unpaid at any time.

In case the undersigned shall be adjudged a bankrupt or shall file a voluntary petition in bankruptcy, or shall make a general assignment for the benefit of creditors, this note shall become forthwith due and payable.

The whole or any part of the principal of the loan evidenced by this note may be paid off at any time at the option of the undersigned on thirty days' notice in writing by the undersigned to said Trust Company.

Agreement for Issuance of McCall Ferry Power Company Securities to Susquehanna Contracting Company for Property, Cash, etc.

A G R E E M E N T made June 13th, 1905, between SUSQUEHANNA CONTRACTING COMPANY, a corporation of New York, hereinafter called Vendor, and McCALL FERRY POWER COMPANY, a corporation of Pennsylvania, hereinafter called Purchaser.

Said parties, each in consideration of the agreements of the other herein, mutually agree as follows:

V e n d o r a g r e e s:

1. To convey and transfer, or cause to be conveyed and transferred to Purchaser, all the lands, riparian rights, islands, river bed, interests in lands, flowage rights and "releases of damages", in, along, or connected with, the Susquehanna River in the County of Lancaster or the County of York, Pennsylvania, or in the County of Harford or the County of Cecil, Maryland, belonging to any one or more of the following: Cary T. Hutchinson, William F. Beyer, George B. Willson, [redacted], the partnership formerly known as "York Furnace Power Company", George K. McGaw, James H. Harlow, George R. Harlow; also all the right, title and interest of one Charles R. McConkey in or to four certain tracts of land in or along said portion of said river, under certain contracts for the purchase thereof; and also all the right, title and interest of one William H. Bayless in two certain tracts in or along said portion of said river in Maryland, known respectively as "Progress" and "New Enterprise"; and also all the canal, rights, property and franchises of the old Tide Water Canal Company, being the canal and property extending along the west bank of said river from the Maryland and Pennsylvania state line to Havre de Grace.

2. To transfer and set over, or cause to be transferred and set over to Purchaser shares of corporate stock as follows:

a. All the capital stock issued and outstanding of the following corporation of Maryland: Proprietors of the Susquehanna Canal chartered under Chap. 23 of the Laws of Maryland, A. D. 1783, and of each of the following corporations of Pennsylvania: Susquehanna Canal and Power Company; Susquehanna Falls Power Company; Susquehanna River Power Company; Susquehanna Storage Lake and Power Company.

b. Two-thirds of the issued capital stock of the Conowingo Land Company of Cecil County, Maryland.

c. All other shares of capital stock in corporations interested in, or in connection with, said river or the development thereof, which Vendor may be able to obtain under any of its existing contracts or arrangements.

3. To vest in or cause to be vested in Purchaser, either by assignment of contracts therefor, or otherwise, the following rights of option:

a. The right and option until July 1, 1905, to purchase a majority of the stock of the Conowingo Bridge Company, a corporation of Maryland, at and for the price of twenty dollars per share.

b. All the rights and options assigned and transferred by Charles D. Pullen by a certain assignment and agreement dated April 29, 1905.

4. To procure to be made with, or transferred to, Purchaser, agreements consenting to the construction, maintenance and operation by Purchaser, or by any corporation or corporations authorized by it, of a dam or dams and water power plant or plants, at any point or points upon the Susquehanna River, and to the impounding of and flooding by water and other consequences of such construction, maintenance and operation, and waiving and releasing all claims for damage or expense by reason of such construction, maintenance or operation, by each of the following companies: Susquehanna Canal and Power Company, above named; Tide Water & Susquehanna River Railroad Company, a corporation of Pennsylvania and Maryland, Conowingo Bridge Company, above named; the latter agreement and consent, however, to be coupled with Purchaser's agreement that in case any such water power and development shall interfere with the existing bridge of said Bridge Company or its approaches, then all cost and expense of alteration or reconstruction shall be paid by Purchaser.

5. To pay or cause to be paid to Purchaser the sum of six million four hundred thousand dollars.

Purchaser agrees:

1. To issue and deliver to Vendor, or upon its order, eight thousand four hundred and eighty-three bonds of Purchaser, each for the principal sum of One thousand dollars, to be dated 1905, and to be payable in gold thirty years after date, with interest at 5% from date, payable semi-annually on the days of and in each year, such

bonds to be out of a total authorized issue of ten million dollars in aggregate principal amount, all to be secured by mortgage and pledge covering all the property, real and personal, (except money) hereby agreed to be conveyed or transferred to Purchaser and upon all property to be acquired or produced by the money herein agreed to be paid by Vendor, and also upon all other property which may be acquired by Purchaser through the issue of any of said bonds or of any of its ten million dollars of capital stock; and to be further secured by provision requiring the payment of one hundred and sixty thousand dollars annually after five years into a sinking fund for retiring the bonds at not exceeding one hundred and five per cent. of par.

2. To deliver to Vendor, in certificates made out in such names and amounts as it shall request, preferred stock of Purchaser, of the par value in the aggregate of ~~three million seven hundred and five thousand dollars~~ four million one hundred and sixteen thousand five hundred dollars ($4,116,500), and common stock of Purchaser of the par value in the aggregate of four million nine hundred and ninety-nine thousand dollars.

The bonds and stocks aforesaid of Purchaser are to be delivered to Vendor upon receipt of deeds, transfers and other instruments, vesting in Purchaser the properties and rights hereby agreed to be so vested, which shall be within sixty days of the date hereof, and the money hereby agreed to be paid by Vendor to Purchaser shall be so paid within three years from the date hereof, in instalments from time to time as and when demanded by Purchaser by thirty days' notice; and it being understood that Vendor may obtain some part of the moneys

so to be paid by borrowing the same upon pledge of, or otherwise raising the same upon or with, any or all of the bonds and stocks of Purchaser coming to it, pursuant hereto; and that in these ways Vendor may be obliged to pay interest and commissions; it is further agreed between the parties hereto that all coupons upon the bonds deliverable to Vendor hereunder shall be payable as they mature, but that Vendor shall account for, and pay over to Purchaser the excess of the total amount of such coupon payments, during the period until full payment by Vendor to Purchaser hereunder, over and above the total amount so paid by Vendor for interest and commissions.

All provisions of this agreement are for the benefit of, and may be enforced by, the successors and assigns of the parties hereto respectively.

I N W I T N E S S W H E R E O F, said parties have executed this agreement in duplicate the day and year first above written.

McCall Ferry Power Co.
Segur. by W. F. Beyer
President

Attest: Geo. B. Nelson Secy

Susquehanna Contracting Co.
Segur. by A. P. Bartlett
President

Attest.
Ross A. Mackey
Secretary.

Agreement for Acquisition of Hutchinson Properties by Susquehanna Contracting Company

1148 ST&B 353

A G R E E M E N T made June 14th, 1905, between CARY T. HUTCHINSON, of the City of New York, hereinafter called Vendor, and SUSQUEHANNA CONTRACTING COMPANY, a corporation of New York, hereinafter called Purchaser.

Said parties, each in consideration of the agreements of the other herein, mutually agree as follows:

Vendor agrees to convey and transfer, or cause to be conveyed and transferred, to McCall Ferry Power Company, a corporation of Pennsylvania (or its nominees) with which Purchaser has agreed to cause these and other properties to be so conveyed, all the lands, riparian rights, islands, river bed, interests in lands, flowage rights, easements, releases of damages and real estate and water interests of every sort, in, along, upon or connected with the Susquehanna River between Columbia, in Pennsylvania, and Havre de Grace, in Maryland, belonging to any one or more of the following: Vendor, William F. Beyer, George B. Willson, the partnership formerly known as "York Furnace Power Company."

Purchaser agrees to issue and deliver to Vendor, or upon his order, in certificates made out in such names and amounts as Purchaser shall request, four thousand shares of the par value in the aggregate of four hundred thousand dollars of the preferred stock and forty eight thousand eight hundred and forty shares of the par value in the aggregate of four million eight hundred and eighty four thousand dollars of the common stock of said McCall Ferry Power Company, and also to pay to Vendor seven hundred and fifty thousand dollars in money.

Payment of said money shall be made to Vendor upon delivery of deeds and other instruments of transfer

conveying and transferring in accordance with the provisions hereof the properties hereby agreed to be so conveyed and transferred, which shall be within fifteen days from the date hereof, and delivery of certificates for said stock shall be as soon thereafter as the mortgage to secure the proposed bond issue of said McCall Ferry Power Company of ten million dollars in aggregate principal amount, shall be delivered, and not later than July 15th, 1905.

All provisions of this agreement are for the benefit of, and may be enforced by, the heirs, representatives and assigns of Vendor and the successors and assigns of Purchaser.

IN WITNESS WHEREOF said parties have duly executed these presents in duplicate the day and year first above written.

Guy T Hutchinson

Susquehanna Contracting Co-
by A. J. Bartlett
President

attest.
Lors A. Mackey
Secretary

AGREEMENT dated June 20, 1905, between CARY T. HUTCHINSON, of New York, hereinafter called "Vendor", and SUSQUEHANNA CONTRACTING COMPANY, a corporation of New York, hereinafter called "Purchaser".

WHEREAS Vendor heretofore made with Purchaser an agreement dated June 14, 1905, whereby Vendor agreed to transfer and convey, or cause to be transferred and conveyed, to McCall Ferry Power Company or its nominees certain lands, interests and other property and rights as in said agreement described, for all of which Purchaser agreed to pay to Vendor the considerations stated in said agreement; and

WHEREAS it has been agreed that this present agreement shall be made as part of the carrying out of the sale and purchase aforesaid:

NOW THEREFORE, in consideration of the premises and for the considerations of said sale and purchase, and to induce the same, Vendor hereby, for himself, his heirs, representatives and assigns, hereby guarantees and agrees to and with Purchaser, its successors and assigns, that all the taxes, charges, incumbrances, defects or other matters enumerated in the schedule hereto attached which affect some of the properties so being sold and purchased, shall be paid, discharged, cleared off and disposed of on or before August 1st, 1905.

IN WITNESS WHEREOF Vendor has hereunto set his hand and seal the day and year first above written.

Cary T. Hutchinson

SCHEDULE TO BE ANNEXED TO CONTRACT BETWEEN
CARY T. HUTCHINSON and Susq. & Penna Contracting Co.
DATED JUNE 20, 1905.

I.

Record in Lancaster and York Counties the following deeds made by partners interested in York Furnace Power Company:

(1) Frederick Shoff and wife to William F. Beyer, dated November 18, 1903.

(2) Deed from John W. Holman and wife to William F. Beyer, dated February 11, 1904.

(3) Deed from Walter M. Franklin and wife to George B. Willson and William F. Beyer, dated February 11, 1904.

II.

Make searches against Walter M. Franklin from January 1, 1899 to date, covering all premises in York and Lancaster Counties in which the York Furnace Power Company was interested.

III.

Taxes are due and payable about this time. The sums payable for taxes should be apportioned so that the vendor will pay the proportion from January 1, 1905 to date, and the purchaser the amount due for the balance of the year.

IV.

Coleman Tract, Lancaster No. 9.

The original release of damages for this tract was

limited in time for five years from this date. This release is turned over by Messrs. Beyer and Willson. Subsequently a new release was obtained, unlimited as to time. This release has not been conveyed by Messrs. Beyer and Willson. Mr. Beyer and his wife and Mr. Wilson should execute a conveyance of this release.

House Rock Fishery, Lancaster No. 12.

(1) Abstract and affidavits showing title of this tract are to be prepared by William F. Beyer. They should be submitted to Simpson, Thacher & Bartlett after their completion.

(2) Subsequently to the preparation of the abstract examined by Simpson, Thacher & Bartlett, it was discovered that an undivided one-half interest in the property had not been acquired by Messrs. Beyer and Willson when the original transaction took place. Deeds have now been obtained from two sources for this undivided one-half interest. These deeds run to George B. Willson as grantee. Mr. Beyer and his wife and Mr. Willson should execute a conveyance of these releases to Cary T. Hutchinson, and Cary T. Hutchinson and his wife should then execute a conveyance to the purchasers.

Rolandus Brubaker, Lancaster No. 13.

Cary T. Hutchinson should agree to hold purchasers harmless against any claim that might be made on behalf of lessees under a mineral lease made to Stouch et al for 15 years from 1899.

John T. Brubaker, Lancaster No. 14.

Wife of John T. Brubaker did not join in release to Cary T. Hutchinson. Release should be obtained from her.

Walton Tract, Lancaster No. 18.

I.

The following judgments are outstanding upon an undivided 1/24 interest in the property.

(1) Robinson v. Patton, $1,000, entered April 21, 1904.

(2) Rieker v. Patton, $1,000, entered Oct.17,1895.

Cary T. Hutchinson should agree to hold purchaser harmless against any claims arising on these judgments.

II.

There is a claim for dower in favor of widow of Samuel Ankrim, amounting to $324. outstanding upon this property. When Cary T. Hutchinson purchased this property he took a bond indemnifying him against any claim arising on account of this dower. William F. Beyer says that this bond is assignable. Bond should be assigned to the purchaser. (This same dower is also outstanding on Hartman's Island. Island Abstract No. 5).

Lewis and Thomas Creamer, Lancaster Nos. 20 and 21.

There are outstanding mineral leases on these properties similar in their general terms to lease mentioned under Rolandus Brubaker, supra, No. 13. Cary T. Hutchinson should agree to indemnify purchaser against any claims that might be asserted on behalf of lessees.

Stoner's Island, Island Abstracts Nos. 6 and 7.

I.

Submit proof that James Galen who conveyed to Krous and Frylye in 1901 was unmarried.

II.

Submit proof that Jacob M. Eshleman who conveyed

to William and Clayton Erb in 1900 was unmarried.

Josiah Haugh, York No. 7.

There is an outstanding dower interest on this property amounting to $92. in favor of Susan Detwiler. She is entitled to 6% on this amount, and principal is payable at her death to her heirs. This encumbrance should be removed, or some disposition of it made satisfactory to the purchasers.

Urey Farm, York No. 4.

I.

The record title to this tract became vested in Frederick Shoff, one of the partners in the York Furnace Power Company. He conveyed to William F. Beyer, who has conveyed to Mr. Hutchinson. This tract of land was acquired for the benefit of the York Furnace Power Company, all of the interest in which is now vested in Messrs. Willson and Beyer. They should execute a confirmatory deed in which Mr. Beyer's wife should join, and thereafter Cary T. Hutchinson and his wife should execute a new deed.

II.

The deed from Samuel Fulton to Frederick Shoff should be recorded in Lancaster County.

York Furnace Farm, York No.5.

Deed from Samuel Fulton, assignee of John Bair to John W. Holman should be recorded in Lancaster County.

Samuel B. and Milton L. Fry, York No.11.

I.

There is an outstanding dower interest on a portion

of the property in favor of the wife of Michael Donohoe, amounting to $264.48 1/3. The widow is entitled to 6% on this amount during her life and at her death the principal is payable to her heirs. This encumbrance upon the property should be removed, or some disposition should be made of it satisfactory to the purchaser.

II.

Release of dower in favor of Elizabeth Richardson should be recorded in York County.

John Stokes, York No. 12.

Affidavit of John Stokes as to adverse possession to be furnished.

Properties below dam in Lower Chanceford and Peach Bottom Townships.

Abstract of title for ~~their perfection~~ three properties to be furnished by William F. Beyer.

In consideration of the sums of one dollar and other valuable consideration, we the undersigned hereby agree to perform all of the obligations undertaken by Cain T. Hutchinson in the written agreement at our own cost and expense except those relating to the Amos Waters Road, Lewis Creamer & Hiram Creamer, and S. B. and M. L. Fry

W. F. Biggs
Geo. B. Williams

Dated June 20, 1905.

Stock Deposit Agreement, McCall Ferry Power Company

McCALL FERRY POWER COMPANY.

STOCK DEPOSIT AGREEMENT.

WHEREAS, the subscribers hereto deem it desirable, in view of the existing arrangements under which the construction of the works and plant of this Company is to be financed, that the stock of the Company should be held together and voted as hereinafter provided during the period of construction:

NOW, THEREFORE, each subscriber hereto, in consideration of the premises, of the agreements of the other subscribers hereto and of the acceptance by Messrs. Harvey Fisk & Sons of the duties of depositaries, and by the Voting Committee of their duties, hereunder, hereby agrees to and does deposit all the stock owned by him in said McCALL FERRY POWER COMPANY (being the number of shares written after his signature hereto) with Messrs. Harvey Fisk & Sons as depositaries under the following terms and regulations:

Stockholders are to duly assign their certificates for transfer to said Harvey Fisk & Sons, who are to procure transfers pursuant thereto and hold the stock until November 1, 1908, unless the works and plant of said McCALL FERRY POWER COMPANY should be completed and put in actual commercial operation prior to that date, in which case this deposit arrangement is to terminate then. It may also be terminated prior to said November 1, 1908, by the concurrent action to that effect (evidenced by written instrument duly acknowledged) of the depositors of two-thirds of all the stock deposited hereunder. Until the termination of this deposit arrangement, said Harvey Fisk & Sons are to vote each share of stock deposited hereunder, at every stockholders' meeting, as directed by a writing signed by the Voting Committee hereinafter provided for. Upon the termination of this deposit arrangement, said Harvey Fisk & Sons will turn over to the depositors respectively, or to their personal representatives or successors, certificates for the shares of stock deposited hereunder.

The Voting Committee to direct the voting of all stock deposited hereunder shall be Henry F. Dimock, William M. Barnum and S. Reading Bertron, all of New York; and any direction or other appropriate writing shall be deemed to be the act of such committee if signed by any two members thereof. In case any member of such committee shall die, resign or for any other reason cease to act as such, the remaining members shall, by writing to be filed with said Harvey Fisk & Sons, appoint a successor.

Said Harvey Fisk & Sons accept the duties of depositaries and said Voting Committee accept their duties under this arrangement as herein defined, and agree to act in these capacities respectively without compensation. Any of them may be depositors of stock hereunder.

IN WITNESS WHEREOF, said Harvey Fisk & Sons, said Voting Committee and the subscribers have severally set their hands and seals hereto this twentieth day of January, 1906.

NAME.	NUMBER OF SHARES.
	..... Preferred
	..... Common

For Value Received, Harvey Fisk & Sons hereby assign and transfer to Knickerbocker Trust Company, a corporation of New York, the foregoing "Bond and Stock Purchase Agreement," and all their rights and interests therein and thereunder, excepting and reserving, however, the right and option of said Harvey Fisk & Sons, as stated in said Purchase Agreement, to purchase the bonds covered thereby at ninety, which right and option remains in said Harvey Fisk & Sons unaffected by this assignment. We hereby certify that the subscriber to said Agreement has paid the first instalment of 20 per cent. of his subscription and no more.

NEW YORK,

McCALL FERRY POWER COMPANY.

STOCK DEPOSIT RECEIPT.

No. 100

.....Shares Preferred.

.....Shares Common.

HARVEY FISK & SONS hereby acknowledge the receipt from

.....

of certificates for ..... *shares of the Common Stock and* ..... *shares of the Preferred Stock of McCALL FERRY POWER COMPANY, to be held by the undersigned as depositaries under the terms and regulations of the Stock Deposit Agreement, a copy whereof is endorsed hereon.*

Dated New York, ... *190* .

Testimony of James H. Harlow Regarding Values of McCall Ferry Power Company Bonds and Common Stock. Susquehanna Power Company v. The Proprietors of The Susquehanna Canal, in the Circuit Court for Cecil County, January 28, 1907.

J. H. Harlow

Q At what price ?

A We received $200,000 in cash - 200 $1,000 bonds and 1,000 shares of stock at the par value of $100.

Q You still hold these bonds, you and your associates ?

A Yes, sir.

Q What do you consider them worth ?

A Well, that is a difficult matter to say.

Q Well, what would you take for them ?

A The Underwriters got them at 90 cents on the dollar.

Q Would you take 90 for them ?

A No, sir ; I don't think I would ; I think I would want par for them.

Q It would be fair to assume that they were worth 90 then, would it not ?

MR. WILLIAMS: Don't cross examine.

Q Well, in your opinion would they be worth 90 ?

A I don't think I could get 90, but I would not take 90 I don't think.

Q You would not take less than par ?

A No, sir ; I don't think I would.

Q And the stock ?

A That is such a prospective matter that I think 10 cents

J. H. Harlow

on the dollar would be enough for that.

Q That would be how much ?

A $10,000.

Q And taking the bonds at 90 would be how much ?

A That would be $435,000.

Q Including the cash ?

A Yes, sir.

Q $435,000 ?

A Yes, sir ; $435,000.

Q That would be a fair appraisement you think ?

A That would be fair I suppose.

Q Well, now Mr. Harlow will you tell me whether or not it is possible to construct a dam across the Susquehanna River at a point at or near Broad Creek ?

A It is.

Q That dam would be upon the land on each side of the river upon the land of the McCall's Ferry Power Company, wouldn't it ?

A If you put it above Broad Creek the west end would be on the property of the McCall's Ferry Power Co. ; if it ran right straight across, the east end would not.

Records of Bertron, Storrs & Griscom Re: Value of Stock and Bonds

PENNSYLVANIA WATER AND POWER COMPANY

M-1711
FILE
Referred to
Note, Advise
Check, Answer
Return to
Reopen

May 23, 1938.

Re: Determination of Original Cost

Messrs. Bertron, Griscom & Company, Inc.
40 Wall Street
New York, N.Y.

Attention: Mr. Joseph O. Adams,
Secretary and Treasurer

Gentlemen:

Mr. Gunn has advised me of his conversation with you last Friday, in which you requested formal communication from this Company before making a search of your files for old McCall Ferry Power Company material. As he probably told you, in order to comply with recent requirements of the Public Utility Commission of Pennsylvania and of the Federal Power Commission, this Company must establish the original cost of its property to the person first devoting it to public service. This makes necessary an exhaustive study of the old records having to do with the early history of the hydroelectric development at Holtwood, Pennsylvania.

The Pennsylvania Water & Power Company originated as a reorganization of the McCall Ferry Power Company. The latter Company was organized in 1905 for the purpose of developing hydroelectric power from the Susquehanna River near McCall's Ferry in Lancaster and York Counties, Pa.

We believe that your firm was active in preliminary development work which led to the formation of the McCall Ferry Power Company. We are endeavoring to ascertain the identity of the recipients of the McCall Company common stock and the nature and scope of any services that may have been rendered. Do your firm records of the period 1900-1910, inclusive, reveal ownership of any McCall Company stock or the nature of services rendered in connection with that company? If so, we will appreciate your

granting us an opportunity to examine any records that you have retained which relate to the affairs of the McCall Ferry Power Company and will be glad to bear any expense that our examination may occasion.

Very truly yours,

Jas. L. Rintoul,
Vice President.

JLR:DG:H

BERTRON, GRISCOM & CO., INC.
40 WALL STREET
NEW YORK

LAND TITLE BUILDING
PHILADELPHIA

CABLE ADDRESS
"BERTRON"
NEW YORK
BENTLEY'S CODE

May 27, 1938

Mr. James L. Rintoul, Vice Pres.,
Pennsylvania Water & Power Company
Lexington Bldg., Baltimore, Maryland

Dear Sir:

Your letter of May 23rd has been received and noted.

We are not able to be of a great deal of assistance to you in this matter, as several months ago we had all of our correspondence files prior to 1914 destroyed to reduce storage space. Mr. Bertron probably could give you some information from memory, but he, unfortunately, is ill at present. Upon his return to the office we will bring the matter to his attention.

Records of our firm investments show that on November 21, 1906 there was recorded the receipt of 1,875 shares of preferred stock and 12,462½ shares of common stock of the McCALL COMPANY. On December 11, 1906, 5000 shares of the common stock were transferred to Lee, Higginson & Co. On August 9, 1907, there is recorded the receipt of 150 additional shares of common stock from Charles D. Pullen. On December 28,1908 all of this common stock was written off. On November 9, 1908 there is recorded the receipt of 360 additional shares of preferred stock described as "from syndicate". On December 28, 1908, all except 160 shares of this preferred stock was written off.

On the sheet recording the charging out of these 2075 shares of preferred stock there is the following tabulation in the margin, which appears to relate to the entry:

To C. A. Coffin interest		775 shares
To Lee, Higginson & Company		1,025 "
Owe H. F. Dimock Sanderson & Porter M.W.D. T.H.McKittrick	not del.	275 "
		2,075 "
Less our		1,875 "
		200 "

2,235
Less 2,075
160

On a separate sheet there are recorded the following entries relating to the McCall Ferry Power Company preferred stock with the certificate numbers stated:

November 18, 1908..Received Certificate No. 243 for 1,100 shares
November 19, 1908..Transferred on Certificate No. 320 1,025 shares to Lee Higginson & Company
November 19, 1908..Certificate No. 321 for 75 shares received in the n/o Bertron, Storrs & Griscom.

Apparently Certificates No. 320 and 321 were exchanged for Certificate No. 243.

We understand from our conversation with Mr. Gunn you have a record of our ownership of eighty (80) McCall Company bonds.

I hope that the above information will be of assistance to you, pending Mr. Bertron's return.

Very truly yours,

Secretary and Treasurer

JOA:L

RICHARD S. STORRS
BLUE MOUNTAIN LAKE
NEW YORK

July 21, 1938

Mr. James L. Rintoul, Vice President
Pennsylvania Water & Power Company
Lexington Building
Baltimore, Maryland

Dear Sir:

Your letter of the 18th instant addressed to my son, Richard S. Storrs, Jr. is forwarded here for my reply. It deals with the McCall Ferry Power Company and asks for information concerning its earlier history as dealt with by Bertron, Storrs & Griscom.

There are absclutely no records in my possession concerning this Company nor does my memory recall any detail concerning its early history. I am sorry I cannot be of service to you.

If any records exist they are in the files of Bertron, Griscom & Company. Mr. Bertron died within the month. He had most to do with the McCall Ferry Power Company and the negoitations dealing with its formation.

Regretting my inability to serve you I am,

Very truly yours,

Richard S Storrs

November 21st 1906

17

188	Stock						30	21	50		
391		Pd.								30	21	50
		1 Bull at Ogd	18	50	@ 10	10	70				
		12 Hfrs & Cows	13	45	50	13	45				
		Mc Calls Ferry Landing.									

19

November 24th 1906

188	Stock						1	000			
391		Pd.								1	000
		transmt entry Mc Calls Ferry Wis									

32

Feb 11th 1907

Dec 11th 1906

	139										
	392	Pst. & c									
	168	Stock									
	392										

Friday August 9-07

✓	Exp. Va. valley Min. Stocks. Zeffirin				10				
✓	do Va. Calcium Trans. Coll. a.				16	75			
✓	SRB do				27	50			
✓	M.L.D. do				30	0			
✓	B.R. A. & Phillips Va. add'l wts. demand				100				
✓	Stock 150 McCall Com. A/c Edward Pullen				75	0			
✓	N.Y. Trust Co.	325.							
		172.							
					497				
✓	Exp. Va. Note Check					30			
✓	Min. W. Cash	20.							
✓	" " "	22.							
✓	A. M. "	8.							
✓	A. M. "	6.							
✓	A.T. Lewis	25.			81				
✓	Cash						1	461	80

PAGE 1

McDalls Ferry Co. Preferred Stock

STOCKS

DATE	DESCRIPTION	DR.	CR.	BALANCE				
APR-1 [illegible]				93750	1875	So		
Dec 31	2 Valuation 25		46875	46875	1875	25		
Nov 9 1908	From Syndicate			93750	3375		46000	J. E. & A. Griffin Interest 775
Dec 28	To Chg. out all		46875		1650			Lee Heyman 1025
								[illegible] N.Y. Biscuit
								[illegible] Pfizer middle 275
								N.W.B.
								[illegible]
								2875
								1375
								200

PAGE 1

McDalls Ferry Co. Common Stock

STOCKS

DATE	DESCRIPTION	DR.	CR.	BALANCE				
APR-1 [illegible]				76125	[illegible]	10		
Aug 9	From Chas D. Pullen	750		76875	[illegible]		10005	
Dec 31	To Valuation all @ 10	750		76125	[illegible]	10		
Dec 28 1908	To Chg out all		76125					

PAGE

Mc Call Ferry Power Co. 5% June - December 1st

DATE 1908	DESCRIPTION	DR.	CR.	BALANCE			
Nov 9	From Syndicate	71037.33		71037.33	80	90	Bonds
Dec 28	To Valuation 90	96267		72000			
31	"		72000				

PAGE

BONDS

Mc Calls Ferry Power Co 5% Jun-Dec 1st

DATE 1909	DESCRIPTION	DR.	CR.	BALANCE			
Jan 1				72000	80	90	
Dec 31	Deposited with Reorganization Com for which we received 40% New Bonds and 60% Stock		72000				

Correspondence With Bertron, Griscom & Company Re: Value of Stock and Bonds

BERTRON, GRISCOM & CO., INC.
LAND TITLE BUILDING
PHILADELPHIA

40 WALL STREET
NEW YORK

RECEIVED
FILE
REPLY
ANSWD
DATE
OPEN

December 4, 1939

Pennsylvania Water & Power Company
Lexington Building
Baltimore, Maryland

Attention: Mr. Gunn

My dear Sir:

Referring to the draft of the letter addressed to the Pennsylvania Water & Power Company which you want me to sign, together with the story of the transaction, I have read both with interest and now advise you that I don't care to sign the letter.

I have no quarrels with any part of this statement, but so many years have elapsed that I have no recollection that would justify me in making and swearing to any statement such as you ask.

Very truly yours,

Bertron, Griscom

REG/E

RECEIVED
DEC 5 1939
CHIEF ENGINEER

Draft of Letter from Mr. Griscom

Attention of Mr. Gunn

Pennsylvania Water & Power Company,
Lexington Building,
Baltimore, Maryland.

Dear Sirs:

You have asked me for a sworn statement of the participation of my firm, then known as Bertron, Storrs & Griscom, in the financing in the spring of 1905 of McCall Ferry Power Company.

My firm commenced as head of the underwriting group but eventually took a position junior to that of Harvey Fisk & Sons who took over leadership of the financing. We received an aggregate of 12,462½ shares of Common Stock of the Company out of which we delivered to Lee, Higginson & Co. 5,000 shares for their participation, leaving us 7,462½ shares as our compensation as bankers or underwriters. At this late date it is difficult for me to recall what value we placed upon the Common Stock of McCall Ferry Power Company in the spring of 1905. However, I do recall that the prospects for the enterprise at that time were very bright and that the best engineering and operating talent were engaged to carry out the enterprise. All of the people who were familiar with the undertaking felt confident that substantial earnings on the Common Stock would

2

be available in a reasonably brief period and it is my ~~best estimate at this time~~ opinion that a valuation of between $ and $ a share in 1905 would not be out of line with the consensus of opinion of those best qualified to make a valuation.

Very truly yours,

Subscribed and sworn to
before me this day
of , 1939.

BERTRON, GRISCOM & CO., INC.
40 WALL STREET
NEW YORK

CABLE ADDRESS
"BERTRON"
NEW YORK
BENTLEY'S CODE

LAND TITLE BUILDING
PHILADELPHIA

December 8, 1939

Donald Gunn, Esquire
Pennsylvania Water & Power Co.,
1600 Lexington Building
Baltimore, Maryland

Dear Mr. Gunn:

Mr. Griscom sent me a copy of his letter to you and I am sorry I was not successful in my efforts to get for you the letter you wanted.

Mr. Griscom returned the papers to me and I will hold them here for you until the next time you are in New York.

Sincerely yours

JOA:L

FORM MD 55

PENNSYLVANIA WATER AND POWER COMPANY

FILE M-1711-3952
Referred to
Note, Advise
Check, Answer
Return to
Reopen

January 8, 1940

Re: Determination of Original Cost -
McCall Ferry Power Company

J. O. Adams, Esq., Secretary and Treasurer
Bertron, Griscom & Co., Inc.
40 Wall Street
New York, New York

Dear Mr. Adams:

We have received Mr. Griscom's letter of December 4, 1939 stating that he could not at this time estimate for us the value of McCall Ferry Power Company Common Stock which was received by your firm at the time the stock was received. We also have received your letter of December 8, 1939 referring to Mr. Griscom's inability to estimate this stock value for us, and stating that you would hold at your office our Company's records which you and I used in preparing the facts which were submitted to Mr. Griscom. I expect to be in New York shortly and will call for these records.

We take it that since Mr. Griscom was unable to give us a direct estimate of the value of this stock at the time it was received by your firm, and in view of the fact that he is the only living member of the firm who was familiar with the enterprise at that time, the possibility of your firm giving us an estimate of this value has been exhausted. There are, however, one or two points in connection with the amounts at which your firm carried these stocks on their books, in connection with which we would like to have your advice. Your records show that the Common Stock was carried from time to time at amounts ranging from $1 up to $10, and that the Preferred Stock was carried at amounts ranging from $10 up to $50. It would be helpful to know which of these amounts represented the appraisal by your firm as to the actual value of these stocks when they were received.

Our need for the foregoing information arises from the fact that the regulatory authorities require that we establish the value of these stocks in connection with the determination of the original cost of the Company's property.

CC: Messrs. J.A. Walls, J.L. Rintoul, F. A. Allner, M. B. Higgins

2

J. O. Adams, Esq.
January 8, 1940

We are sorry to make repeated requests for your assistance in this matter as we realize that they are bothersome and make demands upon your time. However, if you can give us an explanation in connection with the foregoing matters, it will assist us materially in interpreting the information we have obtained from your firm's records, which it is very doubtful if we can do without your assistance.

Very truly yours,

Donald Quam
Assistant to Chief Engineer

DQ:J

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REFER
ANS'D BY
DATE
CABLE ADDRESS "BERTRON"
BENTLEY'S CODE

BERTRON & CO., INC.
40 WALL STREET
NEW YORK

LAND TITLE BUILDING
PHILADELPHIA

January 9, 1940

Pennsylvania Water & Power Company
Lexington Building
Baltimore, Maryland

Attention: Mr. Donald Gunn
Asst. to Chief Engineer

Gentlemen:

Your letter of January 8th is received. I am not surprised that Mr. Griscom has no recollection of details regarding the McCall Ferry Power Company transaction. I believe Mr. Bertron originated and handled this deal. Unfortunately, his death on June 30, 1938 has removed any possibility of obtaining information which he might have recalled and which I hoped he could furnish, as stated in my letter of May 27, 1938. I was never able to discuss any business matters with him after that date as he died at the end of June 1938.

Due to the fact that I was not in the employ of Bertron, Storrs & Griscom at the time of the McCall Ferry Power Co. transaction, it is impossible for me to state which, if any, of the recorded amounts represented the appraisal by the firm as the actual value of the stocks when received. It would appear to me that the partners placed various arbitrary amounts in the McCall Ferry Power Co. stock accounts, as well as in other stock accounts, probably in accordance with understandings or agreements between them.

Hoping the above may be of some assistance to you, we are

Very truly yours,

BERTRON & CO., INC.

Secretary-Treasurer

JOA:L

RECEIVED
JAN 10 1940
CHIEF ENGINEER.

Hopkins' Affidavit, Correspondence Re: Coudert Bros.' Fee for Legal Services

STATE OF NEW YORK,)
) ss.:
COUNTY OF NEW YORK,)

JAMES E. HOPKINS, being duly sworn, says:

I first became associated with the law firm of Coudert Brothers in 1899 and was acquainted with and worked with Lorenzo Semple until his death in 1928. Mr. Semple was a member of the firm for over thirty years and during that time was certainly one of the outstanding lawyers in the City of New York.

Mr. Semple was a friend of and personal attorney for Dr. Cary T. Hutchinson and represented and advised him and his associates in connection with a development on the Susquehanna River for hydro-electric power generation. Mr. Semple was not only an especially capable lawyer, but was gifted with an unusually keen sense of business ability and judgment. Because of his outstanding position, his time and advice were at a premium and commanded substantial fees. In handling his cases, he was very thorough and spent a vast amount of time in studying the various aspects of the problem and the law pertaining thereto. He rendered formal opinion only after very careful study and research and continually revised and redrafted his plans for a proposed corporation - such as the McCall Ferry enterprise. When he undertook a case, it was his custom to work on it continually, frequently working until late at night.

An examination of the firm's files has established that several hundred letters were written by Mr. Semple in connection with this Susquehanna River development including several opinions which necessarily required a thorough study of Pennsylvania corporation law and court decisions. Mr. Semple

worked on the McCall project over a period of more than four years prior to the incorporation of the McCall Ferry Power Company.

From the character and volume of work done by Mr. Semple on the McCall project during these years; my knowledge of Mr. Semple's status in the firm at that time; the firm's method of reckoning its fee on work of this character; and the rate at which fees were charged for work on which Mr. Semple was engaged; it is my opinion that the firm's fee for services rendered in connection with the McCall Ferry Development prior to the incorporation of the McCall Ferry Power Company would have been not less than $50,000. This amount would be in addition to a fee of $5,000. which was paid by the McCall Company after that Company was formed. This latter payment was made to the firm for services rendered during the five months following the formation of McCall Company, at which time Simpson Thacher & Bartlett became principal counsel for the company. This change in legal advisors came about as the result of control of the enterprise vesting in Harvey Fisk & Sons and other bankers rather than in Dr. Hutchinson and his associates.

The fee received by our firm from Dr. Hutchinson for services prior to the incorporation of McCall Ferry Power Company was paid with $20,000 cash and 1,000 shares of common stock of the McCall Ferry Power Company. I am not qualified to place a value on that stock as such, but I believe and am of the opinion that the services rendered warranted a charge of at least $50,000 and that unless the firm had believed that

the $20,000 cash, plus the 1,000 shares of stock, were equivalent to this amount, they would not have accepted it as payment for their services.

James E Hopkins

Sworn to before me this
5-14 day of December, 1939.

Frederick M. Shea

GENEVIEVE M. SHEIL
NOTARY PUBLIC, Kings County
Clk. No. 361, Reg. No. 3[illegible]
Certificate filed in New York Co.
Clk. No. 565, Reg. No. [illegible]
Commission expires March 30, 1940

CARY T. HUTCHINSON
CONSULTING ELECTRICAL ENGINEER
ROOM 2407-60 WALL STREET
NEW YORK CITY
TELEPHONE CONNECTION

June 26, 1905.

Lorenzo Semple, Esq.,
71 Broadway,
New York City.

Dear Semple:-

I am very glad that the occasion has arisen for sending you the enclosed cheque for $20,000; Mr. Dimock tells me that he and you have agreed on a basis of $20,000 and $100,000 stock of the Company.

I feel that a large portion of our success is due to your efforts in the matter, and I congratulate myself that I got hold of you in the first instance.

Yours very sincerely,

Cary T. Hutchinson

Enc.(1)

June 27th, 1905.

Cary T. Hutchinson, Esq.,
No. 60 Wall Street, City.

My dear Hutchinson:

I have your check for $20,000. and confirm Mr. Dimmock's statement that we have agreed on the basis of $20,000 and $100,000 in stock of the Company. I thank you very much for the check and equally as much for the kind expressions contained in your letter.

Yours sincerely,

REPORT

to the

BOARD OF DIRECTORS

of the

SUSQUEHANNA WATER POWER CO.

-----o-----

CARY T. HUTCHINSON,
Chief Engineer.

Wm. BARCLAY PARSONS,
Consulting Engineer.

August 7, 1905.

CARY T HUTCHINSON
CONSULTING ELECTRICAL ENGINEER
ROOM 2407-60 WALL STREET
NEW YORK CITY
TELEPHONE CONNECTION

August 7, 1905.

To the Board of Directors,

Susquehanna Water Power Co.: ---

Gentlemen:-

This report is intended to give a general statement of the present status of the affairs of your Company; the statements made and recommendations have the approval of every member of your Advisory Board of Engineers, although owing to the absence from the City of three members, it is signed only by your Chief Engineer and Consulting Engineer.

This project, as originally undertaken, was to construct a dam at or near McCalls Ferry, Pennsylvania, having a crest elevation of 155 feet above mean sea level which, with the necessary power house and equipment, will have a capacity to deliver 50,000 horse power to Philadelphia or Baltimore, or any point within the tributary territory. It was understood at the outset that it was possible to build a larger plant; no representations, however, were made for the larger plant, since the building of the higher dam necessary was dependent upon the consent of the Pennsylvania Railroad Company to the elevation of the tracks of the Columbia and Port Deposit Railroad, owned by it, to a height of about forty feet above the present grade. Immediately after the project was placed, this matter was taken up with the Pennsylvania Railroad Company, with the result that the Company has consented, informally, to

elevate its tracks to the required height, at the expense of your Company. The Chief Engineer of the Pennsylvania Railroad Company estimates the cost of this work to be $580,000, a sum only $180,000 in excess of the amount included in the original estimates for the dam at an elevation of 155 feet necessary to protect the tracks of the Railroad at their present elevation from floods.

This unexpectedly favorable estimate by the Pennsylvania Company makes it necessary to consider the construction of the higher dam; it is the principal object of this report to give the costs of this undertaking for three heights of dam, that is, elevation at 155, 170 and 185 feet.

In order to secure control of the river, your Company has purchased the property formerly known as the Peach Bottom Development; the ownership of this property brought up the question of the most favorable location for the dam within the entire range of territory owned. Your Advisory Board made a careful examination, with estimates, of the cost of a power development, for the dam located at the three possible points, and unanimously recommends that the dam be placed on the McCalls Ferry site.

The economical development of this river is for a discharge several times greater than the lowest known discharge; under these circumstances it is necessary to supply a part of the power by steam during the season of low water. The auxiliary steam power may be furnished by a plant built by your Company or arrangements may be made with customers of your Com-

pany for the use of the customers' steam plant. Negotiations have been begun for the sale to Baltimore interests of approximately 25,000 horse-power at a profitable price, one condition of the agreement being the use of their steam plants in Baltimore; these steam plants are more than sufficient to supply the needs of your Company for steam auxiliary for its entire output. If a contract of this kind be made, there will then be no occasion for your Company to invest money in an auxiliary steam plant, and the amount so included in the original estimates of the cost of this project will be left for other use. There is practically no question that such an arrangement can be made on good terms, it being obvious that it is to the advantage of both interests to avoid the duplication of investment involved in the construction of a steam plant by your Company.

Our estimates of the total cost of the project, including all property, construction and equipment, right of way for pole lines to Philadelphia and to Baltimore, transmission lines and buildings all complete for delivery of power to Philadelphia or Baltimore, but excluding auxiliary steam plant in all cases, including interest during construction, are as follows:

Elevation 155 ft.	$6,750,000
" 170 "	7,600,000
" 185 "	8,500,000

4

The capacity of the power plant will be as follows:

Elevation 155 ft.	50,000 horse-power
" 170 "	60,000 " "
" 185 "	75,000 " "

And the investment per horse-power will be ---

Elevation 155 ft.	$135
" 170 "	126
" 185 "	113

The surplus after charging off operating expenses, interest and sinking fund in bonds, will be ---

Elevation 155 ft.	$418,000
" 170 "	485,000
" 185 "	820,000

The surplus per horse power will be ---

Elevation 155 ft.	$ 8.33
" 170 "	8.10
" 185 "	10.90

Comparing elevations 155 and 185 feet, the additional 25,000 horse power is obtained for $1,750,000, equal to $70 per horse power, and the increased surplus after paying all charges is $302,000.; that is, this additional investment earns 18 % plus interest and sinking fund,---a total of more than 25 %.

In view of these estimates and the impossibility of later on developing the power that is lost by failure at this time to build the dam to the highest possible point, we recommend strongly that the dam be now built to a crest

elevation of 185.

For various reasons, there has been a delay of more than two months in beginning this work. Your financial arrangements have been made on the basis of a three-year period; if the time of the completion of work is prolonged beyond this three-year period, another year will be necessary for the completion of the work. The cost to your Company of this year for interest charges will be approximately, $400,000; it is, in our opinion, urgent that this work should be undertaken at the earliest possible moment.

We believe that all conditions being considered, the lowest cost of work and the greatest expedition, can be attained by your Company doing the work itself, eliminating contractors entirely, but employing the best contracting firm that can be found, for a fixed fee, to do the work under its direction and at its cost. The employment of such a contracting firm is in lieu of getting together an organization by your Company. Several well-known contracting firms have been asked to name the fee for which they will do the work on this basis and have submitted bids. We strongly recommend your Board to do the work by this method, and in case of a decision so to do the work, we are prepared to submit to your Board the proposals that we have received.

The alternate method of doing the work, is to issue plans and specifications in sufficient detail to represent the work fairly and to get bids from responsible contractors

for the work on the unit price basis. We have prepared such plans and specifications, and if so directed by you, can obtain bids within one month from date of issuance of specifications. This time is necessary to enable the contractors to examine the site of the proposed work and to collect the necessary local information.

We believe that this will be a more costly way to do the work, will take more time and that it has no advantage of any kind over doing the work by the Company directly, the sole apparent advantage of the contract method being the assumption that a contractor can be found of sufficient financial strength to stand back of his losses, if such there be. Experience, however, of other work of this character has proved that there is no such contractor and that the insurance feature of the contract is deceptive.

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We therefore recommend to your Board,

1. That the dam be built at a crest elevation of 185 feet.

2. That the Company do this work itself, as in manner described above; that every effort be made to begin work by September first.

Messrs H. L. Cooper, F. O. Blackwell and Charles T. Main, the other members of your Advisory Board, all of whom have been consulted either personally or by letter, concur in these recommendations.

Very respectfully,

Capt Hutchinson
Chief Engineer.

Wm. Barclay Parsons
Consulting Engineer.

August 7, 1905.

McCALL FERRY POWER COMPANY,
60 Wall Street, New York,
September 11, 1905.

Report of Board of Advisory Engineers.

H. F. DIMOCK, Esq., President.
McCall Ferry Power Company.

DEAR SIR.—Under the direction of your Executive Committee, your Chief Engineer issued specifications and a call for bids on August 11th, for the construction of a dam at elevation of 185 feet, and sub-structure of a power-house at McCall's Ferry. The invitation to bid was issued to the following:

Westinghouse, Church, Kerr and Co.
T. A. Gillespie Co.
J. Breuchaud.
Sanderson and Porter.
J. G. White and Co.
Arthur McMullen and Co.
MacArthur Bros. Co.
Atlantic, Gulf and Pacific Co.

On September 2nd the following bids, in strict accordance with the specifications, were received:

Arthur McMullen and Co.	$2 538 700
Sanderson and Porter	2 950 200
J. G. White and Co.	3 134 300
MacArthur Bros. Co.	3 630 500
Atlantic, Gulf and Pacific Co.	4 051 500

In addition to these bids, J. G. White and Co. made two

informal bids,—the first for $2 500 900, based on one year's additional time to do the work, the second for $2 377 600, on one year's additional time and requiring the Company to take over at the completion of the work a double track railroad from the dam site to Havre de Grace, that it proposes building for construction purposes, and to pay $160 000 for it.

Westinghouse, Church, Kerr and Company, the T. A. Gillespie Company and Mr. Breuchaud declined to bid.

Your Board of Advisory Engineers has considered these bids, and begs leave to report as follows:

The bids are based on the supposition that the dam can be built at an elevation of 185 feet. This elevation was fixed by your Board on the assumption that a substantial agreement had been reached with the Pennsylvania Railroad Company regarding the removal of its tracks. Since then a difference in the views of the officers of the Railroad Company has developed, and possibly there will be a delay in reaching a satisfactory agreement. The correspondence with the Railroad Company, showing the status, is given further on. In our opinion it is, therefore, only fair that all these bids should be rejected and the deposits of $10 000 be returned to each of the contractors, and we so recommend.

The regular bids requiring completion in two seasons, vary from a minimum of $2 538 700 to a maximum of $4 051 500. The details of these bids, together with the letters accompanying them, are attached to this report. The estimate prepared by the Chief Engineer, and approved by the Consulting Engineer of this Company, amounts to $2 338 500.

A letter has been received from Mr. Breuchaud,—the contractor for the new Croton dam, one of the largest dams ever constructed,—in which he declines to bid, and states his reason. On account of the importance of this letter, we quote it in full:

3

(Copy)

J. BREUCHAUD,
Contractor,
Mem. Am. Soc. C. E.
Yonkers, N. Y.

Sept. 1, 1905.

CARY T. HUTCHINSON, Esq.,
Consulting Electrical Engineer,
60 Wall St., New York.

DEAR SIR.—I wish to thank you for remembering me among those whom you have asked to bid on the construction for the dam for the Susquehanna Water Power Co., near McCall's Ferry. I have given the project much thought, and find that the sum which I would name in my bid is so great that I have decided not to make a proposal. But I would like to say that I have visited the site of the dam, and my representative, Mr. B. Goldsborough, has spent four days there, studying local conditions. The plan which I feel is best suited to meet these and the one which I should adopt and which I feel sure would meet with your approval were I to do the work and assume the risks outlined in your proposed contract, would bring my bid if made to $3 909 812. The possibility of an extraordinary flow of water during the first or second season, makes it necessary to add one year's penalty to the bid, which, with the possible loss of one set of coffer dams, accounts for this high figure. Under average conditions, as shown by the flow of the river during the last fourteen years, the same work could be done for $2 321 000, and with favorable conditions, I think the cost might be reduced to about $2 000 000.

If, after considering your bids, you should then have an inclination to do the work as outlined in your letter of June 28th, 1905, I would be pleased to confer with you.

My experience in constructing the new Croton Dam and other difficult work would be of great service in enabling me to handle the very difficult conditions which exist at McCall's Ferry, and the approaching completion of the new Croton Dam would enable me to make use of the organization which from years of service there has become so nearly perfect.

Yours very truly,
(Signed) J. BREUCHAUD.

By this letter you will see that after a careful examination both of the plans and of the site, Mr. Breuchaud believes that

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the work might be done for $2 000 000, or should be done for $2 321 000,—practically the Engineers' estimate. On account of Mr. Breuchaud's experience, these figures are a gratifying confirmation of the estimate. Mr. Breuchaud goes on to state, however, that if he were to bid under the terms of the contract submitted to the bidders, in which he would have to guarantee all possible contingencies that might arise, his bid would amount to $3 909 812. In other words, Mr. Breuchaud adds $1 600 000 to what he considers a fair estimate solely for reasons of insurance, equal to the full amount of the total possible risk. The Atlantic, Gulf and Pacific Company has stated to your Chief Engineer that in making its bid, it has added $550 000 to cover a possible penalty for one year's failure to complete the work, and $250 000 to cover possible loss of plant,—a total of $800 000 for insurance for these two items alone; the bid of this company differs from the bid that Mr. Breuchaud would have made by only $200 000. Other bidders have made similar statements to your Engineers to the effect that they too have added to what they consider a fair cost, sums of large amount to cover all extraordinary contingencies. They have also stated, quite independently of Mr. Breuchaud, that they believed that this work should be completed for a sum between a minimum limit of $2 000 000 and a maximum limit of $2 500 000, practically the sum that has been estimated, so that the letter of Mr. Breuchaud may be taken as representing the views not only of himself but of the various bidders. There is also a very material sum included in these bids for contractor's plant adapted to the needs of the remainder of this work,—that is, to the buildings and equipment, so that the entire contractor's plant is, in the bids, charged against, say one-half of the work. In your Engineers' estimate the cost of plant was distributed over the whole work, dam, power house, machinery, etc.; some allowance should be made for this.

This work is one of uncertainty in its execution, and no contractor of means and repute will be willing to make a contract for a fixed sum unless he has included in such sum the maximum amount to cover all accidents and contingencies

that can possibly be imagined; in other words, under a contract this Company is compelled to pay for the sum total of all possible accidents, that is, it binds itself to pay the maximum cost under the worst conditions, whereas in all human probability such a succession of accidents and contingencies as are implied in this excessive sum will not occur; the Company, therefore, cannot possibly come out advantageously by such an arrangement, and gives up all chance of benefits that would accrue to it from the average conditions which have existed for the last fifteen years. Furthermore, it is almost certain that during the progress of the work, as experience is gained, means can be found for the better carrying on of the work, and improvements in methods not now foreseen will be effected. Under a fixed contract the benefit of all such improvements will go to the contractor; under the plan recommended by this Board, all such benefits will accrue to the Company; in order, therefore, to obtain insurance against a maximum total cost the Company would have to pay as much as 100 per cent. insurance premiums under the estimated bid of Breuchaud. Although these contractors are all reputable it must be borne clearly in mind that, in all similar work, when the contractor finds himself threatened with a heavy loss, he either stops work and gives the company an opportunity to bring suit to collect on his bond,—a long and tedious proceeding,—or, as is usually the case, he compromises; the loss is never borne by the contractor in full.

In our opinion, the advantages of the plan that we recommend are:

1. The possibility of the Company starting work promptly, and without the preparation of detailed plans.

2. The ability of the Company to change the plans and methods of work as the work progresses and as circumstances arise.

3. The fact that the Company will reap the benefit of all improvements in methods and alterations in the plans.

4. The fact that there is no incentive to the contractor to slight the work.

Or, briefly, better results at less cost.

On the other hand, the only advantage claimed for the fixed sum plan is the assumed insurance against excessive cost.

In view of these bids and the letters and statements of the bidders, this Board strongly recommends to the Board of Directors the building of this dam and the dependent works by selecting some constructor of ability and experience, and paying him either a fixed bonus or a bonus plus a portion of such saving as he can effect below a previously agreed on maximum.

Very respectfully,

BOARD OF ADVISORY ENGINEERS

WM. BARCLAY PARSONS, Chairman.
CARY T. HUTCHINSON,
HUGH L. COOPER,
F. O. BLACKWELL,
CHAS. T. MAIN.

Wm. Barclay Parsons Chairman
Cary T. Hutchinson
Hugh L. Cooper
F. O. Blackwell

Correspondence Re: Relocation of C. & P. D. R. R.

November 1, 1905.

A. J. Cassatt, Esq.,

President of the Pennsylvania Railroad,

Broad Street Station, Philadelphia, Pa.

Dear Sir:-

I am in receipt of yours of October 31st, giving me your ideas of what your railroad should receive in case you permitted it to be moved, as we requested. It is needless to say that I am very much disappointed, and if this really is your ultimate conclusion on the matter, we shall be obliged to build the lower dam, as we had first contemplated.

Our scheme was financed on the theory that we should build the lower dam. When subsequently we saw an opportunity to build a higher dam, if your railroad was moved, we, of course, found that the cost of the dam itself would be very much increased, but when we received the estimates of your chief engineer, as to what your present railroad could be duplicated for in the new place, we made up our mind that we should still have money enough to build the increased dam, and pay the amount he indicated as the cost. Your present idea would add so much to that sum that we could not bring it within our means, and there is no way that we could raise enough money, even if we thought it was well to do so to enable us to accomplish this. If you stand, therefore, inflexibly on that amount, it would be beyond our power, and we shall be obliged to proceed upon our original plans.

I will have the matter carefully gone over, and see if

there is any possible opportunity for us to advance anything within our means. We had supposed that the advantage to the Pennsylvania Railroad of having the same kind of a railroad as it now has in a place so much better than it is now, would make it very desirable for your railroad to have it done, and we have understood that that was the opinion of all connected with your railroad until we received your own ideas on the subject.

Yours very truly,

H. F. Alexander

McC. F. P. C. No. 1

The Pennsylvania Railroad Company

Office of the President

General Office
Broad Street Station

Philadelphia, December 6th, 1905.

Mr. Hugh L. Cooper,
Manager of Construction,
McCall Ferry Power Company,
60 Wall St., New York.

Dear Sir:

Your telegram of to-day is at hand. I did not understand that you were waiting for us to submit a proposition.

When you were here last I proposed that your Company should build the new line between Shenk's Ferry and Fishing Creek, connecting with the old road with a 0.3 grade; the graduation and masonry to be for double-track, but a single track only to be laid by you. I further offered to refund to you a part of the increased cost that you would incur for the graduation and masonry for the second track whenever we made use of it by laying track upon it. I now have to propose that the sum we pay you in accordance with the above be $200,000.

We are willing to make the same arrangement with reference to your development at Conowingo, you to do the grading and masonry on the new line for a double track and lay one track on it, we to pay you $175,000. when we make use of the second track grading by laying a track on it.

Mr. Brown estimates the cost of the new line, with grading and masonry for double-track, between Shenk's Ferry and Fishing Creek,

with one track laid on it at $1,437,520.00, and of the line between Fishing Creek and Canal Station, also with grading and masonry for double-track and with a single track laid on it, at $2,127,500.00. You understand, of course, that these are simply estimates of cost, and we expect you to do the work whatever it costs and to obtain the right-of-way at your expense.

Yours truly,

President.

Contract With Cooper for Hydraulic Construction

THIS AGREEMENT made and entered into this 18th day of October, 1905, by and between McCALL FERRY POWER COMPANY, herein called the "COMPANY", a corporation organized under the laws of the State of Pennsylvania, and having its principal office at 60 Wall Street, New York City, and HUGH L. COOPER, herein called "COOPER", a Consulting Engineer, with business offices at 60 Wall Street, New York City,

WITNESSETH:

WHEREAS the Company is about to construct a dam and power-house on the Susquehanna River near McCall's Ferry, in the State of Pennsylvania, with complete hydraulic and electric equipment and transmission lines to such points as it may select, and wishes to retain the services of Cooper in this work,

NOW, THEREFORE, in consideration of the payments and agreements hereunder, it is mutually agreed:

1. The Company agrees to employ and hereby does employ Cooper as "Hydraulic Engineer" and "Manager of Construction", of the works at McCall's Ferry, and Cooper agrees to serve in this capacity under the Company and its officers, for the term of this agreement.

2. Cooper's duties under this agreement shall include the preparation of plans and specifications for the works and for the method to be followed in the construction of the works, all of which plans and specifications shall be subject to the approval of the Chief Engineer of the Company. His duties shall also include the superintendence of the building of the dam, power-house and other buildings, embankment walls, protecting walls, the railroad changes, and all work at or near McCall's Ferry incidental to the development of a complete hydro-electric plant, including the entire hydraulic equipment of the plant; but Cooper's duties shall not include the design or superintendence of the electrical equipment of the plant, of the transmission lines, or of the sub-stations.

3. The term of this agreement shall be until the entire construction of the dam, buildings and all hydraulic works of the plant is completed, and ready for permanent operation.

4. Cooper agrees also to supply to the Company such part of the organization now working at Niagara Falls for the Electrical Development Company as may be sufficient to carry on the work at McCall's Ferry at the rate contemplated under this agreement; and if this organization is not sufficient, as determined by the Chief Engineer, Cooper agrees to supplement it by the best available men. All such persons shall be paid by the Company, except Value.

5. Cooper agrees also to supply the services of Beverly R. Value, now at Niagara Falls, as "Engineer in Charge" of the work at McCall's Ferry, and agrees for Value that his services shall be continuous, and that his entire time shall be given to this work. In case of incapacity, sickness or death of Value, Cooper will then supply a substitute for Value who shall be satisfactory to the Company; Cooper agrees to pay the salary of Value, or of his substitute. The term of Value's services shall be conterminous with Cooper's.

6. It is agreed that Cooper shall not be called upon to give his entire time to this work, but that he shall give as much time as is necessary, in the opinion of the Chief Engineer, for the completion of the work at the earliest possible date, and that he will undertake no other work which will conflict in any way with the prompt and economical execution of this work.

7. Cooper shall select and be responsible for all employes under him on the work at McCall's Ferry; and shall make all purchases of materials.

The Company may, however, require the dismissal of any employe or employes selected by Cooper, but the Company may not demand that Cooper shall employ any special person or persons. The salaries and rate of wages agreed to be paid by Cooper, all

obligations incurred for the account of the Company, all contracts made by Cooper for materials and for labor shall be subject to the approval of the Chief Engineer, whose decision shall be final.

8. It is understood between Cooper and the Company that the Company cannot now decide the elevation of the crest of the dam, which may be from 170 to 185 feet above sea level, called herein "approximately 180 feet", or 155 to 170 feet above sea level, called herein "approximately 155 feet."

9. In case the dam is built to an elevation of approximately 180 feet above sea level, the Company agrees to pay Cooper in full for the services of himself and Value, under this agreement, the sum of One Hundred and Twenty-five Thousand Dollars ($125,000), to be paid in twenty-five monthly installments of Five Thousand Dollars ($5000) each, the first payment to be made the first day of November, 1905; and the Company further agrees to pay Cooper, in case the work hereunder shall be so far completed as is defined in Clause 11, on or before the first of January, 1908, the additional sum of Fifty Thousand Dollars ($50,000); this sum to be paid in monthly installments of Five Thousand Dollars ($5000) each, until the remainder of the work to be done, up to and including the setting of the wheels, which terminates Cooper's term of service, shall have been finished, or until the entire amount shall have been paid; but nothing herein shall be held to release Cooper from his obligations under this agreement to complete all the works up to and including the setting of the wheels. The Company further agrees that if the failure to so far complete the work as is defined in Clause 11, on or before the first of January, 1908, shall be due to the act or omission of the Company, then the Company will continue to pay Cooper at the rate of Five Thousand Dollars ($5000) per month until the Fifty Thousand Dollars ($50,000) additional shall have been paid him,- after which no additional sums shall be paid,- or until Cooper's term of service shall have expired, when the balance, if any, of

the Fifty Thousand Dollars ($50,000) shall be paid to him.

10. In case the dam is built to an elevation of approximately 155 feet, it is mutually agreed that in Clause Nine, One Hundred Thousand Dollars ($100,000) shall be substituted for One Hundred and Twenty-five Thousand Dollars ($125,000), Four Thousand Dollars ($4000) for Five Thousand Dollars ($5000), and Thirty Thousand Dollars ($30,000) for Fifty Thousand Dollars ($50,000), and that all other provisions of Clause Nine shall be unchanged.

11. The work shall be deemed to be "completed"as far as earning the bonus of Fifty Thousand Dollars ($50,000) or Thirty Thousand Dollars ($30,000) is concerned, when the dam is finished to the crest line, the power-house substructure completed, all walls, embankments and incidental work completed, so that the dam and power-house are in such condition that a flood giving ten (10) feet of water on the crest of the dam shall cause no damage to any of the structures. The determination of this fact shall be made by the Chief Engineer, whose decision shall be final.

12. It is mutually agreed that the sums of One Hundred and Twenty-five Thousand Dollars ($125,000) or One Hundred Thousand Dollars ($100,000) to be paid Cooper shall be net payments to him, and that all expenses incurred by Cooper in the design or execution of this work, such as expenses of office force, draughtsmen, traveling expenses of himself and assistants, (but excepting Value's salary), shall be for the account of and payable by the Company.

IN WITNESS WHEREOF to this agreement executed in duplicate the said HUGH L. COOPER has set his hand and seal, and the said McCALL FERRY POWER COMPANY the signature of its President, and its seal, the day and year first above written.

McCall Ferry Power Co
By H. P. Wilmot. Pres
Hugh L. Cooper

McCALL FERRY POWER COMPANY

OFFICE OF THE CHIEF ENGINEER
ROOM 2407, SIXTY WALL STREET
NEW YORK CITY

CARY T. HUTCHINSON,
CHIEF ENGINEER.
BOYD EHLE,
RESIDENT ENGINEER.
R. H. ANDERSON,
ASSISTANT ENGINEER.

WM. BARCLAY PARSONS,
CONSULTING ENGINEER.

June 20, 1906.

W. H. Barnum, Esq., Treasurer,

McCall Ferry Power Co.,

62 Cedar St., New York City.

Dear Sir:-

The Executive Committee of this Company yesterday decided that the dam should be built to elevation 165, thus bringing it within the height called "approximately 155 feet" in Mr. Cooper's contract. You will therefore see that under these circumstances, Mr. Cooper's monthly compensation should be changed from $5000 to $4000, and should be continued until he has been paid a total of $100 000, and that $30 000 additional should be paid him after January 1st, 1908, in case he shall have complied with the completion clause in the contract. As you have been paying Mr. Cooper at the rate of $5000 a month for some time, the total of $100 000 will have been paid before January 1st, 1908, and I assume these payments to him should then cease until January 1st, 1908, and the additional payments provided for in the agreement should again begin. On this matter I would suggest that you get the opinion of Mr. Bartlett.

Yours very truly,

Cary T. Hutchinson

Chief Engineer.

Contract With Sanderson & Porter for Electrical Construction

THIS AGREEMENT, made and entered into this 25th day of October, 1905, by and between McCALL FERRY POWER COMPANY, herein called the "COMPANY", a corporation organized under the laws of the State of Pennsylvania, and having its principal office at 60 Wall Street, New York City, and SANDERSON AND PORTER, herein called the "FIRM", a partnership doing business as Engineers and Contractors, with offices at 52 William Street, New York City, WITNESSETH:

WHEREAS the Company is about to construct a dam and power-house on the Susquehanna River near McCall's Ferry, in the State of Pennsylvania, with complete hydraulic and electric equipment, and transmission lines to such points as it may select, and wishes to retain the services of the Firm in this work,

NOW, THEREFORE, in consideration of the payments and agreements hereunder, it is mutually agreed

1. That the Company hereby employs the Firm as Superintendent of Electrical Construction of its works, and that the Firm will serve in this capacity under the Company and its officers for the term of this agreement:

2. That the term of this agreement shall be until the installation of all the electrical equipment, including transmission lines and sub-stations, is complete and ready for permanent operation,- except that in no case shall the term of this agreement be for a longer period than until January first, 1909:

3. That all work the Firm shall do and all duties that are assigned to it under this agreement, shall be subject to the approval of the Chief Engineer of the Company, and shall be executed under his direction, and that his decision shall be final in all questions arising under this agreement:

4. That the Firm's duties under this agreement shall, in general, include the preparation of plans and specifications for the work; the purchase of materials and machinery, apparatus and equipment; the employment of labor; the testing, either at the factories or on the ground, of all machinery and apparatus; the installation

of machinery and apparatus; the keeping of a complete set of books and vouchers covering its disbursements; the examination, audit and approval of bills and accounts for labor, materials and equipment, and the preparation of drafts for their payment. Furthermore, the Firm will, when requested, give the Company the benefit of its skill and experience relating to the policy and operation of this plant, and, in general, will use its best efforts to further the interests of the work. The scope of its duties shall begin with the electric generators, and shall include the switchboard, transformers and all appurtenances; the transmission lines, including poles and substations, and all incidental equipment; and in addition, the superintendence of such related work as may be requested by the Chief Engineer. The duties of the Firm shall not at any point touch upon the hydraulic equipment of the plant:

5. That the Firm will supply to the Company the services of such part of its organization as may be necessary and sufficient for the carrying on of this work at the rate of progress contemplated:

6. That the Firm shall not be called upon to give its entire time to this work, but that it shall give as much time as is necessary, in the opinion of the Chief Engineer, to ensure the completion of the work in due season, and that it will undertake no other work which will conflict with the satisfactory discharge of its duties hereunder:

7. That in consideration of the services to be rendered by the Firm, the Company will pay to the Firm the sum of Fifty Thousand Dollars ($50,000) in thirty-eight equal monthly installments, the first installment to be paid November first 1905; but in case the work is completed before January first, 1909, the Company will pay the Firm upon the completion of the work, whatever balance may be due to it.

8. That the Company will pay all the expenses in connection with the work done by the Firm under this agreement, it being the intent that the fee paid the Firm shall be subject to no deductions for expenses; but the Company will not pay any part of the general office expenses of the Firm in New York, as, for instance, such items as office rent, local telephone service, and general expenses of office operation; but the Company will reimburse the Firm for all disbursements for engineers, draftsmen, clerical force and other employes employed directly on work for the Company.

IN WITNESS WHEREOF to this agreement executed in duplicate, the said SANDERSON AND PORTER has set its hand and seal, and the said McCALL FERRY POWER COMPANY the signature of its President and its seal, the day and year first above written.

McCall Ferry Power Co
By H. F. Dimock Prest

Sanderson & Porter

Hutchinson's & Parsons' Estimates of Costs, June 19, 1906

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McCALL FERRY POWER COMPANY

OFFICE OF THE CHIEF ENGINEER
ROOM 2407, SIXTY WALL STREET
NEW YORK CITY

CARY T. HUTCHINSON,
CHIEF ENGINEER.
BOYD EHLE,
RESIDENT ENGINEER.
R. H. ANDERSON,
ASSISTANT ENGINEER.

WM. BARCLAY PARSONS,
CONSULTING ENGINEER.

June 19, 1906 .

Henry F. Dimock, Esq., President,

McCall Ferry Power Company.

Dear Sir:-

I wish to call your attention to the following comparison of the various estimates that have been made for the development of the McCall Ferry property.

The comparison is made between (1) the original estimate of the underwriting papers, (2) the estimate of December 18, 1905, for the 185 foot dam, and (3) Mr. Cooper's recent estimate for the 165 foot dam at McCall Ferry. The costs per horse-power are respectively $119, $117 and $125.

These estimates are as follows:-

Comparison of Estimates of McCall Ferry Development

	Power Delivered	Total Cost	Cost per Horse-power.
(1) Original Estimate.			
	50 000 h.p.	$5 491 000	$110
Add for Peach Bottom Purchase		450 000	
		$5 941 000	$119
(2) Estimate of December 18, 1905:			
	50 000 h.p.	$8 265 000	$165
Add for	25 000 h.p.	500 000	
Making for	75 000 h.p.	$8 765 000	$117
(3) Cooper's Estimate of June 18, 1906:			
	50 000 h.p.	$8 859 000	$177
Add for	25 000 h.p.	533 000	
Making for	75 000 h.p.	$9 392 000	$125

H. F. D.:-

That is to say, in spite of the very great increases in the cost of railroad elevation, of property, and sundry expenses, the present estimate, using Mr. Cooper's figures as a basis (which are unquestionably maximum figures), shows substantially the same cost per horse-power as did the original estimate; the proposition is, however, now based on 75 000 horse-power, whereas it was originally based on 50 000 horse-power,- thus insuring materially greater net earnings.

The conclusion to be drawn from this is that the merits of the original proposition were much understated, and that under existing conditions the proposition is better than at the outset.

Yours very truly,

Cary J. Hutchinson

Chief Engineer.

McCALL FERRY POWER COMPANY

OFFICE OF THE CHIEF ENGINEER
ROOM 2407, SIXTY WALL STREET
NEW YORK CITY

CARY T. HUTCHINSON,
CHIEF ENGINEER.
BOYD EHLE,
RESIDENT ENGINEER.
R. H. ANDERSON,
ASSISTANT ENGINEER.

WM. BARCLAY PARSONS,
CONSULTING ENGINEER.

June 19, 1906.

H. F. Dimock, Esq.,
President, McCall Ferry Power Company,
60 Wall St., New York City.

My dear Sir:-

In accordance with your request, I asked Mr. Hugh L. Cooper, Manager and Engineer of Hydraulic Construction, to furnish me with his estimate of the construction of dams with a crest elevation of 165 feet and 185 feet, or at such other height as in his judgment would not require the purchase of additional land. In transmitting this request to Mr. Cooper, I told him that he was at entire liberty to make any suggestions that he might wish.

Mr. Cooper has submitted six different projects. These projects cover three plans for dams at McCall Ferry and three at Cully's Falls. Of the dams at McCall Ferry one would have a crest elevation of 185 feet and would be designed to deliver 90 000 kilowatts at Baltimore; the other two would have an elevation of 165 feet, with a capacity to deliver 45 000 kilowatts and 65 000 kilowatts in Baltimore. The Cully's Falls dams would all have a crest elevation of 165 feet, one to deliver 45 000 kilowatts in Baltimore, another to deliver 45 000 kilowatts, with foundations for machinery for generating 45 000 kilowatts more, and one to deliver 90 000 kilowatts.

As you will see by these figures, Mr. Cooper estimates that the fall of the river is sufficient to economically install a larger amount of electric power than the Chief Engineer had previously, but more conservatively, estimated. The details of Mr. Cooper's plans and estimates are summarized as follows:

No.	Location	Crest Elev.	No. Units in Generating Station	Kilowatts Delivered in Balto.	Estimate of Cost	Cost per kw. Delivered
1	McCall Ferry	165'	13	65 000	$10 447 400	$160.76
2	"	"	9	45 000	9 132 200	202.93
3	"	185	12	90 000	12 476 000	138.60
4	Cully's Falls	165	6	45 000	9 106 600	202.35
5	"	"	12	90 000	11 240 000	124.90
6	"	"	6 *	45 000	9 384 000	208.60

* (Plus foundations for six additional)

Mr. Cooper's estimates are considerably higher than the estimates heretofore considered by the Board. This, in the case of the dam at elevation 185 feet at McCall Ferry, is due largely to the fact that Mr. Cooper has added $990 000 to the amount of property to be acquired. He has also increased the construction estimates above what he had previously submitted or what had been considered by the Board. His reasons for increasing the construction estimates, which in the case of the dam at elevation 185 feet amounted to $750 000, are to allow a very generous, an apparently unnecessarily generous,- amount for contingencies, to cover the increased expenditure for tools, which his plan has shown to be necessary, and a rise in the price of cement, against which he had not taken options.

After a general discussion between the Chief Engineer, Mr. Blackwell and Mr. Cooper, it would seem that the most economical development at the McCall Ferry site would be a total output of 75 000 horse-power, of which approximately 50 000 horse-power would be installed immediately, generated by seven units, and 25 000 horse-power postponed until the future, to be generated by three additional units,

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the foundations of which, however, would be put in at the outset.

Mr. Cooper was then requested to submit estimates on the McCall Ferry and Cully's Falls sites, for plants of the same capacity, and with dams built to an elevation of 165 feet; these estimates are as follows:

McCall Ferry.

Hydraulic Installation	$3 429 000
Electrical Installation	1 305 000
Engineering	300 000
Fixed Charges	3 140 000
Loss of Interest during Construction	675 000
	$8 859 000

Cully's Falls.

Hydraulic Installation	$3 453 000
Electrical Installation	1 247 000
Engineering	300 000
Fixed Charges	3 180 000
Loss of Interest during Construction	750 000
	$8 930 000

In the making of these estimates, Mr. Cooper has used plans with somewhat larger sections than those heretofore considered by the Board of Engineers, giving a dam of much greater weight, in order to provide an additional margin of safety, and foundations for a power-house on a somewhat larger scale in order to carry the greater power. For the moment it would seem wise to accept Mr. Cooper's enlarged sections, for if there is any error, it is an error on the safe side. The details of Mr. Cooper's estimates have been gone over very thoroughly, and it would seem that he has included an exceedingly liberal margin for all possible contingencies. The Board may accept, therefore, Mr. Cooper's total estimate as the maximum cost of a

dam at elevation 165 feet at McCall Ferry. In this estimate Mr. Cooper has increased the previous estimate for right of way for the transmission line to Havre de Grace and Baltimore from $65 000 to $185 000, and the right of way for the Pennsylvania Railroad diversion from $100 000 to $180 000,- an increase of $80 000; and an arbitrary increase of $100 000 for other unknown damages, a total increase in the real estate of $295 000. I personally have no means of knowing the correctness of these real estate estimates.

In regard to the increase of $100 000 for additional lands I beg leave to refer to a letter of the Chief Engineer, attached hereto, in which he states that there is no further land to be acquired above the dam or damages to pay, provided the dam is built not to exceed elevation 165.

It is impossible to say at just what cost Mr. Cooper can complete this dam. It may be stated, however, that unless some extraordinary contingency occurs, the actual cost should be considerably below Mr. Cooper's estimate,- possibly as much as $500 000.

Mr. Cooper makes the recommendation that the work be suspended at McCall Ferry, and that a dam be built at Cully's Falls about one mile further down the river, at crest elevation 165 feet, with machinery installed to doliver 45 000 kilowatts at Baltimore and with foundations for machinery having a capacity of 45 000 kilowatts more; in other words, plan number six in the table first above.

As this involves a complete change in plans, the opening of a number of new uncertainties, and the probable delay in the completion of the work for at least one year, it is my opinion that the work should be carried out as heretofore planned, at the McCall Ferry site, and that the dam should be built at an elevation of 165

feet, unless the Board should see its way clear to carry out a scheme at a greater elevation to make a more economical installation.

Very truly yours,

Wm. Barclay Parsons
Consulting Engineer.

In view of the existing circumstances, we concur in the recommendation to build the dam at the McCall Ferry site, at elevation 165 feet, and we believe that the cost will be within the amount fixed by Mr. Cooper.

Chief Engineer.

F. O. Blackwell
Jr. U.S.C.

AGREEMENT

BETWEEN

COLUMBIA AND PORT DEPOSIT RAILWAY COMPANY,

PHILADELPHIA, BALTIMORE AND WASHINGTON RAILROAD COMPANY,

AND

McCALL FERRY POWER COMPANY.

DATED 13th AUGUST, 1906.

REGARDING THE RECONSTRUCTION OF THE COLUMBIA AND PORT DEPOSIT RAILWAY BETWEEN SAFE HARBOR AND A POINT 500 FEET SOUTH OF BENTON STATION, PENNSYLVANIA.

THIS AGREEMENT made and entered into this thirteenth day of August, 1906, between the **Columbia and Port Deposit Railway Company,** a corporation of the States of Pennsylvania and Maryland, and the **Philadelphia, Baltimore and Washington Railroad Company,** a corporation of the States of Pennsylvania, Delaware and Maryland, operating as Agent the railway of the said Columbia and Port Deposit Railway Company, parties of the first part, hereinafter called "Railway Companies," and the **McCall Ferry Power Company,** a corporation of the State of Pennsylvania, party of the second part, hereinafter called "Power Company."

Whereas by agreement dated July 2nd, 1906, between the Railway Companies and the Power Company, a copy whereof is hereto annexed, the Columbia and Port Deposit Railway Company agreed, *inter alia*, to construct its relocated roadbed, tracks and appurtenances between Safe Harbor and a point 500 feet south of Benton Station, Lancaster County, Pennsylvania, in accordance with the terms and conditions in the said agreement fully set forth, the Power Company therein agreeing, *inter alia*, to pay the cost of grading said relocated roadbed and constructing the masonry for a double track railway beteewn Safe Harbor and a point 500 feet south of Benton Station, and the cost of laying upon such grading and masonry a single track railway in accordance with plans and specifications to be prescribed by the Railway Companies, and also the cost of erecting telegraph lines, stations and other facilities and appurtenances of the same general

character and to take the place of those now used in connection with the present railway line, all of the said work to be performed under authority to be conferred by the Columbia and Port Deposit Railway Company and the said construction payments to be made monthly by the Power Company on demand of the Columbia and Port Deposit Railway Company.

And Whereas the Power Company now desires to undertake the said work of constructing its dam at or near McCall's Ferry, Lancaster County, Pennsylvania, and in connection therewith and to facilitate the said work and avoid unnecessary expense and delay it is essential that the work of constructing the said roadbed, tracks, telegraph lines, stations and other facilities and appurtenances should forthwith be undertaken.

Now, Therefore, This Agreement Witnesseth, that in consideration of the premises and of the covenants and undertakings herein expressed to be observed, kept and performed, as well as of the sum of one dollar by each party to the other in hand paid before the sealing and delivery hereof, the receipt whereof is hereby acknowledged, each of the parties hereto for themselves, their successors and assigns, mutually covenant, stipulate and agree as follows:—

First:—That the Columbia and Port Deposit Railway Company hereby authorizes the Power Company, acting as its agent and for and on its behalf, to cause the said relocated roadbed, tracks, telegraph lines, stations and other facilities and appurtenances between Safe Harbor and a point 500 feet south of Benton Station to be constructed in accordance with plans and specifications prescribed and approved by the Chief Engineer of the Railway Companies, and to cause the said work to be prosecuted and completed without delay under the supervision and

to the satisfaction of the Chief Engineer of the Railway Companies, or his representative, and paid for in accordance with the covenants and undertakings contained in the said agreement of July 2nd, 1906.

Second:—The Power Company hereby agrees, acting for and on behalf of and under authority hereby conferred by the Railway Companies, to cause the work of constructing the said relocated roadbed, tracks, telegraph lines, stations and other facilities and appurtenances to be prosecuted and completed without delay in accordance with plans and specifications prescribed and approved by the Chief Engineer of the Railway Companies and under his supervision and to the satisfaction of the said Chief Engineer, or his representative, and to make all payments therefor in accordance with the terms and conditions of the said agreement of July 2nd, 1906; and report to the Columbia and Port Deposit Railway Company, within twenty days after the end of each month, the payments made to the Contractor for the work performed during the preceding month; and that the said relocated roadbed, tracks, telegraph lines, stations and other facilities and appurtenances shall be delivered to the Columbia and Port Deposit Railway Company free and clear of any liens, claims or demands whatsoever for materials furnished and provided and work and labor done and performed upon or in connection with the said work.

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In Witness Whereof the said parties hereto have caused their respective corporate seals to be hereunto affixed, duly attested, the day and year first hereinbefore written.

Signed, sealed and delivered in the presence of us:

COLUMBIA AND PORT DEPOSIT RAILWAY COMPANY.

By _____
President.

Attest: _____
Asst. Secretary.

PHILADELPHIA, BALTIMORE AND WASHINGTON RAILROAD COMPANY,

By _____
Second Vice-President.

Attest: _____
Asst. Secretary.

Witness as to H. F. Dunock and Harold Pender

Carey Hutchinson

McCALL FERRY POWER COMPANY,

By H. F. Dunock
President.

Attest: Harold Pender
Secretary.

AGREEMENT

BETWEEN

COLUMBIA AND PORT DEPOSIT RAILWAY COMPANY,

PHILADELPHIA, BALTIMORE AND WASHINGTON RAILROAD COMPANY,

AND

McCALL FERRY POWER COMPANY.

DATED 2ND JULY, 1906.

REGARDING THE CONSTRUCTION OF DAMS ACROSS THE SUSQUEHANNA RIVER AT McCALL'S FERRY AND CONOWINGO, AND THE RELOCATION AND IMPROVEMENT OF THE COLUMBIA AND PORT DEPOSIT RAILWAY BETWEEN ~~SAFE HARBOR~~, PENNSYLVANIA, AND ROCK RUN, MARYLAND.

THIS AGREEMENT made and entered into this second day of July, 1906, between the **Columbia and Port Deposit Railway Company,** a corporation of the States of Pennsylvania and Maryland, and the **Philadelphia, Baltimore and Washington Railroad Company,** a corporation of the States of Pennsylvania, Delaware and Maryland, operating as Agent the railway of the said Columbia and Port Deposit Railway Company, parties of the first part, hereinafter called "Railway Companies," and the **McCall Ferry Power Company,** a corporation of the State of Pennsylvania, party of the second part, hereinafter called "Power Company."

Whereas the Railway Companies and the Power Company entered into an agreement dated 16th, February, 1906, regarding the construction of dams across the Susquehanna River, at McCall's Ferry and Conowingo, and the relocation and improvement of a portion of the Columbia and Port Deposit Railway.

And Whereas certain changes in the plans of the Power Company now make it desirable that the said agreement be cancelled, and the following agreement executed in lieu thereof.

And Whereas in the opinion of the Columbia and Port Deposit Railway Company the relocation and improvement of portions of its railway is desirable to further and better secure the safety of persons and property and facilitate the transportation of traffic thereon and avoid the interruption thereof by reason of ice and floods in the Susquehanna River, and it is intended to undertake such work from time to time in the future;

And Whereas the Power Company proposes to construct a dam across the Susquehanna River at or near McCall's Ferry, Lancaster County, Pennsylvania, and

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contemplates the construction of another dam at or near Conowingo, Cecil County, Maryland, either of which would prevent the operation of the Columbia and Port Deposit Railway on its present location, and has requested the Columbia and Port Deposit Railway Company to immediately proceed with the relocation and construction of that portion of its railway and appurtenances as hereinafter set forth, and in consideration of its so doing has agreed to pay the entire cost thereof,

Now, Therefore, This Agreement Witnesseth that in consideration of the premises and of the covenants and undertakings herein expressed to be observed, kept and performed, as well as of the sum of one dollar by each party to the other in hand paid before the sealing and delivery hereof, the receipt whereof is hereby acknowledged, each of the parties hereto for themselves, their successors and assigns, mutually covenant, stipulate and agree as follows:—

First:—The Power Company hereby agrees to promptly proceed with the construction of a dam in the Susquehanna River at or near McCall's Ferry, Lancaster County, Pennsylvania.

Second:—The Columbia and Port Deposit Railway Company, in order to provide for the relocation, widening and improvement of said railway, as hereinafter set forth, has adopted a revised location for that portion thereof between Safe Harbor and Peach Bottom, Lancaster County, Pennsylvania, a distance of fifteen and five-tenths miles, and hereby agrees to also adopt a revised location for that portion between a point about eight hundred and fifty feet south of Fishing Creek Station, Lancaster County, Pennsylvania, and a point at or near Rock Run, Cecil County, Maryland, a distance of about fifteen miles, indicated on the plan hereto attached marked "Exhibit A, July 2nd, 1906," which revised locations will require the construction of a new roadbed and

track at a higher level, and on a wider roadbed, than the present railway, between Safe Harbor and Rock Run; and the Railway Companies hereby agree to take all other corporate action necessary to authorize the construction of such relocated roadbed, tracks and appurtances as herein fully set forth.

Third:—The Columbia and Port Deposit Railway Company hereby agrees to acquire, as hereinafter provided, the right of way for and construct such relocated roadbed, track and appurtenances between Safe Harbor and a point 350 feet south of Peach Bottom Station, Lancaster County, Pennsylvania, and, in case the Power Company shall hereafter determine to build the Conowingo dam, the Columbia and Port Deposit Railway Company agrees to acquire, as hereinafter provided, the right of way and construct such relocated roadbed, track and appurtenances between a point about 850 feet south of Fishing Creek Station, Lancaster County, Pennsylvania, and Rock Run Station, Cecil County, Maryland, the said relocated roadbed, track and appurtenances to be constructed upon such alignment and with such grades and in accordance with such plans and specifications as the Railway Companies may prescribe, and subject to the approval of their Chief Engineer, or his representative, it being hereby understood and agreed that the alignment shall not be less favorable, nor shall it be required to be more favorable, than that of the present roadbed and track of the said railway between the said points, but that there shall be no grades opposed to the eastbound traffic and that the grades opposed to the westbound traffic shall not be more than 0.3% equated for curvature, excepting that until the work of constructing the Conowingo dam is undertaken the grade against the westbound traffic may be 0.5% between a point 850 feet south of Fishing Creek Station and a point 500 feet south of Benton Station. If the building of the said Conowingo dam is not undertaken before January 31st, 1913, all the rights and privileges conferred by this agree-

ment in regard to the Conowingo dam shall then cease and terminate, and the Power Company hereby agrees to then immediately pay the Columbia and Port Deposit Railway Company the amount required by it to reduce the said grade of 0.5% to a grade of 0.3% equated, which will necessitate the construction of the said relocated roadbed and track from a point 850 feet south of Fishing Creek Station to a connection with the present roadbed at a point 350 feet south of Peach Bottom Station, Lancaster County, Pennsylvania.

The Power Company further agrees that if the Columbia and Port Deposit Railway Company shall, before January 31st, 1913, reduce the grades upon the parts of the said railway above Safe Harbor and below a point 350 feet south of Peach Bottom Station to a maximum grade of 0.3% equated for curvature the Power Company will pay the entire expense of maintaining and operating an extra engine and crew to aid in the movement of trains over the said 0.5% grade if, in the opinion of the Railway Companies, such engine shall be necessary, until the said 0.5% grade shall be reduced to 0.3% as hereinbefore provided.

The Power Company further agrees that, upon the request of the Railway Companies, it will furnish and cause to be conveyed free of cost to the said Columbia and Port Deposit Railway Company, the right of way for such relocated roadbed, track and appurtenances between Safe Harbor and Rock Run, so far as it now owns the real estate necessary therefor, as soon as the same shall be required by the Columbia and Port Deposit Railway Company pursuant to the provisions hereof.

The Columbia and Port Deposit Railway Company agrees, as soon as the same shall be required pursuant to the provisions hereof, to obtain by purchase so much of the remainder of such right of way as it shall be able to so obtain on terms and at prices to be approved by the Power Company, and further agrees to cause to be instituted and carried on with due diligence legal pro-

ceedings to obtain the remainder, if any, of such right of way by condemnation; and the Power Company agrees to pay from time to time, as the same shall be incurred, and on demand of the Columbia and Port Deposit Railway Company, the whole cost and expense of so obtaining such remainder of such right of way, either by purchase or condemnation.

Fourth:—The Power Company also hereby agrees to pay the cost of grading said relocated roadbed and constructing the masonry for a double track railway between Safe Harbor and Rock Run, and the cost of laying upon such grading and masonry a single track railway in accordance with plans and specifications to be prescribed by the Railway Companies, and also the cost of erecting telegraph lines, stations and other facilities and appurtenances of the same general character and to take the place of those now used in connection with the present railway line, all of the said work to be performed under authority to be conferred by the Columbia and Port Deposit Railway Company and the said construction payments to be made monthly by the Power Company on demand of the Columbia and Port Deposit Railway Company.

Fifth:—The Railway Companies hereby agree that during the construction of the said relocated roadbed, tracks and appurtenances such work of construction shall not be subjected to unnecessary delay, and the Power Company hereby agrees to pay to the Railway Companies, as part compensation for the loss of revenue and for the cost of moving their traffic by another route, the sum of $300. per day, for each day that the railway may be closed while the line between Safe Harbor and a point 500 feet south of Benton Station is being constructed; and if the Conowingo dam be placed under construction, the Power Company hereby agrees to pay to the Railway Companies the actual cost, resulting from the loss of local traffic and the cost of moving through traffic by another route, during the time that the railway may be

closed to permit the construction of the said relocated roadbed and track between a point 850 feet south of Fishing Creek and Rock Run, such cost to be certified by the Railway Companies.

The Power Company shall not be compelled to make any payment to the Railway Companies for the loss or diversion of traffic in connection with the work of reducing the said 0.5% grade between a point 850 feet south of Fishing Creek Station and a point 500 feet south of Benton Station to a 0.3% grade between a point 850 feet south of Fishing Creek Station and a point 350 feet south of Peach Bottom Station, as provided in Article Third hereof, unless such reduction of grade, in the opinion of the Railway Companies, requires the closing of their railway or the diversion of the traffic therefrom, but in such event the Power Company hereby agrees to pay to the Railway Companies the actual cost resulting from the loss of local traffic and the cost of moving through traffic by another route.

Sixth:—The Railway Companies hereby agree to facilitate the construction of the said relocated roadbed, track and appurtenances between Safe Harbor and Rock Run and will permit the use of the present tracks of the Railway Companies extending along the parts of the line to be relocated, and when the said relocated roadbed, track and appurtenances shall have been constructed and accepted by the Railway Companies, the material in the old line will be disposed of, and the amount received therefrom shall be deducted from the payments to be made by the Power Company, except the amount received from the disposition of the material in that part of the line between Safe Harbor and Shenk's Ferry, which shall be retained by the Railway Companies.

Seventh:—The Railway Companies hereby agree that when they shall make use of the grading of said relocated roadbed, built under the terms of this agreement, for laying a second track thereon, they will pay to the

Power Company for the grading, masonry and right of way for such second track between Safe Harbor and a point 500 feet south of Benton Station the sum of $200,000.; and for that part thereof between a point 850 feet south of Fishing Creek Station and Rock Run the sum of $175,000. and if the latter section is not constructed as hereinbefore provided they will pay to the Power Company for that portion between a point 850 feet south of Fishing Creek Station and a point 350 feet south of Peach Bottom Station, when the grade thereof has been reduced to 0.3%, the sum of $47,144.

Eighth:—The Power Company hereby agrees to pay said Railway Companies all damages which may be sustained by them and to indemnify, protect and save harmless the Railway Companies from all claims, costs, charges, suits, demands or actions arising out of, or in connection with, or resulting from, the construction, existence or operation of the said dams, or from the closing, (if such be necessary,) and reconstruction of the said portions of the line of the Columbia and Port Deposit Railway Company.

The Power Company hereby further agrees that contemporaneously with the execution of this agreement it will execute and deliver unto the Railway Companies a bond in the sum of $250,000. with sureties satisfactory to them, conditioned for the full and faithful performance by the Power Company, and its successors, of each and every its several covenants and agreements herein contained for and during the period of construction of its said dams, and for and during the reconstruction of the said portions of the line of railway and appurtenances of the said Railway Companies and until such portions are satisfactorily completed and placed in operation.

When the said portions of the line and appurtenances of the Railway Companies upon the new location shall have been constructed in conformity with the terms of this agreement and the same have been duly accepted by them and placed in operation, and the Power Com-

pany shall have made the payments required by this agreement, then and thereupon said bond shall become void, it being, however, distinctly understood that the giving and acceptance of the said bond shall not be construed as in any way limiting the measure of the liability and obligation under this agreement of the Power Company, and its successors, but shall be treated and considered as further and additional security, for the protection of the Railway Companies.

If, at any time, the sureties upon the bond shall be deemed insufficient by the Railway Companies, the Power Company hereby agrees to forthwith furnish other sureties satisfactory to the Railway Companies.

Ninth:—The Railway Companies and the Power Company hereby agree that in consideration of the covenants in this agreement contained (and to enable the Railway Companies to co-operate with it in the prompt delivery of materials, and the prompt construction of, the said relocated roadbed, track and appurtenances) they will, in so far as they may legally and properly be able to do so, ship or cause to be shipped, all materials ordered for the said roadbed, track and appurtenances, and the dams hereinbefore mentioned, by the lines in the Pennsylvania Railroad System and over and by the lines of railroad owned, operated or controlled by the Railway Companies.

Tenth:—The Railway Companies hereby agree that if the Power Company does not desire to construct the said Conowingo dam, it may, not later than June 30th, 1912, assign to another corporation, all of its rights, privileges, covenants and obligations in this agreement in so far as they relate to the said dam, but such assignment shall not be made until the form thereof, and the Company to whom the assignment is to be made, are approved by, and declared to be entirely satisfactory to, the Railway Companies, and only when such Assignee Company shall assume and agree to perform all the obligations of the Power Company under this agreement

in respect thereto and agree that the construction of the said dam, if undertaken, shall be subject to the covenants, undertakings, conditions and obligations of this agreement.

Eleventh:—This agreement shall take the place of the said agreement dated February 16th, 1906, between the Railway Companies and the Power Company, which is hereby annulled and cancelled.

In Witness Whereof the said parties hereto have caused their respective corporate seals to be hereunto affixed, duly attested, the day and year first hereinbefore written.

Signed, sealed and delivered in the presence of us:

COLUMBIA AND PORT DEPOSIT RAILWAY COMPANY.

By [signature] President.

Attest: [signature] Secretary

PHILADELPHIA, BALTIMORE AND WASHINGTON RAILROAD COMPANY

By [signature] President.

Attest: [signature] Asst. Secretary

Witness as to H. F. Dimock and Harold Pender

Chas. D. Hutchinson

McCALL FERRY POWER COMPANY,

By [signature] President.

Attest: Harold Pender Secretary.

Contract With Kerbaugh for Relocation Work

McCALL FERRY POWER COMPANY

60 WALL STREET

NEW YORK

AGREEMENT

between

McCALL FERRY POWER COMPANY

and

H. S. KERBAUGH, Incorporated

Dated August 27, 1906

Regarding the Proposed Re-located Roadbed, Tracks, Telegraph Lines and Other Facilities and Appurtenances of the Columbia and Port Deposit Railway Company between Safe Harbor and a point 500 feet south of Benton Station, Lancaster County, Pennsylvania

THIS AGREEMENT, made and entered into this 27th day of August, 1906, between the McCall Ferry Power Company, a corporation of the State of Pennsylvania, party of the first part, hereinafter called "Power Company," and H. S. Kerbaugh, Incorporated, a corporation of the State of West Virginia, party of the second part, hereinafter called "Contractor."

Whereas, the Power Company has made an agreement, dated August 13th, 1906, with the Columbia and Port Deposit Railway Company and the Philadelphia, Baltimore and Washington Railroad Company, a copy whereof is hereto annexed;

And Whereas, the Power Company and H. S. Kerbaugh, Incorporated, entered into an agreement, dated 14th April, 1906, regarding the reconstruction of the Columbia and Port Deposit Railway, between Shenk's Ferry and Peach Bottom, Lancaster County, Pennsylvania, and

Whereas, certain changes in the plans of the Power Company now make it desirable that the said agreement be cancelled, and the following agreement executed in lieu thereof;

And Whereas, the Columbia and Port Deposit Railway Company has authorized the Power Company, at the request of the latter, in connection with its undertaking the work of constructing its dam at or near McCall Ferry, Lancaster County, Pennsylvania, to act for and on behalf of, and under authority given by, said Columbia and Port Deposit Railway Company in causing the construction of its relocated roadbed, tracks, telegraph lines, stations and other facilities and appurtenances between Safe Harbor and a point 500 feet south of Benton Station, Lancaster County, Pennsylvania, to be prosecuted and completed without delay in accordance

with plans and specifications and under the supervision and to the satisfaction of the Chief Engineer of the Railway Companies, or his representative, the Power Company, to make all payments therefor in accordance with the terms and conditions of the said agreement of August 13th, 1906, and said Columbia and Port Deposit Railway Company has furnished to said Power Company such plans and specifications;

And Whereas, the latter Company, in pursuance of the authority conferred upon it by the said Columbia and Port Deposit Railway Company, desires to employ the Contractor to construct and complete, at the cost of the Power Company, the said work of the Columbia and Port Deposit Railway Company hereinbefore referred to, in accordance with all the specifications and provisions, and upon all the terms and conditions hereinafter stated;

And Whereas, Contractor desires to so undertake and perform said work;

Now, Therefore, This Agreement Witnesseth: That in consideration of the premises and of the covenants and undertakings, herein expressed to be observed, kept and performed, as well as of the sum of one dollar by each party to the other in hand paid before the sealing and delivery hereof, the receipt whereof is hereby acknowledged, each of the parties hereto for themselves, their successors and assigns, mutually covenant, stipulate and agree as follows:

First.—The Power Company, acting for and on behalf of and under the authority conferred by the Columbia and Port Deposit Railway Company, does hereby authorize the said Contractor to construct and complete without delay the said relocated roadbed, tracks, telegraph lines, stations and other facilities and appurtenances for the said Columbia and Port Deposit Railway Company, the work

to be performed in accordance with plans and specifications approved by, and under the supervision and to the satisfaction of, the Chief Engineer of the Columbia and Port Deposit Railway Company, or his representative, hereinafter called the Chief Engineer of the Railways, said specifications being set forth below under the heading "Specifications" and made a part hereof, and such work to be performed in conformity with all the other provisions hereinafter contained, the Power Company to pay the Contractor therefor the compensation hereinafter provided.

Second.—That for and in consideration of the covenants and payments herein mentioned to be made and performed by the Power Company, the Contractor doth hereby covenant and agree to furnish all materials and labor necessary to complete, in the most substantial and workmanlike manner, to the satisfaction and acceptance of the Chief Engineer of the Railways, the proposed relocated roadbed, tracks, telegraph lines, stations and other facilities and appurtenances of the Columbia and Port Deposit Railway Company between Safe Harbor and a point 500 feet south of Benton Station, Lancaster County, Pennsylvania; and to completely perform and finish all the said work as described in the following specifications, and agreeably to the directions received from the said Chief Engineer, and in conformity with all the further provisions hereof, within eighteen months of the date of this agreement; and the Contractor further covenants and agrees that he will complete that part of the work described in the following specifications which is to be done above the dam now being constructed by the Power Company near McCall Ferry, Lancaster County, Pennsylvania, where the elevation of the existing track of the Columbia and Port Deposit Railway is now 175 feet or less, by April 1st, 1907.

Third.—The construction of such relocated roadbed, track and appurtenances, which Contractor hereby agrees to do, shall include grading such relocated roadbed and

constructing the masonry for a double-track railway between said Safe Harbor and a point 500 feet south of Benton Station, including all culverts, bridge sub-structures for double-track and bridge superstructures for single-track; and laying upon such grading and masonry a single-track railway, ballasted and ready for use between said points, in accordance with the plans and specifications aforesaid, and erecting and constructing telegraph lines, stations, side-tracks, connections and other facilities and appurtenances of the same general character and to take the place of those now used in connection with the present railway line; but it is expressly understood that Contractor is not required to furnish, or pay any expense of procuring any part of the right of way for such relocated roadbed, track and appurtenances.

SPECIFICATIONS.

Fourth.—The work to be done by the Contractor hereunder consists in the furnishing of all material and performing all labor necessary to the rebuilding of that portion of the Columbia and Port Deposit Railway between Safe Harbor and a point 500 feet south of Benton Station, about 13.9 miles, according to detailed plans and specifications to be made from time to time by the Chief Engineer of the Railways, as work progresses; all for a new line of railway between Safe Harbor and a point 500 feet south of Benton Station, as set forth in the contract between the Railway Company and the Power Company of August 13th, 1906, and the Contractor is obligated to furnish all material and perform all the labor required of the Power Company between Safe Harbor and a point 500 feet south of Benton Station in said contract of August 13th, 1906.

Fifth.—Contractor hereby agrees, in order to enable said Railway Company to co-operate with it in the prompt delivery

of materials and the prompt construction of such relocated roadbed, track, stations and appurtenances, that it will, in so far as it may legally and properly be able to do so, ship, or cause to be shipped, all materials ordered for such relocated roadbed, track, stations and appurtenances by the lines of the Pennsylvania Railroad system and over and by the lines of the railroad owned, operated or controlled thereby.

Sixth.—The said Power Company doth promise and agree to pay to the said Contractor for the work to be done under this contract, the total price of one million two hundred and fifty thousand dollars ($1,250,000), payable in installments as follows: On or about the last day of each month, during the progress of this work, an estimate shall be made of the relative value of the work done, to be judged of by the Chief Engineer of the Railways and verified by the Chief Engineer of the Power Company; and ninety per cent. (90%) of the amount of said estimate shall be paid to the Contractor by the Power Company on or about the fifteenth day of the following month, and the Power Company and the Contractor respectively shall, on the twentieth day of such month, report to the Columbia and Port Deposit Railway Company the amount so paid and received. And when all the work embraced in this contract is completed, agreeably to the specifications and in accordance with the directions and to the satisfaction and acceptance of the Chief Engineer of the Railways, there shall be a final estimate made of the quality, character and value of said work, according to the terms of this agreement, when the balance appearing due to the Contractor shall be paid to the said Contractor within thirty days thereafter, upon the Contractor giving a release, under seal, to the Power Company and to the Columbia and Port Deposit Railway Company from all claims or demands whatsoever growing in any manner out of this agreement, and upon the Contractor procuring and delivering to the Power Company and the Columbia and Port Deposit Railway Company full releases, in proper form and duly executed, from mechanics and material men, of all liens, claims and demands for materials furnished and provided,

and work and labor done and performed upon or in connection with the work herein contracted for under this contract.

Seventh.—There shall be no lien or right to file a lien against the structure or other improvements herein contracted for, or any part or parts thereof, or the site thereof, for work or labor done or materials furnished in the performance of the work embraced in this contract, or any part or parts thereof, or extra work thereunder; and no such lien or claim shall be filed, or in any way attempted to be enforced by, or on behalf of, the Contractor hereto, or by or on behalf of any subcontractor, material man or other person concerned in or in connection with the performance of the work embraced in this contract; nor shall there be any claim for such work or materials against the Power Company, or its assignees, other than the claim of the Contractor under this contract.

Eighth.—It is further covenanted and agreed between the said parties, that the Contractor shall not sub-let or transfer this contract, or any part thereof, to any person (excepting for the delivery of materials) without the written consent of the said Engineers, but will at all times give personal attention and superintendence to the work.

Ninth.—It is further agreed and understood that the work embraced in this contract shall be commenced within ten days from this date, and prosecuted with such force as the Chief Engineer of the Power Company shall deem adequate to its completion within the time specified; and if at any time the said party of the second part shall refuse or neglect to prosecute the work with a force sufficient, in the opinion of the said Engineer, for its completion within the time specified in this agreement, then, and in that case, the said Engineer or such other agent as the said Engineer shall designate, may proceed to employ such a number of workmen, laborers and overseers as may, in the opinion of the said Engineer, be necessary to insure the completion of the work within the time hereinbefore limited, at such wages as he may find necessary or

expedient to give; pay all persons so employed, and charge over the amount so paid to the Contractor as for so much money paid to the Contractor on this contract; or for the failure to prosecute the work with an adequate force, for non-compliance with his directions in regard to the manner of constructing it, or for any other omission or neglect of the requirements of this agreement and specifications on the part of the Contractor, the said Engineer may, at his discretion, declare this contract, or any portion or section embraced in it, forfeited; which declaration and forfeiture shall exonerate the Power Company from any and all obligations and liabilities arising under this contract, the same as if this agreement had never been made; and the reserved percentage upon any work done by the Contractor may be retained forever by the said Power Company.

And the said Contractor hereby further covenants and agrees to take, use, provide and make all proper, necessary and sufficient precautions, safeguards and protections against the occurrence or happening of any accidents, injuries, damages or hurt to any person or property during the progress of the construction of the work herein contracted for, and to be responsible for, and to indemnify and save harmless the Power Company and the Columbia and Port Deposit Railway Company and the said Engineers from the payment of all sums of money by reason of all or any such accidents, injuries, damages or hurt that may happen or occur upon or about said work, and from all fines, penalties and loss incurred for or by reason of the violation of any city or borough ordinance or regulation, or law of the State, while the said work is in progress of construction.

Tenth.—Contractor further agrees, in carrying out this construction contract and performing the work and furnishing the materials pursuant thereto,

(*a*) To do so in manner satisfactory to Power Company in all respects in which the interests and convenience of said

Power Company in carrying on its own work and construction may be affected;

(b) To do everything that Power Company is required to pay for between Safe Harbor and a point 500 feet south of Benton Station by the provisions of said contract dated August 13th, 1906, copy whereof is hereto annexed, except furnishing right of way; provided, that the Contractor shall not be required to bear the expense of removing any private, public or township roads or highways or repairing or reobstructing the same; but shall be compensated for any such work that he is directed to perform at the actual cost thereof plus 10%, such actual cost to include only the labor employed and the materials furnished.

H. G. KENSAUGH, INCORPORATED.

Vice Pres.

McCall Ferry Power Co.

By [illegible] Vice President

(c) That railway traffic shall not, through Contractor's operations, at any time be interrupted or interfered with to McCall Ferry and Minqua Station, and that such traffic shall be without interruption and continuous either from the north or from the south;

(d) To so arrange the closing of the present line below McCall Ferry as not to interfere with the operations of Power Company longer than for three months' time as the total aggregate of all such interruptions, and that whether such interruption shall be in one continuous period or separated into different periods, and the time or times when the same shall occur, are to be determined and selected by Power Company, and Contractor agrees to be governed by Power Company's determinations and selections in these respects;

(e) That Power Company shall be allowed to do all that part of the excavation called for by this construction contract for the distance of one-half mile above and one-half mile below said McCall Ferry dam about to be constructed by Power Company at the rate of eighty cents per cubic yard of such excavation.

Eleventh.—Contractor further assumes and agrees to perform all the obligations of Power Company to said Columbia and Port Deposit Railway Company contained in the first paragraph of the portion numbered "Eighth" of said contract dated August 13, 1906, between Power Company and

said Railway Company (copy whereof is hereto annexed) so far as such obligations relate to, or are based upon, the construction of the relocated roadbed, track and appurtenances covered by this construction contract, or the closing (if such be necessary) during such construction of any portion of the present railway between the aforesaid points of Safe Harbor and a point 500 feet south of Benton Station, and also all such obligations contained in the first half of the first paragraph of the portion numbered "Fifth" of said contract, including the obligation to pay three hundred dollars per day as therein stated.

Twelfth.—Power Company further agrees to permit Contractor (under the permission granted Power Company in and by said contract, copy whereof is hereto annexed) to use the present tracks of Railway Company extending along the parts of the line so to be relocated; and Contractor hereby agrees to so use such tracks as not to interfere with a like use thereof by Power Company under the aforesaid permission.

Thirteenth.—It is mutually agreed and distinctly understood that the decision of the Chief Engineer of the Power Company shall be final and conclusive in any dispute which may arise between the parties to this agreement relative to anything contained in Article Ninth or in clauses (*c*), (*d*) or (*e*) of Article Tenth; and that the decision of the Chief Engineer of the Railways shall be final and conclusive in any dispute that may arise between the parties to this agreement relative to any other clauses of this agreement; and each and every of said parties do hereby waive any right of action, suit or suits, or other remedy in law or otherwise, by virtue of said covenants, so that the decision of either of the said Engineers, as before specified, shall, in the nature of an award, be final and conclusive on the rights and claims of said parties.

Fourteenth.—This agreement shall take the place of the said agreement dated April 14th, 1906, between the Power

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Company and H. S. Kerbaugh, Incorporated, which is hereby annulled and cancelled.

IN WITNESS WHEREOF, the said parties hereto have caused their respective corporate seals to be hereunto affixed, duly attested, the day and year first hereinbefore written.

Signed, sealed and delivered
in the presence of us:

Witness
Geo. A. Tooke

McCALL FERRY POWER COMPANY,
By J. C. S. Kirkland
Vice President.

Attest:
Harold Pender
Secretary.

H. S. KERBAUGH, INCORPORATED,
By

Geo. F. Hoffman

H. S. Kerbaugh
President.

Attest: Frank Lamm

Secretary.

Contract With Kerbaugh for Cully's Cut

THIS AGREEMENT, made and entered into this fifteenth day of August, 1906, between the McCALL FERRY POWER COMPANY, a corporation of the State of Pennsylvania, party of the first part, hereinafter called "Power Company", and H.S. KERBAUGH, INCORPORATED, a corporation of the State of West Virginia, party of the second part, hereinafter called "Contractor".

WITNESSETH: That in consideration of the premises and of the covenants and undertakings herein expressed to be observed, kept and performed, as well as of the sum of one dollar by each party to the other in hand paid before the sealing and delivery hereof, the receipt whereof is hereby acknowledged, each of the parties hereto for themselves, their successors and assigns, mutually covenant, stipulate and agree as follows;

First.- The Contractor will, at his own expense and risk and in conformity to the following specifications, furnish all material, equipment and labor necessary and suitable for excavating the rock canal shown on attached drawings Nos. A and B, hereby made part of this agreement, and doing all work incidental thereto, to the satisfaction of the Chief Engineer of the Power Company or his authorized representative (hereinafter called the Engineer) and for disposing of the spoil in the manner shown on drawing B attached hereto, except as to such part of the spoil as the Company shall elect to make use of, and this part of the spoil the Contractor will load upon cars of the Company, without extra charge, it being understood that the Company will erect suitable tracks to the head of the canal cut, and that the Contractor will erect and maintain all additional tracks and switches that may be necessary both for the loading of the spoil that the Company elects to take, and for the disposition of the other part of the spoil into the spoil banks as shown on drawing B; and the Contractor will trim the spoil banks as directed.

Second.- The Contractor further agrees that the Engineer shall determine all questions as to the amount and quality of work done, and the rate of progress of the work, and that the rate of progress shall be such as in the opinion of the Engineer will insure completion of the work under ordinary circumstances on or before January first, (1st) 1907, and the decision of the Engineer as to these matters shall be binding on both parties; and the Contractor agrees that he will use every reasonable means to complete the work by January first (1st) 1907.

Third.- The Contractor agrees that he will do all the work to the lines and levels and in accordance with the plans and directions given him by the Engineer, and that the work shall be so done that the sides and bottom of the cut shall be as free as possible from gross irregularities and shall not intrude within the neat lines shown on the plans.

Fourth.- All excavation shall be estimated in place within the neat line established, and the price named by the Contractor shall cover any excess excavation which may be necessary to cut to the neat line.

Fifth.- The Contractor agrees that the price named for this work shall include all necessary bailing and draining, and such coffer-dam work as may be required, and that he will maintain a sufficient pumping plant to drain the canal of rainfall and of leakage that may not be shut off by the Company's coffer-dam, and that he will assume with the Company the general risk of overflowing, and that there shall be no charge for extra pumping nor for any flumes that the Contractor may find necessary to build.

Sixth.- The Contractor agrees that he will have the foundation for the low concrete weir at the head of the canal ready for the Company to build said weir by December first (1st) 1906.

Seventh.- And the Contractor further agrees that he will not sublet or assign the work or any portion thereof without the written consent of the Company, and that he will save the work free from liens either for material or labor that may be attempted.

Eighth.- Payments to the Contractor shall be made as follows: On or about the end of the month the Engineer will make measurements and estimate at the price bid the value of the work done during the preceding month, and the Company will pay to the Contractor ninety (90) per cent of such estimate not later than the fifteenth (15th) of the following month. At the conclusion of the work to the satisfaction of the Engineer he shall make a final estimate of the value of the work according to the terms of this contract, and the balance due the Contractor shall be paid him not more than thirty (30) days later upon his giving a release to the Company from all claims or demands whatsoever growing out of this agreement.

Ninth.- The Company agrees that it will pay the Contractor cost plus 10% for all incidental work that the Engineer may order the Contractor to do.

Tenth.- The Company agrees to pay to the Contractor one dollar, fifty cents ($1.50) per cubic yard of solid rock as full compensation for furnishing all material, equipment and labor, and for all the work specified herein.

IN WITNESS WHEREOF, the said parties hereto have caused their respective corporate seals to be hereto affixed, duly attested, the day and year first hereinbefore written.

McCALL FERRY POWER COMPANY

By J. C. Kirkland
Vice - President

ATTEST:

Harold Pender,
Secretary.

H.S.KERBAUGH (INCORPORATED)

By [illegible] President

ATTEST:

Secretary

Kirkland Estimate of Cost, November 30, 1906

3121

COPY.

November 30th, 1906.

H. F. Dimock, Esq.,

President McCall Ferry Power Company,

60 Wall Street, New York.

Dear Sir:-

In accordance with the request contained in Mr. Barnum's letterto you of October 25th, I beg to submit the following statement of the financial condition of this Company as of October 1st. The resources of the Company on that date available to meet expenditures were:

Accounts Receivable.

Susquehanna Contracting Co.	$3 699 175 00	
McCall Ferry Supply Co.	40 000 00	
Knickerbocker Trust Co. (Money in Escrow)	250 000 00	$3 989 175 00
Cash Assets		578 150 83
		$4 567 325 83

The expenditures to October 1st have been as given in the following schedule and opposite each item has been set the amount estimated as necessary to be still spent to complete the Company's work and bring it to the producing stage.

	Already spent	Estimated to be spent.	Total.
Real Estate,	$ 37,014 18	$365 000	$402 014 18
Hydraulic Construction,	1 133 239 38	2 300 000	3 433 239 38
Improvement of Tail-race,		225 000	225 000 00
Electric Construction, 50 000 H.P.	205 65	1 322 000	1 322 205 65
Elevation of C.& A.D. Tracks.....	10 374 48	1 239 625 52	1 250 000 00
Removal of Highways,		50 000	50 000 00
Administration and General Expenses.....	234 868 19	536 000	770 868 19
Net Interest during Construction.....	424 150,00	175 850	600 000 00
	$1 839 851 88	$6 213 475 52	$8 053 327 40

H.F.D.
11/30/06. -2-

Deducting the resources from the estimated amount still to be expended shows that we shall require to raise about $1,646,000.

We have unissued in the treasury 1517 Bonds. Assuming that these are sold at 90%, they will yield $1,365,300. and to complete the work as now contemplated we shall require an additional sum of about $280,000.

I quote as follows from a memorandum of our Chief Engineer showing what parts of our work can be completed with our present resources, both including and excluding the bonds still in the treasury:

> "In the estimate of total cost to complete the works, the cost of transmission lines, with right of way, is $961,000: if this item be omitted, the total estimated cost would become $7,072,000, and the Company would have a surplus over estimated expenditures of $700, 500.
>
> Included in this estimate is the sum of $1,185,000 for electric and hydraulic equipment; included in the resources of the Company as the sum of $1,365,300, the proceeds of bonds now in the treasury. Assuming these bonds not to be sold, the Company has total resources sufficient for the construction of dam, power house, and switch house, complete, with all hydraulic works, but with no equipment, and have a surplus of $460,200.
>
> This is, in brief, the resources of the Company are $200,500. less than the present total estimates; they are $700,500 greater than the present estimates, omitting transmission lines; they are $460,200 greater than the present estimates, without the sale of bonds now held in the treasury, omitting both transmission lines and all equipment".

Very truly yours,

Vice-President.

Court Order Authorizing Construction of Dam

Commonwealth of Pennsylvania,

vs.

McCall Ferry Power Company, et al.

No. 402, Equity Docket.
No. 462, Commonwealth Docket, 1906.

IN EQUITY.

Jan. 14, 1907, the above entitled cause was heard upon bill and answer was argued by counsel and has been fully considered by the court.

The Commonwealth, by her Attorney General, has submitted the form of decree she desires entered and counsel for defendants have been fully heard thereon.

The same upon full consideration and argument, commending itself to the court, is adopted and the decree in the said form is now made and ordered to be entered as follows:

"And now, this 14 day of January, 1907, the above cause having come on to be heard upon bill and answer and having been argued by counsel, it is ordered and decreed that the right of the defendant, the McCall Ferry Power Company, to continue the construction of a dam now in course of erection on the Susquehanna River and to maintain said dam after the same shall have been constructed, shall be subject to its making and maintaining adequate provision for the passage of fish, and further shall be subject to the condition that said defendant corporation, its successors and assigns, whenever the navigation of said Susquehanna River shall hereafter be improved either under State or

Federal requirements in such way and manner as will secure by the additional construction of a proper lock, or locks, a continuous navigation of said River between Columbia and Havre de Grace, such lock or locks necessary to make said navigation continuous shall be erected without delay by the defendant corporation and its assigns, at its and their own expense, and the physical condition of said lock shall be maintained in good order thereafter.

"It is further ordered and decreed that the McCall Ferry Power Company be and is hereby enjoined from the further maintenance of said dam after such time as, said navigation of said River having been made otherwise continuous, said Company shall fail within a reasonable time to erect and construct, at its expense, said lock."

By the Court,

George Kunkel, P. J.,

Thomas H. Capp, A. L. J.

Power Contract With Consolidated Gas Electric Light and Power Company, June 4, 1907

THIS AGREEMENT made this Fourth day of June, in the year nineteen hundred and seven, between the McCALL FERRY POWER COMPANY, hereinafter called "the Power Company", and the CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE, hereinafter called the "Lighting Company", witnesseth:

I.

The Power Company agrees to maintain and keep at its sub-station near the boundary line of the City of Baltimore and not more than twenty-five thousand (25,000) feet from the Lighting Company's sub-station in McClellan's Alley, at the disposal of the Lighting Company, electric energy generated by water power, of approximately thirteen thousand (13,000) volts at a frequency of approximately twenty-five (25) cycles per second, at the busbars in the sub-station of the Power Company. The Power Company shall provide the necessary sub-station for its apparatus, at the point of delivery, shall furnish all necessary ducts inside the building, and shall also furnish for each cable installed by the Lighting Company, for the transmission of power under this contract, a suitable automatic circuit breaking switch, and such measuring insturments within its sub-station as may be necessary under this contract. For the maintenance of this electric energy at the disposal of the Lighting Company, and for the privilege of demanding its delivery as hereinafter set forth, the Lighting Company agrees to pay annually to the Power Company, as long as the Power Company fulfills this contract according to its terms, the sum of eighty thousand dollars ($80,000.) as service charge, less the sum determined by allowing six hundred dollars ($600.) per thousand feet for the distance from the Power Company's sub-station

to the Pratt Street Power House of the United Railways & Electric Company of Baltimore, by the shortest available line of ducts. This sum shall be paid monthly in twelve equal installments.

II.

The Power Company agrees to deliver at its said sub-station to the Lighting Company as much of said electric energy as the Lighting Company may desire to take, and only when and as desired, not exceeding, however, four thousand (4,000) kilowatts, except as hereinafter provided. The Lighting Company agrees that it will not dispose of said electric energy, or any part thereof, directly or indirectly, to any passenger electric railway now or hereafter operating in competition with the United Railways & Electric Company of Baltimore, or permit it, or any part thereof, to be used by any such Railway Company. The electric energy is to be delivered as desired by the Lighting Company, during the twenty-four hours of each and every day, to the Lighting Company, and it is to be received by it, at the low pressure bars of the said sub-station of the Power Company, the pressure and frequency at which said electric energy shall be delivered shall be practically constant at thirteen thousand (13,000) volts; that is to say, fluctuations of either pressure or frequency shall not be such as to prevent successful operation of electrical apparatus connected with the circuits of the Lighting Company, provided said apparatus is of good design and is connected and operated in accordance with good practice. The Lighting Company shall furnish and install, at its own expense, cables for connection to the switches installed by the Power Company. For the electric energy delivered the

Lighting Company shall pay to the Power Company an energy charge, which shall be determined by multiplying the total number of kilowatt hours delivered to the Lighting Company by two mills. All payments under this contract shall be made monthly, on or before the fifteenth day of each month following that in which electric energy is first regularly supplied, and including the first month after the expiration of this agreement; each such monthly payment to include all amounts due under this contract for operations to the end of the preceding month.

III.

It is the intent of this agreement that the Lighting Company shall have the right to take an average of four thousand (4,000) kilowatts during those hours when the load of the Lighting Company is four thousand (4,000) kilowatts or greater. Inasmuch as it is impossible, by reason of fluctuations in the Lighting Company's load, to hold the energy delivered by the Power Company at exactly four thousand (4,000) kilowatts, the Lighting Company is hereby permitted to take an average of four thousand (4,000) kilowatts during the hours when its load is equal to or in excess of four thousand (4,000) kilowatts, provided that it shall at no time exceed forty-two hundred (4,200) kilowatts. For this excess energy, no charge will be made by the Power Company other than the two mills per kilowatt hour. During the hours when the load of the Lighting Company is less than four thousand (4,000) kilowatts, the Lighting Company shall have the right to take energy under this agreement for momentary peaks up to five thousand (5,000) kilowatts, provided that by so doing the Power Company is not interfered with in the delivery of its energy to other customers. No

charge for this excess energy will be made by the Power Company other than the two mills per kilowatt hour, and the Power Company shall supply, to the extent of the energy contracted for, the Lighting Company's peak load (that is to say four thousand (4,000) kilowatts) even during the low water period.

IV.

The date upon which the supply of the four thousand (4,000) kilowatts hereby contracted for shall begin, shall be the first day of September, 1908; provided, however, that in case either party shall be delayed in the construction of its works, or in the completion of any essential part thereof, by strike, war, act of God, or any other cause beyond its control, including any interruption in the construction, maintenance or operation by the Power Company of its electric plant, or transmission lines caused by any injunction or order of Court granted in any bona fide and adverse legal proceedings, the date shall be extended for a period equal to that during which the interruption will have existed, provided, however, this extension shall not be later than September 1st, 1909. If the delay in delivering the electric energy by the Power Company to the Lighting Company, in accordance with this contract, shall extend later than September 1st, 1909, then the Lighting Company shall have the option of allowing such further extension or extensions, from time to time, after September 1st, 1909, as it may see fit to grant, or rescinding this contract, and declining to take any deliveries thereunder. The Power Company will give to the Lighting Company written notice, naming the exact date at which it will stipulate to be ready to furnish power hereunder, and such notice shall be given sufficiently

in advance of such date to enable the Lighting Company to order, procure and install cables, connections and apparatus, including conduits between the City Limits and the Power Company's sub-station, required and necessary to be furnished and installed by it, the Lighting Company, hereunder. In the interval, if any, between said dates so to be named in said notice, and the time of the actual readiness of the Power Company to furnish power hereunder, the Power Company shall pay to the Lighting Company interest at the rate of six per centum on the capital invested in said cables, conduits, connections and apparatus, together with any conduit rental payable by the Lighting Company to the Mayor and City Council of Baltimore for the use of the City conduits for the service covered hereby. The Power Company warrants, notwithstanding anything in Article One herein contained, that its sub-station will be located near the Eastern boundary line of the City of Baltimore, and in no event more than ten thousand (10,000) feet from the intersection of said boundary line with East Baltimore Street.

V.

The Lighting Company shall adjust the apparatus installed by it and by its customers, and so install and maintain its system of distribution that electric energy delivered by the Power Company shall be at a power factor not lower than ninety per cent (90%). The Lighting Company shall take electric energy in such a manner that the variation in amount supplied by any two phases shall in no case exceed ten (10) per cent, provided the potential supplied by the Power Company at the thirteen thousand (13,000) volt busbars in its sub-station shall be identical as measured upon each of the three phases. In the event of unbalanced load, due to unequal loading of phases by the

Lighting Company, the maximum energy taken by the Lighting Company shall be held to be that which would be taken if the three phases were loaded equally to the same extent as the most heavily loaded phase.

VI.

The Lighting Company agrees to supply upon demand from the Power Company electric energy generated by steam power upon the following conditions:

Upon six hours' notice, specifying the amount required during the twenty-four hour period, the Lighting Company shall supply energy to the Power Company not exceeding one hundred and fifty thousand (150,000) kilowatt hours in any twenty-four hour period, and not exceeding an average of four million (4,000,000) kilowatt hours per annum during the term of this agreement, or any extensions thereof. Provided, however, that the obligation of the Lighting Company to furnish energy for the use of the Power Company in supplying users other than the Lighting Company shall extend only to such power as, at the time of any demand by the Power Company, the Lighting Company may have available in excess of the power required for its own operations. Provided it does supply this one hundred and fifty thousand (150,000) kilowatt hours in any twenty-four hour period, the Lighting Company may supply it at such hours and rates of delivery, i. e. quantum of energy per hour, as it may choose. In this connection, it is hereby agreed, that if the Power Company, at any time, is deficient in the delivery of any electric energy generated by water power, which it, under this contract, is obliged to supply the Lighting Company, the Lighting Company may supply to itself electric energy generated by itself from steam power, in an amount equal to

such deficiency, and charge the Power Company therefor at the rate of four mills per kilowatt hour, (that is to say, to allow the Power Company two mills per kilowatt hour, and to charge them six mills per kilowatt hour making a net charge of four mills as aforesaid.) This amount thus supplied, in substitution of the obligation of the Power Company, shall be deducted from the one hundred and fifty thousand (150,000) kilowatt hours, which, under this contract, the Lighting Company would otherwise be obliged to deliver to the Power Company. For all energy generated by steam power, delivered by the Lighting Company to the Power Company, the Power Company shall pay six mills per kilowatt hour. The Electric energy generated by steam power to be delivered under this article by the Lighting Company to the Power Company shall be delivered at the busbars at the Westport Power House, and to be the same kind of energy as to voltage and frequency as is normally delivered by the Power Company, and the Lighting Company for this delivery shall allow the Power Company the free use of its cables and ducts. In order to be in a condition to perform this obligation, the Lighting Company agrees to maintain its steam plant, so as to have not less than its present output capacity, to wit, thirteen thousand (13,000) kilowatts under a normal load, and for this maintenance of condition to deliver the electric energy generated by steam power, as prescribed by this contract, the Power Company shall pay annually to the Lighting Company the sum of twenty thousand dollars ($20,000.) as a service charge for the right to receive such energy generated by steam in accordance with the terms of this contract. This sum shall be paid in twelve equal monthly installments.

VII.

Meters necessary to determine the quantities supplied under this contract are to be provided as may be mutually agreed upon between the two Companies. Those installed in the sub-station of the Power Company are to be provided and kept in repair by the Power Company, and shall be and remain its property. Those installed in the Power house of the Lighting Company are to be provided and kept in repair by the Lighting Company, and shall be and remain its property. The meters shall be sealed and approved by both parties when installed, and after each test. Either party shall have the right to inspect and test the meters at any reasonable time two days after having given notice, in writing, to the other party, of its desire to do so, and the expense of such test shall be borne by the party requesting it.

VIII.

The Power Company agrees that during the term of this contract it will sell electric energy for use in Baltimore and its vicinity to no individual or corporation, directly or indirectly, other than the Lighting Company, except that it may sell to the United Railways and Electric Company of Baltimore ten thousand (10,000) kilowatts upon terms and conditions not more favorable to said Railways Company than those in this contract, but said electric energy is to be used by the Railways Company only for its railway purposes in connection with its own railroad or lines leased or controlled by it and not for electric lighting or electric power as an independent business; and railway purposes shall include parks owned or operated by the Railways Company. For the purposes of this contract "Baltimore and vicinity" shall include all territory within a radius of twenty-five miles of the Washington Monument in Baltimore City.

IX.

If the Lighting Company desires to purchase more energy generated by water power than the maximum amount of energy, which under this contract, it has agreed to purchase from the Power Company, it agrees to call on the Power Company to name a price at which it will agree to furnish such additional electric energy. If the price at which the Power Company will furnish the said additional electric energy is less than the price at which the Lighting Company can secure such additional electric energy generated by water power, then the Power Company agrees to furnish, and the Lighting Company agrees to purchase said additional energy from the Power Company, but should the Lighting Company secure a price for said additional electric energy generated from water power at less than that at which the Power Company will, in its offer, agree to furnish said energy, then the Lighting Company agrees to purchase said additional energy from the Power Company, if offered, upon terms as favorable as those offered by any bona fide source.

X.

If default shall be made at any time by either party to this agreement, in making payments at the time or times when they shall fall due under the terms of this agreement, and if such default shall continue for sixty days after demand for payment will have been made, then the other party shall have the right, at its option, of terminating this agreement, or, without terminating this agreement, to discontinue delivering electric energy generated by water or by steam, as the case may be, until all money due to it from the other party will have been paid. And this option may be exercised by either party, whenever and as often as any such default shall occur and continue for the said period of

sixty days after demand has been made; omission to exercise such option at any time shall not constitute a waiver of right to exercise such option whenever such default shall occur, nor shall anything herein contained be held to prevent either party from enforcing the payments due to it by legal process.

XI.

If for any reason any difference should arise between the Lighting Company and the Power Company as to the failure of either party to perform the provisions of this contract, or any question should arise as to the construction by either party of the provisions of this contract, the questions arising therefrom shall be submitted to a board of arbitrators, one member of which shall be appointed by the Lighting Company, another by the Power Company, and the two so selected to appoint a third member, and any decision made by this board, or a majority thereof, shall be final and binding upon the parties hereto, and any damage which may be awarded by said board, or majority, to the party injured shall be paid to the party injured by the other party within thirty days from the decision of the board. Should either party fail or refuse to name its arbitrator within ten days after written notice from the other party of the latter's desire for arbitration, (which notice shall define the question or questions to be arbitrated, and shall contain the name of the arbitrator chosen by said other party), then it shall be competent for any member of the Supreme Bench of Baltimore City to name an arbitrator on behalf of the party so failing or refusing, and said arbitrator so named shall have all the powers of an arbitrator named by the party so in default. Should the arbitrators, however named fail to agree upon a third arbitrator within ten days after their

appointment, then it shall be competent for any member of said Supreme Bench of Baltimore City, at the request of either party to name such arbitrator.

XII.

This contract between the Power Company and the Lighting Company shall remain in force for a period of ten years from the date of the first delivery of energy generated by water power under this contract. The Lighting Company shall have the option to extend the contract for a further period of ten years, providing notice to that effect is given not less than one year prior to the expiration of the ten year period.

XIII.

This agreement is an entire contract, each stipulation thereto being a part of the consideration for every other, and the terms, covenants and conditions therof shall inure to the benefit of and bind the successors and assigns of each of the parties hereto, as well as the parties themselves.

XIV.

This entire contract has been drawn upon the expectation that the Lighting Company shall demand from the Power Company an average maximum of four thousand (4,000) kilowatts, as expressed in Article II and Article III of this contract. Inasmuch as the Lighting Company may desire to take, instead of four thousand (4,000) kilowatts, as expressed in Article II and Article III, at least five thousand (5,000) kilowatts, an option is hereby given to the said Lighting Company to demand said five thousand (5,000) kilowatts instead of four thousand (4,000) kilowatts, provided the said

option is exercised by written notice sent to the Power Company not more than one year after the execution of this contract. In the event of the exercise of such option to take five thousand (5,000) kilowatts instead of four thousand (4,000) kilowatts, the amounts expressed in the respective articles of this contract shall be changed as follows:

In Article I instead of eighty thousand dollars ($80,000.) there shall be one hundred thousand dollars ($100,000.).

In Article I instead of six hundred dollars ($600.) ther shall be seven hundred and fifty dollars ($750.)

In Article II instead of four thousand (4,000) kilowatts there shall be five thousand (5,000) kilowatts.

In Article III instead of four thousand (4,000) kilowatts, there shall be five thousand (5,000) kilowatts.

In Article III instead of forty-two hundred (4,200) kilowatts, there shall be fifty-two hundred and fifty (5,250) kilowatts.

In Article III, instead of five thousand (5,000) kilowatts, there shall be six thousand (6,000) kilowatts.

In Article III, last line, instead of four thousand (4,000) kilowatts, there shall be five thousand (5,000) kilowatts.

In Article IV instead of four thousand (4,000) kilowatts, there shall be five thousand (5,000) kilowatts.

In Article VI instead of twenty thousand dollars ($20,000.), there shall be twenty-five thousand dollars ($25,000.).

FINALLY.

Inasmuch as the satisfactory operation of the Lighting Company's system will depend largely on the uninterrupted availability and reliability of the energy furnished

by the Power Company hereunder, - it is further agreed, notwithstanding anything hereinbefore contained:-

1. That if at any time or for any cause the Power Company shall be unable to give to its customers the full amount of energy due them, no discrimination will be made against the Lighting Company to its injury in favor of any other customer of the Power Company. Inasmuch as the damages arising from the breach of this stipulation may be serious and will be impossible of exact ascertainment, it is agreed that five thousand dollars ($5,000.) shall be paid for each breach, as liquidated damages, and not as a penalty.

2. Loss of revenue to the Lighting Company caused by any customer declining to pay for current by reason of interruptions of service and loss of business of the Lighting Company by reason of such interruption shall be considered as elements of damage arising from interruption of service. Inasmuch, however, as there may be interruptions more or less short in duration, where the resort to arbitration may prove to be too cumbersome a method for the determination of losses due to such interruptions, the Lighting Company instead of resorting to arbitration may, (but it is not required to), elect to have the General Managers of the two Companies determine the amount of said loss or losses, calling in a third party as umpire, if necessary, whose decision shall be final as to the matters presented to him. The Lighting Company shall charge the Power Company, in the next succeeding monthly settlement, with the amount of loss or losses so determined.

3. The arbitration provisions of this contract shall not prevent the exercise by the Lighting Company of any legal rights it would otherwise have to terminate this contract,

without resort to arbitration, if the service of the Power Company is not substantially in accordance with Article I and the other provisions hereof.

IN WITNESS WHEREOF, the parties hereto have caused this agreement to be executed by their proper officers thereunto duly authorized, and their respective corporate seals to be hereunto affixed, the day and year first above written.

McCALL FERRY POWER COMPANY

By J. C. S. Thicknesse
Vice President

Attest:
Harold Pender
Secretary

CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE.

By Allen J. Miller
Vice President.

Attest:
Chas. M. Cohen
Secretary.

Power Contract With United Railways and Electric Company, June 28, 1907

THIS AGREEMENT Made this 28th day of June in the year nineteen hundred and seven, between the McCALL FERRY POWER COMPANY, hereinafter called, "Power Company", and THE UNITED RAILWAYS AND ELECTRIC COMPANY OF BALTIMORE, hereinafter called, "Railway Company",—

WITNESSETH:

I.

The Power Company agrees to maintain and keep at its sub-station near the boundary line of the City of Baltimore and not more than twenty-five thousand (25,000) feet from the Pratt Street Power House of the Railway Company at the disposal of the Railway Company, electric energy generated by water power of approximately thirteen thousand (13,000) volts at a frequency of approximately twenty-five (25) cycles per second at the busbars in the sub-station of the Power Company. The Power Company shall provide the necessary sub-station for its apparatus at the point of delivery, shall furnish all necessary ducts inside the building, and shall also furnish for each cable installed by the Railway Company for the transmission of power under this Contract, a suitable automatic circuit-breaking switch, and such measuring instruments within its sub-station as may be necessary under

(2)

this Contract. For the maintenance of this electric energy at the disposal of the Railway Company and for the privilege of demanding its delivery as hereinafter set forth, the Railway Company agrees to pay annually to the Power Company so long as the Power Company fulfills this Contract according to its terms, the sum of two hundred thousand dollars ($200,000) as service charge, less the sum determined by allowing fifteen hundred dollars ($1500) per thousand feet for the distance from the Power Company's sub-station to the Pratt Street Power House of the Railway Company by the shortest available line of ducts. This sum shall be annually paid in four equal quarterly instalments.

II.

The Power Company agrees to deliver at its said sub-station to the Railway Company, as much of said electric energy as the Railway Company may desire to take, and only when and as desired, not exceeding, however, ten thousand (10,000) kilowatts, except as hereinafter provided. The electric energy is to be delivered to the Railway Company as desired by it during the twenty-four hours of each and every day, and it is to be received by the

(3)

Railway Company at the low-pressure busbars of the said sub-station of the Power Company. The pressure and frequency at which said electric energy shall be delivered shall be practically constant at thirteen thousand (13,000) volts; that is to say, fluctuations of either pressure or frequency shall not be such as to prevent successful operation of electrical apparatus connected with the circuits of the Railway Company, provided said apparatus is of good design and is connected and operated in accordance with good practice. The Railway Company shall furnish and install at its own expense cables for connection to the switches installed by the Power Company. For the electric energy delivered, the Railway Company shall pay to the Power Company an energy charge, which shall be determined by multiplying the total number of kilowatt hours delivered to the Railway Company by two mills. All payments under this Contract, except as otherwise especially provided, shall be made monthly, on the fifteenth day of each month following that in which electric energy is first regularly supplied, and including the first month after the expiration of this Agreement.

III.

Inasmuch as it is impossible, by reason of fluctuations in the Railway Company's load, to hold

(4)

the energy delivered by the Power Company at exactly ten thousand (10,000) kilowatts, the Railway Company is hereby permitted to take an average of ten thousand (10,000) kilowatts during the hours when its load is equal to or in excess of ten thousand (10,000) kilowatts, provided that it shall at no time exceed ten thousand five hundred (10,500) kilowatts. For this excess energy, no charge will be made by the Power Company other than the two mills per kilowatt hour. During the hours when the load of the Railway Company is less than ten thousand (10,000) kilowatts, the Railway Company shall have the right to take energy under this Agreement for momentary peaks up to twelve thousand (12,000) kilowatts, provided that by so doing the Power Company is not interfered with in the delivery of its energy to other customers. No charge for this excess energy will be made by the Power Company other than the two mills per kilowatt hour, and the Power Company shall supply to the extent of the energy contracted for, the Railway Company's peak load even during low water period.

IV.

The date upon which the supply of the ten thousand (10,000) kilowatts hereby contracted for shall begin, shall be the first day of September, nineteen hundred and eight; provided, however,

(5)

that in case either party shall be delayed in the construction of its works, or in the completion of any essential part thereof, by strike, war, act of God, or any other cause beyond its control, including any interruption in the construction, maintenance or operation by the Power Company of its electric plant or transmission lines, caused by any injunction or order of court granted in any bona fide and adverse legal proceedings,— the date shall be extended for a period equal to that during which the interruption shall have existed; provided, moreover, this extension shall not be later than the first day of September, nineteen hundred and nine. If the delay in delivering the electric energy by the Power Company to the Railway Company in accordance with this Contract, shall extend later than the first day of September, nineteen hundred and nine, then the Railway Company shall have the option of extending the date to a period later than the first day of September, nineteen hundred and nine, or of rescinding this Contract and declining to take any deliveries thereunder. The Power Company will give to the Railway Company a written notice naming the exact date at which it will stipulate to be ready to furnish power hereunder, and such notice shall be given sufficiently in advance of such date to enable the Railway Company to order, procure and install cables, connec-

tions and apparatus, including conduits between the City limits and the Power Company's sub-station, required and necessary to be furnished and installed by it, the Railway Company, hereunder. In the interval, if any, between said date so to be named in said notice, and the time of the actual readiness of the Power Company to furnish power hereunder, the Power Company shall pay to the Railway Company interest at the rate of six per centum per annum on the capital invested in said cables, connections, apparatus and conduits, together with any conduit rental payable by the Railway Company to the Mayor and City Council of Baltimore for the use of the City conduits for the service covered hereby. The Power Company warrants, notwithstanding anything in Article I hereof contained, that its sub-station will be located near the eastern boundary line of the City of Baltimore, and in no event more than ten thousand (10,000) feet from the intersection of said boundary line with East Baltimore street.

V.

The Railway Company shall adjust the apparatus installed by it, and so install and maintain its system of distribution that electric energy delivered by the Power Company shall be at a power factor not lower than ninety per cent. (90%). The Railway Company shall

(7)

take electric energy in such a manner that the variation in amount supplied by any two phases shall in no case exceed ten per cent. (10%), provided the potential supplied by the Power Company at thirteen thousand (13,000) volt busbars in its sub-station shall be identical as measured upon each of the three phases. In the event of unbalanced load, due to unequal loading of phases by the Railway Company, the maximum energy taken by the Railway Company shall be held to be that which would be taken if the three phases were loaded equally to the same extent as the most heavily loaded phase.

VI.

The Railway Company agrees to supply upon demand from the Power Company electric energy generated by steam power upon the following conditions:

(1) Upon six hours' notice, specifying the amount required during the twenty-four hour period, the Railway Company shall supply energy to the Power Company not exceeding three hundred thousand (300,000) kilowatt hours in any twenty-four hour period, and not exceeding an average annual supply of eight million (8,000,000) kilowatt hours during the term of this Contract or any extension thereof. The Railway Company may supply the three hundred thousand (300,000)

(8)

kilowatt hours in any twenty-four period at such hours and rates of delivery, i.e., quantum of energy per hour as it may choose.

(3) For all energy generated by steam power and delivered by the Railway Company to the Power Company, the Power Company shall pay six mills per kilowatt hour.

(3) If the Power Company at any time is deficient in the delivery of any electric energy generated by water power which it, under this Contract, is obliged to supply the Railway Company, the Railway Company may supply to itself electric energy generated by itself from steam power, in amount equal to such deficiency and charge the Power Company therefor at the rate of four mills per kilowatt hour (that is to say, allow the Power Company two mills per kilowatt hour against the charge of six mills per kilowatt hour, making a net charge of four mills as aforesaid). This amount thus supplied in substitution of the obligation of the Power Company shall be deducted from the three hundred thousand (300,000) kilowatt hours which, under this Contract, the Railway Company would otherwise be obliged to deliver to the Power Company.

(4) The obligation of the Railway Company to furnish to the Power Company energy other than for the use of the Railway Company, shall extend only to such power as, at or during the time of any demand by the Power Company, the Railway Company may have available in excess of the power required for its own operations.

(c)

The electric energy generated by steam power to be delivered under this Article by the Railway Company to the Power Company, shall be delivered at the busbars at the Pratt Street Power House of the Railway Company, and to be the same kind of energy as to the voltage and frequency as is normally delivered by the Power Company, and the Railway Company for this delivery shall allow the Power Company the free use of its cables and ducts. In order to be in a condition to perform this obligation, the Railway Company agrees, subject to the provision aforesaid, to maintain its steam plant so as to have not less than its present output capacity, to wit: twenty-five thousand (25,000) kilowatts under a normal load; and for this maintenance of condition to deliver the electric energy generated by steam power, as prescribed by this Contract, the Power Company shall pay annually to the Railway Company the sum of fifty thousand dollars ($50,000) as a service charge for the right to receive such energy generated by steam in accordance with the terms of this Contract. This sum shall be paid in four equal instalments of twelve thousand five hundred dollars ($12,500) each.

VII.

Meters necessary to determine the quantities supplied under this Contract are to be provided as may be mutually agreed upon between the two Companies.

(10)

Those installed in the sub-station of the Power Company are to be provided and kept in repair by the Power Company, and shall be and remain its property. Those installed in the power house of the Railway Company are to be provided and kept in repair by the Railway Company, and shall be and remain its property. The meters shall be sealed and approved by both parties when installed, and after each test. Either party shall have the right to inspect and test the meters at any reasonable time two days after having given notice, in writing, to the other party of its desire to do so, and the expense of such test shall be borne by the party requesting it.

VIII.

The Power Company agrees that, during the term of this Contract, it will sell electric energy for use in Baltimore and its vicinity to no individual or corporation, directly or indirectly other than the Railway Company, except that it may sell to the Consolidated Gas, Electric Light and Power Company of Baltimore electric power upon terms and conditions not more favorable to said Lighting Company than those in this Contract, but said electric energy is to be furnished to said Lighting Company under restrictions preventing its use, either directly or indirectly, by any passenger electric railway company now or

(11)

hereafter operating in competition with the Railway Company. The Railway Company agrees that it will use the electric energy under this Contract only for its railway purposes in connection with its own railroad or lines leased or controlled by it, and not for electric lighting or electric power as an independent business; and railway purposes shall include parks owned or operated by the Railway Company. For the purpose of this Contract, "Baltimore and vicinity" shall include all territory within a radius of twenty-five miles of the Washington Monument in Baltimore City.

IX.

If the Railway Company desires to purchase more energy generated by water power than the maximum amount of energy which, under this Contract, it has agreed to purchase from the Power Company, it agrees to call on the Power Company to name a price at which it will agree to furnish such additional electric energy. If the price at which the Power Company will so furnish is less than the price at which the Railway Company can elsewhere secure such additional electric energy generated by water power, then the Power Company agrees to furnish and the Railway Company agrees to purchase, said additional energy from the Power Company; and should the Railway Company secure a price for said additional electric energy

generated from water power less than that at which the Power Company will, in its offer, agree to furnish said energy, then the Railway Company agrees to purchase said additional energy from the Power Company, if the latter will meet such price.

X.

If default shall be made at any time by either party to this Agreement in making payments at the time or times when they shall fall due under the terms of this Agreement, and if such default shall continue for sixty days after demand for payment shall have been made, then the other party shall have the right, at its option, of terminating this Agreement, or without terminating this Agreement to discontinue delivering electric energy generated by water or by steam, as the case may be, until all money due to it from the other party shall have been paid. And this option may be exercised by either party whenever, and as often as any such default shall occur and continue for the said period of sixty days after demand has been made; omission to exercise such option at any time shall not constitute a waiver of the right to exercise such option whenever such default shall occur, nor shall anything herein contained be held to prevent either party from enforcing the payments due to it by legal process.

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XI.

If any question should arise between the Railway Company and the Power Company as to the performance by either party of any provisions of this Contract, or if any question should arise over either party's construction of any such provisions, such question shall be submitted to a board of arbitrators, one member of which shall be appointed by the Railway Company, another by the Power Company, and the two so selected to appoint a third member; any decisions made by this board or a majority thereof shall be final and binding upon the parties hereto; and any damages which may be awarded by said board or majority to the party injured shall be paid to the party injured by the other party within thirty days from the decision of the board. Should either party fail or refuse to name its arbitrator within ten days after written notice from the other party of the latter's desire for arbitration (which notice shall define the question or questions to be arbitrated and shall contain the name of the arbitrator chosen by said other party), then it shall be competent for any member of the Supreme Bench of Baltimore City to name an arbitrator on behalf of the party so failing or refusing; and such arbitrator so named shall have all the powers of an arbitrator named by the party so in default. Should the arbitrators, however named, fail to agree upon a third arbitrator within ten (10) days after

their appointment, then it shall be competent for any member of said Supreme Bench, at the request of either party to name such third arbitrator.

XII.

This Contract between the Power Company and the Railway Company shall remain in force for a period of ten (10) years from the date of the first delivery of energy generated by water power under this Contract. The Railway Company shall have the option to extend the Contract for a further period of ten (10) years, provided notice to that effect is given not less than one (1) year prior to the expiration of the ten (10) year period.

XIII.

This Agreement is an entire contract, each stipulation being a part of the consideration for every other, and the terms, covenants and conditions thereof shall ensure to the benefit of and bind the successors and assigns of each of the parties hereto, as well as the parties themselves.

(15)

FINALLY.

Inasmuch as the satisfactory operation of the Railway Company's system will depend largely on the uninterrupted availability and reliability of the energy furnished by the Power Company hereunder,— it is further agreed, notwithstanding anything hereinbefore contained:

(1) That if at any time or for any cause the Power Company shall be unable to give to its customers the full amount of energy due them,— no discrimination will be made against the Railway Company to its injury in favor of any other customer of the Power Company. Inasmuch as the damages arising from the breach of this stipulation may be serious and will be impossible of exact ascertainment, it is agreed that five thousand dollars ($5000) shall be paid for each breach, as liquidated damages, and not as a penalty.

(2) Loss of fares by the Railway Company shall be considered as an element of damages arising from interruptions of service. Inasmuch, however, as there may be interruptions more or less short in duration, where the resort to arbitration may prove to be too cumbersome a method for the determination of losses due to such interruptions, the Railway Company instead of resorting to arbitration may (but it is not required to) elect to have the General Managers of the two Companies determine the amount of

said loss or losses, calling in a third party as umpire if necessary, whose decision shall be final as to the matters presented to him. The Railway Company shall charge the Power Company, in the next succeeding monthly settlement, with the amount of loss or losses so determined.

(3) The arbitration provisions of this Contract shall not prevent the exercise by the Railway Company of any legal right it would otherwise have to terminate this Contract, without resort to arbitration, if the service of the Power Company is not substantially in accordance with Article I and the other provisions hereof.

IN WITNESS WHEREOF The parties hereto have caused this Agreement to be executed by their proper officers thereunto duly authorized, and their respective corporate seals to be hereunto affixed, the day and year first above written.

McCALL FERRY POWER COMPANY,

ATTEST: By H. Dimock
President.

Harold Pender
Secretary.

THE UNITED RAILWAYS AND ELECTRIC COMPANY OF BALTIMORE,

ATTEST: By Jno. K. Stone
President.

D. Carder
Secretary.

Hutchinson's Report on Condition of the Work, November 1, 1907

McCALL FERRY POWER COMPANY
OFFICE OF THE CHIEF ENGINEER
ROOM 2407, SIXTY WALL STREET
NEW YORK CITY

CARY T. HUTCHINSON
CHIEF ENGINEER
WM. BARCLAY PARSONS
CONSULTING ENGINEER

November 26th, 1907.

H. F. Dimock, Esq., President,
McCall Ferry Power Company,
#60 Wall Street, N. Y. City.

CONDITION OF THE WORK AT McCALL FERRY ON NOVEMBER 1st, 1907.

Dear Sir,-

In accordance with the direction of the Executive Committee the works of this Company at McCall Ferry have been suspended, only such men being retained as are necessary to guard the work already done against danger during winter.

It happens that the condition of the work was particularly favorable to a partial suspension, owing to the fact that we have finished all the work on the dam on both sides of the river that would have been done this Fall. It was intended that work on the dam should cease on November 1st, as it did; we expected to proceed with the work of the tail-race cut and complete the walls and other parts of the power house; this work has been stopped.

The back wall of the power house, however, is up to its finished height at all points and so guards the power house against dangers from floods or ice. The cessation of work therefore means delay, but does not mean danger to the work already done. The force on the ground is sufficient to meet any emergencies; it is employed in putting the construction plant in winter quarters and in minor work in the power house.

In the meantime, as authorized, the work of securing rights-of-way for the transmission line to Baltimore will be continued, and that part already secured will be held, and the detail work on the engineering designs will be continued.

To Mr. Dimock,

The makers of water wheels and of the electrical machinery have been directed to cease work on their contracts.

The attached sheets give,-

(A) Work done and to be done, excluding equipment, in quantities.

(B) Work done and to be done, excluding equipment, in percentage.

(C) Money spent and to be spent, including equipment.

Making allowances for the ten months spent in preparatory work, and the money spent on this work, I estimate that the work as a whole, excluding equipment is at least 80% complete. The work done will not be endangered by suspension of active work.

Very truly yours,

Carl J. Hutchinson

Chief Engineer.

(A)

CONDITION OF WORK

November 1st, 1907

C O N C R E T E

	Total	In Place	To Complete
Dam and Abutments	189 125 yds.	142 766 yds.	46 359 yds.
Power House Sub-structure	86 650	64 637	22 013
Power House Super-structure	10 530	4 480	6 050
Sundry	19 313	9 063	10 250
TOTAL	305 618 yds.	220 946 yds.	84 672 yds.

S T E E L

Power House Super-structure	939 400 lbs.	79 106 lbs.	830 294 lbs.

ROCK EXCAVATION

Tail Race	150 000 yds.	60 447 yds.	89 553 yds.
Other Work	147 946	116 829	31 117
TOTAL	297 946 yds.	177 276 yds.	120 670 yds.

(B)

WORK DONE IN PERCENTAGE.

CONCRETE

	In Place	To Complete
Dam and Abutments	75%	25%
Power House Sub-structure	74%	26%
Power House Super-structure	42%	58%
Sundry	47%	53%
TOTAL	72%	28%

STEEL

Power House Super-structure	8.5%	91.5%

ROCK EXCAVATION

Tail Race	40.5%	59.5%
Sundry	79.0%	21 %
TOTAL	59.5%	40.5%

Trace pencil - as it must print.

(C)

COST OF CONSTRUCTION.

TO NOVEMBER 22nd, 1907.

	Total to Complete	Money Spent	Balance	R-W C.
Construction Plant and Preliminary Work	$1 326 210	$1 326 210	- -	100 %
Dam and Power House Sub-structure	1 855 730	1 326 960	$528 770	71.5 %
Power House Super-structure	286 540	48 250	238 290	16.8 %
Hydraulic Equipment	570 000	127 250	442 750	22.4
Electrical Equipment	553 000	---	553 000	0
Tail Race Improvement	365 000	173 930	191 070	47.6
Elevation C. and P. D. Tracks	1 250 000	1 155 370	94 630	92.5
TOTAL	$6 206 480	$4 157 970	$2 048 510	
PERCENT	100%	67%	33%	

Letter Agreement for Issuance of Additional McCall Ferry Power Company Bonds to Susquehanna Contracting Company for Additional Property, Cash, etc.

SUSQUEHANNA CONTRACTING COMPANY.
62 Cedar Street.

New York, October 20th, 1908.

McCall Ferry Power Company,
60 Wall Street, New York.

Gentlemen:

The Susquehanna Contracting Company hereby offers to discharge and cancel all indebtedness due from McCall Ferry Power Company to the Susquehanna Contracting Company, including the indebtedness arising from recent advances for the purpose of providing for construction work now under way and lately undertaken, with a view to provision being made therefor through the issuance of bonds of the McCall Company, and will assign and release to the McCall Company all collateral held for any of said indebtedness, and will further pay to the McCall Company $62,000 in cash from time to time as needed by the McCall Company for or in connection with its construction work, and will convey or cause to be conveyed to the McCall Company all the lands, and interests in lands, in the State of Pennsylvania, now owned, directly or indirectly, by the Contracting Company, in consideration that the McCall Company will pay and deliver to the Contracting Company $544,000 in par value of the first mortgage

bonds of McCall Company.

SUSQUEHANNA CONTRACTING COMPANY,

By A. J. Bartlett

President

SUSQUEHANNA CONTRACTING COMPANY.

62 Cedar Street.

New York, October 20, 1908.

McCall Ferry Power Company,

60 Wall Street, New York.

Gentlemen:

In case your Company shall accept the proposition this day submitted to you by us for the issuance to us of $544,000 in par value of the first mortgage bonds of the McCall Company, we beg to say that we have made arrangements whereby we can borrow $400,000 in cash, to be repaid in one year, with interest at 6%, on the pledge of 702 of said bonds of the McCall Company, which will then be in our possession, and the first mortgage on the property of the Conowingo Land Company, on which there is now due, principal and interest, over $30,000, provided the lenders be protected by the pledge as additional collateral of the equity of the McCall Ferry Power Company in the deposit of $250,000 and interest held by the Knickerbocker Trust Company to secure the performance of a certain contract with two Railroad Companies. Accordingly if your Company will pledge your equity in said deposit as aforesaid, this Company hereby offers to procure for you, and secure to you, the option to purchase said 702 bonds and said Conowingo Land Company mortgage, by paying the amount of said $400,000 loan, and interest, at any

time on or before the maturity of said loan, it being understood that if said option should not be exercised by you, and your equity in said deposit, or any part thereof, should be used in the payment of said loan (such option being not exercised) then this Company will be responsible to you therefor.

SUSQUEHANNA CONTRACTING COMPANY,

By A. P. Bartlett

President

Gun 41-D 3743

McCALL FERRY POWER COMPANY
SIXTY WALL STREET
NEW YORK

October 22, 1908.

Susquehanna Contracting Company,
62 Cedar Street,
New York City.

Gentlemen:-

The McCall Ferry Power Company hereby accepts the proposition contained in your first letter of the 20th inst., relative to the delivery to you of $~~544,000~~ in par value of the first mortgage bonds of this Company, for the considerations stated in said letter.

Yours very truly,

McCALL FERRY POWER COMPANY,

By H. Dimick
President.

McCALL FERRY POWER COMPANY
SIXTY WALL STREET
NEW YORK

October 22, 1908.

Susquehanna Contracting Co.,
62 Cedar Street,
New York City.

Gentlemen:-

The McCall Ferry Power Company hereby accepts the proposition contained in your second letter of the 20th inst., relative to the pledge by this Company of the equity in the deposit of $250,000 and interest held by the Knickerbocker Trust Company, for the considerations stated in said letter.

Yours very truly,

McCALL FERRY POWER COMPANY,

By H. Hunter

President.

Notes for $400,000 Loan

$100,000. New York, October 28th, 1908.

On or before one year after date, the SUSQUEHANNA CONTRACTING COMPANY promises to pay to HARVEY FISK & SONS, or order, at their office in the City of New York, one hundred thousand dollars ($100,000), with interest at six per cent. per annum, for value received, having assigned, or procured to be assigned, to said HARVEY FISK & SONS as collateral security one hundred and seventy-five (175) One thousand dollar ($1000) first mortgage bonds of the McCall Ferry Power Company, Nos. 1945 to 1983 and 8484 to 8619, inclusive, and also a one-fourth interest in the equity of the McCall Ferry Power Company in the deposit of two hundred and fifty thousand dollars ($250,000) and interest held by the Knickerbocker Trust Company. In case of any exchange of or addition to the collaterals above named, the provisions of this note shall extend to and embrace such new or additional collaterals. In case of the non-payment of this note at maturity, the Susquehanna Contracting Company hereby authorizes said Harvey Fisk & Sons to sell, without notice, at the Board of Brokers in the City of New York, or at public or private sale, at the option of said Harvey Fisk & Sons, all or any of the above mentioned collaterals, applying the net proceeds to the payment of this note, including interest, and accounting to said Susquehanna Contracting Company for the surplus, if any. In case of deficiency, the Susquehanna Contracting Company promises to pay to said Harvey Fisk & Sons the amount of such deficiency forthwith after such sale, with legal interest. Upon any sale of any such collaterals, said Harvey Fisk & Sons may become the purchasers thereof, and may hold the same thereafter in their

own right absolutely free from any claim by the Susquehanna Contracting Company. Upon the transfer of this note said Harvey Fisk & Sons may deliver the collaterals, or any part thereof, to the transferee, who shall thereupon become vested with all the powers and rights above given to the said Harvey Fisk & Sons with respect thereto, and said Harvey Fisk & Sons shall thereafter be forever relieved and fully discharged from any liability or responsibility in the matter. As further security for the payment of this note the Susquehanna Contracting Company has assigned to Thomas Thacher and Philip G. Bartlett, of New York City, as Trustees, an undivided one-fourth interest in two of the first mortgage bonds of the McCall Ferry Power Company Nos. 2101 and 2102, and also an undivided one-fourth interest in and to the first mortgage on the real property of the Conowingo Land Company, in Conowingo, Cecil County, Maryland, executed on the 1st day of April, 1902, by Charles C. Caldwell and wife to the Executors of James C. Bell, together with the bond secured thereby, in the principal sum of twenty-five thousand dollars ($25,000), and all interest accrued or to accrue thereon, to be held, used and applied for the benefit of said Harvey Fisk & Sons, their executors, administrators and assigns.

SUSQUEHANNA CONTRACTING COMPANY,

By P. G. Bartlett

President

Asa T. Mackey

Secretary

$100,000. New York, October 28th 1908.

On or before one year after date, the SUSQUEHANNA CONTRACTING COMPANY promises to pay to BERTRON, STORRS & GRISCOM, or order, at their office in the City of New York, one hundred thousand dollars ($100,000), with interest at six per cent. per annum, for value received, having assigned, or procured to be assigned, to said BERTRON, STORRS & GRISCOM, as collateral security one hundred and seventy-five (175) One thousand dollar ($1000) first mortgage bonds of the McCall Ferry Power Company Nos. 2023 to 2061 and 8756 to 8891, inclusive, and also a one-fourth interest in the equity of the McCall Ferry Power Company in the deposit of two hundred and fifty thousand dollars ($250,000) and interest held by the Knickerbocker Trust Company. In case of any exchange of or addition to the collaterals above named, the provisions of this note shall extend to and embrace such new or additional collaterals. In case of the non-payment of this note at maturity, the Susquehanna Contracting Company hereby authorizes said Bertron, Storrs & Griscom to sell, without notice, at the Board of Brokkers in the City of New York, or at public or private sale, at the option of said Bertron, Storrs & Griscom, all or any of the above-mentioned collaterals, applying the net proceeds to the payment of this note, including interest, and accounting to said Susquehanna Contracting Company for the surplus, if any. In case of deficiency, the Susquehanna Contracting Company promises to pay to said Bertron, Storrs & Griscom the amount of such deficiency forthwith after such sale, with legal interest. Upon any sale of any such collaterals, said Bertron,

Storrs & Griscom may become the purchasers thereof, and may hold the same thereafter in their own right absolutely free from any claim by the Susquehanna Contracting Company. Upon the transfer of this note, said Bertron, Storrs & Griscom may deliver the collaterals, or any part thereof, to the transferee, who shall thereupon become vested with all the powers and rights above given to the said Bertron, Storrs & Griscom with respect thereto, and said Bertron, Storrs & Griscom shall thereafter be forever relieved, and fully discharged from any liability or responsibility in the matter.

As further security for the payment of this note, the Susquehanna Contracting Company has assigned to Thomas Thacher and Philip G. Bartlett, of New York City, as Trustees, an undivided one-fourth interest in two of the first mortgage bonds of the McCall Ferry Power Company Nos. 2101 and 2102 , and also an undivided one-fourth interest in and to the first mortgage on the real property of the Conowingo Land Company, in Conowingo, Cecil County, Maryland, executed on the 1st day of April, 1902, by Charles C. Caldwell and wife to the Executors of James C. Bell, together with the bond secured thereby, in the principal sum of twenty-five thousand dollars ($25,000) and all interest accrued or to accrue thereon, to be held, used and applied for the benefit of said Bertron, Storrs & Griscom, their executors, administrators and assigns.

SUSQUEHANNA CONTRACTING COMPANY,

By A. G. Bartlett

President.

Alex. T. Mackey

Secretary.

$100,000. New York, October 28th, 1905.

On or before one year after date, the SUSQUEHANNA CONTRACTING COMPANY promises to pay to LEE, HIGGINSON & COMPANY, or order, at their office in the City of New York, one hundred thousand dollars ($100,000), with interest at six per cent. per annum, for value received, having assigned, or procured to be assigned, to said Lee, Higginson & Company as collateral security one hundred and seventy-five (175) One thousand dollar ($1000) first mortgage bonds of the McCall Ferry Power Company, Nos. 1984 to 2022 and 8620 to 8755, inclusive, and also a one-fourth interest in the equity of the McCall Ferry Power Company in the deposit of two hundred and fifty thousand dollars ($250,000) and interest held by the Knickerbocker Trust Company. In case of any exchange of or addition to the collaterals above named, the provisions of this note shall extend to and embrace such new or additional collaterals. In case of the non-payment of this note at maturity, the Susquehanna Contracting Company hereby authorizes said Lee Higginson & Company to sell, without notice, at the Board of Brokers in the City of New York, or at public or private sale, at the option of said Lee, Higginson & Company, all or any of the above mentioned collaterals, applying the net proceeds to the payment of this note, including interest, and accounting to said Susquehanna Contracting Company for the surplus, if any. In case of deficiency, the Susquehanna Contracting Company promises to pay to said Lee, Higginson & Company the amount of such deficiency forthwith after such sale, with legal interest. Upon any sale of any such collaterals, said Lee, Higginson & Company may become the purchasers thereof, and may hold the same

thereafter in their own right absolutely free from any claim by the Susquehanna Contracting Company. Upon the transfer of this note said Lee, Higginson & Company may deliver the collaterals, or any part thereof, to the transferee, who shall thereupon become vested with all the powers and rights above given to the said Lee, Higginson & Company with respect thereto, and said Lee, Higginson & Company shall thereafter be forever relieved and fully discharged from any liability or responsibility in the matter. As further security for the payment of this note the Susquehanna Contracting Company has assigned to Thomas Thacher and Philip G. Bartlett, of New York City, as Trustees, an undivided one-fourth interest in two of the first mortgage bonds of the McCall Ferry Power Company Nos. 2101 and 2102, and also an undivided one-fourth interest in and to the first mortgage on the real property of the Conowingo Land Company, in Conowingo, Cecil County, Maryland, executed on the 1st day of April, 1902, by Charles C. Caldwell and wife to the Executors of James C. Bell, together with the bond secured thereby, in the principal sum of twenty-five thousand dollars ($25,000), and all interest accrued or to accrue thereon, to be held, used and applied for the benefit of said Lee, Higginson & Company, their executors, administrators and assigns.

SUSQUEHANNA CONTRACTING COMPANY

By A. T. Bartlett

President

R. C. Mackey

Secretary.

$100,000. New York, October 28, 1908.

On or before one year after date, the SUSQUEHANNA CONTRACTING COMPANY promises to pay to C. A. COFFIN, or order, at his office in the City of New York, One hundred thousand dollars ($100,000), with interest at six per cent. per annum, for value received, having assigned, or procured to be assigned, to said C. A. Coffin as collateral security one hundred and seventy-five (175) One thousand dollar ($1,000) first mortgage bonds of the McCall Ferry Power Company, Nos. 2062 to 2100 and 8892 to 9027, inclusive, and also a one-fourth interest in the equity of the McCall Ferry Power Company in the deposit of Two hundred and fifty thousand dollars ($250,000) and interest held by the Knickerbocker Trust Company. In case of any exchange of or addition to the collaterals above named, the provisions of this note shall extend to and embrace such new or additional collaterals. In case of the non-payment of this note at maturity, the Susquehanna Contracting Company hereby authorizes said C. A. Coffin to sell, without notice, at the Board of Brokers in the City of New York, or at public or private sale, at the option of said C. A. Coffin, all or any of the above mentioned collaterals, applying the net proceeds to the payment of this note, including interest, and accounting to said Susquehanna Contracting Company for the surplus, if any. In case of deficiency, the Susquehanna Contracting Company promises to pay to said C. A. Coffin the amount of such deficiency forthwith after such sale, with legal interest.

Upon any sale of any such collaterals, said C. A. Coffin may become the purchaser thereof, and may hold the same thereafter in his own right absolutely free from any claim by the Susquehanna Contracting Company. Upon the transfer of this note said C. A. Coffin may deliver the collaterals, or any part thereof, to the transferee, who shall thereupon become vested with all the powers and rights above given to the said C. A. Coffin with respect thereto, and said C. A. Coffin shall thereafter be forever relieved and fully discharged from any liability or responsibility in the matter.

As further security for the payment of this note the Susquehanna Contracting Company has assigned to Thomas Thacher and Philip G. Bartlett, of New York City, as Trustees, an undivided one-fourth interest in two of the first mortgage bonds of the McCall Ferry Power Company Nos. 2101 and 2102, and also an undivided one-fourth interest in and to the first mortgage on the real property of the Conowingo Land Company, in Conowingo, Cecil County, Maryland, executed on the 1st day of April, 1902, by Charles C. Caldwell and wife to the Executors of James C. Bell, together with the bond secured thereby, in the principal sum of Twenty-five thousand dollars ($25,000), and all interest accrued or to accrue thereon, to be held, used and applied for the benefit of said C. A. Coffin, his executors, administrators and assigns.

SUSQUEHANNA CONTRACTING COMPANY,
By A. P. Butler
President.

Pay to General Electric Company
without recourse
F. Coffin

WITHOUT RECOURSE.
General Electric Company
Henry M. Darling
TREASURER.
Countersigned.
John Riley
asst

Kelsch's Engineering Report, April 26, 1909

REPORT

PREPARED BY

R. S. KELSCH
CONSULTING ENGINEER
MONTREAL
CANADA

(COPY)

APRIL 26th,1909.

H. B. ALLEN, ESQ.,

MONTREAL, CANADA.

Dear Sir,-

In compliance with your instructions I visited the Pennsylvania Power Company's Hydro-Electric development, located near McCall's ferry, on the Susquehanna River, Lancaster County, Pa., and found that there is a water power of very large capacity. The head under normal conditions is 53 feet, increasing at high water seasons to 64 ft. This large Hydro-Electric Plant, which has been under construction since the Fall of 1905, is about 85% finished. I estimate the cost of work done, including construction plant, to have cost approximately $7,000,000. The ultimate normal capacity of the plant, as constructed, is for 100,000 H.P., and for a two-hour peak overload capacity of 135,000 H.P.

I have examined the plans for this development, and have made calculations on cost of completing the work for developing 37,500 H.P., and transmitting the power 40 miles to Baltimore, Md. I found the plans of development to be as shown in Bulletin #3, dated June 1907. This Bulletin gives full details of the Plant and shows the arrangement for the generation of 100,000 H.P., normal, and 135,000 H.P. for a two-hour peak.

#2

A copy of this bulletin is enclosed herewith, and in order that the exact condition of the work may be understood, without going into a long description of the same, I have scored out the unfinished part of power house shown in section in the bulletin, from which you will see that all of the expensive, slow and hazardous work has been finished, and that the unfinished work consists of light walls, roofs and some arches below the transformer building and the generators. The above applies to the Power House.

Outside of the Power House, the expensive, slow and hazardous work is finished, as shown on plan view in bulletin. The figures indicate the percentage of work completed on each part of the plant and are as follows, - Power House 80%; main dam 82%, tail race fender 56%, tail race 100%, forebay 98%, ice protection dam 95%, ice fender - entrance to forebay 95%.

I made a very thorough examination of the finished work which has successfully withstood two flood seasons, without damage of any kind. The concrete work is first-class, and as hard as solid rock. Before the work was discontinued all steel and other perishable material was painted or housed in to protect it from the weather. The construction plant has also been housed. The property is now in charge of the former Paymaster and four watchman.

With respect to your instructions to make an estimate on the cost, to finish the work for the generation of 37,500 H.P. requiring three main units, two exciters, raising and lowering

transformers, switch-boards, transmission line, water wheels, substation at Baltimore,etc-, I have received from Wm.M. Barnum, Esq. copies of contracts for the hydraulic and electrical apparatus. As all of this machinery is in the hands of the manufacturers, and as they will be unable to dispose of it on account of the special design of the apparatus, it will, no doubt, be possible to purchase it at less than the prices mentioned in the original contracts, especially as prices of all materials are now much lower than when contracts were signed. However, in making the estimates, I have used the prices in the original contracts. Therefore my estimates are on the safe side, and will no doubt be found high, rather than too low. My estimates are based on finishing the work as follows,-

Close up 14 gaps in main dam, each 40 ft. long, or 560 ft, of the total 2500 ft, of the main dam. (the lower portion of footings in gaps are in place) Finish curtain wall and supports for racks in front of Power House, booms at entrance to forebay; tail race fender, ice chutes, and the railroad tunnel entrance to Power House, screen and gate room, and transformer house. This would permit the installation of five main units and two exciters; switchboards, etc., without any additional extension to building, to give a generating capacity of 50,000 H.P.,normal, and 67,000 H.P. for the two-hour daily peak loads under normal water conditions. All of which I estimate, would cost $800,000. plus $100,000 for engineering and contingencies. The Pennsylvania Railroad tracks will have to be changed when the compressor plant is removed.

J.F.ALLNUTT,ESQ. -4-

In addition to the foregoing there will be the three main and two exciter water-wheel units, water-wheel governors, piping, etc., three generators, two exciters, raising and lowering transformers, switchboards, wires and cables, transmission line and substation at Baltimore, engineering and contingencies, all of which, I estimate, will cost $1,375,000. Making a total expenditure of $2,275,000. This does not allow for any commissions, or cost of financing. This expenditure would complete the Plant for delivering 30,000 H.P., from the busbars in substation in the City of Baltimore, Md.

At McCall's Ferry, and on the Company's property, there are twelve residences finished and ready for occupation by the Power House operating staff. These buildings are complete with electric lights, heating, water and sewerage systems. They belong to the Company and cost on an average of $4,000. each There is a fine machine and carpenter shop, fully equipped, owned by, and on the property of the Company.

The development is located on the main line of the Pennsylvania R.R.Co., between Perryville and Lancaster; has good telegraph, long-distance telephone, and transportation facilities, and in fact has advantages rarely found in connection with the average Hydro-Electric Plant.

While it is almost unnecessary to say that the contemplated plan to reorganize the Company on basis of finishing the plant along economical lines for delivering 30,000 H.P. in Baltimore is bound to bear satisfactory results, I strongly recommend that the plans for finishing the development include

J.K.ALDRED,ESQ. #5

generating 100,000 H.P. in the very near future, for in my opinion it will not be long before the ultimate capacity of the plant, as originally contemplated, will be in demand, as there is a market for several times the maximum capacity of the plant as originally designed.

The development is in a section of the country, free from any severe weather conditions, and, in fact, the general situation is favorable to successful operation and assuring power purchasers a continuity of service equal to that furnished by any Hydro-Electric development on this continent.

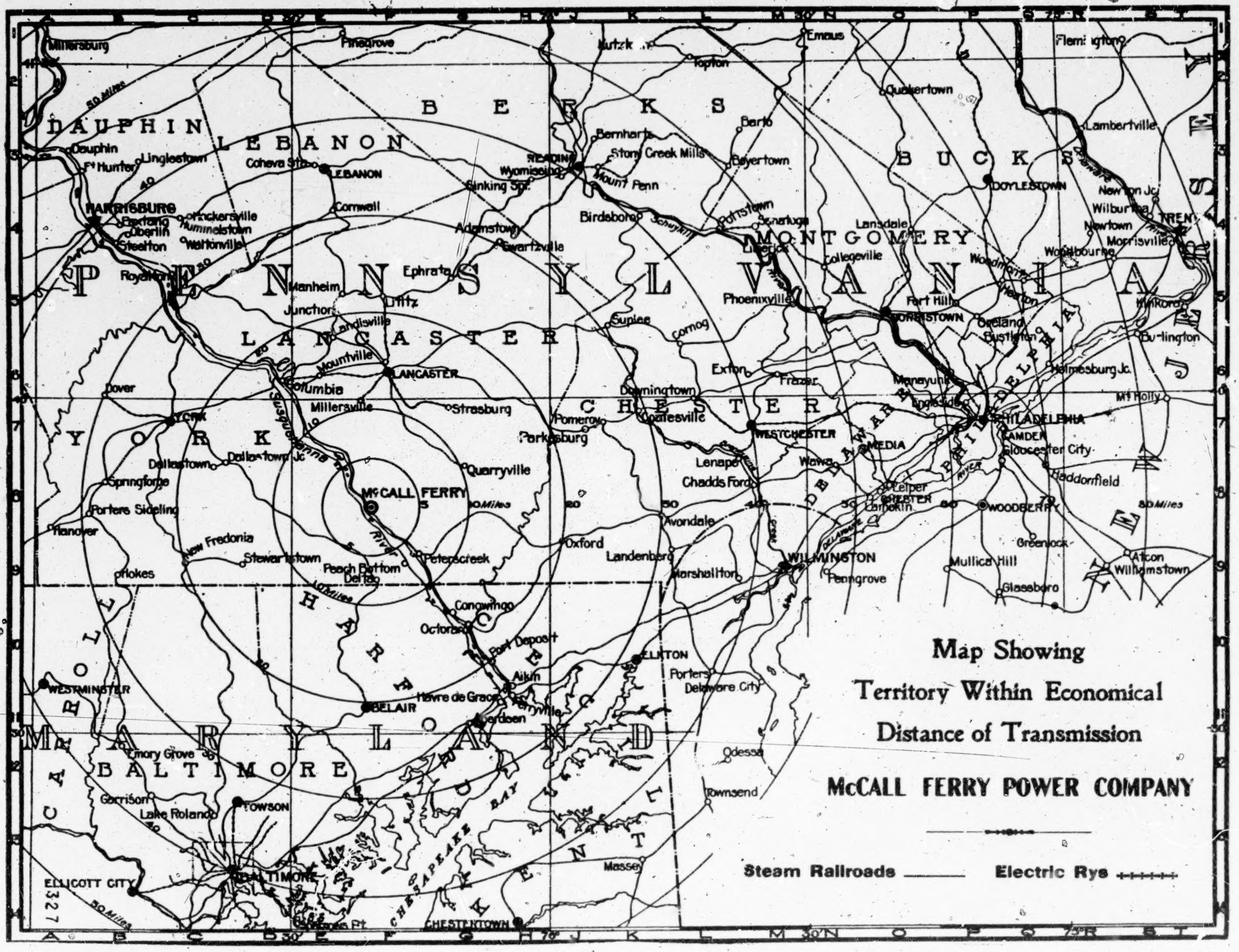
Attached hereto is a map showing the location of the McCall's Ferry and the distance to cities where several hundred thousand horse-power is used to operate the numerous industrial plants.

Attached hereto is a map showing the location of the McCall's Ferry and the distance to cities where several hundred thousand horse-power is used to operate the numerous industrial plants.

Trusting that I have fully covered the matter, I am,

Yours respectfully,

R B Keech


PENNSYLVANIA
DAUPHIN
LEBANON
BERKS
LANCASTER
YORK
CHESTER
MONTGOMERY
BUCKS
PHILADELPHIA
CAMDEN
MARYLAND
BALTIMORE
HARFORD
CECIL
KENT
NEW CASTLE
DELAWARE
HARRISBURG
LEBANON
READING
LANCASTER
YORK
McCALL FERRY
WILMINGTON
WESTCHESTER
NORRISTOWN
TRENTON
BALTIMORE
TOWSON
ELKTON
CHESTERTOWN
Millersburg
Dauphin
Lingleston
Coneva Stn.
Pinegrove
Topton
Emaus
Quakertown
Lambertville
Bernhart's
Stony Creek Mills
Bayertown
Barto
Wyomissing
Mount Penn
Sinking Spr.
Cornwall
Adamstown
Birdsboro
Schuylkill
Pottstown
Lansdale
Doylestown
Newtown Jc.
Wilburtha
Newtown
Morrisville
Woodbourne
Collegeville
Phoenixville
Fort Hill
Oreland
Bustleton
Burlington
Ephrata
Manheim
Lititz
Junction
Landisville
Mountville
Columbia
Millersville
Strasburg
Dover
Dallastown
Springforge
Porters Sideling
Hanover
New Fredonia
Stewartstown
Peach Bottom
Delta
Peterscreek
Quarryville
Parksburg
Pomeroy
Coatesville
Downingtown
Exton
Frazer
Malvern
Englesville
Wawa
Lenape
Chadds Ford
Avondale
Oxford
Landenberg
Marshallton
Penngrove
Mullica Hill
Glassboro
Greenlock
Haddonfield
Gloucester City
Atlon
Williamstown
Mt Holly
Holmesburg Jc.
Burlington
Conowingo
Octoraro
Port Deposit
Elkton
Porters
Delaware City
Aikin
Havre de Grace
Perryville
Aberdeen
Belair
Westminster
Emory Grove
Garrison
Lake Roland
Towson
Baltimore
Ellicott City
Curtis Bay
Chesapeake Bay
Massey
Odessa
Townsend
Chesterton
50 Miles
Map Showing
Territory Within Economical
Distance of Transmission
McCALL FERRY POWER COMPANY
Steam Railroads
Electric Rys

Letter Re: Status of General Electric Company Work, August 11, 1909

GENERAL ELECTRIC COMPANY

PRINCIPAL OFFICE
SCHENECTADY, N. Y.

In Reply Refer to 303.B

NEW YORK OFFICE, 30 CHURCH STREET

August 11, 1909.

McCALL FERRY POWER COMPANY.

RECD

Mr. J. R. Aldred,
Receiver,
The McCall Ferry Power Company,
No. 24, Exchange Place
New York City, N.Y.

Dear Sir:-

Referring to your favor of August 10th., asking as to the present condition of the apparatus under contract between the General Electric Company and the McCall Ferry Power Company,

Beg to advise that there are six (6) of these generators. One is and has been for many months completed. The second one is in excess of 60% completed. The remaining four are in various stages of completion, it being difficult to give the actual percent, because while some parts are entirely completed, other parts are simply in the rough. The general condition of the remaining four, however, might be considered, counting the actual work done, and not including material, as in excess of 20% completed.

The transformers are between 50% and 60% completed.

Other apparatus, such as compressors, small motors, air tanks, etc., are 100% completed.

The switchboard is about 80% completed.

With respect to all the above apparatus, the material therefor has all been in stock for many months.

It is difficult, in a line of complicated apparatus,

No. 2. GENERAL ELECTRIC COMPANY

scattered over many shops, to give a more detailed report than the above, which I hope will be satisfactory.

Several thousands of dollars worth of smaller apparatus, in addition to the above, was shipped and is in the possession of the McCall Ferry Power Company.

Very truly yours,

JRM/S. Chairman Sales Committee.

Request for Deposit of Bonds

To the Holders of First Mortgage Bonds
and Preferred Stock of
McCALL FERRY POWER COMPANY:

The undersigned have been engaged for some time in efforts to secure the completion of the McCall Ferry Power Company's enterprise in a manner which should be satisfactory to its bondholders, and these efforts, and negotiations in connection therewith, are being actively pushed at present.

The Company will not have in hand on December 15th, 1908, sufficient funds to pay the coupons maturing that day.

With the approval of holders of a large proportion of the bonds outstanding, Messrs. William M. Barnum, A. G. Bedford, S. Reading Bertron, Charles A. Coffin, and Gardiner M. Lane, have been asked and have consented to act as a Committee in the interests of holders of bonds and preferred stock of said Company, to continue the efforts and negotiations to perfect a plan for financing the completion of said enterprise, and this Committee considers that its hands will be greatly strengthened in these negotiations, and the interests of all conserved, if the bonds and preferred stock are deposited at once under a preliminary agreement looking to the perfection and submission of such plan as soon as practicable, and providing that depositors may withdraw their deposits without expense if not satisfied with the plan when submitted, that the Committee have certain discretionary powers in the meantime, and that the members shall serve without compensation.

Accordingly, holders of such bonds and stock are invited to deposit the same with the Knickerbocker Trust

Company, No. 66 Broadway, New York, or the City Trust Company, No. 50 State Street, Boston, under the Preliminary Agreement, a copy of which is enclosed herewith. Negotiable certificates of deposit will be issued by the depositaries respectively.

The Knickerbocker Trust Company authorizes us to state that (subject to the consents of its "participators," some of which have been given and the rest of which are expected) it will, upon being directed so to do by the owners thereof, deposit under said Preliminary Agreement bonds and stock of said Company held by it as collateral to secure loans, receiving and holding the certificates of deposit as security in lieu of the collateral so deposited. Accordingly, holders of such bonds and stock so pledged should sign the enclosed order addressed to said Trust Company, and return it in the enclosed envelope.

Dated New York, December 7, 1908.

HARVEY FISK & SONS,
LEE, HIGGINSON & COMPANY,
BERTRON, STORRS & GRISCOM,
H. F. DIMOCK,
C. A. COFFIN.

Preliminary Agreement for Deposit of Bonds

McCALL FERRY POWER COMPANY,

FIRST MORTGAGE BONDS AND PREFERRED STOCK,

PRELIMINARY AGREEMENT.

Agreement, made this 7th day of December, 1908, between WILLIAM M. BARNUM, A. C. BEDFORD, S. READING BERTRON, CHARLES A. COFFIN, and GARDINER M. LANE (hereinafter called the Committee), and the holders of first mortgage bonds and preferred stock of McCall Ferry Power Company becoming parties hereto (hereinafter called Depositors).

WHEREAS, said McCall Ferry Power Company is at present without sufficient resources to finish its hydro-electric enterprise in the State of Pennsylvania, but efforts and negotiations are in progress with the object of perfecting a plan for financing the completion of said enterprise, and the Committee has consented to continue the same and endeavor to perfect such plan;

NOW, THEREFORE, Depositors, each for himself and not for any other, agree with each other and with the Committee as follows:

FIRST.—The Committee is requested to continue the efforts and negotiations above mentioned on behalf of Depositors, and to perfect and issue, as early as may be feasible, a plan for financing the completion of the McCall Ferry Power Company's enterprise. Printed copies of such plan embodied in an appropriate agreement shall be lodged with the Depositaries receiving deposits hereunder, and notice thereof, with a copy of such plan and

agreement, shall be mailed to each Depositor at the address furnished by him in writing to the Depositary receiving his bonds and stock. Depositors who do not assent to such plan and agreement may, without expense to them, at any time before a date to be specified in such notice—which date shall be at least thirty days after the mailing thereof—withdraw their deposits upon surrender of their Certificates of Deposit. All Depositors not so withdrawing their deposits within such time shall be bound by such plan and agreement, with like effect as if they had executed the same, and their deposits shall be deemed to have been deposited, and to be held, under such plan and agreement. Unless such notice of such plan and agreement shall be mailed on or before June 30, 1909, Depositors may, without expense to them, withdraw their deposits upon surrender of their Certificates of Deposit.

SECOND.—Until Depositors shall have become bound by such plan and agreement or shall have withdrawn their deposits, in accordance with the foregoing provisions hereof, Depositors respectively appoint the Committee their agents and attorneys in fact with respect to the deposited bonds and stock, with full power to act for the Depositors in all matters arising in said interval deemed by the Committee to require action in the interest of Depositors, including power, in the discretion of the Committee, to present, or withhold the presentment, for payment, of coupons, and power to request or instruct the trustee under the mortgage securing said bonds with respect to the action of such trustee thereunder, and including power to receive any moneys collected for cou-

pons, such moneys to be paid over to Depositors upon presentation of their Certificates of Deposit to be appropriately stamped.

THIRD.—By appointment in writing signed by a majority of the Committee, additional members thereof may be appointed, and vacancies therein, occurring by death, resignation or otherwise, may be filled. The Committee may act by a majority thereof either at a meeting or in writing without a meeting. Any member may vote or act by proxy appointed in writing, who may be another member of the Committee or any other person approved by a majority of the Committee. No member of the Committee shall be liable for the act or omission of another member, nor shall the Committee or any member thereof, or either of the Depositaries hereinafter named, be liable for the act or omission of any agent or employe selected in good faith, or in any case except for its or his own willful misconduct. The Committee shall be under no obligation whatever to any holder of bonds or stock of said McCall Ferry Power Company not a party to this agreement.

All members of the Committee will serve without compensation.

FOURTH.—Holders of bonds or of preferred stock of said McCall Ferry Power Company may become parties hereto — within such time as the Committee may determine — by depositing, or causing the deposit of, their bonds or stock, subject hereto, with Knickerbocker Trust Company, No. 66 Broadway, New York, or with City Trust Company, No. 50 State Street, Boston (herein called the Depositaries). Such

bonds and stock shall be held by the Depositary receiving the same subject to the order of a majority of the Committee in accordance with the provisions hereof. Negotiable Certificates of Deposit, in form approved by the Committee, will be issued by the Depositaries respectively for all bonds or stock so deposited. Such deposits of bonds and stock shall have the same effect as if the Depositors respectively had signed and sealed this agreement; and the Depositors severally assign to the Committee, as joint tenants, the bonds and stock so deposited, to hold the same as trustees for the purposes of this agreement. Upon transfer of any Certificate of Deposit, the transferee shall succeed to all the rights of the prior holder and be subject to all the provisions hereof with the same effect as if the transferee had been the original Depositor.

FIFTH.—The word "Committee" herein means the Committee as constituted or existing in accordance with the provisions hereof—and notwithstanding any vacancy therein—at the time in question.

The word "Depositors" herein means the holders of record of the Certificates of Deposit issued hereunder outstanding at the time in question. The Committee and the Depositaries may treat the holder of record of each Certificate of Deposit as the absolute owner thereof.

IN WITNESS WHEREOF the Committee has caused this agreement to be signed by at least a majority of its members the day and year first above written, and holders of bonds or stock of McCall Ferry Power Company become parties hereto by depositing the same hereunder.

Memorandum of an Understanding With Aldred

MEMORANDUM OF an understanding between J. E. Aldred, of Montreal, and the undersigned members of the Committee representing First Mortgage Bonds of the McCall Ferry Power Company, under a Preliminary Agreement dated December 7, 1908, a copy of which is attached hereto

The following is a Plan of Reorganization, as respects capitalization, approved by the parties hereto, to wit:

A new company to be formed, to be called "Pennsylvania Power Company", or some other appropriate name, or the old company to be continued if deemed advisable by the parties hereto; the new company to be capitalized, or the old company to be recapitalized, as the case may be, as follows:

Capital stock, par value	$8,500,000.
First Mortgage 30-year 5% coupon Gold Bonds, dated July 1, 1909	
Authorized - - - - - - - - -	$12,500,000.
To be immediately available,---------	7,500,000.

The new bonds and stock to be used as follows:

Bondholders of the McCall Ferry Power Company, being holders of bonds outstanding of the par value of $8,325,000. shall receive 40% of old bonds in new bonds, and 60% of old bonds in new stock.

Total amount of new bonds and stock to be so used:

Bonds	$3,330,000.
Stock,	4,995,000.

To be used for construction and other corporate purposes of the new company or the old company, as the case may be:

Bonds.	$4 000,000
Stock,	3,500,000.

(2)

$170,000. par value, of bonds, being the balance of new bonds above designated as immediately available and not appropriated for use, shall be included in the bonds to be sold as hereinafter provided, and the proceeds (that is, $153,000) shall be used, as far as may be necessary in the discretion of the Committee, in meeting reorganization expenses and in making settlement with the floating debt of the Company hereinafter mentioned other than the secured indebtedness of $400,000 hereinafter described. Any balance not so used shall be paid over to the new Company, or to the old Company, as the case may be.

Said secured indebtedness is represented by an obligation of the Susquehanna Contracting Company, amounting at its face value to $400,000. which is secured by a claim upon a deposit in the Knickerbocker Trust Company amounting to $250,000 (but the application of which to the payment of such secured debt has not yet been settled); and by $702,000. par value, of First Mortgage Bonds of the McCall Ferry Power Company, and by a mortgage on real estate near McCall Ferry for the principal sum of about $25,000. Provision shall be made for the payment of such secured indebtedness, and upon its payment the security therefor shall be assigned to the new company or to the old company, as the case may be, with the exception of the bonds, which shall be cancelled.

Said floating debt, provision for the settlement of which is to be made as above provided, does not, it is understood, exceed $250,000.

(3)

The Committee will use its best efforts to have the above plan approved by the bondholders of the McCall Ferry Power Company in an amount sufficient to insure the carrying out of the Plan.

Mr. Aldred will use his best efforts to sell $4,170,000 of new bonds at 90% of their par value, being the bonds above designated for construction and other corporate purposes, and for the Committee's uses as above understood, and the said $3,500,000. of stock shall go to him for use in connection with the sale of such bonds, or otherwise, as he may determine.

The Bondholders of the McCall Ferry Power Company shall have the privilege of subscribing to $1,000,000. (or to any part thereof) of the new bonds so to be sold by Mr. Aldred, at 90% of their par value, with a common stock bonus equal to 50% of the par value of the bonds so subscribed for.

It is understood that all stock shall be placed in a voting trust for three years from November 1st, 1909 (that is, until November 1st, 1912) and voting trust certificates issued therefor, to be used as above in place of the stock. Two of the trustees in such voting trust shall be nominated by Mr. Aldred and one by the Committee.

It is understood that all parties to this memorandum shall proceed with diligence, and that this understanding shall remain in force for thirty days from date, and thereafter, until cancelled by either party upon ten days' notice to the other.

Dated, April 24, 1909.

Committee

Gardiner M. Lane

Aldred's Affidavit

ALDRED STATEMENT

During the past two and a half years I have been consulted from time to time on various phases of the study being made by the Pennsylvania Water & Power Company to determine its original cost. During this time I have examined many of the documents and much of the correspondence covering the period from my first contact with the development at McCall's Ferry (now Holtwood) in late 1908 until the end of 1912 when the voting trust was dissolved and the stockholders assumed the ultimate responsibility for the management of the company.

The following statement is a composite of facts from existing data supplemented by my own recollections from personal knowledge of affairs during that period and deals largely with those portions which are not self-evident from the data.

For more than a year prior to my first personal contact with the McCall Ferry Power Company, various plans had been studied by those interested in that company, whereby the plant could be finished and the enterprise put on a paying basis. The increase in the capacity of the development made the original financing inadequate and the panic of 1907 had interfered with the proposal to sell additional bonds. It became evident, in the fall of 1908, that the company would probably have to undergo some sort of reorganization in order to secure the necessary additional capital to insure success for the project.

I had been active in the financing, development

and management of the Shawinigan Water and Power Company which was then in successful operation, and probably for that reason was one of those approached to assist the McCall Ferry Power Company. Late in October, 1908, Mr. C. A. Coffin, then President of the General Electric Company, arranged for me to meet with some of the people who were attempting to work out a plan to salvage the McCall Ferry enterprise. These men were working on a number of plans for rehabilitating the company. I declined to take part in any plan unless a reorganization was effected which would materially reduce the company's existing capitalization and fixed charges.

It then became apparent that no arrangements could be made in time to avoid default on the bond interest due December 15, 1908. By the latter part of November, it was agreed that a reorganization was essential and that a Bondholders' Protective Committee should be formed to secure the deposit of bonds pending further negotiations. A call for the deposit of bonds was made on December 7, 1908 by a committee composed of Wm. M. Barnum, A. C. Bedford, S. R. Bertron, C. A. Coffin and G. M. Lane, all of whom had been active in the enterprise and were familiar with its affairs.

During the next four and a half months the Bondholders' Committee was negotiating with various interests, including myself, who were presenting different plans for reorganizing and refinancing the enterprise, each with the hope that their plan would be acceptable to the Committee.

I devised several programs during my examination of the company's affairs to determine the one which would be acceptable to the old bondholders and yet be liberal enough to insure success of the sale of securities for the necessary new money. I considered it essential to reduce fixed charges to a proper point so that there might be no danger of again throwing the company into receivership.

On April 6, 1909, I submitted a plan to the Reorganization Committee, proposing a reorganization of McCall Company and abrogation of the existing power contracts. Under this plan, the reorganized company would authorize a total issue of

$8,500,000. First Mortgage 5% 30 Year Bonds
$8,500,000. Common Stock

The old bondholders were to exchange their bonds on a par basis, receiving one-third in new bonds and two-thirds in new stock. Additional money was to be raised by the sale of $4,000,000. par of bonds at 90 with a 50% bonus in stock, there being sufficient authorized shares in the above capitalization to permit compensation to the underwriters in the form of common stock. The plan finally adopted provided for an exchange of old bonds for 40% in new bonds and 60% in new stock.

The Committee desired to secure my services until the plant was in successful operation. The various plans submitted for consideration had caused a difference of opinion and considerable opposition from some of the bondholders

and particularly from the common stockholders. It was, therefore, deemed expedient by the Committee to temporarily concentrate control in a voting trust and so far as practicable to bring in new personnel familiar with this type of project.

In addition to the common stock for bonus for the new money bonds and that necessary for the bankers' compensation, as provided in the above capitalization, the Committee stipulated as a part of my plan that I, in consideration of 5,000 shares of stock, would become the active manager of the Company during construction and until the expiration of the proposed voting trust, by which time it was expected that the first group of units would be in service and satisfactory power contracts obtained for their output. I delivered a relatively small amount of the 5,000 shares to engineers whom I had consulted on the feasibility of completing the development and making it a profitable enterprise. Inasmuch as my compensation was to be in common stock and my reputation was staked on the outcome of the project, it was agreed that I should have the right to select two of the three members of the voting trust. It was gratifying to me that after the expiration of the voting trust, the stockholders (a majority of whom were the old bondholders) saw fit to retain me as head of their company.

Before entering into a definite agreement with the Bondholders' Committee which was executed on April 24, 1909, I had had a careful examination made of the McCall Company

assets. We had the benefit of the various engineering reports prepared prior to my contact with the enterprise. In addition to this, both Mr. H. S. Holt and I made a personal examination of the plant and I had Mr. R. S. Kelsch make an examination and report. Mr. Julian C. Smith, General Superintendent of the Shawinigan Company, also submitted a report. Mr. Kelsch was a Consulting Engineer in Montreal and I had a great deal of respect for both his judgment and that of Mr. Holt.

After carefully considering the situation with Messrs. Wood and Holt, we became convinced that it would be difficult to underwrite all of the new money bonds promptly in America and that it would be necessary to dispose of a large part of them abroad. We had expected the old bondholders to take approximately a million par of the new money bonds but were able to interest them in only half that amount. I, therefore, communicated with Kitcat & Aitken of London, who had assisted in financing the Shawinigan project, and I subsequently went to London to discuss the matter. It was agreed that they would secure underwriting for half of the bonds not taken by the old bondholders and that Messrs. Wood, Holt and myself would dispose of the other half in United States and Canada.

Based on the various engineering reports and the experience of others familiar with hydroelectric projects, the Reorganization Committee as well as the Board of Directors of the reorganized company determined the value of

the plant, property, water rights and power development to be in excess of $12,000,000. For all the assets of the McCall Company, $3,753,000. in cash or equivalent and my obligations to manage the enterprise until November 1, 1912, the Pennsylvania Water & Power Company subsequently issued $7,500,000. par value of its bonds and $8,495,000. par value of its common stock. This was set forth in a plan submitted to the bondholders under date of May 28, 1909 which was ultimately accepted by all except the owners of 66 bonds.

In addition to the 5,000 shares which I received, 30,000 shares were available to go with the new money bonds and for the bankers' compensation for underwriting them. Kitcat & Aitken of London received 4,575 as the commission agreed upon with me for disposing of $1,835,000. of bonds. Mr. E. R. Wood received 1,525 shares, Mr. H. S. Holt, 1,500 shares, and I received 1,550 as our proportional shares for disposing of another $1,835,000. of bonds. The old bondholders took $500,000. of bonds in addition to those exchanged. No bankers' commission was paid on this block.

Arrangements were made with those furnishing the new money so that cash would be available to resume construction prior to the formation of the reorganized company, thus reducing the period in which the funds of the old bondholders and the company itself would be tied up without return. In addition to the construction, this cash enabled me to settle on favorable terms various claims outstanding

against the company, aggregating approximately half a million dollars, and to purchase the 66 bonds not deposited. Both of these materially reduced the hazards of extensive litigation and protracted hearings which would have delayed conveyance of the property to the new company, as well as creating additional expense.

On July 17, 1909 I had been made Receiver of the old company. The activities of a Receiver of a non-operating company are necessarily limited and the scope of the Bondholders' Committee did not warrant the assumption of obligations and responsibility beyond the safeguarding of the interests of the Bondholders. To expedite the work at the plant and to induce the manufacturers of the equipment to resume their work, it became incumbent on me to enter into a number of contracts personally. Among these were contracts for cement, sand and stone for construction, as well as a contract with the Empire Engineering Corporation to carry on the construction work. In addition, I made personal contracts with I. P. Morris Company for completion of the turbines; with General Electric Company for work on the generators, switchboard and transformers, and with the York Bridge Company for gates. These contracts were subsequently turned over to the Pennsylvania Water & Power Company without profit to me as I deemed them part of the managerial services rendered by me in putting the company on a sound operating basis before expiration of the voting trust. Technical difficulties and delays in the manufac-

ture and delivery of the equipment required much of my personal attention to secure the equipment when necessary.

I secured capable and efficient engineering personnel, which materially reduced the cost of engineering as compared to that of the old company. I also began negotiations for new power contracts and was successful in securing two satisfactory contracts in Baltimore and one in Lancaster before termination of the voting trust. All of them required a large amount of attention and effort on my part.

The difficulties which were encountered in securing proper delivery of equipment and in having it installed in time to meet the obligations of the power contracts were greater than I had anticipated. Once installed, some of the equipment failed to operate properly, transformers burned out, generator bearings failed, and a great many other difficulties of this character were encountered. These entailed negotiating complicated adjustments with the manufacturers. The terms of the power contracts had to be worked out to assure mutual understanding and satisfaction. There is nothing in our present day power developments comparable to the technical difficulties encountered in the early days at Holtwood because the industry has undergone vast development and technical progress. In those days, much less was known about power plant equipment and transmission than we know today.

It appears to me that what I have set forth

supplements existing data sufficiently to give a clear understanding of the reorganization period and that further explanation would merely be a repetition of available data which are self-evident.

STATE OF NEW YORK)
)
COUNTY OF NEW YORK)

Before me, a Notary Public in and for the State of New York, County of New York, personally appeared J. E. Aldred, who being duly sworn acknowledged that he signed the above instrument in my presence.

WITNESS my Hand and Official Seal this 27th day of December 1939.

NOTARY PUBLIC, Kings County
Kings Co. Clk's No. 106, Reg. No. 225
N. Y. Co. Clk's No. 338, Reg. No. 0K203
Commission Expires March 30, 1940

JEA/AES

Kitcat & Aitken Underwriting Agreement

An Agreement made the 27th day of May 1909

Between MESSRS. KITCAT & AITKEN of 120 Bishopsgate Street Within in the City of London (hereinafter called "the Managers") of the one part and THE SEVERAL PERSONS who shall sign this Agreement or counterparts thereof as participants in the Syndicate intended to be hereby formed and shall be accepted by the Managers as participants (hereinafter called "the Subscribers") of the other part.

WHEREAS the McCall Ferry Power Company (hereinafter called "the McCall Company") was incorporated in the United States of America in the year 1905 to develop a water power situate at McCall's Ferry on the Susquehanna River and supply power to the surrounding cities.

AND WHEREAS the McCall Company fell into financial difficulties in the year 1907 and the works were shut down and have not been completed.

AND WHEREAS the outstanding obligations of the McCall Company consist of (1) $8,325,000 of bonds (part of a total authorised issue of $10,000,000) (2) an indebtedness of $400,000 secured by a claim against a deposit of $250,000 in the Knickerbocker Trust Company and collaterally secured by the deposit of a further $702,000 of the said bonds of the McCall Company beyond the $8,325,000 of such bonds above mentioned and (3) certain floating indebtedness.

AND WHEREAS J. E. Aldred of Montreal has undertaken to use his best endeavours to reorganize the McCall Company on a basis of which the following is a general outline, viz.:—A Company (hereinafter called "the Company") is to be formed under the laws of Pennsylvania U.S.A. to take over the undertaking of the McCall Company and complete the development work with a capital of $8,500,000 of common stock and an authorised bond issue of $12,500,000 of which $7,500,000 are to be immediately issued leaving $5,000,000 in the treasury of the Company. The $8,325,000 of outstanding bonds of the McCall Company are to be satisfied as to 40 per cent. in bonds of the Company and 60 per cent. in common stock of the Company absorbing ~~$3,300,000~~ $3,330,000 of bonds and $4,995,000 of common stock and leaving $4,170,000 of bonds of the Company available for issue for raising the funds required for settling with the said floating indebtedness and the said secured indebtedness of $400,000 and for meeting the expenses of reorganization and the completion of the development work and the working capital required by the

Company. The said J. E. Aldred is to procure these $4,170,000 of bonds (less $500,000 part thereof which are to be subscribed by the existing bondholders of the McCall Company) to be subscribed at 90 per cent. of their face value and is to receive for his services and for use by him in getting the said bonds subscribed a block of fully-paid common stock of the Company. The necessary foreclosure proceedings required for carrying through the above reorganization scheme are to be taken forthwith and the said J. E. Aldred is to be appointed in such proceedings Receiver of the McCall Company and to forthwith proceed with the development work raising the money required therefor by the issue of Receiver's certificates which will rank as a charge on the undertaking of the McCall Company in priority to the existing bonds and all other charges thereon and will on the scheme being carried through be exchanged for bonds of the Company at the rate of $100 of bonds for each $90 of Receiver's certificates.

AND WHEREAS the Managers have agreed with the said J. E. Aldred to form a Syndicate which will subscribe for $1,835,000 of the said bonds of the New Company when formed at 90 per cent. of their face value and in the meantime will make advances to him as Receiver of the McCall Company on Receiver's certificates for carrying on the development work and in consideration thereof they are to receive from the said J. E. Aldred part of the said block of common stock of the Company receivable by him for undertaking the reorganization as hereinbefore mentioned.

AND WHEREAS it is part of the said scheme of reorganization that the whole of the common stock of the Company shall (in order to ensure continuity of development and management of the undertaking) be placed for three years from the 1st November 1909 in a voting trust with three trustees (of whom two are to be nominated by the said J. E. Aldred) and be held in the names of such trustees who will issue in respect thereof voting trust certificates which will represent such common stock and be used in place thereof.

Now in consideration of the premises and of the mutual promises herein contained the Managers hereby agree with the subscribers and each of them and each of the subscribers for himself severally (but not jointly) hereby agrees with the Managers and each of the other subscribers as follows namely:—

1. The Syndicate hereby formed shall consist of the subscribers each of whom shall be interested therein to the amount of his participation set opposite to his name in the schedule to this Agreement. The total available participation in

the Syndicate shall be $1,835,000. The Managers may themselves be subscribers for a participation of any amount. Participation in the Syndicate shall rest in the sole discretion of the Managers.

2. The Managers shall be the Managers of the Syndicate and shall on behalf of the Syndicate subscribe for the said $1,835,000 of bonds of the New Company when formed and in the meantime make advances to the Receiver against such Receiver's certificates as hereinbefore mentioned. For the purpose of enabling them to do so payments shall be made by each subscriber through the agency of the Bank of Scotland 19 Bishopsgate Street Within London E.C. by the following instalments :—

£20 11 0	per $1,000 of bonds	on 1st June 1909	= 10	per cent.
£41 1 11	„ „ „ „	on the 1st July 1909	= 20	„ „
£41 1 11	„ „ „ „	on the 1st September 1909 ...	= 20	„ „
£41 1 11	„ „ „ „	as and when called by the Managers on 30 days' notice expiring not earlier than 1st January 1910	= 20	„ „
£41 1 11	„ „ „ „	as and when called by the Managers on 30 days' notice expiring not earlier than 1st March 1910	= 20	„ „
£184 18 8	per $1,000 of bonds (par value £205 9*s.* 8*d.*)		90	per cent.

All the instalments aforesaid shall carry interest at 5 per cent. per annum from the 1st July 1909 such interest to be paid by the Managers to the subscribers when the Managers receive payment of such interest from the Company.

3. The total sum payable by each subscriber is limited to 90 per cent. of the nominal amount of his participation and each subscriber shall be liable only to the extent of that sum and to the Managers their successors and assigns only and nothing herein contained shall constitute the subscribers partners with one another or with the Managers or except as provided in Clauses 7 and 8 hereof render any subscriber liable to pay or contribute in any event more than such sum as aforesaid.

4. Interest at 6 per cent. per annum will be payable to the Managers on all instalments in arrear and the failure of any subscriber to punctually pay any sum or instalment payable by him as aforesaid on the due date for payment thereof or to perform any other of his obligations hereunder shall (in addition to rendering him liable to the Managers for any loss or damage thereby occasioned to them or

to the Syndicate) entitle the Managers to forfeit on behalf of the Syndicate his participation in the Syndicate and all instalments previously paid by him and to exclude him from all further interest or participation in the Syndicate and to allot his participation to any other person or otherwise dispose thereof on behalf of the Syndicate as they think fit. Such failure of any subscriber shall not however affect or release any other subscriber

5. All monies paid by the subscribers as aforesaid or advanced on their behalf as hereafter mentioned shall be forwarded by the Managers to America and paid over by them in America to the Company against delivery to them in America of bonds of the Company (or temporary bonds if the engraved bonds are not then ready for delivery) at the rate of $100 of bonds (or temporary bonds) for each $90 paid over: Provided that until the said scheme of reorganization of the McCall Company has been carried through the Managers may advance the whole or any part of the monies aforesaid to the Receiver of the McCall Company against Receiver's certificates to be issued by him to the Managers and others making similar advances and carrying interest at such rate as may be arranged provided only that the Managers shall be advised that such Receiver's certificates will rank as a first charge on the property and assets of the McCall Company in priority to the existing bonds of that Company. Any Receiver's certificates so issued to the Managers shall be held by them until the said scheme of reorganization is carried through when the same shall be exchanged for bonds or temporary bonds of the Company at the rate of $100 of bonds for each $90 of Receiver's certificates.

6. During the continuance of the Syndicate all bonds of the Company delivered to and received by the Managers as aforesaid will be retained by them and deposited to their order with the Bank of Scotland or their agents. At any time during the continuance of the Syndicate the Managers shall be entitled (subject as hereinafter mentioned as regards bonds withdrawn from sale by subscribers) without any consent and notwithstanding any dissent by the subscribers or any of them to sell on behalf of the Syndicate either by private treaty or by public issue and at such price and on such terms as they shall think fit and either in England America or elsewhere all or any part of the said bonds and to pay brokerage underwriting overriding and other commissions in connection with any such sale or issue and generally to adopt such methods as they think fit for effecting such sale: Provided always that no bonds shall be sold except upon such terms and at such prices that the net

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proceeds of sale of the bonds sold remaining after payment of all expenses of and incident to such sale shall be at least 90 per cent. of the face value of the bonds sold plus any interest accrued thereon up to the date of sale.

7. The Managers shall not be entitled to sell by private treaty the bonds of any subscriber who on application for his participation notified the Managers that he desired to withdraw his bonds from sale but they shall be entitled notwithstanding such notice to include such bonds in any public issue of bonds made by them: Provided that if they shall do so they shall give to each subscriber who has so withdrawn (hereinafter called "a non-selling subscriber") whose bonds are to be included in such public issue seven days' notice at least of their intention specifying the amount of his bonds intended to be included in such issue the price of issue and the rate of any commissions (whether overriding or underwriting) being paid on such issue and stating that in the event of his applying firm for the whole of his bonds and paying up such sum as will with the instalments already paid by him make up the price at which the public issue is made before some date to be named in the notice he will be entitled to an allotment of such bonds upon the terms of the public issue and also to be paid the same (if any) underwriting and/or overriding commissions in respect of his bonds as are being paid to other underwriters in connection with such issue.

8. The bonds allotted to each such non-selling subscriber shall go in special relief of his subscription and shall not be deemed to be subscriptions by the public as between such subscriber and any other underwriters. Any non-selling subscriber who shall so subscribe and pay for and be allotted his said bonds shall have credited to him by the Managers in or towards payment of the price payable by him therefor on the said public issue any instalments or sums previously paid by him in respect of his participation and shall be relieved from liability to pay the remaining instalments (if any) due in respect of the participation in the Syndicate but on the termination of the Syndicate the non-selling subscribers shall only be entitled to participate in the assets of the Syndicate available for distribution after the other subscribers have had returned to them the instalments paid up on their respective participations with the accrued interest thereon the intention being that in order that the bonds of a non-selling subscriber may be included in any quotation for the bonds that may be obtained on the Stock Exchange he shall be bound to allow his bonds to be included in any public issue that may be made by the Managers and bear his proper proportion of any expenses thereof.

9. On the termination of the Syndicate the assets thereof after paying all the liabilities and all costs charges and expenses properly payable hereunder shall be applied by the Managers :—

(*a*) In repaying to each subscriber the amount paid up by him on his participation with accrued interest (if any) less the amount (if any) for which he may already have received credit under the last preceding clause hereof.

(*b*) The balance of such assets (representing the profit of the Syndicate) shall be distributed amongst the subscribers *pro rata* according to their respective participations.

Provided always that on a distribution of the assets any unsold bonds shall be treated as being worth 90 per cent. of the face value thereof plus accrued interest (if any) and as far as possible be applied at that value in repaying to the non-selling subscribers the amounts paid up on their participations and the balance of the unsold bonds shall only be applied in repayment of the amounts paid up on the participations of the other subscribers so far as the cash assets of the Syndicate are not sufficient to repay the same.

And provided also that for the purpose of the division referred to in Sub-clause (*b*) of this Clause the nominal amount of the participation in the Syndicate of any subscriber to whom bonds have been allocated under this Clause shall be reduced by the nominal amount of such bonds.

10. If the proposed scheme for the reorganization of the McCall Company shall not for any reason be successfully carried through then on the termination of the Syndicate any certificates issued by the Receiver of the McCall Company and held by the Managers and any cash paid up by the subscribers and not already advanced by the Managers to the Receiver of the McCall Company shall be distributed by the Managers *pro rata* amongst the subscribers in proportion to their participations and the subscribers shall have no further claim whatsoever against the Managers in respect of their participations in the Syndicate or otherwise howsoever.

11. The Managers shall be entitled at any time after they shall have received delivery of all the said $1,835,000 of bonds or after they shall be satisfied that the proposed scheme for reorganization of the McCall Company will not be successfully carried through to terminate the Syndicate by notice in writing to the subscribers. In default of earlier notice of termination being given as

aforesaid the Syndicate shall terminate on the 1st July 1910 unless the Managers shall previously to that date by notice in writing to the subscribers postpone the termination of the Syndicate for a further period not exceeding six calendar months in which case the Syndicate shall continue until the expiration of such further period unless previously determined by the Managers by notice to the subscribers.

12. The Managers will issue to each subscriber upon payment by him of the instalment payable in respect of his participation on the 1st July 1909 a certificate under their hands certifying that he will be entitled to delivery of bonds to the amount of his participation on the termination of the Syndicate on payment of the remaining instalments payable by him in respect of his participation subject nevertheless to the terms of this Agreement: Provided that in any case where such a certificate is issued to a subscriber the Managers may refuse to make any payment or to deliver any bonds or other securities to the subscriber or to permit him to exercise any rights as a subscriber hereunder unless he shall if and whenever required by the Managers so to do produce such certificate to them and permit them to endorse thereon such notice as they think fit of such payment or delivery having been made or such right having been exercised as aforesaid.

13. In consideration of the subscribers joining the Syndicate the Managers shall out of the common stock of the Company receivable by them from the said J. E. Aldred as hereinbefore recited pay to each subscriber the following bonus namely—To each subscriber who avails himself of the arrangements made by the Managers as hereinafter mentioned for the financing of subscribers by certain banks a bonus equal to 30 per cent. of his participation in the Syndicate. And to each subscriber who does not avail himself of such arrangement a bonus equal to 40 per cent. of his participation. Such bonuses shall be payable in voting trust certificates representing common stock of the Company issued by the Trustees of the voting trust to be created as hereinbefore mentioned and shall be payable to each subscriber upon payment by him of the instalment payable in respect of his participation on the 1st September 1909 or on such later date as the said voting trust certificates shall be ready for delivery.

14. The Managers have arranged with certain banks to advance to any subscriber (if individually acceptable to the bank) the amount of the instalments payable by him hereunder in respect of his participation in the Syndicate other than the instalments payable on allotment upon the security of his personal

obligation as well as of his participation in the Syndicate and of all bonds securities or moneys to become payable to him in respect thereof (but exclusive of the bonus of common stock of the Company to which such subscriber will become entitled hereunder and which he will remain entitled to receive notwithstanding his availing himself of the arrangement so made). All sums so advanced by the banks will be advanced by paying the said instalments on behalf of the subscribers to the account of the Managers at the Bank of Scotland and such sums will be repayable by the subscriber on the 1st July 1910 or on the earlier termination of the Syndicate with interest at 5 per cent. per annum. Any subscriber desiring to avail himself of such arrangement must give notice of the fact when he signs this Agreement and will have to execute such personal obligation as aforesaid and to pay all stamp duties payable in respect of his advance including the cost of stamping any bonds or other securities delivered by the Managers to the Bank in respect of the participation of such subscriber in the Syndicate.

15. As regards any subscriber availing himself of the aforesaid arrangement the Managers shall (notwithstanding any notice to the contrary from such subscriber) be entitled to treat the bank making advances on his behalf as absolutely entitled to the participation and all the rights of such subscriber under this Agreement and to receive on his behalf and give a valid receipt for such certificate as mentioned in Clause 12 hereof and all bonds securities and moneys (but not the said bonus in common stock of the Company) receivable in respect of the participation of such subscriber in the Syndicate until they shall receive notice from such bank that the subscriber has repaid such advances to the bank with interest.

16. The Managers shall have the sole direction and management and conduct of the operations of the Syndicate and may on behalf of the Syndicate consent to or approve any modification of the said proposed scheme of reorganization of the McCall Company which may be found necessary or be desirable for enabling the said scheme to be carried through and the Company to be formed and acquire the properties and issue bonds charged thereon or to concur in the substitution for such scheme or any other similar scheme and may on behalf of the Syndicate take or concur in taking any steps or proceedings necessary or desirable for the purposes of carrying through the said scheme or any such substituted scheme and may settle or approve on behalf of the Syndicate the form and nature of the bonds of the Company and of the trust deed securing the same and of the said voting trust to be created of the common

stock of the Company and the documents constituting the same and the voting trust certificates and generally may on behalf of the Syndicate do or concur in doing any act or thing in connection with the matter which they would or might have done on their own behalf if they had been the sole subscribers to the Syndicate. The Managers may also on behalf of the Syndicate borrow money on such terms as they may deem expedient for the purpose of carrying out the said Agreement with the said J. E. Aldred or for performing any obligation of the Syndicate and may pledge or charge as security for any such loan any bonds or securities of the Syndicate and also the obligations of the subscribers or any of them under this Agreement (provided only that the Managers shall not be entitled to borrow any such moneys in the names of the subscribers or impose any personal liability upon the subscribers or any of them for the repayment of any moneys so borrowed or any interest thereon) and may pay off any moneys so borrowed out of any moneys of the Syndicate.

17. Each of the subscribers hereby irrevocably appoints the Managers until the termination of the Syndicate his attorney and agent either in his own name or in the name of the Syndicate or of the Managers to give all such consents and approvals and do or take any such things or steps as mentioned in the last preceding clause and to receive from the Bank of Scotland all moneys paid thereto by the subscribers or the advancing banks under this Agreement and to subscribe for his participation hereunder of the said bonds of the Company and to accept an allotment thereof and to make all payments in respect thereof and to receive delivery and give a valid discharge for such bonds and the voting trust certificates representing the bonus of common stock payable to such subscriber hereunder and to exercise all rights conferred by any bonds or common stock or voting trust certificates so delivered or otherwise acquired hereunder and to enter into execute and do all arrangements agreements and things deemed expedient or necessary to carry out the subscription or purchase of the said bonds or generally to accomplish the purposes of this Agreement including any sale or pledge of the said bonds in accordance with the provisions herein contained.

18. Subject to the provisions hereinbefore contained as regards those subscribers who avail themselves of the arrangements made by the Managers with the financing banks the respective participations of the subscribers shall not nor shall their respective rights and interests or obligations hereunder be assignable either absolutely or by way of mortgage charge or pledge or otherwise except with the previous sanction in writing of the Managers which they may give upon such terms and conditions (if any) or withhold altogether as

they think fit. And the Managers may (if they think fit so to do) absolutely disregard any notice given to them of any such assignment mortgage charge or pledge as aforesaid which they shall not have sanctioned in writing and may continue notwithstanding any such notice to treat the several subscribers as the only persons entitled to any interest in the Syndicate or to give valid receipts and discharges for any certificates bonds securities or moneys issuable to or distributable amongst the subscribers hereunder: Provided that any subscriber may after payment in full of all the instalments payable in respect of his participation charge or pledge his participation or interest hereunder and any certificate issued by the Managers in respect thereof as security for loans made to him thereon and the Managers shall have regard to any such charge or pledge of which they shall receive notice in writing.

19. The Managers shall be chargeable with good faith in the management and conduct of the affairs of the Syndicate but except in the event of their being guilty of want of good faith they shall not be liable for anything done or omitted by them in the performance or intended performance of their duties as Managers of the Syndicate or for any loss damage or injury occasioned to the subscribers thereby or by the exercise or non-exercise by them of any power or discretion hereby vested in them.

20. The Managers will receive further common stock of the Company beyond that required by them for providing the bonuses payable hereunder to the subscribers and they will retain such additional common stock or such part thereof as is not used by them for obtaining subscribers to the Syndicate as their profit and they shall not be accountable therefor to the subscribers. The Managers shall accordingly not be entitled to any remuneration from or to make any charge against the subscribers for forming the Syndicate and acting as Syndicate Managers but all out of pocket expenses of the Managers including legal expenses and all other disbursements made by them in good faith in connection with this Agreement and for carrying out the purposes of the Syndicate (other than any expense incurred in connection with any sale of bonds which expense shall be payable out of the proceeds of sale of the bonds sold as hereinbefore provided) and the rateable proportion of such expenses payable by each subscriber may be deducted by the Managers from any moneys payable by them to such subscriber under any of the provisions hereof.

21. Any notice hereunder may be served on the parties hereto by sending the same through the post in a letter addressed to the Managers at their address

above stated and to the several subscribers at their addresses stated in the schedule hereto and any notice so served shall be deemed to be served upon the day on which it is posted in London.

22. An original of this Agreement shall be signed by the Managers and lodged with the Bank of Scotland on behalf of the subscribers and counterparts thereof may be signed by any one or more of the subscribers and the said original and all such counterparts shall be read together and shall form and be one original instrument.

IN WITNESS whereof the Managers have subscribed an original hereof and the subscribers have subscribed the said original or counterparts thereof as of the day and year first above written.

THE SCHEDULE.

Full name of Subscriber.	Address.	Description.	Amount of participation in Syndicate in $
			$ (say dollars)

I the undersigned subscriber $\frac{\text{do}}{\text{do not}}$ desire to avail myself of the arrangement made with the financing banks as within stated.

I the undersigned $\frac{\text{do}}{\text{do not}}$ desire to withdraw my Bonds from sale on the terms within stated.

Signature of Subscriber _____ 6d. STAMP.

Witness _____

Address _____

_____

Certified true Copy
Judicial Cullen
16 June

Montreal Trust Company Underwriting Agreement

AGREEMENT FOR THE PURCHASE OF NEW SECURITIES

TO BE ISSUED PURSUANT TO

"McCALL FERRY POWER COMPANY - PLAN AND AGREEMENT"

AGREEMENT dated July 27th, 1909, between the Subscribers severally, of the one part, and the MONTREAL TRUST COMPANY, a corporation of the Dominion of Canada, hereinafter called Vendor of the other part.

Reference being made to the "Plan and Agreement" dated May 28, 1909, a copy whereof is hereto attached, issued by the Committee named therein, each Subscriber hereby agrees with Vendor to purchase, at the price and upon the terms hereinafter stated, the aggregate principal amount written after his signature hereto of the Thirty Year First Mortgage Five Per Cent Gold Bonds of the "New Company' described in said "Plan and Agreement," together with 50% of the said amount in the voting trust certificates for stock of said "New Company," also described in said "Plan and Agreement."

The price is to be $900 and accrued interest, if any, for each one thousand dollar bond together with such voting trust certificates for $500 par value of stock, and is payable to Vendor at its office in Montreal, Canada, or elsewhere as directed by it, as follows: 10% of such $900 on August 1, 1909; 15% thereof on October 1, 1909, and the balance in instalments each of which shall not exceed 25% of such $900 and shall be so payable within thirty days after notice by Vendor calling for payment of such instalment shall have been mailed to the Subscriber at the address written after his signature hereto.

This purchase agreement, however, is made upon the condition that each Subscriber, at or before the delivery to him of the bonds and voting trust certificates agreed to be purchased, shall be paid or credited with interest at 5% upon each instalment of purchase price paid by him from the date of payment thereof to the date of payment or credit of such interest.

Appropriate receipts of Vendor, negotiable as therein provided, will be issued for all payments by Subscribers. No assignment, transfer or other disposition of any such receipt shall discharge or diminish any obligation of any Subscriber hereunder.

The Subscribers severally authorise Vendor, at any time prior to the issue of such bonds of the "New Company", to loan or advance to the Committee under said "Plan and Agreement" all or any of the moneys received from Subscribers in payment of instalments hereunder, and any interest moneys received by Vendor, taking for such loans or advances the obligations of said Committee, as such, as authorised by said "Plan and Agreement", such obligations to bear interest at 5%, to mature not later than January 1, 1910, and to be secured either by pledge of Receivers' certificates, of amount equal to the amount of such loans or advances, and such certificates to be under court order making them a lien on the property covered by the present mortgage of the said McCall Ferry Power Company prior to at least eighty-five per cent of the outstanding bonds secured by said mortgage,

or by pledge of said present bonds of the said McCall Ferry Power Company, provided that not less than $100 in aggregate principal of such bonds shall be so pledged to secure each $20 so advanced, and that not less than 85% of all of said bonds outstanding shall be so pledged to secure such obligations of said Committee to Vendor and its similar obligations, if any, to others.

Vendor may accept as conclusive the written statement of a majority of said Committee as to any matter involved in the foregoing paragraph hereof.

The Subscribers intend their agreements herein stated to be relied upon by said Committee in carrying out the said "Plan and Agreement", and understand that arrangements have been or will be made by said Committee with Vendor to furnish to Vendor for the net purchase price thereof hereunder the bonds and voting trust certificates hereby agreed to be purchased, upon or before the complete carrying out of said plan; but in case said "Plan and Agreement" should not be carrid out so as to provide said Committee with such bonds and voting trust certificates, the subscribers will accept in full discharge the delivery to them proportionately of all obligations and security received by Vendor for loans or advances made as hereinbefore authorized, and the return to them proportionately of all moneys received by Vendor hereunder and not so loaned or advanced by Vendor.

The words "said Committee" as used herein mean the Committee under said "Plan and Agreement" as at any time constituted. No partnership or joint relation of any kind results from this agreement, nor does Vendor assume any fiduciary relation or any obligation to cause the said "Plan and Agreement" to be carried out. Signatures to this agreement, though made upon different papers, shall be deemed signatures of one agreement, and Vendor may be a Subscriber.

NAME	AMOUNT	ADDRESS

Final Plan and Agreement for Deposit of Bonds

62 CEDAR STREET,
NEW YORK, May 28th, 1909.

To the Holders of
First Mortgage Bonds and Preferred Stock of
McCALL FERRY POWER COMPANY:

The undersigned Committee, appointed by the "Preliminary Agreement" dated December 7, 1908, submit the enclosed "Plan and Agreement," having made arrangements whereby, if such plan is promptly adopted with substantial unanimity, the "new money" called for thereby will be supplied by others without requiring any contribution from the bondholders. The plan has been approved by holders of a large amount of the bonds. The following is an outline of the

PLAN

Either the present Company readjusted or a new company—such company, new or old, to be named SOUTHERN PENNSYLVANIA POWER COMPANY, or other appropriate name—to be capitalized and to issue bonds and stock as follows:

Bonds:	First Mortgage Thirty-Year Five Per Cent. Gold Bonds, authorized		$12,500,000
	For use in obtaining the "new money" by sale at 90, with stock as shown below, not to exceed	$4,250,000	
	To go to present bondholders as hereinafter stated, 40% of par of the present bonds	3,330,000	7,580,000
	Leaving in Treasury, at least		$ 4,920,000
Stock:	Authorized stock, all of one class		$ 8,500,000
	To go with the new bonds sold at 90	$3,500,000	
	To go to the present bondholders, 60% of par of the present bonds	4,995,000	8,495,000
	Leaving in treasury		$5,000

Holders of McCall Ferry Power Company First Mortgage Bonds to receive 40% of the principal of such bonds in the new bonds and 60% thereof in voting trust certificates for the new stock; all such new stock to be deposited under a

voting trust terminating November 1, 1912, when the certificates will be exchangeable for the stock- the voting trust to provide for three voting trustees, two to be nominated by those furnishing the "new money" and one by the Committee, successors, if any, to be nominated by the same interests respectively.

The principles of this Plan may be stated summarily as follows: A first lien bond issue to be created sufficient to provide the "new money" required by the Plan, to give the present bondholders 40% of their present bonds in such new bonds and to leave in the treasury, to be issued hereafter only under proper safeguards and restrictions, a further amount deemed sufficient for what are likely to become in the future desirable capital expenditures for the Company; parties not interested in the enterprise at present to agree to take $4,170,000 of the new bonds at 90 ($80,000 more to be for like use at the discretion of the Committee), and with this amount are to receive $3,500,000 of stock; present bondholders to receive 40% of their bonds in new bonds and 60% of their bonds in new stock—the total stock so to be received amounting to nearly three-fifths of the whole issue thereof; the present preferred and common stock of McCall Ferry Power Company to have no share in the new issues.

The amount of "new money" to be raised under the Plan has been fixed through conference with those who are to furnish it at a figure deemed by them sufficient—after providing for all expenditures of the Committee under the powers of said Plan and Agreement—to so far complete the enterprise that its operation so completed will, as they estimate, make earnings sufficient to pay all bond interest and leave a substantial surplus. They also estimate that the further construction for which the treasury bonds are reserved will result in large additional earnings. They have had experience in the successful management of similar enterprises, and the Committee have confidence in the efficiency of their management of this one.

Accordingly, as provided by said Preliminary Agreement, Depositors thereunder are hereby notified that printed copies of said Plan, embodied in an appropriate agreement, have been lodged with the Knickerbocker Trust Company, No. 66 Broadway, New York, and the City Trust Company, No. 50 State Street, Boston, the Depositaries under said Preliminary Agreement, and a copy of said Plan and Agreement is enclosed herewith; and such Depositors are further notified, in accordance with the provisions of said Preliminary Agreement, that, unless they withdraw their deposits, or cause them to be withdrawn, on or before July 1st, 1909, they will be bound by the enclosed Plan and Agreement with like effect as if they had executed the same.

The successful carrying through of the Plan depends, however, to a large extent, and the early resumption of the work depends entirely, upon the *prompt* acceptance of the Plan by a large proportion of the bondholders. Accordingly, the Committee urges all bondholders who approve the Plan to become parties to said Plan and Agreement immediately by depositing, or causing the deposit of, their bonds and preferred stock *at once* with one of said Depositaries. Those holding Certificates of Deposit under said Preliminary Agreement should surrender them in exchange for Certificates of Deposit under said Plan and Agreement; and those whose bonds and stock are pledged should arrange with the pledgees for the deposit thereof.

WILLIAM M. BARNUM,
A. C. BEDFORD,
S. READING BERTRON,
CHARLES A. COFFIN,
GARDINER M. LANE,
Committee.

McCALL FERRY POWER COMPANY,

PLAN AND AGREEMENT.

Agreement, made this 28th day of May, 1909, between WILLIAM M. BARNUM, A. C. BEDFORD, S. READING BERTRON, CHARLES A. COFFIN, and GARDINER M. LANE (hereinafter called the Committee), and the holders of first mortgage bonds and preferred stock of McCall Ferry Power Company becoming parties hereto (hereinafter called Depositors).

WHEREAS, additional funds are required to complete for operation the plant now of the McCall Ferry Power Company, and the Committee has prepared the following:

PLAN.

1. A new company—the term "New Company" being used herein to mean either the present company or any other that may be used—is to be vested with the properties of the present company and with cash as hereinafter stated, and will have authorized bonds and stock as follows: Thirty-Year First Mortgage Five Per Cent. Gold Bonds, $12,500,000; Stock, all of one class, $8,500,000; of which bonds at least $4,920,000 are to be in the treasury of the New Company after the Plan is carried out.

2. The holders of the bonds of the present company who become parties to this Plan and Agreement and perform the obligations thereof will receive in exchange for their present bonds 40% of the principal thereof in such bonds and 60% of such principal in negotiable voting trust certificates for such stock of the New Company, all such new stock to be deposited under a voting trust terminating November 1, 1912, when the voting trust certifi-

cates will be exchangeable for the stock—the voting trust to provide for three voting trustees, two to be nominated by those furnishing the new money, and one by the Committee, and their successors to be nominated in the same interests respectively.

3. From $4,170,000 to $4,250,000 of such bonds, and $3,500,000 of such stock of the New Company are to be for sale at a price to realize 90 per cent. of the principal of the bonds.

4. The disposition of the securities of the New Company, in accordance with the foregoing, is indicated in the following table:

Parties.	*Bonds.*	*Stock.*
To those furnishing the new money ($3,753,000, at least)	$4,170,000	$3,500,000
To holders of the present bonds ($8,325,000)* 40% in new bonds and 60% in new stock	3,330,000	4,995,000
	$7,500,000	$8,495,000

* Certain additional bonds outstanding in pledge are not included, as they will be discharged from pledge and cancelled in carrying out said Plan and Agreement.

5. The Committee may cause fractional scrip to be issued to those entitled to fractional amounts of bonds or stock.

NOW, THEREFORE, THIS INDENTURE WITNESSETH:

FIRST.—William M. Barnum, A. C. Bedford, S. Reading Bertron, Charles A. Coffin and Gardiner M Lane agree to act as the Committee.

SECOND.—All holders of bonds or of bonds and preferred stock of the McCall Ferry Power Company, becoming parties hereto, hereby assent to said Plan and agree to forthwith deposit, or cause the deposit of, their bonds and

preferred stock with the Knickerbocker Trust Company, No. 66 Broadway, New York, or with the City Trust Company, No. 50 State Street, Boston (hereinafter called the "Depositaries"), it being understood that the receiving Depositary shall, upon such deposit, issue Certificate or Certificates of Deposit evidencing the same, which Certificates shall be transferable, and shall entitle the holder to receive new securities in accordance with said Plan, or to receive back the bonds and stock deposited, as hereinafter provided. All certificates for stock shall be properly endorsed in blank for transfer. The mere deposit of any bonds or bonds and stock with one of the Depositaries shall operate to make the depositor a party to this agreement, and shall, operate as a transfer of the bonds and stock so deposited to the Committee or its successors, and shall empower the Committee to exercise all the powers herein given.

THIRD.—The holders of said bonds or bonds and stock, parties hereto, hereby severally vest in said Committee, under the terms of this agreement, as trustee of an express trust, the legal title to all bonds and stock deposited or caused or agreed to be deposited by them respectively and give the Committee full power to do all things in the Committee's judgment necessary or proper to carry out said Plan, including power:

(*a*) at their discretion to acquire, or not to acquire, at public or private sale or otherwise the whole or any part of the properties of the McCall Ferry Power Company, including any on which it holds options, and to use deposited bonds, or any thereof, or any other resources, in such purchase or acquisition;

(*b*) to act for the Depositors in presenting coupons for payment, in requesting or instructing or otherwise moving the trustee under the mortgage securing said bonds with respect to action thereunder, and also to act for them in or in re-

spect to any action which may be brought for the foreclosure of said mortgage or in any other action which may be brought which in any way affects or may affect the rights and interests of the Depositors; to receive and receipt for any money to which said bonds or stock shall be at any time entitled; to execute and deliver any requests, consents, waivers or other writings—including consents to issuing Receivers' Certificates prior, or not, in lien—which it may seem to the Committee necessary or desirable to file in any Court or office or with the Trustee under said mortgage or elsewhere;

(*c*) to employ such agents, attorneys and counsel as the Committee deem best, to represent and act for, or authorize representation of and action for, the Depositors, or any of them, in any Court or elsewhere, with respect to all rights and interests in any way affecting said bonds or stock;

(*d*) so far as deemed expedient by the Committee, to contract, or otherwise provide, for the purchase, compromise, adjustment or payment, in full or in part, of any indebtedness of the McCall Ferry Power Company, or of any Receiver's certificates that may be liens on any of the mortgaged property, or for the extension of any such indebtedness as the obligation of the New Company, or for the redemption from pledge of any property or securities directly or indirectly belonging to said McCall Ferry Power Company;

(*e*) to sell, contract for the sale of, or otherwise dispose of, any new bonds and stock not required for the Depositors or reserved for the treasury under said Plan, and to contract for underwriting with respect thereto, and, in con-

nection with any such contract for underwriting, to pay a reasonable commission therefor; any member or members of the Committee, or any persons or corporations who may be associated with or represented by them, to have the right to join in any such sale or contract.

(*f*) to borrow money in order to raise any cash required to pay the expenses of the Committee or to make any cash payment required upon any foreclosure or other sale, or to carry on any construction or other work, or purchase any property deemed necessary, or to enable the Committee to do any of the other things which they may be authorized to do, or generally for any purpose which the Committee may deem necessary or expedient in order to carry out said Plan; the Committee being hereby expressly authorized to pledge for the repayment of any or all sums so borrowed, any or all of the deposited bonds or stock, and any or all assets acquired by them, and any or all of the bonds or stock of the New Company received by them under said Plan and not specifically appropriated by the Plan or taken by the parties entitled thereto; but no Depositor shall be liable personally for or upon any debt of the Committee;

(*g*) to cause the new Company to be organized in such manner and with such powers as the committee may deem proper, or to adapt and use an existing company as such "New Company" and to fix the terms of its bonds and the mortgage securing the same, subject to the provisions of said Plan; to determine all questions pertaining to the management, operation or disposition of any property acquired by them until the New Company shall be organized and in possession and control of said property; to make such construction, im-

provements or repairs as they shall deem expedient, and to make such contracts in regard thereto as the New Company might make if already organized and in operation; and to cause the provisions of said Plan in respect to a voting trust and voting trust certificates to be carried out;

and generally to exercise all the powers of owners and holders of said bonds and stock, including power to vote at any meeting of bondholders, creditors or stockholders, and to use the same as the Committee may deem expedient in carrying out said Plan; the statement of particular powers herein not to limit the Committee from or in the exercise of any power which, in their judgment, may be desirable in accomplishing the purposes of said Plan and Agreement; nor shall the Committee be restricted in or in respect to dealing, under any of its powers, with or in respect to any property, security or indebtedness, by reason of any interest in any thereof of any member of the Committee or of any firm or corporation in which a member is interested; it being expressly agreed by all Depositors that the methods to be adopted for carrying out said Plan and Agreement are to be determined from time to time by the Committee in their sole discretion, and that the Committee shall have the right at any time to change any such determination should their judgment be changed by subsequent developments.

FOURTH.—Whatever shall be acquired in any way by the Committee under this agreement shall be acquired by them as joint tenants, and not as tenants in common, so as to remain the property of the said Committee, however the members thereof may be changed. The members of the Committee shall have reasonable compensation for their services from this time in carrying out said Plan, the amount of such compensation, however, to be subject to the approval of the Board of Directors of the New Company. Any member of the Committee may be

come a party hereto as a Depositor. Any member of the Committee may resign by writing addressed to the Committee. By appointment in writing signed by a majority of the Committee, additional members thereof may be appointed, and vacancies therein, occurring by death, resignation or otherwise, may be filled. The Committee may act by a majority thereof either at a meeting or in writing without a meeting. Any member may vote or act by proxy appointed in writing, who may be another member of the Committee or any other person approved by a majority of the Committee. No member of the Committee shall be liable for the act or omission of another member, nor shall the Committee or any member thereof, or either of the Depositaries be liable for the act or omission of any agent or employe selected in good faith, or in any case except for its or his own willful misconduct.

FIFTH.—The Committee may construe this agreement, including said Plan, and their construction thereof, or action thereunder, in good faith, shall be final and conclusive; they shall have power to determine, and to act according to their judgment in, all matters not specifically provided for herein but within the general purpose set out in said Plan, and shall also have power to modify said Plan in any matter of detail not affecting the substantial rights of the other parties hereto.

SIXTH.—Holders of bonds or bonds and preferred stock of the McCall Power Company may become parties hereto at any time on or before July 1st, 1909, or such later date or dates as the Committee may fix, by signing this agreement, which it is understood may be signed in any number of parts, or by depositing, or causing the deposit of, their bonds or bonds and stock without such signing as above provided.

SEVENTH.—The Committee shall not be required to take any action in the interest of any of the stock de-

posited hereunder, nor shall it be under any obligation whatever to any holder of bonds or stock not a party to this agreement.

EIGHTH.—In case the Committee should at any time decide that it is not, for any reason, to the interest of the Depositors to carry out the said Plan, they may either

(1) declare this agreement terminated, in which case all bonds and stock deposited hereunder shall be delivered and transferred to the several holders of Certificates of Deposit upon surrender of said Certificates, and upon payment of their due proportion of the obligations already incurred, to be determined by the Committee; or

(2) file a new agreement with the Depositaries, mail a copy of the same in a postpaid wrapper to each Depositor to the address, if any, filed with either of the Depositaries, or, if no such address has been so filed, then to the address last known to the Committee, whereupon the Depositors shall have the right, within twenty days after the copies of such new agreement shall have been so mailed, to withdraw their bonds and stock upon payment of their due proportion of the obligations already incurred, to be determined by the Committee, and in the event of failure to so withdraw within such twenty days, every Depositor so failing shall be deemed to have assented to and ratified such new agreement, and such assent and ratification shall be deemed final and irrevocable.

NINTH.—In case the Committee shall deem it desirable or proper to give any notice to the Depositors or any of them, such notice shall be deemed to have been given if mailed in writing to such Depositors at the addresses, if any, filed in writing with a Depositary for the

purpose; or when no such address has been so filed, then to the address last known to the Committee.

TENTH.—Acceptance of new bonds and stock by any Depositor shall estop such Depositor from questioning the conformity thereof, as to character or otherwise, to any provision of this Plan and Agreement.

ELEVENTH.—After the reorganization shall have been completed, and all debts and liabilities incurred in connection therewith shall have been paid or discharged, all moneys, securities and other property not used or required for any of the purposes herein authorized and remaining in the hands of the Committee, are to be transferred to, or held for the benefit of, the New Company, under appropriate agreements for the protection and indemnity of the Committee.

TWELFTH.—Originals of this agreement are to be lodged with said Knickerbocker Trust Company of the City of New York, and with said City Trust Company of Boston, where they may be inspected by Depositors. This instrument may be signed in several parts with the same effect as if all signatures were hereon.

Upon transfer of any Certificate of Deposit the transferee shall succeed to all the rights of the prior holder and be subject to all the provisions hereof. The word "Depositors" herein includes the holders of record of the Certificates of Deposit issued hereunder outstanding at the time in question. The Committee and the Depositaries may treat the holder of record of each Certificate of Deposit as the absolute owner thereof.

The Depositaries shall severally hold and dispose of, subject to the order of a majority of the Committee, the bonds and certificates of stock deposited with it, and, in acting as Depositaries hereunder, act respectively as agents for, and are answerable to, the Committee alone.

10

A writing signed by a majority of the Committee shall be sufficient evidence to the Depositaries of any action of the Committee stated therein.

IN WITNESS WHEREOF, the parties of the first part (members of said Committee) have hereunto signed their names, and the various depositors, parties of the second part, have hereunto signed their names and written opposite thereto the amount of bonds and stock deposited by them, respectively, or have deposited, or caused the deposit of, their bonds and stock, the day and year first above written.

WILLIAM M. BARNUM,
A. C. BEDFORD,
S. READING BERTRON,
CHARLES A. COFFIN,
GARDINER M. LANE.

Protest of Sanderson & Porter Against Final Plan

EDWIN N. SANDERSON
H. HOBART PORTER
FRANCIS BLOSSOM
RICHMOND TALBOT
RICHARD S. BUCK
WYNN MEREDITH

CABLE ADDRESS SANDP

SANDERSON & PORTER
ENGINEERS AND CONTRACTORS
52 WILLIAM STREET, NEW YORK
UNION TRUST BUILDING, SAN FRANCISCO

June 25th, 1909.

To the Holders of the First Mortgage Bonds and Preferred Stock of the McCall Ferry Power Company,

Gentlemen.—Referring to the Circular and Plan of Agreement dated May 28th, 1909, sent by the Committee to the holders of the First Mortgage Bonds and Preferred Stock of the McCall Ferry Power Company, we desire to advise you that, after a careful consideration of the entire subject, including an analysis of the financial plan therein submitted, we are of the opinion that the adoption of the Plan proposed is not to the best interest of the holders of such securities.

The Plan presented under date of May 28th will bind all depositors under the Preliminary Agreement of December 7th, 1908, unless they withdraw their securities before July 1st, 1909.

Under the plan proposed, the present bondholders will become the majority stockholders but control of the Company will be in the hands of those furnishing the new money until at least November 1st, 1912, since the Plan calls for a Voting Trust of three members, two of whom are to be nominated by those furnishing the new money.

The Committee's Plan presents a financial scheme which is inequitable as shown below and may prove disastrous to the interests of the present security holders. Such Plan gives no information as to essential questions of construction, future financing and financial management.

While the Committee states that those furnishing the new money have had experience in the successful management of similar enterprises, no information as to the personality of these parties is given in the Circular nor is any assurance offered that the financial management entailed by this Plan is experienced or that ample capital will be available if the funds now to be provided prove inadequate to properly complete the plant and deliver the power to market, in which case a further re-organization may be necessary in the near future which might practically wipe out the original bondholders.

The present bondholders have furnished $7,492,000 in cash for which, under the proposed plan of re-organization, they will receive $3,330,000 par value in bonds and $4,995,000 par value in stock, thus paying therefore 90 per cent. of their combined par value, whereas those furnishing the new money will secure bonds at 90 per cent. with about 90 per cent. bonus in stock, thus paying therefor less than 50 per cent. of their combined par value.

As a result the new securities must sell at a price which will show a profit of $3,500,000 to those who have advanced $3,800,000 of new capital before the present bondholders can realize enough from the sale of their securities to equal their original investment.

Under the Plan no opportunity is given to the present bondholders to participate on any basis in the furnishing of the new capital which would seem to clearly indicate that those proposing to furnish such capital believe that they have negotiated a very profitable bargain.

We have been informed that a tentative plan was suggested to and rejected by some members of the Committee by parties who were willing to purcha.. sufficient first mortgage bonds to complete the property to a capacity of 60,000 H. P., which plan contemplated an issue of cumulative preferred stock to be offered to the present bondholders in exchange for their bonds, par for par.

We believe that it is still possible to form a syndicate which would purchase sufficient first mortgage bonds of a new issue to insure completion of the property in the best manner, provided the present first mortgage bondholders would agree to convert their bonds into 5 per cent. cumulative preferred stock par for par, with a participation in the new common stock, such syndicate to offer to the present bondholders the privilege of subscription. It is believed that if a reasonable time be given such a plan can be perfected and an offering on substantially the above lines can be made to the present security holders.

Construction work on the development of the McCall Ferry Power Company, other than some excavation in the tail race has been suspended since the fall of 1907, and while we have taken as yet no active part in the construction work, we have been retained as engineers since its inception, and are familiar with the conditions and we are convinced that the season is now so far advanced that the work of construction can not be completed during the present low water season even if funds were immediately available, and that another year must in any event elapse before completion. We feel, therefore that the interests of the present bondholders and of the Company will not be jeopardized by taking the time required to formulate a plan on the lines indicated above.

We have withdrawn our bonds, believing that this course is in the best interests of the security holders, and we urge that you do likewise.

Yours very truly,

SANDERSON & PORTER.

Bondholders Committee's Reply to Protest of Sanderson & Porter

62 CEDAR STREET,
NEW YORK, June 28th, 1909.

To the Holders of
Bonds and Preferred Stock of
McCALL FERRY POWER COMPANY:

The undersigned Committee comments as follows upon the letter to you of Messrs. Sanderson & Porter, dated June 25, 1909.

Messrs. Sanderson & Porter urge you to reject this Committee's plan with the expectation that, later on, some one may present a plan similar to a tentative one which, they say, they "have been informed was suggested to and rejected by some members of the Committee." They were misinformed. Suggestions of a plan were made to the Committee by those to whom Messrs. Sanderson & Porter must allude, but after considerable negotiation were entirely withdrawn.

The Committee has believed that a majority of the bondholders prefer a plan not calling upon them to furnish the further money necessary. Those who have agreed to provide this money stated at the outset that their purpose would be not to organize a mere underwriting syndicate, but, if taking it up at all, to obtain subscriptions for investment in the enterprise and to undertake its management during at least the period of the voting trust, and that they did not care to solicit subscriptions which would be conditional upon the prior exercise of the right to subscribe by others. This has not seemed unreasonable to the Committee.

When the Committee's circular was issued there were reasons, which do not now apply, deemed sufficient for not naming the persons who agreed to furnish the new money and undertake the responsibility of management. The leader of the party is Mr. J. E. Aldred, of Montreal, who is the President of the Shawinigan Water and Power Company, which has been, in the opinion of competent judges, ably and successfully managed; and Mr. Aldred has largely associated with him in the McCall Ferry matter his English and Canadian associates in the Shawinigan enterprise.

As to the sufficiency of the provision for additional funds under the Committee's plan, the Committee has nothing to add to what it said in its circular except —what was to be inferred therefrom—that it believes that this substantial amount of money would not be offered for investment in this enterprise unless those offering it were very confident of its sufficiency to complete a plant capable of making satis-

factory earnings; and it believes further that the experience and standing of those making the offer justify the confidence of others in their convictions in this respect. Their prospect of profit from the enterprise lies in the stock, and of this the present bondholders are to receive the greater part. Moreover, the "tentative plan" to which Messrs. Sanderson & Porter allude, was substantially the same as the Committee's plan in its provision of further funds.

The Committee, without motive or inducement other than to act in the interests, and according to what they suppose to be the wishes, of the bondholders, a very large majority of whom have appointed them to do so, after extended negotiations in various directions and mature consideration, with entire unanimity, made the arrangement for carrying on the enterprise set forth in the Circular and Plan and Agreement, and the Committee believes it to be to the interest of the bondholders to adopt the plan at once. If they do not do so in sufficient numbers the agreement to furnish the additional money will be discharged.

The Committee does not request or urge the bondholders to adopt the arrangements made for them. It does, however, urge them to consider the matter very carefully before withdrawing their deposits under the Preliminary Agreement and so forfeiting the opportunity offered by the Committee's plan for the prompt carrying on of the enterprise.

WILLIAM M. BARNUM,
A. C. BEDFORD,
S. READING BERTRON,
CHARLES A. COFFIN,
GARDINER M. LANE,
Committee.

Letter Re: Opposition to Final Plan

June 29, 1909.

Mr. W. F. Beyer,
33 N. Duke Street,
Lancaster, Pa.

My dear Beyer:-

I have your letter of June 28th. Hutchinson tells me tha Mr. Colgate, who is an underwriter to the extent of $250,000, as are also Sanderson and Porter, are backed by substantial financial interests, but of course I cannot tell whether they are strong enough to prevent the plan advocated by Barnum from being carried out. I will let you know anything that I hear upon the subject, and I would be obliged to you if you would telegraph me immediately upon the filing of any bill in Pennsylvania for your receivership of the McCall Ferry Power Co. I would like to have prompt information upon this subject and will rely upon you to give it to me.

Very sincerely yours,

LS-T

Notice to Knickerbocker Trust Company of Default on Bond Interest

To KNICKERBOCKER TRUST COMPANY,

of the County and State of New York:

The undersigned hereby notify you that William M. Barnum, A. C. Bedford, S. Reading Bertron, Charles A. Coffin and Gardiner M. Lane, as Trustees under the "Plan and Agreement" dated May 26th, 1909, a copy whereof is hereto attached, hold $7,400,000 in aggregate principal amount of first mortgage 5% gold bonds of the McCall Ferry Power Company, outstanding under a mortgage or deed of trust from the McCall Ferry Power Company to Knickerbocker Trust Company, dated June 15, 1905, and that under the terms of said Plan and Agreement whereby the legal title to said bonds is vested in said Trustees, it is provided that said Trustees may act by a majority thereof either at a meeting or in writing without a meeting.

The undersigned, a majority of said Trustees, hereby notify you that the McCall Ferry Power Company defaulted in the payment of the interest due on December 15, 1908, on the bonds issued and outstanding under the said mortgage, and that such default has continued for more than six months; and we further notify you that said Trustees, the holders as aforesaid of more than a majority in interest of the bonds secured under said mortgage now outstanding, have elected and do elect that the entire principal sum secured

by said mortgage and the interest due thereon shall become and be immediately due and payable, and we request that you notify the McCall Ferry Power Company of this election.

In behalf of said Trustees we further request you to take forthwith appropriate legal proceedings for the foreclosure of the lien of said mortgage, and to enforce your rights as trustee, and the rights of the bondholders under said mortgage, and hereby agree to indemnify you against any expense or liability incurred by you in taking or causing such proceedings to be taken.

IN WITNESS WHEREOF the undersigned, a majority of said Trustees, have executed these presents this sixth day of July, 1909.

W M Barnum

A. B Bedford

Charles A. Coffin

Gardiner M Lane

STATE OF NEW YORK, :
: ss:
COUNTY OF NEW YORK, :

On this 6th day of July, 1909, before me personally

came Wm M. Barnum, A. C. Bedford, Charles A. Coffin and Gardner M Lane.
to me known and known to me to be the individuals described in and who executed the foregoing instrument, and they duly severally acknowledged to me that they executed the same.

Ross A. Mackey

(Seal)

Notary Public
Kings County
Certificate filed in New York County

Order Appointing Aldred Receiver

CIRCUIT COURT OF THE UNITED STATES
FOR THE EASTERN DISTRICT OF PENNSYLVANIA.

KNICKERBOCKER TRUST COMPANY, :
Complainant, :
vs. : IN EQUITY.
McCALL FERRY POWER COMPANY, :
Defendant. :

This cause coming on to be heard on the bill of complaint and the answer of the defendant admitting all the allegations of the bill, and consenting to the appointment of a Receiver, and the Court having heard the counsel for the respective parties, and duly considered the matters involved, it is now, on motion of Frank P. Prichard, Esq., of counsel for the complainant; Franklin H. Mills, Esq., of counsel for the defendant appearing and assenting,

ORDERED, ADJUDGED AND DECREED, that J. Edward Aldred, Esq., be, and he is hereby, appointed Receiver of all and singular the property, real and personal, equitable interests, contracts, things in action, effects, moneys, receipts, earnings, rights, privileges, franchises, and immunities, of every kind and description, of the defendant McCall Ferry Power Company, wheresoever situated, to hold the same as the officer of and subject to the order of this Court, with all the powers, rights and duties of receivers in like cases, and with the powers, rights and duties herein set forth.

Said Receiver shall forthwith enter upon and take possession of all and singular the said property, real and personal, equitable interests, contracts, things in action, effects, moneys, receipts, earnings, rights, privileges, franchises and immunities, and have, hold, use preserve, manage, exercise and enjoy the same, acting in all things subject to the supervision of the Court.

The defendant McCall Ferry Power Company and its officers, directors, agents and employees, and all persons and corporations are hereby required and commanded forthwith to turn over and deliver to the said Receiver, or his duly constituted representative, all of the property of the defendant, including all books of account, vouchers, papers, deeds, contracts, bills, notes, accounts, money or other property of said Company in its or their hands, or under its or their hands, or under its or their control, wheresoever situated, and they and each of them, and all persons or corporations whatsoever are hereby enjoined and restrained from interfering with any of the property of the defendant, or from transferring, selling or disposing of the same except to said Receiver, or from taking possession of and levying upon , or attempting to sell, either by judicial process or otherwise, any of said property, or from interfering or intermeddling with said Receiver in any manner in the possession, control, management and use of said property.

Said Receiver is further directed to pay the wages and salaries, if any, due to the clerks, agents and employees of the defendant, accruing since the 1st. day of July, 1909, and is hereby invested with full power at his discretion to employ and discharge and fix and pay the compensation of all such counsel, managers, agents and employees as may be required for the proper discharge of the duties of his trust, and to pay allcurrent expense incident to the creation, and administration of this trust and to the preservation of the property and business hereby entrusted to him.

Said Receiver is hereby authorized to collect by suit or otherwise, and receive all income from the said property, and all debts due the defendant of every kind, and to institute and prosecute all such suits as he may deem necessary to recover and protect the property and trust hereby invested in him, and to defend all actions instituted against him as such Receiver, and also to appear in and conduct the prosecution or the defense of any suits wherein the defendant may be a party.

Said Receiver shall cause to be kept just, full and true accounts of his receipts and disbursements, and shall report his doings to this Court with such account from time to time, and said Receiver may apply to this Court for instructions, and for such further order or orders in respect to his actions as said Receiver may from time to time deem necessary or advisable.

Said Receiver shall within ten days from the date hereof, or within such further time as may be allowed by the Court for this purpose, make and file with the Clerk of this Court, a proper bond, with sufficient surety, or sureties, to be approved by a Judge of this Court, in the penal sum of $50,000-, conditioned for the faithful performance of his duties as such Receiver, and that he will in all respects obey the order of this Court as such Receiver.

Said Receiver, and any party to this cause, may at any time apply to the Court for further decree in the cause.

Dated, July 17, 1909.

Geo. Gray

Circuit Judge.

ENDORSED:- 329 Apr. S. 1909. C. C. OF THE U. S. FOR THE ED. OF PA. KNICKERBOCKER TRUST COMPANY, Complainant, against MCCALL FERRY POWER COMPANY, Defendant. ORDER APPOINTING RECEIVER. JOHN G. JOHNSON, DAVIES, STONE & AUERBACH, Solicitors for Complainant. Filed Jul. 17, 1909 Henry B. Robb, Clerk. By L. Deputy Clerk.

UNITED STATES OF AMERICA,
Eastern District of Pennsylvania, } SCT.

I, HENRY B. ROBB, *Clerk of the Circuit Court of the United States of America for the Eastern District of Pennsylvania, in the Third Circuit,* do hereby Certify *the foregoing to be a true and faithful copy of the original*

order appointing receiver in the case of Knickerbocker Trust Co. versus McCall Ferry Power Co. No. 329 April Session, 1909, filed July 17th, 1909

on file and now remaining among the records of the said Court in my office.

In Testimony Whereof, *I have hereunto subscribed my name and affixed the seal of the said Court at Philadelphia, this* 20th *day of* July *in the year of our Lord one thousand nine hundred and* nine, *and of the Independence of the United States the one hundred and thirty* fourth

Henry B. Robb
Clerk of C. C.

By Leda Daley
Deputy Clerk

Contract With Empire Engineering Corporation for Additional Construction

THIS MEMORANDUM OF AGREEMENT, made this 16 day of August, 1909, between J. M. ALDRED, as Receiver in the suit below named, (hereinafter called the Receiver), and THE EMPIRE ENGINEERING CORPORATION, a corporation organized under the laws of the State of New York, and having an office at 60 Wall Street, New York City, (hereinafter called the Corporation),

WITNESSETH, That WHEREAS said J. M. Aldred was appointed Receiver of all the property of the McCall Ferry Power Company by an order entered in the Circuit Court of the United States for the Eastern District of Pennsylvania, on the 17th day of July, 1909, in a suit entitled Knickerbocker Trust Company vs. McCall Ferry Power Company, and

WHEREAS it is the intention of the Receiver to continue the work of construction on the hydro-electric development of the McCall Ferry Power Company, near McCall Ferry, Pennsylvania, doing the work in the most economical manner possible, and completing the main dam, ice spillway, fishway, deflecting dam, power-house substructure, power-house superstructure, and such other work as may be necessary to put the plant in shape for the installation of hydraulic and electric equipment of a capacity of fifty thousand horse power, but leaving unfinished the other portions of the development; and

WHEREAS the Receiver desires to obtain the services of the Corporation in connection with the work of construction;

NOW, THEREFORE, in consideration of the payments and agreements herein described, IT IS MUTUALLY AGREED:

-3-

(1) The Receiver agrees to employ, and hereby does employ, the Corporation as engineers and supervisors of construction of the work on said hydro-electric development, and the Corporation agrees to accept such employment and duly and faithfully perform the duties appertaining thereto.

(2) The Corporation is to carry out such part of the necessary work as may be ordered by the Receiver, in accordance with plans and specifications to be approved by the Corporation. For the purpose of doing this work, the Corporation is to give the Receiver the benefit of the services of the general officers of the Corporation, and is to permit to work thereon, at the expense of the Receiver, as many of the original force of the McCall Ferry Power Company, now employed by the Corporation, as may be deemed necessary by the Receiver. It is further understood and agreed that in view of the fact that Mr. Beverly R. Value, now acting as Executive Engineer of the Corporation, was formerly connected with the work of the McCall Ferry Power Company on said development, and is familiar with the plans therefor, said Value is to give to the work covered by this agreement his constant attention and such personal attendance at McCall Ferry as may be necessary to insure the completion of the work in a substantial and workmanlike manner.

(3) Subject to the approval of the Receiver as to the men and the compensation to be paid them, the Corporation is to employ all the force to carry on the work, except such men as may be required in the accounting and paymaster's department, who are to be employed by the Receiver. The Receiver is to pay for all labor and services, except for the services of the President, Vice-

President, Executive Engineer and Secretary and Treasurer of the Corporation. The Receiver is to furnish and pay for all material and supplies.

(4) For all services to be performed under this agreement in connection with work to the amount of $600,000, the Receiver is to pay to the Corporation the sum of $ 0,000, payable on or before the 15th day of each month in installments equal to ten per cent. of the cost of the work done during the preceding calendar month, except as hereinafter stated. If the Receiver shall request the Corporation to perform like services in connection with work involving a greater cost than $600,000, the Corporation is to receive a commission of eight per cent. on the cost of the additional work. The cost of the work, for the purpose of ascertaining the compensation of the Corporation, is to be considered as including the cost of the material and labor as above described, and is not to include the salary of any officer of the Corporation. The Receiver is to furnish all the plant and money required to carry out the undertaking. The Receiver agrees that if less than $600,000 worth of work is performed, the compensation of the Corporation is to be $60,000, unless this agreement is terminated as in the sixth paragraph provided.

(5) It is further agreed that the Corporation is to be responsible for the completion in a substantial and workmanlike manner of all work to be supervised or done by it.

(6) Upon any neglect or failure on the part of the Corporation diligently and promptly to carry out the terms of this agreement according to the true intent and

meaning thereof, the Receiver is to have the right to terminate the agreement on thirty days' notice, and both parties shall thereupon, at the expiration of such thirty days, be relieved from further obligations hereunder, except that moneys theretofore earned by the Corporation but not paid shall thereupon be paid to it forthwith.

(7) It is understood that it is the intention that the property of the McCall Ferry Power Company is upon foreclosure to be vested in a new corporation, and it is intended that the obligations of this agreement on the part of the Receiver shall be taken over by such new corporation, and it is agreed that the Corporation will accept such new corporation in the place and stead of the Receiver and discharge the Receiver from liability hereunder; subject, however, to the understanding that the new corporation shall be of adequate financial ability to carry out the provisions hereof.

(8) It is further understood and agreed that the Receiver is about to apply for leave of court to enter upon the work of construction herein described, and for authority to make this agreement, and that until such leave be obtained this contract shall not be binding upon either party, but shall thereupon become binding and in full force and effect.

IN WITNESS WHEREOF this instrument has been execu-

ted by the parties hereto the day and year first above written.

Receiver as aforesaid.

THE EMPIRE ENGINEERING CORPORATION

By

President

Attest:

Secretary.

MEMORANDUM OF AGREEMENT made this 22nd day of July, 1910, by and between PENNSYLVANIA WATER & POWER COMPANY party of the first part, hereinafter called the Power Company, and the EMPIRE ENGINEERING CORPORATION, party of the second part, hereinafter called the Corporation.

WITNESSETH that WHEREAS a contract dated August 16, 1909, between J. E. Aldred, Receiver of the McCalls Ferry Power Company and the Empire Engineering Corporation, is in existence; and

WHEREAS it is therein provided as follows:

"It is understood that it is the intention that the property of the McCall Ferry Power Company is upon foreclosure to be vested in a new corporation, and it is intended that the obligations of this agreement on the part of the Receiver shall be taken over by such new corporation, and it is agreed that the Corporation will accept such new corporation in the place and stead of the Receiver and discharge the Receiver from liability hereunder; subject, however, to the understanding that the new corporation shall be of adequate financial ability to carry out the provisions hereof;and

WHEREAS a new Company by the name of Pennsylvania Water & Power Company has been formed under the laws of the State of Pennsylvania and has taken over all the property of the McCall Ferry Power Company and has assumed the carrying out of the provisions of the said contract.

Now for divers good and valuable considerations moving from each party hereto to the other party hereto, it is agreed first, that the Power Company assumes all the covenants contained in said contract, to be performed on the part of the said J. E. Aldred, Receiver, and agrees to make

all payments required by the said contract, to be made by the said J. E. Aldred, Receiver; second, that the Corporation assents to the assignment of the said contract by the said J. E. Aldred, Receiver to the Power Company, and agrees as between it and the Power Company to perform the said contract in every particular and abide by each and every of the provisions thereof binding upon it.

IN WITNESS WHEREOF the parties hereto have executed this agreement the day and year first above written.

PENNSYLVANIA WATER & POWER CO.

Chas. E. Clark

VICE PRESIDENT

Sherman Paine

SECRETARY

EMPIRE ENGINEERING CORPORATION.

Wm. Barclay Parsons

President.

Attest

W. Goode

SECRETARY & ASSISTANT

Agreement for Deposit of Bonds With Trustee to Secure Loans to Bondholders Committee

AGREEMENT, made the 8th day of September, nineteen hundred and nine, between WILLIAM M. BARNUM, A. C. BEDFORD, S. READING BERTRON, CHARLES A. COFFIN and GARDINER M. LANE, as the Committee named in the "McCall Ferry Power Company Plan and Agreement" dated May 28th, 1909, (hereinafter called the Committee,) and KNICKERBOCKER TRUST COMPANY, a corporation of New York, hereinafter called the Trustee.

WHEREAS, the Committee, in order to borrow money for purposes authorized in and by said Plan and Agreement, has determined to execute and issue a series of notes, limited in amount as hereinafter provided, and to secure the same as provided herein; and

WHEREAS, said notes are to be payable either to bearer or to the registered holder, and the notes payable to bearer are to be in substantially the following form:

[FORM OF BEARER'S NOTE.]

No..... $.....

FOR VALUE RECEIVED, William M. Barnum, A. C. Bedford, S. Reading Bertron, Charles A. Coffin and Gardiner M. Lane, as the Committee named in the "McCall Ferry Power Company Plan and Agreement" dated May 28, 1909, but not individually, promise to pay to bearer dollars ($) with interest at five per cent. (5%) per annum from date until paid, at the office of the Knickerbocker Trust Company, in the City of New York, on the first day of

January, 1910, subject to the provisions as to extension of time of payment in the Trust Agreement hereinafter mentioned.

This note is one of a series of notes issued under a certain Trust Agreement between said Committee and the Knickerbocker Trust Company, dated the 8th day of September, 1909, and is subject to all the terms and provisions thereof.

This note shall not be binding until the certificate hereunder shall be signed by said Trustee.

Witness the signatures of a majority of said Committee, the day of , 1909.

and the notes payable to the registered holder are to be in substantially the same form except that they are to be payable to the registered holder instead of to bearer, the name of the registered holder and any transfers to be noted on the back thereof;

and each of said notes is to bear thereon a certificate signed by the Trustee in form as follows:

[FORM OF TRUSTEE'S CERTIFICATE.]

This is one of the notes described in the Trust Agreement above mentioned.

KNICKERBOCKER TRUST COMPANY,
Trustee,

By

and the amount of principal of each note is to be five hundred dollars ($500) or a multiple thereof.

NOW, THEREFORE, THIS AGREEMENT WITNESSETH: That in order to secure the payment of said notes and the in-

terest thereon and to declare the terms and conditions on which said notes are to be issued, received and held, the parties hereto, in consideration of the premises and of One Dollar to each paid, receipt whereof is acknowledged, hereby agree and provide as follows:

ARTICLE I.

The Committee hereby assign and transfer to the Trustee the bonds of the McCall Ferry Power Company, secured by mortgage to Knickerbocker Trust Company, dated June 15, 1905, which are delivered to the Trustee herewith, being bonds for the principal sum in the aggregate of Eight million five hundred thousand dollars ($8,500,000), and also any further such bonds or other securities which the Committee may hereafter deliver to the Trustee to be received hereunder (said bonds and other securities being hereafter referred to as "the collateral"); the same to be held by the Trustee, its successors and assigns, in trust for the benefit of the holders of said notes and to secure the payment thereof without preference of any of said notes over any other, upon and subject to the following terms and conditions:

ARTICLE II.

Said notes, at any time or times, shall be certified and delivered by the Trustee upon and according to the written order of a majority of the Committee; provided that the aggregate amount of the principal of such notes at any time outstanding shall not exceed twenty per cent. of the principal of the bonds of the McCall Ferry Power Company, described as aforesaid, delivered to and held by the Trustee hereunder.

Upon receipt by the Committee and the Trustee of

evidence satisfactory to them of the loss or destruction of any outstanding note secured hereby, and of indemnity satisfactory to them, the Committee may execute and the Trustee shall certify and deliver a new note of like tenor.

If the holder of any note shall demand of the Committee that there be substituted therefor several notes for the same aggregate principal, the principal of each to be $500 or some multiple thereof, such substitution shall be made by the execution, certification and delivery of such new notes and cancellation of such old note.

ARTICLE III.

If the Committee shall use any money received for or upon any notes issued hereunder to make advances for purposes of construction to the Receiver who now holds the property of the McCal' Ferry Power Company, and shall receive from said Receiver certificates or evidences of indebtedness for such advances, such certificates or evidences of indebtedness shall forthwith be transferred and delivered to the Trustee hereunder and be deemed part of the collateral. If further bonds of the McCall Ferry Power Company shall be deposited under said Plan and Agreement and shall in such way or in any other way come within the control of the Committee so that they may do so, the Committee shall forthwith transfer and deliver the same to the Trustee to be held as part of the collateral.

ARTICLE IV.

The Committee reserves and may continue to exercise the right and power to speak for and as the owners of bonds and of any receiver's certificates or evidences of indebtedness which are or may hereafter be delivered and held hereunder in suits pending or which may be brought

upon, or under or in respect to the mortgage securing said bonds, and the right and power to use the same in making payments on account of the purchase price in case the Committee or its representative or representatives shall purchase the property of the McCall Ferry Power Company or any part or parts thereof at any sale made under said mortgage, or under judgment or decree based thereon, and generally all rights and powers given them in and by said Plan and Agreement (except only the power to further pledge said bonds while any notes secured hereby shall remain unpaid), so far as may be necessary to carry out the purposes of said Plan and Agreement, and the Trustee shall deliver said bonds, and receiver's certificates or evidences of indebtedness or any of them, to or according to the written order of a majority of the Committee, whenever a majority of the Committee shall deliver to the Trustee a certificate in writing, signed by them, that such delivery is necessary in order to carry out such purposes; it being understood that so long as any notes secured hereunder shall be unpaid, the Committee shall hold whatever it may acquire by any use of such bonds or receiver's certificates or evidences of indebtedness in trust charged primarily, in the stead thereof, to secure such notes, and shall as soon as reasonably may be transfer to the Trustee to become part of the collateral hereunder whatever it may so acquire.

ARTICLE V.

If default shall be made in the payment of principal or interest of any of said notes, the Trustee, if requested in writing by the holders of any of them so to do, shall, by such officer or officers, agent or agents as it may appoint, sell the collateral or such part or parts

thereof as it shall deem necessary or proper to discharge said notes and interest thereon and all charges hereunder, without demand of payment or notice, except as hereinafter provided. The collateral may be so sold at one or more times and in one or more lots, and any such sale shall be made at public auction after advertisement for not less than twenty days in two daily papers published in the City of New York.

Notice of its intention to make any such sale, stating the time and place, shall be mailed by the Trustee at least ten (10) days before the date of sale, in the City of New York, in a post-paid wrapper, addressed to William M. Barnum, Chairman, at 62 Cedar Street, New York City, or at such other address as the Committee may have given to the Trustee for the purpose. The Trustee shall not, however, be obliged to make any sale pursuant to such notice. The Trustee may adjourn any sale in whole or in part and proceed according to such adjournment without further notice; or the Trustee may discontinue or abandon any sale in whole or in part, giving notice as aforesaid of further intended sales. At any such sale the Trustee or the holder or holders of any of the notes hereby secured may purchase any or all of the collateral then sold and may hold the same thereafter absolutely and free from any claims of the Committee. After deducting all expenses of or incidental to the sale and other charges of the Trustee, the Trustee shall apply the proceeds, with any cash held by it hereunder, to the payment of said notes, principal and interest, without preference as between them; and shall account for and pay over and deliver to the Committee, its successors or assigns, the surplus, if any, and any of the collateral, remaining after said notes shall have been paid in full.

ARTICLE VI.

It is agreed, and to this every holder of notes issued hereunder assents, by accepting said notes respectively, that the time for the payment of all said notes shall, if neither of the events hereinafter in this Article stated shall have occurred before January 1, 1910, be extended so that said notes shall not be deemed to be due or payable until either (1) the New Company provided for in said Plan and Agreement shall have been formed and vested with the properties of the McCall Ferry Power Company as proposed in said Plan and Agreement, or (2) sale of such properties under judgment or decree based upon the mortgage securing said bonds, to a purchaser or purchasers other than the Committee or its representatives, shall have been duly confirmed and consummated by payment of the purchase price therefor.

It is agreed also, and to this every holder of notes issued hereunder in like manner assents, that the members of the Committee individually shall not be liable upon or with respect to said notes, but that said notes and this agreement shall bind the Committee only as such Committee with respect to their powers and duties under said Plan and Agreement.

ARTICLE VII.

The Trustee need not take notice of any default hereunder, unless specifically notified thereof in writing by one or more holders of notes hereby secured. It shall not be liable or responsible with respect to its acts or omissions hereunder except for its own gross negligence or wilful default, nor be liable or responsible for any acts or omissions of the Committee hereunder or of any agent, attorney or employee by the Trustee employed

hereunder, if selected with reasonable care. It shall be under no obligation to take any proceedings to enforce this agreement or protect the interests of the noteholders hereunder, unless it shall have been indemnified to its satisfaction in respect thereof. It makes no representations as to the validity of this agreement or of the notes secured hereby nor as to the validity or value of the collateral, and is not responsible for any recital herein or in said notes. The Committee shall pay to the Trustee reasonable compensation and shall pay all expenses incurred by the Trustee hereunder, including all legal expenses; and for such compensation and expenses the Trustee shall have a first lien upon the collateral.

The Trustee may rely upon the certificate of a majority of the Committee as to the existence of any fact which the Trustee may desire to determine hereunder, or as to the necessity of any action under the Plan and Agreement; the Trustee shall be under no responsibility to see to the use or application of said notes, or any of them, or of the proceeds thereof. The Trustee may resign by delivering to the Committee notice of such resignation and by publishing such notice twice a week, for three successive weeks, in *The New York Times*. In case of any vacancy in the office of Trustee, the Committee may appoint a new Trustee, a trust company in the City of New York, and upon such appointment shall publish notice thereof, twice a week, for three successive weeks, in *The New York Times*.

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IN WITNESS WHEREOF, the said Committee has caused these presents to be executed in its behalf by a majority of its members, and the Trustee has caused these presents to be signed by its Vice President and its corporate seal to be hereunto affixed and attested by its Secretary, the day and year first above written.

WM. M. BARNUM
A. C. BEDFORD
GARDINER M. LANE
} Majority of Committee.

KNICKERBOCKER TRUST COMPANY,
by F. C. WALCOTT
Vice President.

[CORPORATE SEAL]

Attest
H. A. DUNN
Secretary.

Minutes of Pennsylvania Water & Power Company, March 3, 1910

A WALLM. PRESIDENT,
L RINTOUL, VICE PRESIDENT
A ALLNER, VICE PRESIDENT

J E O'CONNOR, TREASURER
F J ALLEN, SECRETARY

Pennsylvania Water & Power Company
Lexington Building
Baltimore, Md.

40 Wall Street
New York, N. Y.
July 8, 1940

I, F. J. Allen, Secretary of the Pennsylvania Water & Power Company, do hereby certify that the attached is a copy of extracts from the Minutes of a meeting of the Board of Directors of this Company, duly called and held on March 3, 1910, at which a quorum was present and voted throughout.

F. J. Allen
Secretary

Henry L. Perry
Witness

A meeting of the directors of the Pennsylvania Water & Power Company was held at the office of the Company No. 24 Exchange Place, New York City on March 3rd, 1910, at 2 o'clock P.M.

There were present: Messrs Aldred, Canby Dow Kelly and Spence and also the secretary and treasurer of the company.

A call and waiver of notice of the meeting signed by all of the directors, was produced, and on motion, duly seconded, was ordered spread upon the minutes of the meeting. The following is a copy thereof:

Pennsylvania Water & Power Company.
Call and Waiver of Meeting of Directors.

A meeting of the directors of the Pennsylvania Water & Power Company a corporation of Pennsylvania is hereby called to be held at No. 24 Exchange Place, in the City of New York on the 3rd day of March, 1910, at two o'clock in the afternoon, and the undersigned hereby waive notice of such meeting.

Dated, Feb. 24th, 1910.

J. Marriott Canby
Frank C. McCune, Jr.
Fayette B. Dow
John H. Kelly
Kenneth M. Spence
J.E. Aldred

The president reported that a certificate of the actual increase of the indebtedness of the corporation to $7,580,000 had been filed in the office of the Secretary of the Commonwealth of Pennsylvania on February 4, 1910.

The president further reported that the stockholders, by a resolution adopted at a special meeting held on February 3, 1910, had changed the par value of the shares into which the capital stock of the company is divided, from the par value of fifty dollars per share to the par value of one hundred dollars per shares and that a certificate of such change has been filed in the office of the Secretary of the Commonwealth on February 4, 1910.

The president further reported that pursuant to

the action of the stockholders in respect to the par value of the stock, all the outstanding stock certificates of the company, to-wit, certificates for 169,900 shares of the par value of fifty dollars each, had been called in and cancelled, and that in exchange therefor certificates for 84,950 shares of the par value of one hundred dollars each had been duly issued.

The president further reported that the corporation had been duly registered in the office of the Auditor General of the Commonwealth of Pennsylvania.

There was submitted to the Board a letter, dated March 3, 1910, from the Committee under the McCall Ferry Power Company Plan and Agreement, with an account attached thereto. Said letter was ordered spread upon the minutes of this meeting. The following is a copy thereof:

March 3, 1910.

Pennsylvania Water & Power Company,
24 Exchange Place,
City.

Gentlemen:

Referring to the transactions, including the written contract, between yourselves and this Committee on January 13th, 1910, this Committee now submits its account, hereto attached, showing the disposition of all moneys received by it to date and showing a balance in hand of $85,719.39. Of this balance a check to your order for $62,658.30 is enclosed, being a further payment on account and part performance of said contract of January 13th, 1910. Said account shows that this Committee advanced to J. E. Aldred, while he was in possession, as Receiver, of the property conveyed to you on January 13th, 1910, $600,000, to be expended by him. Mr. Aldred submits an account, dated March 3, 1910, and enclosed herewith, to yourselves and this Committee, of his expenditures of said advances, together with a letter of this date throwing light in the matter and setting forth certain other transactions. This Committee approves said account and the transactions shown thereby, and has requested Mr. Aldred to pay directly to you the balance shown by said account as a further payment on account and part performance of said contract of January 13th, 1910.

Of the bonds and stock received by this Committee from you - the stock now being represented by voting trust certificates therefor - this Committee has placed with the depositaries for delivery to the depositors under the Plan and Agreement of McCall Ferry Power Company, $3,330,000.00 in aggregate principal of the bonds and $4,995,000.00 in aggregate par value of such Voting Trust Certificates. Arrangements have been made by Mr. Aldred calling for the purchase of an aggregate of $4,170,000.00 of said bonds and $3,300,000.00 of said voting trust certificates, at the price of ninety and accrued interest of the bonds. Several instalments of purchase price have been paid, and have been the source from which this Committee obtained its funds, and partial deliveries of bonds and voting trust certificates have been made against these payments. As further instalments are paid, this Committee will be in receipt of further moneys to be paid over as provided in said contract of January 13th, 1910.

Eighty of said bonds and the balance of $23,961.09 now remaining in the hands of this Committee will be retained by the Committee for future accounting.

The Plan and Agreement provides that the amount of this Committee's compensation shall be subject to the approval of the board of directors of the New Company. The amount of this compensation appears in said account submitted herewith, and approval thereof is asked accordingly.

The Susquehanna Contracting Company notes mentioned in said account were secured by seven hundred and two (702) McCall Ferry Power Company bonds mentioned in the Plan and Agreement as being outstanding in pledge and to be discharged from pledge and cancelled. These bonds will be so cancelled and turned over to you, this Committee having taken said bonds and the Conowingo Land Company mortgage hereinafter mentioned in payment of said notes.

Said notes were also secured by a mortgage on the property of the Conowingo Land Company for $25,000 principal and by pledge of the equity in a certain deposit of $250,000 with the Knickerbocker Trust Company, with which you are

familiar. The said deposit has been discharged from the lien of said notes and a declaration of trust is delivered to you herewith, showing that said Conowingo Land Company mortgage is held for you.

Very truly yours,
Reorganization Committee, McCall Ferry Power Company
By Wm. M. Barnum,
Chairman.

McCall Ferry Power Company Reorganization Committee.
Summary Cash Statement.

Receipts		Expenditures	
Proceeds of Committee's Notes	$1,100,000.00.	Payment of Committee's Notes, principal and interest	$1,103,763.88.
Proceeds of Bonds— $2,222,000 par value at 90 and int.	2,007,405.50.	Payment of cash to Pennsylvania Water & Power Co. on a/c.	750,000.00.
		Advances to J.E. Aldred, Receiver, for use in construction,	600,000.00.
		Purchase of Susquehanna Contracting Co Notes, at par and int.	422,983.32.
		Payment to Special Master under decree in foreclosure suit	15,000.00.
		Settlement of claims against McCall Ferry Power Co.	51,874.14.
		Reorganization Expenses: Payments to counsel, depositaries, Secretary, Montreal Trust Co., and for travelling expenses, printing, etc. $38,064.77.	
		Committee's compensation 40,000.00.	78,064.77.
		Balance of cash on hand (of which amount the Committee proposes to turn over to the Pennsylvania Water & Power Co. $62,658.30. and to retain for future disposition 23,061.09.)	85,719.39.
	$3,107,405.50.		$3,107,405.50.

Dated, March 1st, 1910.

(There was also enclosed with this letter a copy of the same account of J. E. Aldred with the Bondholders' Committee, dated Dec. 31, 1909, which was enclosed with Mr. Aldred's letter to the Company, and which is copied below.)

On motion, ~~duly~~ seconded, it was

Resolved, that the account attached to said letter and the transactions shown thereby (and by said letter, including the compensation paid to said Committee, be and the same are hereby approved, and that receipt of the sum of $62,658.30, and of the declaration of trust showing the holding of the Enowings mortgage for this Company be and the same are hereby acknowledged, and that the secretary of this Company be directed to furnish to said Committee a certified copy of this resolution.

There were submitted to the Board a letter dated March 3, 1910, from J. E. Aldred to this Company, and the account of expenditures made by him of the moneys advanced to him by the said Committee, which account is mentioned in said letter and in the letter to this Company from the Committee heretofore ordered spread upon the minutes of this meeting.

Said letter was ordered spread upon the minutes of this meeting. The following is a copy thereof:

March 3rd, 1910.

Pennsylvania Water & Power Company,

Gentlemen:

While the foreclosure suits which resulted in the formation of your Company were pending and while I, through arrangements with the Reorganization Committee, was carrying forward the construction at considerable practical risk (inasmuch as no lien superior to that of the mortgage bonds could be had for the money expended) matters and situations were met with which could not strictly be dealt with appropriately by the Committee, or by me as Receiver, or as part of the construction work carried on as just mentioned. These were of two classes: (1) Settlements and right-of-way purchases for the Columbia and Port Deposit Railway Company necessary to carry out the contract for change of track location and to release for the benefit of your company the large equity in the

fund of $250,000 deposited to secure the performance of that contract; (2) acquisition of bonds of McCall Ferry Power Company.

It was obvious that the settlements and right-of-way purchases could be made much more advantageously while the outcome of the reorganization was not generally known to be assured than if postponed until after the actual existence of your company. In order to avail of these advantages and also to avoid the serious and costly delay in the foreclosure that would have resulted if one at least of these settlements had not been made, I proceeded, with the approval of the Committee as to the wisdom of each transaction, to make these settlements and purchases, taking whatever risk there may be of your company not adopting them and assuming the outlays and liabilities along with the acquisitions and advantages thereof. These right of way purchases and settlements were, in detail, as follows:

John H. Kiemeng for land deeded to Columbia and Port Deposit Railway Company was paid $12,000.

The arrangement made with Paul Heine was as follows: For land deeded to Columbia and Port Deposit Railway Company by him and others he received $20,000 in cash, and it was agreed that he should receive $15,000 in bonds and $10,000 in stock of the new company the bonds to carry interest from September 1, 1909. On October 13, 1909, I advanced him $12,000, and on December 31st, $3,000, constituting a loan on the security of said bonds and stock, he having the right to purchase the bonds and stock at any time within two years from October 13, 1909, upon payment of $15,000 with interest at 5% from October 13, 1909. There was a further expense of $75.00 in this matter.

In connection with the foregoing right-of-way acquisitions it was necessary to give, and I did give as Receiver, the following deeds:

Oct. 6, 1909, deed to York Furnace, Airville & Red Lion Railroad Company of right-of-way over property formerly of the Company in Lower Chanceford to bridge of York Furnace Bridge Company.

Oct. 6, 1909, deed to York Furnace Bridge Company of right to erect bridge.

H. S. Kerbaugh, Inc. had a judgment against the McCall Ferry Power Company for $66,587.64, and had suit pending against the Company for a further amount of $363,495 and interest. There was no dispute that the amount of the judgment was due to said Kerbaugh Company. The judgment had become a lien on the McCall Ferry Power Company's property and the claims was made on behalf of the Kerbaugh Company that the deposit of $250,000 with the Knickerbocker Trust Company, mentioned above, could be held for the protection of this claim. I settled the claims of said Kerbaugh Company in full by paying to it the sum of $35,051.17 and agreeing to deliver, or cause to be delivered, to said Company $28,000 of bonds and $14,200 of stock of the new company upon payment by said Kerbaugh Company, at any time within a year from January 1, 1916, of $35,000, with interest at 5% from October 6, 1909.

Thus my total expenditures in the foregoing settlements and right-of-way purchases have been $82,126.17.

Before the final decree of foreclosure opportunities arose to acquire all of the sixty six bonds of the McCall Ferry Power Company which had not been deposited under the Plans. I was advised that the deposit of all these bonds would surely simplify and shorten materially the remaining legal proceedings and might obviate serious delays therein which could result from litigious opposition, and would also obviate organized cooperation of the holders of these bonds in forcing the Committee to pay a high price at the sale - such a cooperation finding instigation in the fact that large sums had been expended in carrying on construction pending the foreclosure without the protection of any lien - which I was advised could not be obtained. Finally I considered the aggregate price paid for these bonds to be probably below rather than above what might be expected to be the fair value of the equivalent new securities at, or soon after, their issue.

Accordingly, I purchased said sixty-six bonds at an aggregate cost of $49,044.60. In connection with one of the purchases it became important

to retain Mr. M. H. Houseman, an attorney for two years for a retainer of $2,500.00. This I did, and hand you herewith the letter containing the terms of this retainer. I also made with Mr. Houseman the arrangement with respect to a possible further small payment for a certain lot of six bonds, set forth in the enclosed letter from me to him, dated December 4th, 1909.

An approximate estimate of interest at five per cent. in connection with the foregoing payments is $1,222.60.

All the foregoing I did with the intention of offering to turn over and make available all thereof to this Company as soon as it should be in a position to act thereon, without any profit or advantage to myself, the Company to assume and make good my outlays and obligations as above set forth. This offer I now make, it being understood that the offer is not divisible—all must be taken and assumed or none.

There is also submitted to you herewith an account showing my disbursements for and in connection with construction of the total of $600,000 advanced to me by the Committee, and the Committee, as I understand, writes stating its approval of this account and that it has requested me to pay over to you the balance shown thereby. I also submit all the contracts (shown on schedule to said account) which I have made for or in connection with construction, and I ask your approval of said account and your adoption and assumption of said contracts, whereupon I shall pay over to you the balance of $134,888.77 shown by said account.

Very truly yours,

J. E. Aldred

December 31st, 1909.

J. E. Aldred
in account with Bondholders Committee
on account of Pennsylvania Water & Power Company.

Debit

For Disbursements

Engineering

R. S. Kelsch	2,603.49.	
J. A. Walls	50.00.	
Cement Tests	1,532.03.	
Empire Eng. Corp.	13,328.81.	
		$17,594.33
Material, Labor, etc.		
McCall Ferry Debits	146,749.35.	
Water Wheel Contract	100,000.00.	
Stone	10,336.73.	
Insurance	822.79.	
		257,908.87.
Interest on advance payments on Bonds		28,197.60
Cash funds transferred to Penn. Water & Power Co.		163,060.25.
		$466,761.05.

Credit

Cash advanced	600,000.00.
Bank interest	288.04.
Insurance rebate	139.18.
Interest (estimated)	1,222.60.
	601,649.82

Total credit	601,649.82.
debit	466,761.05.
Balance due Committee	$134,888.77.

Contracts and Agreements Entered Into
By J. E. Aldred.

Aug. 19/09. Agreement with Virginia Portland Cement Co.
For purchase of Cement.

Oct. 29/09. " " R. A. & W. C. Cooper
For purchase of sand.

Dec. 1/09 " " Henry Clark
For purchase of stone

Aug. 16/09. Contract with Empire Engineering Corp.
Nov. 11/09. " " F. P. Morris Company
Nov. 18/09. " " General Electric Company.
Nov. 27/09. " " General Electric Company.
Nov. 29/09. " " York Bridge Company

December 4, 1909.

Mr. J. E. Aldred,
54 Exchange Place, City.

Dear Sir.

This is to acknowledge receipt of $2500.00 paid me as a retainer for legal services to be hereafter rendered in and about matters within the states of Maryland and Pennsylvania; it being understood that you are to have a call in my service during a term of two years from date, on the condition that for such time as I may give in connection with work which may be allotted to me by you, I shall be paid a further consideration of $25 per day during the time of such service. In this connection I beg to say, inasmuch as you might call upon me at times when I might be engaged in other works it is understood that the services to be rendered to you will require to fit in with my other engagements.

Yours very truly,
M. H. Houseman.

December 4, 1909.

M. H. Houseman, Esq.
11 Pine St. City.

Dear Sir.

In reference to the $6,000.00 of first mortgage bonds of the McCall Ferry Power Company now in the hands of Frank Gosnell, Esq. Trustee, Baltimore, Maryland, which bonds you heretofore deposited with the said Gosnell, Trustee, to secure an obligation on your part of $6,000.00:

It is hereby understood that these bonds are to be sold to satisfy said obligation and it is agreed in case I should purchase these bonds at either Public or Private Sale, for less than

their par value, and in which case the said Gosnell may hold you liable for your obligation up to the full amount of $6,000.00, in that event I agree upon such purchase by me of said bonds to reimburse you to the extent of your obligation to said Gosnell. But in the event that you satisfy your said obligation for a less amount than the $6,000.00, I will divide with you the amount of the difference between $6,000.00 and the total amount necessary to satisfy the said obligation.

Yours very truly,
J. E. Aldred.

On motion, duly seconded and unanimously adopted, except that Mr. Aldred did not vote, it was

Resolved, that the offer of Mr. Aldred to this Company stated in said letter be and the same is hereby accepted, and that this Company take over and adopt and avail of the settlements, purchases and transactions set forth in said letter as made by Mr. Aldred in the expectation of making his said offer in respect thereto, and that this Company forthwith pay to Mr. Aldred the sum of $134,888.77 expended by him as shown in said letter, and assume and fully perform and carry out all of the obligations of Mr. Aldred as shown by said letter; and

Further Resolved, that the said account of expenditures made by Mr. Aldred of moneys advanced to him by said Committee and the transactions shown thereby be and the same are hereby approved, and receipt is hereby acknowledged from Mr. Aldred of the balance shown by said account, and

Further Resolved, that the contracts made in connection with construction shown on the schedule attached to said account and all thereof be and the same are hereby adopted and assumed by this Company, and that the secretary of this Company be and he is hereby directed to furnish to Mr. Aldred a certified copy of these resolutions.

Report of Foreclosure Sale

UNITED STATES CIRCUIT COURT

FOR THE EASTERN DISTRICT OF PENNSYLVANIA.

KNICKERBOCKER TRUST COMPANY, Complainant,	)	On Bill to Foreclose. IN EQUITY.
vs.	)	
MC. CALL FERRY POWER COMPANY, Defendant.	)	Apl. Sess. 1909. No. 329.

In pursuance of a decree made by the said Court in the above stated cause and bearing date the Twelfth day of October 1909, by which it was, among other things, ordered, adjudged and decreed that all the property, both real and personal, owned by the McCall Ferry Power Company wheresoever situated and every part and parcel thereof, including all the property particularly described in said decree as subject to the lien of the mortgage or deed of trust, in said decree recited, should be sold together as an entirety by or under the direction of the undersig ned, who was appointed Special Master, for that purpose, at public auction at the front door of the County Court House in the City of Lancaster, in the County of Lancaster, in the Eastern District of Pennsylvania, and that the Special Master should give notice of the time and place of said sale by publication of a notice of such sale, containing a brief general description of the property to be sold, to be published once in each week for at least six successive weeks prior to such sale in one newspaper in each of the cities of New York, Boston, Phil adelphia, Baltimore and Lancaster; and that after such sale shall have been made, the Master should report the same to the Court for confirmation.

I, Henry P. Brown, Master as aforesaid, do hereby report to the said Circuit Court that I advertised the public sale of all and singular the said mortgaged property and the premises specifically described in said decree, at the front door of the County Court House in the City of Lancaster, in the County of Lancaster, in the Eastern District of Pennsylvania, on Tuesday, the 7th, day of December, 1909, at 12 o'clock, M., as follows; by causing a notice thereof containing a brief description of the property to be sold, to be published once in each week for six successive weeks prior to the said sale, on the foll owing dates, to-wit; on October 26th, 1909, November 2nd, 1909, November 9th, 1909, November 16th, 1909, November 23rd, 1909, November 30th, 1909 and December 7th, 1909, (with the exception that the last insertion of the said notice was published in the Boston Transcript, on the 6th, day of December 1909, instead of on the 7th, day of December, 1909), in each of the following papers, to-wit:

The Public Ledger, a daily newspaper printed, published, regularly issued and having a general circulation in the City of Philadelphia, State of Pennsylvania.

The Sun, a daily newspaper printed, published, regularly issued and having a general circulation in the City of Baltimore, State of Maryland.

The Examiner, a daily newspaper printed, published, regularly issued and having a general circulation in the City of Lancaster, State of Pennsylvania.

The Transcript, a daily newspaper printed, published, regularly issued and having a general circulation in the City of Boston, State of Massachusetts.

The Times, a daily newspaper printed, published,

regularly issued and having a general circulation in the City of New York, State of New York.

(A copy of the said notice and of the proof of publication thereof are attached hereto, marked Exhibits "A" and "B" respectively).

And I further return, certify and report that on the Seventh day of December, 1909, the day on which the said premises were so advertised to be sold as aforesaid, I, as said Master, attended at the time and place fixed for said sale and exposed said properties and premises for sale, at public sale, to the highest bidder, upon the terms and conditions in said decree and in said notice stated, and William M. Barnum then and there bidding the sum of Two Million Dollars, ($2,000,000.), and no one bidding so much or more for the same, the said property and premises were struck off and sold to the said William M. Barnum at the price aforesaid.

I do further report that in accordance with the conditions of sale the said purchaser has paid to me as Special Master, the sum of Ten thousand Dollars ($10,000.), and has deposited with me as Special Master, the sum of Two hundred thousand Dollars ($200,000.), in principal amount of bonds of the McCall Ferry Power Company, secured by the mortgage described in said decree, with all coupons from December 15th, 1908, inclusive, attached thereto.

I do further report that the said purchaser has signed an acknowledgment of his purchase.

Respectfully submitted this seventeenth day of December 1909.

HENRY P. BROWN,

MICRO

TRADE

1,917

CARD
MARK ®

MATTHEW BENDER & COMPANY
MB

53

State of Pennsylvania,)
: SS.
County of Philadelphia.)

HENRY P. BROWN, the above named Special Master, being duly sworn, on his oath says that the property referred to in the foregoing report, was sold by him at the highest and best price the same would then bring in cash.

Sworn and subscribed on)
this)
day of)
A. D. Nineteen hundred)
and Nine, before me.)

Order of Court Confirming Foreclosure Sale

(McC J.P.Co.-v3)

CIRCUIT COURT OF THE UNITED STATES

FOR THE EASTERN DISTRICT OF PENNSYLVANIA.

IN EQUITY.

KNICKERBOCKER TRUST COMPANY,
Complainant.

vs.

McCALL FERRY POWER COMPANY,
Defendant.

This cause coming on to be further heard on the report of sale filed this day by Henry P. Brown, Esq., Special Master, and upon the motion of the Complainant to confirm the sale described in said report, and it appearing to the Court that the defendant did not within ten days after the entry of the decree of foreclosure and sale in this cause, or at any time thereafter, pay, or cause to be paid, into the Registry of this Court the sums required by said decree of foreclosure and sale to be paid by the defendant, or any part thereof, and it appearing from said report that such sale was conducted and held, and notice thereof was given, in all respects in accordance with said decree of foreclosure and sale, and that the amount bid at said sale and reported by the Special Master, to wit, the

sum of Two million dollars, bid by William M. Barnum, was the highest and best bid for the property, rights and franchises ordered to be sold by the Special Master, and it appearing from said report that the purchaser duly paid to the Special Master, as provided in said decree of foreclosure and sale, the sum of Ten thousand Dollars ($10,000), and further deposited with the Special Master Two hundred thousand Dollars ($200,000) in principal amount of bonds of the McCall Ferry Power Company, secured by the mortgage described in said decree of foreclosure and sale, with all coupons due on and after December 15, 1908, and the defendant having waived the right to file exceptions to the said report of the Special Master, and no cause being shown against said report, or against the granting of the motion of the Complainant to confirm the sale, and the Court having heard John G. Johnson, Esq., of counsel for the Complainant, and Loring C. Christie, Esq., of Winthrop & Stimson, of counsel for the Defendant, and Thomas M. Day, Esq., of counsel for the Purchaser,

Now, on motion of the counsel for the Complainant, it is

ORDERED, ADJUDGED AND DECREED that the said sale be, and the same hereby is, ratified, confirmed and approved, and all the proceedings of the Special Master, as shown by said report, are approved and confirmed; and it is further

ORDERED, ADJUDGED AND DECREED that the Special Master, out of the sum of cash paid or

to be paid to him by the Purchaser, pay the costs of this cause, as taxed by the Clerk of this Court, and also the costs of the causes between the same Complainant and the same Defendant, in the Circuit Courts of the United States for the Southern District of New York, and the District of Maryland, as taxed by the Clerks of said Courts, respectively, and also the expenses of sale, as reported by the Special Master, to wit, five hundred and fourteen 71/100 dollars ($514.71), and compensation to the Special Master for his services herein, which is hereby fixed at five thousand dollars ($5,000), and also to the Complainant the amount of its disbursements made and obligations incurred as Trustee, including payments and obligations for the service of its solicitors and counsel herein and in said causes in the said Circuit Courts for the Southern District of New York and District of Maryland, as compensation to the Complainant, all of these items together amounting to the sum of eight thousand five hundred and eight 10/100 dollars ($8,509.10), to which aforesaid allowances no objection is made by the Defendant or by the Purchaser; and it appearing to the Court that the sum of Ten thousand dollars ($10,000), heretofore paid by the Purchaser is not sufficient for the payment of the amounts above provided, it is further

ORDERED, ADJUDGED AND DECREED that the Purchaser pay to the Special Master the further sum of five thousand dollars ($5,000) in cash or by a certified check upon some responsible bank, and the counsel for the Purchaser making it known to the court that the Purchaser is the holder of all of the bonds of the Defendant

secured by the mortgage described in the decree of foreclosure and sale, to wit, 9,027 bonds of the principal amount of One thousand dollars each, and all the coupons appurtenant thereto, which matured or are to mature, on and after December 15, 1908 (including the two hundred bonds and the coupons annexed thereto, heretofore deposited with the Special Master, as shown by his report), and offering in behalf of the Purchaser all of the said bonds and coupons as further payment of the purchase money, that is to say, offering as such payment the amounts which may hereafter be found herein to be distributable upon said bonds and coupons, such amounts to be deemed as paid thereon and said bonds and coupons to be stamped to show such payments and then to be returned to the Purchaser, it is further

ORDERED, ADJUDGED AND DECREED that the said bonds not so deposited, to wit, eight thousand eight hundred and twenty seven (8,827) bonds, for the aggregate principal amount of eight million eight hundred and twenty-seven thousand dollars ($8,827,000), together with all the coupons appurtenant thereto which matured or are to mature on and after December 15, 1908, be delivered by the Purchaser to the Special Master, and that said bonds and coupons together with the bonds and coupons already deposited with the Special Master as aforesaid, be accepted in further payment or the purchase money not already paid in cash, or hereinbefore required to be paid in cash at the sum of the amounts which may be found herein to be distributable upon said bonds and coupons, and in full payment of such purchase money, ex-

cept as the court may require further payment after settlement of the accounts of the Receiver, and the Special Master is hereby directed to retain possession of said bonds and coupons, until by further order the court shall instruct him as to the stamping thereof as aforesaid; and it appearing to the court that the portion of the purchase money necessary to be paid in cash, in addition to the sum of Ten thousand dollars already paid, and the sum hereinbefore required to be paid by the Purchaser, cannot be precisely ascertained and determined until the Receiver herein appointed shall have made report of his receipts and disbursements, and his accounts shall have been passed upon, it is further

ORDERED, ADJUDGED AND DECREED that after the payment by the Purchaser to the Special Master of the said sum of five thousand dollars ($5,000) in cash, and the delivery by the Purchaser to the Special Master of the said eight thousand eight hundred and twenty-seven (8,827) bonds, together with the said coupons appurtenant thereto, upon demand of the Purchaser or his assigns, the Special Master shall make, execute, acknowledge and deliver to the Purchaser or his assigns, a deed or deeds duly conveying, assigning and transferring to him or them in fee simple all and singu lar the property, rights and franchises sold as aforesaid, and all the right, title and interest at law or in equity of the parties to this suit, of, in or to the same, or any part thereof, but said deed or deeds shall be made subject to the provisions of the decree of the Court of Common Pleas of Dauphin County, Pennsylvania, entered on the 14th day of January, 1907, in a certain

provements or repairs as they shall deem expedient, and to make such contracts in regard thereto as the New Company might make if already organized and in operation; and to cause the provisions of said Plan in respect to a voting trust and voting trust certificates to be carried out;

and generally to exercise all the powers of owners and holders of said bonds and stock, including power to vote at any meeting of bondholders, creditors or stockholders, and to use the same as the Committee may deem expedient in carrying out said Plan; the statement of particular powers herein not to limit the Committee from or in the exercise of any power which, in their judgment, may be desirable in accomplishing the purposes of said Plan and Agreement; nor shall the Committee be restricted in or in respect to dealing, under any of its powers, with or in respect to any property, security or indebtedness, by reason of any interest in any thereof of any member of the Committee or of any firm or corporation in which a member is interested; it being expressly agreed by all Depositors that the methods to be adopted for carrying out said Plan and Agreement are to be determined from time to time by the Committee in their sole discretion, and that the Committee shall have the right at any time to change any such determination should their judgment be changed by subsequent developments.

FOURTH.—Whatever shall be acquired in any way by the Committee under this agreement shall be acquired by them as joint tenants, and not as tenants in common, so as to remain the property of the said Committee, however the members thereof may be changed. The members of the Committee shall have reasonable compensation for their services from this time in carrying out said Plan, the amount of such compensation, however, to be subject to the approval of the Board of Directors of the New Company. Any member of the Committee may become a party hereto as a Depositor. Any member of the Committee may resign by writing addressed to the Committee. By appointment in writing signed by a majority of the Committee, additional members thereof may be appointed, and vacancies therein, occurring by death, resignation or otherwise, may be filled. The Committee may act by a majority thereof either at a meeting or in writing without a meeting. Any member may vote or act by proxy appointed in writing, who may be another member of the Committee or any other person approved by a majority of the Committee. No member of the Committee shall be liable for the act or omission of another member, nor shall the Committee or any member thereof, or either of the Depositaries be liable for the act or omission of any agent or employe selected in good faith, or in any case except for its or his own willful misconduct.

FIFTH.—The Committee may construe this agreement, including said Plan, and their construction thereof, or action thereunder, in good faith, shall be final and conclusive; they shall have power to determine, and to act according to their judgment in, all matters not specifically provided for herein but within the general purpose set out in said Plan, and shall also have power to modify said Plan in any matter of detail not affecting the substantial rights of the other parties hereto.

SIXTH.—Holders of bonds or bonds and preferred stock of the McCall Power Company may become parties hereto at any time on or before July 1st, 1909, or such later date or dates as the Committee may fix, by signing this agreement, which it is understood may be signed in any number of parts, or by depositing, or causing the deposit of, their bonds or bonds and stock without such signing as above provided.

SEVENTH.—The Committee shall not be required to take any action in the interest of any of the stock de-

suit in equity between the Commonwealth of Pennsylvania, Complainant, and the McCall Ferry Power Company and others, Defendants, and this Court reserves jurisdiction over and a lien upon said property to compel and secure the payment of such further sum as it may hereafter direct to be paid by the purchaser to complete payment of the purchase price, with the right to resell the same, or any part thereof, if such payment shall not be made within twenty days after order of this Court directing such payment, and it is further

ORDERED, ADJUDGED AND DECREED that after the delivery of said deed or deeds, the parties to this cause, and the Receiver appointed herein, are hereby required and directed to surrender and deliver possession of all and singular the property, rights and franchises so sold as aforesaid to the said Purchaser, or his assigns, upon the presentation of the said deed or deeds and demand made for such possession, provided, however, that said Receiver shall retain any money in his hands until, after his report shall have been made and passed upon, the court shall make further order with respect thereto, and it is further

ORDERED, ADJUDGED AND DECREED that the Complainant and the Defendant shall make, execute, acknowledge and deliver to the Purchaser or his assigns, a deed or deeds of conveyance, assignment and transfer, executed by them respectively, by way of confirmation and further assurance of title, to the Purchaser or his assigns, conveying and transferring to him or

them all the estate, right, title and interest of each of said companies, of in or to the property, rights and franchises sold as aforesaid, including all debts, claims and demands owing to the McCall Ferry Power Company, now or hereafter to become due; all choses in possession and in action, absolute or upon condition, vested or contingent, and all other property, real and personal, owned by the McCall Ferry Power Company; and that they and each of them shall execute such other instruments and do such acts as may be necessary or proper on their parts respectively to enable the Purchaser or his assigns to get possession of all property sold as aforesaid and to enforce any of the debts, claims, demands and choses in action so sold and hereinbefore mentioned; and it is further

ORDERED, ADJUDGED AND DECREED that said deed of the complainant operate as a full and complete execution of the power of sale contained in said mortgage or deed of trust, and that no covenant be implied therein as against the complainant; and it is further

ORDERED, ADJUDGED AND DECREED that the Receiver herein, after surrendering possesion to the Purchaser or his assigns, as hereinbefore required, shall with all convenient speed make and file with the Clerk of this Court his final report of his doings as Receiver in this cause; and such report shall stand as approved as of course in case each of the parties to this cause by their solicitors shall file with the Clerk of this Court either a written approval or a waiver of the

right to except or object to said report or in case no written exception or objection to said report shall have been filed with said Clerk within ten days after the filing of said report; but if within such time any exceptions or objections shall have been so filed, then it is hereby referred to Henry P. Brown, Esq., who is hereby appointed Special Master for that purpose, to examine the report of said Receiver, and all accounts filed therewith, and take such testimony as may be offered in respect thereof and to report to the Court his conclusions with respect to the question raised by such exception or objection.

IT IS FURTHER ORDERED, ADJUDGED AND DECREED that all questions as to further payments to be made by the Purchaser, and as to the proceeds of sale and the distribution thereof, and the acts and accounts of said Receiver and the compensation to be allowed for his services and the services of his counsel, and as to the disposition of any money remaining in his hands not heretofore or hereby disposed of, are reserved, and that any party to this action, or the Special Master, or the Receiver, or the Purchaser or his assigns, may apply to the Court for such other or further directions as may be necessary, at the foot of this decree.

Dated the 18th day of December, 1909.

JAMES B. HOLLAND,
Judge.

Minutes of Organization of Pennsylvania Water & Power Company, January 13, 1910

J. E. O'CONNOR, TREASURER
F. J. ALLEN, SECRETARY

Pennsylvania Water & Power Company

Lexington Building

Baltimore, Md.

40 Wall Street,
New York, N. Y.
July 8, 1940

I, F. J. Allen, Secretary of the Pennsylvania Water & Power Company, do hereby certify that the attached are full and complete copies of the Minutes of (1) the organization meeting, (2) a meeting of the Board of Directors, and (3) a meeting of the stockholders of this Company, all duly called and held on January 13, 1910, at which quorums were present and voted throughout.

F. J. Allen
Secretary

Witness

Pennsylvania Water & Power Company.

Record of Organization Meeting.

At a meeting held at Room No. 228 in the Land Title Building, corner of Broad Street and Chestnut Street, Philadelphia, Pa., on January 13, 1910, at 3.30 o'clock P. M., after due publication of notice thereof according to law, there were present, Messrs. William M. Barnum, A. C. Bedford, S. Reading Bertron, Charles A. Coffin and Gardiner M. Lane, being all the persons for or on whose account the material, rolling stock, property and franchises of the McCall Ferry Power Company were purchased at the sale thereof made December 7th, 1909, in the City of Lancaster, Pennsylvania.

Mr. Barnum was chosen Chairman and Mr. J. H. Kelly Secretary of the meeting.

The Chairman reported that the material, rolling stock, property and franchises of said McCall Ferry Power Company were sold at the City of Lancaster, Pennsylvania, on the 7th day of December, 1909, under and by virtue of the decree of the Circuit Court of the United States for the Eastern District of Pennsylvania, made October 12, 1909, in a suit entitled Knickerbocker Trust Company vs. McCall Ferry Power Company, and under and by virtue of the decree of the Circuit Court of the United States for the Southern District of New York made on the 15th day of October, 1909, in a suit between the same parties, and under and by virtue of a decree of the Circuit Court of the United States for the District of Maryland made on the 20th day of October, 1909, in a suit between the same parties. The Chairman further reported that, pursuant to the authority given to him by William M. Barnum, A. C. Bedford, S. Reading Bertron, Charles A. Coffin and Gardiner M. Lane, as Committee under the McCall Ferry Power Company Plan and Agreement dated May 28th, 1909, he had purchased the material, rolling stock, property and franchises of McCall Ferry Power Company so sold for and on account of the said Committee, and that a deed of said property and franchises to him by Henry P. Brown, Special Master, dated January 13, 1910, had been delivered to him on said

date and prior to this meeting, and that prior to this meeting he had executed and delivered a deed conveying said property and franchises to said Committee.

A copy of said Plan and Agreement was ordered spread on the minutes of this meeting. The following is a copy thereof:

McCALL FERRY POWER COMPANY,

PLAN AND AGREEMENT.

Agreement, made this 28th day of May, 1909, between WILLIAM M. BARNUM, A. C. BEDFORD, S. READING BERTRON, CHARLES A. COFFIN, and GARDINER M. LANE (hereinafter called the Committee), and the holders of first mortgage bonds and preferred stock of McCall Ferry Power Company becoming parties hereto (hereinafter called Depositors).

WHEREAS, additional funds are required to complete for operation the plant now of the McCall Ferry Power Company, and the Committee has prepared the following:

PLAN.

1. A new company—the term "New Company" being used herein to mean either the present company or any other that may be used—is to be vested with the properties of the present company and with cash as hereinafter stated, and will have authorized bonds and stock as follows: Thirty-Year First Mortgage Five Per Cent. Gold Bonds, $12,500,000; Stock, all of one class, $8,500,000; of which bonds at least $4,920,000 are to be in the treasury of the New Company after the Plan is carried out.

2. The holders of the bonds of the present company who become parties to this Plan and Agreement and perform the obligations thereof will receive in exchange for their present bonds 40% of the principal thereof in such bonds and 60% of such principal in negotiable voting trust certificates for such stock of the New Company, all such new stock to be deposited under a voting trust terminating November 1, 1912, when the voting trust certifi-

cates will be exchangeable for the stock—the voting trust to provide for three voting trustees, two to be nominated by those furnishing the new money, and one by the Committee, and their successors to be nominated in the same interests respectively.

3. From $4,170,000 to $4,250,000 of such bonds, and $3,500,000 of such stock of the New Company are to be for sale at a price to realize 90 per cent. of the principal of the bonds.

4. The disposition of the securities of the New Company, in accordance with the foregoing, is indicated in the following table:

Parties.	*Bonds.*	*Stock.*
To those furnishing the new money ($3,753,000. at least)	$4,170,000	$3,500,000
To holders of the present bonds ($3,325,000)* 40% in new bonds and 60% in new stock	3,330,000	4,996,000
	$7,500,000	$8,496,000

* Certain additional bonds outstanding in pledge are not included, as they will be discharged from pledge and cancelled in carrying out said Plan and Agreement.

5. The Committee may cause fractional scrip to be issued to those entitled to fractional amounts of bonds or stock.

NOW, THEREFORE, THIS INDENTURE WITNESSETH:

FIRST.—William M. Barnum, A. C. Bedford, S. Reading Bertron, Charles A. Coffin and Gardiner M. Lane agree to act as the Committee.

SECOND.—All holders of bonds or of bonds and preferred stock of the McCall Ferry Power Company, becoming parties hereto, hereby assent to said Plan and agree to forthwith deposit, or cause the deposit of, their bonds and preferred stock with the Knickerbocker Trust Company, No. 66 Broadway, New York, or with the City Trust Company, No. 50 State Street, Boston (hereinafter called the "Depositaries"), it being understood that the receiving Depositary shall, upon such deposit, issue Certificate or Certificates of Deposit evidencing the same, which Certificates shall be transferable, and shall entitle the holder to receive new securities in accordance with said Plan, or to receive back the bonds and stock deposited, as hereinafter provided. All certificates for stock shall be properly endorsed in blank for transfer. The mere deposit of any bonds or bonds and stock with one of the Depositaries shall operate to make the depositor a party to this agreement, and shall, operate as a transfer of the bonds and stock so deposited to the Committee or its successors, and shall empower the Committee to exercise all the powers herein given.—

THIRD.—The holders of said bonds or bonds and stock, parties hereto, hereby severally vest in said Committee, under the terms of this agreement, as trustee of an express trust, the legal title to all bonds and stock deposited or caused or agreed to be deposited by them respectively and give the Committee full power to do all things in the Committee's judgment necessary or proper to carry out said Plan, including power:

(*a*) at their discretion to acquire, or not to acquire, at public or private sale or otherwise the whole or any part of the properties of the McCall Ferry Power Company, including any on which it holds options, and to use deposited bonds, or any thereof, or any other resources, in such purchase or acquisition;

(*b*) to act for the Depositors in presenting coupons for payment, in requesting or instructing or otherwise moving the trustee under the mortgage securing said bonds with respect to action thereunder, and also to act for them in or in re-

spect to any action which may be brought for the foreclosure of said mortgage or in any other action which may be brought which in any way affects or may affect the rights and interests of the Depositors; to receive and receipt for any money to which said bonds or stock shall be at any time entitled; to execute and deliver any requests, consents, waivers or other writings—including consents to issuing Receivers' Certificates prior, or not, in lien—which it may seem to the Committee necessary or desirable to file in any Court or office or with the Trustee under said mortgage or elsewhere;

(c) to employ such agents, attorneys and counsel as the Committee deem best, to represent and act for, or authorize representation of and action for, the Depositors, or any of them, in any Court or elsewhere, with respect to all rights and interests in any way affecting said bonds or stock;

(d) so far as deemed expedient by the Committee, to contract, or otherwise provide, for the purchase, compromise, adjustment or payment, in full or in part, of any indebtedness of the McCall Ferry Power Company, or of any Receiver's certificates that may be liens on any of the mortgaged property, or for the extension of any such indebtedness as the obligation of the New Company, or for the redemption from pledge of any property or securities directly or indirectly belonging to said McCall Ferry Power Company;

(e) to sell, contract for the sale of, or otherwise dispose of, any new bonds and stock not required for the Depositors or reserved for the treasury under said Plan, and to contract for underwriting with respect thereto, and, in connection with any such contract for underwriting, to pay a reasonable commission therefor; any member or members of the Committee, or any persons or corporations who may be associated with or represented by them, to have the right to join in any such sale or contract;

(f) to borrow money in order to raise any cash required to pay the expenses of the Committee or to make any cash payment required upon any foreclosure or other sale, or to carry on any construction or other work, or purchase any property deemed necessary, or to enable the Committee to do any of the other things which they may be authorized to do, or generally for any purpose which the Committee may deem necessary or expedient in order to carry out said Plan; the Committee being hereby expressly authorized to pledge for the repayment of any or all sums so borrowed, any or all of the deposited bonds or stock, and any or all assets acquired by them, and any or all of the bonds or stock of the New Company received by them under said Plan and not specifically appropriated by the Plan or taken by the parties entitled thereto; but no Depositor shall be liable personally for or upon any debt of the Committee;

(g) to cause the new Company to be organized in such manner and with such powers as the committee may deem proper, or to adapt and use an existing company as such "New Company" and to fix the terms of its bonds and the mortgage securing the same, subject to the provisions of said Plan; to determine all questions pertaining to the management, operation or disposition of any property acquired by them until the New Company shall be organized and in possession and control of said property; to make such construction, im-

posited hereunder, nor shall it be under any obligation whatever to any holder of bonds or stock not a party to this agreement.

EIGHTH.—In case the Committee should at any time decide that it is not, for any reason, to the interest of the Depositors to carry out the said Plan, they may either

(1) declare this agreement terminated, in which case all bonds and stock deposited hereunder shall be delivered and transferred to the several holders of Certificates of Deposit upon surrender of said Certificates, and upon payment of their due proportion of the obligations already incurred, to be determined by the Committee; or

(2) file a new agreement with the Depositaries, mail a copy of the same in a postpaid wrapper to each Depositor to the address, if any, filed with either of the Depositaries, or, if no such address has been so filed, then to the address last known to the Committee, whereupon the Depositors shall have the right, within twenty days after the copies of such new agreement shall have been so mailed, to withdraw their bonds and stock upon payment of their due proportion of the obligations already incurred, to be determined by the Committee, and in the event of failure to so withdraw within such twenty days, every Depositor so failing shall be deemed to have assented to and ratified such new agreement, and such assent and ratification shall be deemed final and irrevocable.

NINTH.—In case the Committee shall deem it desirable or proper to give any notice to the Depositors or any of them, such notice shall be deemed to have been given if mailed in writing to such Depositors at the addresses, if any, filed in writing with a Depositary for the purpose; or when no such address has been so filed, then to the address last known to the Committee.

TENTH.—Acceptance of new bonds and stock by any Depositor shall estop such Depositor from questioning the conformity thereof, as to character or otherwise, to any provision of this Plan and Agreement.

ELEVENTH.—After the reorganization shall have been completed, and all debts and liabilities incurred in connection therewith shall have been paid or discharged, all moneys, securities and other property not used or required for any of the purposes herein authorized and remaining in the hands of the Committee, are to be transferred to, or held for the benefit of, the New Company, under appropriate agreements for the protection and indemnity of the Committee.

TWELFTH.—Originals of this agreement are to be lodged with said Knickerbocker Trust Company of the City of New York, and with said City Trust Company of Boston, where they may be inspected by Depositors. This instrument may be signed in several parts with the same effect as if all signatures were hereon.

Upon transfer of any Certificate of Deposit the transferee shall succeed to all the rights of the prior holder and be subject to all the provisions hereof. The word "Depositors" herein includes the holders of record of the Certificates of Deposit issued hereunder outstanding at the time in question. The Committee and the Depositaries may treat the holder of record of each Certificate of Deposit as the absolute owner thereof.

The Depositaries shall severally hold and dispose of, subject to the order of a majority of the Committee, the bonds and certificates of stock deposited with it, and, in acting as Depositaries hereunder, act respectively as agents for, and are answerable to, the Committee alone.

A writing signed by a majority of the Committe shall be sufficient evidence to the Depositaries of an action of the Committee stated therein.

IN WITNESS WHEREOF, the parties of the first par (members of said Committee) have hereunto signed their names, and the various depositors, parties of the second part, have hereunto signed their names and written opposite thereto the amount of bonds and stock deposited by them, respectively, or have deposited, or caused the deposit of, their bonds and stock, the day and year first above written.

WILLIAM M. BARNUM,
A. C. BEDFORD,
S. READING BERTRON,
CHARLES A. COFFIN,
GARDINER M. LANE.

(7)

Said deeds were produced, and, on motion, duly seconded, it was ordered that the same be marked for identification and filed.

The Chairman further reported that this meeting had been called and notice thereof published as aforesaid, pursuant to the statutes of Pennsylvania applicable to such sale and purchase and constituting a corporation of the persons for or on whose account such property and franchises were purchased, for the purpose, as stated in the public notice thereof, of organizing the new corporation by electing a president and board of six directors, adopting a corporate name and common seal, and determining the amount of the capital stock of the corporation, and also to determine as to making and issuing certificates therefor, and as to issuing bonds, and also to transact any other business which may properly and lawfully be acted upon by the meeting.

The meeting proceeded to the election of a president. Mr. J. E. Aldred was nominated for president. A ballot was taken and Mr. J. E. Aldred was unanimously elected president of the corporation constituted as aforesaid, to continue in office until the first Monday in May, 1910.

The meeting proceeded to elect a board of six directors to continue in office until the first Monday in May, 1910. A ballot was taken and the following were unanimously elected directors of the corporation so constituted, to serve until the first Monday in May, 1910: J. Edward Aldred, of New York, W. Marriott

Canby, of Philadelphia, Fayette B. Dow, of New York, John H. Kelly, of New York, Frank C. McCown Jr., of Philadelphia, and Kenneth M. Spence, of New York.

On motion, duly seconded and unanimously carried, it was

Resolved that the name Pennsylvania Water & Power Company be and the same hereby is adopted as the corporate name of said corporation.

On motion, duly seconded it was

Resolved that a common seal containing the following words: Pennsylvania Water & Power Company, Seal be adopted as the corporate common seal of said corporation. Such a seal was produced and here follows an impression thereof:

The following resolution was thereupon adopted:

Resolved that this corporation accepts the provisions of the Constitution of Pennsylvania, adopted December 16, 1873, including Article 16 of said Constitution, and the President and Secretary are hereby authorized and directed to make, under the seal of the corporation, and to file in the office of the Secretary of the Commonwealth, the certificate required by law for the purpose aforesaid.

On motion, duly seconded and unanimously carried, it was

Resolved that the amount of the capital stock of said corporation be and the same hereby is determined to be $8,500,000, to consist of 170,000 shares of $50. each.

On motions, duly seconded and unanimously carried it was

Resolved that there shall be duly executed, made, issued and delivered by said corporation to the said purchasers, namely, to the said persons present at this meeting and constituting the Committee aforesaid, $7,580,000 in aggregate principal amount of bonds of said corporation, to be dated January 13th, 1910, payable on the first day of January, 1911, and to bear interest

from January 1st, 1910, at the rate of 5% per annum, and certificate or certificates for 169,900 shares of $50 each of the capital stock of said corporation, such issues and deliveries to be made in consideration of the conveyance and transfer to said corporation of all the property and franchises so purchased and to represent the interest of said purchasers therein, and also in consideration of the agreement of said Committee with said corporation to carry out, in favor of said corporation, the provisions of the paragraph numbered Eleventh of the aforesaid Plan and Agreement, dated May 28, 1909, reading as follows:

> "Eleventh: After the reorganization shall have been completed, and all debts and liabilities incurred in connection therewith shall have been paid or discharged, all moneys, securities and other property not used or required for any of the purposes herein authorized and remaining in the hands of the Committee, are to be transferred to, or held for the benefit of, the New Company, under appropriate agreements for the protection and indemnity of the Committee."

such agreement to be conditioned upon said Company's lawfully making a mortgage to secure an authorized bond issue of $12,500,000 of Thirty Year First Mortgage Five Per Cent. Gold Bonds in accordance with the terms and provisions of said Plan and Agreement and exchanging bonds secured thereby, par for par, with the bonds so hereby directed to be issued and delivered, and such agreement to further provide that, in case it shall be desirable to fully carry out said agreement when some instalments of purchase price for bonds which have been contracted to be sold shall not yet be due, such agreement may be so performed in respect to such unmatured instalments by turning over or making available to said corporation all such contracts for the sale of bonds, together with the bonds and voting trust certificates necessary for delivery thereunder, so that said corporation shall be entitled to all such further instalments of purchase price as they fall due, and such agreement to provide further that, upon the same being so fully carried out, said corporation shall assume and agree to carry out all agreements made by said Committee acting under said Plan and Agreement and not then fully performed or provided for.

A form of such stock certificate was submitted, of which the following is a copy:

NO. ..... SHARES.

Pennsylvania Water & Power Company

INCORPORATED UNDER THE LAWS OF PENNSYLVANIA

AUTHORIZED CAPITAL, $8,500,000

SHARES - $100 EACH

This Certifies .....

to be the owner of ..... full-paid and non-assessable shares of the stock of PENNSYLVANIA WATER & POWER COMPANY, transferable only on the books of the Company by the holder in person or by attorney on surrender of this certificate.

Witness the seal of said Company and the signatures of its duly authorized officers this ..... of 191

[SEAL]

Treasurer. *President.*

7195 C

NO. ..... SHARES

Pennsylvania Water & Power Company

INCORPORATED UNDER THE LAWS OF PENNSYLVANIA

AUTHORIZED CAPITAL, $8,500,000

SHARES - $50 EACH

This Certifies .....

to be the owner of ..... full-paid and non-assessable shares of the stock of PENNSYLVANIA WATER & POWER COMPANY, transferable only on the books of the Company by the holder in person or by attorney on surrender of this certificate.

Witness the seal of said Company and the signatures of its duly authorized officers this ..... of .....

[SEAL]

Treasurer. *President.*

8878 C

On motion, duly seconded, it was

Resolved that the stock certificates of such corporation be substantially in the form so submitted until the form thereof shall be lawfully changed.

A form for the bond or bonds so to be issued and delivered was submitted, of which the following is

NO. $

UNITED STATES OF AMERICA

Pennsylvania Water & Power Company

FIVE PER CENT. ONE YEAR GOLD BOND

For Value Received, PENNSYLVANIA WATER & POWER COMPANY promises to pay to bearer, or, in case this bond be registered, to the registered owner hereof, ... dollars in gold coin of the United States of America of the present standard, at its office or agency in the City of New York on the first day of January, in the year one thousand nine hundred and eleven, and to pay interest thereon in like coin from the first day of January, 1910, at the rate of five per centum per annum on the first days of July and January in each year until such principal shall be paid. Bonds not registered must be presented at said office for appropriate endorsement in order to obtain payment of interest thereon.

This bond is one of a series of bonds of like import and amount, the aggregate principal whereof shall not exceed $7,580,000.

This bond may be registered on the books of said Company at its said office or agency and the registration noted hereon, after which no valid transfer can be made except on said books until after registered transfer to bearer.

In Witness Whereof, said PENNSYLVANIA WATER & POWER COMPANY has caused its corporate seal to be affixed hereto, attested by its Secretary, and these presents to be signed by its President this day of January, one thousand nine hundred and ten.

.....
President.

Attest: .....
Secretary.

8378C

On motion, duly seconded, it was

Resolved that the bonds so to be issued and delivered be substantially in said form.

On motion, duly seconded and unanimously carried, it was

Resolved that such bonds and certificates of stock be so delivered forthwith upon delivery of the deed by the purchasers aforesaid conveying to said Pennsylvania Water & Power Company the properties and franchises so purchased and the execution and delivery of the agreement between said corporation and said Committee described in the foregoing resolution.

A code of By-Laws was submitted and on motion, duly seconded and unanimously carried, said By-Laws were adopted as the By-Laws of said Pennsylvania Water & Power Company, and it was ordered that a copy thereof be spread upon the minutes. The following is a copy thereof.

By-Laws

of

Pennsylvania Water & Power Company

A Corporation of Pennsylvania.

The annual meeting of the stockholders for the election of directors shall be held at the principal office of the company in Pennsylvania, on the first Monday in May in each year after the year 1909 at three o'clock in the afternoon, or at such other hour as the Board of Directors may fix prior to notice of the meeting.

Special meetings of the stockholders shall be called by the president or secretary, upon direction of the Board of Directors, or upon direction in writing of the holders of one-fourth of the outstanding stock of the company.

2. The principal office of the company shall be in the City of Lancaster in the County of Lancaster in the Commonwealth of Pennsylvania, until lawfully changed by amendment of this by-law or otherwise, and branch office or offices of the company may be maintained in such other place or places within or without the Commonwealth of Pennsylvania as the Board of Directors may fix.

3. The secretary, or officer performing his

By-Laws adopted by Resolution of the Board of Directors at their meeting on May 4, 1910

duties shall give notice of all stockholders meetings to each stockholder of record at least ten days before the date of such meeting, but meetings may be held at any time without notice if all the stockholders are present or if notice is waived by all those not present.

4. Meetings of stockholders shall be presided over by the president, or, in his absence by a vice-president or in the absence of president and all vice-presidents by a chairman to be elected by the persons actually present at the meeting who are stockholders or proxies of stockholders, each such person to have one vote in such election. The secretary of the company shall act as secretary of such meetings, if present.

Stockholders may vote at any meeting in person or by written proxy. Holders of a majority of the issued stock of the company present either in person or by proxy, shall constitute a quorum for a stockholders' meeting, but a less number may adjourn to a later date fixed by them or without date.

As soon as may be after their election in each year the Board of Directors shall appoint two inspectors of stockholders' votes and elections, to serve until the final adjournment of the next annual stockholders' meeting. If they fail to make such appointment or if their appointees, or either of them, fail to appear at any meeting of stockholders the chairman of the meeting may appoint inspectors or an inspector to serve with the one appearing, for that meeting.

5. The directors shall have the charge and management of the property and affairs of the company. The number of directors shall be six but this number may be changed from time to time by amendment of these by-laws, without action of the stockholders. An increase of the number of directors shall be deemed to create vacancies in the board to the extent of such increase, to be filled in the manner hereinafter provided. A majority of the directors in office at the time shall be a quorum.

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6. Vacancies in the Board of Directors may be filled until the next annual stockholders' election only by majority vote of a quorum of the Board.

7. Meetings of the Board of Directors shall be held upon the order of the Board, the Executive Committee, the president, a vice president or three directors, and may be held either within or without the State of Pennsylvania; and the secretary or officer performing his duties shall give reasonable notice of all meetings to each director, but a meeting may be held without notice immediately after the annual election, at the same place.

8. The Board of Directors may appoint an Executive Committee, to consist of the president and two directors, which committee shall have the powers of the Board of Directors when that Board is not in session. The term of office of the Executive Committee shall be the same as the term of office of the Board of Directors under which it acts. Such committee shall report to the Board and be subject to its directions, and the Board may fill vacancies therein.

9. The Board of Directors shall elect a president, one or more vice presidents, a secretary, a treasurer, and such other officers as may be required by law, or as may be deemed useful. The same person may be elected secretary and treasurer. Agents and employees may be appointed by or under the authority of the Board of Directors or Executive Committee. The term of office of all officers shall be the same as that of the Board of Directors electing them, and until their respective successors in office are elected. Vacancies of any of the offices above named may be filled by vote of a majority of a quorum of the Board. The compensation of all officers shall be fixed by the Board of Directors or the Executive Committee.

10. In addition to powers and duties conferred by law, the officers shall have such duties as usually pertain to their respective offices, and such duties and powers as may

By-Law 9 amended by Resolution of the Board of Directors adopted at their meeting of April 28, 1910

be assigned them by the Board of Directors or Executive Committee.

11. Stock of the company shall be transferable only on its books by the holder, in person or by attorney, upon surrender of the certificates therefor.

12. These by-laws may be amended or added to at any meeting of the Board of Directors, if notice of the proposed change has been sent to all the directors three days before the meeting, or if all the directors are present, or if all not present assent in writing to such change.

13. Any notice required by these by-laws shall be sufficiently given if addressed to the person to be notified and mailed or delivered to his residence, place of business or last known address at or within the time prescribed; and waiver of any such notice by the person to be notified shall be deemed equivalent to due and timely notice to him.

By-Laws 1 to 13 amended & re-enacted Stockholders Meeting Feb 10 1910

The meeting thereupon adjourned to meet again at 4.15 p m of the same day at the same place.

J. H. Kelly
Secy of meeting

A meeting of the directors of the Pennsylvania Water & Power Company was held at room 228 in the Land Title Building, corner of Chestnut Street and Broad Street in the City of Philadelphia, on the 13th day of January 1910, at 3.50 o'clock in the afternoon.

There were present: J. E. Aldred, W. Marriott Canby, John H. Kelly and Frank C. McCown, Jr.

The President, Mr. J. E. Aldred, presided.

A call of this meeting and waiver of notice signed by all the directors was read and ordered spread upon the minutes. The following is a copy thereof:

Pennsylvania Water & Power Company.

Call and Waiver of First Meeting of Directors.

A meeting of the directors of the Pennsylvania Water & Power Company, a corporation of Pennsylvania,

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is hereby called to be held at Room 228 in the Land Title Building, in the City of Philadelphia, on the 13th day of January, 1910, at 2.50 o'clock P. M., and the undersigned hereby waive notice of such meeting.

Dated, Philadelphia, January 13, 1910.

Fayette B. Dow
Kenneth M. Spencer,
H. Marriott Canby,
Frank C. McCown, Jr.,
J. E. Aldred,
John H. Kelly.

The proceedings of a meeting of William M. Barnum, A. C. Bedford, S. R. Bertron, Charles A. Coffin and Gardiner M. Lane, held at 3.30 p.m. of the same day and at the same place as the present meeting, were read.

The President stated that the election of a Secretary and a Treasurer would be in order. A ballot was taken and the following were elected, each to the office written after his name as follows: C. C. J. Clarke, Treasurer; Sherman L. Lewis, Secretary.

On motion, duly seconded and unanimously carried, it was

Resolved that there shall be duly executed, made, issued and delivered by this Company to William M. Barnum, A. C. Bedford, S. R. Bertron, Charles A. Coffin and Gardiner M. Lane, constituting the Committee under McCall Ferry Power Company Plan and Agreement dated May 28, 1909, seven million five hundred and eighty thousand dollars ($7,580,000) in aggregate principal amount of bonds of this Company, dated this day, payable on the first day of January, 1911, and to bear interest from January 1st, 1910, at the rate of five per cent. per annum, and certificates for 169,900 shares of $50 each of the capital stock of this Company, such bonds and stock to be delivered in consideration of and upon the delivery of a deed by said Committee conveying to this Company the properties and franchises formerly of the McCall Ferry Power Company sold at the foreclosure sale thereof in the City of Lancaster on the 7th day of December, 1909, and also in consideration of and upon the making and delivery between said Committee and this Company of an agreement substantially in the following form:

Agreement made the 13th day of January, 1910, between William M. Barnum, A. C. Bedford, S. Reading Berton, Charles A. Coffin and Gardner M. Dana, as a Committee as hereinafter set forth, party of the first part, and Pennsylvania Water & Power Company, a corporation of Pennsylvania, party of the second part

The said Committee, party of the first part constituted such by the McCall Ferry Power Company — Plan and Agreement, dated May 25th, 1909, a copy whereof is hereunto annexed, having caused the said Pennsylvania Water & Power Company to be reorganized and formed under the law of Pennsylvania commonly known as the Reorganization Statute to be the "New Company" mentioned in the said Plan and Agreement, and it being proposed that said Company issue bonds and stock to said Committee, in consideration for the conveyance and transfer to it of all the property and franchises formerly of the McCall Ferry Power Company sold at foreclosure sale December 7th, 1909, and purchased for or on account of said Committee, and to represent the interest of said purchasers therein, and also in consideration of the making by said Committee of this agreement with said Company

Now therefore in consideration of the premises and of the issue and delivery of such stock and bonds, and each in further consideration of the agreements of the other herein stated, said parties hereto mutually agree as follows:

Said Committee agrees to fully carry out in favor of said Company the provisions of the paragraph numbered Eleventh of said Plan and Agreement, reading as follows:

> Eleventh: After the reorganization shall have been completed, and all debts and liabilities incurred in connection therewith shall have been paid or discharged, all moneys, securities and other property not used or required for any of the purposes herein authorized and remaining in the hands of the Committee, are to be transferred to or held for the benefit of the New Company, under appropriate agreements for the protection and indemnity of the Committee

2. The foregoing agreement of said Committee, however, is made only upon the condition that said Company shall hereafter, through appropriate action of its stockholders and directors, lawfully make an issue of $13,500,000 in aggregate principal of thirty-year first mortgage five per cent. gold bonds, and make a mortgage securing the same, all in accordance with the terms and provisions of said Plan and Agreement, and shall deliver to said Committee in exchange for all the unsecured bonds so as aforesaid issued by said Company to said Committee bonds so made and secured by such mortgage, such exchange to be on the basis of one dollar of principal of such mortgage bonds for each one dollar of principal of said unsecured bonds, adjustment to be made of difference if any of accrued interest; and said Committee shall not be bound by this agreement unless the condition hereinbefore in this paragraph stated shall be fully performed within a reasonable time.

3. Said Company agrees that in case of the affirmative action of its stockholders pursuant to the requirements of law of the State of Pennsylvania, it will in all respects comply with and carry out the condition stated in the foregoing paragraph hereof.

4. Contracts having been made for the sale of mortgage bonds to be made and secured by the New Company in accordance with the provisions of said Plan and Agreement, together with Voting Trust Certificates for stock of said Company, upon which contracts instalments of purchase price have been paid in advance of the existence of such New Company or such bonds or certificates, and the remaining instalments are to fall due hereafter, it is mutually agreed by the parties hereto that in case said Committee shall desire to fully carry out and perform this agreement on its part while some instalments of purchase price under said contracts for the sale of bonds and certificates, or any thereof, shall not yet be due, this agreement may and shall be deemed to be fully performed on the part of said Committee

in respect of unpaid instalments of such purchase price, as fully as if said Committee, having received such instalments of purchase price, had turned them over to said Company, if said Committee shall turn over or make available to said Company all such contracts for the sale of bonds and certificates, together with the bonds and certificates necessary for delivery thereunder, so that said Company shall be entitled to all further instalments of purchase price as they fall due.

5. Said Company further agrees that upon this agreement being carried out by said Committee, said Company will assume and agree to carry out and fully perform all agreements made by said Committee (other than its agreements herein contained) acting under said Plan and Agreement and not then fully performed or provided for.

This agreement, conditionally as hereinbefore provided, is binding on the members of said Committee, party of the first part, only in their capacity as members of such Committee, and not on them or any of them personally.

In Witness Whereof said parties have duly executed this agreement in duplicate the day and year first above written.

Pennsylvania Water & Power Company

(Seal) By J. E. Aldred,
President.

Attest:
Sherman L. Lewis,
Secretary.

On motion, duly seconded, it was

Resolved that the officers of this Company be and they are hereby severally authorized and directed to make and deliver an agreement with said Committee in substantially the form foregoing coincidently with the delivery to this Company of the deed by said Committee described in the last foregoing resolution.

Forms of bonds and stock certificate were submitted, and on motion, duly seconded, said forms were ordered to be marked for identification by the Secretary and filed.

On motion, duly seconded, it was

Resolved that the bonds and stock certificates

to be issued and delivered as provided in the foregoing resolutions shall be substantially in the forms so submitted, and the President Secretary and Treasurer of this Company be and each of them is hereby authorized to execute such bonds and stock certificates and deliver the same on behalf of this Company

On motion, duly seconded, it was

Resolved that this corporation accepts the provisions of the Constitution of Pennsylvania adopted December 6, 1873 including Article 16 of said Constitution; and the President and Secretary are hereby authorized and directed to make, under the seal of the corporation and to file in the office of the Secretary of the Commonwealth, the certificate required by law for the purpose aforesaid.

On motion, duly seconded, it was

Resolved that the Treasurer of this Company be and he is hereby authorized to pay forthwith to the State Treasurer of the Commonwealth of Pennsylvania the sum of $28,393.33, being the bonus tax required to be paid in respect to the authorized capital stock of this Company and that said officer be and he is hereby authorized to borrow the money necessary for this purpose from the Committee under McCall Ferry Power Company Plan and Agreement dated May 28th, 1909 and give this Company's note or other obligation therefor.

On motion, duly seconded, it was

Resolved that this corporation within one calendar month make a certificate of its organization under its common seal, attested by the signature of its President and Secretary, and duly acknowledged as the act of the corporation, specifying the date of such organization, the name adopted, the amount of capital stock and the names of its President and directors, and that the same be filed in the office of the Secretary of State of the Commonwealth of Pennsylvania.

Adjourned.

Herman Reuel
Secretary

At 4.15 p.m. of the same day the said meeting reconvened as a meeting of all the stockholders of said corporation, said William M. Barnum, A. C. Bedford, S. Reading Bertron, Charles A. Coffin and Gardiner M. Lane being present

The Chairman reported that since the former session of this meeting the directors of the Pennsylvania Water & Power Company had met and by appropriate resolutions had also authorized and directed the issue and delivery of bonds and certificates of stock of said Company as provided by this meeting at its said former session and had authorized and directed the making of the agreement by said Company with the Committee described in the resolution in that regard adopted at said former session, and that the deed from said Committee to said Company conveying the properties and franchises sold and purchased as set forth in the minutes of said former session had been delivered to said Company, and such agreement with said Committee had been mutually executed and delivered, and that bonds and stock certificates of said Company had thereupon been delivered as provided in the said resolutions adopted at said former session of this meeting.

The following resolution was thereupon adopted:

Resolved that this corporation accepts the provisions of the Constitution of Pennsylvania adopted December 16, 1873, including Article 16 of said Constitution, and the President and Secretary are hereby authorized and directed to make under the seal of the corporation, and to file in the office of the Secretary of the Commonwealth, the certificate required by law for the purpose aforesaid.

Adjourned.

Herman Rowe
Secretary

Voting Trust Agreement, Pennsylvania Water & Power Company

PENNSYLVANIA WATER & POWER COMPANY.

VOTING TRUST AGREEMENT.

AGREEMENT, made this 7th day of February, 1910, between the holders of stock of PENNSYLVANIA WATER & POWER COMPANY, a corporation of the State of Pennsylvania, who shall become parties to this agreement by signing the same (hereinafter called the "Subscribers"), parties of the first part, and J. E. ALDRED, W. M. BARNUM and C. E. F. CLARKE (hereinafter called the "Voting Trustees"), parties of the second part.

WHEREAS, each of the Subscribers represents that he is the owner of the shares of stock set opposite his signature hereto in said Pennsylvania Water & Power Company (which is hereinafter called the "Company"), and

WHEREAS, the Subscribers deem it to be to the interest of said Company and of all the stockholders therein that this agreement should be made,

NOW, THEREFORE, in consideration of the agreements herein and of the terms and provisions hereof, and of One Dollar to each of them paid, receipt whereof is acknowledged, the parties hereto provide and agree as follows:

1. Each of the Subscribers agrees that he will forthwith deposit with the Voting Trustees or with their

authorized agent, the certificate or certificates for his said shares, together with a proper and sufficient instrument duly executed for the transfer thereof to the Voting Trustees.

2. Upon deposit as aforesaid by any Subscriber of a certificate or certificates of stock hereunder, accompanied by transfer as aforesaid, the Voting Trustees will deliver or procure to be delivered to such Subscriber or upon his order their Voting Trust Certificate or Certificates for the same number of shares of stock of the Company as is represented by the certificate or certificates so deposited, which Voting Trust Certificates shall be substantially in the following form:

No. .... Shares.

PENNSYLVANIA WATER & POWER COMPANY.

VOTING STOCK CERTIFICATE.

This certifies, that on November 1, 1912,..... ..... will be entitled to receive a certificate or certificates, expressed to be fully paid, for ..... shares of $100 each of the Stock of Pennsylvania Water & Power Company, a corporation of the State of Pennsylvania, and, in the meantime, to receive payments equal to the dividends, if any, collected by the Voting Trustees hereinafter mentioned upon a like number of said shares; and until after the actual delivery of such certificates the Voting Trustees shall, in respect to any and all such stock, possess and

be entitled to exercise, except as otherwise expressly provided in the agreement hereinafter mentioned, all stockholders' rights of every kind, including the right to vote and to take part in or consent to any corporate or stockholders' action, it being expressly stipulated that no right to vote or to take part in or consent to any corporate or stockholders' action passes by or under this certificate or by or under any agreement, express or implied.

This certificate is issued under and pursuant to, and the rights of the holder are subject to and limited by, the terms and conditions of a certain agreement dated the 7th day of February, 1910, between holders of Stock of said Company and the Voting Trustees thereunder at said date, copies whereof are filed with said Company and with The New York Trust Company.

No stock certificate shall be due or deliverable hereunder before November 1, 1912, but the Voting Trustees, in their discretion, may make earlier delivery as provided in said agreement.

This certificate is transferable only on the books of the Voting Trustees by the registered holder hereof in person or by attorney according to rules established for that purpose by the Voting Trustees and on surrender hereof. Until so transferred, the Voting Trustees may treat the registered holder as owner hereof for all purposes whatsoever.

This certificate is not valid unless duly signed on behalf of the Voting Trustees by The New York Trust Company, their agent.

4

IN WITNESS WHEREOF, the Voting Trustees have caused this certificate to be signed by their duly authorized agent hereunder, this ..... day of ....., 1910.

J. E. ALDRED,
W. M. BARNUM,
C. E. F. CLARKE,
Voting Trustees.

THE NEW YORK TRUST COMPANY,
Agent,

By

.....
Assistant Secretary.

THE NEW YORK TRUST COMPANY is hereby authorized by the Voting Trustees to sign and deliver Voting Trust Certificates as aforesaid as agent of the Voting Trustees.

Said Voting Trust Certificates shall be transferable as therein provided, and not otherwise, and transfer so made of any such certificate shall vest in the transferee all rights and interests of the transferor in and under such certificate, and upon such transfer the Voting Trustees will deliver or cause to be delivered a Voting Trust Certificate or Certificates to the transferee for the same number of shares as is represented by the Voting Trust Certificate so transferred. Until such transfer the Voting Trustees may treat the registered holder of a Voting Trust Certificate as owner thereof for all purposes whatsoever.

3. The shares of stock of the Company, certificates for which shall be deposited hereunder with the Voting

Trustees, shall be vested in the Voting Trustees, and shall be transferred to the name of the Voting Trustees on the books of the Company, and until after the actual delivery of certificates for said stock to the holders of the Voting Trust Certificates, in accordance with the provisions of this agreement, the Voting Trustees shall, in respect to all stock so held by them, possess and be entitled to exercise all stockholders' rights of every kind, including the right to vote and to take part in or consent to any corporate or stockholders' action and to receive dividends on said stock, and it is expressly understood and agreed that the holders of Voting Trust Certificates shall not have any right, with respect to any such stock held by the Voting Trustees, to vote or take part in or consent to any corporate or stockholders' action of the Company.

4. The holder of each Voting Trust Certificate shall be entitled, until distribution of stock in the Company as hereinafter provided for, to receive from time to time payments equal to the dividends, if any, collected by the Voting Trustees upon the like number of shares of stock of the Company as is specified in such Voting Trust Certificate.

5. On November 1, 1912, or at such earlier date as the Voting Trustees shall in their discretion determine, the Voting Trustees shall distribute the stock of the Company held by them to the holders of the Voting Trust Certificates as follows, that is to say, they shall, upon presentation and surrender on or after such date of Voting Trust Certificates accompanied by properly executed transfers thereof to the Voting Trustees, deliver certifi-

cates of stock of the Company for the shares specified in the Voting Trust Certificates so surrendered.

6. All questions arising among the Voting Trustees shall be determined by the decision of a majority of them. The Voting Trustees may in all matters act either at a meeting or by writing with or without meeting, and the decision or act of a majority of the Voting Trustees shall in all matters, including the exercise of the voting power, be deemed the decision or act of all the Voting Trustees. In voting the stock held by them, and in any other action, meeting or proceeding, any or all of the Voting Trustees may act by proxy.

7. Any Voting Trustee may at any time resign by delivering to the other Voting Trustees his resignation in writing, and in every case of death, resignation or vacancy otherwise arising the vacancy so occurring shall be filled as follows: If such vacancy shall be in the voting trusteeship originally occupied by said J. E. Aldred, it shall be filled by appointment in writing by said C. E. F. Clarke, or his successor as voting trustee hereunder; if such vacancy shall be in the trusteeship originally occupied by said C. E. F. Clarke, it shall be filled by appointment in writing by said J. E. Aldred, or his successor as voting trustee hereunder; if such vacancy shall be in the trusteeship originally occupied by said W. M. Barnum, it shall be filled by appointment in writing by the firm of Lee, Higginson & Company, of Boston, or the successor thereof, as constituted at the time of such vacancy. Every successor so appointed shall from the time of such appointment be deemed a Voting Trustee hereunder, and have

all the estate, title, rights and powers of a Voting Trustee hereunder, and all acts and instruments shall be done and executed which shall be necessary or reasonably requested for the purpose of effecting such succession and of making the Voting Trustees as they shall exist upon such appointment the owners of record of the stock deposited as aforesaid with the Voting Trustees.

The agent of the Voting Trustees may at any time resign its duties hereunder by giving ten days' notice thereof to the Voting Trustees, and such agent may at any time be removed therefrom by a written instrument signed by at least a majority of the then Voting Trustees and delivered to the agent. In case of a vacancy in the position of agent the majority of the Voting Trustees may by writing signed by them and delivered to such successor elect a successor to the agent, which successor shall thereupon be entitled to all the rights, authority and powers hereby conferred upon the above named agent, and the agent so resigning or so removed shall thereupon deliver to such successor the stock certificates held by it hereunder, together with all books, registers and other papers pertaining or relating to said stock certificates or the Voting Trust Certificates which may from time to time be issued hereunder.

8. In voting upon said shares of stock or doing any act with respect to the control or management of the Company or its affairs, as holders of the stock deposited hereunder, the Voting Trustees shall exercise their best judgment in the interest of the Company to the end that its affairs shall be properly managed.

The Voting Trustees may vote on said stock in person or by such person or persons as they shall select as their proxy.

9. Any holder of any stock of the Company may at any time become a Subscriber hereto with respect to any such stock by subscribing this agreement and depositing the certificates of his said stock as aforesaid, accompanied by duly executed transfer thereof as above provided, and shall thereupon and thereafter be deemed and be a subscriber hereunder.

10. Any notice to be given to the holders of Voting Trust Certificates hereunder shall be sufficiently given if mailed to the registered holders of Voting Trust Certificates at the addresses furnished by such holders to the Voting Trustees or their agent.

11. No Voting Trustee shall be liable for any error of judgment or mistake of law or other mistake, or for anything save only his own wilful misconduct or gross negligence.

12. This agreement may be executed in several parts of like form, each of which, when executed, shall be deemed to be an original, and such parts shall together constitute one and the same instrument.

IN WITNESS WHEREOF, the several parties hereto have respectively signed this agreement, the day and year first above mentioned.

Voting Trustees.

[9704D]

Eighty-four thousand nine hundred and sixty (84,960) shares

Report of Receiver to Court

(J.E.A. Rec. 4)

Fol. 1. CIRCUIT COURT OF THE UNITED STATES
FOR THE EASTERN DISTRICT OF PENNSYLVANIA.

KNICKERBOCKER TRUST COMPANY,
Complainant,

vs. IN EQUITY.

McCALL FERRY POWER COMPANY,
Defendant.

TO THE HONORABLE JUDGES OF SAID COURT:

I, J. E. ALDRED, who was appointed Receiver of
2 the property of the defendant by an order of this Court made on the 17th day of July, 1909, respectfully report that I forthwith took possession of such property, as directed in said order, and that within ten days from the date of said order I made and filed with the Clerk of this Court a proper bond, with sufficient surety, which was approved by a Judge of this Court, in the penal sum of fifty thousand dollars, as required in said order.

I further report that Henry P. Brown, Esq., Special
3 Master, having executed and delivered a deed to William M. Barnum, the purchaser, I turned over and delivered said property (except the moneys in my hands as Receiver) to said purchaser, pursuant to the provisions of the decree of this Court, made the 18th day of December, 1909,

I further report that the moneys received and paid out by me as the Receiver of the property of the defendant appointed in this cause, and also in like causes in the

Circuit Court of the United States for the District of Maryland, and the Circuit Court of the United States for the Southern District of New York, are set forth in the statement hereto annexed and made a part hereof.

I respectfully pray the instruction of the Court as to the disposition of the moneys in my hands as Receiver, and further pray that when I shall have paid out the same as directed by the Court, I may be discharged as Receiver and my bond may be cancelled and the surety thereon released.

J. E. ALDRED
Receiver

Dated, February 18th, 1910.

STATE OF NEW YORK,)
: ss:
COUNTY OF NEW YORK,)

J. E. ALDRED, being duly sworn, says that he is the Receiver described in the foregoing report; that he has read said report and knows the contents thereof and that said report is true to the best of his knowledge, information and belief.

J. E. ALDRED

Sworn to and subscribed before me
this 18th day of February, 1910.

Louis F. Mentz
Notary Public, Kings County,
Certificate filed in New York County.

(Notarial seal)

McCALL FERRY POWER COMPANY

Statement
-of-
Receiver's Receipts
-and-
Disbursements.

\- - -

DISBURSEMENTS.

Insurance			$3027.47
Taxes			1987.68
Rent, New York	475.00		
McCall F. Sundry	875.00		1350.00
Sundry Expense & Supplies		640.79	
" " "		375.00	1015.79
Receiver's Office Salaries (Messrs. Young, Lewis & Hinton)			2523.75
McCall Ferry Office & Works Expense			
Wages, Local Agent, Constable, Watchman, Engineer, Guage Reader, Clerks, Stableman, Laborer,		3211.38	
Office Sundries & expense,		680.00	
Misc. Repairs,		125.00	
Water, Fire & Sewerage,		121.91	
Removing Conowingo Line,		93.50	
Water Analysis,		20.00	
Work on Pequea Road,		50.00	4301.79
Travelling, etc.,			624.02
Settlement re Cary T. Hutchinson attachment,			5000.00
Legal Expenses			6892.41
Receivership, Fee & Expense			7000.00
			$33,722.91

McCALL FERRY POWER COMPANY

Statement
of
Receiver's Receipts
and
Disbursements.

RECEIPTS:

Cash and Banks,		$29770.89
McCall Ferry Supply Co. Settlemt.		2815.43
Material Sold.		
Cement Bags,	$2169.15	
Insurance Rebates		
Interest & Sundries,	2349.23	4518.38
Knickerbocker T.Co., on a/c $250,000 dep.		100000.00
Interest K.T.Co., " " " "		36061.57
		$173166.27
Disbursed per Statement,		33722.91
		$139443.36

Cash and Bank Balances $139443.36

Power Contract With Consolidated Gas Electric Light and Power Company, August 29, 1910

THIS AGREEMENT made this 29th day of August 1910, by and between THE PENNSYLVANIA WATER & POWER COMPANY, a corporation organized and existing under the laws of the State of Pennsylvania, hereinafter called the "Power Company", party of the first part, and the CONSOLIDATED GAS ELECTRIC LIGHT & POWER COMPANY OF BALTIMORE, a corporation organized and existing under the laws of the State of Maryland, hereinafter called the "Electric Company", party of the second part; WITNESSETH:

WHEREAS the Power Company is engaged in the business of generating and transmitting electric power, and whereas the Electric Company is in the business of distributing and selling electric energy and desires to purchase electric energy for the said distribution and sale,

NOW, THEREFORE, the parties hereto, in consideration of the premises, and of one dollar ($1.00) and other valuable considerations, each to the other in hand paid, receipt of which is hereby mutually acknowledged, and the covenants hereinafter set forth, mutually agree as follows:-

ARTICLE 1.

Character of Service and Term.

For and during the term of ten (10) years, commencing on the first day of October, 1910, and during any extended life of this contract, effected under the provisions hereinafter set forth, the Power Company agrees to sell and supply electric energy to the Electric Company and the Electric Company agrees to purchase and pay for the same in such quantities as herein provided, and under the terms and conditions hereafter set forth. Such electric energy will be in the form of three phase, alternating current, at a frequency of twenty-five cycles per second, and at a pressure of thirteen thousand, two hundred (13,200) volts, as hereinafter provided, and hereinafter referred to

as "energy".

Provided the Power Company is ready to make delivery of the said energy on the first day of October, 1910, the Electric Company shall take and pay for the said energy from that date. It is agreed, however, that should the Power Company and the Electric Company be ready to deliver and take the energy before the above mentioned date, the energy will be delivered and take and paid for under the terms and conditions provided for herein in Article XVI.

ARTICLE II.

Amount of Energy to be Supplied.

The Electric Company agrees to take each year beginning and after twelve o'clock noon October first, 1910, and the Power Company agrees to supply, an amount of electric power equal to two-thirds (2/3) of the Electric Company's maximum peak load of the next preceding year. The Electric Company may generate the balance by steam. It is agreed that the Electric Company's peak load as of last year shall be taken as twenty thousand (20,000) kilowatts. The Electric Company for the year beginning October first, 1910, ~~will~~, therefore, take from the Power Company a maximum of thirteen thousand, three hundred and thirty-three (13,333) kilowatts. It is agreed that the amount of energy the Electric Company shall pay for and the Power Company shall supply, during the first year of this contract shall not be less than seventy million (70,000,000) kilowatt hours, subject to the conditions stated in Article V. and Article XVI. and in each year thereafter this amount shall be increased in proportion to the increase in the aforesaid peak load. This minimum amount of energy to be paid for shall be proportionately reduced, however, in case of any reduction, failure or interruption in the supply of energy.

The expression "electric power" used herein refers to the amount of electric power load used at any one time and measured in kilowatts, as distinguished

from the amount of "electric energy" used within a given period and measured in kilowatt hours.

ARTICLE III.

Rate to be Paid.

The Electric Company agrees to pay for all energy supplied under this contract at the rate of four (4) mills per kilowatt hour under the conditions provided for herein, subject to the exception stated in Article XVI.

ARTICLE IV.

Additional Energy.

The Electric Company shall have the right to take and the Power Company agrees to supply, additional amounts of power and energy under the terms and conditions herein provided, but the Power Company shall in no event be required to supply more than fifty per cent (50%) in excess of the amount of power and energy specified for the first year in Article II, that is to say, not more than twenty thousand (20,000) kilowatts and one hundred and five million (105,000,000) kilowatt hours per year.

In case the installation of additional apparatus is required to meet the demand for additional power and energy, the Power Company shall have a reasonable time in which to procure the necessary additional apparatus.

ARTICLE V.

Minimum Supply.

At times of low water the Power Company shall have the right to reduce the supply of energy to the Electric Company to a minimum in any one day of not less than fifty per cent (50%) of the pro rated daily equivalent in kilowatt hours of the amount of energy in kilowatt hours per year which the Electric Company agrees to pay for as set forth in Articles II. and IV, in which case the minimum amount of energy which the Electric Company shall be required to pay for shall be reduced accordingly.

The Power Company shall not, however, have the right to reduce the supply of energy at any time when the amount of water flow is sufficient to operate the Power Company's generating plant to its full rated capacity for twenty (20) hours per day. In case of any reduction or cessation of supply, except under the conditions hereiff stated in this Article V, or for causes beyond the control of the Power Company, the Power Company shall pay the excess cost or amount, if any, over the cost of four (4) mills per kilowatt hour for electric energy as herein provided, which the Electric Company may be put to in generating or securing a supply of energy to make up the deficiency caused by the said reduction in supply.

ARTICLE VI.

Right of Power Company to Call for Steam Power.

The Power Company shall have the right to call upon the Electric Company for energy at such times and in such amounts as the Electric Company can supply with its then existing generating and cable capacity, over and above its own distribution requirements delivered to the Power Company's hereinafter mentioned sub-station, or at the Pratt Street Station of the United Railways and Electric Company, from the Electric Company's Westport station, during the twelve (12) hours per day of regular operation of said station, and the Power Company shall pay to the Electric Company for such energy at the rate of four and one-half (4½) mills per kilowatt hour, measured at the bus-bars of the Westport station. Such energy supply may be extended to twenty-four (24) hours per day at a price to be agreed upon, which shall take into consideration the cost to the Electric Company of an extra shift of labor at the said station.

ARTICLE VII.

Transmission Lines and Point of Delivery.

The energy to be furnished by the Power Company under this contract shall be transmitted from the point or points of generation on the Susquehanna River or

elsewhere by two separate transmission circuits, (which may be carried upon the same tower line) to the Power Company's terminal sub-station at Philadelphia Road and Seventh Street, in Highlandtown adjacent to the Eastern limits of the City of Baltimore, and there transformed and delivered to the Electric Company.

It is understood that the transmission lines and said terminal sub-station, or either, herein referred to, may be owned and operated, or both, by a company or companies other than the Power Company, but controlled by the Power Company. Ownership or operation by such company or companies shall be deemed to be ownership or operation by the Power Company, and the Power Company shall be in every way responsible for the acts of such controlled company for the purposes of this agreement.

ARTICLE VIII.

Terminal Station Equipment.

The Power Company's terminal sub-station with all necessary transformers, switches, switchboard and controlling apparatus shall be erected at the sole expense of the Power Company and the Power Company shall provide a suitable automatic circuit breaking switch and such measuring and indicating instruments as may be necessary for each of the Electric Company's cables or distribution lines leaving the said sub-station, together with all necessary ducts for such cables inside the sub-station building and within the property lines of the Power Company. The Power Company shall also provide within the said sub-station sufficient space for such additional feeder switches, regulators, and transformers to be furnished by the Electric Company, as the Electric Company may require to control its feeders and transmission lines leaving the said sub-station, for which space the Electric Company shall pay to the Power Company a rental of eight (8) per cent per annum on the cost of such space, and the Power Company will also, if required, operate the Electric Company's apparatus, for which service the

Power Company shall receive reasonable compensation. The Power Company, however, will not be responsible in any manner whatsoever, for any damage or loss that may occur to the Electric Company in any manner whatsoever, because of said operation by the Power Company or by reason of the opening or closing of any switches by the Power Company at the Electric Company's request.

ARTICLE IX

Interruptions for Repairs.

In order to make necessary repairs or changes on its system, the Power Company shall have the right to temporarily discontinue the service at such time or times as may be least inconvenient to the Electric Company, and except in case of extreme emergency, at least twelve (12) hours' notice shall be given by the Power Company to the Electric Company that such discontinuance of the service is to take place.

ARTICLE X.

Measurement of Energy.

All electric energy to be supplied hereunder shall be measured by watt hour meters to be installed by the Power Company at its expense, at its said terminal sub-station. The Power Company may also install graphic meters to check the peak load measurements. Such watt hour meters or other meters shall be of an approved type and shall be placed in the thirteen thousand, two hundred (13,200) volt circuit. The Electric Company shall have the right to install its own check meters in addition to the meters installed by the Power Company, and space and structure for the said check meters shall be provided by the Power Company in its said terminal sub-station.

Said meters installed by the Power Company shall be read at noon on the first day of each calander month, for the purpose of ascertaining the kilowatt hours drawn and used during the previous month. The meters shall be tested and calibrated at suitable intervals or upon written request of either party in the presence of duly appointed representatives of both parties, and if, as the result

of such tests, any meter shall be found incorrect or inaccurate, it shall be restored to an accurate condition, or a new meter shall be substituted.

The readings of any meter tested and found to be not more than two per cent (2%) from accuracy, shall be considered correct and accurate. If, as a result of any such tests, any meter shall be found to register in excess of two per cent (2%) either above or below accuracy, then the consumption recorded by such meter since the last monthly reading previous to the request for test, shall be corrected accordingly, by one-half (½) of the percentage of inaccuracy so found, provided that this percentage is less than ten per cent (10%), but no correction shall extend back beyond thirty (30) days previous to the day on which such tests are requested, and if during such previous thirty (30) days, one or more prior tests shall have been made under the provisions hereof, then no correction shall extend back beyond the date of such prior tests. Should the error in the meter exceed ten per cent (10%) the probable consumption shall be estimated and paid for as agreed upon between the parties hereto.

ARTICLE XI.

Circuit Breakers.

The automatic circuit breakers on the Power Company's switchboards shall be set for at least fifty per cent (50%) in excess of the normal maximum load to which the Electric Company is at the time entitled.

ARTICLE XII.

Maintenance of the Electric Company's Equipment.

The Electric Company agrees to install and maintain all of its apparatus and distribution lines in first-class condition, and in case any of its apparatus which in any way affects the taking of energy from the Power Company breaks down or becomes defective, it will immediately use due diligence to repair said apparatus and operate the same. The Power Company shall assume no liability nor shall it be held responsible for any damages which may occur to the whole or any part of

the apparatus or lines of the Electric Company, or damages to life or property caused by the lines or apparatus of the Electric Company, except for such damages as may be due to the negligence of the Power Company or its employees.

ARTICLE XIII.

Insurance against Interruptions.

The Power Company agrees to exercise due care to give continuous and satisfactory service, and in the event of its generating station apparatus, or transmission lines, other than such apparatus as may be owned by the Electric Company, being destroyed or crippled by any cause whatsoever, it will immediately use due diligence to repair or replace the same so as not to interfere with the supply of energy to the Electric Company for a longer period than is absolutely necessary. To ensure against long continued interruptions in the event of accident or breakdown to the Power Company's apparatus, the Power Company shall keep in reserve in both its main Power House and in its terminal sub-station, sufficient spare capacity to take care of the breakdown of any single piece of apparatus.

ARTICLE XIV.

Unavoidable Suspension of Service.

If at any time during the continuance of the contract, the operation of the works or equipment of either party is suspended owing to war, rebellion, civil disturbances, strikes, serious epidemics, fires, lightning, or any other causes of a like nature beyond the control of either party, the party whose operations are so suspended shall not be liable to the other for damages or penalties for the time during such suspension, and the party whose operation is so interfered with shall use all reasonable diligence to resume operation.

ARTICLE XV.

Regulation of Pressure and Frequency.

M.M.M.

The Power Company agrees to maintain at the point of delivery to the Electric Company the voltage and frequency of the supply at approximately thirteen thousand, two hundred (13,200) volts and approximately twenty-five (25) cycles respectively, at all times during which the energy taken by the Electric Company does not exceed the maximum load to which the Electric Company is at that time entitled.

The Power Company agrees that the fluctuation of frequency and voltage shall not be such as to prevent the proper and effective operation of the transforming, converting and controlling apparatus owned by, and connected with the circuits of, the Electric Company. To insure such operation the Power Company shall install, operate and maintain the best and most up-to-date system of automatic regulators for its generators and if necessary, for its circuits.

For the purpose of utilizing the electric energy furnished by the Power Company, the Electric Company shall install its apparatus in accordance with good engineering practice. The said apparatus of the Electric Company shall be of such character and so operated as to maintain a practically balanced load between phases, and to draw current from the Power Company's lines at as nearly as possible to unity power factor. At no time shall the Power Factor be less than ninety per cent (90%) unless necessary for regulation purposes.

The Electric Company shall use all energy contracted for herein in a manner that will not cause undue disturbance to the Power Company's system or abnormal fluctuations in the demand for energy.

In order to insure the Electric Company against possible overloading of the aforesaid two transmission circuits and the consequent impairment of the pressure regulation, the Electric Company shall have the right to control and limit, at all times, the amount of power to be transmitted over the said transmission circuits. The Power Company shall, however, have the right to transmit over the said transmission circuits power to the extent of twenty thousand (20,000)

kilowatts for street railway operation, and shall have the right to take from the said transmission circuits, for other purposes, an amount of power not to exceed five thousand (5000) kilowatts within a distance not greater than fifteen (15) miles from the point of generation on the Susquehanna River.

ARTICLE XVI.

Special Provisions for First Three Months.

During the first three months of operation, under this contract, that is to say, until January 1st, 1911, or during such time as it is necessary to operate the Electric Company's Westport Station under experimental conditions to determine the best methods of joint operation and to insure uninterrupted supply during said period, the Electric Company shall pay for all energy furnished by the Power Company at the rate of three (3) mills per kilowatt hour, with no limitations as to the minimum amount of energy to be taken and paid for.

ARTICLE XVII.

Time of Payment for Service.

The Electric Company agrees to pay on or before the fifteenth day of each month for all energy taken from the Power Company during the prededing month. All payments shall be made without deduction for any disputed claim or counterclaim, which the Electric Company may have or claim to have against the Power Company under this contract or otherwise. All claims or counterclaims which the Electric Company may have or claim to have against the Power Company arising out of this contract, shall be presented to the Power Company in writing during the first fifteen (15) days of the following month.

ARTICLE XVIII.

Arbitration.

In the event of a difference of opinion on any question as to quantity, quality, kind, conformity with technical standards, value or cost of any service, property, matter or thing furnished, used, performed or done, or omitted to be furnished, used, performed or done in connection with this contract, the

respective parties mutually agree that any and all such questions be submitted to a Board of Arbitration consisting of three members, one to be appointed by the Power Company, one by the Electric Company, and the third to be chosen by these two. In the event of either party failing to appoint an arbitrator within (30) days after request from the other party, or in the event of a failure of the said two arbitrators to appoint a third, the said arbitrator shall be appointed by the person then occupying the position of Chief Judge of the Supreme Bench of Baltimore City. The expense of the Board of Arbitration shall be shared equally by the parties hereto.

The decision of any two of the arbitrators shall be final and binding upon the parties hereto. Such submission to and decision by said Board of any and all questions as to any of the matters aforesaid is hereby declared to be a condition precedent to the bringing of any legal action or proceedings by either party hereto on account of any matter or thing involving any such question.

ARTICLE XIX.

Renewal of Contract.

This contract shall automatically renew itself for periods each of ten (10) years duration, unless terminated by either party by written notice to the other party given at least one (1) year prior to the expiration of the period then in effect.

The provisions herein contained shall extend to and bind the parties hereto and their successors and assigns, respectively.

IN WITNESS WHEREOF the parties hereto have caused this Agreement to be executed by their proper officers thereunto duly authorized, and their

respective corporate seals to be hereunto affixed the day and year first above written.

THE PENNSYLVANIA WATER AND POWER COMPANY,

By _____ President.

ATTEST:

_____
Secretary.

CONSOLIDATED GAS ELECTRIC LIGHT & POWER COMPANY
Of Baltimore,

By _____ President.

Approved:

_____
Director, Electric Division.

ATTEST:

_____
Secretary.

J.E. ALDRED, PRESIDENT CHARLES E.F.CLARKE, TREASURER SHERMAN L. LEWIS, SECRETARY

Pennsylvania Water & Power Company
Twenty-Four Exchange Place
New York

August 29th, 1910.

Consolidated Gas Electric Light and Power Company of Baltimore,
Continental Building,
Baltimore, Md.

Gentlemen:-

Referring to the contract entered into on the 29th day of August 1910, by and between you and this Company, we hereby give you permission to increase by ten per cent (10%) the maximum amount of electric power to be taken during the first year's period of the said contract, without increasing the minumum amount of electric energy to be taken and paid for as set forth in Article 11 of said contract. This will entitle you to fourteen thousand six hundred and sixty-six (14,666) kilowatts of electric power.

Yours very truly,

PENNSYLVANIA WATER AND POWER COMPANY.

By J. E. Aldred
President

Power Contract With United Railways and Electric Company, February 8, 1911

CONTRACT FOR ELECTRIC POWER

PENNSYLVANIA WATER & POWER COMPANY

AND

THE UNITED RAILWAYS & ELECTRIC COMPANY

OF BALTIMORE

Agreement, made this 8th day of February, in the year nineteen hundred and eleven, by and between THE PENNSYLVANIA WATER & POWER COMPANY, a corporation of Pennsylvania (hereinafter called the Power Company), and THE UNITED RAILWAYS & ELECTRIC COMPANY OF BALTIMORE, a corporation of Maryland (hereinafter called the Railways Company).

WHEREAS the Power Company is engaged in the business of generating, transmitting and transforming hydro-electric power; and the Railways Company is operating an electric railway system in the City of Baltimore and adjacent territory,

NOW THIS AGREEMENT WITNESSETH, that in consideration of one hundred dollars ($100) by each to the other paid, the receipt whereof is acknowledged, and in consideration of the mutual undertakings and promises hereinafter set forth, the Power Company agrees to sell and supply electric energy to the Railways Company, and the Railways Company agrees to use and pay for the same, under the provisions, terms and conditions following:

ARTICLE I.

DURATION OF CONTRACT. This Agreement shall terminate at the expiration of fifteen (15) years from the 8th day of February, 1911, provided, always, that the Railways Company shall have the right and option to terminate the same prior to that time, at the end of either five (5) or of ten (10) years from said date, upon giving to the Power Company written notice of its intention so to terminate at least six (6) months next before the expiration of such five (5) or ten (10) year period.

ARTICLE II

POINT OF DELIVERY. All energy hereby contracted for shall be supplied by the Power Company to the Railways Company at the latter's Pratt Street Power Station; and the prices hereinafter named are based upon deliveries at said point.

ARTICLE III.

CHARACTERISTICS OF ENERGY SUPPLIED. The said energy shall be supplied in the form of three (3) phase alternating current at a frequency of approximately twenty-five (25) cycles per second and at a pressure of approximately thirteen thousand (13,000) volts.

ARTICLE IV.

QUANTITIES. For convenience of description and reference, the electric power to be supplied by the Power Company under this Agreement is classified and specified as follows:

(a) FLAT POWER. That is to say, power to a definite amount which the Railways Company agrees to accept and the Power Company undertakes to supply (subject to reduction as hereinafter specified under Article VIII) at all times during each and every twenty-four (24) hour day, said amount of power being twelve thousand (12,000) kilowatts, subject to the right of increase in Article X provided. And the Railways Company shall have the right to take as flat power, electrical energy to an amount not exceeding during any day of twenty-four (24) hours, two hundred and thirty thousand and four hundred (230,400) kilowatt hours, this amount being based on a load factor of eighty per cent. (80%).

(b) SURPLUS POWER (which the Railways Company agrees to accept and the Power Company agrees to supply). That is to say, such power in excess of the flat power as, together therewith, will be sufficient during the running of this Agreement to operate the Railways Company's entire system between the hours extending from 10 P. M. of each and

every day to 1 P. M. of the next day, and including all of the hours of Sundays throughout the year.

The Power Company may also supply as surplus power between the hours extending from 1 P. M. to 10 P. M. of week days, energy to make up deficits, as hereinafter provided under Article VIII.

At all hours except between 1 P. M. and 10 P. M. of week days the Power Company shall supply all energy which may be necessary to provide for the Railways Company's requirements, subject to reduction, as hereinafter specified under Article VIII.

ARTICLE V.

PRICES. For energy supplied as "flat power" the price shall be at the rate of $24.00 per kilowatt per annum supplied and used.

For energy supplied as surplus power the price shall be 3 mills per kilowatt hour supplied and used.

ARTICLE VI.

MEASUREMENTS. All electric energy supplied hereunder shall be measured by watt hour meters, to be installed and maintained by the Railways Company at its expense at the Pratt Street Power Station. The Railways Company may also install graphic or other meters to check the necessary measurements. Such watt hour meters or other meters shall be of an approved type, and shall be so connected as to measure the energy delivered to the thirteen thousand (13,000) volt busbars. Deficiencies which may occur in the amount of electric energy to be supplied by the Power Company shall be calculated from measurements of the output of the Pratt Street Power Station of the Railways Company, and of the energy supplied by the Power Company during the period or periods in which such deficiency occurs. The Power Company shall have the right to inspect all the meters used by the Railways Company to measure power or energy under this contract, and to install its own check meters in addition to the meters installed by the Railways Company, and space and structure for the said check meters shall be provided by the Railways Company in the said Pratt Street Power Station. Said meters installed by the Railways Company shall be read and recorded hourly, for the purpose of ascertaining the kilowatt hours used. The meters shall be tested and calibrated at suitable intervals upon written request of either party, in the presence of duly appointed representatives of both parties, and if, as the result of such test, any meter shall be found incorrect or inaccurate, it shall be restored to an accurate condition or a new meter substituted. The reading of any meter tested and found to be not more than Two per Cent. (2%) from normal accuracy at all ranges within the limits between which it is in use, shall be considered correct and accurate. If, as a result of any such test, any meter shall be found to register in excess of two per cent. (2%) either above or below normal accuracy, then the consumption recorded by such meter since the last monthly reading previous to the request for test, shall be corrected accordingly by one-half of the percentage of inaccuracy so found, provided that this percentage is less than ten per cent. (10%); but no correction, whatever the inaccuracy, shall extend back beyond thirty (30) days previous to the day on which tests are requested, and if during such previous thirty (30) days one or more prior tests shall have been made under the provisions hereof, then no correction shall extend back beyond the date of such prior tests. Should the error in the meter exceed ten per cent. (10%), the probable consumption for the preceding thirty (30) days—or since the last test if within thirty (30) days—shall be estimated and paid for as may be agreed between the parties hereto; and, in default of agreement, the dispute shall be settled by arbitration, as provided for in Article XI hereof.

ARTICLE VII.

REGULATION AND USE OF APPARATUS AND CURRENT. Variations in frequency or pressure, or both, of the power supplied, shall not be such as to prevent successful operation of the steam-driven electric generating apparatus of the Railways Company when connected in parallel with the Power Company's circuits, provided said steam-driven apparatus is maintained and operated in accordance with good practice, and to this end the Power Company shall adjust the potential upon the circuits through which power is supplied to the Railways Company in such manner as shall practically prevent the variations of potential as delivered at Pratt Street Power Station which otherwise would result from variations of load on the transmitting circuits.

The Railways Company shall maintain and operate its apparatus in such manner as will maintain a practically balanced load between phases, and shall utilize energy from the Power Company's circuits at a power factor not less than ninety per cent. (90%).

Inasmuch as it is impracticable, by reason of fluctuations in the Railways Company's load, to maintain the quantity of energy to be supplied by the Power Company between the hours of 1 P.M. and 10 P. M. on week days at exactly twelve thousand (12,000) kilowatts, or such other amount of "flat power" as the Power Company may be obligated to supply under this contract, it is the intent of this contract that between said hours on week days (except as provided in Article VIII) the Power Company shall supply and the Railways Company shall have the right to use an average of twelve thousand (12,000) kilowatts or other such obligated amount during the hours when the Railways Company's requirements equal or exceed the amount so demandable. Provided, however, that taking into consideration the fluctuating character of the load in accomplishing this result, the Railways Company shall maintain the demand for power on the Power Company as nearly as may be practicable at the twelve thousand (12,000) kilowatts or other amount to which it may be entitled under this contract.

ARTICLE VIII.

INTERRUPTIONS AND DEFICIENCIES. A. If at any time during the continuance of this contract the Power Company shall be prevented from supplying, or the Railways Company shall be prevented from using all or any part of the energy hereby contracted for, by reason of war, rebellion, civil disturbances, strikes, serious epidemics, fires, or other causes of like nature beyond the control of either party, the obligation of the Power Company to supply, and the obligation of the Railways Company to use and pay for energy contracted for hereunder, shall cease until the time when the party so incapacitated shall, by the exercise of all reasonable diligence, be able to resume such supply or use. But deficiencies in the supply or in the use of power caused by conditions of low water at the Power Company's dam; temporary interruptions caused by lightning or by defects or break-downs in the machinery, apparatus or transmission and distribution lines of either party, shall not be considered as causes excusing supply or use hereunder; and deficiencies in supply arising from such last-named causes shall be governed by Subdivision "D" of this Article.

B. The Power Company will maintain its plant and system in first-class condition, and use the utmost care and diligence consistent with the state of the art in the operation of its system, so as to furnish, as nearly as practicable, a continuous and satisfactory supply of power; will keep in reserve, both in its main power-house and in the terminal sub-station, sufficient spare equipment to provide for the breakdown of any single piece of apparatus, and will provide transmission circuits and cables to such extent as may be necessary to enable it to make repairs upon any transmission circuit or cable without necessitating a reduction in the quantity of power supplied to the Railways Company.

The Railways Company agrees to install and maintain all of its receiving apparatus and distribution lines in first-class condition, and in case any of its apparatus which in any way affects the taking of energy from the Power Company breaks down or becomes defective, it will immediately use due diligence to repair said apparatus and operate the same.

C. At times of low water the Power Company shall have the right to reduce the supply of power to a minimum, in any one day, equal to twenty-five per cent. (25%) of the "flat power" energy which the Railways Company may at such times have the right to use—the Railways Company having the right to take such energy at any rate in the morning and evening peaks which it may desire, not exceeding the maximum value of the morning peak power which it may then be entitled to take under this Agreement. Provided, however: First—That the Railways Company shall have and receive forty-eight (48) hours' notice of each and every reduction before the same goes into effect; and provided, Second—(and the Power Company guarantees, nor will it make any contracts with its other customers to prevent)—that the supply of the Railways Company shall not, during any twenty-four (24) hour period, be reduced hereunder below one-half of the Power Company's total available energy. It is the purpose of the Power Company to provide hereby that the supply of the Railways Company shall not at any time be less than twenty-five (25%) per cent. of the quantity demandable under this Agreement; and that, notwithstanding said limit of twenty-five (25%) per cent., the Railways Company shall, in times of reduced supply, be a preferred customer of the Power Company to the extent of one-half of the latter's total energy during such period's of reduction.

D. If, on account of low water, repairs, or for any cause (except as excused by Paragraph "A" of this Article), the Power Company shall be unable to supply the full amount of electric energy to which the Railways Company may be entitled under Article IV of this Agreement (so that the Railways Company shall be compelled to supply such deficiencies by use of its steam plant, or otherwise), then the Power Company will pay an amount (which the Railways Company may deduct from the monthly settlements hereinafter provided for) equal to 4 mills per kilowatt hour for all such deficiencies, calculated (in the case of each and every reduction) for a minimum duration of thirty (30) days), and for the actual duration, if in excess of thirty (30) days. The purpose of this provision is to indemnify the Railways Company for the agreed excess cost to it of producing, by its steam plant, the supply cut off; and it is recognized that the Railways Company, when compelled to supply by its steam plant power in lieu of that so cut off, cannot operate economically for less than periods of thirty (30) days.

Provided, however, that (subject to the limitations hereinafter mentioned) the accumulated deficiency in kilowatt hours of any one month may be made up by the Power Company during the next succeeding month or months, when it has surplus energy available and when the Railways Company may be able to utilize such surplus energy as an addition to the supply to which it may be then entitled. Deficiencies in flat power so made up shall be paid for at the rate of .3425 cents per kilowatt hour, and deficiencies in surplus power so made up shall be paid for at the rate of 3 mills per kilowatt hour. The right of the Power Company to make up the deficiency of any month shall cease three (3) years from the end of such month in which said deficiency shall occur, and at the termination of this Agreement, if the same shall terminate before the expiration of any three year period.

ARTICLE IX.

PAYMENTS AND SETTLEMENTS. The Railways Company shall make monthly cash settlements on the fifteenth day of each month for the indebtedness of the preceding calendar

month; and in case of any disagreement between the parties as to the amount of any monthly settlement, the disputed portion shall be arbitrated as provided in Article XI hereof.

ARTICLE X.

ADDITIONAL POWER. A. At any time and from time to time during the running of this Agreement, the Railways Company shall, at its option, be entitled to take, and the Power Company shall be obligated to supply, such additional flat power as, together with that provided by Article IV hereof, will be sufficient to enable the Railways Company to dispense with more of its steam-generated electric power; provided, however (1), That the additional flat power demandable by the Railways Company hereunder shall not exceed six thousand (6,000) kilowatts; and provided (2), that if and as such additional flat power is demanded, the amount thereof shall not thereafter be subject to reduction during the running of this Agreement; and provided (3), that such additional flat power shall be paid for at the rate of .3425 Cents per kilowatt hour; and provided (4), that the supply and use of such additional power shall be subject to the provisions of Article VIII of this Agreement; and provided (5), that if any additional apparatus or facilities shall be required to enable the Power Company to supply such additional power, said Company shall have a reasonable time, not exceeding nine (9) months from demand, within which to install or prepare the same.

B. At any time during the running of this Agreement the Railways Company shall, at its option, be entitled to take, and the Power Company shall be obligated to supply, such power, in addition to that to which the Railways Company may then be entitled, as will be sufficient to render unnecessary any use for its railway purposes, of the Railways Company's power plant, provided, however (1), That if any additional apparatus or facilities shall be required to enable the Power Company so to furnish all of the power requirements of the Railways Company, the Power Company shall have a reasonable time, not exceeding twelve (12) months from demand, within which to install or prepare the same; and provided (2) that the prices and quantities hereinbefore fixed and agreed upon shall be superseded by a uniform price of 4.8 mills per kilowatt hour for the entire power requirements of the Railways Company so to be furnished and used; and provided (3) that all the remaining provisions of this Agreement, not inconsistent with such changes in the quantities and prices of power, shall continue and remain in force, except that the Power Company will guarantee to the Railways Company a continuous supply of power adequate at all times for its entire requirements.

C. It is understood and agreed that the undertakings and promises of the Power Company in this Article contained, are inducements to the execution of this Agreement by the Railways Company; and the Power Company, for the money and other considerations hereinbefore set forth in this Agreement, covenants that said undertakings and promises shall be and remain irrevocable during the running of this Agreement.

ARTICLE XI.

ARBITRATION. If and whenever any dispute shall arise over the construction of this contract, or over the rights and duties of either party thereunder, then upon the demand of either party and within ten (10) days from the time of such demand, each party shall name an arbitrator, and the two so named shall promptly thereafter choose a third. If either party shall fail to name an arbitrator within ten (10) days from said demand, or if any two arbitrators named shall fail within ten (10) days from their nomination to agree upon and appoint the third, then such second or third arbitrator, as the case may be, shall be appointed by any Judge of the Supreme Bench of Baltimore City. The decision of any two of the

arbitrators shall be final and binding upon the parties, and such submission to a decision by arbitrators is hereby declared to be a condition precedent to the bringing of any action or suit by either party hereto against the other on account of any matter within the terms of this Article. But the parties hereto may, by mutual consent, refer any matter in dispute to their respective General Managers, who shall be empowered to call in, if necessary, a third party to be agreed upon between them, as umpire, and the decision of the umpire shall be final.

ARTICLE XII.

CANCELLATION. If the Power Company shall fail to commence deliveries on or before the first day of September, 1911, or if the Power Company shall fail to keep and perform its obligations contained in Subdivision "B" of Article VIII, or in Article X hereof, the Railways Company may, at its option and upon thirty (30) days' written notice, cancel this contract without prejudice to any right of action thereunder. If the Railways Company shall fail to keep and perform its obligations as contained in Subdivision "B" of Article VIII; or if it shall for a period of thirty (30) days be in default on any payment due hereunder (not being a sum in dispute or arbitration), then the Power Company shall have the right, at its option and upon thirty (30) days' written notice, to cancel this contract without prejudice to any right of action thereunder. Provided, however, that the liability of the Power Company for inability (without fault on its part) to supply the full amount of power contracted for under this Agreement, shall be limited to the deficiency charges provided by Article VIII hereof.

ARTICLE XIII.

The rights and obligations created by this contract shall inure to and bind the successors and assigns of the respective parties.

Until such time as the Power Company shall regularly qualify to do business in Maryland, the Superintendent or Manager in charge of the Highlandtown sub-station of the Susquehanna Transmission Company of Maryland shall be and continue to be the Agent of the Power Company in Maryland for the purpose of service of process in any litigation growing out of this Agreement.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed in duplicate by their proper officers, thereunto duly authorized, and their respective corporate seals to be hereunto affixed the day and year first above written.

THE PENNSYLVANIA WATER & POWER COMPANY,
By J. E. ALDRED, President.

Attest: SHERMAN L. LEWIS, Secretary.

THE UNITED RAILWAYS & ELECTRIC COMPANY,
of Baltimore,
By WM. A. HOUSE, President.

Attest: WM. EARLY, Secretary.

Johnson's Legal Opinions Re: Eminent Domain

October 31, 1905.

John G. Johnson, Esq.,
Land Title Building,
Philadelphia, Pa.

Dear Sir,

We desire to submit the following matter for your consideration:

The McCall Ferry Power Company, as you will doubtless recall, is a Pennsylvania corporation, formed by the consolidation of two corporations formed under the provisions of the Act of April 29th, 1874, and supplements thereto, for the storage and transportation of water and water power for commercial and manufacturing purposes in the Townships of Lower Chanceford, in York County, and Martic, in Lancaster County.

The Company now desires to obtain a large piece of land near McCall's Ferry in the Township of Martic, this piece of land being one that will be flooded by the dam when finally constructed, but at present is needed for terminal and storage purposes. The Company informs us that this piece of land is absolutely necessary for its enterprise, and that it does not constitute five per cent. of the total property re-

quired for the development, the remaining ninety-five per cent. being owned by the Company. Upon this state of facts, we desire to know whether you are of the opinion that McCall Ferry Power Company has a right to condemn this property.

You will note that the particular property which the Company desires to acquire in this instance is situated in the Township of Martic, one of the townships where the Company has power to furnish water and water power. If you are of opinion that the Company may condemn this property, we desire also to know if you believe that the Company may condemn lands necessary for its purposes outside of the Townships of Martic and Lower Chanceford.

Assuming that the Company has powers of condemnation, and that proceedings are brought to condemn the piece of land to which we have referred, is the Company the sole judge of the necessity of the particular land needed, or may the property owner attempt to show in Court that some other piece of land is just as good for the purposes of the Company?

The most important case with which we are familiar on these points is Keller v. Riverton Water Company, 161 Pa. 422.

The two enclosed opinions which were prepared by Wm. C. Farnsworth, Esq., of Harrisburgh, and submitted to Houseman and his associates in connection with their proposed development of the Susquehanna River, may be of some assistance to you in your investigation. In the opinion numbered "1", the right

of condemnation is considered by Mr. Farnsworth at pages 17 and following. As to the points considered by Mr. Farnsworth in opinion numbered "2", if the only risk that our clients might incur in starting condemnation proceedings would be that a Federal Court might hold that the Act giving the Company powers of condemnation was unconstitutional, we believe that our clients would take the risk. On account of this fact, you need make no detailed investigation of these points, but we shall be very glad, nevertheless, to have your views on the subject.

The McCall Ferry Power Company tells us that it believes that the Pennsylvania Railroad Company controls companies organized under the act under which our companies were organized, and that the condemnation powers have been successfully used.

If we can give you any further information that will assist you in rendering your opinion, kindly advise us.

Yours very truly,

C.B. Eddy
(R.N.S.
4-12-38

Enclosures.

(File copy of letter from Simpson, Thacher & Bartlett's files)

LAND TITLE BUILDING
CHESTNUT-SANSOM
AND BROAD STREETS
PHILADELPHIA

3rd November, 1905.

Messrs. Simpson, Thatcher & Bartlett,

Dear Sirs:-

I beg to acknowledge the receipt of yours of 31st October, making certain inquiries as to the power of the McCall Ferry Power Co., a corporation created under the Act of 29th April, 1874 and supplements, for the storage and transportation of water and water power for commercial and manufacturing purposes in the Townships of Lower Chanceford, in ~~York~~ York County, and Martic, in Lancaster County.

I understand that it is the desire of the Company to appropriate, under an exercise of the right of eminent domain, a large piece of land near McCall's Ferry, in the Township of Martic, which is required for terminal and storage purposes; that this land, in the judgment of the Company, is absolutely necessary for the successful conduct of its business in the securing and distributing water and water power.

The Supreme Court may say of its action in Keller vs. Riverton Water Co., 161 Pa. 422, that it did not mean to decide that water power companies were vested with the right of eminent domain, and if the Court shall be of the opinion that there is no such vesting of power, they will not hesitate, by reason of anything done in the Riverton case, to so decide.

Water supply and water power companies possess, in my judgment,

S. T. & B., No. 2.

AND TITLE BUILDING
CHESTNUT—SANSOM
AND BROAD STREETS
PHILADELPHIA

in Pennsylvania, precisely the same powers, in the matter of the right to exercise eminent domain.

The power conferred by the Act of 1874 is amended by the Act of 16th May, 1889, which, in my judgment, embodies the whole grant which is to be considered.

The Act is not very happily worded; but, in my judgment, it contains, beyond question, a grant sufficiently broad to include the exercise of the right of eminent domain for the purpose desired.

The phraseology itself, read with reasonable intelligence, is broad enough, and the intention of the Legislature to confer the power, is disclosed by the title itself,"authorizing companies incorporated for the supply of power to the public, or for the supply of water and water power for commercial and manufacturing purposes, to condemn property and rights for the purpose of obtaining and supplying water or water power."

The property in the present case is desired to be appropriated in the performance of the duty of "obtaining and supplying water power."

Not only does the Act confer upon such companies the power to "provide, erect and maintain all works and machinery necessary or proper for raising and introducing, etc. a sufficient supply of etc. water and water power as aforesaid"; but also,to accomplish the purpose, permits them to " provide, erect and maintain all proper buildings, cisterns, reservoirs, pipes and conduits for the reception and conveyance of water power." Such companies are given power

S. T. & B. N°. 3.

LAND TITLE BUILDING
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to appropriate so much of the water from the rivers, etc., as may be necessary for the purposes, and they are empowered "to enter upon such lands, etc. as may be necessary to occupy * * * * for the construction of their works.

It is true that there is specific power to appropriate the water, followed specifically by a provision for compensation in accordance with the 41st Section of the Act. I do not regard this as important, inasmuch as all the powers to enter upon lands, etc., given to such companies, are followed by a requirement "if any injury be done to private property", they "shall make compensation therefor in a manner provided for in the 41st Section of this Act." If it should be held that companies so necessary to the public as those created for the supply of water, do not possess the right invitum to occupy lands necessary for their purposes, the whole provision in Pennsylvania for such supply of water may be rendered worthless.

I am very decidedly of the opinion that lands may be appropriated by water companies, adversely, upon the terms of compensation in the manner provided for in the 41st Section of the Act of 1874.

Whilst water supply and water power companies may be held limited to supplying with water and water power, the territorial districts specified in their respective charters, I do not think there is any limitation upon them, either to obtain the supply of water, or to acquire land for the requisite buildings and works within such districts.

S. T. & B. N°. 4.

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The question as to whether the water power company is "the sole judge of the necessity of the particular land needed," to the exclusion of any right on the part of the owner to prove "that some other piece of land is just as good for the purpose of the company," is more difficult.

In no State has it been more thoroughly ~~proven~~ than in Pennsylvania, that the right of a Railroad Company, authorized to construct a railroad between two points, is one which can be exercised by it without any right to show that another location could be made. The discretion of location in such cases in this State is unreviewable.

The power, however, in the case of railroad companies, is one to "locate, fix, mark and determine such route for railroad as it may deem expedient."

I know of no decisions upon the subject of possible right of review, in cases where the power is given by phraseology similar to that by which, in the Act of 1889, it is conferred.

The power vested in the water companies is "to provide, erect and maintain all works and machinery necessary or proper for raising and introducing, etc."

The right of entry upon lands is to such extent "as may be necessary to occupy, etc. for the construction of said works, etc."

The power is not in words conferred upon the companies to provide works and machinery, etc., which, by the Company, shall be deemed necessary. The condition of the entry is that it shall be

J. T. & B. No. 5.

LAND TITLE BUILDING
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necessary.

It is therefore within the power of the Supreme Court to determine that the discretion of the water companies in the appropriation of private lands, is reviewable, and that the taker requires, as a condition prerequisite, not the determination of necessity by the company, but the actual necessity.

I do not think, however, that our Supreme Court will put upon the power such a narrow restriction. I think the company will be granted the right to determine the necessity, subject to revision only in cases almost amounting to a fraudulent exercise of discretion.

I can conceive the possibility of such outrageous appropriation as would induce the Court to interfere.

Whilst I am not able to state with certainty that the Courts will not review the discretion of the water power companies in the appropriation, I am decidedly of the opinion that there will be no interference with the discretion if the circumstances are such that the Court must conclude that the discretion was exercised in a matter as to which there was a discretion, or as to which there could be an honest different opinion.

Some restraint will undoubtedly be exercised; but as I have suggested, it will be under circumstances almost amounting to fraud. I cannot conceive that our judicial tribunals will take upon themselves the determination of whether or not tract A or tract B is best for the purposes of the water company.

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I express no opinion upon the point discussed by Mr Farnsworth as to the fear that the Federal Courts may hold the Act of 1889 unconstitutional, in view of what you say.

I do not think, however, I would bother much in reaching a conclusion if the only danger would lie in the probability of any such determination by the Federal Court.

I return the papers you sent me, and am

Very truly yours,

John C. Swan

LAND TITLE BUILDI
CHESTNUT-SANSOM
AND BROAD STREETS
PHILADELPHIA

15th December, 1905.

Messrs. Simpson, Thatcher & Bartlett,

Dear Sirs:-

I have just had a conference with Mr. Beyer with reference to the proposed taking of the Robert E. Fry tract by the McCall Ferry Power Company, and several matters have arisen as a result of this conference which makes it necessary for me to communicate with you.

Incidentally, I have learned from Mr. Beyer that the dam which is intended to be constructed will raise the river higher than was originally expected, and will flood some lands that we do not now own. As you know, I have always insisted upon the right to erect a dam being exercised to such extent as to flood no lands other than those owned by us. I am very certain that if the Court should reach a conclusion that we were exercising any power which we may possess in the way of eminent domain, to acquire lands which we intend to flood, we would be held guilty of an abuse of power.

This is merely in passing. I find that the McCall Company was merged or consolidated on the 14th day of April, 1905, the Governor having held the merger papers for many months. I had supposed that the merger took place at an earlier date.

The Act of 13th April, 1905, (P.L. 152), which is entitled: "An Act providing that the right of eminent domain, as respects the appropriation of streams, rivers or waters, or the land covered thereby, shall not be exercised by water companies incorporated

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under law," thus enacts:-

"That no water company hereafter incorporated under any law, shall have power or exercise the right of eminent domain as respects the appropriat of the streams, rivers or waters of this Commonwealth or any of them, nor the land covered thereby."

Whilst this Act does not say no land shall be taken "for terminal storage purposes," yet it is exceedingly doubtful whether the Court will hold that the right of eminent domain exists for an incidental purpose where it has been expressly taken away for the main purpose, viz, the appropriation of the streams, rivers and waters.

I very much fear our Supreme Court will hold that no right of eminent domain longer exists in water companies incorporated after the 13th of April, 1905.

Whether or not a consolidated or merged company is a company newly "incorporated", is an exceedingly nice question.

Under our Merger Acts, the consolidated company possesses all the franchises of the old company. It may therefore be contended that the Act does not apply, and was not intended to apply, to a company resulting from such consolidation or merger.

In this State the status of a consolidated company is not very accurately defined. Whether or not it is a new incorporation, is a matter of some doubt.

Under the Federal decisions, the status of a consolidated company would appear to be that of a new company. I am rather inclined

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N.Y.

to think that such is the status of a merged company in your State, although as to that you know far better than I do.

It is very doubtful, therefore, whether the Court will not hold that the McCall Company was incorporated after the Act of 13th April, 1905.

A point of still greater difficulty presents itself, growing out of the proviso to the Act of 16th May, 1889, in these words:- "Provided, That this Act shall not apply to private springs or private water supplies." There can be no doubt that even if the Act of 13th April, 1905 does not exclude the taking of land for terminal purposes, it does forbid the appropriation of "streams." If we are subject to the Act, therefore, the land with this stream running thereon, cannot be taken.

I understand from Mr. Beyer that the tract we are taking is a long and narrow one, through which meanders for a very considerable distance, the spring which has its origin on land immediately above, running through the property proposed to be taken, and then through property of ours to the river. He also tells me it is impossible to take a portion of the land intended in such way as not to appropriate this stream.

The Act of 1889 does not authorize the taking of "Streams"; but simply "rivers and creeks." The stream in question cannot be called a creek. Its appropriation is therefore hardly within the right of appropriation of anything other than land for terminal purposes; but

S. T. & B. . . 4.

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the proviso is one which not merely applies to the taking of rivers and creeks; but also applies to the taking ~~of land~~ for any purposes. The prohibition is in the broadest possible words, excluding from the right of eminent domain "private springs or private water supplies."

I do not see how we can escape this proviso. Undoubtedly, the stream in question is a private water supply.

My advice is to obtain leave to take testimony under the answer; to spin along the taking of this testimony for some time; and then to negotiate for private purchase.

I await your instructions, and am

Very truly yours,

X X G X

Letter Re: Bertron, Storrs & Griscom Control of Susquehanna Electric Power Company

Susquehanna Electric Power Co.-1 200

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FEPCo 3010-1

BERTRON, STORRS & GRISCOM
BANKERS
60 WALL STREET, NEW YORK — LAND TITLE BUILDING, PHILADELPHIA

New York, May 22, 1907.

Henry F. Dimock, Esq., President,
60 Wall St., New York.

Dear Mr. Dimock:-

As you know, we were for some time negotiating with DeVictor in regard to the possibility of clearing up the Susquehanna River situation through them. These negotiations came to naught.

We have now taken an option on the Miller-Surratt properties, otherwise known as the SUSQUEHANNA ELECTRIC POWER COMPANY, which we think will accomplish what we had in view much more economically and effectively. We have asked Mr. Homer to represent us in these negotiations and I wanted to advise you. What this Company does will in no sense be antagonistic to the McCall Ferry interests, as you know but I wanted you to be apprised of the fact and ask you to notify the McCall Ferry attorneys, impressing upon them the great importance of keeping this matter exceedingly quiet. If we acquire these

interests we will want to go ahead and take options at least on certain lands, before the matter becomes public.

We have instructed Mr. Homer to look after the clearing up of the SUSQUEHANNA ELECTRIC POWER situation and to see that nothing is done antagonistic to the McCall Ferry Company. but the actual litigation to which that Company will have to resort will be conducted by Messrs. Bastjer & Surratt, in the course of which it will be necessary to bring suit, we are advised, against the Construction Company, apparently, but not actually hostile to the McCall Ferry interests. After Mr. Homer is thoroughly posted in the matter, he will take up the legal aspect of it and keep in touch with Mr. Bartlett in regard to it.

Very sincerely yours,

S. B. Elkins

Consolidation Agreements of 1908

THIS AGREEMENT Made on this, the 20 day of February in the year nineteen hundred and eight, by and among JOEL H. DeVICTOR, acting on behalf of himself and all other shareholders of the SUSQUEHANNA POWER COMPANY, as party of the first part; JOHN HENRY MILLER and WILLIAM H. SUBRATT, acting on behalf of themselves and their associates controlling the SUSQUEHANNA ELECTRIC POWER COMPANY interests, as parties of the second part; and BERTRON, STORRS & GRISCOM, acting on behalf of themselves and shareholders representing a Majority in interest and controlling the McCall Ferry Power Company, as parties of the third part.

WHEREAS the parties hereto have been heretofore interested in attempts to make separate developments upon the Susquehanna River between tide water in the State of Maryland and the foot of Cully's Falls, in the State of Pennsylvania, at the elevation of one hundred and three feet above mean low tide at Havre de Grace, as defined by bench marks placed by the Columbia and Port Deposit Railroad; and, as a result, have come into conflict the one with the others and serious litigation has resulted; and

WHEREAS it is desirable in the interest of all the parties hereto to avoid further litigation and expense and to consolidate all interests on said River between tide water and the elevation of one hundred and three feet aforesaid, to the end that the power of said River may be developed to the best advantage between these said points;

NOW, THEREFORE, THIS AGREEMENT W I T N E S S E T H In consideration of the premises and the sum of one dollar by each of the parties hereto unto the others in hand paid, the

receipt whereof is hereby acknowledged, said parties hereby agree as follows:

FIRST: (a) The party of the first part shall be regarded as controlling 30/91 of the interests on said River to be consolidated as aforesaid; (b) the parties of the second part shall be regarded as controlling 23/91 of the interests on said River to be consolidated as aforesaid; and (c) the parties of the third part shall be regarded as controlling 38/91 of the interests on said River to be consolidated as aforesaid and the shares of stock and bonds of the Susquehanna Power Company to be issued and paid for said properties shall each be divided in like proportions among the parties hereto.

Second: All interests controlled by the party of the first part if not now held by the Susquehanna Power Company shall be by appropriate conveyance or legal proceedings conveyed to it, an approximate schedule whereof is hereto attached marked Exhibit A.

Third: All interests controlled by said parties of the second part shall be transferred by appropriate conveyances of legal proceedings to the Susquehanna Power Company, an approximate schedule whereof is hereto attached marked Exhibit B.

Fourth: All interests of the McCall Ferry Power Company in or along the Susquehanna River lying in Maryland shall be by appropriate conveyances or legal proceedings transferred to the Susquehanna Power Company and all interests of the said McCall Ferry Power Company in or along

the Susquehanna River in the State of Pennsylvania lying below the foot of Cully's Falls shall be by appropriate conveyances or legal proceedings transferred to a corporation now existing or to be hereafter organized under the laws of the State of Pennsylvania, all of whose capital stock shall be transferred to and held by the Susquehanna Power Company, - approximate schedules whereof are hereto attached marked (as to Maryland properties) Exhibit C, and (as to Pennsylvania properties) Exhibit D.

By the expression "all interests" of any of the parties hereto, there is intended to be included all lands now owned directly or indirectly by such parties or their associates which were acquired for purposes of development of the power on the Susquehanna River or to facilitate such development; also all corporations in which they are interested to the extent of such interest and also any lands for which contracts of purchase have been made or options acquired; also all canals, other franchises and rights of whatsoever character and description so long as the same lie between tide water on the Susquehanna River in the State of Maryland and the foot of Cully's Falls in the State of Pennsylvania, which would be necessary, convenient or proper to a development of the power on that River between said two elevations or which might be over-flowed, damaged or affected in any manner by reason of the development of such power between said two points or any part thereof; including, also its interest in the Conowingo Land Company and any and all property and rights owned by the Proprietors of the Susquehanna Canal; as also the shares of said Company and any and all property and rights now or formerly owned by

the Tide Water Canal Company in Maryland, together with a release, acquittance and discharge in full from the Susquehanna Canal and Power Company in Pennsylvania from and against all damages, injuries or losses incident to the overflow of any of its lands, properties, rights or franchises below the foot of Cully's Falls, - but the parties of the second part shall not thereby be bound to transfer or secure the transfer of the Hugh A. Jones tract above Conowingo Bridge of the land now standing in the name or held by the Continental Trust Company purchased by said Trust Company through E. M. Allen, Junior, about 1902, 1903 or 1904 --- any equity in said properties held by the interests represented by the parties of the second part to be, nevertheless, included in the transfer to be made as aforesaid.

Fifth: The four thousand shares of the capital stock of the Susquehanna Power Company now outstanding shall be surrendered to the Trustees hereinafter mentioned, properly endorsed, for the purpose of cancellation and reissue in the proportions of 30/91, 23/91 and 38/91 to the parties hereto respectively of the first, second and third parts or their respective nominees; and, in addition thereto, there shall be issued (a) to the said party of the first part, of the issue of ten million dollars of five per cent. first mortgage gold bonds secured by Mortgage of the Susquehanna Power Company to the Girard Trust Company of Philadelphia, such additional amount of bonds as will, together with those already issued equal six hundred thousand dollars par value, upon condition precedent that the said party of the first part and his associates shall have released

and discharged the property now or heretofore owned by the Susquehanna Power Company of and from all liens or liability other than said Mortgage to the Girard Trust Company and shall have made payment and settlement of all debts and obligations of the Susquehanna Power Company; (b) The said parties of the Second part, shall receive of the said five per cent. first mortgage gold bonds four hundred and sixty thousand dollars at the par value thereof when and as soon as the said parties of the second part shall have discharged all liens, claims and balances of purchase money or option contracts, upon the interests which they are to convey under the terms hereof to the Susquehanna Power Company; and (c) the said parties of the third part shall upon delivery of all of the interests as aforesaid controlled and owned by the McCall Ferry Power Company in the State of Maryland and in the State of Pennsylvania and lying in and along the Susquehanna River south of the foot of Cully's Falls free of liens and encumbrances thereon, receive of said five per cent. first mortgage gold bonds seven hundred and sixty thousand dollars at the par value thereof.

It is the intent and purpose of the foregoing paragraph of this Agreement that said bonds shall not be delivered to the respective parties hereunder, until all mortgages, liens, debts, encumbrances, obligations, balance of purchase money's and other option contracts, hereinbefore specified as to be discharged, have been discharged, satisfied and paid by the respective parties hereto.

Sixth: It is furthermore agreed that all of the stock of the Susquehanna Power Company, whether aggregating four thousand shares as hereinbefore mentioned or as may

happen only two thousand shares, but in any event to include all of the issued and outstanding shares of said Company, shall, less necessary qualification shares be transferred with due and proper endorsements in blank to a Holding Company to be organized having a nominal capital, with full power in said Holding Company vested to have such shares transferred and restored in its name or not at its election or in the name of its nominee or nominees as to it may seem wise and expedient - the shares of such Holding Company to be held by the parties hereto in the same proportions and ratio as they shall under the terms hereof be entitled to hold and receive shares of the capital stock of the Susquehanna Power Company; and it is further agreed that all of the stock of such Holding Company shall until the completion and operation of a development of the power of the Susquehanna River within the limits aforesaid contemplated by this agreement; not to exceed however, a period of ten years, accounting from the day of the date hereof be deposited with Samuel R. Bertron and Joel H. DeVictor as Trustees unless such Trusteeship be sooner terminated by the concurrence of said Trustees or by the vote of a majority of the stock so deposited with them.

Seventh: The Trustees through the control of said Holding Company shall in their discretion either sell from time to time additional first mortgage bonds of the Susquehanna Power Company or borrow on the security thereof to provide additional money to pay for such further lands, properties, developments, improvements, franchises and rights as may from time to time in their judgment be required in order to advance, facilitate and make feasible the pro-

posed development on the Susquehanna River; as also to pay all engineering, legal and other expenses of the said Susquehanna Power Company or of the Holding Company or of the Trustees hereunder, which may be hereafter incurred with the approval of such Trustees or of the parties hereto or a majority in interest of the parties hereto and to provide moneys to pay the fixed charges, taxes, insurance and other expenses upon said property when and as same shall from time to time accrue, including interest on the bonds from time to time outstanding, in cash or bonds.

Eighth: In addition to the sums hereinbefore provided to be paid in bonds and stocks of the Susquehanna Power Company to the parties of the first, second and third parts respectively there shall be allotted and delivered to the party of the first part $25,000. par value of the said five per cent. First General Mortgage Gold Bonds of the Susquehanna Power Company in full settlement of all expenses, costs and liabilities incurred by them in reference to the preliminary development of a temporary power plant at the old Paper Millsite in Harford County, Maryland, and the Trustees shall have full power and authority, in their discretion to provide in the same manner, as is provided in Paragraph Seven hereof, the necessary moneys to complete said development and to build and construct transmission lines for the marketing of the power so produced, if in the judgment of the Trustees hereunder it shall appear wise and for the benefit and advantage of the parties hereto.

Said Trustees shall have, furthermore, full power

to vote the shares of stock of the said Holding Company deposited with them to carry out any and all of the foregoing purposes; as also to any and all other matters and things which in their judgment may become necessary, proper, expedient or convenient in order to facilitate and advance the development of the power of the Susquehanna River within the limits aforesaid, being given hereby the broadest and fullest discretion without limitation or restriction of any kind or character whatsoever; provided, however, that no construction contract shall be entered into in such manner as will cause any one share of deposited stock to obtain any advantage or benefit over any of the other deposited shares and provided further that they shall if requested secure the election of as Directors of the Susquehanna Power Company upon the demand of the party of the first part three of his nominees, of the parties of the second part, one nominee and of the parties of the third part three of their nominees.

In the event of the death of resignation of Joel H. De Victor as a Trustee hereunder, Stevenson A. Williams of Bel Air shall be and become substituted as his successor in the trusts and in like manner in the event of the death of Samuel R. Bertron, a member of his firm shall be and become substituted as his successor in the trust hereunder.

The use of the term "Susquehanna Power Company" is for convenience and shall be taken to include any other corporation which the Trustees hereunder may use for the accomplishment of the purposes by this Agreement sought to be obtained.

Obligations of the parties of the third part hereto

are conditioned upon obtaining releases and other actions by the Trustee of the McCall Ferry Company first mortgage bonds.

AS WITNESS the hands and seals of the parties hereto the day and year first written. The words "in cash or bonds" at the end of paragraph "Seventh" having been interlined prior to the execution hereof.

W.H.S.

Test. as to DeVictor
Miller
Surratt

(Signed) E.Harvey Welch

(Signed) Joel H. DeVictor (Seal)
Acting on behalf of himself and all other shareholders of the Susquehanna Power Company.

(Signed) John Henry Miller (Seal)

(Signed) Wm. H. Surratt (Seal)

Acting on behalf of themselves and their associates controlling the Susquehanna Electric Power Company interests.

(Signed) Bertron Storrs & Griscom
(Seal)
(Signed) By Rodman E. Griscom
A member of said firm--

Acting on behalf of themselves and shareholders representing a majority in interest and controlling the McCall Ferry Power Company.

EXHIBIT A.

Property and water rights (bed of river not included) of the Susquehanna Power Company in Maryland.

		Acres.
(A.)	Harford County:	
1.	Contract for purchase from E. M. Allen of the Maud Ramsey Landing,	4
2.	Contract for purchase from Allen of the easement to back the river to a limited extent over the land of "Harford County Flint Company"	40
3.	Hugh A. Jones parcel	40
4.	Charles A. Andrew parcels (formerly James C. Bell	90-1/2
5.	D. C. Wharton Smith's "Glencove property" (55 acres)	
	(a) The easement to back the river over it 15 feet higher than the present dam of S. P. Co.	
	(b) A strip 100 ft. wide from the berme of the Canal and for length extending through the "Glencove property, say	5
	(c) A covenant to purchase the balance of Glencove property for $10000. (if impaired by operations of S. P. Co. as a business site) subject to arbitration.	
6.	A strip extending entirely through the San Domingo and Eldrige Farms and Lime Kiln Lot of Charles A. Andrew 150 ft. Wide from Berme, say	5

7.	The old Paper Mill Site and contiguous parcels and islands (some of which are partly in Cecil County) including the strips purchased from Worthington heirs and Smith (Shure parcel).	328-1/2
8.	Contract with Allen for the purchase of the McCausland title to several unlocatable islands, say	20

(B.) Cecil County:

1.	The Garber farm opposite the Paper Mill Site,	141-1/2
2.	Parcel contiguous to Garber purchased from The Propr's etc.,	16
3.	Contract for purchase from Allen of his Plint Mill and water rights on Conowingo Creek,	5

(C) Pennsylvania (York County)

Contract with Allen for purchase of the Cromwell heirs parcel--Lower Chanceford, 20-1/2

EXHIBIT B.

Property and water rights of the Susquehanna Electric Power Company and Susquehanna River Electric Company of Baltimore City in Maryland.

(A.) Harford County:	Acres.
1. "John's Design" 3/4 undivided interest, say	7-8/10
2. Whiteford's Landing (the part lying between Canal and river) say,	2
3. Contract for purchase of the Trenton Flint Spar Co. lands	330
4. Contract for purchase of the Winfield S. Shure parcel,	26
5. "Maidens Mount Addition" and seven (7) Islands, 46-1/2 a. 12 ps. --35-3/4 a. (river bed and islands)	82-1/4
6. Equity in lands lying along and in river now standing in name of Continental Trust Co. being Reynolds Shonk Parker Christy etc. lots.	

		Acres.
(B).	Harford and Cecil County:	
	1. Contract for purchase of the patent "New Design" with Barton C. and Harriet French (river bed and islands.)	166
(C)	Cecil County:	
	1. Tome Farm,	317
	2. Porter's Addition to Triumph" undivided 1/2 of	20-3/4
	3. The French Hotel property continguous to "New Design"	25
	In Pennsylvania.	
A.	Eugene M. Haines about	5
B.	Riparian and flowage rights for distance of 6000 ft. on Lancaster County side over lands (W. T. Brown (B. Frank Eshelman. (Alfred M. Brown. (Timothy Haines.	

EXHIBIT C.

Property and water rights of the

McCall Ferry Power Company

In Maryland.

		Acres.
(A,)	Harford County:	
1.	Hugh Dooley parcel	25
2.	Daniel Flandis parcel,	2-3/4
3.	James R. Whiteford parcel	14
4.	Farmer's Warehouse parcel,	11-1/2
5.	Sarah E. Orr parcel,	52-3/4
6.	"John's Design" 1/4 undivided interest (the whole contains 10-1/2 a. 26 sq. ps.) say	2-6/10
7.	Tidewater Canal property,	
	(a) The Canal, 47 a. ---53 a.	100
	(b) Archer's Island,	27
	(c) Havre de Grace Lots, square 188) square 208) square 209) say	50
8.	Easement and power to flood and destroy Housman's railroad.	
9.	Easement and power to flood Conowingo Bridge Co.	
10.	Grace Shure parcel (below Harlow's proposed dam)	3-6/10

(B.) Harford and Cecil County.	Acres.
1. Patent "Progress" bed of river,	329-1/2
2. Patent "New Enterprise" do.	1065-1/2

(C.) Cecil County:

1. The Prop'rs Susquehanna Canal, 77 a. --43 a.	120
2. Conowingo Land Co. say undivided 2/3 of	850
3. "Foster's Addition to Triumph" undivided 1/2 in Conowingo L. Co.,	20-3/4

EXHIBIT C.

Starts at Dam Line

McCall

Property — Left Bank --East Side.
PENNSYLVANIA.

Former Owner	Frontage. Foot Cully Falls	Title.
Snively & McCall	2300 feet	Fee
D. H. Wissler	3100 "	"
Mary Cutter	2000 "	"
H. C. Demuth	1420 "	"
Alvan Cutler	1700 "	"
W. A. Brown	3220 "	"
Wm. Sweigert	1250 "	"
Emil Sechler	4000 "	"
Rosanna Long	1180 "	"
Thomas McSparran	2460 "	"
Taylor Sprout	1920 "	"
	Right Bank--West Side	
	Foot Cully's	
H. McCall & McCall F. P. Co.	2750	Each holds 1/2 int.
John Scott	500	
M. Craig tract west of Canal back of this owned by McCall Ferry Power Co.		
Mud Island	700	
Cold Cabin	1150	
R. & L. Robinson	3440	
L. H. Semple	3500	
Wiley or McLachlan	2050	
J. Osmun	580	
Chas. Cooper tract	2550	
Levi Cooper	5700	
Thos. J. Cooper	750	
	Islands: lying between Cully's Falls and State line owned by McCall Co.	
Upper Bare		
Lower Bare		
Big Chestnut		
Johnson		
High or Bench (?)		

THIS AGREEMENT made on this, the 30th day of June in the year nineteen hundred and eight, by and among JOEL H. DeVICTOR, acting on behalf of himself and all other shareholders of the SUSQUEHANNA POWER COMPANY, as party of the first part; JOHN HENRY MILLER and WILLIAM H. SURRATT, acting on behalf of themselves and their associates controlling the SUSQUEHANNA ELECTRIC POWER COMPANY interests, as parties of the second part; and BERTRON, STORRS & GRISCOM, acting on behalf of themselves and shareholders representing a majority in interest and controlling the McCALL FERRY POWER COMPANY, as parties of the third part.

WHEREAS the parties hereto have heretofore made an Agreement, under date of February 20th, 1908, a copy of which is hereby made a part of this Agreement; and

WHEREAS it has since become apparent that in making said Agreement the parties thereto failed to make proper provision to enable them to meet the preliminary charges and expenses necessary to make the hydro-electric development contemplated by said Agreement; and

WHEREAS the party of the first part thereto has requested that clauses Fifth and Sixth of said Agreement be modified as hereinafter mentioned; and also that the requirement as a condition precedent to the carrying out of said Agreement, that said party of the first part take up and retire the first and second mortgage bonds of the Susquehanna Power Company, amounting in the aggregate to one hundred and fifty thousand dollars, be waived;

NOW, THEREFORE, in consideration of the premises and the desire of the parties hereto to make provision as hereinbefore referred to, to meet the expenses of said development and to grant the request of the said party

of the first part and the sum of ten dollars, the said parties hereto agree as follows:

FIRST: The first and second mortgages on the Susquehanna Power Company property not to exceed in the aggregate one hundred and fifty thousand dollars shall not be required to be released, as a condition precedent to the carrying of said Agreement into effect, but in lieu thereof there shall be held by the Girard Trust Company, Trustee, one hundred and fifty thousand dollars of the bonds provided to be paid to the said Joel H. DeVictor and his associates.

SECOND: There shall be issued to the said Joel H. DeVictor in addition to the bonds by said Agreement provided, one hundred and ninety-five thousand dollars of the general mortgage bonds of the Susquehanna Power Company and to Miller and Surratt parties of the second part an additional one hundred and sixty-two thousand dollars of said bonds and to Bertron, Storrs & Griscom an additional two hundred and sixty-eight thousand dollars of said bonds, which bonds excepting twelve thousand five hundred dollars to be retained by Miller and Surratt and twenty-one thousand dollars to be retained by Bertron, Storrs & Griscom as their respective absolute property, shall as soon as received by the said parties respectively be transferred and delivered to Joel H. DeVictor and S. Reading Bertron, Trustees under said Agreement, for the purpose of using said bonds to meet said preliminary charges and expenses and also to further the interests of the parties to said Agreement of February 20th, 1908, and their associates in the Susquehanna Power Company in such manner as to the said Trustees may seem right, proper and expedient without any

responsibility on the part of the said Trustees to account for the use or application of said bonds to any person or persons whomsoever, except by the request of a majority in interest of the parties to said afore-mentioned Agreement of February 20th, 1908.

THIRD: Paragraph "SIXTH" of said Agreement shall be modified by striking out from the end of said paragraph the words: "or by a vote of a majority of the stock so deposited with them" and substituting in lieu thereof "or by a vote of five-sevenths (5/7) of the directors of the Susquehanna Power Company", and the latter part of Paragraph EIGHTH of said Agreement, Page 6, referring to the successors of said Trustees in the event of their death or resignation, shall be modified to read as follows: "In the event of the death or resignation of Joel H. DeVictor as Trustee hereunder, the shareholders represented by the said Joel H. DeVictor shall name his successor in the trust, and in like manner in the event of the death or resignation of S. R. Bertron as Trustee hereunder, the shareholders represented by the said S. R. Bertron shall name his successor in the trust."

FOURTH: It is furthermore agreed that there shall be elected as Directors of the "Holding Company" one representative of each of the three parties to said Agreement of February 20th, 1908, and should the Directors of said Holding Company be more than three in number then such number shall be increased in such manner as to always maintain in said Board an odd number, and the representation of the parties of the first part and the parties of the third part on the Board of Directors of said Holding Company shall always be equal.

FIFTH: Except as herein expressly modified, all

of the terms and provisions of the Agreement of February 20th, 1908, are expressly ratified and confirmed.

AS WITNESS the hands and seals of the parties hereto the day and year first above written.

TEST:- as to all

BERTHA A. LOCKARD.

JOEL H. DeVICTOR (SEAL)
Acting on behalf of himself and all other shareholders of the Susquehanna Power Company.

JOHN HENRY MILLER (SEAL)
WM. H. SURRATT (SEAL)
Acting on behalf of themselves and their associates controlling the Susquehanna Electric Power Company interests.

- - - - - - - - - - - - - - -(SEAL)

BY- - - - - - - - - - - - - -(SEAL)
A member of said firm--
Acting on behalf of themselves and shareholders representing a majority in interest and controlling the McCall Ferry Power Company.

Baltimore, July 1st/08.

Mr. Joel H. DeVictor,

Dear Sir,

We having, by a Supplementary Agreement waived the requirement of the payment of the first and second mortgages of the Susquehanna Power Company as a condition precedent to the carrying out of the terms of our arrangement and Contract of February 20, 1908, with you; and being now advised, that there are sundry debts due and owing by the Susquehanna Power Company and the Maryland Construction Company, aggregating sixty thousand nine hundred and eighty-six dollars and sixty-six cents ($60,986.66) a schedule whereof, duly initialed by you, has been handed to Francis T. Homer, we beg to state that if you will turn over or cause to be turned over to Mr. Homer sixty-one (61) of the General Mortgage Thirty Year Five Per Cent. Gold Bonds of the Susquehanna Power Company of the par value of one thousand dollars ($1,000.00) each to be applied by him in an effort to compromise and settle said claims, that we are agreeable to the Contract of February 20, 1908 and the Supplement thereto of June 30, 1908 being carried out upon the understanding that we waive any personal obligation or liability on your part to secure a settlement and adjustment of the aforementioned indebtedness of $60,986.66 - it being understood, however, that neither we nor Mr. Homer are to assume any personal liability to see said debts paid, except to the extent that and so far as the same can be liquidated through the medium of said sixty-one bonds or the proceeds thereof.

Very truly yours,
Bertron, Storrs & Griscom
by Rodman E. Griscom
WM. H. SURRATT
JOHN HENRY MILLER.

SCHEDULE.

SUSQUEHANNA POWER COMPANY CREDITORS.

Notes outstanding	8,202.70
James M. Harlow	1,000.00
Joel H. DeVictor	693.74
W. M. Allen, Jr.	180.00
L. H. Weddrop	146.00
B. Harvey Welch	1,397.92
Morgan & Lewis, Sundry expense account	312.14
Morgan & Lewis	14,500.00
Philip H. Close	1,075.00
Sheriff, Harford County	620.35
Sheriff, Cecil County	393.05
Allen, Lane & Scott	75.00
R. S. Joyce & Co.	7.00
Conowingo Bridge Co.	15.30
Girard Trust Co.	188.25
F. A. C. Perrine	1,207.62
S. A. Williams	2,163.40
Trust Co. of North America	5.00
W. A. Caldwell	92.50
A. F. Shure	45.75
C. W. Love	46.22
J. Hayward Harlow	263.50
James H. Harlow	5,522.06
Robinson	5,000.00
Carver	500.00
Harlan	500.00
Warburton	1,000.00
E. B. Warner	1,000.00
L. H. Weddrop	500.00
Sundry small accounts	1,700.00
	48,351.50
American Bank Note Company	3,750.00
	52,101.50

Agreement for Sale of Susquehanna Power Company Bonds etc

THIS AGREEMENT, made this 5th day of March 1912, by and between PENNSYLVANIA WATER & POWER COMPANY, as party of the first part, hereinafter called "The Pennsylvania Company", and BERTRON, GRISCOM & JENKS, of New York City, the SUSQUEHANNA POWER COMPANY, a corporation of Maryland, and the SOWEGO WATER & POWER COMPANY, a corporation of Pennsylvania, as parties of the second part, hereinafter called the "Purchasers".

W I T N E S S E T H :

That for and in consideration of the sum of One Dollar, by each of the parties hereto to the other in hand paid, the receipt whereof is hereby acknowledged, and of the mutual covenants hereinafter contained, and for divers other valuable considerations as follows:

FIRST: The Pennsylvania Company covenants and agrees:

(a) To sell at any time within sixty days from the date hereof to the Purchasers 70% of the General Mortgage Five Per Cent. Thirty Year Gold Bonds of the Susquehanna Power Company, of the principal value of $1,000 each, with the coupon maturing November 1st, 1968, and all subsequent coupons attached, and also 1,500 shares of the Susquehanna Properties Company capital stock, of the par value of $1.00 per share, at and for the price or sum of $200,000. in cash, of which said sum $10,000. has been paid at the time of the signing hereof and the receipt whereof is hereby acknowledged.

(b) To accept and retain as liquidated damages for a breach of this contract of sale the said $10,000. paid contemporaneously herewith should the Purchasers fail to pay the balance of $190,000 within the time aforesaid.

(c) The Purchasers shall not be entitled to carry out the terms of the purchase hereunder except upon condition that they will at the same time take over from the Pennsylvania Company the Conowingo Land Company mortgage at the principal value thereof, with all interest in arrears, and the reasonable cost to the Pennsylvania Company thus far incurred in its foreclosure suit under the said mortgage now pending in the Circuit Court of Cecil County, Maryland, including attorney's fees and all other expenses.

(d) The Columbia & Port Deposit Railway Company and the Philadelphia, Baltimore & Washington Railroad Company entered into with the McCall Ferry Power Company, an agreement, dated July 2nd, 1906, and a supplemental agreement, dated August 13th, 1906, providing for the relocation and improvement of a part of the road-bed, tracks, and appurtenances of said railway company, in pursuance whereof said relocated and improved road-bed, track and appurtenances have been completed between Safe Harbor in Lancaster County, Pa., and a point 850 feet south of Fishing Creek Station in said County and State.

By agreement dated March 24th, 1908, between said railway and railroad companies respectively, and the Susquehanna Power Company, a corporation of Maryland, an assignment of the benefits of said contract, with certain modifications, was assented to by said railway and railroad companies, and said Susquehanna Power Company accepted by said companies as obligor in lieu and place of said McCall Ferry Power Company.

The purchasers shall not be entitled to a delivery of the 703 5% general mortgage gold bonds of the Susquehanna Power Company of the principal value of $1000.

each with coupons attached as hereinbefore mentioned, or of the 1500 shares of the capital stock of the Susquehanna Properties Company, although the balance of purchase price, $190,000. shall have been paid in full, until they shall have secured either a release to be executed to the Pennsylvania Company by said railway and railroad companies respectively, releasing and discharging the said Pennsylvania Company from any and all liability whatsoever upon or by reason of the aforementioned agreement and supplemental agreement, dated July 2nd, 1906, and August 13th, 1906, respectively, in so far as the same apply to the relocation and improvement of the right of way, road-bed, track and appurtenances of the said railway company south of a point 850 feet south of Fishing Creek Station as in said agreement and supplemental agreement mentioned; or, alternately, give to the Pennsylvania Company a bond with either the Susquehanna Power Company, its successors or assigns, or the Sewego Water & Power Company, its successor or assigns, as principal, and an existing surety company, as surety, in the penalty of $100,000. conditioned to indemnify and save harmless the said Pennsylvania Company, its successors and assigns, in the same manner as if the foregoing release had been executed and delivered by said railway and railroad company, which said bond shall remain in full force and virtue in law until the Susquehanna Power Company, its successors or assigns, shall have relocated and improved said roadbed, track and appurtenances from a point 850 feet south of Fishing Creek Station, in accordance with the obligations, if any, resting upon the Pennsylvania Company as assignee of the purchaser of the property, franchises and privileges of the McCall Ferry Power Company at the sale had in pursuance of the foreclosure of the first mortgage bonds of the said McCall Ferry Power Company, or until said bonds shall be

discharged by the furnishing of a release or releases as hereinbefore provided.

SECOND: The Purchasers covenant and agree that they will within sixty days from the date hereof:

(a) Pay the balance of $190,000. for the said 703 of the General Mortgage Five Per Cent. Thirty Year Gold Bonds of the Susquehanna Power Company, of the principal value of $1,000. each, with the aforementioned coupons attached, and the said 1,500 shares of Susquehanna Properties Company stock.

(b) Will purchase the Conowingo Land Company mortgage aforesaid at the principal value thereof, with the accrued unpaid interest thereon, and will reimburse the said Pennsylvania Company for its reasonable cost incurred in the aforementioned foreclosure suit, including attorney's fees and all other expenses, and that upon the failure of their performance of either (a) or (b) or both of them they will forfeit as liquidated damages to the Pennsylvania Company the $10,000. this day by them hereunder paid.

(c) The purchasers covenant and agree not to demand a delivery of the aforementioned bonds and shares of stock until they shall have complied with the provisions of Paragraph 1, Sub-Paragraph d., hereof, but assent to the holding of said bonds and stock by the Pennsylvania Company as security for the performance of one or the other alternatives set forth in said Paragraph 1, Sub-Paragraph d., as a condition to the right of said purchasers to demand delivery of said bonds and stock.

THIRD: The Pennsylvania Company covenants and agrees to permit the purchasers to defend any suit or suits brought against the Pennsylvania Company under said Agreement of July 2nd, 1906 and supplement thereto of August 13, 1906, at their, the said purchasers own expense and to furnish said purchasers and their attorneys with all documents, agreements, correspondence and evidence in the possession of the said Pennsylvania Company and to facilitate and assist the said purchasers and their attorneys, without further compensation in defending any such suit or suits.

IN WITNESS WHEREOF, the parties hereto have duly executed this agreement in duplicate originals under their respective seals.

PENNSYLVANIA WATER & POWER COMPANY

Chas. G. Clarke
V.P. President.

ATTEST:

Secretary.

Witness Chas. J. Jones

Otto Kolstad

SUSQUEHANNA POWER COMPANY,

George R. Willis
President.

ATTEST:

Chas. J. Kaufmann
Ass't Susquehanna Power Co.

SOWEGO WATER & POWER CO.

Fred Williams
President.

ATTEST: S. J. Caldwell Ass't Sowego Water & Power Co.

Vol. VIII

TRANSCRIPT OF RECORD

(Pages 3205 to 3448)

Supreme Court of the United States

OCTOBER TERM, 1951

No. 428

PENNSYLVANIA WATER AND POWER COMPANY AND SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND, PETITIONERS,

vs.

FEDERAL POWER COMMISSION ET AL.

No. 429

PENNSYLVANIA PUBLIC UTILITY COMMISSION, PETITIONER,

vs.

FEDERAL POWER COMMISSION

ON WRITS OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

PETITIONS FOR CERTIORARI FILED NOVEMBER 16, 1951

CERTIORARI GRANTED FEBRUARY 4, 1952

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32	Cost of Substitute Plant for Penn Water as of December 31, 1945	3329
33	Testimony and Exhibits of Dr. H. B. Dorau Relating to the Supply of Money and the Value of the Dollar	3367
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46	Rate of Return Study	3389

EXHIBIT NO. 29.

[22149]

PENNSYLVANIA WATER & POWER COMPANY
EXPERIENCED COST OF CAPITAL

Note

For Exhibit No. 29 (p. 3206), please turn to Card 86.

Schedule 1

Pennsylvania Water & Power Company
Monthly Earnings - Price Ratios
January, 1912 to December, 1945

Year	January	February	March	April	May	June	July	August	September	October	November	December
1912	1.61	1.86	2.09	2.16	2.42	2.66	2.95	3.14	3.29	3.08	3.23	3.31
1913	3.21	3.27	3.53	3.46	3.54	3.87	3.72	3.44	3.35	3.72	4.01	4.02
1914	4.12	4.08	4.04	4.27	4.43	4.62	4.62	5.04	5.26	5.34	5.42	5.51
1915	5.54	5.74	5.75	5.77	5.95	6.23	6.22	6.05	5.89	5.82	5.89	6.01
1916	6.12	6.17	6.57	6.55	6.86	6.91	6.95	7.04	7.09	7.01	6.76	6.88
1917	7.08	7.30	7.63	7.78	8.21	8.56	8.61	8.52	9.02	9.27	9.82	10.86
1918	10.62	10.56	10.41	10.38	10.26	10.64	10.60	10.58	9.99	9.21	9.14	8.87
1919	9.04	9.02	9.06	8.60	8.44	8.23	8.35	8.59	8.69	8.68	8.85	9.36
1920	9.21	9.64	9.29	8.93	9.41	9.58	9.34	9.49	9.28	9.26	9.33	9.60
1921	9.69	9.38	9.51	9.22	9.12	9.05	9.28	9.39	9.34	8.96	8.89	8.52
1922	8.41	8.19	7.97	7.58	7.36	7.39	7.50	7.19	6.96	6.86	7.27	7.34
1923	7.45	7.39	7.26	7.25	7.37	7.45	7.62	7.76	7.76	7.89	7.94	8.12
1924	7.56	7.67	7.60	7.67	7.73	7.84	7.51	7.62	7.37	6.99	6.98	7.12
1925	7.25	7.24	7.28	7.46	7.06	6.85	6.49	5.98	6.43	6.23	6.38	6.39
1926	6.28	6.64	6.96	7.69	7.51	7.48	7.20	7.10	6.86	6.65	6.64	6.24
1927	6.30	6.21	6.31	6.17	5.87	6.03	5.75	5.19	5.05	4.47	4.61	4.49
1928	4.53	4.77	4.88	4.33	4.14	4.49	4.78	4.66	4.58	4.74	4.58	4.68
1929	4.36	4.27	4.74	4.92	4.97	4.32	4.15	3.91	4.30	4.63	5.53	5.92
1930	5.67	5.13	4.98	4.93	5.04	5.53	5.92	6.14	6.34	6.92	7.49	7.86
1931	7.56	7.17	6.88	7.36	8.04	8.20	7.97	7.58	8.67	9.44	8.91	9.64
1932	9.76	9.56	9.42	11.05	11.80	13.07	12.55	10.41	8.99	9.50	9.62	9.51
1933	8.50	9.09	10.43	11.18	9.68	8.64	8.96	9.06	10.47	10.04	10.20	10.49
1934	10.03	9.23	9.06	8.96	8.87	9.18	9.03	8.99	9.09	8.86	9.37	9.31
1935	9.02	8.74	8.35	8.18	7.41	7.13	6.92	6.68	6.64	6.83	6.02	5.67
1936	5.65	5.56	5.55	5.34	5.37	5.34	5.08	4.98	5.08	5.10	5.32	5.44
1937	5.37	5.34	5.75	6.09	6.37	6.37	6.63	6.34	6.56	7.43	7.46	7.61
1938	7.18	7.81	8.35	8.22	8.11	8.12	8.10	8.21	8.28	7.87	7.42	7.46
1939	7.10	6.69	6.42	6.64	6.66	6.65	6.57	6.65	7.08	7.18	7.10	7.43
1940	7.26	7.31	7.68	7.39	8.29	8.45	8.23	8.69	8.92	8.86	8.82	8.94
1941	9.07	9.19	8.94	9.37	9.55	9.56	9.40	9.59	10.05	10.65	11.27	12.54
1942	12.53	11.41	12.44	11.94	11.62	10.82	10.51	10.29	10.55	10.62	10.08	9.88
1943	9.40	8.89	8.79	8.95	8.40	7.96	7.49	7.55	7.68	7.71	8.00	7.90
1944	7.77	7.64	7.76	8.07	8.03	7.71	8.00	8.02	8.64	9.28	9.06	8.66
1945	8.65	7.95	7.94	7.51	7.30	7.11	7.15	7.10	6.72	6.41	6.24	6.38

Schedule 2

Pennsylvania Water & Power Company
Gross Income, Its Disposition and Income Per Share of Common Stock(a)
1911 - 1945

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
		Income Deductions		Preferred Stock Requirement	Preferred Stock and Prior Requirements		Available for Common Stock		Available Per Common Share at End of Year		Dividends Paid per Common Share (at Dec. 31)	
Year	Gross Income	Amount	Percent of Gross Income		Amount	Percent of Gross Income	Amount	Percent of Gross Income	As Adjusted(a)	As Reported(b)	Amount	Percent of Earnings Reported Available(c)
1911	$ 417,326	$ 381,125	91.3	-	$ 381,125	91.3	$ 36,201	8.7	$ .43		-	-
1912	569,908	384,139	67.4	-	384,139	67.4	185,769	32.6	2.19		-	-
1913	630,000	434,500	69.0	-	434,500	69.0	195,500	31.0	2.30			
1914	765,552	443,575	57.9	-	443,575	57.9	321,978	42.1	3.79		$ 4.00	105.5
1915	858,300	514,278	59.9	-	514,278	59.9	344,022	40.1	4.05		4.00	98.8
1916	991,000	521,150	52.6	-	521,150	52.6	469,850	47.4	5.53		5.00	90.4
1917	1,066,300	518,550	48.6	-	518,550	48.6	547,750	51.4	6.45		5.00	77.5
1918	1,105,800	518,340	46.9	-	518,340	46.9	587,460	53.1	6.92		6.00	86.7
1919	1,149,300	532,850	46.4	-	532,850	46.4	616,450	53.6	7.26		6.00	82.6
1920	1,174,000	528,550	45.0	-	528,550	45.0	645,450	55.0	7.60		7.00	92.1
1921	1,196,290	524,938	43.9	-	524,938	43.9	671,352	56.1	7.90		7.00	88.6
1922	1,203,190	535,144	44.5	-	535,144	44.5	668,046	55.5	7.86		7.00	89.1
1923	1,354,600	593,900	43.8	-	593,900	43.8	760,700	56.2	7.79		7.00	89.9
1924	1,702,100	755,050	44.4	-	755,050	44.4	947,050	55.6	8.81		8.00	90.8
1925	1,856,300	750,000	40.4	-	750,000	40.4	1,106,300	59.6	10.29		8.00	77.7
1926	1,916,900	745,100	38.9	-	745,100	38.9	1,171,800	61.1	10.90		8.00	73.4
1927	2,009,400	740,300	36.8	-	740,300	36.8	1,269,100	63.2	2.95		2.50	84.7
1928	2,507,500	845,000	33.7	-	845,000	33.7	1,662,500	66.3	3.87		2.50	64.6
1929	2,717,600	840,200	30.9	-	840,200	30.9	1,877,400	69.1	4.37		3.00	68.6
1930	2,855,100	914,100	32.0	-	914,100	32.0	1,941,000	68.0	4.52		3.00	66.4
1931	3,096,300	1,040,163	33.6	-	1,040,163	33.6	2,056,142	66.4	4.78	4.78	3.00	62.8
1932	3,184,007	1,061,900	33.4	-	1,061,900	33.4	2,122,107	66.6	4.94	4.94	3.00	60.8
1933	3,169,640	1,064,220	33.6	16,873	1,081,093	34.1	2,088,547	65.9	4.86	4.86	3.00	61.7
1934	3,197,664	1,059,446	33.1	19,145	1,078,591	33.7	2,119,073	66.3	4.93	4.93	3.00	60.9
1935	3,327,970	1,055,780	31.7	107,465	1,163,245	35.0	2,164,725	65.0	5.04	5.09	4.00	78.6
1936	3,232,458	1,054,519	32.6	107,465	1,161,984	35.9	2,070,474	64.1	4.82	4.82	4.00	83.0
1937	3,356,773	1,099,662	32.8	107,465	1,207,127	36.0	2,149,646	64.0	5.00	5.00	4.50	90.0
1938	3,589,794	1,095,557	30.5	107,465	1,203,022	33.5	2,386,772	66.5	5.55	5.55	4.50	81.0
1939	3,001,200	710,500	23.7	107,465	817,965	27.3	2,183,235	72.7	5.08	4.81	4.00	83.2
1940	3,039,084	755,800	24.9	107,465	863,265	28.4	2,175,819	71.6	5.06	4.67	4.00	85.7
1941	3,003,416	773,581	25.8	107,465	881,046	29.3	2,122,370	70.7	4.94	4.66	4.00	85.8
1942	3,020,844	743,804	24.6	107,465	851,269	28.2	2,169,575	71.8	5.05	4.93	4.00	81.1
1943	2,989,392	730,530	24.4	107,465	837,995	28.0	2,151,397	72.0	5.01	4.67	4.00	85.7
1944	3,037,468	719,816	23.7	107,465	827,281	27.2	2,210,187	72.8	5.14	4.77	4.00	83.9
1945(d)	3,042,545	754,994	24.8	107,465	862,459	28.3	2,180,086	71.7	5.07	5.07	4.00	78.9

(a) Income as reported to stockholders is adjusted for the effect of non-recurring items, in order to state prospective income on the basis of the operating, demand and cost conditions existing during each past year, by reference to information supplied in the annual reports for that and prior years. The nature of each adjustment and certain other information available to stockholders with respect to prospective income are indicated in the attached notes.

(b) See attached "notes on reported earnings per share".

(c) Adjusted earnings per share, 1914-1930; reported earnings per share, 1931-1945.

(d) Moody's Public Utilities, Supplement, p. 1516. February 20, 1946.

Notes on Schedule 2

[22153] (page 1)

Pennsylvania Water & Power Company

Gross Income, its Disposition and Income per Share of Common Stock
1911-1945

1911

The plant was not considered in operation until 1911. 84,950 shares of $100 par value common stock had been issued in 1910.

$30,000 "transferred to contingent fund" by credit to surplus is excluded from gross income. The purpose of the transfer to "contingent fund" is not explained in the report for 1911. The income statement includes no provision for depreciation. At the end of 1911 $7,680,000 principal amount of 5% bonds, with interest requirements of $384,000, were outstanding, but no adjustment is made for this difference.

The 1910 report stated that expected income from signed contracts would reach $700,000, with capacity available for additional contracts. Not expected to be reached in the first year of operation. The income of last half of 1911 was double that of the first half. Results for the year obviously do not indicate normal operation. Development of additional storage and an additional unit of 16,000 hp. to be installed during 1912 was being planned by the engineers.

A pro-forma statement on the basis of the $700,000 is as follows:

Normal power sales	$700,000
Operating expense and taxes (a)	100,000
Contingency appropriation (against revenue variation, etc.)	30,000
Balance for investors	$570,000
Bond requirements (including bonds to be sold in 1912)	396,500
Balance for common stock	$173,500
Per share on 84,950 shares	$ 2.042

(a) Allowing for increased maintenance for plant operating on normal basis

1912

$50,000 "transferred to contingent account" is excluded from gross income. No provision was made for depreciation by charges to operating expenses or otherwise.

The additional unit of 16,000 hp. was placed in operation on November 1. A contract was entered into for supply to the Edison Electric Company at Lancaster, Pa., to be effective May 1, 1913, and it was announced that an additional unit of 16,000 hp. capacity (seventh) would be installed in 1913.

1913

The annual report states that "net revenues" of $302,662 (after interest on first mortgage bonds) was "disposed of as follows:

1. Transferred to depreciation fund	$150,000
2. Transferred to sinking fund	100,000
3. Transferred to contingent fund	50,000
Surplus carried to profit and loss	2,662."

[22154] (page 2)

This disposition includes the first provision for depreciation and an advance contribution to the sinking fund. The provision of $250,000 ($150,000 plus $100,000 out of a $200,000 payment by the Pennsylvania Railroad) as the equivalent of depreciation expense for the period of three years may suggest an annual allowance of from $80,000 to $90,000. It was reported that transmission improvements were expected to be "paid for" out of savings of energy currently being lost on account of overloading of existing circuits. Deduction is not made for both depreciation and contingent reserve appropriations.

Therefore, reported income available is adjusted as follows:

Reported gross income	$709,767
Less provision for depreciation	79,767
Adjusted gross income	$630,000
Bond requirement (including $185,000 of treasury bonds)	434,500
Balance for common stock	$195,500
Per share on 84,950 shares	$ 2.301

It was announced that the seventh unit was placed in operation on November 1, that the eighth unit (16,000 hp.) would be installed during 1914 and that the stock of the company would be "placed on a dividend basis in the near future."

1914

Reported net income in the amount of $411,978, together with a balance in earned surplus of $18,532 at the beginning of the year, was disposed of by the declaration of

common dividends in the amount of $339,800 and a transfer of $90,000 "to contingent fund," leaving a balance of $710 in earned surplus.

The annual report included an explanation of the contingent fund as a reserve to equalize variations in water flow. The year 1914 was one of low water; $107,340 was charged to "contingent fund" and credited, apparently, to operating revenue. The eighth unit (16,000 hp.) was placed in operation on December 16, making a total of 112,000 hp. It is stated that no further construction expenditures were contemplated before 1917.

Reported gross income of $855,552 is adjusted by deduction of the contingent fund provision of $90,000. No provision was made for depreciation.

If the reported income deductions were adjusted to a year end basis, the balance for common stock would be $306,800 and the earnings per share would be $3.61 instead of $3.79.

1915

The annual report states that additional construction must be considered during 1916 to increase the capacity of the plant.

$73,164.57 was reported as "transferred to contingency fund". Since no provision is made for depreciation, reported gross income is adjusted by deducting approximately $90,000 instead of $73,164.57. If the reported income deductions of $514,278 were adjusted to a year end basis ($521,350), the balance for common stock would be $396,950 and the earnings per share would be $3.97.

[22155] (page 3)

1916

Reported net income in the amount of $619,850, together with a balance in earned surplus of $21,798 at the beginning of the year, was disposed of by the declaration of common dividends in the amount of $382,275, a transfer

of $100,000 to "construction account," and a transfer of $150,000 to "depreciation fund," leaving a balance of $9,373 in earned surplus.

No construction was reported other than deepening of tailrace, which was being paid for out of available cash. Reported gross income of $1,141,000 is adjusted by deduction of $150,000, the amount credited to depreciation.

If the reported income deductions of $521,150 were adjusted to a year end basis ($518,550), the balance for common stock would be $472,450 and the earnings per share would be $5.56.

The quarterly dividend rate was increased to 1¼% beginning with the third quarter of 1916.

1917

Reported net income in the amount of $697,717, together with balance in earned surplus of $9,373 at the beginning of the year, was disposed of by the declaration of common dividends in the amount of $424,750, a transfer of $150,000 to "contingent account," a transfer of $75,000 to "reserve for sinking fund," and a charge of $50,500 representing "Red Cross subscription," leaving a balance of $6,840 in earned surplus.

Gross income is adjusted by excluding the $150,000 credited to the "contingent fund".

If the reported income deductions of $518,550 were adjusted to a year end basis ($515,600), the balance for common stock would be $550,600 and the earnings per share would be $6.48.

1918

Reported net income in the amount of $737,496, together with a balance in earned surplus of $6,840 at the beginning of the year, was disposed of by the declaration of common dividends in the amount of $467,225, a transfer of $150,000 to "contingent account," a transfer of $75,000 to "reserve for sinking fund," and a charge of $45,500 repre-

senting "Red Cross subscription," leaving a balance of $6,611 in earned surplus. Reported gross income is adjusted by excluding the $150,000 credited to the "contingent fund".

It was reported that sales to utility customers provide an increasing load factor because of decreasing proportion of total load carried by hydro plant.

If the reported income deductions of $518,340 were adjusted to a year end basis ($532,850), the balance for common stock would be $572,950 and the earnings per share would be $6.75.

The quarterly dividend rate was increased to 1½% beginning with the third quarter of 1918.

[22156] (page 4)

1919

Reported "net revenue" of $766,406, together with a balance in earned surplus of $6,611 at the beginning of the year, was disposed of by the declaration of common dividends in the amount of $509,700, a transfer of $150,000 to "contingent account," a transfer of $75,000 to "reserve for sinking fund," and a charge of $35,000 representing a donation to United War Work, Inc., leaving a balance of $3,317 in earned surplus.

Gross income is adjusted by excluding the $150,000 credited to "contingent fund."

1920

Reported "net revenue" of $815,410, together with a balance in earned surplus of $3,317 at the beginning of the year, was disposed of by the declaration of common dividends in the amount of $552,175, a transfer of $170,000 to "depreciation reserve," and a transfer of $95,000 to "contingent account," leaving a balance of $1,552 in earned surplus.

The annual report indicates adoption of depreciation accounting. The withdrawals from "contingent fund"

have been insignificant and it is reasonable to consider further credits to the "contingent account" as segregations of surplus. Reported gross income is adjusted by excluding the $170,000 credited to the depreciation reserve but not the $95,000 transferred to the "contingent account".

If the reported income deductions of $528,550 were adjusted to the year end basis ($523,950), the balance for common stock would be $650,050 and the earnings per share would be $7.65.

A new contract with the Baltimore Company provided higher charges for power. The need for keeping rates favorable to the customers, as a means of assuring permanence of the market, was recognized. Attention was called to the settling of "river coal" in the reservoir and the possibility of its recovery on an attractive basis.

The quarterly dividend rate was increased to 1¾% beginning with the third quarter of 1920.

1921

Reported "net revenue" of $841,477, together with a balance in earned surplus of $1,552 at the beginning of the year, was disposed of by the declaration of common dividends in the amount of $594,650, a transfer of $170,125 to "depreciation reserve" and a transfer of $75,000 to "sinking fund reserve," leaving a balance of $3,254 in earned surplus.

Reported gross income is adjusted by excluding the $170,125 credited to the depreciation reserve.

If the reported income deductions of $524,938 were adjusted to the year end basis ($536,200), the balance for common stock would be $660,100 and the earnings per share would be $7.70.

The contingent fund was charged on account of the subnormal river flow during 1921. The recovery of river coal was started and a three-way contract involving the traction load in Baltimore was entered into.

[22157] (page 5)

1922

The reported "balance brought down" (revenue less expenses, taxes and maintenance) of $1,456,400 is adjusted by deducting $173,210 transferred to depreciation reserve and $80,000 transferred to "contingent fund" by charges to earned surplus. Because of low water conditions $362,900 was withdrawn from the contingent fund. Therefore, the inclusion of the transfer to "contingent fund" is reconsidered for this year.

If the adjustment of gross income were limited to the charge for depreciation and if the reported income deductions of $535,144 were adjusted to the year end basis ($551,950), the balance for common stock would be $731,250 and the earnings per share would be $8.61.

It was reported that construction of a steam plant to burn river coal and completion of the hydroelectric development were being considered.

1923

Frequency converter equipment of 13,000 hp. was reported installed. Two additional generating units of 20,000 hp. each (66 instead of 25 cycle), were under construction, and were expected to be completed by April 1, 1924. Agreements to be effective April 1, 1924 were made with the Edison Light and Power Company of York, Pa. and with the Chester Valley Electric Company of Coatesville, Pa., for wholesale delivery of power, and related transmission lines were under construction.

The reported "balance brought down" (revenue less expenses, taxes and maintenance) was $1,530,024; $175,410 was transferred to depreciation reserve and $93,000 to "contingent fund" by charges to earned surplus. The balance in the "contingent fund" is $730,500 and income is not adjusted for the additional transfer.

Dividends were paid on 12,743 additional $100 par value shares, outstanding during the third and fourth quarters, making a total of 97,693 shares.

Reported income is adjusted as follows:

Gross revenue		$2,124,400
Expenses	$594,400	
Depreciation	175,400	769,800
Balance for investors		$1,354,600
Bond requirements		593,900
Balance for common stock		$760,700
Per share on 97,693 shares		$ 7.787

1924

It was reported that the last two hydroelectric units had gone into operation and that the decision to build a steam plant with 30,000 hp. initial capacity to use river coal had been taken. A new subsidiary was formed to build and operate the plant (Holtwood Power Company).

The reported "balance brought down" (revenue less expenses, taxes and maintenance) was $1,912,107; $210,010 was transferred to depreciation reserve and $130,000 to "contingent fund" by charges to earned surplus.

Dividends were paid on 9,769 additional $100 par value shares, outstanding during the third and fourth quarters, making a total of 107,462 [22158] (page 6) shares (a premium of $122,113 was realized from the sale of the additional 9,769 shares).

Reported income is adjusted as follows:

Gross revenue		$2,686,500
Expenses	$774,400	
Depreciation	210,000	984,400
Balance for investors		$1,702,100
Bond requirements		755,050
Balance for common stock		$ 947,050
Per share on 107,462 shares		$ 8.81

1925

The reported "balance brought down" (revenue less expenses, taxes and maintenance) was $2,077,113; $220,850 was transferred to depreciation reserve and $140,000 to "contingent fund" by charges to earned surplus.

The steam plant was in operation and the year was one of low river flow. Reported income is adjusted as follows:

Gross revenue		$2,960,400
Expenses	$883,300	
Depreciation	220,800	1,104,100
Balance for investors		$1,856,300
Bond requirements		750,000
Balance for common stock		$1,106,300
Per share on 107,462 shares		$ 10.29

1926

The reported "balance brought down" (revenue less expenses, taxes and maintenance) was $2,146,953; $230,053 was transferred to depreciation reserve and $200,000 to "contingent fund" by charges to earned surplus.

The year was one of supernormal river flow; agreement as to tail-water level was reached with Susquehanna Power Company. Reported income is adjusted as follows:

Gross revenue		$3,103,709
Expenses	$956,700	
Depreciation	230,100	1,186,800
Balance for investors		$1,916,900
Bond requirements		745,100
Balance for common stock		$1,171,800
Per share on 107,462 shares		$ 10.90

1927

The reported "balance brought down" (revenue less expenses, taxes and maintenance) was $2,252,526; $243,144 was transferred to "reserve for renewals and replacements" and $200,000 to "contingent fund" by charges to earned surplus.

The year was one of above normal river flow. The reported income increased somewhat because of the merger of Holtwood Power Company and Pennsylvania Water & Power Company late in 1927 and the inclusion of the [22159] (page 7) income of Holtwood instead of the dividends received by Pennsylvania. Refunding of the Holtwood Company bonds at a saving was prospective.

Preliminary work and surveys under way on the Safe Harbor project; the land and riparian rights were owned. A new forty-three year contract was entered into with Consolidated Gas Electric Light and Power Company of Baltimore, which included provision for adjustment for charges in "factors entering into determination of the value of power supplied."

Effective May 31, 1927 the outstanding 107,462 $100 par value common shares were changed to stock without

par value on the basis of four shares of new stock for each share of old stock. (Prices of the new shares reported for July) Common dividends were paid at the rates of 2% for the first two quarters, and 62½ cents for the second two quarters of the year.

Reported income is adjusted as follows:

Gross revenue		$3,525,300
Expenses	$1,272,800	
Depreciation	243,100	1,515,900
Balance for investors		$2,009,400
Bond requirements		740,300
Balance for common stock		$1,269,100
Per share on 429,848 no par shares		$ 2.952

1928

The reported "balance brought down" (revenue less expenses, taxes and maintenance) was $2,853,060, $345,574 was transferred to "reserve for renewals and replacements" and $150,000 to "miscellaneous reserves" by charges to earned surplus.

The "contingent fund" was renamed the "equalization reserve" and $300,000 transferred to that account was not shown in the income statement.

The year was one of above normal river flow. The 6% bonds of Holtwood were refunded early in the year by 4½% Series B bonds.

A part of the increased amount shown as gross income was the result of including in the parent company accounts for the full twelve months of 1928 items which previously had been shown in a separate statement of Holtwood Power Company.

Engineering, design, surveys and property acquisitions continued for the Safe Harbor project.

Reported income is adjusted as follows:		
Gross revenue		$4,388,100
Expenses	$1,535,000	
Depreciation	345,600	1,880,600
Balance for investors		$2,507,500
Bond requirements		845,000
Balance for common stock		$1,662,500
Per share on 429,848 shares		$ 3.868

[22160] (page 8)

1929

The reported "balance brought down" (revenue less expenses, taxes and maintenance) was $3,069,683; $352,102 was transferred to "reserve for renewals and replacements" and $120,000 to "miscellaneous reserves" by charges to earned surplus. The Safe Harbor Water Power Corporation was organized and construction was under way.

The amount of $352,102 is deducted from $3,069,683 to obtain the statement of gross income.

The quarterly dividend rate was increased from $0.625 to $0.75 for the last quarter of 1929.

1930

The reported "balance brought down" (revenue less expenses, taxes and maintenance) was $3,210,219; $355,147 was transferred to "reserve for renewals and replacements," $400,000 to "equalization reserve," and $120,000 to "miscellaneous reserves" by charges to earned surplus.

An unprecedented drought in 1930 resulted in the lowest "stream flows ever recorded in the eastern central states." Substantial withdrawals were made from the stabilizing reserve but more was credited than was taken

out. Attention was called to the fact that $161,193 more was paid out in common dividends than during 1929.

Reported income is adjusted as follows:

Gross revenue		$4,835,600
Expenses	$1,625,300	
Depreciation	335,200	1,980,500
Balance for investors		$2,855,100
Bond requirements		914,100
Balance for common stock		$1,941,000
Per share on 429,848 shares		$ 4.416

1931

Reported "net revenues" of $3,096,304 do not require adjustment, but bond interest in the amount of $1,066,800 is substituted for the actual requirements of $1,040,163.

Under a new power agreement dated June 1, 1931 the annual payments of Consolidated to Pennsylvania and of Pennsylvania to Safe Harbor took "the form of annual sums independent of the amount of output. Hence it will no longer be necessary for your company to equalize its earnings to eliminate the effect of variations in river flow as heretofore. . . . The new contractual arrangement with the Consolidated Company covers a period of forty-eight years and constitutes virtually a guarantee of earnings on your Company's capital stock, since all the payments which the Consolidated Company is obligated to make to your Company are an operating expense of that company and thus come ahead of the dividends on its own preferred and common stock." (Annual Report).

Following the power agreements of 1931 the equalization reserve was reduced and the excess carried to "miscellaneous reserves," where it was available for write-down of unamortized debt discount and expense. A con-

tingent liability to Consolidated Gas Electric Light and Power Company of Baltimore until 1937 was reserved for and a twenty year agreement for Electrification of the Pennsylvania Railroad was announced on October 7.

[22161] (page 9)

The first two units of the initial installation of six units at Safe Harbor began to deliver power to Baltimore in December.

1932

No adjustment of reported income is required. It is stated that the issuance of $5 preferred stock has been authorized and that a transmission line to Washington is under construction. The Safe Harbor Company went on a normal operating basis as of July 1.

1933

3,829 shares of $5 preferred stock, with total dividend requirements of $19,145 were sold to the common stockholders through subscription rights (offered in February, 1933).

No adjustment is made to reported income. If bond and preferred stock requirements were adjusted to the year end basis the result would be as follows:

Gross income		$3,169,600
Requirements of senior securities		
Bonds	$1,055,400	
Preferred	19,100	1,074,500
Balance for common stock		$2,095,100
Per share on 429,848 shares		$ 4.87

1934

No adjustment of reported income is required. Plans for selling additional preferred stock were announced.

1935

An additional 17,664 shares of preferred stock were sold privately during April, 1935, making a total of 21,493 shares outstanding on which the annual dividend requirements were $107,465.

Reported income is adjusted by substituting $107,465 for the actual preferred dividend requirements of $85,385. For the last quarter of 1935 the annual dividend rate was increased from $3.00 to $4.00.

1936

No adjustment of reported income is required. Earnings were affected by the worst ice and flood conditions (March) in the Company's experience. A retirement plan is placed in effect and provision made for past service liability.

1937

No adjustment of reported income is required. The second 220 kilowatt line from Safe Harbor to Baltimore was completed. For the first quarter of 1937 the dividend rate was increased to $4.50 per year. Revised system of accounts prescribed by the Federal Power Commission and the Pennsylvania Public Utility Commission effective January 1.

1938

No adjustment of reported income is required.

On September 2 the Federal Power Commission adopted an order directing Pennsylvania Water & Power Company to show cause why a proceeding should [22162] (page 10) not be instituted against the Company for operat-

ing the hydroelectric facilities without a license granted pursuant to the Federal Power Act.

On November 1 the Federal Power Commission instituted an investigation with respect to navigability of the Susquehanna River and the authority under which the Pennsylvania Water & Power Company's facilities were maintained.

Towards the end of 1938 the "reserve for renewals and replacements" reached 15% and under the operation of the contract with Consolidated the operating income of Pennsylvania Water & Power Company decreased by $22,990 during the period.

1939

The Federal Power Commission issued an order against Safe Harbor Water Power Corporation, dated July 25, instituting a proceeding to determine if the charges under the contract for electric service were unreasonable.

At the instance of the Maryland Commission a supplemental agreement was entered into on September 29 with Consolidated in lieu of a provision in the 1931 contract which reduced the charges for power by approximately $750,000 a year and "net earnings (after income taxes) available for dividends by approximately $600,000 a year".

On November 3 the Federal Power Commission issued an order directing the Company to file with the Commission an application for a license to operate and maintain the Holtwood project. The Annual Report for 1939 states "If it is ultimately established that your Company must accept such a license, then the value of the Company's Holtwood plant may be materially adversely affected both because its 'net investment' may actually be materially less than either the present fair value or present book value of the property in question and also because the Commission may not accept as satisfactory proof the only now available evidence of actual expenditures made many years ago."

The reported gross income of $3,289,192 is subject to the following adjustment on account of the reductions in the charges to Baltimore for power:

Reported Gross Income		$3,289,192
Effect of agreement effective December 1, 1939	$600,000	
Less effect of supplemental agreement effective throughout 1939	355,147	
Difference	$244,853	
Less effect of further reduction for month of December	20,404	220,449
Difference		$3,068,743
Less adjustment of income taxes for reduction of interest (at 20%)		67,590
Adjusted gross income		$3,001,153

3¼% refunding mortgage (due 1964) bonds in the amount of $10,900,000 were sold December 22, 1939 to provide funds for the retirement of the previously outstanding 5% bonds; 3¼% mortgage bonds (due 1970) in the amount of $10,962,000 were sold in March, 1940, to provide funds for the redemption of [22163] (page 11) a like amount of first mortgage 4½% bonds. The pro-forma interest requirements of these refunding bonds was $710,500.

1940

On February 8 the Company filed in the Court of Appeals a petition for review of the Federal Power Commission order requiring Pennsylvania Water & Power Company to file an application for a license.

On June 11 the Federal Power Commission issued an order reducing the rates charged by Safe Harbor to Consolidated and Pennsylvania in an amount of approximately $350,000 per year.

On September 10 Safe Harbor filed in the Circuit Court of Appeals a petition for review of the rate order of the Federal Power Commission.

Net income as reported was after an income deduction of $145,367 for amortization over a sixty-one month period beginning March 1, 1940, of debt discount, premium and expense applicable to the Series B bonds redeemed as of March 1, 1940. Income deductions (after consideration of the refunding) are adjusted by $90,258, determined by discounting $145,367 at 10% for five years.

The balance available for common stock was approximately $2,221,000 and the earnings per share were about $5.17 on the basis of income as reported to the Federal Power Commission.

1941

On October 28 the Circuit Court of Appeals affirmed the order of the Federal Power Commission directing Pennsylvania Water & Power Company to apply for a license. The Company appealed to the United States Supreme Court.

On December 2 the order of the Federal Power Commission directing Safe Harbor to reduce its rates was set aside by the Circuit Court of Appeals as beyond the jurisdiction of the Commission.

Income deductions are adjusted by $119,145, determined by discounting at 10% for four years the charge of $174,440 for amortization of debt discount, premium and expense related to the Series B bonds redeemed March 1, 1940.

The balance available for common stock was approximately $2,177,000 and the earnings per share were about

$5.06 on the basis of income as reported to the Federal Power Commission.

1942

On February 16 the Supreme Court refused to review the decision of the Circuit Court of Appeals affirming the order of the Federal Power Commission requiring Pennsylvania Water & Power Company to apply for a license.

On April 6 the Supreme Court refused to review the decision of the Circuit Court of Appeals which set aside a rate order of the Federal Power Commission with respect to Safe Harbor, and as a consequence, Safe Harbor collected the full contract rates.

Reported gross income of $3,100,844 is adjusted by deducting $80,000 of other income, consisting of a dividend of $0.80 per share received from Safe Harbor Water Power Corporation in adjustment "for the lesser dividends received in 1941 from that Corporation." (Annual Report) p. 5.

[22164] (page 12)

Income deductions are adjusted by $131,059, determined by discounting at 10% for three years the charge of $174,440 for amortization of debt discount, premium and expense related to the Series B bonds redeemed March 1, 1940.

The balance available for common stock was approximately $2,292,000 and the earnings per share were about $5.33 on the basis of income as reported to the Federal Power Commission.

1943

On December 3 the Federal Power Commission ordered issuance of a major license for the period terminating June 30, 1970, subject to conditions.

Income deductions are adjusted by $144,165, determined by discounting at 10% for two years the charge of

$174,440 for amortization and debt discount, premium and expense related to the Series B bonds redeemed March 1, 1940.

1944

On September 1 the Federal Power Commission ordered separate investigations to determine whether the rates of Pennsylvania Water & Power Company and Safe Harbor are just and reasonable.

On December 5 the Pennsylvania Public Utility Commission instituted an investigation on its own motion into the reasonableness of the rates charged by Pennsylvania Water & Power Company.

Income deductions are adjusted by $158,582, determined by discounting at 10% for one year the charge of $174,440 for amortization of debt discount, premium and expense related to the Series B bonds redeemed March 1, 1940.

1945

No adjustment.

[22165] (page 13)

Notes on reported earnings per share

1931 was the first year in which the income statement contained in the Annal Report to Stockholders included an item labeled "net income". Therefore, the "available per share as reported" is limited to the period 1931 to date.

Moody's, 1932, 347, states earnings per share for prior years as follows:

1931—$4.78	1928—$3.84
1930— 4.55	1927— 2.92
1929— 4.37	

Moody's, 1927, 64, states earnings per share for prior years as follows:

1926—$10.90	1923—$8.26
1925— 10.41	1922— 8.81
1924— 9.81	1921— 7.90

The above statements by Moody's for the years 1921-1926 show "available for common dividends" after depreciation expense but before credits to contingent account and sinking fund reserve.

Moody's, 1924, 346, states earnings per share for prior years as follows:

1923—$6.54	1920—$6.48
1922— 7.86	1919— 7.26
1921— 7.90	1918— 6.92

The above statements by Moody's for the years 1918-1923 show "available for dividends" after credits to depreciation and contingency reserves.

Schedule 3

Electric and Electric - Combination Utility Earnings - Price Ratios
Mean of Medial Four of Six*
January, 1907 to December, 1945

Year	January	February	March	April	May	June	July	August	September	October	November	December
1907	5.37	5.62	5.90	6.16	6.15	6.13	6.13	6.25	6.37	6.40	6.87	6.89
1908	6.54	6.77	6.52	6.31	6.20	6.00	5.88	5.59	5.71	5.53	5.50	5.54
1909	5.62	5.77	5.63	5.61	5.54	5.71	5.80	5.82	5.92	6.07	6.05	6.10
1910	6.49	6.55	6.59	6.76	6.84	6.85	7.13	7.17	7.03	6.91	6.91	7.02
1911	7.13	6.88	6.67	6.60	6.45	6.53	6.52	6.63	6.79	6.72	6.58	6.68
1912	6.52	6.46	6.32	6.27	6.28	6.38	6.36	6.35	6.44	6.41	6.44	6.59
1913	6.69	6.82	6.97	7.00	7.05	7.19	7.02	6.74	6.54	6.70	6.87	6.96
1914	6.78	6.74	6.70	6.85	6.89	6.92	7.09	7.16	7.23	7.35	7.49	7.61
1915	7.67	7.79	7.81	7.78	7.93	8.03	8.08	8.17	7.98	7.70	7.51	7.42
1916	7.33	7.36	7.46	7.62	7.68	7.59	7.57	7.64	7.68	7.47	7.33	7.44
1917	7.68	7.81	8.02	8.19	8.46	8.29	8.32	8.21	8.39	8.77	9.25	9.71
1918	9.49	9.16	9.14	9.27	9.29	9.45	9.45	9.30	9.28	8.80	8.31	8.22
1919	8.32	8.36	8.20	8.20	8.28	8.08	7.94	8.28	8.46	8.41	8.52	8.53
1920	8.62	9.14	9.09	9.08	9.43	9.26	9.37	9.33	9.24	9.07	9.23	9.55
1921	9.33	9.34	9.26	9.12	8.98	9.25	9.10	9.07	8.95	8.87	8.71	8.87
1922	9.08	9.27	9.04	8.85	8.99	9.21	9.48	9.09	8.82	9.02	9.35	9.56
1923	9.66	9.66	9.78	10.04	10.39	10.72	10.92	10.70	10.88	10.79	10.61	10.33
1924	9.84	9.64	9.68	9.66	9.60	9.32	9.04	8.78	8.56	8.66	8.40	8.16
1925	8.16	8.06	8.08	8.03	7.67	7.42	7.32	7.29	7.10	7.05	7.21	7.24
1926	7.25	7.22	7.71	7.82	7.87	7.75	7.63	7.64	7.70	7.77	7.91	7.73
1927	7.86	7.99	7.98	7.85	7.46	7.30	7.33	7.16	6.86	6.71	6.59	6.49
1928	6.46	6.23	6.25	5.93	5.66	6.02	6.07	6.09	5.82	5.90	5.43	5.22
1929	4.66	4.56	4.65	4.63	4.45	4.19	3.66	3.15	3.14	3.87	5.18	5.06
1930	4.93	4.44	4.21	3.90	3.96	4.19	4.38	4.41	4.35	4.76	5.25	5.43
1931	5.18	4.90	4.74	5.00	5.30	5.49	5.21	5.18	5.91	6.81	6.31	7.04
1932	7.15	7.15	6.96	8.14	9.62	10.78	9.51	7.43	6.66	6.85	6.84	6.61
1933	6.57	7.31	7.89	8.42	7.12	6.09	5.97	6.26	7.00	7.40	8.05	8.31
1934	7.63	6.75	7.09	7.21	7.71	7.57	7.95	8.46	8.73	9.07	9.64	9.78
1935	9.75	10.15	9.95	8.99	8.29	7.76	7.32	7.10	7.10	6.79	6.27	6.29
1936	6.01	5.75	5.86	6.06	6.32	5.99	5.62	5.54	5.61	5.64	5.79	5.72
1937	5.61	5.71	6.16	6.50	6.80	7.16	6.94	6.73	7.32	8.04	8.02	8.26
1938	8.36	8.73	9.14	9.07	8.35	8.17	7.42	7.49	7.88	7.20	7.19	7.34
1939	7.22	6.88	6.87	7.55	7.18	7.01	6.85	6.84	7.32	7.01	6.96	7.03
1940	6.94	6.93	7.00	6.96	7.76	8.04	7.58	7.53	7.58	7.65	7.79	7.94
1941	7.74	8.03	8.03	8.31	8.82	8.80	8.76	8.84	8.63	9.03	9.67	10.58
1942	10.32	10.23	10.99	11.53	11.20	10.10	10.09	10.46	10.11	9.31	8.88	8.87
1943	8.38	7.87	7.71	7.74	7.57	7.55	6.99	7.00	6.94	6.91	7.06	7.01
1944	6.94	6.96	6.88	6.87	6.73	6.57	6.52	6.45	6.47	6.40	6.29	6.29
1945	6.14	6.04	5.97	5.90	5.66	5.54	5.59	5.67	5.55	5.30	5.16	5.22

* Commonwealth Edison Company, Detroit Edison Company, Boston Edison Company, Consolidated Gas Electric Light and Power Company of Balto., Pacific Gas and Electric Company and Consolidated Edison Company of New York (as predecessors); 1907 - 1910, inclusive, adjusted.

Schedule 4

Pennsylvania Water & Power Company
Experienced Cost of Debt Capital, Computed on a Sinking Fund Basis
(Amounts computed to nearest $100)

Issues Prior to 1923:
(Any uncompensated costs which may have been associated with these issues have been neglected in the following computation).

Issues Refunded in March, 1928, by First and Refunding Series B 4½%, due March 1, 1968:

Offered In:	First and Refunding Series A 5½% due Oct. 1, 1953 Nov., 1923	First and Refunding Series A 5½% due Oct. 1, 1953 July, 1924	Holtwood Series A 6% due Sept. 1, 1954 Oct?, 1924	Total Three Issues
1. Principal amount offered	$ 2,000,000	$ 1,000,000	$ 2,750,000	$ 5,750,000
2. Discount and Expense at Offering	196,300	40,000	162,800	399,100
3. Net Proceeds at Offering	$ 1,803,700	$ 960,000	$ 2,587,200	$ 5,350,900
4. Ditto, in percent of Principal Amount	90.18	96.00	94.08	
5. Periods of Amortization (a)	30 years	29 years	30 years	
6. Cost Rate to Maturity (b)	6.225%	5.785%	6.450%	
7. Percent of Principal Amount, After Accumulation of Amortization to Date of Refunding	90.79	96.22	94.32	
8. Proceeds accumulated to Date of Refunding	$ 1,815,800	$ 962,200	$ 2,593,800	$ 5,371,800
9. Annual Requirement at Date of Refunding	113,000	55,700	167,400	336,100
10. Effective Average Cost Rate of Group of Issues (b)				6.256%
11. Unamortized Discount and Expense at Date of Refunding (Item 1 minus Item 8)				$ 378,200
12. Call Premium	$ 195,000		$ 192,500	387,500
13. Duplicate Interest	none		none	none
14. Tax Savings Due to Refunding Costs (Cr.)	(47,800)		(40,400)	(88,200)
15. Total Amortizable Burden on this Group of Issues at Date of Refunding (Sum of Items 11, 12, 13 & 14)				$ 677,500
16. Cash Requirement of Refunding (Sum of Items 15 and 8).				$ 6,049,300
17. Net Proceeds of Refunding Issue (Item 23)				5,703,500
18. Proportion of Old Bonds Refunded from Proceeds of New Issue (Item 17 ÷ Item 16)				94.284%
19. Amortizable Burden Transferred to New Issue (Item 15 x Item 18)				$ 638,800
20. Balance of Cash Requirement of Refunding, Met from Equity Funds (Item 16 less Item 17)				$ 345,800

First and Refunding Series B 4½%, due March 1, 1968, Refunded in March, 1940, by Refunding and Collateral Trust 3¼%, due January 15, 1970.

	Offered in:	March, 1928	March, 1930	March, 1931	Total, Three Issues
21.	Principal amount offered	$ 6,000,000	$ 1,750,000	$ 3,500,000	$ 11,250,000
22.	Discount and Expense at Offering	296,500	210,300	272,000	778,800
23.	Net Proceeds of Offering	$ 5,703,500	$ 1,539,700	$ 3,228,000	$ 10,471,200
24.	Unamortized Costs of Refunded Issues Transferred (Item 19)	638,800	-	-	638,800
25.	Net Proceeds After Transferred Capital Costs	$ 5,064,700	$ 1,539,700	$ 3,228,000	$ 9,832,400
26.	Ditto, in Percent of Principal Amount	84.41	87.98	92.23	
27.	Period of Amortization (a)	40 years	38 years	37 years	
28.	Cost Rate to Maturity (b)	5.465%	5.230%	4.960%	
29.	Percent of Principal Amount After Accumulation of Amortization to Date of Refunding	86.25	89.33	93.08	
30.	Proceeds Accumulated to Date of Refunding	$ 5,175,000	$ 1,563,300	$ 3,257,800	$ 9,996,100
31.	Annual Requirement at Date of Refunding	283,700	81,800	161,600	526,400
32.	Effective Average Cost Rate of Entire Series (b)				5.266%
33.	Unamortized Discount and Expense at Date of Refunding (Item 21 less Item 30)				$ 1,253,900
34.	Bonds called for Sinking Fund				$ 268,000
35.	Principal Amount of Bonds Refunded				10,962,000
36.	Accumulated Proceeds with Respect to Item 35 (Item 30 x Item 35 ÷ Item 21)				9,740,200
37.	Unamortized Discount and Expense on Refunded Bonds				$ 1,221,800
38.	Call Premium				328,900
39.	Expense and Duplicate Interest				37,700
40.	Tax Credit				(212,800)
41.	Total Amortizable Burden Applicable to Refunded Bonds				$ 1,375,600
42.	Cash Requirements of Refunding (Sum of Items 36 and 41)				11,115,800
43.	Net Proceeds of Refunding Issue (Item 48)				11,205,900
44.	Percent of Old Issues Refunded From Proceeds of New				100.0

Issues Outstanding at December 31, 1945:

		Refunding and Collateral Trust 3¼%		
		Series Due Dec. 15, 1964 (c)	Series Due Jan. 15, 1970	Total
	Date Offered	Dec. 22, 1939	Jan. 27, 1940	
45.	Principal Amount Offered	$ 10,900,000	$ 10,962,000	$ 21,862,000
46.	Premium on Issue	218,000	328,900	546,900
47.	Expenses of Issue	(138,500)	(85,000)	(223,500)
48.	Net Proceeds at Issue	$ 10,979,500	$ 11,205,900	$ 22,185,400
49.	Unamortized Costs Transferred From Refunded Issue (Item 41)	-	1,375,600	1,375,600
50.	Net Proceeds After Transferred Capital Costs	$ 10,979,500(c)	$ 9,830,300	$ 20,809,800
51.	Ditto, in Percent of Principal Amount	100.73	89.68	
52.	Amortization Period (a)	25 years	30 years	
53.	Cost Rate to Maturity (b)	3.210%	3.830%	
54.	Remaining Term to Maturity at Dec. 31, 1945 (a)	19 years	24 years	
55.	Percent of Principal Amount After Accumulation of Amortization to Dec. 31, 1945	100.57	90.95	
56.	Proceeds Accumulated to Said Date	$ 10,962,100	$ 9,969,900	$ 20,932,000
57.	Annual Requirements as at Said Dates	351,900	381,800	733,700
58.	Effective Average Cost Rate to Maturity on Present Debt Capital (b)			3.505%

NOTES:

(a) Computed to nearest half-year.
(b) Computed to nearest .005 percent.
(c) The 3¼ series of 1964 was issued to provide for redemption at maturity of the original 5's of 1940. However, the proceeds of the 1964 series were more than sufficient to provide for the principal amount of the old issue plus the small amount of duplicate interest involved. For this reason, no costs related to the 5's of 1940 remain uncompensated at December 31, 1945.

Schedule 5

Pennsylvania Water & Power Company
Experienced Cost of Preferred Stock Capital

	3,829 Shares Issued March, 1933	17,664 Shares Issued April, 1935	Total
Gross proceeds	$ 373,328	$ 1,757,568	$ 2,130,896
Expenses	15,790	53,344	69,134
Net proceeds	$ 357,538	$ 1,704,224	$ 2,061,762
Annual requirements	$ 19,145	$ 88,320	$ 107,465
Effective cost rate	5.35	5.18	5.21

Schedule 6

Pennsylvania Water & Power Company
Overall Experienced Cost Of Capital as at December 31, 1945

			Percent of Total Capital
I. Division of Capitalization Among Security Issues: (b)			
A. Debt capital:			
1. Net proceeds, with amortization on sinking fund basis to Dec. 31, 1945, related to original principal amount of bonds now outstanding. (Schedule 4)		$ 20,932,000	
2. Less: Proportion applicable to bonds redeemed for the sinking fund.			
Original issue	$ 21,862,000		
Remaining bonds at 12/31/45	20,833,000		
Amount redeemed	$ 1,029,000		
Proportion of original issue redeemed	4.7068%	985,200	
Net proceeds of presently outstanding debt capital		$ 19,946,800	52.0
B. Preferred stock capital:			
Net proceeds (Schedule 5)		2,061,800	5.4
C. Equity capital:			
1. Balance of capitalization, per books, as at Dec. 31, 1945, after deduction of net proceeds of fixed income securities shown above. (Item D, less Items A and B)		16,349,900	42.6
Total capitalization (Item D, below)		$ 38,358,500	100.0
D. Statement of total capital at December 31, 1945 (b)			
1. Bonds outstanding		$ 20,833,000	
2. Preferred stock outstanding		2,130,900	
3 Common Stock, stated value		10,868,300	
4. Consolidated surplus:			
Reported amount	$ 6,298,300		
Less: Amount classified in Accounts 107 as at 1/1/37(a)	1,772,000	4,526,300	
Total capitalization		$ 38,358,500	

Schedule 6 (cont.)

Pennsylvania Water & Power Company
Overall Experienced Cost of Capital as at December 31, 1945

II. Computation of Overall Experienced Cost of Capital

	Reference	Proportion of Capital Supplied (Sec.I)	Applicable Cost Rates	Product Aggregate
Debt capital	Schedule 4	52.0%	3.50%	1.82%
Preferred stock capital	Schedule 5	5.4	5.21	0.28
Equity capital		42.6	9.25	3.94
Total		100.0%		
Overall cost rate				6.04%

Notes:

(a) From Statements H of Company's reports on Determination of Original Cost of Electric Plant Pursuant to Electric Plant Instruction 2-D of the Uniform System of Accounts...of the Federal Power Commission:

Items Proposed for Transfer to Earned Surplus -	
Pennsylvania Water & Power Company	$ (135,222.81)
Susquehanna Transmission Company of Pennsylvania	(423.32)
Pennsylvania Transmission Company	3,754.10
Total	(131,892.03)
Item Proposed to remain in Account 107	1,903,897.74
Total	$ 1,772,005.71

(b) On consolidated basis, per Company's annual report.

[22173]

PENNSYLVANIA WATER & POWER COMPANY

REPLACEMENT COSTS OF CAPITAL

Evidence of the Fair Rate of Return in Relation to an Original Cost Rate Base

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Schedule 7

YIELDS ON PENNSYLVANIA WATER & POWER COMPANY 3¼ PERCENT BONDS
AND
MOODY'S INDEX OF YIELDS ON "AA" PUBLIC UTILITY BONDS

Period	"AA" Bonds	PW Bonds Series of 1964	PW Bonds Series of 1970
Jan., 1940	2.94	-	-
Feb.	2.94	2.93	2.98
Mar.	2.92	2.93	2.97
Apr.	2.88	2.85	2.93
May	2.99	2.96	2.99
June	2.99	2.98	2.99
July	2.92	2.93	2.97
Aug.	2.92	2.95	2.96
Sept.	2.88	2.86	2.92
Oct.	2.89	2.83	2.89
Nov.	2.86	2.82	2.88
Dec.	2.85	2.74	2.80
Average	2.92	2.89	2.93
Jan., 1941	2.88	2.82	2.86
Feb.	2.88	2.91	2.96
Mar.	2.87	2.88	2.98
Apr.	2.90	2.92	2.92
May	2.87	2.86	2.99
June	2.84	2.80	2.88
July	2.80	2.73	2.79
Aug.	2.81	2.67	2.73
Sept.	2.81	2.69	2.78
Oct.	2.76	2.68	2.77
Nov.	2.74	2.71	2.74
Dec.	2.85	2.90	2.85
Average	2.83	2.80	2.86
Jan., 1942	2.87	2.84	2.88
Feb.	2.91	2.83	2.86
Mar.	2.92	2.84	2.90
Apr.	2.89	2.81	2.91
May	2.89	2.77	2.84
June	2.89	2.82	2.89
July	2.86	2.84	2.89
Aug.	2.86	2.85	2.90
Sept.	2.85	2.83	2.88
Oct.	2.83	2.81	2.85
Nov.	2.81	2.80	2.86
Dec.	2.83	2.82	2.87
Average	2.87	2.82	2.88

Schedule 7 (cont.)

YIELDS ON PENNSYLVANIA WATER & POWER COMPANY 3¼ PERCENT BONDS
AND
MOODY'S INDEX OF YIELDS ON "AA" PUBLIC UTILITY BONDS

Period	"AA" Bonds	PW Bonds Series of 1964	PW Bonds Series of 1970
Jan., 1943	2.79	2.83	2.84
Feb.	2.76	2.82	2.81
Mar.	2.75	2.76	2.82
Apr.	2.75	2.72	2.79
May	2.74	2.69	2.76
June	2.71	2.75	2.72
July	2.68	2.71	2.72
Aug.	2.69	2.70	2.76
Sept.	2.70	2.71	2.81
Oct.	2.70	2.75	2.81
Nov.	2.73	2.78	2.81
Dec.	2.77	2.84	2.89
Average	2.73	2.76	2.80
Jan., 1944	2.74	2.82	2.85
Feb.	2.74	2.82	2.80
Mar.	2.72	2.79	2.78
Apr.	2.71	2.78	2.85
May	2.70	2.78	2.78
June	2.70	2.82	2.85
July	2.70	2.79	2.85
Aug.	2.69	2.80	2.82
Sept.	2.69	2.74	2.82
Oct.	2.72	2.70	2.78
Nov.	2.75	2.70	2.76
Dec.	2.72	2.69	2.77
Average	2.72	2.77	2.81
Jan., 1945	2.72	2.69	2.76
Feb.	2.69	2.67	2.75
Mar.	2.67	2.67	2.82
Apr.	2.70	2.67	2.72
May	2.69	2.68	2.79
June	2.65	2.78	2.79
July	2.63	2.83	2.79
Aug.	2.65	2.84	2.86
Sept.	2.66	2.76	2.74
Oct.	2.67	2.77	2.85
Nov.	2.64	2.77	2.83
Dec.	2.62	2.81	2.85
Average	2.67	2.74	2.80
Jan., 1946	2.57	2.75	2.80
Feb.	2.51	2.90	2.82
Mar.	2.49	2.90	2.92
Average	2.52	2.85	2.85

Schedule 8

Mortgage Bond Issues by Electric and Electric - Combination Utilities offered publicly during the Period April 1, 1945 to March 31, 1946

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Symbol	Name of Issues	Designation of Issue	Principal Amount Issued	Price to Public (Per Cent of Principal Amount)	Proceeds to Issuer Gross	Proceeds to Issuer Net (a)	Yield to Maturity at Market Price (%)	Cost Rate to Maturity (%)	Per Cent of Adjusted Gross Income required for Equal and Senior Issues (c)	Date of Offering	Moody's Rating (b)
BNE	Buffalo Niagara Electric Corporation	First 2-3/4, Nov. 1, 1975	56,929,000	102.06	101.68	100.77	2.65	2.71	22.0	Dec. 13, 1945	Aa
CIF	Central Illinois Electric & Gas Company	First 3, Feb. 1, 1975	14,000,000	103.00	102.55	101.96	2.85	2.95	23.2	Apr. 19, 1945	Baa
CVQ	Central Vermont Public Service Corporation	First 2-3/4, D, Feb. 1, 1975	6,967,000	101.50	100.77	99.76	2.68	2.76	28.4	Apr. 11, 1945	A
CCJ	Cincinnati Gas & Electric Company (The)	First 2-3/4, Oct. 1, 1975	45,500,000	101.00	100.34	99.86	2.70	2.76	18.0	Oct. 18, 1945	Aaa
CLP	Connecticut Light and Power Company (The)	First & Ref., 3, K, Oct. 1, 1980	15,000,000	106.75	105.75	105.25	2.70	2.77	20.2	Oct. 3, 1945	Aaa
CSP	Consumers Power Company	First 2-7/8 Sept.1, 1975	113,825,000	102.37	101.68	101.23	2.76	2.81	25.7	Sept.12, 1945	Aa
DYR	Dayton Power and Light Company (The)	First 2-3/4, Oct. 1, 1975	28,850,000	101.62	101.14	100.48	2.67	2.73	17.1	Oct. 25, 1945	Aa
GGR	Georgia Power and Light Company	First 3, Mar. 1, 1975	2,500,000	101.95	101.51	99.51	2.90	3.02	26.8	May 8, 1945	Baa
LSD	Lake Superior District Power Company (g)	First 3, A, Oct. 1, 1975	5,600,000	102.50	100.55	(e)	2.88	(e)	23.0	Nov. 5, 1945	A
MDJ	Madison Gas and Electric Company	First 2-1/2, Jan. 1, 1976	4,500,000	102.25	101.56	99.96	2.39	2.50	15.2	Feb. 8, 1946	Aa
MEC	Maine Public Service Company (g)	First & Coll. 2-7/8, Oct. 1, 1975	1,200,000(f)	101.25	100.28	(e)	2.81	(e)	13.4	Dec. 19, 1945	Baa
MNR	Minnesota Power & Light Company	First 3-1/8, Sept.1, 1975	26,000,000	102.46	101.71	101.19	3.00	3.06	24.2	Sept.19, 1945	A
MNP	Monongahela Power Company	First 3 Aug. 1, 1975	22,000,000	102.50	101.46	100.91	2.88	2.95	20.7	Aug. 24, 1945	A
MTP	Montana Power Company (The)	First 2-7/8, Oct. 1, 1975	40,000,000	101.00	100.28	99.76	2.83	2.89	19.1	Oct. 24, 1945	A
MSP	Mountain States Power Company (g)	First 3, July 1, 1975	7,500,000	101.95	101.26	(e)	2.90	(e)	20.5	July 13, 1945	Baa
NYR	New York Power and Light Corporation	First 2-3/4, Mar. 1, 1975	50,000,000	102.50	101.80	100.90	2.63	2.71	19.7	Apr. 11, 1945	Aa
NSP	Northern States Power Company (Minn.)	First 2-3/4, Oct. 1, 1975	75,000,000	101.00	100.34	99.87	2.70	2.76	20.6	Oct. 25, 1945	Aa
OD	Ohio Edison Company	First 2-3/4, Apr. 1, 1975	26,089,000	101.00	100.28	99.83	2.70	2.76	22.7	Apr. 11, 1945	A
PJ	Pacific Gas and Electric Company	First & Ref., 3, N, Dec. 1, 1977	49,000,000	105.30	104.80	104.43	2.75	2.79	23.5(d)	Oct. 18, 1945	Aa
PNP	Pennsylvania Power Company	First 2-7/8, Nov. 1, 1975	9,793,000	102.50	101.85	101.24	2.75	2.81	19.9	Oct. 26, 1945	A
PNR	Pennsylvania Power & Light Company	First 3, Oct. 1, 1975	93,000,000	101.38	100.66	100.40	2.93	2.98	26.6	Oct. 4, 1945	A
PGE	Portland General Electric Company	First 3-1/8, July 1, 1975	34,000,000	102.41	101.18	100.58	3.00	3.10	26.3	July 11, 1945	Baa
QI	Public Service Company of Indiana, Inc.	First 3-1/8, F, Sept.1, 1975	48,000,000	102.46	101.90	101.33	3.00	3.06	19.3	Sept.21, 1945	A
QOK	Public Service Company of Oklahoma	First 2-3/4, A, July 1, 1975	22,500,000	99.50	98.78	98.42	2.78	2.83	19.1	Oct. 19, 1945	Aa
SXJ	Sioux City Gas and Electric Company	First & Coll. Tr. 3-3/4, Dec. 1, 1975	8,000,000	100.62	100.08	99.17	2.72	2.79	19.5	Dec. 12, 1945	A
SWE	Southwestern Electric Service Company	First 3-1/8, May 1, 1975	1,550,000	102.25	101.15	(e)	3.01	(e)	17.3	Aug. 29, 1945	Baa
TES	Texas Electric Service Company (g)	First 2-3/4, Mar. 1, 1975	18,000,000	101.00	100.44	(e)	2.70	(e)	11.8	May 3, 1945	Aa
TXR	Texas Power & Light Company	First 2-3/4 May 1, 1975	26,600,000	100.75	100.15	99.48	2.71	2.78	18.3	May 23, 1945	Aa
UEM	Union Electric Company of Missouri	First & Coll. Tr. 2-3/4, Oct. 1, 1975	13,000,000	101.02	100.63	99.84	2.70	2.76	21.1	Oct. 24, 1945	Aa
VEP	Virginia Electric and Power Company	First & Ref. 2-3/4, E, Mar. 1, 1975	59,000,000	101.50	100.82	100.32	2.68	2.73	19.8	May 2, 1945	Aa
WLT	Western Light & Telephone Co., Inc.	First 3, A, July 1, 1975	6,200,000	101.95	101.10	99.85	2.90	3.01	20.8	Sept.6, 1945	A

Data from offering prospectus unless otherwise indicated:

(a) Expenses estimated, per prospectus. In a few instances expenses are arbitrarily apportioned among two or more issues sold simultaneously.
(b) Provisional as at time of issue.
(c) Adjusted to reflect effect of Federal income taxation on the basis of the Revenue Act of 1945.
(d) Per 1945 report, adjusted. Results assumed to have been anticipated by investors.
(e) Not available.
(f) An additional $1,000,000 of this issue was sold privately at the same time.
(g) Data from Moody's Public Utilities - Prospectus not available.

Schedule 9

Cumulative Preferred Stock Issues
of Electric and Electric Combination Utility Corporations
Offered Publicly During the Period April 1, 1945 to March 31, 1946

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Symbol	Name of Issuer	Rate and Series	Par Value	Number of Shares Issued	Price to Public per Share	Proceeds to Issuer per Share: Gross	Proceeds to Issuer per Share: Net	Current Yield at Sale Price	Cost Rate Corresponding to Net Proceeds	Per Cent of Adjusted Gross Income required for Equal and Senior Issues (c)	Date of Offering
A2P	Arizona Power Company (b)	5%	$100	12,000	101.00	(e)	(e)	4.95%	(e)	51.8%	Aug. 29, 1945
BNE	Buffalo Niagara Electric Corporation	3.60%	100	350,000	102.85	101.42	101.05	3.50	3.56%	39.2	Jan. 10, 1946
CIF	Central Illinois Electric and Gas Company	$4.10, A	100	30,000	102.00	100.09	99.52	4.02	4.12	30.9	Apr. 19, 1945
CNY	Central New York Power Corporation	3.40%	100	200,000	101.50	100.15	99.62	3.35	3.41	36.8	Mar. 21, 1946
CNR	Central Power and Light Company	4%	100	100,000	102.75	101.15	(e)	3.89	(e)	39.3	Dec. 21, 1945
CCJ	Cincinnati Gas & Electric Company (The)	4%	100	270,000	106.00	104.28	104.01	3.77	3.85	35.6	Oct. 18, 1945
IDP	Idaho Power Company	4%	100	39,413	105.50	104.00	103.50	3.79	3.86	43.4	July 19, 1945
IOR	Iowa Power & Light Company	3.80%	100	50,000	101.50	99.76	97.96	3.25	3.37	32.3	Feb. 19, 1946
MNP	Monongahela Power Company	4.40%	100	90,000	103.50	101.03	100.53	4.25	4.38	36.2	Aug. 24, 1945
NYR	New York Power and Light Corporation	3.90%	100	240,000	104.00	102.30	101.89	3.75	3.83	32.5	May 10, 1945
PTD	Potomac Edison Company (b)	3.60%	100	63,784	101.75	(e)	(e)	3.55	(e)	26.9(d)	Jan. 18, 1946
QOK	Public Service Company of Oklahoma	4%	100	98,500(a)	102.75	101.20	100.95	3.89	3.96	31.1	Oct. 19, 1945
SXJ	Sioux City Gas and Electric Company	3.90%	100	38,000	102.00	100.28	99.69	3.82	3.91	37.6	Dec. 12, 1945
SWE	Southwestern Electric Service Company	4.40%	100	10,150	103.00	100.77	(e)	4.27	(e)	35.3	Aug. 29, 1945
UEM	Union Electric Company of Missouri	$3.70	None	40,000	101.75	100.55	99.90	3.64	3.70	34.2	Oct. 24, 1945

Data from offering prospectus unless otherwise noted:

(a) Subject to prior exchange with holders of previously outstanding issues.
(b) Data from Moody's Public Utilities - prospectus not available.
(c) Adjusted to reflect effect of Federal income taxation on the basis of the Revenue Act of 1945.
(d) Per 1945 report, adjusted. Results assumed to have been anticipated by investors.
(e) Not available.

Schedule 10

Pennsylvania Water & Power Company
Overall Replacement Cost of Capital as at December 31, 1945

(1) Kind of Capital	(2) Proportion of Capital Supplied (%)	(3) Applicable Cost Rates	(4) Product Aggregate	(5) Proportional Division of Income (%)
I Computation on the basis of the existing capitalization (Sch. 6)				
Debt capital (Schs. 7 and 8)	52.0	2.78	1.446	25.9
Preferred stock capital (Sch. 9)	5.4	3.72	.201	3.6
Equity capital (Sch. 6)	42.6	9.25	3.941	70.5
Total	100.0			100.0
Overall replacement cost rate			5.6	
II Computation on the basis of 25 percent equity capital				
Debt capital (Schs. 7 and 8)	55.0	2.83	1.557	31.7
Preferred stock capital (Sch. 9)	20.0	3.98	.796	16.2
Equity capital	25.0	10.25	2.563	52.1
Total	100.0			100.0
Overall replacement cost rate			4.9	

Schedule 11

Pennsylvania Water & Power Company

Application of Evidence of the Competitive Return as a Test of Reasonableness of the Regulated Return, Assuming Adoption of an Original Cost Rate Base.

I	Consolidated original cost of plant as at December 31, 1945	$ 36,704,706		
	Plus working capital estimate	977,160		
	Total	$ 37,681,866		
II(a)	Estimated cost of constructing, as of December 31, 1945, a substitute new plant capable of providing the same service	$ 55,394,792		
	Plus working capital estimate	977,160		
	Total	$ 56,371,952		
	Annual return at 4.9 per cent (Sch. 10)		$ 2,762,000	
	Rate of return required to provide an equivalent return on original cost as the rate base			7.3
II(b)	Consolidated original cost as of December 31, 1945	$ 36,704,706		
	Plus 42.6 per cent of the difference between original cost and the cost of a substitute plant	7,961,977		
	Plus working capital estimate	977,160		
	Total	$ 45,643,843		
	Annual return at 5.6 per cent (Sch. 10)		2,556,000	
	Rate of return required to provide an equivalent return on original cost as the rate base			6.8
III(a)	Trended cost of construction of physical properties, as of December 31, 1945	$ 62,410,377		
	Plus working capital estimate	977,160		
	Total	$ 63,387,537		
	Annual return at 4.9 per cent (Sch. 10)		3,106,000	
	Rate of return required to provide an equivalent return on original cost as the rate base			8.2
III(b)	Consolidated original cost as of December 31, 1945	$ 36,704,706		
	Plus 42.6 per cent of the difference between original cost and the trended original cost of construction	10,950,616		
	Plus working capital estimate	977,160		
	Total	$ 48,632,482		
	Annual return at 5.6 per cent (Sch. 10)		2,723,000	
	Rate of return required to provide an equivalent return on original cost as the rate base			7.2

Schedule 11 (continued)

Pennsylvania Water & Power Company

Application of Evidence of the Competitive Return as a Test of Reasonableness of the Regulated Return, Assuming Adoption of an Original Cost Rate Base.

IV(a)	Nominal dollar investment adjusted for changes in purchasing power of the dollar to 1945	$ 50,093,000	
	Plus working capital estimate	977,160	
	Total	$ 51,070,160	
	Annual return at 4.9 per cent (Sch. 10)		$ 2,502,000
	Rate of return required to provide an equivalent return on original cost as the rate base		6.6
IV(b)	Consolidated original cost as of December 31, 1945	$ 36,704,706	
	Plus 42.6 per cent of the difference between original cost and the nominal dollar investment adjusted for changes in purchasing power of the dollar to 1945	5,703,000	
	Plus working capital estimate	977,160	
	Total	$ 43,384,866	
	Annual return at 5.6 per cent (Sch. 10)		2,430,000
	Rate of return required to provide an equivalent return on original cost as the rate base		6.4

EXHIBIT No. 31

[22178]

Cost of Constructing
the Entire Physical Properties of the
Pennsylvania Water & Power Co.
and the
Susquehanna Transmission Company of Maryland
as of December 31, 1945

March 26, 1946

A study has been made of the cost of constructing and reproducing the entire physical properties of the Pennsylvania Water & Power Company and of the Susquehanna Transmission Company of Maryland as of December 31, 1945. This study was undertaken to determine what would be the cost of reproducing these properties as of December 31, 1945 by the use of modern construction methods.

The prices and costs as of December 31, 1945 will be hereinafter referred to as present day costs, although there have been increases in labor rates and the prices of materials in January and February 1946 and other increases have been authorized or are contemplated. For example, the union scale of wages in Baltimore for common labor went up from 80¢ per hour to 95¢ per hour on January 2, 1946. Truck drivers on December 31, 1945 were getting 75¢ per hour. A wage increase to $1.00 per hour may go into effect shortly. Likewise, the union wage scale for carpenters which was $1.67½ per hour on December 31, 1945 may soon go to $1.77½ per hour. Cement finishers will soon be increased from $1.50 to $1.72½ per hour. An increase in the price of steel by $5.00 per ton was authorized by the Federal Government on February 18, 1946. The present period, characterized by strikes and shortages of many materials is one of rapidly rising prices and costs.

Ceiling prices still prevail on many construction materials. Quotations being made on materials and equipment are usually subject to the price prevailing at the time of delivery. Deliveries for the most part are lengthy or indefinite. Contractors in general are unable to bid lump sum prices without large elements of contingencies to take care of the inflationary trend. Government contracts are being placed with escalator clauses. In view of all of these circumstances and the present unsettled period, we have in our study considered the prices and wage rates frozen as of December 31, 1945.

Methods Used in Determination of Present Costs of Construction

The cost of constructing or reproducing the physical properties of the Companies as of December 31, 1945 is based upon trending the original cost of the properties year by year to the present time. Retirements were deducted according to the year of installation so that the dollars that remain in each account represent the actual original cost of the surviving property, in other words, the actual original cost of the present property according to the year in which the money was spent. An exception to this has been made in the Holtwood Hydro Plant and the early transmission lines and substations, all of the original investment prior to the year 1912 being considered as made in 1912.

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The history of the Companies was studied and a chronological statement has been prepared which shows that 57.4 per cent of the hydro property surviving was installed initially and that for the most part, the subsequent additions have been major ones. From the standpoint of reproduction, therefore, the method used lends itself to the single impulse theory of reproducing the entire property at one time. Deductions have been made or taken into ac-

count to allow for any factor for so-called "piecemeal" construction. Even if the entire property were reproduced under the single impulse theory certain elements would be placed in operation when completed and the construction of the remainder would be carried on while maintaining operation.

The dollars of the surviving original investment have been further segregated year by year in each account into labor, materials, and overheads. The materials have been further broken down into 26 classifications as follows:

1. Rails—Steel for R. R. track
2. Lumber—Timbers for cofferdam and heavy construction
   - Forms for concrete work
   - General lumber for houses and building purposes
3. Concrete—Concrete for the Dam and appurtenances
   - Concrete for Hydro and Steam Plant Substructures and Superstructure
   - Concrete for Cable Tunnels
   - Concrete for Substation Buildings
   - Concrete for Transmission Tower Footings
   - Concrete for Bus Compartments and floors
4. Structural Steel—Fabricated Structural Steel
   - Transmission Line Towers and Structures
   - Substation Structures and Supports
5. Wire and Cable—Copper Power and Control Cable
6. Metal and Metal Products—Manufactured Products such as:
   - Elevators, Lifts and Hoists
   - Switchgear including Auxiliary Oil Circuit Breakers
   - Lighting and Control Cabinets
   - Meters, Instruments and Gage Panels

7. Pipe—All kinds of Metal Pipe, such as Steam and Oil Piping for Steam Plant, Hydraulic Piping and Oil Piping for Hydro Plant
   Cast Iron Water Mains
   Air Piping and Ash Sluices
8. Other Building Materials—All building materials except those which have separate indices. This includes doors, windows, roofing, etc.
9. Plumbing and Heating—Covers heating systems and plumbing fixtures.
   [22180] (page 3)
10. Reinforcing Bars—Steel reinforcing bars for reinforced concrete
11. Steel Plates and Tanks—Covers fabricated steel plate and tanks
12. Iron and Steel—Covers semi-manufactured products such as lighting beams, stairways, gates, trash screens, cranes, rolling stock, steam boilers, and superheaters, ash sluices, coal conveyors, cyclone separators, etc.
13. Copper—For use as copper bus, copper tubing and connecting straps
    Copper for transmission line, conductors, ground wires, and counterpoises
14. Aluminum—Covers aluminum conductors, and aluminum cable steel reinforced
15. Furniture—Office furniture and fixtures
16. Motor vehicles—Passenger cars and trucks
17. House furnishings—For office use
18. Other Mechanical Equipment—Large manufactured products such as Hydraulic Turbines and Generators Steam Turbine Generators, and Air Coolers, Feed Water Heaters and Pumps

Water Supply System and Sand Disposal System
Condensers and Hot Well
Condensate Pumps and Steam Jet Air Pumps
Raw Water Pumps
Auxiliary Electrical Equipment including Feeder Voltage Regulators, Storage Batteries, and Charging Equipment
Main Exciter Units
Compressed Air Pumps
Main Oil Circuit Breakers
Lighting System for Operators Village, etc.

19. Conduit—Metal conduit for station covering lighting and control cables

20. Brick—All common brick and brick for boiler settings

21. Railroad Track—In power plants and spur tracks—also used for railroad relocation work—includes grading, culverts and drains, ties, rails, fastenings, special work, track laying, ballast, road crossings

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22. Railroad Raising—Railroad relocation

23. Temporary Construction—Any temporary buildings afterward remaining for permanent use—none

24. Patrol Stations—For transmission lines

25. Village Houses—For Operators Village

26. General Overall—Largely labor items from which the labor dollars have been removed. A small amount of materials, blasting powder, dynamite

and caps, small tools, riprap where used, etc., in the following:

Clearing, grading sites
Excavations for dam, forebay and tail-race
Power House substructures, cable tunnels, frequency converter foundations and for substation structures, and substructures for transmission towers and special structures
Backfills and foundation preparations

The overheads have been further broken down year by year as the expenditures occurred into engineering, temporary construction facilities and payroll overheads, and taxes and interest.

In our determination of the present day costs of reproduction a study was made of the actual wage rates paid by the company and its predecessor for both skilled and common labor, and also of the union scale of wages in Baltimore, Philadelphia, and York, Pennsylvania for the various trades and for common labor. Since Holtwood is located about equidistant from Baltimore and Philadelphia, the largest labor markets in the area, and about 23 miles from York, Pennsylvania, it was assumed that in reconstructing the property about 40% of the labor would be drawn from Baltimore, 40% from Philadelphia and 20% from York. Composite rates were, therefore, developed for each skilled trade and for common labor on this basis with certain exceptions such as for hoisting engineers, crane and tractor operators, etc., for which there is no scale for York, these being normally drawn from Philadelphia.

In reproducing a property of this magnitude today, union labor would have to be used exclusively throughout on all of the construction work, although the Company does not now employ any union labor. However, no other

kind of labor is available for construction work of any kind except possibly some small residence. The wage and hour law prevails and the prevailing scale of wages in each locality is the union wage scale. We have, therefore, used as of December 31, 1945 the union wage scales prevailing in Baltimore, Philadelphia, and York for the purpose of reproducing the property, but since the original dollars were put in by Company wage scales, we have trended the original dollars for labor to the December 31, 1945 union wage scale to obtain as closely as ascertainable the present cost of reproducing the property.

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To take into effect the large force that would be required for constructing the property under the single impulse theory and also to establish the proper proportion of skilled and unskilled labor, we have used the construction of the Safe Harbor plant, where very accurate construction cost records were kept, as a guide. From analyses of several Safe Harbor payrolls during 1930 and 1931, we have established a ratio of skilled and semi-skilled dollars and wage rates to common labor dollars and wage rates. This ratio was then applied to the ratio of the Company's skilled labor wage rates to its common labor wage rates each year, and a divisor thereby obtained so that the dollars of common labor and those of skilled labor were determined for each year, and each trended separately to December 31, 1945, and then recombined to obtain the present day value of the labor.

In the development of trend factors for materials, the indexes and average prices published by the United States Bureau of Labor Statistics were largely used as a guide with checks made from quotations and actual purchases made and from a study of the original contracts. In so far as obtainable today, identical equipment was used. When not obtainable, the modern substitute was used as a basis

for determining present day prices, except in those instances when to do so would require a complete redesign of the plant.

The dollars for the different classes of materials were then added to obtain the total dollars of materials by years and these were then combined with the total dollars of labor.

Overheads, Indirect Costs and Direct Construction Costs

To the basic pay of labor and the direct costs of materials, certain other charges are always incurred, and must be added to arrive at what is commonly called the "Direct Construction Cost." Practice varies in regard to the additions of these charges and as to what is included in the "Direct Construction Cost."

Starting with labor, there must be added a factor to cover additional compensation for overtime for all hours worked in excess of the basic 40-hour week. Most contractors in their estimates on building construction figure 10% additional for a 48-hour work week, although actually on the basis of time and one-half for all hours in excess of 40, this figure is 8 1/3%. We have approached this problem on the basis of a composite labor force with 70% of the force working a 45-hour week (five 9-hour days), 20% working a 48-hour week (six 8-hour days), and 10% working a 54-hour week (six 9-hour days). This gives percentages for overtime pay of 5.56%, 8.33%, and 12.97% respectively, but when allowance is made for rainy days every other week, the composite figure for overtime pay is reduced to 3.428%. This we have used, throughout the work for the various accounts for both inside and outside work and should be considered a minimum for overtime pay.

To the labor dollars must also be added a factor for employees liability insurance (Workmens' Compensation), State and Federal Unemployment insurance, and Federal

Old Age Benefits. A study was made of the number of workers that would be employed in a composite labor force, classified as to occupations and the results of this study were as follows:

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	Total Insurance %	Labor Multiplier Incl. Overtime & Insurance
Pennsylvania		
Hydro Plant	5.66	1.09282
Steam Plant	5.17	1.08875
Transmission Lines	6.15	1.09799
Substations	6.00	1.09633
General Plant	5.60	1.093
Maryland		
Transmission Lines	7.54	1.11226
Substations	6.37	1.10016
General Plant	7.40	1.1108

In addition to the labor factors, there are other charges incurred in the design and construction of any large project whether the construction is carried on by contract, or with the owner's force. In a project of this magnitude, and because of the difficulty of the owner building up a large construction organization under present conditions of labor shortages, it is believed that the project could be constructed in less time and at less total cost by contracting for most of the work. There will, therefore, be incurred by the contractors certain expenses and in addition, thereto, a charge for the contractors' services.

To determine suitable bases for these charges, analyses have been made of the costs of the Safe Harbor Plant, the Holtwood Steam Station, the Transmission Plants, and the General Plants. The studies of Safe Harbor show actual

costs in terms of percentages for indirect and overhead charges were as follows:

HOLTWOOD HYDRO PLANT INDIRECT COSTS	Percent of Labor and Payroll Overheads + Material Costs (Safe Harbor Costs)	Percent Used for Holtwood Hydro
Constructors Fees & Expenses		
Contractor's Engineering & Superintendence	0.835	
Contractor's Accounting & Purchasing	1.352	
Contractor's Office Furniture Supplies & Expenses	0.160	
Total Contractors Exp.	2.347	
Constructors Fee & Administrative Exp.	3.456	
Total Constructors Charges	5.803	5.8
Other Indirect Construction Costs		
Construction Equipment	4.363	4.4
Temporary Construction & Service Facilities	7.801	7.8
Insurance (Other than Employee)	0.423	0.4
Testing Equipment	0.035	Omitted
Camp, Commissary, Hospital, etc.	0.089	0.25
Furniture & Equipment	0.137	
Suspense Account	7.023	Omitted
Total	19.871	12.85
Total Inc. Contractors Fees & Expense	25.674	18.65

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Holtwood Hydro Plant Overhead Charges	Percent of Labor and Payroll Overheads + Material Costs (Safe Harbor Costs)	Percent Used for Holtwood Hydro
Engineering and Superintendence		
Consulting Engineers Fees & Expenses	0.547	0.50
Acct. 3941—Administrative	0.543	0.50
Acct. 3951—Eng. & Superintendence	7.667	7.50*
Acct. 3952—Accounting & Purchasing	0.220	0.25
Acct. 3953—Office Supplies Exp.	1.394	1.40
Total Engineering & Superintendence	10.371	10.15
Preliminary Operating Expenses	0.170	0.20
Total Before Interest & Taxes**	36.215	29.00
Taxes During Construction percent of above total	0.126	0.125
Interest During Construction percent of above total	5.783	5.875
	5.909	6.000

*Field 2.5%

Office 5.0%

**Excluding Legal Fees and Expenses

The suspense items included in accounts

3991 General Foreman, Guards, etc.
3992 Sickness and Vacations
3993 Small Tools
3994 Operation and Maintenance of Temporary Plant & Facilities
3995 Operation and Maintenance of Temporary Buildings
3999 Miscellaneous Charges

have been omitted from our application of indirect charges to the reproduction of the Holtwood Plant, because we were informed that these charges were in the original cost of the Holtwood Plant, and, therefore, would be duplicated. This does not apply, however, to our method of handling Account 321—Structures & Improvements, and 322—Dams and Waterways—due to our method of treating these accounts.

Legal Fees and Expenses amounting to $18,315 or 0.0105% of the labor and material base have been omitted from the application to Holtwood, because it is assumed that it would be covered in any valuation of water rights.

From the above percentages, multipliers were calculated to be applied separately to labor and material costs as shown below:

Material Multiplier

1.06 (Interest & Taxes) x 1.29 (Total before Interest & Taxes)

= 1.3674

Labor Multiplier

1.093 (Overtime and Insurance) x 1.3674 (Material Multiplier)

= 1.4946

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HOLTWOOD STEAM PLANT

For the Holtwood Steam Plant, we have determined the additional direct, indirect and overhead charges as follows:

	Percent of Labor + Overtime Pay + Insurance + Material	
INDIRECT COSTS		
Constructor's Fee & Expenses	(Same as Used on Holtwood Hydro)	5.8
Camp Commissary & Hospital	(Same as Used on Holtwood Hydro)	0.25
Other Construction Costs Analysis of Holtwood Steam shows $9.17 less .06 Salvage	Used	9.2
Sickness & Vacation 0.63% of Labor	Omitted in this case.	
Total Indirect Costs		15.25
OVERHEAD CHARGES		
Engineering & Superintendence		
Consulting Engineers' Fee & Exp.	(Same as Used for Holtwood Hydro)	0.5
Administrative Charges	(Same as Used for Holtwood Hydro)	0.5
Field Engineering & Expediting	(Same as Used for Holtwood Hydro)	2.5
Office Engineering & Drafting		7.0
Accounting & Purchasing (Actual Costs Holtwood Steam 0.73)	Used	0.75

Office Supplies and Expenses (Actual Holtwood Steam 1.16) (Safe Harbor 1.394)			
Average	1.277	Used	1.25
Total Engineering & Superintendence			12.50
Preliminary Operating Expenses			
Actual Holtwood Steam 0.42%		Used	.40
Total Before Interest & Taxes			28.15
Taxes (Actual Holtwood Steam 0.10%)		Used	3.00
Interest (Actual Holtwood Steam 2.86%)			

From the above percentages, material and labor multipliers were determined as shown below:

Material Multiplier

1.03 (Interest & Taxes) x 1.2815 (Total before interest) = 1.3199

Labor Multiplier

1.088 (Overtime + Insurance) x 1.3199 (Material Multiplier) = 1.4361

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TRANSMISSION PLANT

Analyses were made of the actual original costs of the indirect and overhead charges on transmission lines and substations. From these analyses, the present day costs were determined largely on the basis of reproducing the transmission plant in a short period of time. The construction work would be handled by general contractors.

	Actual Original Cost Percent of Labor and Material		
	Pa.	Md.	Pa. & Md.
(a) *Transmission Lines Only* (Accounts 341, 344, 345, 346 & 349)			
Payroll Insurance	3.56	4.29	3.92
Temporary Construction Facilities	8.69	6.13	7.30
Engineering	16.88	11.16	13.76
Interest & Taxes During Construction	3.67	4.56	4.14
(b) *Substations Only* (Accounts 342 and 343)			
Payroll Insurance	6.45	2.03	5.09
Temporary Construction Facilities	3.38	2.36	3.10
Engineering	17.12	11.85	15.70
Interest & Taxes During Construction	3.36	2.53	3.17

Further analyses were made of the actual original costs of the Westport, Washington, Perryville and Riverside Transmission Lines which were constructed in 1931, 1932, 1934 and 1937 respectively. These analyses showed that temporary facilities costs ranged from 4.97% on the Riverside Line, (1937) to a maximum of 12.63% on the

Perryville Line (1934) with an average of 8.63% for the four lines. Construction Equipment from 0.08% to 2.76% with an average of 1.35%, Suspense Accounts from 3.80 to 9.23%, with an average of 6.74%. Camp Facilities costs were incurred or shown for only one line, the Riverside Line, and amounted to 0.63%. We have figured the Camp Facilities separately, and have used the percentages shown on the following pages.

TRANSMISSION LINES ONLY

	Pennsylvania (Accounts 341-345)			Maryland (Accounts 341-346-349)	
	Labor	Material		Labor	Material
Direct L & M (D)	1.000	1.000		1.000	1.000
Overtime Pay	.03428			.03428	
Construction Cost (C)	1.03428	1.000		1.03428	1.000
Insurance 6.15% of (C)	.0636082		7.54%	.0779847	
Camp 3.357% of (D)	.03357			.03357	
Construction Equipment 6.2% of (C)	.0641253	.062		.0641253	062
Field Cost (F)	1.1955835	1.062		1.209960	1.062
Contractors Fee & Expenses 6.5% of (F)	.0777129	.06903		.0786474	.06903
Taxes & Engineering 9.0% of (C)	.0930852	.09000		.0930852	.09000
Total (T)	1.3663816	1.22103		1.3816926	1.22103
Interest 3% of (T)	.0409914	.0366309		.0414508	.0366309
Total Multipliers	1.407373	1.2576609		1.4231434	1.2576609
Multipliers Used	1.40737	1.25766		1.42314	1.25766

TRANSMISSION LINES ONLY
INDIRECT COSTS AND GENERAL OVERHEADS

	Pennsylvania (Accounts 344-346-349)			Maryland (Accounts 344-345)	
	Labor	Material		Labor	Material
Direct L & M (D)	1.000	1.000		1.000	1.000
Overtime Pay	.03428			.03428	
Construction Cost (C)	1.03428	1.000		1.03428	1.000
Insurance 6.15% of (C)	.0636082		7.54%	.0779847	
Camp 3.357% of (C)	.0347208			.0347208	
Construction Equipment 6.2% of (C)	.0641253	.062		.0641253	.062
Field Cost (F)	1.1967343	1.062		1.2111108	1.062
Contractors Fee & Expenses 6.5% of (F)	.0777877	.069030		.0787222	.06903
Engineering & Taxes 9.0% of (C)	.0930852	.090000		.0930852	.09000
Total (T)	1.3676072	1.22103		1.3829182	1.22103
Interest 3% of (T)	.0410282	.0366309		.0414875	.0366309
Total Multipliers	1.4086354	1.2576609		1.4244057	1.2576609
Multipliers Used	1.40864	1.25766		1.42441	1.25766

SUBSTATIONS ONLY
ACCOUNTS 342 & 343

	Pennsylvania		Maryland	
	Labor	Material	Labor	Material
Direct L & M	1.000	1.000	1.000	1.000
Overtime Pay 3.428%	.03428		.03428	
Construction Cost (C)	1.03428	1.000	1.03428	1.000
Insurance 6% of (C)	.0620568		6.37% .0658836	
Construction Equipment & Temporary Facilities 3%	.0310284	.030	.0310284	.03
Field Cost (F)	1.1273652	1.030	1.1311920	1.030
Contractors Fee and Expenses 6.5% of (F)	.0732787	.06695	.0735275	.06695
Taxes and Engineering 13.5% of (C)	.1396278	.13500	.1396278	.13500
Total (T)	1.3402717	1.23195	1.3443473	1.23195
Interest 3%	.0402081	.0369585	.0433042	.0369585
Total Multipliers	1.3804798	1.2689085	1.3846777	1.2689085
Multipliers Used	1.38048	1.26891	1.38468	1.26891

GENERAL PLANT

In order to determine the approximate direct and indirect costs and overhead charges for the General Plant property analyses were made of the actual original costs incurred for each primary account by the Pennsylvania and Maryland Companies.

For the Pennsylvania Company, the result of the analyses are shown below:

		Original Cost Percentages of Labor & Material			Cost of Reproduction Percentages Used by Us		
Acct. No.	P/R	Eng.	Temp. Facil.	Taxes & Interest	Eng.	Temp. Facil.	Taxes & Interest
371	4.12	18.75	6.5	2.36	11.5	6.5	3.0
372	4.31	11.00	0.117	0.745	11.0	0.117	0.745
373	-	0.54	-	-	0.54	-	-
374	6.2	20.40	6.36	-	11.5	6.36	-
375	6.1	18.00	6.32	0.17	11.5	6.32	0.17
376	7.15	11.10	0.555	7.80	11.1	0.555	2 80
377	3.56	7.85	1.07	1.04	7.85	1.07	1 04
378	4.81	24.00	3.45	3.26	11.5	3 45	3 00
379	6.18	13.75	4.03	-	11.5	4 03	

Similar analyses of the actual original costs of the Maryland Company were made and the results and percentages used by us are as follows:

		Original Cost Percentages of Labor & Material			Cost of Reproduction Percentages Used by Us		
Acct. No.	P/R	Eng.	Temp. Facil.	Taxes & Interest	Eng.	Temp. Facil.	Taxes & Interest
371	1.26	17.2	0.33	0.45	11.5	0.33	0.45
372	-	5.75	0.43	2.6	5.75	0.43	2.6
373	-		-	-	-	-	-
374	-	12.4	-	-	11.5	-	-
375	-	15.5	-	-	11.5	-	-
376	-	87.5	-	-	11.5	-	-
377	-	9.22	-	0.375	9.22	-	0.375
378	7.28	21.5	1.75	0.66	11.5	1.75	0 66
379	-	-	-	-	-	-	

From the above analyses and percentages adopted, material and labor multipliers were developed and applied separately for each primary account of the Pennsylvania and Maryland General Plant properties. The summary of multipliers used is presented here:

Acct. No.	Pennsylvania Multipliers Material	Pennsylvania Multipliers Labor	Maryland Multipliers Material	Maryland Multipliers Labor
371	1.2154	1.3275	1.1233	1.2358
372	1.145	1.2505	1.0894	1.1985
373	1.005	No Labor	None on Labor or Material	
374	1.1786	1.2873	1.1150	1.2267
375	1.1802	1.2890	1.1150	1.2267
376	1.1478	1.2536	1.1150	1.2267
377	1.1328	1.2372	1.0963	1.2061
378	1.1840	1.2932	1.13997	1.2541
379	1.1553	1.2618	None on Labor or Material	

SUMMARY

For the purpose of providing comparative data on 1945 Costs of Reproduction with the actual original costs year by year as they were incurred in the surviving property, the labor and material dollars as of December 31, 1945 were adjusted to give effect to the present day indirect costs and overhead charges, and are presented opposite the total cost of surviving property by primary accounts for each year. That is up to the end of the year 1944. In making the adjustment for the gross additions and retirements made in the year 1945, the larger retirements were adjusted to the 1945 cost of the dollars as of the year of installation. The 1945 gross additions were then added at actual cost.

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PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945
BASED UPON TREND FACTORS

GRAND SUMMARY - BOTH COMPANIES

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
SUMMARY PENNSYLVANIA WATER & POWER COMPANY		
Intangible Plant	$ 790,803	$ 790,803
Production Plant		
(a) Steam	4,594,803	6,836,425
(b) Hydraulic	18,481,916	34,876,833
Transmission Plant	6,175,506	9,486,600
General Plant	752,574	1,000,041
Total Electric Plant in Service Pennsylvania Water & Power Co.	$30,795,602	$52,990,702
SUMMARY SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND		
Intangible Plant	$ 9,000	$ 9,000
Transmission Plant	5,565,553	9,340,003
General Plant	44,077	70,672
Total Electric Plant in Service Susquehanna Transmission Company of Maryl...	$ 5,618,630	$ 9,419,675
GRAND TOTAL - BOTH COMPANIES	$36,414,232	$62,410,377

PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945 -2-
BASED UPON TREND FACTORS

SUMMARY

Account No.	ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
	INTANGIBLE PLANT		
301	Organization	$ 668,530	$ 668,530*
302	Franchises and Consents	64,005	64,005*
303	Miscellaneous Intangible Plant	58,268	58,268*
	Total Intangible Plant	$ 790,803	$ 790,803*
	PRODUCTION PLANT		
	(A) Steam		
310	Land and Land Rights	$ 2,000	$ 2,000
311	Structures and Improvements	1,214,710	2,067,055
312	Boiler Plant Equipment	1,866,969	2,580,059
314	Turbo-Generator Units	806,226	1,221,425
315	Accessory Electric Equipment	401,464	586,152
316	Miscellaneous Power Plant Equipment	303,434	379,734
	Total Steam	$ 4,594,803	$ 6,836,425
	(B) Hydraulic		
320	Land and Land Rights	$ 2,749,982	$ 2,749,982*
	(a) Excluding Railroad Relocation	1,498,434	2,542,446
	(b) Railroad Relocation Only	4,958,609	9,409,241
321	Structures and Improvements	4,020,318	7,675,794
322	Reservoirs, Dams and Waterways	3,458,957	9,030,608
323	Hydraulic Turbines and Generators	1,529,177	2,977,842
324	Accessory Electric Equipment	194,522	338,289
325	Miscellaneous Power Plant Equipment	71,917	152,631
326	Roads, Railroads and Bridges		
	Total Hydraulic	$ 18,481,916	$ 34,876,833
	TRANSMISSION PLANT		
340	Land and Land Rights	$ 807,107	$ 1,498,575
341	Clearing Land and Rights-of-Way	116,267	235,282
342	Structures and Improvements	330,844	558,466
343	Station Equipment	2,781,224	3,890,451
344	Towers and Fixtures	1,102,909	1,964,770
345	Poles and Fixtures	10,892	14,673
346	Overhead Conductors and Devices	989,514	1,266,021
349	Roads and Trails	36,749	58,362
	Total Transmission Plant	$ 6,175,506	$ 9,486,600

* Original Cost - Not Trended

PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945 -3-
BASED UPON TREND FACTORS

SUMMARY (Cont'd.)

Account No.	ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
	GENERAL PLANT		
371	Structures and Improvements	$ 248,014	$ 382,346
372	Office Furniture and Equipment	115,090	138,922
373	Transportation Equipment	56,665	65,278
374	Stores Equipment	13,959	15,133
375	Shop Equipment	31,761	35,117
376	Laboratory Equipment	49,187	55,860
377	Tools and Work Equipment	118,635	139,224
378	Communication Equipment	104,969	150,501
379	Miscellaneous Equipment	17,668	21,034
393	Donations in Aid of Construction	(3,374)	(3,374)
	Total General Plant	$ 752,574	$ 1,000,041
	SUMMARY OF TOTALS		
	Intangible Plant	$ 790,803	$ 790,803
	Production Plant		
	(a) Steam	4,594,803	6,836,425
	(b) Hydraulic	18,481,916	34,876,833
	Transmission Plant	6,175,506	9,486,600
	General Plant	752,574	1,000,041
	Total Electric Plant in Service	$30,795,602	$ 52,990,702

SUSQUEHANNA TRANSMISSION CO. OF MARYLAND
COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945
BASED UPON TREND FACTORS
SUMMARY (Cont'd.)

Account No.	ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
	INTANGIBLE PLANT		
301	Organization	$ 3,332	$ 3,332
303	Miscellaneous Intangible Plant	5,668	5,668
	Total Intangible Plant	$ 9,000	$ 9,000
	TRANSMISSION PLANT		
340	Land and Land Rights	1,909,136	$ 2,528,645
341	Clearing Land and Rights-of-Way	136,614	317,848
342	Structures and Improvements	364,941	886,932
343	Station Equipment	716,071	1,457,874
344	Towers and Fixtures	1,171,897	2,463,735
345	Poles and Fixtures	491	937
346	Overhead Conductors and Devices	1,237,115	1,620,452
349	Roads and Trails	29,288	63,580
	Total Transmission Plant	$5,565,553	$ 9,340,003
	GENERAL PLANT		
371	Structures and Improvements	$ 6,944	$ 12,208
372	Office Furniture and Equipment	4,216	5,794
373	Transportation Equipment	(1,074)	(1,033)
374	Stores Equipment	1,257	2,203
375	Shop Equipment	927	1,371
376	Laboratory Equipment	241	173
377	Tools and Work Equipment	6,919	8,622
378	Communication Equipment	40,600	57,287
379	Miscellaneous Equipment	0	0
393	Donations in Aid of Construction	(15,953)	(15,953)
	Total General Plant	$ 44,077	$ 70,672
	SUMMARY		
	INTANGIBLE PLANT	$ 9,000	$ 9,000
	TRANSMISSION PLANT	5,565,553	9,340,003
	GENERAL PLANT	44,077	70,672
	TOTAL ELECTRIC PLANT IN SERVICE SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND	$5,618,630	$ 9,419,675

PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945
BASED UPON TREND FACTORS

INTANGIBLE PLANT

ACCOUNT NO. 301 - ORGANIZATION

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Total Organization	$ 668,530	$ 668,530*

* Original Cost - Not Trended

PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945
BASED UPON TREND FACTORS

-6-

INTANGIBLE PLANT

ACCOUNT NO. 302 - FRANCHISES AND CONSENTS

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Total Franchises and Consents	$ 64,005	$ 64,005*

*Original Cost - Not Trended

PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945
BASED UPON TREND FACTORS

INTANGIBLE PLANT

ACCOUNT NO. 303 - MISCELLANEOUS INTANGIBLE PLANT

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Total Miscellaneous Intangible Plant	$ 58,268	$ 58,268*

*Original Cost - Not trended

PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945
BASED UPON TREND FACTORS

HOLTWOOD STEAM PLANT

ACCOUNT NO. 310 - LAND AND LAND RIGHTS

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Year		
1939	$ 2,000	$ 2,000

PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF DEC. 31, 1945
BASED UPON TREND FACTORS

HOLTWOOD STEAM PLANT

ACCOUNT NO. 311 - STRUCTURES AND IMPROVEMENTS

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Year		
1924	$ 303,742	$ 507,803
1925	660,364	1,151,799
26	20,804	35,269
27	9,974	17,555
28	4,640	9,620
29	10,260	17,435
1930	43,520	$ 97,671
31	10,886	23,112
32	848	2,702
33	836	1,526
34	12,758	27,111
1935	1,950	3,351
36	4,302	8,412
37	13,403	19,472
38	3,193	4,400
39	442	805
1940	432	459
41	6,448	8,214
42	98,095	126,142
43	3,127	3,899
44	2,092	2,545
1945 Net Additions	2,594	(2,247)
TOTAL	$ 1,214,710	$ 2,067,055

PENNSYLVANIA WATER & POWER CO.

COST OF CONSTRUCTING PROPERTY AS OF DEC. 31, 1945 -10-

BASED UPON TREND FACTORS

HOLTWOOD STEAM PLANT

ACCOUNT NO. 312 - BOILER PLANT EQUIPMENT

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Year		
1924	$ 325,234	$ 413,248
1925	633,069	932,121
26	21,818	30,726
27	11,814	16,888
28	55,469	110,091
29	259	432
1930	131,036	232,236
31	23,897	49,750
32	5,901	13,008
33	7,314	15,314
34	40,148	66,661
1935	5,941	9,632
36	5,543	10,264
37	40,354	53,918
38	8,271	10,296
39	15,562	17,798
1940	59,947	74,798
41	40,451	49,399
42	412,871	453,200
43	4,307	5,359
44	10,928	12,514
1945 Net Additions	6,815	2,349
TOTAL	$ 1,866,969	$ 2,580,059

PENNSYLVANIA WATER & POWER CO. -11-
COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945
BASED UPON TREND FACTORS 22202

HOLTWOOD STEAM PLANT

ACCOUNT NO. 314 - TURBO-GENERATOR UNITS

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Year		
1924	$ 238,418	$ 358,389
1925	509,403	784,091
26	7,817	12,024
27	8,712	13,375
28	32	12
29	1,119	2,178
1930	1,383	2,547
31	3,444	6,519
32	25	41
33	393	1,076
34	29	-
1935	33	40
36	1,540	2,977
37	-	-
38	1,145	1,653
39	-	-
1940	-	-
41	11,574	11,848
42	15,603	18,430
43	4,475	4,939
44	1,081	1,286
1945 Net Additions	None	None
TOTAL	$ 806,226	$ 1,221,425

PENNSYLVANIA WATER & POWER CO.

COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945

BASED UPON TREND FACTORS

HOLTWOOD STEAM PLANT

ACCOUNT NO. 315 - ACCESSORY ELECTRICAL EQUIPMENT

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Year		
1924	$ 75,590	$ 116,950
1925	163,853	240,539
26	3,893	5,750
27	2,706	4,260
28	4,170	8,299
29	1,898	3,038
1930	30,445	58,748
31	4,158	7,349
32	3,087	5,220
33	122	223
34	6,927	11,127
1935	955	1,590
36	67	84
37	5,789	7,766
38	2,797	3,901
39	1,284	1,718
1940	7,549	4,718
41	8,273	12,461
42	61,537	71,235
43	651	4,814
44	15,470	16,119
1945 Net Additions	243	243
TOTAL	$ 401,464	$ 586,152

PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945 -13-
BASED UPON TREND FACTORS

HOLTWOOD STEAM PLANT

ACCOUNT NO. 316 - MISCELLANEOUS POWER PLANT EQUIPMENT

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Year		
1924	$ 14,610	$ 20,714
1925	30,332	43,989
26	966	1,305
27	523	732
28	3,196	6,221
29	-	
1930	687	797
31	1,638	3,489
32	9	16
33	1,842	3,840
34	31,621	57,810
1935	13,644	25,971
36	3,346	6,074
37	28,841	39,234
38	15,428	17,334
39	42,362	50,028
1940	8,458	10,755
41	28,583	38,069
42	17,802	18,586
43	18,238	22,923
44	22,175	26,130
1945 Net Additions	19,133	(14,283)
TOTAL	$ 303,434	$ 379,734

PENNSYLVANIA WATER & POWER, CO.
COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945
BASED UPON TREND FACTORS

HYDRAULIC PLANT

ACCOUNT NO. 320 - LAND EXCLUDING R.R. RELOCATION

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Land + Net Additions	$ 4,248,416	$ -
Less R.R. Relocation + Net Additions	1,498,434	-
Land Excluding R.R. Relocation	$ 2,749,982	$ 2,749,982*

* Original Cost - Not Trended

PENNSYLVANIA WATER & POWER CO.

COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945

BASED UPON TREND FACTORS

HOLTWOOD HYDRO PLANT

ACCOUNT NO. 320 - R.R. RELOCATION ONLY

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Year		
1912	$ 1,698,309	$ 2,742,189
1913		
1914	125	257
1945 Net Additions	None	None
TOTAL	$ 1,698,434	$ 2,742,446
Credit Payment from R.R.	200,000	200,000
NET TOTAL	$ 1,498,434	$ 2,542,446

PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945 -16-
BASED UPON TREND FACTORS

HOLTWOOD HYDRO PLANT

ACCOUNT NO. 321 - STRUCTURES AND IMPROVEMENTS

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Year		
1912 and prior years	$ 2,284,729	$ 4,514,376
13	148,910	294,627
14	147,459	358,670
1915	-	-
16	-	-
17	18,142	29,889
18	2,293	6,406
19	56,777	94,442
1920	-	-
21	3,662	5,973
22	6,181	10,297
23	668,589	1,772,791
24	622,380	469,388
1925	168,070	243,936
26	273,930	451,171
27	84,777	166,490
28	67,150	113,781
29	37,076	76,103
1930	26,821	54,028
31	35,232	58,173
32	16,414	41,225
33	31,069	64,491
34	27,550	50,053
1935	9,356	13,710
36	18,982	27,906
37	58,603	85,439
38	54,209	68,094
39	36,761	44,343
1940	5,431	12,093
41	34,658	42,965
42	11,667	15,159
43	2,624	4,083
44	264	296
1945 Net Additions	(1,157)	(1,157)
TOTAL	$ 4,958,609	$ 9,409,241

PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945
BASED UPON TREND FACTORS

HOLTWOOD HYDRO PLANT

ACCOUNT NO. 322 - RESERVOIRS DAMS & WATERWAYS

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Year		
1912	$ 3,052,665	$ 6,545,213
13	62,980	71,279
14	9,226	13,630
1915-19	200,847	444,506
1920-25	11,621	10,789
1926-29	159,906	109,719
1930-33	39,641	33,516
1934-41	483,432	447,242
1942-44	-	-
1945 Net Additions	-	-
TOTAL	$ 4,020 318	$ 7,675,794

PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF DEC. 31, 1945
BASED UPON TREND FACTORS

HOLTWOOD HYDRO

ACCOUNT NO. 323 - HYDRAULIC TURBINES AND GENERATORS

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Year		
1912	$ 1,693,081	$ 4,805,767
13	343,163	1,036,080
14	252,344	751,936
1915	637	1,624
16	9,464	25,222
17	4,622	8,282
18	3,111	10,333
19	6,239	14,657
1920	6,232	11,540
21	1,775	6,056
22	4,819	14,080
23	525,085	1,170,989
24	361,775	927,037
1925	2,726	6,940
26	5,712	13,872
27	10,572	27,438
28	12,330	40,884
29	8,499	24,530
1930	7,327	19,021
31	4,600	11,459
32	11,722	31,528
33	10,107	21,219
34	16,634	36,259
1935	27,687	44,878
36	55,687	74,593
37	20,905	29,310
38	15,692	21,035
39	21,956	26,524
1940	504	644
41	4,697	5,943
42	2,572	3,223
43	3,077	3,961
44	3,085	3,672
1945 Net Additions	None	None
TOTAL	$ 3,458,957	$ 7,030,608

PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945 -19-
BASED UPON TREND FACTORS

HOLTWOOD HYDRO PLANT -

ACCOUNT NO. 324 - ACCESSORY ELECTRIC EQUIPMENT

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Year (b)		
1912 and prior years	$ 306,560	$ 795,872
13	115,095	181,526
14	34,279	87,728
1915	818	1,031
16	2,259	7,397
17	3,505	6,280
18	6,207	27,566
19	10,809	24,564
1920	8,353	19,416
21	13,840	31,529
22	23,720	20,514
23	235,275	471,186
24	139,349	257,524
1925	138,435	241,312
26	12,481	20,938
27	17,325	34,062
28	18,982	38,834
29	21,850	48,223
1930	21,742	44,874
31	73,647	142,284
32	8,153	24,031
33	51,249	114,507
34	11,883	14,912
1935	20,731	27,361
36	23,202	37,846
37	35,284	48,855
38	57,077	67,301
39	4,713	6,084
1940	20,102	23,885
41	53,005	64,233
42	19,131	22,821
43	13,618	15,837
44	3,406	4,417
1945 Net Additions	3,091	3,092
TOTAL	$ 1,529,178	$ 2,977,842

PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945
BASED UPON TREND FACTORS

HOLTWOOD HYDRO PLANT

ACCOUNT NO. 325 - MISCELLANEOUS POWER PLANT EQUIPMENT

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Year		
1912 and prior years	$ 63,900	$ 128,918
13	4,763	12,462
14	2,724	7,779
1915	12	23
16	-	-
17	-	-
18	118	141
19	419	328
1920	74	166
21	190	418
22	1,309	2,983
23	7,279	12,235
24	6,415	10,157
1925	14,083	20,002
26	4,025	8,855
27	1,511	2,640
28	9,782	17,386
29	1,007	1,931
1930	13,205	21,212
31	912	1,862
32	3,162	9,844
33	1,068	2,454
34	1,390	1,221
1935	3,751	6,538
36	69	101
37	12,198	14,821
38	9,636	15,666
39	10,751	12,657
1940	211	277
41	528	742
42	1,146	1,366
43	5,406	7,570
44	13,503	15,559
1945 Net Additions	(25)	(25)
TOTAL	$ 194,122	$ 338,289

PENNSYLVANIA WATER & POWER CO. -21-

COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945

BASED UPON TREND FACTORS

HOLTWOOD HYDRO PLANT

ACCOUNT NO. 326 - ROADS, RAILROADS, AND BRIDGES

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Year		
1912 and prior years	$ 48,030	$ 111,674
1924	88	277
1929	17,033	32,825
1931	267	-
1936	6,499	7,855
1945 Net Additions	None	None
TOTAL	$ 71,917	$ 152,631

PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945 -22-
BASED UPON TREND FACTORS

TRANSMISSION PLANT

ACCOUNT NO. 340 - LAND AND LAND RIGHTS

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Total Land and Land Rights as of December 31, 1944	$ 809,241	
1945 Net Additions	(2,134)	
TOTAL	$ 807,107	$ 1,498,575

PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945
BASED UPON TREND FACTORS

TRANSMISSION PLANT

ACCOUNT NO. 341 - CLEARING LAND AND RIGHTS-OF-WAY

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Year		
1912 and prior years	$ 2,697	$ 10,781
13	1,478	5,048
14	485	1,958
1915	197	-
17	?	20
1923	40,802	63,539
24	9,845	19,470
28	216	-
1931	13,019	33,961
32	1,762	5,777
33	12	-
34	15,444	43,187
1935	-	-
36	194	-
37	22,266	39,956
38	1,657	2,913
39	-	-
1940	1,557	2,175
41	4,569	6,421
42	60	76
1945 Net Additions	None	None
TOTAL	$ 116,267	$ 235,282

PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945
BASED UPON TREND FACTORS

TRANSMISSION PLANT

ACCOUNT NO. 342 - STRUCTURES AND IMPROVEMENTS

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Year		
1912 and prior years	$ 604	$ 1,220
13	92	230
14	142	415
1915	-	-
16	-	-
17	2,162	4,431
18	1,853	3,258
19	-	-
1920	-	-
21	1	1
22	362	649
23	71,860	108,788
24	6,120	8,812
1925	1,698	3,529
26	2	3
27	201	263
28	29	43
29	595	1,024
1930	165	264
31	19,897	33,214
32	1,001	3,236
33	7,993	15,254
34	106,673	217,988
1935	8,754	13,241
36	5,773	9,669
37	43,010	65,023
38	38,519	51,230
39	1,186	1,669
1940	3,312	4,356
41	1,537	2,142
42	7,421	8,632
43	-	-
44	-	-
1945 Net Additions	(118)	(118)
TOTAL	$ 330,844	$ 558,466

PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945
BASED UPON TREND FACTORS

TRANSMISSION PLANT

ACCOUNT NO. 343 - STATION EQUIPMENT

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Year		
1912 and prior years	$ 314,325	$ 437,781
13	-	-
14	-	-
1915	910	11
16	527	946
17	28,869	38,954
18	3,327	6,675
19	2,107	3,565
1920	1,106	2,850
21	183	113
22	3,263	7,789
23	205,790	335,190
24	29,247	45,662
1925	88,942	121,095
26	4,142	5,820
27	97,699	141,869
28	5,998	9,688
29	93,174	128,233
1930	37,814	57,011
31	331,950	516,931
32	36,861	90,728
33	5,503	5,958
34	738,492	993,800
1935	45,886	66,135
36	44,131	58,693
37	249,833	327,931
38	231,503	300,514
39	9,176	9,997
1940	70,162	64,072
41	71,671	82,361
42	10,269	10,702
43	8,661	9,664
44	4,122	4,778
1945 Net Additions	5,581	4,935
TOTAL	$ 2,781,224	$ 3,830,451

PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF DEC. 31, 1945
BASED UPON TREND FACTORS

TRANSMISSION PLANT

ACCOUNT NO. 344 - TOWERS AND FIXTURES

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Year		
1912 and prior years	$ 59,910	$ 164,258
13	15,534	39,613
14	19,957	61,110
1915	-	-
16	-	-
17	-	-
18	-	-
19	-	-
1920	63	104
21	84	109
22	34	37
23	362,726	508,084
24	76,326	119,034
1925	-	-
26	1,555	-
27	199	362
28	3,903	251
29	-	-
1930	-	-
31	135,291	274,580
32	21,075	44,491
33	99	-
34	213,918	436,940
1935	1,740	3,486
36	47,243	66,264
37	114,989	201,033
38	23,530	37,747
39	-	
1940	3,882	5,660
41	-	-
42	1,731	1,995
43	-	-
44	603	700
1945 Net Additions	(1,183)	(1,184)
TOTAL	$ 1,102,909	$ 1,964,[illegible]

PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945
BASED UPON TREND FACTORS

TRANSMISSION PLANT

ACCOUNT NO. 345 - POLES AND FIXTURES

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Year		
1912 and prior years	$ -	$ -
1922	7	-
1932	1,121	1,707
37	35	62
38	334	634
1941	7,319	9,799
42	2,076	2,471
1945 Net Additions	None	None
TOTAL	$ 10,892	$ 14,677

PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945
BASED UPON TREND FACTORS

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TRANSMISSION PLANT

ACCOUNT NO. 346 - OVERHEAD CONDUCTORS AND DEVICES

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Year		
1912 and prior years	$ 27,870	$ 37,828
13	4,852	7,901
14	16,508	26,154
1915	-	
16	303	705
17	21,699	20,217
18	114	78
19	-	-
1920	-	
21	-	
22	-	
23	276,344	294,235
24	64,230	75,379
1925	2,924	5,181
26	2,516	3,045
27	291	594
28	15,200	21,790
29	864	1,344
1930	5,269	7,260
31	136,079	183,483
32	13,164	25,814
33	1,925	1,202
34	160,087	248,969
1935	1,927	3,146
36	62,556	92,463
37	124,578	150,405
38	35,326	42,003
39	359	543
1940	7,501	8,694
41	-	
42	7,302	7,861
43	-	
44	-	
1945 Net Additions	(274)	(273)
TOTAL	$ 989,514	$ 1,266,021

PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945
BASED UPON TREND FACTORS

TRANSMISSION PLANT

ACCOUNT NO. 349 - ROADS AND TRAILS

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Year		
1912 and prior years	$ 1,439	$ 4,979
13	55	236
14	107	327
1915	39	19
16	199	701
17	-	-
18	-	-
19	43	66
1920	-	-
21	-	-
22	81	-
23	112	106
24	255	498
1925	-	-
26	72	46
27	-	-
28	41	60
29	-	-
1930	-	-
31	2,632	5,365
32	7,749	21,114
33	3	-
34	10,289	8,231
1935	-	-
36	165	246
37	1,620	2,528
38	426	819
39	-	-
1940	-	-
41	-	-
42	1,765	2,167
43	7,908	8,908
44	2,045	2,240
1945 Net Additions	(296)	(296)
TOTAL	$ 36,749	$ 58,362

PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945
BASED UPON TREND FACTORS

GENERAL PLANT

ACCOUNT NO. 371 - STRUCTURES AND IMPROVEMENTS

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Year		
1912 and prior years	$ 4,056	$ 10,434
1918	863	-
1920	1	-
21	46	-
22	-	-
23	2	-
24	494	667
1925	1,517	1,235
26	31	39
27	954	21
28	133,507	230,105
29	27,295	47,471
1930	2,396	-
31	1,855	2,647
32	-	
33	-	
34	-	
1935	1,058	1,647
36	598	1,008
37	14,625	20,637
38	668	914
39	4,979	5,293
1940	347	437
41	14,489	17,022
42	36,473	40,689
43	1,272	1,410
44	1,330	1,512
1945 Net Additions	(842)	(842)
TOTAL	$ 248,014	$ 382,346

PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945 -31-
BASED UPON TREND FACTORS

GENERAL PLANT

ACCOUNT NO. 372 - OFFICE FURNITURE AND EQUIPMENT

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Year		
1912 and prior years	$ 2,654	$ 4,095
13	1,008	2,163
14	761	1,428
1915	183	239
16	400	638
17	793	1,129
18	116	129
19	981	996
1920	1,217	907
21	572	512
22	1,034	1,315
23	2,964	2,973
24	3,070	3,184
1925	1,511	1,657
26	542	650
27	2,619	3,301
28	4,942	5,814
29	4,862	5,892
1930	21,754	27,113
31	2,377	3,511
32	2,714	4,214
33	793	1,230
34	3,607	4,781
1935	3,082	4,658
36	3,327	4,866
37	10,109	12,160
38	8,030	8,773
39	6,247	6,935
1940	10,749	11,773
41	7,867	7,960
42	2,836	2,591
43	75	71
44	622	592
1945 Net Additions	672	672
TOTAL	$ 115,090	$ 138,922

PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945 -32-
BARED UPON TREND FACTORS

GENERAL PLANT

ACCOUNT NO. 373 - TRANSPORTATION EQUIPMENT

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Year		
1933	$ 4,446	$ 6,053
34	2,707	3,500
1935	341	459
36	2,277	3,099
37	6,479	8,223
38	2,190	2,265
39	12,335	14,987
1940	5,028	5,897
41	17,128	18,780
42	697	701
43	-	-
44	-	-
1945 Net Additions	3,037	1,314
TOTAL	$ 56,665	$ 65,278

PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945
BASED UPON TREND FACTORS

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GENERAL PLANT

ACCOUNT NO. 374 - STORES EQUIPMENT

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Year		
1928	$ 2,638	$ 2,721
29	6,174	7,227
1935	230	246
39	31	31
1940	-	-
41	849	794
42	3,987	4,064
1945 Net Additions	50	50
TOTAL	$ 13,959	$ 15,133

PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945
BASED UPON TREND FACTORS

GENERAL PLANT

ACCOUNT NO. 375 - SHOP EQUIPMENT

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Year		
1912 and prior years	$ 1,946	$ 2,688
13	-	-
14	89	114
1918	4	3
19	-	-
1920	19	16
1926	77	95
27	403	477
28	1,636	2,567
29	3,172	3,804
1930	42	57
31	3,583	5,272
32	20	31
33	-	-
34	-	-
1935	159	167
36	6	8
37	139	235
38	115	164
39	7,336	6,819
1940	10,476	10,066
41	999	1,002
42	261	262
43	196	186
44	699	700
1945 Net Additions	384	384
TOTAL	$ 31,761	$ 35,117

PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945
BASED UPON TREND FACTORS

GENERAL PLANT

ACCOUNT NO. 376 - LABORATORY EQUIPMENT

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Year		
1912 and prior years	$ 5,078	$ 5,751
13	831	925
14	3,003	4,096
1915	237	295
16	70	148
17	453	356
18	943	712
19	748	677
1920	828	981
21	432	445
22	232	263
23	2,456	2,519
24	3,439	3,620
1925	2,493	3,767
26	251	293
27	178	213
28	3,164	3,718
29	2,888	3,038
1930	3,428	4,336
31	684	963
32		
33	100	142
34	396	522
1935	1,931	2,117
36	1,791	2,492
37	513	538
38	2,089	2,095
39	3,197	3,650
1940	2,225	2,457
41	2,562	2,268
42		
43		
44	1,077	994
1945 Net Additions	1,470	1,469
TOTAL	$ 49,187	$ 55,860

PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945
BASED UPON TREND FACTORS

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GENERAL PLANT

ACCOUNT NO. 377 - TOOLS AND WORK EQUIPMENT

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Year		
1912 and prior years	$ 22,299	$ 29,047
13	6,113	8,011
14	2,016	2,797
1915	103	143
16	90	93
17	116	92
18	206	181
19	1,115	1,857
1920	733	952
21	388	395
22	262	304
23	5,799	5,395
24	2,979	2,807
1925	7,614	7,762
26	326	351
27	10,472	12,730
28	9,726	10,857
29	5,969	7,090
1930	14,576	18,411
31	990	1,342
32	10	15
33	170	254
34	1,718	2,315
1935	1,024	1,348
36	8,408	11,146
37	1,923	1,928
38	1,744	1,836
39	1,217	1,176
1940	4,138	3,733
41	4,521	4,151
42	2,136	1,845
43	231	139
44	-	-
1945 Net Additions	(497)	(1,279)
TOTAL	$ 118,635	$ 139,224

PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945 -37-
BASED UPON TREND FACTORS

GENERAL PLANT

ACCOUNT NO. 378 - COMMUNICATION EQUIPMENT

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Year		
1912 and prior years	$ 10,440	$ 18,350
13	1,725	3,867
14	1,405	3,154
1915	21	33
16	218	235
17	30	19
18	762	1,900
19	359	487
1920	7,018	7,080
21	169	392
22	268	445
23	10,758	17,698
24	3,227	5,623
1925	9,103	12,016
26	589	949
27	668	347
28	4,118	6,542
29	2,237	3,408
1930	1,147	2,140
31	1,153	2,380
32	2,974	5,428
33	506	1,234
34	4,001	5,762
1935	3,064	4,501
36	12,326	15,563
37	5,299	6,712
38	2,094	2,636
39	728	885
1940	7,259	8,408
41	1,566	1,778
42	4,082	4,467
43	5,724	6,123
44	272	280
1945 Net Additions	(341)	(341)
TOTAL	$ 104,969	$ 150,511

PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF DEC. 31, 1945
BASED UPON TREND FACTORS

GENERAL PLANT

ACCOUNT NO. 379 - MISCELLANEOUS EQUIPMENT

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Year		
1912 and prior years	$ 21	$ -
13	-	-
14	-	-
1915	430	941
1920	37	-
21	-	-
22	-	-
23	-	-
24	1,814	1,567
1925	1,148	142
26	12,036	16,322
27	145	151
28	-	-
29	260	338
1937	172	241
38	257	241
39	319	352
1940	-	-
41	-	-
42	1,897	1,636
43	308	291
44	168	156
1945 Net Additions	(1,344)	(1,344)
TOTAL	$ 17,668	$ 21,034

PENNSYLVANIA WATER & POWER CO.
COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945
BASED UPON TREND FACTORS

GENERAL PLANT

ACCOUNT NO. 393 - DONATIONS IN AID OF CONSTRUCTION

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Year		
1937	$ (3,374)	$ (3,374)
TOTAL	$ (3,374)	$ (3,374)

SUSQUEHANNA TRANSMISSION CO. OF MARYLAND
COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945
BASED UPON TREND FACTORS

INTANGIBLE PLANT

ACCOUNT NO. 301 - ORGANIZATION

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31 1945
Total Organization	$ 3,332	$ 3,332*

*Original Cost - Not Trended

SUSQUEHANNA TRANSMISSION CO. OF MARYLAND
COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945
BASED UPON TREND FACTORS

INTANGIBLE PLANT

ACCOUNT NO. 303 - MISCELLANEOUS INTANGIBLE

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Total Miscellaneous Intangible Plant	$ 5,668	$ 5,668*

*Original Cost - Not Trended

SUSQUEHANNA TRANSMISSION CO. OF MARYLAND
COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945
BASED UPON TREND FACTORS

TRANSMISSION PLANT

ACCOUNT NO. 340 - LAND AND LAND RIGHTS

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Total Land and Land Rights	$ 1,909,136	$ 2,528,645

SUSQUEHANNA TRANSMISSION CO. OF MARYLAND

COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945 -43-

BASED UPON TREND FACTORS

TRANSMISSION PLANT

ACCOUNT NO. 341 - CLEARING LAND AND RIGHTS-OF-WAY

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Year		
1912	$ 6,699	$ 28,610
13	1,343	6,048
14	1,472	5,946
1915	-	-
16	-	-
17	30	88
18	-	-
19	-	-
1920	46	-
21	-	-
22	-	-
23	-	-
24	4,738	8,355
1925	75	212
26	-	-
27	-	-
28	-	-
29	-	-
1930	-	-
31	43,098	106,985
32	16,978	44,609
33	3	10
34	18,525	39,199
1935	-	-
36	78	-
37	29,875	56,465
38	3,281	6,209
39	7,290	10,755
1940	3,083	4,357
41	-	-
42	-	-
43	-	-
44	-	-
1945 Net Additions	None	None
TOTAL	$ 136,614	$ 317,848

SUSQUEHANNA TRANSMISSION CO. OF MARYLAND
COST OF CONSTRUCTING PROPERTY AS OF DEC. 31, 1945
BASED UPON TREND FACTORS

TRANSMISSION PLANT

ACCOUNT NO. 342 - STRUCTURES AND IMPROVEMENTS

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Year		
1912 and prior years	$ 123,313	$ 432,816
13	2,612	9,502
14	29,708	78,701
1915	90	358
16	471	1,521
17	11,370	27,060
18	24,295	66,069
19	3,364	5,710
1920	4,339	8,019
21	845	1,505
22	901	1,945
23	6,289	13,034
24	899	917
1925	1,495	2,544
26	876	1,348
27	9,381	13,616
28	1,445	2,369
29	4,095	5,952
1930	7,872	12,208
31	29,871	51,528
32	23,001	40,130
33	7,610	14,133
34	5,090	9,742
1935	899	1,477
36	205	262
37	19,759	29,053
38	24,281	32,410
39	2,100	2,801
1940	112	170
41	3,246	3,793
42	11,429	12,548
43	312	325
44	-	-
1945 Net Additions	3,366	3,366
TOTAL	$ 364,941	$ 886,932

SUSQUEHANNA TRANSMISSION CO. OF MARYLAND
COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945
BASED UPON TREND FACTORS

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TRANSMISSION PLANT

ACCOUNT NO. 343 - STATION EQUIPMENT

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Year		
1912 and prior years	$ 218,789	$ 540,447
13	38,157	91,116
14	71,038	164,489
1915	1,689	3,183
16	7,689	15,240
17	24,234	59,486
18	37,561	88,804
19	5,674	12,145
1920	11,981	26,855
21	15,202	26,944
22	18,991	46,787
23	29,808	61,779
24	13,210	20,149
1925	10,580	19,480
26	11,976	21,237
27	765	1,373
28	562	226
29	58,192	87,463
1930	2,910	2,407
31	12,067	21,738
22	53,092	60,336
33	879	1,655
34	18,716	25,468
1935	1,701	1,540
36	585	667
37	4,058	5,281
38	23,354	28,958
39	894	1,141
1940	2,007	2,368
41	3,921	4,054
42	12,160	14,387
43	2,940	3,132
44		
1945 Net Additions	697	(2,461)
TOTAL	$ 716,071	$ 1,457,874

SUSQUEHANNA TRANSMISSION CO. OF MARYLAND
COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945
BASED UPON TREND FACTORS

TRANSMISSION PLANT

ACCOUNT NO. 344 - TOWERS AND FIXTURES

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Year		
1912 and prior years	$ 130,081	$ 374,937
13	12,428	35,350
14	83,611	263,401
1915	-	
16	15	25
17	566	923
18	-	-
19	1	-
1920	216	359
21	292	387
22	83	160
23	53	86
24	111,017	169,161
1925	8,800	15,256
26	-	
27	217	397
28	-	
29	-	
1930	-	
31	238,359	514,495
32	69,797	148,041
33	4,963	11,594
34	157,009	326,022
1935	292	667
36	-	
37	290,548	506,073
38	32,932	54,899
39	16,470	24,357
1940	855	1,213
41	7,640	9,785
42	3,095	3,562
43	220	249
44	-	
1945 Net Additions	2,336	2,336
TOTAL	$ 1,171,896	$ 2,463,735

SUSQUEHANNA TRANSMISSION CO. OF MARYLAND
COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945
BASED UPON TREND FACTORS

TRANSMISSION PLANT

ACCOUNT NO. 345 - POLES AND FIXTURES

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Year		
1912	-	
1938	491	937
1945 Net Additions	-	
TOTAL	$ 491	$ 937

SUSQUEHANNA TRANSMISSION CO. OF MARYLAND
COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945
BASED UPON TREND FACTORS

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TRANSMISSION PLANT

ACCOUNT NO. 346 - OVERHEAD CONDUCTORS AND DEVICES

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Year		
1912	$ 110,706	$ 153,558
13	5,582	14,408
14	58,474	93,192
1915	-	-
16	1,303	3,035
17	86,292	79,891
18	686	1,672
19	191	-
1920	-	-
21	134	193
22	-	-
23	-	-
24	41,145	48,105
1925	1,400	1,346
26	1,007	1,147
27	-	-
28	111	102
29	5,053	2,504
1930	4,673	6,459
31	345,152	452,413
32	94,272	135,966
33	972	1,722
34	115,023	182,133
1935	1,101	1,826
36	7,617	12,134
37	246,096	304,704
38	12,425	16,550
39	23,327	27,389
1940	15,233	18,548
41	15,978	17,285
42	17,150	18,103
43	547	602
44	-	-
1945 Net Additions	25,465	25,465
TOTAL	$ 1,237,115	$ 1,620,452

SUSQUEHANNA TRANSMISSION CO. OF MARYLAND
COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945
BASED UPON TREND FACTORS

TRANSMISSION PLANT

ACCOUNT NO 349 - ROADS AND TRAILS

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Year		
1912	$ 5,649	$ 20 904
13	257	1 003
14	252	922
1915	178	423
16	-	-
17	-	-
18	72	43
19	124	223
1920	1,786	2 907
21	1,907	3 066
22	57	74
23	264	470
24	240	377
1925	-	-
26	-	-
27	-	-
28	-	-
29	165	279
1930	-	-
31	5 388	9 629
32	5 256	11 724
33	-	-
34	3 266	4 885
1935	-	-
36	594	1 224
37	4 167	5 761
38	-	-
39	-	-
1940	-	-
41	-	-
42	-	-
43	-	-
44	-	-
1945 Net Additions	(334)	(334)
TOTAL	$ 29,288	$ 63,580

SUSQUEHANNA TRANSMISSION CO. OF MARYLAND
COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945 -50-
BASED UPON TREND FACTORS

GENERAL PLANT

ACCOUNT NO. 371 - STRUCTURES AND IMPROVEMENTS

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Year		
1912	$ 178	$ 446
13	-	-
14	48	153
1915	-	-
16	-	-
17	-	-
18	20	-
19	814	1,132
1920	199	-
21	13	15
22	93	189
23	1,531	2,962
24	-	-
1925	-	-
26	-	-
27	692	1,376
28	64	72
29	-	-
1930	-	-
31	995	2,041
32	497	1,033
33	243	347
34	-	-
1935	1,014	1,880
36	-	-
37	-	-
38	-	-
39	-	-
1940	-	-
41	322	341
42	-	-
43	-	-
44	-	-
1945 Net Additions	221	221
TOTAL	$ 6,944	$ 12,208

SUSQUEHANNA TRANSMISSION CO. OF MARYLAND
COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945
BASED UPON TREND FACTORS

GENERAL PLANT

ACCOUNT NO. 372 - OFFICE FURNITURE AND EQUIPMENT

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Year		
1912	$ 504	$ 909
13	94	136
14	318	501
1915	98	139
16	278	423
17	700	894
18	86	82
19	209	188
1920	158	98
21	10	8
22	771	1,064
23	146	155
24	172	175
1925	125	133
26		-
27	15	17
28	198	356
29	153	270
1930	-	
31		
32		
33		
34	20	28
1935	10	15
36	125	178
37	-	-
38	-	-
39	-	-
1940	-	-
41	-	
42	-	
43	-	-
44	26	25
1945 Net Additions	None	None
TOTAL	$ 4,216	$ 5,794

SUSQUEHANNA TRANSMISSION CO. OF MARYLAND
COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945 52
BASED UPON TREND FACTORS

GENERAL PLANT

ACCOUNT NO. 373 - TRANSPORTATION EQUIPMENT

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Year		
1931	$ (1,485)	$ (1,485)
1937	410	452
1945 Net Additions	None	None
TOTAL	$ (1,075)	$ (1,033)

SUSQUEHANNA TRANSMISSION CO. OF MARYLAND
COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945
BASED UPON TREND FACTORS

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GENERAL PLANT

ACCOUNT NO. 374 - STOPES EQUIPMENT

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Year		
1922	$ 187	$ 375
23	277	963
1934	766	838
1938	27	27
1945 Net Additions	-	
TOTAL	$ 1,257	$ 2 203

SUSQUEHANNA TRANSMISSION CO. OF MARYLAND
COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945
BASED UPON TREND FACTORS

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GENERAL PLANT

ACCOUNT NO. 375 - SHOP EQUIPMENT

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Year		
1912	$ -	$ -
13	-	-
14	4	5
1920	1	1
21	-	-
22	12	13
23	839	1,268
24	-	-
1925	-	-
26	-	-
27	-	-
28	71	84
1945 Net Additions	None	None
TOTAL	$ 927	$ 1,371

SUSQUEHANNA TRANSMISSION CO. OF MARYLAND
COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945
BASED UPON TREND FACTORS

GENERAL PLANT

ACCOUNT NO. 376 - LABORATORY EQUIPMENT

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Year		
1912	$ -	$ -
1925	159	94
1937	82	79
1945 Net Additions	None	None
TOTAL	$ 241	$ 173

SUSQUEHANNA TRANSMISSION CO. OF MARYLAND
COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945
BASED UPON TREND FACTORS

GENERAL PLANT - MARYLAND

ACCOUNT NO. 377 - TOOLS AND WORK EQUIPMENT

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Year		
1912	$ 299	$ 351
13	92	187
14	374	1,233
1915	35	49
16	118	118
17	374	249
18	338	252
19	634	988
1920	355	341
21	346	522
22	454	550
23	163	306
24	513	547
1925	-	-
26	92	93
27	-	-
28	-	-
29	660	730
1930	-	-
31	-	-
32	212	213
33	-	-
34	-	-
1935	116	141
36	-	-
37	-	-
38	1,613	1,650
39	-	-
1940	-	-
41	131	117
42	102	88
43	-	-
44	-	-
1945 Net Additions	(103)	(103)
TOTAL	$ 6,918	$ 8,622

SUSQUEHANNA TRANSMISSION CO. OF MARYLAND
COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945 -57-
BASED UPON TREND FACTORS

GENERAL PLANT

ACCOUNT NO. 378 - COMMUNICATION EQUIPMENT

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC 31, 1945
Year		
1912	$ 980	$ 2,891
13	118	346
14	-	-
1915	-	
16	-	
17	3,007	2,720
18	-	-
19	-	-
1920	41	40
21	72	86
22	1,126	1,352
23	148	157
24	1,100	1,350
1925	1,573	599
26	1	1
27	-	-
28	51	57
29	1,215	2,533
1930	1,367	2,917
31	1,728	4,475
32	455	1,459
33	706	1,667
34	1,760	3,081
1935	643	1,480
36	470	1,050
37	18,680	23,030
38	553	726
39	884	1,308
1940	2,036	1,875
41	550	686
42	30	34
43	376	413
44	317	341
1945 Net Additions	613	613
TOTAL	$ 40,600	$ 57,287

SUSQUEHANNA TRANSMISSION CO. OF MARYLAND
COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945
BASED UPON TREND FACTORS

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GENERAL PLANT

ACCOUNT NO. 379 - MISCELLANEOUS EQUIPMENT

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31 1945
Year		
1942	$ 12	$ 4
1945 Net Additions	(12)	(4)
TOTAL	$ 0	$ 0

SUSQUEHANNA TRANSMISSION CO. OF MARYLAND
COST OF CONSTRUCTING PROPERTY AS OF OF DEC. 31, 1945
BASED UPON TREND FACTORS

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GENERAL PLANT

ACCOUNT NO. 393 - DONATIONS IN AID OF CONSTRUCTION (CREDIT)

ITEM	ACTUAL ORIGINAL COST OF SURVIVING PROPERTY	TRENDED CONSTRUCTION COST AS OF DEC. 31, 1945
Year		
1932	$ (590)	$ (590)
1939	(15,363)	(15,363)
1945 Net Additions	0	0
TOTAL	$ (15,953)	$ (15,953)

EXHIBIT 32.

[22252]

CHAS. T. MAIN, INC.
Architects—Engineers
201 Devonshire Street
Boston, 10, Mass.

F. M. GUNBY
W. F. UHL
A. W. BENOIT
MARCUS K. BRYAN
R. A. MONCRIEFF
W. M. HALL

Industrial Plants
Textile Mills
Paper Mills
Steam Power
Water Power
Foundations
Valuations
Cable Address
Chasmain, Boston

April 10, 1946

PENNSYLVANIA WATER & POWER COMPANY

and

SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND

OUTLINE OF ESTIMATING PROCEDURE SUBSTITUTE AND REPRODUCTION PLANT COSTS

As of December 31, 1945

In developing the cost as of December 31, 1945, for the physical properties of Pennsylvania Water & Power Company and Susquehanna Transmission Company of Maryland, as shown in the attached summary, two methods were used in determining the final cost. The first method utilized trend factors to adjust actual original cost to December 31, 1945, and the second involved a new estimate of the cost of a new "Substitute Plant" with unit costs as of December 31, 1945. The first method was applied to all physical property as described in a separate report, and

the second to those portions of the property where modern practices in design and operating procedure might have brought about some degree of obsolescence.

SUBSTITUTE PLANT

The major items included in the Substitute Plant are the hydro-electric development, the steam plant, the electrical equipment serving outgoing transmission lines at Holtwood, the double circuit 66 kv transmission line from Holtwood to Highlandtown, and the Highlandtown Substation. Three plans are attached showing general plans and sections of the proposed substitute plant. In the case of the steam and hydro plants certain necessary items are not included in the Substitute Plant but are retained at original cost or trended original cost. These include all Land and Land Rights, the [22253] (page 2) railroad relocation, the operators' village, the river coal plant and equipment, and all roads, trails, and bridges. Trended original costs were used for Transmission Roads, Trails, and Bridges. A more detailed reference to these items is made in the following description of Substitute Plant items.

HOLTWOOD SUBSTITUTE HYDRO PLANT

The substitute hydro plant is similar in design to Safe Harbor and other recent plants. The dam is located on the same axis as the existing dam and differs slightly from it except for length of spillway and the inclusion of a crest gate in the new design. The selection of the same site for the dam removed many of the uncertainties from the estimate of foundations, resulting in a more accurate estimate than is ordinarily possible. The length of free crest on the existing dam is 2368 feet with a 14 ft log sluice section, while the substitute dam has a free crest length slightly shorter and a 50 ft crest gate section as shown on the General Plans and Sections attached hereto. The new crest and gate section provide for a maximum discharge of 1,200,000 cubic feet per second with headwater at elevation

188 which is approximately equal to the present discharge capacity at that elevation.

In the design of the substitute power house full advantage is taken of modern developments in hydraulic turbine and generator design. The substitute plant has four main generating units instead of the original ten. The normal rating of each hydraulic turbine is 35,100 horsepower at 51 ft net head. The generators consist of three 25 cycle machines with a rating of 27,500 kva, or 25,500 kw, at .925 power factor and one 60 cycle machine with a rating of 30,000 kva, or 25,500 kw, at .85 power factor. These four units give the plant a normal capacity of 102,000 kw in the main units. The turbines are of the adjustable 5-blade propeller type which provide for high efficiency under all operating conditions.

Two Station Service Units are also provided, which are rated at 1000 kva or 750 kw at .75 power factor. The turbines for these units are vertical Francis type units with a normal rating of 1050 hp at 51 ft net head.

The arrangement of the power house, skimmer wall, deflection wall and tail race is much the same as in the present plant except that the power house length is materially reduced through elimination of six units.

Equipment design for the power house follows conventional present-day practice and besides the Generating Units themselves includes head gates, draft tube gates, operating cranes, trash racks, draft tube unwatering pumps, power house crane and [22254] (page 3) miscellaneous tools and devices.

The power house itself has concrete substructure, intake and electrical bay with the superstructure constructed of brick with structural steel frame. The roof of the electrical bay is designed to support step-up transformers for outgoing transmission lines and the power house roof is used to support substation steelwork for the outgoing lines.

Main switching control and protection equipment up to the low tension terminals of the step-up transformers

is included in the substitute hydro-plant estimate as is the 25/60 cycle frequency converter. The estimate for switching and control includes a double bus arrangement for both 25 cycle and 60 cycle sections. Control and switching for generators, outgoing lines, frequency converter, station service and steam plant circuit is provided.

The frequency converter is a 31,250 kva, 25/60 cycle, synchronous-synchronous type machine rated at 25,500 kw at 0.81 power factor. The rating of the machine is determined by load requirements on both the 25 and 60 cycle systems correlated with the main generator size and output.

Transformers and high voltage switchgear are described under the Transmission system.

COMPARISON WITH PRESENT HYDRO

The property replaced, consisting of the present dam, deflection wall, skimmer wall, power house and bulkhead section, is of similar nature but of earlier design. The major difference is in the power house and equipment. The present power house measures 173 feet by 510 feet in plan whereas the substitute power house would be 102 feet by 372 feet. The housing over the intake makes an appreciable difference in width since it is eliminated in the substitute design and the reduction in the number of units reduces the length materially. The width for the substitute power house includes the electrical bay on which the new outdoor transformers are to be placed. These factors all operate to reduce the substitute power house cost as compared with the trended reproduction cost as indicated below.

Power House Cost—December 31, 1945

Substitute Plant	$5,501,738
Trended Reproduction	$7,837,311

The second major difference in the substitute hydro plant lies in the equipment. The ten original units were installed between 1910 and 1924 and range in size from 10,000 kw to 12,000 kw. [22255] (page 4) Their total ac-

tual capacity operating at full load is 103,500 kw. The substitute generators are rated at 102,000 kw for the main units and 1,500 kw for the station service, making the total capacity equal to the present plant, or 103,500 kw. However, the new equipment would be more efficient and the total capacity reached with a flow of 28,500 cubic feet per second as compared to 31,500 cubic feet per second required to reach full capacity in the present plant.

The frequency converter installation in the present plant is 12,000 kw, or equal in size to the two 60 cycle generators. In other words, total available 60 cycle capacity with one unit out of service would be 24,000 kw. This situation is duplicated in the substitute plant which has one 25,500 kw unit and one 25,500 kw frequency changer. With either of these out of service, the 60 cycle capacity of the plant would be 25,500 kw or just slightly more than provided at present.

The total cost of equipment to be installed in the substitute power house is also materially reduced because of the decrease in the number of units installed in spite of the fact that the adjustable blade units are inherently more expensive than the older Francis type as indicated below.

Hydro Plant Equipment Costs—December 31, 1945

Substitute Plant	$ 9,158,831
Trended Reproduction	$12,346,739

PRESENT ITEMS RETAINED

Items of the original hydro plant which are retained in the 1945 cost at trended reproduction or original cost are:

Land	Original Cost
Railroad Relocation	Trended Cost
Operators' Village	Trended Cost
Roads, Railroads and Bridges	Trended Cost

The railroad relocation, the operators' village, and roads, railroads and bridges are not estimated in the sub-

stitute plant because no functional obsolescence can be found and their reconstruction today would follow the original pattern in all material aspects.

[22256] (page 5)

For the Hydro Plant substitute plant estimates represent $21,962,564 and trended reproduction costs $7,016,989 of the total estimated cost as of December 31, 1945 of $28,979,553.

HOLTWOOD SUBSTITUTE STEAM PLANT

The estimate for the substitute steam plant covers a single unit station of the same capacity as the present plant. Two separate buildings are provided as at present, one housing the steam turbine and boiler and the other housing the coal preparation plant. Both have concrete foundations, steel frame and brick exterior walls. The substitute structures are located in approximately the same sites as the present plant.

The main generating unit is a 25,000 kw, 13,800 volt, 60 cycle turbo-generator using steam at 650 lb per square inch pressure and 825 degrees throttle temperature. The electrical end is rated at 29,400 kva, allowing for 25,000 kw at .85 power factor. The steam end is gaged to carry a maximum load of 26,500 kw and this amount could be carried by the unit as long as the power factor is .90 or better.

The boiler is a Stirling type bent tube unit, rated at 275,000 lb of steam per hour and capable of delivering a maximum of 300,000 lb per hour when steam for heating and melting ice is in demand. Air heater and economizer are provided for maximum efficiency as are all the usual boiler auxiliaries including automatic combustion control. A Cotterell electrostatic precipitator is installed on the boiler house roof for fly ash collection.

Condensing water for the plant is taken from the pond above the dam through a screen house and intake tunnel.

The water is returned to the pond through a discharge tunnel so arranged as to prevent recirculation.

The coal handling and preparation equipment in the substitute plant provides for receiving coal from the River Coal Plant (included in the trended reproduction estimate) in a track hopper. Equipment is provided at the hopper to transfer the coal to the storage yard through a skip hoist and drag scraper. Storage of the wet coal in the yard for a time tends to reduce the moisture content and consequently makes the drying operation easier.

When the coal is reclaimed from storage it is delivered to two 500-ton wet coal bunkers. From these main storage bunkers the coal is delivered to two small 25-ton bunkers which feed the two dryers. The rotary type dryers are designed to reduce the moisture content of the coal from 20% to 2%. After the coal leaves the dryers it is carried through conveying and weighing equipment to two pulverizing mills designed to reduce the coal to a fineness suitable for burning. The pulverized coal is delivered from the mills through a transport pump and 5 inch steel pipe to the 100-ton pulverized coal bunker in the boiler room.

[22257] (page 6)

Auxiliaries for the steam plant include a compressed air system, fire protection system, power house crane, elevator in the boiler house and miscellaneous small items.

The electrical system at the steam plant is relatively simple, consisting only of the necessary controls at the turbine cables for delivering the generator output to the hydro plant, control cables and steam plant auxiliary equipment switching and control. The generator operates at 13,800 volts and is tied in to the system on the 13.8 kv, 60 cycle bus in the hydro plant. There is no 13.8 kv switching in the steam plant. The generators are excited by direct connected main and pilot exciters, with an emergency tie to the spare exciter in the hydro plants. All main electrical controls for the generator are likewise located in the

hydro plant. Electrical equipment is provided in the steam plant for plant auxiliaries. A central switchgear group is provided in the steam station and the coal preparation plant. Local groups are also provided in the steam station, strategically situated for operation of the auxiliary equipment, but these are kept to a minimum in the coal preparation plant on account of the severe operating conditions with respect to dust and heat. The type of switching equipment used is the modern fully enclosed unit construction. Other electrical items included consist of the necessary power and control wiring for plant auxiliaries, a d-c system for the coal feeders, grounding and lighting.

COMPARISON WITH PRESENT PLANT

The present steam plant has two units presently rated at 26,000 kw, operating at 350 lb per square inch pressure and 550° temperature at the throttle. Sufficient steam capacity is provided in three boilers to carry 26,000 kw. Because of the reduction from two units to one unit and from three boilers to one boiler, the size of the power house is reduced from 146 ft x 119 ft to 127 ft x 72 ft.

The increase in boiler and turbine pressure makes possible a reduction in the total amount of steam required from 375,000 lb per hour to 300,000 lb per hour.

The comparative cost of the structures and equipment in the present plant and the substitute plant are as shown below:

Comparative Cost—December 31, 1945

	Structure	*Equipment*
Substitute Plant	$1,666,117	$3,575,975
Trended Reproduction	2,006,810	4,139,851

These figures include the dryer and pulverizer building which do not differ greatly in the present and substitute plants.

[22258] (page 7)

The coal drying equipment and the puverizing equipment in the substitute plant is similar to the most modern equipment in the present plant.

ITEMS RETAINED AT TRENDED COST

The River Coal Plant is the only item in the original design for which no substitute plant is estimated. This consists of dredges, steam boats, tug boats, barges and their auxiliaries, together with the shore installation near the steam plant. The shore installation consists of a coal washing plant for separation of the coal from the sand and silt dredged up with it.

SUBSTITUTE TRANSMISSION PLANT

The intent of the substitute transmission plant is to evaluate an economical substitute for that portion of the transmission property which might indicate obsolescence to a sufficient degree to warrant investigation, as to the feasibility of replacement in accordance with modern practice. The elements of property coming under this classification are the Holtwood-Baltimore lines and the substation equipment at each end of these lines.

HOLTWOOD SUBSTATION

The substitute transmission substation at Holtwood consists of step-up transformers and other station equipment serving the Holtwood-Baltimore lines as well as other high tension lines out of Holtwood. While the obsolescence in transmission plant may be considered as involving primarily the Holtwood-Baltimore connection, the changes required for this purpose, together with the extensive changes involved in the substitute hydro plant at Holtwood, make it desirable to provide a substitute for all substation equipment at that location.

In the proposed arrangement the transformers are located on the roof of the electrical bay, similar to the

arrangement at the Safe Harbor plant. The high tension switching structure is mounted on the roof of the generator room. The switching arrangement includes no high tension circuit breakers, as the transformers are associated with specific lines and all load switching is done on the low-tension side except in emergencies. This follows the company's current practice for the past several years and also that of Safe Harbor. The low tension switchgear required for this purpose is included in the cost of the hydro plant.

COMPARISON WITH PRESENT PLANT

The major changes made in the substitute plant as compared with the existing plant are as follows:

The indoor 70 kv oil switches are eliminated; instead, air-break switches are substituted as they will provide equivalent switching service at lower cost.

[22259] (page 8)

Nine 3-phase power transformers, now located indoors, stepping up the 25 cycle power to 66 kv for transmission to Baltimore and Lancaster, are replaced by outdoor transformers, two banks stepping up power to 110 kv for transmission to Baltimore, and one 3-phase transformer stepping up to 66 kv for transmission to Lancaster. Little fundamental change is made in the 60 cycle arrangement. There is some adjustment in the sizes of transformers. There is also some change in the design of most of the transformers, particularly the 25 cycle units, to make use of modern developments such as inert gas atmosphere and air blast equipment for the higher loadings. Water cooling is eliminated.

HIGHLANDTOWN SUBSTATION

At Highlandtown a complete substitution is proposed for all property associated with transmission of power, except land. The storage and meter test facilities and the

garage located at this point therefore remain unchanged. The new substation facilities consist of an outdoor 110 kv switching structure with two transformer banks stepping down to 13.8 kv, and a low tension switchhouse containing the 13.8 kv switchgear, control switchboards, and service facilities. These replace the present 8 three-phase transformers which are all indoors, the indoor 70 kv switchgear, and the low tension switchgear which is inadequate to properly handle the short circuit requirements of the present system. The number of high tension circuits is reduced due to the use of larger transformer banks possible with modern designs and the use of two lines from Holtwood instead of four. The number of low tension feeder circuits increases somewhat because some feeders are now doubled up on the same circuit on account of limited space for switching facilities. The more adequate low tension switchgear permits elimination of the current limiting reactors now required. The spray pond and transformer water cooling equipment are also eliminated in the new design by the use of self-cooled transformers with air blast equipment for the higher loadings.

HOLTWOOD-BALTIMORE LINES

The transmission lines between Holtwood and Baltimore are completely revised in the substitute layout. The present four 66 kv circuits are replaced by two 110 kv circuits. The present four circuits are run in vertical arrangement on two tower lines on a common right of way. The two substitute lines are run in flat arrangement on separate tower lines, also on a common right of way which is wider than that for the present lines. The route is assumed to be the same as that traversed by the present lines. Overhead ground wires and underground counterpoise are included in the substitute lines, following the company's practice. In view of the numerous interconnections the substitute lines are deemed to provide reliability and serviceability substantially equivalent to that originally pro-

vided by the existing lines. By operating at higher voltage with somewhat larger conductors the substitute lines will have a smaller power loss, thereby improving both the operating revenue and the effective system capacity. Assuming unity power factor on the Holtwood end of the lines, the losses [22260] (page 9) on the proposed circuits will be approximately 48% of the losses over the existing lines with a nominal load of 75,000 kw.

OTHER LINES

There is a portion of the Gunpowder transmission line now located on a portion of the same right of way at the Baltimore end of these lines. The costs used for the substitute lines disregard this condition, on the assumption that it is irrelevant to the problem and would not materially alter the overall cost picture. The company owns and operates a number of other transmission lines in both Pennsylvania and Maryland. As these are considered fully adequate for present requirements no substitution is planned for any of them. The relocation of transformers at Holtwood would require some rearrangement of the Holtwood terminations of some of these lines but no cost allowance has been included in our estimates for this as it would not substantially affect the value of the property.

OTHER SUBSTATIONS

There are also a number of other substations and switching stations which the company owns and operates. No substation plant has been figured for these as they are considered adequate and sufficiently modern.

SOURCE OF UNIT COSTS AND QUANTITIES

For the major items of equipment in the substitute plant such as hydraulic turbines, generators, turbo-generator unit, boiler transformers, and other substantial items letters were obtained from manufacturers giving the price of the equipment in question. In other cases, prices on smaller items of equipment were obtained from manufac-

turers' representatives by telephone or from published price lists of the manufacturers.

For field construction unit costs of recent projects including some of the Tennessee Valley Authority costs on recent projects and the prices per unit of the Wolf Creek, Table Rock and Center Hill projects, where unit prices covering direct labor and material costs were not available from current operations, unit prices were built up from material costs and prevailing wage rates applicable to the Holtwood area and finally compared with Safe Harbor cost giving consideration to increase in cost trends.

Quantities were estimated from the General Plans and Sections of the proposed substitute plant. These quantities could be checked against original quantities in some cases and the results are sufficiently accurate so that a large contingency allowance for quantity overrun is not necessary.

[22261] (page 10)

TRENDING OF DEC. 31, 1940 COSTS TO DEC. 31, 1945

Most of the costs for the substitute plant were originally estimated as of Dec. 31, 1940. This was primarily because of the fact that no major construction of this nature was carried out between 1940 and 1945. The one exception to this is the steam plant equipment and its installation which is priced at Dec. 31, 1945 because of the difficulty of obtaining equipment costs as of 1940. Trend factors for the large equipment items in the steam plant are also at or near unity in any event and the number of comparable sales of equipment of this type in that period was small so that pricing of these items as of 1945 proved desirable.

The trend factors applied to the remainder of the substitute plant were developed from actual labor rates and material costs prevailing in the area on the two dates. Each account was analyzed to determine the percent labor and material costs involved, the division between common

and skilled labor and the type of material involved. From these facts and the material and labor costs combined trend factors (covering both material and labor) were developed. Direct labor and material cost for the substitute hydro plant increased 21% from Dec. 31, 1940 to Dec. 31, 1945. The corresponding figure for the substitute transmission plant of both companies was 16%. These compare with an increase in the Engineering News Record Construction Cost Index of 29.5% for the same period. Most of the substitute steam plant was not trended in this manner so no corresponding figure is available for it.

INDIRECT COST AND COMPANY EXPENSE

In all cases in the estimate for the substitute plant the unit prices used in the detailed estimate include only direct labor and material costs. Direct labor cost includes allowance for necessary overtime and payroll charges for social security, workmen's compensation, etc. Contractor's expenses and fee and other indirect costs of construction incurred by the contractor in carrying out the work are not included in the unit prices. These indirect costs amount to 18.65 percent for the hydro plant, 15.25 percent for the steam plant and 15.4 percent for the transmission plant. These percentages are applied and added to the direct labor and material cost.

In addition to the above certain expenses are incurred directly by the company because of the construction which are not covered by unit prices or indirect construction. These expenses include, legal expense, administration, field engineering, office engineering and design, accounting and purchasing, office supplies and expenses and preliminary operation. These total 10.85 percent for the hydro plant, 13.4 percent for the steam plant and 8.9 percent for the transmission plant and are applied and added to the direct labor and material costs.

[22262] (page 11)

The third item not included in direct cost is that covering contingencies. In this estimate the allowance is not as large as is usual in an estimate made from preliminary plans because foundation conditions are known at the present plant, therefore removing some of the uncertainties. The allowance for contingencies is 8.5 percent for the hydro plant, 7.5 percent for the steam plant, and 6.5 percent for the transmission plant.

These percentages are also applied and added to direct labor and material and a sub-total obtained covering direct cost of construction, indirect construction costs, company engineering supervision and expenses and contingencies. To this sub-total is added the final item covering interest and taxes during construction while the money is invested but as yet not capable of producing a return. The allowance for interest and taxes is 6.0 percent for the hydro plant, 3 percent for the steam plant and 3.1 percent for the transmission plant. These percentages are applied and added to the sub-total referred to above for the final cost as of December 31, 1945. The allowance for interest is based on a rate of 6% and construction periods ranging from a little over a year for the steam plant to 2½ years for the hydro plant.

In the determination of the amount of indirect costs and company expense we have been guided by the company's experience at Safe Harbor. A detailed explanation of these costs as experienced by the company is included in Estimate of Constructing and Reproducing the Entire Physical Properties as of December 31, 1945 by Chas. T. Main, Inc.

PENNSYLVANIA WATER & POWER COMPANY
and
SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND
SUMMARY
SUBSTITUTE AND REPRODUCTION PLANT COSTS
AS OF DECEMBER 31, 1945

	1 Trended Reproduction Cost as of Dec. 31, 1945	2 Amount to be Replaced by Substitute Plant	3 Amount of Trended Reproduction Cost Retained	4 Estimated Cost of Substitute Plant	5 Total Cost as of Dec.31,1945
Pennsylvania Water & Power Company					
Intangible Plant	$ 790,803	$ -	$ 790,803	$ -	$ 790,803
Steam Plant					
310 Land & Land Rights	2,000	-	2,000	-	2,000
311 Structures & Improvements	2,067,055	2,006,810	60,245	1,666,117	1,726,362
312 Boiler Plant Equipment	2,580,059	2,271,291	308,768	1,893,286	2,202,054
314 Turbo-Generator Units	1,221,425	1,221,425	-	1,024,144	1,024,144
315 Accessory Electric Equipment	586,152	548,357	37,795	503,554	541,349
316 Misc. Power Plant Equipment	379,734	98,778	280,956	155,001	435,957
Total Steam Plant	$ 6,836,425	$ 6,146,661	$ 689,764	$ 5,242,102	$ 5,931,866
Hydro Plant					
320 Land & Land Rights	$ 5,292,428	$ -	$ 5,292,428	$ -	$ 5,292,428
321 Structures & Improvements	9,409,241	7,837,311	1,571,930	5,501,738	7,073,668
322 Reservoirs, Dams & Waterways	7,675,794	7,675,794	-	7,301,995	7,301,995
323 Hydraulic Turbines & Generators	9,030,608	9,030,608	-	6,571,954	6,571,954
324 Accessory Electric Equipment	2,977,842	2,977,842	-	2,216,053	2,216,053
325 Misc. Power Plant Equipment	338,289	338,289	-	370,824	370,824
326 Roads, Railroads & Bridges	152,631	-	152,631	-	152,631
Total Hydro Plant	$34,876,833	$27,859,844	$ 7,016,989	$21,962,564	$28,979,553

	1 Trended Reproduction Cost as of Dec. 31,1945	2 Amount to be Replaced by Substitute Plant	3 Amount of Trended Reproduction Cost Retained	4 Estimated Cost of Substitute Plant	5 Total Cost as of Dec.31,1945
Pennsylvania Water & Power Company					
Transmission Plant					
340 Land & Land Rights	$ 1,498,575	$ -	$ 1,498,575	$ 6,214	$ 1,504,789
341 Clearing Land & Rights of Way	235,282	17,807	217,475	18,433	235,908
342 Structures & Improvements	558,466	34,279	524,187	7,204	531,391
343 Station Equipment	3,890,451	1,961,053	1,929,398	1,719,391	3,648,789
344 Towers & Fixtures	1,964,770	281,178	1,683,592	283,414	1,967,006
345 Poles & Fixtures	14,673	-	14,673	-	14,673
346 Overhead Conductors & Devices	1,266,021	119,213	1,146,808	92,462	1,239,270
349 Roads & Trails	58,362	-	58,362	-	58,362
Total Transmission Plant	$ 9,486,600	$ 2,413,530	$ 7,073,070	$ 2,127,118	$ 9,200,188
General Plant	$ 1,000,041	-	$ 1,000,041	-	$ 1,000,041
Total Pennsylvania Water & Power Co.	$52,990,702	$36,420,035	$16,570,667	$29,331,784	$45,902,451

	1 Trended Reproduction Cost as of Dec. 31, 1945	2 Amount to be Replaced by Substitute Plant	3 Amount of Trended Reproduction Cost Retained	4 Estimated Cost of Substitute Plant	5 Total Cost as of Dec.31,1945
Susquehanna Transmission Co.of Maryland					
Intangible Plant	$ 9,000	-	$ 9,000	-	$ 9,000
Transmission Plant					
340 Land & Land Rights	2,528,645	-	2,528,645	47,255	2,575,900
341 Clearing Land & Rights of Way	317,848	49,835	268,013	71,740	339,753
342 Structures & Improvements	886,932	707,107	179,825	383,384	563,209
343 Station Equipment	1,457,874	1,396,028	61,846	1,621,204	1,683,050
344 Towers & Fixtures	2,463,735	777,575	1,686,160	959,050	2,645,210
345 Poles & Fixtures	937	-	937	-	937
346 Overhead Conductors & Devices	1,620,452	416,198	1,204,254	336,776	1,541,030
349 Roads & Trails	63,580	-	63,580	-	63,580
Total Transmission Plant	$ 9,340,003	$ 3,346,743	$ 5,993,260	$ 3,419,409	$9,412,669
General Plant	$ 70,672	$ -	$ 70,672	$ -	$ 70,672
Total Susquehanna Transmission Company of Maryland	$ 9,419,675	$ 3,346,743	$ 6,072,932	$ 3,419,409	$ 9,492,341
Grand Total Pennsylvania W & P Co.and Susquehanna T.Co. of Md.	$62,410,377	$39,766,778	$22,643,599	$32,751,193	$55,394,792

PENNSYLVANIA WATER & POWER COMPANY
and
SUSQUEHANNA TRANSMISSION CO. OF MARYLAND

SUBSTITUTE PLANT
ESTIMATE OF CONSTRUCTION COST
AS OF DECEMBER 31, 1945

SUMMARY

Substitue Steam Plant

Acct No.	Item	Estimate
310	Land & Land Rights	-
311	Structures & Improvements	$1,666,117
312	Boiler Plant Equipment	1,893,286
314	Turbo-Generator Units	1,024,144
315	Accessory Electric Equipment	503,554
316	Misc. Power Plant Equipment	155,001
	TOTAL STEAM PLANT	$5,242,102

Substitute Hydro Plant

320	Land & Land Rights	-
321	Structures & Improvements	$5,501,738
322	Reservoirs, Dams, & Waterways	7,301,995
323	Hydraulic Turbines and Generators	6,571,954
324	Accessory Electric Equipment	2,216,053
325	Misc. Power Plant Equipment	370,824
326	Roads, Railroads & Bridges	-
	TOTAL HYDRO PLANT	$21,962,564

Substitute Transmission Plant - P.W.& P. Co.

Acct No.	Item	Estimate
340	Land & Land Rights	$ 6,214*
341	Clearing Land & Rights-of-Way	18,433
342	Structures & Improvements	7,204
343	Station Equipment	1,719,391
344	Towers & Fixtures	283,414
345	Poles & Fixtures	-
346	Overhead Conductors & Devices	92,462
349	Roads & Trails	-
	TOTAL P. W. P. CO. TRANSMISSION	$2,127,118
	TOTAL P. W. P. CO. SUBSTITUTE PLANT	$29,331,784

Transmission S. T. Co. of Maryland

340	Land & Land Rights	$ 47,255*
341	Clearing Land & Rights-of-Way	71,740
342	Structures & Improvements	383,384
343	Station Equipment	1,621,204
344	Towers & Fixtures	959,050
345	Poles & Fixtures	-
346	Overhead Conductors & Devices	336,776
349	Roads and Trails	-
	TOTAL S. T. CO. OF MARYLAND SUBSTITUTE PLANT	$3,419,409
	TOTAL SUBSTITUTE PLANT	$32,751,193

* Penna. Water & Power Co. Estimate

PENNSYLVANIA WATER & POWER COMPANY

SUBSTITUTE HOLTWOOD STEAM PLANT

SUMMARY OF COST AS OF DECEMBER 31, 1945

Acct No.	Description	Total Direct Cost	Total Incl. Indirect Cost
311	Structures & Improvements	$1,188,093	$1,666,117
312	Boiler Plant Equipment	1,350,086	1,893,286
314	Turbo-Generator Units	730,308	1,024,144
315	Accessory Elec. Equipment	359,080	503,554
316	Misc. Power Plant Equipment	110,530	155,001
	TOTAL DIRECT COST - 1945	$3,738,097	
	INDIRECT CONSTRUCTION COSTS	570,060	
	Company Engineering, Supervision and Expense	500,905	
	Contingencies	280,357	
	SUB-TOTAL	$5,089,419	
	Interest and Taxes During Construction	152,683	
	TOTAL COST, HOLTWOOD SUBSTITUTE STEAM PLANT - 1945	$5,242,102	$5,242,102

PENNSYLVANIA WATER & POWER COMPANY

SUBSTITUTE HOLTWOOD HYDRO PLANT

SUMMARY OF COST AS OF DECEMBER 31, 1945

Acct No.	Description	Total Direct Cost	Total Incl. Indirect Cost
321	Structures & Improvements	$3,761,101	$5,501,738
322	Reservoirs, Dams & Waterways	4,991,793	7,301,995
323	Hydraulic Turbines & Generators	4,492,722	6,571,954
324	Accessory Electric Equipment	1,514,939	2,216,053
325	Misc. Power Plant Equipment	253,503	370,824
	TOTAL DIRECT COST - 1945	$15,014,058	
	INDIRECT CONSTRUCTION COSTS	2,800,122	
	Company Engineering, Supervision and Expense	1,629,025	
	Contingencies	1,276,195	
	SUB-TOTAL	$20,719,400	
	Interest & Taxes During Construction	1,243,164	
	TOTAL COST HOLTWOOD SUBSTITUTE HYDRO PLANT - 1945	$21,962,564	$21,962,564

PENNSYLVANIA WATER & POWER COMPANY

SUBSTITUTE TRANSMISSION PLANT

SUMMARY OF COST AS OF DECEMBER 31, 1945

Acct No.	Description	Total Direct Cost	Total Incl. Indirect Cost
341	Clearing Land & Rights-of-Way	$13,669	$18,433
342	Structures & Improvements	5,342	7,204
343	Station Equipment	1,274,994	1,719,391
344	Towers & Fixtures	210,163	283,414
346	Overhead Conductors & Devices	68,564	92,462
	TOTAL DIRECT COST OF TRANSMISSION - 1945	1,572,732	
	INDIRECT CONSTRUCTION COSTS	242,201	
	Company Engineering, Supervision and Expense	139,973	
	Contingencies	102,227	
	SUB-TOTAL	$2,057,133	
	Interest & Taxes During Construction	63,771	
	TOTAL COST PENNA. WATER & POWER CO. TRANSMISSION - 1945	$2,120,904	$2,120,904
*340	Land & Land Rights		6,214
	TOTAL SUBSTITUTE PLANT ESTIMATE		$ 2,127,118

* Penna. Water & Power Co. Estimate

SUSQUEHANNA TRANSMISSION CO. OF MARYLAND

SUBSTITUTE TRANSMISSION PLANT

SUMMARY OF COST AS OF DECEMBER 31, 1945

Acct No.	Description	Total Direct Cost	Total Incl. Indirect Cost
341	Clearing Land & Rights-of-Way	53,198	71,740
342	Structures & Improvements	284,294	383,384
343	Station Equipment	1,202,185	1,621,204
344	Towers & Fixtures	711,173	959,050
346	Overhead Conductors & Devices	247,508	336,776
	TOTAL DIRECT COST OF TRANSMISSION - 1945	2,498,358	
	INDIRECT CONSTRUCTION COSTS	387,655	
	Company Engineering Supervision and Expense	222,354	
	Contingencies	162,393	
	SUB-TOTAL	3,270,760	
	Interest & Taxes During Construction	101,394	
	TOTAL COST S.T. CO. OF MD. TRANSMISSION - 1945	$3,372,154	$3,372,154
*340	Land & Land Rights		47,255
	TOTAL SUBSTITUTE PLANT ESTIMATE		$3,419,409

* Penna. Water & Power Co. Estimate

PENNSYLVANIA WATER AND POWER COMPANY

TREND DEC. 31, 1940
to
DEC. 31, 1945

HOLTWOOD SUBSTITUTE HYDRO PLANT

Acct No.	1940 Direct Cost	Trend Factor	1945 Direct Cost
320			
321	$ 2,906,570	1.294	$ 3,761,101
322	3,831,000	1.303	4,991,793
323	4,110,450	1.093	4,492,722
324	1,332,400	1.137	1,514,939
325	229,000	1.107	253,503
326	-	-	-
TOTAL	$12,409,420		$15,014,058

PENNSYLVANIA WATER & POWER COMPANY

and

SUSQUEHANNA TRANSMISSION CO. OF MARYLAND

Trend Dec. 31, 1940
to
Dec. 31, 1945

Substitute Transmission Plant

Penn. Water & Power Co.

Acct No.	1940 Direct Cost	Trend Factor	1945 Direct Cost
341	$ 9,736	1.404	$ 13,669
342	4,210	1.269	5,342
343	1,151,756	1.107	1,274,994
344	159,335	1.319	210,163
346	68,564	1.000	68,564
TOTAL	$1,393,601		$1,572,732

Susquehanna Trans. Co. of Maryland

341	37,890	1.404	$ 53,198
342	224,030	1.269	284,294
343	1,082,075	1.111	1,202,185
344	540,405	1.316	711,173
346	247,508	1.000	247,508
TOTAL	$2,131,908		$2,498,358

PENNSYLVANIA WATER & POWER COMPANY

SUBSTITUTE STEAM POWER PLANT

SUMMARY OF DIRECT COSTS AS OF DECEMBER 31, 1945

Acct No.		Cost	
3111	Site Improvement see Acct. 3711		
3112	Substructure	$ 205,325	
3113	Building Superstructure	915,624	
3114	Structures Equipment	67,144	
	TOTAL ACCT. 311		$1,188,093
3121	Boiler Plant Equipment	874,164	
3122	Coal Preparation Plant	369,516	
3124	Coal Unloading & Handling Equipment	106,406	
	TOTAL ACCT. 312		$1,350,086
3141	Main Turbo-Generator Unit	578,718	
3142	Auxiliary Equipment	151,590	
	TOTAL ACCT. 314		$ 730,308
315	Accessory Electrical Equipment		359,080
3161	Auxiliary Power Plant Equipment	70,530	
3163	General Outside Mechanical Equipment	40,000	
	TOTAL ACCT. 316		$ 110,530
TOTAL DIRECT LABOR & MATERIAL COST			$3,738,097

PENNSYLVANIA WATER & POWER COMPANY

SUBSTITUTE HOLTWOOD HYDRO PLANT

SUMMARY OF DIRECT COSTS AS OF DECEMBER 31, 1940

Acct. No.	Item	Direct Cost	
3211	Site Improvement	$ ---	
12	Powerhouse Substructure	1,369,100	
13	Powerhouse Superstructure	750,700	
14	Structures Equipment	261,700	
15	Cable Tunnel	1,270	
16	Operators' Village	---	
17	Intake Equipment	446,000	
18	Tailrace Equipment	45,000	
19	Filter Plant	32,800	
	TOTAL ACCT. 321.		$2,906,570
21	Dam Investigation	60,000	
22	Dam	2,003,000	
23	Forebay	239,000	
24	Tailrace	817,000	
26	Cofferdams	712,000	
27	Reservoir	---	
	TOTAL ACCT. 322		$3,831,000
31	Turbine Tests	---	
32	Turbines - main units	1,800,000	
33	Turbines - service units	45,000	
34	Generators - main units	1,722,000	
35	Generators - service units	31,400	
36	Frequency Converter	487,050	
37	Auxiliary Equipment	25,000	
	TOTAL ACCT. 323		$4,110,450
41	Main Switching, cont. & prot. eq.	1,033,010	
42	Aux. Switching, cont. & prot. eq.	112,000	
43	Auxiliary protecting eq.	168,540	
44	Excitation System	18,850	
	TOTAL ACCT. 324		$1,332,400
51	Auxiliary Power Plant Equip.		229,000
TOTAL			$12,409,420

PENNSYLVANIA WATER & POWER COMPANY
and
SUSQUEHANNA TRANSMISSION CO. OF MARYLAND

Substitute Transmission Plant

Summary of Direct Cost as of Dec. 31, 1940

Pennsylvania Water & Power Company

Acct. No.	Description	Estimate
340	Land & Land Rights	---
341	Clearing Land & Rights-of-Way	$ 9,736
342	Structures & Improvements	4,210
343	Station Equipment	1,151,756
344	Towers & Fixtures	159,335
345	Poles & Fixtures	---
346	Overhead Conductors & Devices	68,564
349	Roads & Trails	---
	TOTAL PENN. WATER & POWER CO.	$1,393,601

Susquehanna Transmission Co. of Maryland

Acct. No.	Description	Estimate
340	Land & Land Rights	---
341	Clearing Land & Rights-of-Way	337,890
342	Structures & Improvements	224,030
343	Station Equipment	1,082,075
344	Towers & Fixtures	540,405
345	Poles & Fixtures	---
346	Overhead Conductors & Devices	247,508
349	Roads & Trails	---
	TOTAL SUSQUEHANNA TRANSMISSION CO. OF MARYLAND	$2,131,908

PENNSYLVANIA WATER & POWER COMPANY

SUBSTITUTE HOLTWOOD HYDRO PLANT

INDIRECT CONSTRUCTION COSTS AND COMPANY EXPENSE

Indirect Construction Costs		
Constructor's Expense	2.30%	
Constructor's Fee	3.50%	
Insurance (Other Than Employee)	0.40%	
Construction Equipment	4.40%	
Temporary Construction & Service Facilities	7.80%	
Camp, Commissary & Hospital	0.25%	
Total Indirect Construction Costs		18.65%
Company Engineering Supervision & Expense		
Legal Expense	0.50%	
Engineering & Supervision of Construction		
Administration	0.50%	
Field Engineering	2.50%	
Office Engineering	5.00%	
Accounting & Purchasing	0.25%	
Office Supplies & Expenses	1.40%	
Consulting Engr's Fees & Expenses	0.50%	
Total Engineering & Supervision	10.15%	
Preliminary Operating Expenses	0.20%	
Total Engineering Supervision & Expense		10.85%
Contingencies		8.50%
Sub-Total		38.00%
Interest & Taxes		
Interest During Construction	5.88%	
Taxes During Construction	0.12%	
Total Interest & Taxes		6.00%

PENNSYLVANIA WATER & POWER COMPANY

SUBSTITUTE HOLTWOOD STEAM PLANT

INDIRECT CONSTRUCTION COSTS AND COMPANY EXPENSE

Indirect Construction Costs		
Constructor's Expenses	2.30%	
Constructors Fee	3.50%	
Insurance (Other Than Employee)	0.10%	
Construction Equipment	3.70%	
Temporary Construction & Service Facilities	5.40%	
Camp, Commissary & Hospital	0.25%	
Total Indirect Construction Costs		15.25%
Company Engineering Supervision & Expense		
Legal Expense	0.50%	
Engineering & Supervision of Construction		
Administration	0.50%	
Field Engineering	2.50%	
Office Engineering	7.00%	
Accounting & Purchasing	0.75%	
Office Supplies & Expenses	1.25%	
Consulting Engrs. Fees & Expenses	0.50%	
Total Engineering & Supervision	12.50%	
Preliminary Operating Expenses	0.40%	
Total Engineering Supervision & Expense		13.40%
Contingencies		7.50%
Sub-Total		36.15%
Interest & Taxes		
Interest During Construction	2.90%	
Taxes During Construction	.10%	
Total Interest & Taxes		3.00%

PENNSYLVANIA WATER & POWER COMPANY
and
SUSQUEHANNA TRANSMISSION CO. OF MARYLAND

Substitute Transmission Plant

INDIRECT CONSTRUCTION COSTS AND COMPANY EXPENSE

Other Direct Costs		
Overtime Pay	3.428%	
Labor Overheads	6.15%	
Combined - Other Direct Costs		9.8%
Indirect Construction Costs		
Constructor's Expense	2.7%	
Constructor's Fee	4.3%	
Insurance (Other Than Employee)	0.2%	
Construction Equipment	1.5%	
Temporary Facilities	4.7%	
Camp Expense	2.0%	
Total Indirect Construction Cost		15.4%
Company Engineering, Supervision & Expense		
Legal Expense	0.2%	
Engineering & Supervision of Construction		
Administration	0.5%	
Field Engineering	2.7%	
Office Engineering	3.5%	
Accounting & Purchasing	0.75%	
Office Supplies & Expenses	1.25%	
Total Engineering & Supervision	8.7%	
Total Company Engr., Supervision & Expense		8.9%
Contingencies		6.5%
Sub-Total		30.8%
Interest & Taxes		
Interest During Construction	3.0%	
Taxes During Construction	0.1%	
Total Interest & Taxes		3.1%

Note: Other Direct Costs are applied to all Transmission Accounts, except Acct. 342. In Acct. 342 these items are included in the Unit Costs, as is the case with the substitute Steam and Hydro Plants. The percentage shown is applied to Direct Labor Cost Only.

PENNSYLVANIA WATER & POWER COMPANY
and
SUSQUEHANNA TRANSMISSION CO. OF MARYLAND

Trend Factors
Dec. 31, 1940
to
Dec. 31, 1945

Substitute Transmission Plant

Pennsylvania Water & Power Company

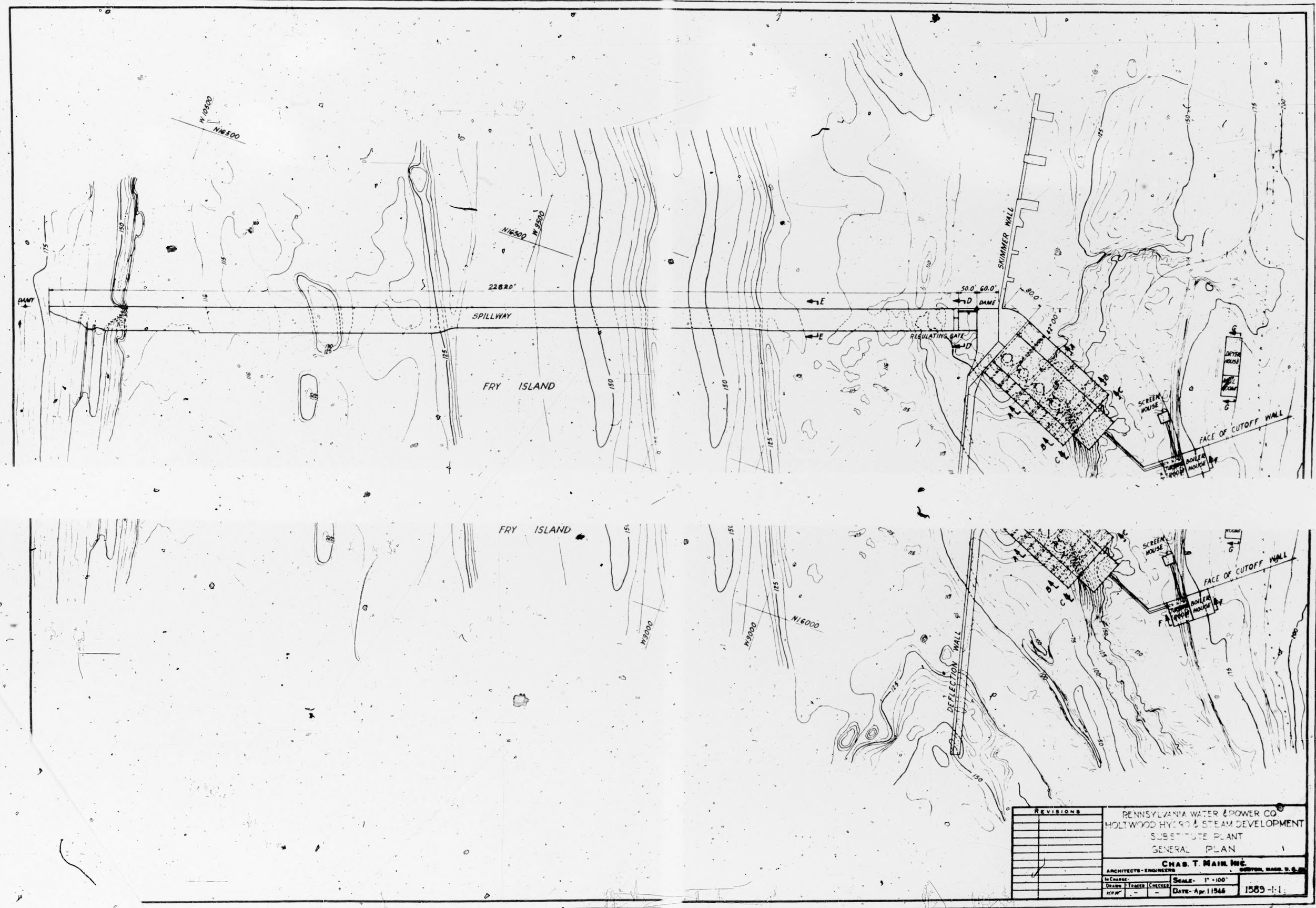
Acct. No.	Labor Factor	% Labor	Material Factor	% Material	Combined Trend Factor	
Steam Plant						
311	1.390	50.64	1.200	49.36	1.296	
312	1.39	16.19	1.057	83.81	1.111	
314	1.39	30.00	1.274	70.00	1.310	(Turbine Foundation Only
315	Not used					
316	Not used					
Hydro Plant						
321	1.390	44.60	1.216	55.40	1.294	
322	1.390	50.25	1.216	49.75	1.303	
323	1.390	44.97	1.077	55.03	1.093	
324	1.390	24.80	1.053	75.20	1.137	
325	1.390	19.65	1.038	80.35	1.107	
326	1.390	53.30	1.120	46.70	1.264	

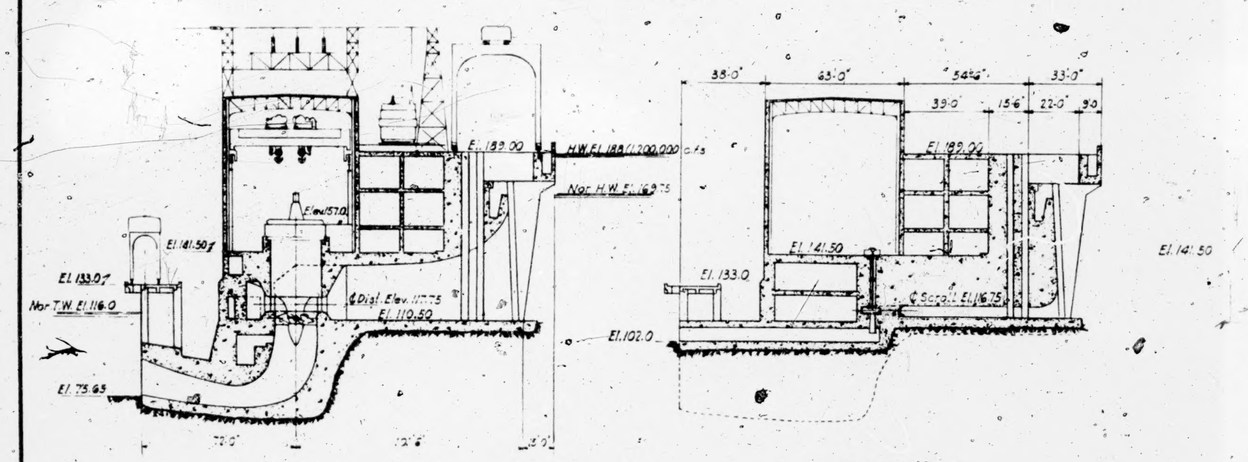
PENNSYLVANIA WATER & POWER COMPANY
and
SUSQUEHANNA TRANSMISSION CO. OF MARYLAND

TREND FACTORS DECEMBER 31, 1940 - DECEMBER 31, 1945

SUBSTITUTE PLANT

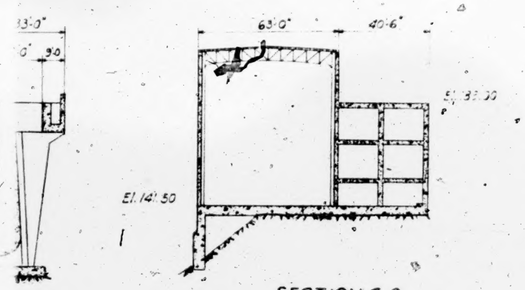
Acct No.	Labor Factor	% Labor	Material Factor	% Material	Combined Trend Factor
Pennsylvania Water & Power Company Transmission Plant					
342	1.404	98.50	1.404	1.50	1.404
343	1.349	39.93	1.216	60.07	1.269
344	1.390	17.94	1.045	82.06	1.107
346	1.328	29.37	1.315	70.63	1.319
349	1.326	10.40	0.969	89.60	1.000
	1.404	45.74	1.337	54.26	1.368
Susquehanna Trans. Co. of Maryland Transmission Plant					
341	1.404	98.50	1.404	1.50	1.404
342	1.349	39.93	1.216	60.07	1.269
343	1.349	23.43	1.038	76.57	1.111
344	1.328	25.15	1.312	74.85	1.316
346	1.326	10.40	0.969	89.60	1.000
349	1.404	55.58	1.130	44.42	1.282


W 10500
N16500
N16500 W 9500
2282.0'
DAM
SPILLWAY
FRY ISLAND
SKIMMER WALL
50.0'
60.0'
80.0'
DAM
REGULATING GATE
SCREEN HOUSE
FACE OF CUTOFF WALL
BOILER HOUSE
W9000
N16000
DEFLECTION WALL
REVISIONS
PENNSYLVANIA WATER & POWER CO
HOLTWOOD HYDRO & STEAM DEVELOPMENT
SUBSTITUTE PLANT
GENERAL PLAN
CHAS. T. MAIN INC.
ARCHITECTS - ENGINEERS
BOSTON, MASS. U.S.A.
In Charge -
Drawn - HMM
Traced -
Checked -
SCALE - 1" = 100'
DATE - Apr. 1 1946
1589-1-1

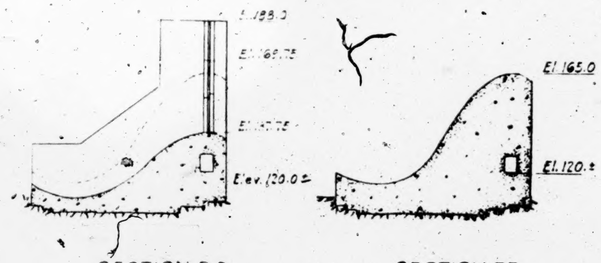


SECTION-A-A

SECTION-B-B

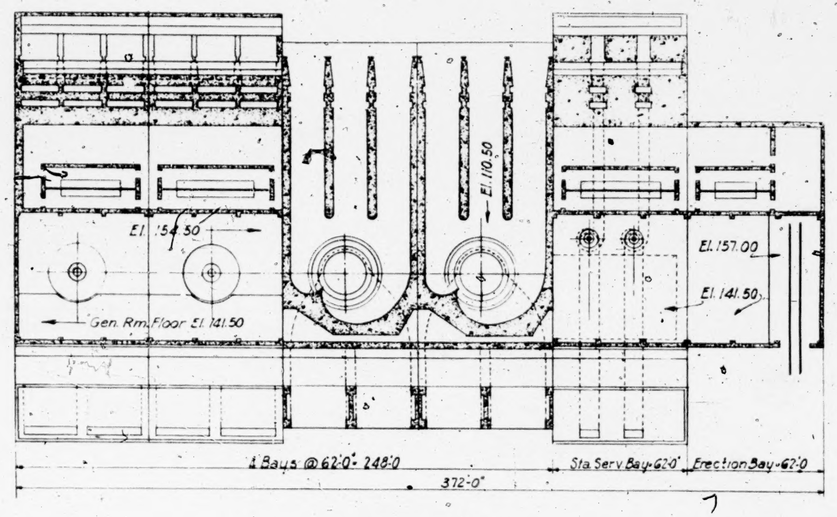


SECTION-C-C

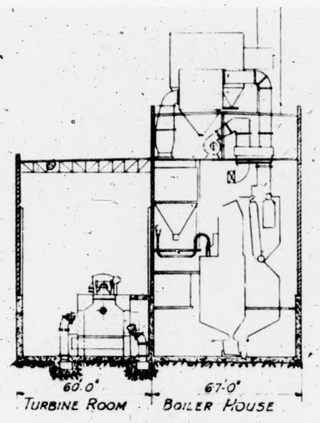


SECTION-D-D

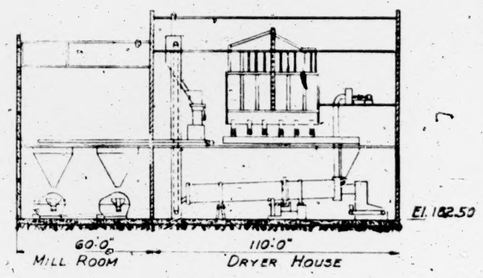
SECTION EE



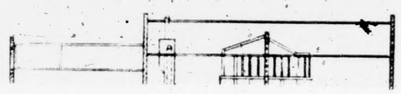
SECTIONAL PLAN
Scale 1" = 30'0"



SECTION-F-F



SECTION-G-G

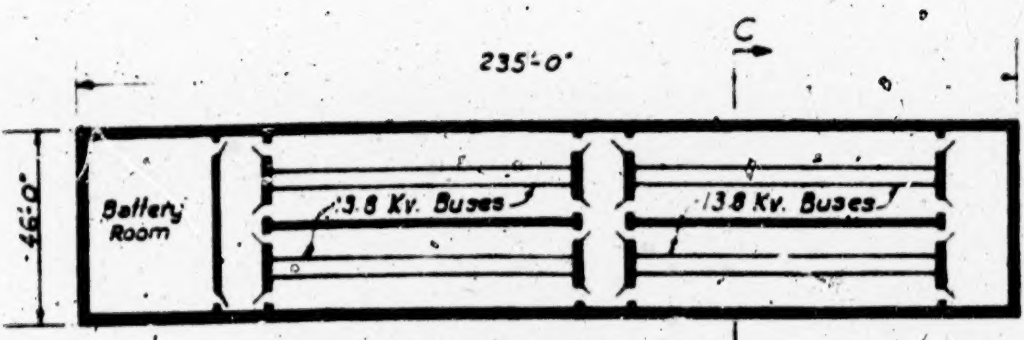


Revisions	

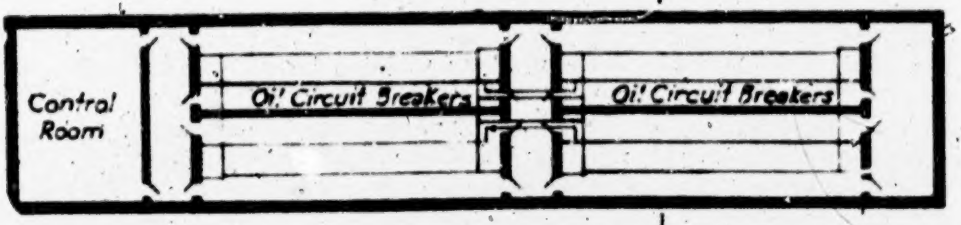
PENNSYLVANIA WATER & POWER CO.
HOLTWOOD HYDRO & STEAM DEVELOPMENT
SUBSTITUTE PLANT
PLAN & SECTIONS

CHAS. T. MAIN, INC.
ARCHITECTS-ENGINEERS BOSTON, MASS. U. S. A.

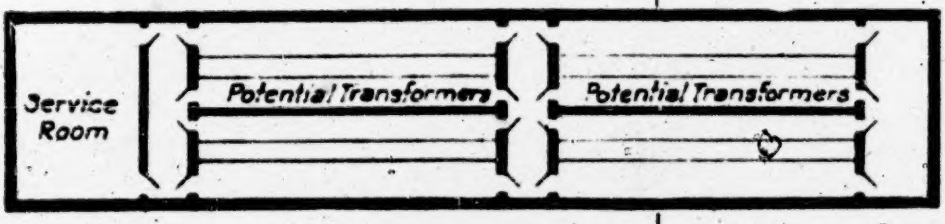
In Charge			Scale - Noted	1589-1-2
Drawn	Traced	Checked	Date - Apr. 6, 1946	



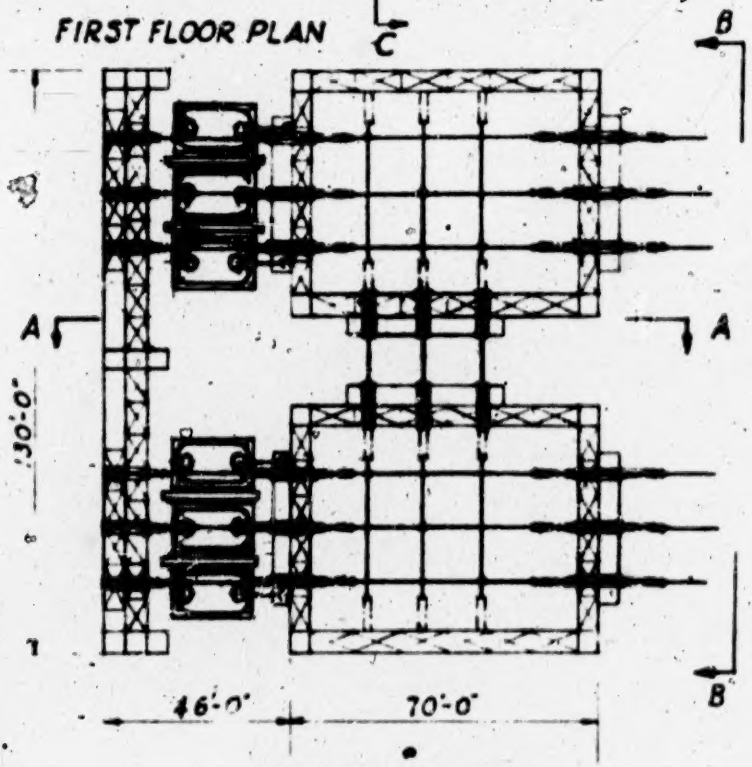
THIRD FLOOR PLAN



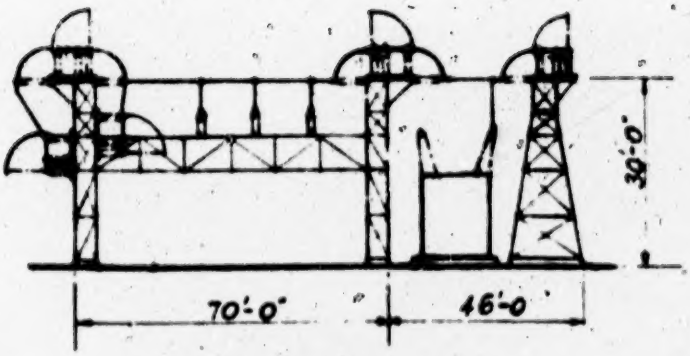
SECOND FLOOR PLAN



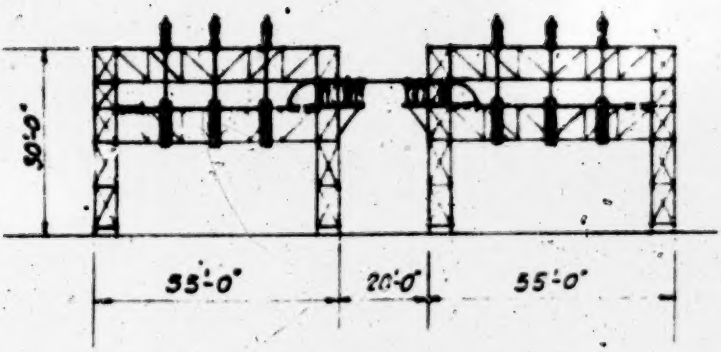
FIRST FLOOR PLAN



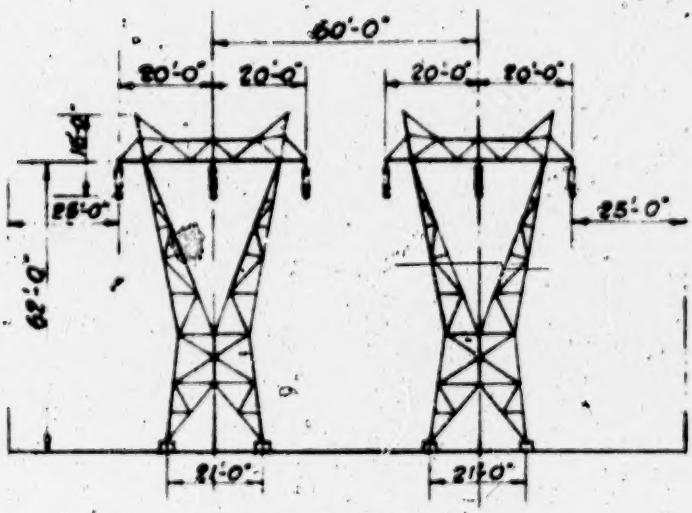
SWITCHYARD PLAN
HIGHLANDTOWN SUBSTATION
Scale 1" = 30'



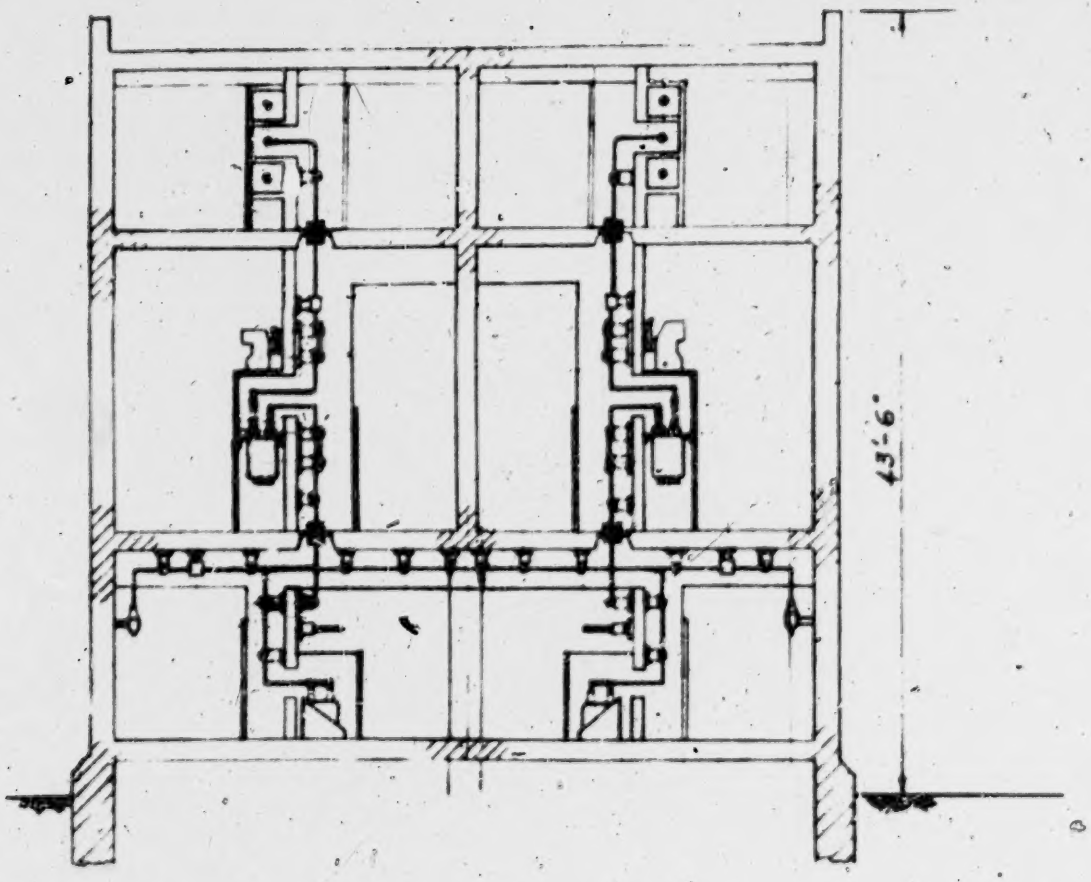
SECTION A A
Scale 1"= 30'



ELEVATION B-B
Scale 1"= 30'



TRANSMISSION LINE
TYPICAL ARRANGEMENT
Scale 1"= 30'



SECTION C-C
Scale $\frac{1}{8}$" = 1'-0"

Page 3366
(Part 2)

NOTE -

High tension switching structure at Hollwood similar to Highlandtown except mounted on power house roof with transformers on intake deck.

SECTION C-C
Scale 1/8" = 1'-0"

NOTE -

High tension switching structure at Holtwood similar to Highlandtown except mounted on power house roof with transformers on intake deck.

Page 3366
(Part 3)

REVISIONS	

PENNSYLVANIA WATER & POWER CO.
SUSQUEHANNA TRANSMISSION CO. OF MD.
HOLTWOOD-~~HIGHLANDTOWN TRANSMISSION~~
SUBSTITUTE PLANT

CHAS. T. MAIN, INC.
ARCHITECTS - ENGINEERS
BOSTON, MASS. U.S.A.

In Charge -			Scale - AS NOTED	1589-1-3
Drawn	Traced	Checked	Date - 4-3-46	
F.A.C.				

EXHIBIT No. 33.

[22285]

BEFORE THE FEDERAL POWER COMMISSION

In the Matter of

Pennsylvania Water & Power Company and
Susquehanna Transmission Company of Maryland

IT-5915

TESTIMONY AND EXHIBITS OF DR. H. B. DORAU RELATING TO THE SUPPLY OF MONEY AND THE VALUE OF THE DOLLAR

Washington, D. C.
May 1, 1946.

Exhibit No. 33

[22286]

PROPOSED TESTIMONY OF H. B. DORAU

1-Q. Have you prepared an exhibit setting forth the the changes in the supply of money in the United States over the period of 1914-1946?

1-A. Yes, I prepared a tabulation and chart setting forth Deposits, Investments and Loans of All Banks, as well as Currency in Circulation and Gold Stocks in millions of dollars for the period 1914-1946.

2-Q. Will you briefly explain the meaning and significance of this exhibit?

2-A. The chart in this exhibit graphically sets forth the rise in total bank deposits, gold stocks and currency in circulation, 1914-1945 and the rise of loans from 1914 to 1929 and the subsequent decline of loans.

It can be readily and quickly seen that total deposits have gone through two periods of substantial increase since 1933. The first rise took place from 1933 to 1943, during which period total deposits rose from $36,919 million to $71,027 million. The second and even more rapid rise brought the total of the June 30, 1942 of $71,027 million to $137,688 million as of June 30, 1945.

3-Q. What is the meaning and significance of total deposits in dollars?

3-A. Total deposits in dollars measure the quantity of dollar money which the banks owe the depositors and which the depositors can withdraw from the banks and spend as they may choose, time deposits with notice, other deposits on demand. Total deposits measure the potential expressible money spending power of depositors. Deposit dollars are money and thus a major part of the money supply of the country. The increase in [22287] (page 2) deposits therefore measures, to a large extent, the increase in the supply of money in the United States.

4–Q. Are there other components of the money supply?
4–A. Yes, currency in circulation.
5–Q. Will you explain your exhibit in further detail?
5–A. With respect to currency in circulation, reference to the chart indicates a gradual increase until 1939 when a rapid rise began. From a level of $6,461 million as of June 30, 1938 the currency in circulation rose to $9,612 million in 1941, to $17,421 million in 1943 and to $26,746 million in 1945.

As of June 30, 1945 currency in circulation was more than eight times the amount of June 30, 1914, and more than four times the quantity as of June 30, 1938.

Gold stocks, because they are at least in theory the basis of our monetary standard of value, are also important. The gold stock of the country has increased from $1,699 million as of June 30, 1915 to $20,213 million as of 1945. The rapid increase in gold stock took place after 1933, since which date the rise has been five-fold.

In 1933 the total of deposit money and currency in circulation was $42,353 million, in 1945 the total of deposit money and currency was $164,667 million, or close to a four-fold increase.

The difference between total deposits and loans is also important. Loans represent the extent to which people are in debt to the banks as distinguished from deposits which reflect the extent to which banks are in debt to their depositors.

[22288] (page 3)

As of June 30, 1919, following the last previous war, the excess of deposits over loans may be seen by reference to the tabulation which is a part of this exhibit, to have been only $7,322 million ($32,012 million less $24,690 million). As of June

30, 1945 the excess of deposits over loans was $109,709 million, or fifteen (15) times the excess of deposits over loans in 1919.

6–Q. What is the economic significance of this substantial increase in the quantity of money for the determination of a fair return in utility regulation?

6–A. The money revolution in the United States since 1933 constitutes the largest monetary inflation in the history of the country. The increase in the number of dollars of money in the country since 1933, and even more strikingly since 1941, is without parallel and unprecedented in this country.

The dollar is the economic measure of investment and return, of sacrifice and income. The quantity of dollars is therefore one of the important factors determining the size of the dollar as a unit for the measurement of economic sacrifice and return.

The yardstick as a linear measure does not change in linear significance when the number of yardsticks is increased, but the size of the dollar as a standard of measurement tends to decrease with an increase in the effective quantity of spendable dollars.

A change in the magnitude of any unit of measurement and enumeration destroys its validity as a standard of measurement and [22289] (page 4) comparison.

Merely calling the changed unit of measurement by the same name does not make it the same. The summation of such changed units of measurement, simply because they continue to have the same label, is as invalid as adding pears, peaches, peas and persimmons. The accounting summation of unlike dollars does not measure the investment sacrifice.

If the mile as a unit of linear measurement should have changed in magnitude as the dollar has changed as a measure of sacrifice and gain, no sen-

sible person would draw any conclusions from a comparison of ton-miles of railway service in 1907, 1917 and 1935. Before any informed person would believe that the ton-miles in 1917 exceeded the ton-miles in 1935, he would demand that such calculations be translated into an equated or equivalent number of ton-miles on the basis of the relative magnitude of the different length of the miles used.

Progress in every field of human endeavor has depended on the establishment of standard and comparable units of measurement. When the horsepower was the power of a horse instead of the energy equivalent of 550 foot-pounds per second, the enumeration of horsepowers was of limited accuracy and meaning.

When the foot was literally a "foot-length" instead of, as now 12 inches, linear measurement and comparison were uncertain and unreliable. It would be no more inappropriate to add nautical miles and land miles than to add 1907 dollars and 1917 dollars, but no respectable geographer would do so.

If the mile as well as the dollar had been redefined at 59 percent of its former magnitude in 1934, geographers and engineers would not make comparisons and enumerations without equating and adjusting for [22290] (Page 5) the differences in the actual comparative magnitude of the standard of measurement.

7-Q. Can the differences in the dollar as a unit of measurement of economic cost and income be equated so as to afford a reasonably comparable standard for the measurement of investment and return in utility regulation?

7-A. Yes, the variability of the dollar as a unit of economic measurement can be measured with reasonable accuracy so as to afford the basis for equating one size dollar with another. The size of the dollar is

measured by the goods and services which it can buy. Money is but the medium of exchange and the dollar is the unit of measurement, but the dollar varies in its purchasing power, its exchangeability for goods and services, and thus in its size.

This variability of the dollar can be equated so that the dollars of different size can be *legitimately* added and expressed as the equivalent of a fixed and certain sum of any other size of dollar, just as the sum of nautical and land miles can be equated and expressed as either so many nautical miles or the equated number of land miles.

8–Q. Have you prepared an exhibit which sets forth the change in the yearly average size of the dollar over the period 1902-1945?

8–A. Yes, I have prepared a tabulation which sets forth the purchasing power change in the size of the dollar by years from 1902-1945 and a seven-year moving average from 1905.

Column 1 identifies the years from 1902-1945.

[22291] (page 6)

Column 2 records the wholesale price index as reported by the United States Department of Labor, Bureau of Labor Statistics, with the average for 1926 equal to an index of 100.

Column 3 translates the index of wholesale prices into the purchasing power of the dollar which is determined by calculating the reciprocal of the annual averages in Column 2, i. e., by dividing the index of wholesale prices into 100.

Column 4 records the total of the seven years of Column 3, i. e., the total of the years 1902-1908 for 1905, and for each succeeding seven-year group in the same way down to 1943, for which a five-year total is ascertained, and for 1944 for which year a three-year

total is determined, and for 1945, for which a one-year total is taken.

Column 5 records the calculated seven-year moving average of Column 3 plotted on the fourth year center, except that for the year 1943 a five-year average is calculated and recorded, for 1944 a three-year average, and for 1945 a one-year average.

Column 6 records the translation of the seven-year moving average index of the purchasing power of the dollar to an index with 1945 as 100 for ease of comparison.

9–Q. Does the United States Department of Commerce calculate and report the changing purchasing power of the dollar?

9–A. Yes, in the Survey of Current Business.

10–Q. Does it use the same index of wholesale prices which you have used?

10–A. Yes, the Department of Commerce calculates the purchasing power of [22292] (page 7) the dollar as the reciprocal of the index of wholesale prices.

11–Q. Why did you use a seven-year moving average, except as noted?

11–A. The period of time from 1902-1945 is long enough to accommodate a seven-year average and a seven-year average satisfactorily eliminates minor and short-term changes which are more in the nature of fluctuations.

12–Q. Why did you use a five and three-year average for 1943 and 1944 and the one-year average for 1945?

12–A. In order to taper off the seven-year average and bring it down to the current time and date of 1945. This is satisfactory and justified since the trend during these years was in the same direction and accelerating. Moreover, since the continuing trend in 1945 and 1946 is strongly in the direction of higher prices and a cheaper dollar, the result is conservative.

13–Q. What, in brief, does the index developed, in Column 6 of this exhibit, disclose as to the changing economic size of the dollar?

13–A. Treating the 1945 dollar as 100, or par, the dollar of 1905 was 73.2 percent larger. The average size of the dollar was larger than in 1945 in every year down to 1918. From 1918 to 1923 it was slightly and temporarily below 100, but since 1922 the purchasing power of the dollar has been above 1945 by as much as 42.3 percent in 1934 and on the average for the period 23 percent above 1945.

From 1905 to 1918 the purchasing power of the dollar was on the [22293] (page 8) average 50 percent above 1945.

From 1918 to 1923 it was on the average 5 percent below 1945.

For the entire period 1905-1945 the average purchasing power of the dollar on the basis calculated in Column 6, was 28 percent above 1945.

14–Q. Do you find in these evidences of the changing magnitude of the dollar any basis for the conclusion that the changes in the economic size of the dollar can be disregarded because the fluctuations are compensatory?

14–A. No. There is no evidence to support such an assertion in this exhibit or anywhere. I have just pointed out that the average of the entire period is 28 percent above 1945 and that in every year except five during a 44-year period the purchasing power of the dollar was above 1945. My use of a seven-year moving average is proper treatment of mere fluctuations in the short term and even if in the long term there were compensations, changing investments and investors would make the *assumption* of a constant dollar inequitable.

The long term trend, however, is not and has not been compensatory. The price level has been ris-

ing since 1897 and the dollar reciprocally declining in size. The trend continues. Forces and factors justifying the expectation that the dollar will continue to shrink in size are clearly in evidence. Among the more obvious of these factors are the unparalleled quantity of money, the rate of spending, the size of the public debt, and the new and high levels of wages.

15–Q. Has the dollar been legally re-defined during the period covered by your exhibit?

[22294] (page 9)

15–A. Yes, before January 31, 1934 the "dollar" was the name for 23.22 grains of fine gold; after January 31, 1934 the name "dollar" was used to mean 13.714 grains of fine gold. The legal post-1934 dollar is only 59 percent the size of the pre-1934 dollar. The dollar has been changed legally as well as economically, but the name remains the same, and so bookkeepers add and subtract these different dollars without distinction.

16–Q. Has the distinction between the calculation of economic sacrifice and return in nominal and actually comparable dollars been recognized in other economic areas?

16–A. Yes. In the field of wage determination and administration the distinction between nominal dollar wages and real wages is fully recognized and well understood by wage earners and others.

17–Q. What is the economic meaning of the term investment?

17–A. The investment process consists of converting liquid or alternatively applicable economic resources into indirect goods capable of income production. Investment involves the sacrifice of alternative goods and the alternative goods given up measure the investment.

An investment may be made through the medium of money (as is most common in our day) or by direct investment of labor, risk-taking and the cost of waiting or postponement of income to the future. The investment in any economic undertaking may and commonly does consist of both money investment and direct investment. In any case the investment is measured by the sacrifice made to produce a future [22295] (page 10) income, whether accounted for by bookkeeping or not, and whether in the form of money expenditures or direct sacrifices made without the intervention of the medium of exchange money.

18–Q. Assuming the *entire* investment of two enterprises to be reflected by the same number of accounted for dollars, does it follow that the investment in the two enterprises is the same?

18–A. No, it is the same only in the number of nominal dollars. If those dollars are not of equal size and economic significance, the investment sacrifice is not the same. If one was in 1918 dollars and the other in 1905 dollars, the actual investment would (as measured by the index of dollar purchasing power in Column 6 of my exhibit) be 73 percent greater in 1905 dollars than the investment of the same number of accounted for 1918 dollars.

A larger number of small dollars may actually constitute a smaller investment than a smaller number of larger dollars.

19–Q. What is the economic meaning of the investment standard for utility rate-making?

19–A. The investment standard proposes that the investor receive a fair return on the dollars (or dollar equivalent) which he gave up and invested, i. e., on the total sacrifice made. It is a sacrifice standard as distinguished from a value standard and cannot be fairly construed to mean the sacrifice of an equal number of other dollars since they would not measure the investment sacrifice made.

[22296] (page 11)

20–Q. Does the sum of the nominal dollars invested (in money and/or goods and services) measure the investment actually made, if made in dollars of different economic size and purchasing power?

20–A. Obviously not. An investment made by the sacrifice of dollars having a purchasing power of 100 would be equal to the investment of twice the same number of 50-cent dollars. It seems almost too simple to have to explain that an investment sacrifice of 1,000,000 hundred-cent dollars is the same as an investment of 2,000,000 fifty-cent dollars.

21–Q. Is it possible to express the nominal investment in an enterprise made in various kinds of dollars in terms of an equivalent number of dollars of equal size and equal investment significance?

21–A. Yes, very easily. The relative size and investment significance of the dollars sacrificed each year can be determined by reference to an index of purchasing power. By weighting the dollars invested each year by their purchasing power an average purchasing power dollar related to any desired base can be obtained and the investment in terms of any weight of dollar determined. In this way the constant dollar equivalent of the investment of heterogeneous dollars of different vintage and size can be determined.

22–Q. Have you applied this method to the dollars invested in electric plant in service of Pennsylvania Water & Power Company including Susquehanna Transmission Company to determine the investment sacrifice of 1945 dollars?

[22297] (page 12)

22–A. Yes, I requested that the Company provide me with a distribution of the $36,414,232 of electric plant in service (before adjustments and construction work

in progress and property held for future use) by years according to year of origin of the dollars of electric plant in service December 31, 1945.

The Company provided the desired information and I have used the same in the first numerical column of a two-page tabulation and chart which I have prepared.

23–Q. Will you explain this tabulation and chart?

23–A. Column 1 of the tabulation identifies the years from 1905-1945. Column 2 records the dollars of investment in electric plant in service December 31, 1945 according to the year of origin of the investment.

Column 3 repeats the moving average purchasing power of the dollar as previously developed with 1945 as an index of 100.

Column 4 of this tabulation expresses the equivalent number of 1945 dollars which were invested in each year in electric plant and which remained in service on December 31, 1945.

The original investment in electric plant recorded opposite each year for the period 1905-1945 in Column 4 is determined by multiplying the annual investment of each year of various size dollars by the factor in Column 3 which measures the relationship of the purchasing power of that year's dollars to 1945 dollars. To illustrate, in 1905 2,135,006 dollars were invested which represented electric plant in service as of December 31, 1945. The dollar of 1905 had 1.732 times the purchasing power of the 1945 dollar. Multiplying 2,135,006 by 1.732 results in the number of equivalent 1945 dollars in the amount [22298] (page 13) of 3,697,830.

By the same method the equivalent number of 1945 dollars was determined for the investment of each year which remained in service as of December 31, 1945.

The number of 1945 dollars which represent the equivalent investment sacrifice of the dollars recorded in Column 2 is found by adding the figures in Column 4 to obtain a total.

It will be seen that the 50,091,106 1945 dollars are the equivalent investment sacrifice of the 36,414,232 nominal dollars of various vintage and diverse size.

The accompanying chart sets forth the method and result graphically.

The purchasing power of the dollar of each year (based on the seven-year moving average) is indicated by a bar in size relative to the purchasing power of the dollar of 1945 as 100 cents.

Examination of this chart indicates that the size of the dollar of 1905-1918 was consistently and substantially in excess of the economic size of the dollar of 1945; on the average it represented a 50 percent greater investment.

These were the years in which a substantial part of the investment remaining in service December 31, 1945 originated, as may be observed by reference to the first numerical line below the graphic section of the chart, and the years 1905, 1906, 1907 and 1910 in particular. Other years of large investment were 1923, 1924, and 1925 when the purchasing power of the dollar was not much above what it is in 1945. The large investments of the years 1931, 1934 and 1937 were, however, made in dollars of substantially larger purchasing power and investment sacrifice than 1945 dollars.

[22299] (page 14)

The dotted horizontal line affords a convenient reference for comparison of the investment sacrifice of each year with 1945. It will be readily seen that except for the years 1919, 1920, 1921 and 1922, in-

vestments of all years are in dollars representing greater investment sacrifice than 1945 dollars.

The second numerical line records the number of equivalent 1945 dollars invested in each year, the third numerical line cumulates the annual investments in nominal dollars which adds up to $36,414 thousand in 1945.

The fourth numerical line cumulates the annual investment in 1945 dollars found in the second line. It will be seen that in each year the cumulative total in 1945 dollars exceeds by a substantial margin, the cumulation of nominal dollars invested up to that year and in service December 31, 1945.

Relating the cumulative 1945 dollars, as of 1945, to the nominal dollars of the same year, cumulated, shows that the cumulative investment of 1945 dollars exceeded the cumulation of nominal dollars in 1945 by 37.6 percent.

The cumulative total of $50,093 thousand in the fourth line under the year 1945 fairly measures and expresses, in my opinion, the investment of electric plant in service on December 31, 1945 in 1945 dollars.

24–Q. Is this figure of $50,093 thousand the cost of reproduction of the electric plant in service as of December 31, 1945?

24–A. No, it is not. I had no intention of reflecting cost of reproduction which is an entirely different matter and this exhibit does not reflect cost of reproduction. This calculation reflects no appreciation [22300] (page 15) in *value* and the figure found does not measure the *value* of electric plant. This determination sets forth the number of 1945 dollars which measure the investment sacrifice of the dollars which investors actually gave up. I have merely calculated the number of dollars which would now command the same amount of goods in exchange as the dollars in-

vestment would have commanded at the time of their investment. Any small number of dollars would mean a sacrifice on the part of investors.

Reflecting the changed size of the dollar only operates to keep the actual investment quoted in terms of the same amount of *real* sacrifice of goods and services. It is a method of avoiding arbitrary devaluation of the actual sacrifice and in no way attempts to reflect revaluation, appreciation or present value. It is merely a way of avoiding arbitrary economic write-down of the basis of return. It only corrects for the bookkeeping fiction that all dollars are alike and measure the same amount of investment.

25–Q. Will you briefly explain the difference between your determination in this exhibit and cost of reproduction?

25–A. Cost of reproduction is evidence of present value and is determined by applying the present cost of the components of property to an inventory of the property components. The difference is that the determination of the equivalent 1945 dollar investment does not attempt or presume to reflect any *actual* increases in value; it reflects only the sacrifice made by the investment as measured by the size of the present day dollars in which size dollar the return is paid.

[22301] (page 16)

The price of goods can increase for two reasons, (1) an increase in the scarcity of goods, and (2) a decrease in the economic size of the dollar. This exhibit does not purport to reflect any actual increase in value, it only measures the investment made in a single size dollar of the purchasing power of 1945. It attempts only to establish what number of 1945 dollars measure the accounted for investment sacrifice made for the plant in use December 31, 1945.

26–Q. Is your determination in this exhibit the same as trended original cost?

26–A. No, it is not. Trending original cost involves the use of the current prices of commodities and labor which enter into the construction of a plant. Trended original cost would also reflect actual increases in value. It would reflect the extent to which components of plant had increased (or decreased) in scarcity as well as that increase (or decrease) in price which was nothing but the reflection of changes in the size of the dollar.

There is no reason or excuse, in my opinion, for identifying or confusing a calculation of the fair original cost or investment in homogeneous current dollars with either cost of reproduction or trended original cost. They are not the same and I have not pretended that they are the same.

27–Q. In your opinion is the fair original cost in homogeneous current dollars a useful fact in the determination of a fair return under regulation?

[22302] (page 17)

27–A. Yes, it is useful evidence for the determination of a fair return.

28–Q. Is it, in your opinion, useful for the determination of the rate base or the fair rate of return?

28–A. The fact as to the fair original cost or investment in homogeneous current dollars is alternatively useful for both purposes. It is useful evidence as to a fair rate base in terms of current dollars and useful for the calculation of a fair rate of return if applied to a rate base not expressed in dollars of current purchasing power. Unless the decreased significance of the dollar as a unit of economic measurement is recognized in either the rate base or the rate of return the *real* income on the investment will be arbi-

trarily decreased. In the instance of the Pennsylvania Water & Power Company, as far as electric plant alone is concerned, the real income would be decreased by the complement of the percentage relationship of $36,414 thousand to $50,093 thousand (72.7) or 27.3 percent.

Recognition of the fact that the actual investment made and remaining in service is measured and measurable by 50,093 thousand 1945 dollars, the size of dollar in which the return is paid maintains the economic parity of the investment.

Exhibit No. 33

[22307]

PENNSYLVANIA WATER & POWER COMPANY

AND

SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND

Original Cost of Electric Plant in Present Dollars The Purchasing Power of the Dollar as Measured by Wholesale Prices as Reflected by a Seven-Year Moving Average

1905-1945

Year	Original Investment in Electric Plant [a] (Nominal Dollars)	Purchasing Power of the Dollar [b] (1945 = 100)	Original Investment in Electric Plant (1945 Dollars)
1905	2,135,006	173.2¢	3,697,830
1906	2,150,746	169.8	3,651,967
1907	3,212,023	166.0	5,331,958
1908	680,006	163.9	1,114,530
1909	975,871	160.6	1,567,249
1910	3,025,472	157.9	4,777,220
1911	598,307	156.9	938,744
1912	598,307	154.6	924,983
1913	804,371	149.9	1,205,752
1914	757,204	141.4	1,070,686
1915	35,927	129.5	46,526
1916	198,295	118.6	235,178

(a) Original cost of electric plant surviving as of December 31, 1945—Data supplied by Company.

(b) Measured by wholesale prices as reflected by a seven-year moving average (B. L. S. Index).

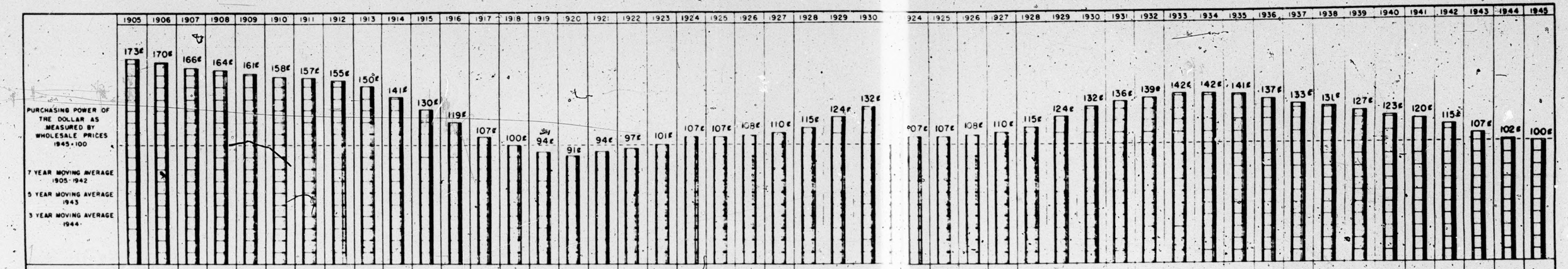
Year	Original Investment in Electric Plant [a] (Nominal Dollars)	Purchasing Power of the Dollar [b] (1945 = 100)	Original Investment in Electric Plant (1945 Dollars)
1917	281,514	106.8¢	300,657
1918	97,541	100.0	97,541
1919	107,359	93.9	100,810
1920	84,486	91.2	77,051
1921	135,666	93.8	127,255
1922	84,841	96.8	82,126
1923	2,663,258	101.1	2,692,554
1924	2,535,879	107.1	2,715,926
1925	2,489,580	107.3	2,671,319
1926	400,612	107.5	430,658
1927	402,277	109.9	442,102
1928	394,249	115.2	454,175
1929	347,892	124.0	431,386
1930	477,712	131.7	629,147
1931	2,282,093	136.1	3,105,929
1932	536,738	139.4	748,213
1933	146,048	142.2	207,680
1934	1,468,095	142.3	2,089,099
1935	714,408	140.8	1,005,886
1936	347,617	137.0	476,235
1937	2,679,646	133.3	3,571,968
1938	618,999	130.5	807,794
1939	252,136	126.9	319,961
	[22308] (page 2)		
1940	237,875	122.9	292,348
1941	375,231	119.9	449,902
1942	757,974	114.9	870,912
1943	86,984	106.6	92,725
1944	75,666	101.5	76,801
1945	160,323	100.0	160,323
Totals	36,414,232		50,091,106

PENNSYLVANIA WATER & POWER COMPANY

ORIGINAL COST OF ELECTRIC PLANT IN PRESENT DOLLARS

THE PURCHASING POWER OF THE DOLLAR AS MEASURED BY WHOLESALE PRICES AS REFLECTED BY A SEVEN-YEAR MOVING AVERAGE

1905-1945



	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930
PURCHASING POWER OF THE DOLLAR AS MEASURED BY WHOLESALE PRICES 1945=100	173¢	170¢	166¢	164¢	161¢	158¢	157¢	155¢	150¢	141¢	130¢	119¢	107¢	100¢	94¢	91¢	94¢	97¢	101¢	107¢	107¢	108¢	110¢	115¢	124¢	132¢
ORIGINAL INVESTMENT OF NOMINAL DOLLARS (ANNUAL)	2,135	2,151	3,212	680	976	3,025	598	598	804	757	36	198	281	98	107	84	136	85	2,663	2,536	2,490	401	402	394	348	477
ORIGINAL INVESTMENT OF 1945 DOLLARS (ANNUAL)	3,698	3,652	5,332	1,115	1,567	4,776	938	925	1,205	1,070	47	235	301	98	100	77	128	82	2,692	2,716	2,672	431	442	454	432	630
ORIGINAL INVESTMENT OF NOMINAL DOLLARS (CUMULATIVE)	2,135	4,286	7,498	8,178	9,154	12,179	12,777	13,376	14,180	14,937	14,973	15,172	15,453	15,551	15,658	15,742	15,878	15,963	18,626	21,162	23,652	24,052	24,455	24,849	25,197	25,674
ORIGINAL INVESTMENT OF 1945 DOLLARS (CUMULATIVE)	3,698	7,350	12,682	13,797	15,364	20,140	21,078	22,003	23,208	24,278	24,325	24,560	24,861	24,959	25,059	25,136	25,264	25,346	28,038	30,754	33,426	33,857	34,299	34,753	35,185	35,815

(ORIGINAL INVESTMENT IN THOUSANDS OF DOLLARS)

PENNSYLVANIA WATER & POWER COMPANY

PLANT IN PRESENT DOLLARS

ALE PRICES AS REFLECTED BY A SEVEN-YEAR MOVING AVERAGE

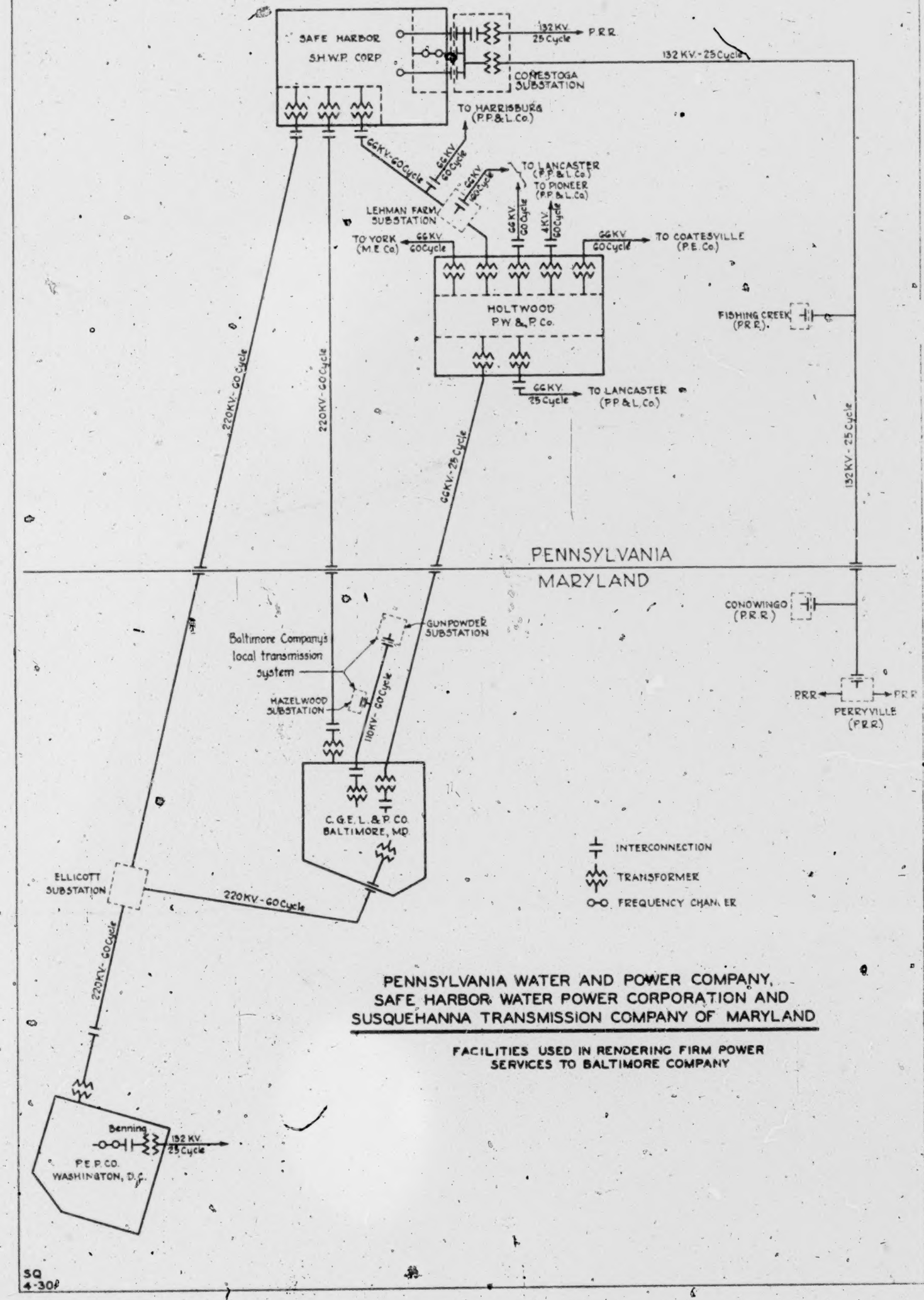
945

	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945
PURCHASING POWER OF THE DOLLAR AS MEASURED BY WHOLESALE PRICES 1945=100	107¢	107¢	108¢	110¢	115¢	124¢	132¢	136¢	139¢	142¢	142¢	141¢	137¢	133¢	131¢	127¢	123¢	120¢	115¢	107¢	102¢	100¢
ORIGINAL INVESTMENT OF NOMINAL DOLLARS (ANNUAL)	2,536	2,490	401	402	394	348	477	2,282	537	146	1,468	714	347	2,680	619	252	238	375	758	87	78	160
ORIGINAL INVESTMENT OF 1945 DOLLARS (ANNUAL)	2,716	2,672	431	442	454	432	630	3,106	749	208	2,089	1,005	477	3,572	808	320	293	450	871	93	77	160
ORIGINAL INVESTMENT OF NOMINAL DOLLARS (CUMULATIVE)	21,162	23,652	24,052	24,455	24,849	25,197	25,674	27,956	28,493	28,639	30,107	30,822	31,169	33,849	34,468	34,720	34,958	35,333	36,091	36,178	36,254	36,414
ORIGINAL INVESTMENT OF 1945 DOLLARS (CUMULATIVE)	30,754	33,426	33,857	34,299	34,753	35,185	35,815	38,921	39,670	39,878	41,967	42,972	43,449	47,021	47,829	48,149	48,442	48,892	49,763	49,856	49,933	50,093

SANDS OF DOLLARS)

(P. 3387)

EXHIBIT NO. 34



PENNSYLVANIA WATER AND POWER COMPANY,
SAFE HARBOR WATER POWER CORPORATION AND
SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND

FACILITIES USED IN RENDERING FIRM POWER SERVICES TO BALTIMORE COMPANY

SQ 4-30f

TRANSMISSION LINES AND INTERCONNECTIONS OF THE PENNSYLVANIA WATER & POWER CO. AND SUSQUEHANNA TRANSMISSION CO. OF MARYLAND (A SUBSIDIARY COMPANY)

ENOLA
HARRISBURG
LEMOYNE
MIDDLETOWN
MANHEIM
YORK HAVEN
MARIETTA
COLUMBIA
LANCASTER
SAFE HARBOR
YORK
AKRON
THORNDALE
COATESVILLE
PARKESBURG
HOLTWOOD
HANOVER
PARKTON
CONOWINGO
WESTMINSTER
BEL AIR
HAVRE DE GRACE
PERRYVILLE
FINKSBURG
BALTIMORE
Huzelwood S.S.
Gunpowder S.S.
Riverside
WESTPORT
GOULD ST.
ELLICOTT CITY
ELKRIDGE
LAUREL
TAKOMA PARK
WASHINGTON D.C.
BENNING
BUZZARD
ANNAPOLIS
CHESAPEAKE BAY
PENNSYLVANIA
MARYLAND
Pennsylvania
Maryland

1 Steel Tower 66 Kv 3φ 25~
2 Cir 30,000 Kva /Cir 40.07 Mi
300,000 C.M.A.L. 19 Str.
1 3/8" Ground Wire

1 Steel Tower 66 Kv 3φ 25φ
2 Cir 30,000 Kva /Cir 40.08 Mi
300,000 C.M.A.L. 19 Str
2 3/8" Ground Wires

Transf { 2 45,000 Kva / 2 120,000 Kva }

7 Hydro Units 210,000 Kw

1 Steel Tower 66 Kv 3φ 60~ 2 Cir 30,000 Kva /Cir
23.01 Mi 2/0 Cu 7 Str Grd Wire 2 3/8 Steel
Md.
Transf 15,600 Kva Also 66 Kv Tie

1 Steel Tower 66 Kv 3φ 60~ 2 Cir 30,000 Kva /Cir
60~ Transf 166,900 Kva
25~ Transf 140,000 Kva

Transf 4 20,000 Kva
Transf 2 20,000 Kva Owned by P.R.R.

Transf 30,000 Kva

1 Steel Tower 66 Kv 3φ 60~
2 Cir 30,000 Kva /Cir
29.38 Mi 2/0 Cu 7 Str
1 3/8" Copper Weld Ground Wire

30,000 Kva
45,000 Kva
7.68 Mi 2/0 Cu 7 Str
1.67 Mi 4/0 Cu 7 Str
3/8" Ground Wire

Hydro 10 Units 111,000 Kw
Steam 2 Units 20,000 Kw

1 Steel Tower 132 Kv 1φ 25~
4 Cir 50,000 Kva /Cir
31.50 Mi 397,500 A.C.S.R.
2 159,000 A.C.S.R Ground Wires

1 Steel Tower 220 Kv 3φ 60~
1 Cir 250,000 Kva /Cir 50.55 Mi
(28 Mi S.H.W.P. Corp) 795,000 A.C.S.R
2 203,000 A.C.S.R. Ground Wires

1 Steel Tower 220 Kv 3φ 60~
1 Cir 250,000 Kva /Cir 68.15 Mi
(to City Boundary) (23 Mi S.H.W.P. Corp) 795,000 A.C.S.R. 2 203,200 A.C.S.R Ground Wires

1 Steel Tower 220 Kv 3φ 60~
1 Cir 250,000 Kva /Cir 14.59 Mi
(5 T Co of Md owned) 795,000 A.C.S.R
2 203,200 A.C.S.R Ground Wires

1 Steel Tower Line 110 Kv 3φ 60~ 9.63 Mi
(Leased by C.G.E.L. & P. Co)
Comprising
1 Cir 25,000 Kva 2/0 Cu Cond 9.55 Mi
1 Cir 25,000 Kva 2/0 Cu Cond 2.80 Mi
plus 4/0 Cu Cond 3/8 Mi.
3/8" 7 Str. S.M. Ground Wires.

Transf 87,500 Kva
Transf 126,000 Kva Owned by Cons. G.E.L. & P. Co
Transf 126,000 Kva Owned by Cons. G.E.L. & P. Co
Transf 60,000 Kva Owned by P.E.P. Co

Cons. G.E.L. & P. Co of Balto
Susq. Transm. Co of Md.
P.W. & P. Co
P.R.R. Co
B. & O. R.R.
Penna.
P.P. & L. Co
M.E. Co
C. & P. R.R.
W. M. R.R.
N. C. Ry.

0 4 8 12 16
Miles

- 220,000 V. Lines
- 132,000 V. Single Phase Line
- 110,000 V. Line
- 66,000 V. Lines
- Hydro-Electric Plant
- Steam-Electric Plant

(P.W. & P. Co and Subsidiary)

- Lines of Other Companies
- Interconnections with Other Companies
- Hydro-Electric Plants of Other Companies
- Steam-Electric Plants of Other Companies
- Electrified Trackage of The Pennsylvania Railroad Co.
- Other Railroads
- (V) Interconnection with The Pennsylvania Railroad Co.
- (W) Interconnection with Consolidated Gas Electric Light & Power Co. of Baltimore.
- (W1) Point of Delivery for Account of Consolidated Gas Electric Light & Power Co of Baltimore.
- (X) Interconnection with Philadelphia Electric Co.
- (Y) Interconnection with Edison Light & Power Co and Interchange with Metropolitan Edison Co.
- (Z) Interconnection with Pennsylvania Power & Light Co.

410/424 -A-130463

Supersedes drawing of same number dated 10-1-38

[22345] Exhibit No. 37 3388

EXHIBIT NO. 46.

[22374]

FEDERAL POWER COMMISSION

Docket No. IT-5915

Pennsylvania Water & Power Company

RATE OF RETURN STUDY

April 15, 1946

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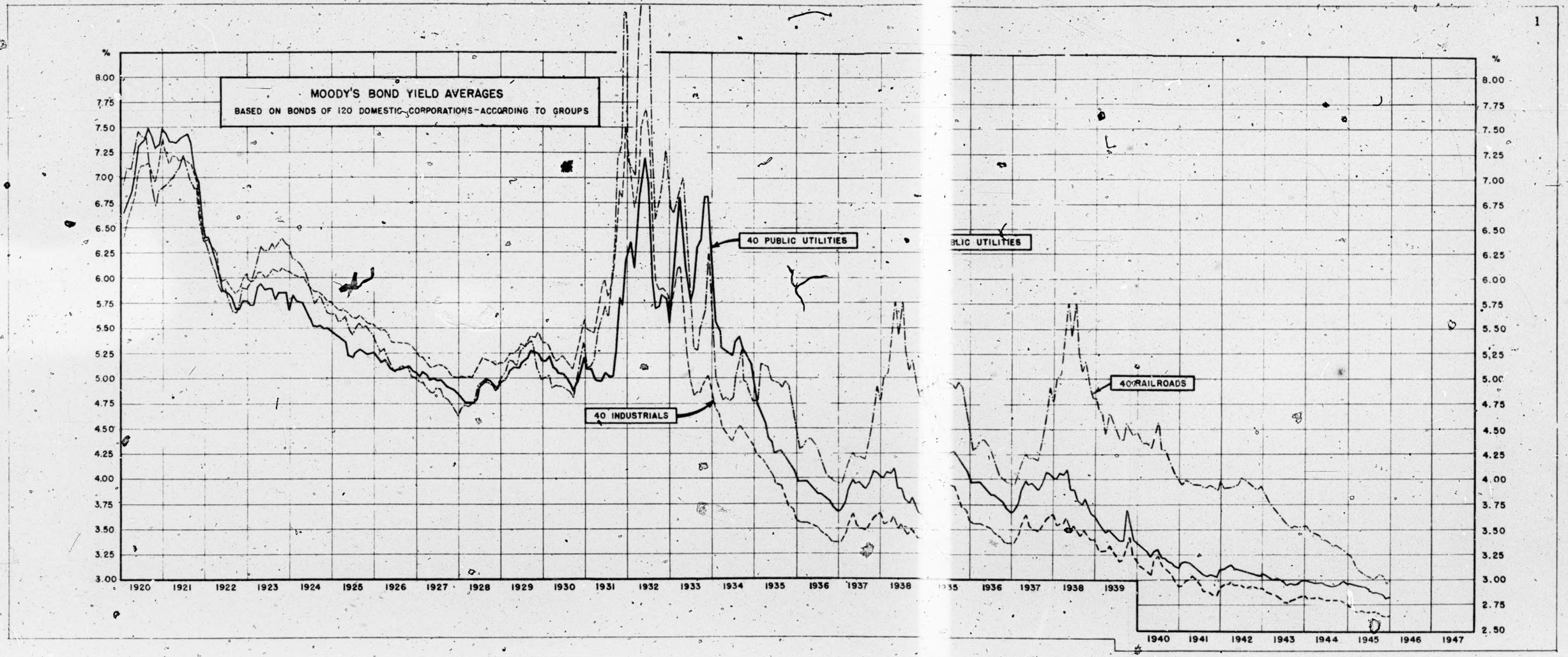
MOODY'S BOND YIELD AVERAGES
BASED ON BONDS OF 120 DOMESTIC CORPORATIONS-ACCORDING TO GROUPS
40 PUBLIC UTILITIES
40 INDUSTRIALS
40 RAILROADS
%
8.00
7.75
7.50
7.25
7.00
6.75
6.50
6.25
6.00
5.75
5.50
5.25
5.00
4.75
4.50
4.25
4.00
3.75
3.50
3.25
3.00
2.75
2.50
1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938
1936 1937 1938 1939
1940 1941 1942 1943 1944 1945 1946 1947

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MOODY'S BOND YIELD AVERAGES

BASED ON BONDS OF 120 DOMESTIC CORPORATIONS - ACCORDING TO GROUPS

40 INDUSTRIALS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
1920	6.39	6.57	6.66	6.78	7.01	7.11	7.12	7.15	7.05	6.97	7.11	7.39	6.94
1921	7.27	7.14	7.22	7.21	7.16	7.19	7.17	7.13	7.06	6.93	6.61	6.36	7.04
1922	6.37	6.32	6.25	6.08	5.96	5.99	5.91	5.88	5.79	5.88	5.98	6.03	6.04
1923	5.95	5.97	6.04	6.05	5.99	6.01	6.07	6.07	6.05	6.10	6.07	6.06	6.04
1924	6.03	6.01	6.00	6.00	5.94	5.89	5.86	5.86	5.84	5.81	5.76	5.75	5.90
1925	5.72	5.66	5.68	5.66	5.64	5.59	5.59	5.61	5.59	5.54	5.54	5.53	5.61
1926	5.49	5.46	5.49	5.43	5.35	5.34	5.35	5.34	5.34	5.33	5.32	5.26	5.37
1927	5.21	5.20	5.15	5.10	5.10	5.11	5.12	5.10	5.07	5.02	5.01	5.00	5.10
1928	5.01	5.00	5.01	5.00	5.07	5.14	5.19	5.18	5.16	5.14	5.13	5.15	5.10
1929	5.14	5.18	5.24	5.24	5.27	5.34	5.32	5.34	5.41	5.40	5.45	5.35	5.31
1930	5.34	5.32	5.23	5.16	5.17	5.21	5.17	5.12	5.08	5.24	5.37	5.58	5.25
1931	5.41	5.40	5.44	5.65	5.89	5.97	5.79	5.93	6.33	6.86	6.79	7.51	6.08
1932	7.20	7.02	6.71	7.02	7.55	7.68	7.40	6.37	5.96	5.89	5.90	5.85	6.71
1933	5.66	5.83	6.10	6.10	5.60	5.21	4.95	4.84	4.87	4.87	4.99	5.03	5.34
1934	4.87	4.73	4.65	4.53	4.47	4.41	4.39	4.47	4.52	4.47	4.40	4.37	4.52
1935	4.31	4.24	4.20	4.18	4.11	4.07	3.95	3.94	3.91	3.83	3.73	3.71	4.02
1936	3.59	3.57	3.56	3.57	3.55	3.54	3.52	3.48	3.44	3.42	3.37	3.37	3.50
1937	3.36	3.46	3.55	3.65	3.55	3.51	3.50	3.47	3.55	3.63	3.65	3.66	3.55
1938	3.54	3.57	3.58	3.64	3.51	3.55	3.48	3.43	3.50	3.43	3.39	3.40	3.50
1939	3.31	3.29	3.29	3.35	3.30	3.23	3.17	3.21	3.57	3.43	3.25	3.21	3.30
1940	3.14	3.12	3.09	3.05	3.20	3.25	3.15	3.12	3.10	3.06	2.98	2.93	3.10
1941	2.96	3.00	3.02	3.06	3.02	2.96	2.90	2.90	2.88	2.85	2.85	2.94	2.95
1942	2.97	2.98	3.00	2.96	2.97	2.97	2.94	2.94	2.95	2.94	2.93	2.94	2.96
1943	2.90	2.88	2.87	2.87	2.86	2.84	2.80	2.79	2.82	2.82	2.85	2.86	2.85
1944	2.83	2.83	2.83	2.83	2.81	2.79	2.79	2.79	2.79	2.79	2.77	2.74	2.80
1945	2.73	2.69	2.68	2.69	2.68	2.68	2.68	2.68	2.67	2.65	2.64	2.64	2.68

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MOODY'S BOND YIELD AVERAGES

BASED ON BONDS OF 120 DOMESTIC CORPORATIONS - ACCORDING TO GROUPS

40 RAILROADS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
1920	6.93	7.09	7.08	7.26	7.46	7.40	7.39	7.23	6.91	6.72	6.86	7.15	7.12
1921	6.91	6.97	6.99	7.06	7.08	7.22	7.10	6.97	6.90	6.88	6.52	6.37	6.91
1922	6.28	6.11	6.07	5.91	5.85	5.88	5.77	5.66	5.65	5.72	5.89	5.88	5.89
1923	5.94	6.00	6.16	6.30	6.26	6.27	6.33	6.28	6.33	6.39	6.34	6.31	6.24
1924	6.18	6.17	6.14	6.09	6.02	5.88	5.73	5.78	5.81	5.72	5.65	5.63	5.90
1925	5.63	5.56	5.57	5.60	5.48	5.41	5.48	5.54	5.50	5.52	5.46	5.42	5.51
1926	5.33	5.26	5.28	5.18	5.09	5.06	5.08	5.11	5.10	5.10	5.02	5.00	5.13
1927	4.96	4.95	4.90	4.86	4.85	4.90	4.89	4.80	4.79	4.75	4.68	4.66	4.83
1928	4.70	4.73	4.72	4.74	4.78	4.91	4.94	4.98	4.94	4.93	4.87	4.95	4.85
1929	5.00	5.06	5.17	5.16	5.12	5.26	5.28	5.34	5.36	5.30	5.11	4.99	5.18
1930	5.00	5.02	4.89	4.92	4.91	4.91	4.89	4.86	4.80	4.91	5.10	5.34	4.96
1931	5.09	5.11	5.17	5.45	5.60	5.70	5.62	6.01	6.43	7.20	7.28	8.46	6.09
1932	7.20	7.10	7.04	8.24	9.30	9.14	8.70	6.96	6.58	6.75	7.00	7.27	7.61
1933	6.71	6.65	6.67	7.00	6.11	5.68	5.31	5.28	5.54	5.67	6.25	5.95	6.09
1934	5.45	4.99	4.91	4.78	4.81	4.78	4.80	5.05	5.15	4.99	4.96	4.86	4.96
1935	4.75	4.81	5.14	5.14	5.12	4.99	4.97	4.95	4.91	4.97	4.90	4.73	4.95
1936	4.50	4.31	4.32	4.38	4.40	4.35	4.31	4.22	4.09	4.02	4.00	3.96	4.24
1937	3.95	4.03	4.15	4.26	4.22	4.22	4.21	4.28	4.43	4.66	4.91	4.79	4.34
1938	5.02	5.06	5.14	5.75	5.14	5.75	5.25	5.09	5.18	4.94	4.83	4.82	5.21
1939	4.70	4.63	4.46	4.66	4.60	4.47	4.42	4.41	4.58	4.51	4.44	4.47	4.53
1940	4.39	4.37	4.37	4.33	4.46	4.57	4.32	4.30	4.23	4.15	4.07	4.03	4.30
1941	3.96	4.00	3.98	3.96	3.95	3.95	3.92	3.92	3.95	3.93	3.91	3.99	3.95
1942	3.93	3.94	3.94	3.95	3.97	4.03	4.02	3.98	3.95	3.92	3.93	3.96	3.96
1943	3.86	3.78	3.73	3.69	3.64	3.61	3.56	3.55	3.56	3.55	3.56	3.56	3.64
1944	3.51	3.49	3.48	3.45	3.41	3.40	3.37	3.34	3.35	3.32	3.29	3.25	3.39
1945	3.23	3.16	3.11	3.07	3.05	3.03	3.00	3.02	3.05	3.03	2.96	2.99	3.06

MOODY'S BOND YIELD AVERAGES

BASED ON BONDS OF 120 DOMESTIC CORPORATIONS - ACCORDING TO GROUPS

40 UTILITIES

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
1920	6.63	6.76	6.83	7.03	7.30	7.35	7.37	7.48	7.40	7.28	7.31	7.49	7.19
1921	7.43	7.35	7.35	7.34	7.38	7.41	7.42	7.34	7.08	6.95	6.58	6.37	7.17
1922	6.40	6.31	6.20	6.05	5.87	5.87	5.83	5.78	5.68	5.67	5.77	5.76	5.93
1923	5.72	5.73	5.90	5.93	5.88	5.89	5.89	5.77	5.85	5.85	5.85	5.86	5.83
1924	5.82	5.77	5.76	5.74	5.67	5.59	5.52	5.51	5.52	5.48	5.49	5.46	5.61
1925	5.44	5.41	5.39	5.35	5.22	5.20	5.25	5.28	5.26	5.24	5.24	5.25	5.29
1926	5.20	5.15	5.17	5.12	5.08	5.06	5.08	5.09	5.10	5.11	5.07	5.05	5.11
1927	5.02	5.05	5.03	4.98	4.99	4.98	4.98	4.94	4.92	4.89	4.88	4.84	4.96
1928	4.79	4.77	4.75	4.75	4.79	4.90	4.93	4.97	4.96	4.93	4.90	4.95	4.87
1929	4.96	5.00	5.07	5.09	5.09	5.15	5.16	5.22	5.27	5.25	5.24	5.17	5.14
1930	5.17	5.20	5.10	5.08	5.04	5.03	5.00	4.94	4.87	4.93	5.05	5.21	5.05
1931	5.09	5.09	4.99	4.97	4.97	5.04	5.00	5.01	5.24	5.79	5.72	5.31	5.27
1932	6.20	6.36	6.10	6.66	6.98	7.21	6.97	6.03	5.69	5.72	5.84	5.80	6.30
1933	5.56	5.90	6.41	6.82	6.34	5.99	5.78	5.90	6.31	6.38	6.82	6.82	6.25
1934	6.24	5.58	5.50	5.31	5.27	5.24	5.23	5.37	5.43	5.30	5.22	5.15	5.40
1935	4.97	4.76	4.65	4.60	4.43	4.37	4.26	4.28	4.27	4.24	4.17	4.12	4.43
1936	4.02	3.98	3.98	3.97	3.95	3.91	3.86	3.85	3.83	3.80	3.74	3.69	3.88
1937	3.68	3.76	3.90	3.99	3.95	3.97	3.92	3.89	3.96	4.08	4.06	4.03	3.93
1938	4.01	4.07	4.05	4.11	3.90	3.90	3.79	3.76	3.82	3.73	3.65	3.63	3.87
1939	3.57	3.52	3.48	3.51	3.45	3.42	3.39	3.40	3.70	3.57	3.41	3.38	3.48
1940	3.35	3.33	3.29	3.24	3.30	3.33	3.23	3.23	3.19	3.18	3.14	3.13	3.25
1941	3.17	3.19	3.17	3.16	3.13	3.10	3.07	3.06	3.07	3.05	3.04	3.12	3.11
1942	3.13	3.15	3.17	3.13	3.13	3.12	3.09	3.09	3.08	3.07	3.06	3.07	3.11
1943	3.05	3.02	3.00	3.01	3.00	2.98	2.95	2.96	2.96	2.96	2.98	3.00	2.99
1944	2.99	2.98	2.97	2.97	2.97	2.96	2.95	2.94	2.94	2.96	2.98	2.96	2.97
1945	2.97	2.95	2.94	2.94	2.93	2.89	2.87	2.86	2.85	2.84	2.79	2.81	2.89

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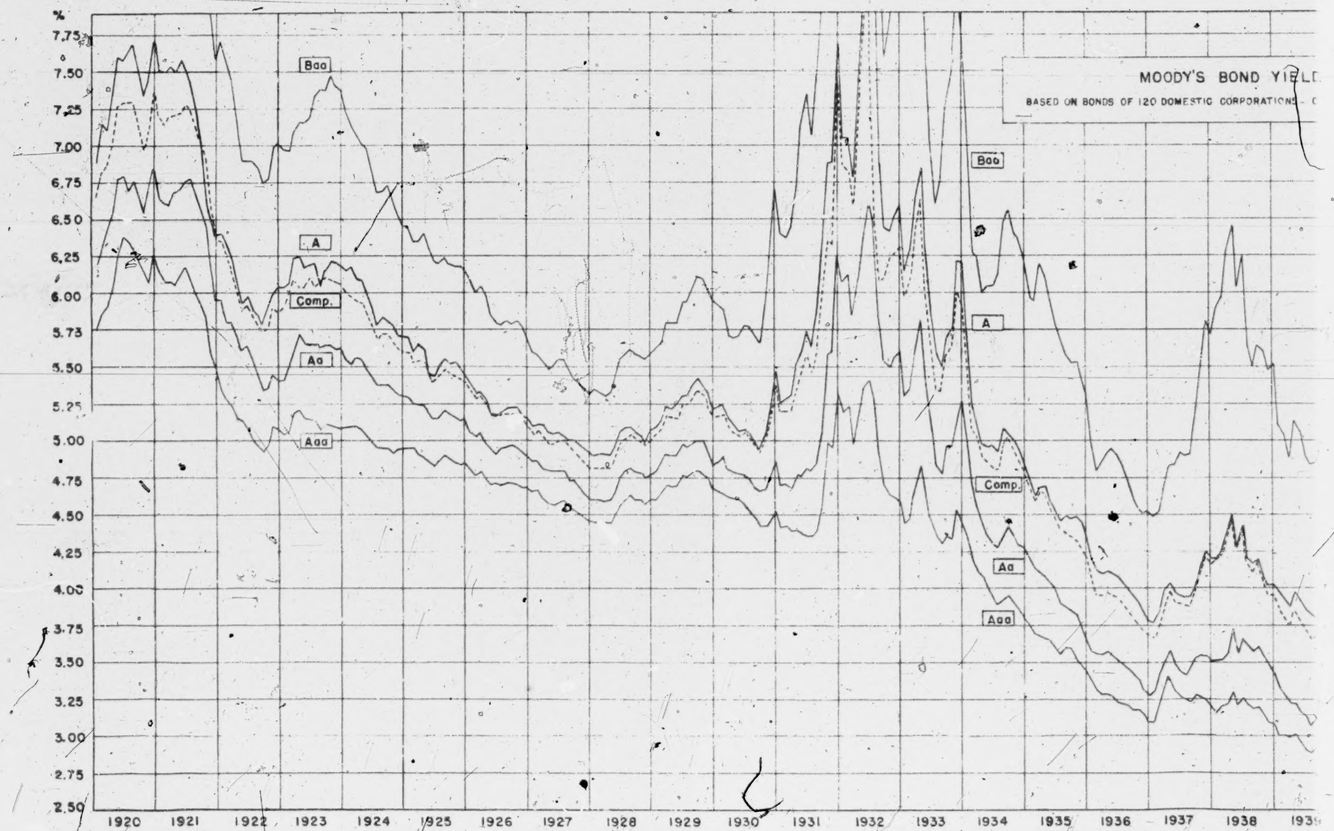
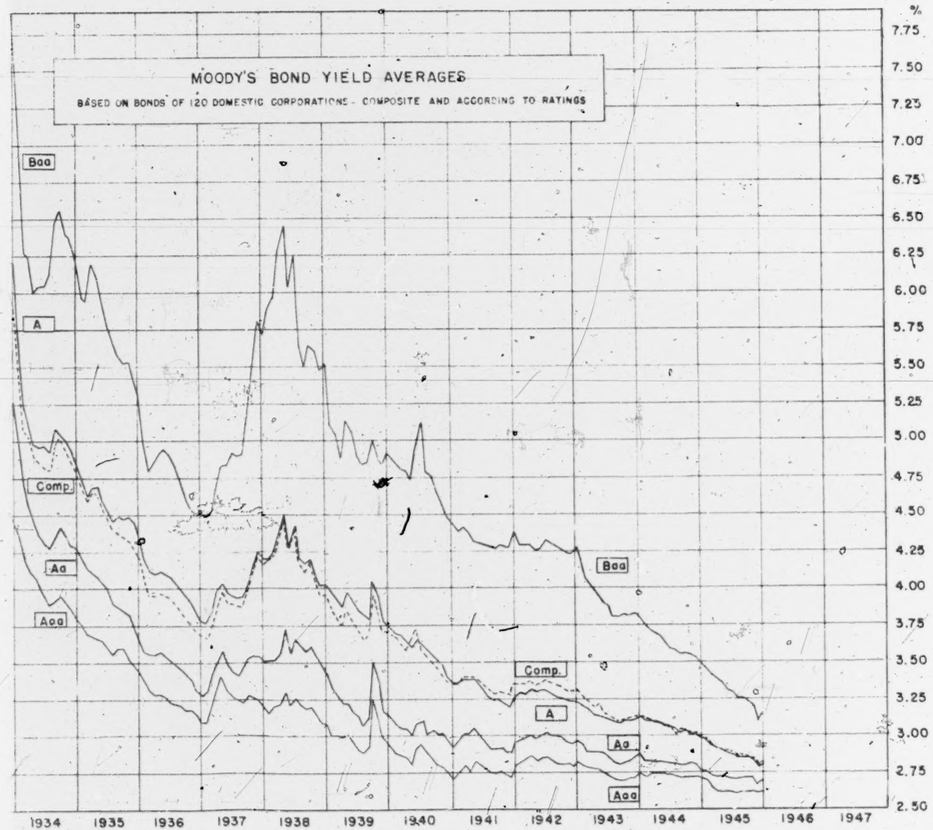


MOODY'S BOND YIELD

BASED ON BONDS OF 120 DOMESTIC CORPORATIONS - C



MOODY'S BOND YIELD AVERAGES

BASED ON BONDS OF 120 DOMESTIC CORPORATIONS - COMPOSITE AND ACCORDING TO RATINGS

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MOODY'S BOND YIELD AVERAGES

BASED ON BONDS OF 120 DOMESTIC CORPORATIONS - COMPOSITE AND ACCORDING TO RATINGS

COMPOSITE

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
1920	6.65	6.81	6.86	7.02	7.26	7.29	7.29	7.29	7.12	6.99	7.09	7.34	7.08
1921	7.20	7.15	7.19	7.20	7.21	7.27	7.23	7.14	7.02	6.92	6.57	6.36	7.04
1922	6.35	6.24	6.17	6.01	5.89	5.92	5.84	5.78	5.71	5.76	5.68	5.89	5.95
1923	5.87	5.90	6.03	6.09	6.04	6.05	6.10	6.04	6.08	6.11	6.09	6.08	6.04
1924	6.01	5.98	5.96	5.94	5.88	5.79	5.70	5.72	5.72	5.67	5.63	5.61	5.81
1925	5.60	5.54	5.54	5.54	5.45	5.40	5.44	5.48	5.45	5.43	5.42	5.40	5.47
1926	5.34	5.29	5.31	5.25	5.17	5.16	5.17	5.18	5.18	5.18	5.14	5.10	5.21
1927	5.06	5.07	5.03	4.98	4.98	5.00	5.00	4.95	4.93	4.89	4.86	4.83	4.97
1928	4.83	4.83	4.82	4.83	4.88	4.99	5.02	5.04	5.02	5.00	4.97	5.01	4.94
1929	5.04	5.08	5.16	5.16	5.16	5.25	5.25	5.30	5.34	5.32	5.29	5.17	5.21
1930	5.17	5.18	5.08	5.05	5.04	5.05	5.02	4.97	4.92	5.02	5.17	5.38	5.09
1931	5.20	5.20	5.20	5.35	5.48	5.57	5.47	5.65	6.00	6.62	6.60	7.43	5.81
1932	6.87	6.83	6.62	7.31	7.94	8.01	7.69	6.45	6.08	6.12	6.24	6.31	6.87
1933	5.98	6.13	6.46	6.64	6.02	5.63	5.35	5.34	5.57	5.64	6.02	5.93	5.89
1934	5.52	5.10	5.02	4.87	4.85	4.81	4.81	4.96	5.03	4.92	4.86	4.79	4.96
1935	4.68	4.60	4.66	4.64	4.55	4.47	4.40	4.39	4.36	4.34	4.27	4.19	4.46
1936	4.04	3.95	3.95	3.97	3.96	3.94	3.90	3.85	3.79	3.75	3.71	3.67	3.87
1937	3.67	3.75	3.87	3.97	3.91	3.90	3.88	3.88	3.98	4.12	4.21	4.16	3.94
1938	4.19	4.23	4.36	4.50	4.28	4.40	4.17	4.09	4.17	4.03	3.95	3.95	4.19
1939	3.86	3.81	3.74	3.84	3.78	3.71	3.66	3.67	3.95	3.83	3.70	3.69	3.77
1940	3.63	3.60	3.58	3.54	3.65	3.72	3.57	3.55	3.50	3.46	3.40	3.36	3.55
1941	3.36	3.40	3.39	3.39	3.37	3.34	3.30	3.29	3.30	3.27	3.26	3.35	3.34
1942	3.35	3.35	3.37	3.34	3.36	3.37	3.35	3.34	3.33	3.31	3.31	3.32	3.34
1943	3.27	3.23	3.20	3.19	3.16	3.14	3.11	3.10	3.11	3.11	3.13	3.14	3.16
1944	3.11	3.10	3.09	3.08	3.06	3.05	3.02	3.04	3.03	3.02	3.02	2.98	3.05
1945	2.97	2.93	2.91	2.90	2.89	2.87	2.85	2.86	2.85	2.84	2.80	2.82	2.87

MOODY'S BOND YIELD AVERAGES

BASED ON BONDS OF 120 DOMESTIC CORPORATIONS - COMPOSITE AND ACCORDING TO RATINGS

30 DOMESTIC CORPORATIONS - RATING AAA

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
1920	5.75	5.86	5.92	6.04	6.25	6.38	6.34	6.30	6.22	6.05	6.08	6.26	6.12
1921	6.14	6.08	6.08	6.06	6.11	6.18	6.12	5.99	5.93	5.84	5.60	5.50	5.97
1922	5.34	5.29	5.23	5.15	5.13	5.08	5.00	4.96	4.93	4.97	5.09	5.08	5.10
1923	5.04	5.07	5.18	5.22	5.16	5.15	5.14	5.08	5.12	5.11	5.09	5.09	5.12
1924	5.09	5.09	5.10	5.08	5.04	4.99	4.95	4.95	4.95	4.92	4.94	4.95	5.00
1925	4.95	4.95	4.91	4.87	4.83	4.83	4.87	4.90	4.87	4.85	4.84	4.85	4.88
1926	4.82	4.77	4.79	4.74	4.71	4.72	4.71	4.72	4.72	4.71	4.68	4.68	4.73
1927	4.66	4.67	4.62	4.58	4.57	4.58	4.60	4.56	4.54	4.51	4.49	4.46	4.57
1928	4.46	4.46	4.46	4.46	4.49	4.57	4.61	4.64	4.61	4.61	4.58	4.61	4.55
1929	4.62	4.66	4.70	4.69	4.70	4.77	4.77	4.79	4.80	4.77	4.76	4.67	4.73
1930	4.66	4.69	4.62	4.60	4.60	4.57	4.52	4.47	4.42	4.42	4.47	4.52	4.55
1931	4.42	4.43	4.39	4.40	4.37	4.36	4.36	4.40	4.55	4.99	4.94	5.32	4.58
1932	5.20	5.23	4.98	5.17	5.36	5.41	5.26	4.91	4.70	4.64	4.63	4.59	5.01
1933	4.44	4.48	4.68	4.78	4.63	4.46	4.36	4.30	4.36	4.34	4.54	4.50	4.49
1934	4.35	4.20	4.13	4.07	4.01	3.93	3.89	3.93	3.96	3.90	3.86	3.81	4.00
1935	3.77	3.69	3.67	3.66	3.65	3.61	3.56	3.60	3.59	3.52	3.47	3.44	3.60
1936	3.37	3.32	3.29	3.29	3.27	3.24	3.23	3.21	3.18	3.18	3.15	3.10	3.24
1937	3.10	3.22	3.32	3.42	3.33	3.28	3.25	3.24	3.28	3.27	3.24	3.21	3.26
1938	3.17	3.20	3.22	3.30	3.22	3.26	3.22	3.18	3.21	3.15	3.10	3.08	3.19
1939	3.01	3.01	2.99	3.02	2.97	2.92	2.89	2.93	3.25	3.15	3.00	2.94	3.02
1940	2.88	2.86	2.84	2.82	2.93	2.96	2.88	2.85	2.82	2.79	2.75	2.71	2.84
1941	2.75	2.78	2.80	2.82	2.81	2.77	2.74	2.74	2.75	2.73	2.72	2.80	2.77
1942	2.83	2.85	2.86	2.83	2.85	2.85	2.83	2.81	2.80	2.80	2.79	2.81	2.83
1943	2.79	2.77	2.76	2.76	2.74	2.72	2.69	2.69	2.69	2.70	2.71	2.74	2.73
1944	2.72	2.74	2.74	2.74	2.73	2.73	2.72	2.71	2.72	2.72	2.72	2.70	2.72
1945	2.69	2.65	2.62	2.61	2.62	2.61	2.60	2.61	2.62	2.62	2.61	2.62	2.62

MOODY'S BOND YIELD AVERAGES

BASED ON BONDS OF 120 DOMESTIC CORPORATIONS - COMPOSITE AND ACCORDING TO RATINGS

30 DOMESTIC CORPORATIONS - RATING AA

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
1920	6.19	6.28	6.42	6.54	6.78	6.79	6.69	6.76	6.65	6.56	6.63	6.84	6.59
1921	6.64	6.60	6.59	6.68	6.69	6.76	6.78	6.64	6.56	6.47	6.18	5.95	6.55
1922	5.94	5.80	5.79	5.71	5.62	5.64	5.57	5.44	5.35	5.36	5.45	5.41	5.59
1923	5.42	5.49	5.62	5.73	5.66	5.66	5.69	5.63	5.65	5.65	5.63	5.63	5.62
1924	5.55	5.52	5.57	5.56	5.49	5.43	5.38	5.38	5.38	5.35	5.32	5.31	5.44
1925	5.30	5.25	5.24	5.24	5.19	5.15	5.17	5.21	5.18	5.17	5.14	5.14	5.20
1926	5.07	5.04	5.05	4.99	4.94	4.92	4.95	4.95	4.97	4.95	4.93	4.89	4.97
1927	4.87	4.87	4.83	4.80	4.79	4.80	4.80	4.73	4.73	4.69	4.65	4.62	4.77
1928	4.61	4.61	4.59	4.60	4.64	4.75	4.79	4.82	4.79	4.78	4.75	4.77	4.71
1929	4.79	4.86	4.92	4.91	4.91	4.98	4.97	4.99	5.01	5.01	4.94	4.84	4.93
1930	4.86	4.89	4.80	4.78	4.77	4.76	4.74	4.68	4.65	4.67	4.75	4.85	4.77
1931	4.70	4.80	4.67	4.76	4.76	4.81	4.81	4.85	5.08	5.57	5.61	6.26	5.05
1932	6.08	6.13	5.85	6.11	6.38	6.60	6.51	5.83	5.54	5.51	5.57	5.60	5.98
1933	5.30	5.35	5.61	5.81	5.40	5.09	4.83	4.77	4.96	4.97	5.35	5.27	5.23
1934	5.00	4.70	4.55	4.43	4.37	4.30	4.28	4.34	4.42	4.36	4.28	4.27	4.44
1935	4.21	4.13	4.11	4.08	4.03	3.99	3.89	3.87	3.85	3.82	3.73	3.65	3.95
1936	3.57	3.55	3.55	3.57	3.53	3.51	3.48	3.44	3.41	3.37	3.31	3.28	3.46
1937	3.30	3.40	3.50	3.57	3.48	3.43	3.41	3.41	3.46	3.53	3.54	3.50	3.46
1938	3.50	3.51	3.56	3.73	3.56	3.68	3.62	3.57	3.60	3.53	3.46	3.42	3.56
1939	3.32	3.26	3.22	3.22	3.16	3.13	3.07	3.11	3.49	3.35	3.16	3.14	3.22
1940	3.08	3.05	3.04	2.99	3.08	3.10	3.01	3.03	3.01	3.01	2.96	2.92	3.02
1941	2.95	3.00	3.01	3.04	2.99	2.95	2.90	2.90	2.91	2.87	2.86	2.95	2.94
1942	2.96	2.98	3.00	2.98	3.00	3.01	2.99	2.99	2.98	2.95	2.94	2.96	2.98
1943	2.93	2.89	2.88	2.88	2.87	2.85	2.82	2.81	2.82	2.83	2.84	2.87	2.86
1944	2.83	2.83	2.82	2.82	2.81	2.81	2.80	2.79	2.79	2.81	2.80	2.76	2.81
1945	2.76	2.73	2.72	2.73	2.72	2.69	2.68	2.70	2.70	2.70	2.66	2.68	2.71

MOODY'S BOND YIELD AVERAGES

BASED ON BONDS OF 120 DOMESTIC CORPORATIONS - COMPOSITE AND ACCORDING TO RATINGS

30 DOMESTIC CORPORATIONS - RATING A

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
1920	6.88	7.15	7.11	7.34	7.60	7.58	7.62	7.69	7.48	7.34	7.45	7.71	7.41
1921	7.52	7.50	7.53	7.53	7.50	7.58	7.53	7.43	7.23	7.03	6.62	6.39	7.28
1922	6.41	6.33	6.22	6.05	5.93	5.97	5.88	5.85	5.79	5.91	5.99	6.04	6.03
1923	6.04	6.07	6.24	6.25	6.17	6.19	6.21	6.06	6.15	6.23	6.22	6.22	6.17
1924	6.16	6.18	6.10	6.09	6.00	5.90	5.79	5.84	5.83	5.78	5.72	5.72	5.93
1925	5.70	5.61	5.66	5.63	5.46	5.44	5.51	5.56	5.53	5.54	5.51	5.46	5.55
1926	5.38	5.33	5.34	5.27	5.18	5.15	5.21	5.23	5.23	5.23	5.17	5.16	5.24
1927	5.11	5.13	5.12	5.06	5.05	5.06	5.04	5.01	5.01	4.97	4.94	4.92	5.04
1928	4.91	4.92	4.92	4.91	4.96	5.07	5.09	5.10	5.07	5.04	4.99	5.08	5.01
1929	5.10	5.14	5.24	5.23	5.24	5.31	5.32	5.39	5.43	5.38	5.33	5.21	5.28
1930	5.23	5.25	5.15	5.12	5.07	5.08	5.06	5.00	4.94	5.06	5.21	5.43	5.13
1931	5.26	5.29	5.30	5.52	5.65	5.75	5.64	5.88	6.29	6.88	6.90	7.70	6.01
1932	7.06	7.06	6.80	7.48	8.40	8.50	8.19	6.84	6.45	6.44	6.53	6.61	7.20
1933	6.16	6.30	6.64	6.85	6.29	5.88	5.58	5.51	5.70	5.76	6.22	6.21	6.09
1934	5.72	5.24	5.12	4.97	4.96	4.96	4.93	5.09	5.17	5.00	4.93	4.86	5.08
1935	4.74	4.63	4.67	4.69	4.59	4.52	4.46	4.49	4.48	4.49	4.45	4.35	4.55
1936	4.21	4.12	4.10	4.12	4.11	4.09	4.05	3.99	3.94	3.90	3.85	3.78	4.02
1937	3.77	3.85	3.97	4.04	3.98	3.96	3.94	3.94	4.02	4.16	4.24	4.20	4.01
1938	4.20	4.24	4.34	4.49	4.28	4.41	4.21	4.13	4.20	4.08	4.02	4.02	4.22
1939	3.97	3.94	3.87	3.97	3.92	3.86	3.83	3.80	4.05	3.94	3.78	3.74	3.89
1940	3.69	3.68	3.65	3.59	3.65	3.70	3.57	3.55	3.52	3.48	3.40	3.36	3.57
1941	3.36	3.38	3.37	3.38	3.34	3.31	3.26	3.24	3.24	3.21	3.19	3.27	3.30
1942	3.30	3.29	3.32	3.30	3.31	3.31	3.28	3.27	3.26	3.24	3.24	3.23	3.28
1943	3.20	3.17	3.14	3.14	3.13	3.11	3.09	3.08	3.10	3.10	3.11	3.13	3.13
1944	3.11	3.10	3.10	3.09	3.07	3.07	3.05	3.04	3.05	3.01	3.01	2.98	3.06
1945	2.98	2.94	2.92	2.90	2.88	2.86	2.85	2.85	2.85	2.84	2.79	2.81	2.87

MOODY'S BOND YIELD AVERAGES

BASED ON BONDS OF 120 DOMESTIC CORPORATIONS - COMPOSITE AND ACCORDING TO RATINGS

30 DOMESTIC CORPORATIONS - RATING BAA

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
1920	7.78	7.94	7.97	8.17	8.39	8.39	8.52	8.39	8.14	7.99	8.21	8.56	8.20
1921	8.50	8.42	8.55	8.53	8.52	8.56	8.48	8.51	8.34	8.34	7.88	7.61	8.35
1922	7.70	7.55	7.45	7.14	6.89	6.97	6.89	6.85	6.75	6.78	6.98	7.08	7.08
1923	6.98	6.97	7.09	7.17	7.17	7.21	7.34	7.38	7.38	7.46	7.40	7.38	7.24
1924	7.24	7.14	7.08	7.03	6.97	6.82	6.67	6.69	6.73	6.62	6.54	6.46	6.83
1925	6.44	6.36	6.36	6.41	6.30	6.18	6.20	6.24	6.20	6.17	6.17	6.15	6.27
1926	6.09	6.02	6.05	5.98	5.86	5.80	5.79	5.81	5.79	5.81	5.77	5.68	5.87
1927	5.61	5.59	5.54	5.48	5.50	5.55	5.55	5.48	5.42	5.38	5.35	5.32	5.48
1928	5.35	5.33	5.32	5.33	5.42	5.55	5.58	5.61	5.59	5.58	5.55	5.60	5.48
1929	5.63	5.66	5.79	5.80	5.80	5.94	5.95	6.04	6.12	6.11	6.03	5.95	5.90
1930	5.92	5.89	5.73	5.70	5.72	5.78	5.77	5.73	5.65	5.94	6.25	6.71	5.90
1931	6.41	6.38	6.44	6.72	7.15	7.36	7.08	7.47	8.07	9.04	8.93	10.42	7.62
1932	9.13	8.87	8.83	10.46	11.63	11.52	10.79	8.22	7.61	7.87	8.24	8.42	9.30
1933	8.01	8.37	8.91	9.12	7.74	7.07	6.62	6.77	7.27	7.49	7.98	7.75	7.76
1934	7.01	6.27	6.26	6.01	6.05	6.06	6.13	6.49	6.57	6.40	6.37	6.23	6.32
1935	5.98	5.95	6.20	6.13	5.94	5.77	5.67	5.58	5.53	5.54	5.43	5.50	5.75
1936	5.00	4.80	4.86	4.91	4.94	4.90	4.84	4.74	4.62	4.54	4.52	4.53	4.77
1937	4.49	4.53	4.68	4.84	4.84	4.93	4.91	4.92	5.16	5.52	5.82	5.73	5.03
1938	5.89	5.97	6.30	6.47	6.06	6.25	5.63	5.49	5.65	5.36	5.23	5.27	5.80
1939	5.12	5.05	4.89	5.15	5.07	4.91	4.84	4.85	5.00	4.88	4.85	4.92	4.96
1940	4.86	4.83	4.80	4.74	4.94	5.11	4.80	4.76	4.66	4.56	4.48	4.45	4.75
1941	4.38	4.42	4.38	4.33	4.32	4.31	4.28	4.27	4.30	4.28	4.28	4.38	4.33
1942	4.29	4.29	4.30	4.26	4.27	4.33	4.30	4.28	4.26	4.24	4.24	4.28	4.28
1943	4.16	4.08	4.01	3.96	3.91	3.88	3.81	3.81	3.93	3.82	3.83	3.82	3.91
1944	3.76	3.72	3.70	3.68	3.63	3.59	3.57	3.55	3.56	3.55	3.53	3.49	3.61
1945	3.46	3.41	3.38	3.36	3.32	3.29	3.26	3.26	3.24	3.20	3.10	3.15	3.29

SOURCE OF DATA

Moody's Bond Yield Averages are computed by Moody's Investors Service and are issued in their publications. The Bond Yield Averages are reproduced in Survey of Current Business, November 1937, 1938 Supplement, and March 1939. The above figures were taken from the last named source for the period from January 1920 to January 1939; and were taken direct from Moody's Bond Survey for the subsequent months.

COMPILATION OF MOODY'S BOND YIELD AVERAGES

In the compilation of Moody's Bond Yield Averages, daily yields for each individual bond are computed on the basis of closing prices. Unweighted arithmetic averages are computed to obtain each of the series shown. The monthly series are arithmetic averages of the daily figures.

Occasional substitutions in the bond list have been made when ratings have been changed, when a bond is called, when a bond sells too far above its call price, or because of approaching maturity. Suitable adjustments (usually small), which are gradually amortized, are introduced to prevent such substitutions from impairing the comparability of the series. No convertible or other unusual issues are included and the average maturity is close to 30 years.

Only 60 bonds were used in the averages from 1920 to 1927, inclusive. From 1928 to 1933, inclusive, 120 bonds were used, no adjustment being required to connect the two series. Since 1933 it has not been possible to find a sufficient number of representative bonds for some of the Industrial and Railroad groups, and therefore contain a less number from time to time. However, the averages for these groups are given equal weighting in combining them with other group averages.

KEY TO MOODY'S BOND RATINGS

Moody's Ratings are an indicator of the relative investment quality of bonds. The Ratings are defined by Moody's Investors Service as follows:

Aaa

Bonds which are rated Aaa are judged to be of the best quality. They carry the smallest degree of investment risk and are generally referred to as "gilt edge." Interest payments are protected by a large or by an exceptionally stable margin and principal is secure. While the various protective elements are likely to change, such changes as can be visualized are most unlikely to impair the fundamentally strong position of such issues.

Aa

Bonds which are rated Aa are judged to be of high quality by all standards. Together with the Aaa group they comprise what are generally known as high grade bonds. They are rated lower than the best bonds because margins of protection may not be as large as in Aaa securities or fluctuation of protective elements may be of greater amplitude or there may be other elements present which make the long term risks appear somewhat larger than in Aaa securities.

A

Bonds which are rated A possess many favorable investment attributes and are to be considered as higher medium grade obligations. Factors giving security to principal and interest are considered adequate but elements may be present which suggest a susceptibility to impairment sometime in the future.

Baa

Bonds which are rated Baa are considered as lower medium grade obligations, i.e., they are neither highly protected nor poorly secured. Interest payments and principal security appear adequate for the present but certain protective elements may be lacking or may be characteristically unreliable over any great length of time. Such bonds lack outstanding investment characteristics and in fact have speculative characteristics as well.

Source of definitions of Ratings: Moody's Public Utilities. 1945, page vi.

BONDS USED IN MOODY'S CORPORATE BOND YIELD AVERAGES

PUBLIC UTILITIES

Aaa

Boston Edison 2-3/4s, 1970
Cincinnati Gas & El. 2-3/4s, 1975
Cleveland Elec. Illum. 3s, 1970
Commonwealth Edison 3s, 1977
Connecticut Lt. & Pr. 3s, 1974
Cons. Gas E. L. & P. Balt. 2-3/4s, 1976
Illinois Bell Tel. 2-3/4s, 1981
Phila. Elec. Co. 2-3/4s, 1971
Public Serv. El. & Gas 3s, 1972
Southwest'n Bell Tel. 2-3/4s, 1985

Aa

Delaware Pr. & Lt. 3s, 1973
Detroit Edison 3s, 1970
Houston Ltg. & Pr. 2-7/8s, 1974
Metropolitan Ed. 2-7/8s, 1974
New York Pr. & Lt. 2-3/4s, 1975
Ohio Power 3s, 1971
Pacific Gas & Elec. 3s, 1979
South. Cal. Edison 3s, 1965
Union Elec. Co. of Mo. 2-3/4s, 1975
Virginia El. & Pr. 2-3/4s, 1975

A

Appalachian El. Pr. 3-1/4s, 1970
Arkansas Pr. & Lt. 3-1/8s, 1974
Central N. Y. Pr. 3s, 1974
Indianapolis P. & L. 3-1/4s, 1970
Louisiana Pr. & Lt. 3s, 1974
Ohio Edison 2-3/4s, 1975
Oklahoma Gas & El. 2-3/4s, 1975
Potomac Edison 3s, 1974
Southwestern Gas & El. 3-1/4s, 1970
Wisconsin Pub. Serv. 3-1/4s, 1971

Baa

Alabama Pr. 3-1/2s, 1972
Calif. El. Power 3-1/2s, 1968
Central Ill. El. & Gas 3s, 1975
Empire Dist. El. 3-1/2s, 1969
Kentucky Utilities 4s, 1970
Mississippi Pr. 3-1/8s, 1971
Portland Gen. El. 3-1/8s, 1975
South Carolina Pr. 3s, 1975
Southwestern P. S. 3-1/8s, 1974
Utah Pr. & Lt. 3-3/4s, 1968

RAILROADS

Aaa

Chesapeake & Ohio 4-1/2s, 1992
Cincinnati Union Term. 2-3/4s, 1974
Hocking Valley 4-1/2s, 1999
Kansas City Term. 2-3/4s, 1974
Norfolk & Western 4s, 1996
Terminal R.R. of St. L. 2-7/8s, 1985
Union Pacific B 3s, 1990

Aa

Ala. Gt. So. 3-1/4s, 1967
Atch., Top. & S. Fe gen. 4s, 1995
Indianapolis Union 3-1/2s, 1986
Monongahela Ry. 3-1/4s, 1966
Pitts., Cin., Chi. & St. L. 4-1/2s, 1964
Virginian Ry. 3s, 1995

BONDS USED IN MOODY'S CORPORATE BOND YIELD AVERAGES

RAILROADS (Cont'd.)

A

Chicago & Nor. West 3s, 1989
Erie R. R. Ohio Div. 3-1/4s, 1971
Great Northern 3-1/8s, 2000
Louisv. & Nashv. 2-7/8s, 2003
N. Y. Connecting R.R. 2-7/8s, 1975
Pennsylvania 3-1/8s, 1985
Piedmont & Northern 3-3/4s, 1966
Pitts., Cin., Chi. & St. L. 3-3/8s, 1975
Reading 3-1/8s, 1995

Baa

Chicago, Burl. & Quincy 3-3/4s, 1974
Clev., Cin., Chi. & St. L. 4s, 1993
Erie 3-1/8s, 2000
N. Y. Cent. & Hud. Riv. 3-1/2s, 1997
N. Y., Chicago & St. L. 3-1/4s, 1980
Northern Pacific 4s, 1997
Pere Marquette 3-3/8s, 1980
Southern Rwy. 5s, 1994
Texas & Pacific 1st 5s, 2000
Wabash R.R. 3-1/4s, 1978

INDUSTRIALS

Aaa

Standard Oil Calif. 2-3/4s, 1966
Swift & Co. 2-3/4s, 1961
Texas Corp. 3s, 1965

Aa

Bethlehem Steel 2-3/4s, 1970
Deere & Co. 2-3/4s, 1965
National Steel 3s, 1965
Philip Morris 3s, 1963
Phillips Petrol. 2-3/4s, 1964
Quaker Oats 2-5/8s, 1964

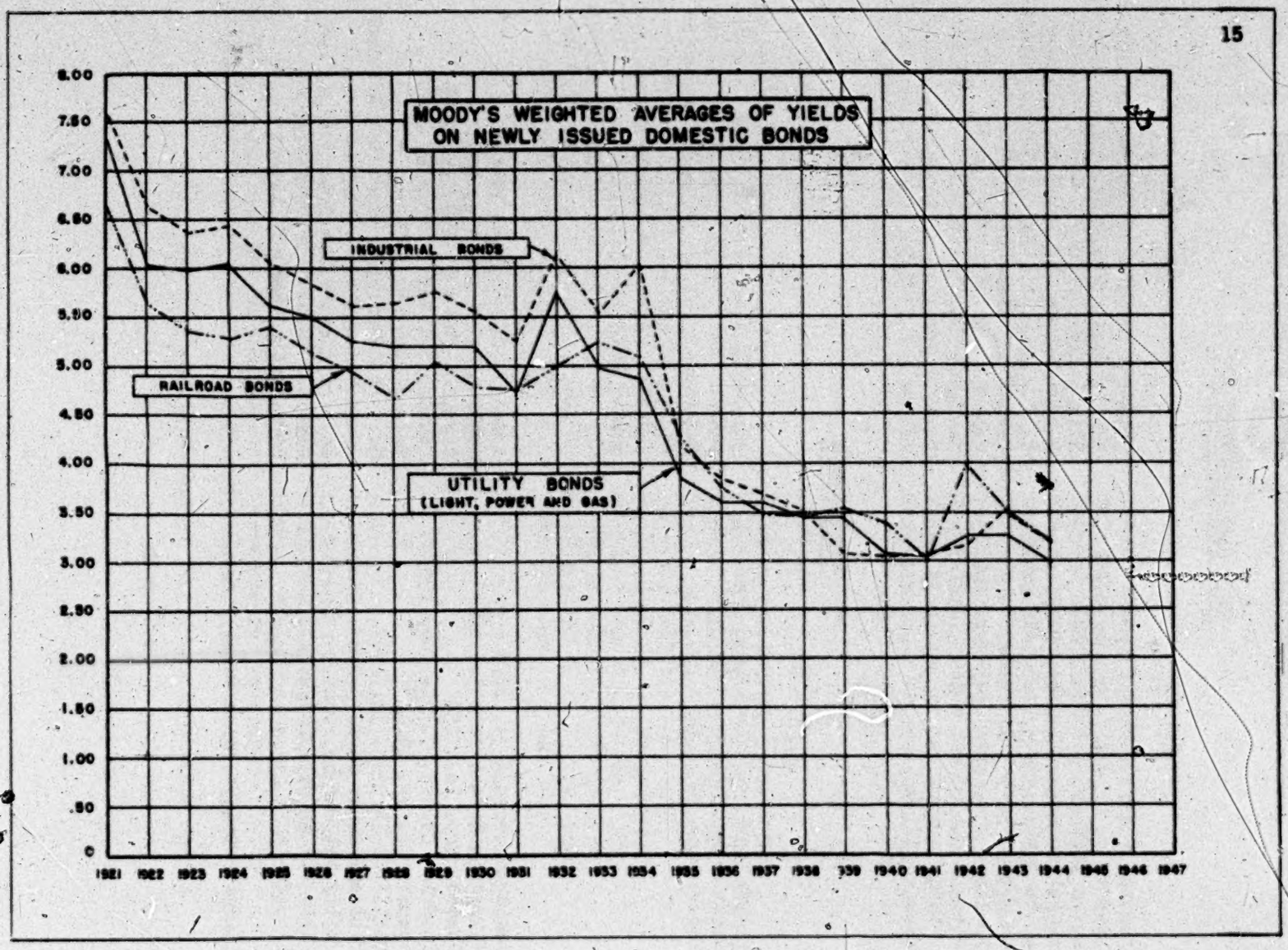
A

American Tobacco 3s, 1969
Firestone Tire & Rub. 3s, 1961
General Shoe 3s, 1959
Goodrich Co. (B. F.) 2-3/4s, 1965
Koppers Co. 3s, 1964
Lorillard (P.) Co. 3s, 1963
National Dairy Prod. 3-1/4s, 1960
Skelly Oil 2-3/4s, 1965
Union Oil of Cal. 2-3/4s, 1970

Baa

Armour & Co. 3-1/4s, 1964
Ashland Oil & Ref. 3s, 1965
Champion Paper & Fiber 3s, 1965
Continental Baking Co. 3s, 1965
Cudahy Packing 3s, 1964
Eastern Gas & Fuel Asso. 3-1/2s, 1965
Jones & Laughlin 3-1/4s, 1961
Seagram (Jos. E.) & Sons 3-1/4s, 1965
Wheeling Steel 3-1/4s, C. 1970
York. Corp. 3-1/4s, 1960

Source: Moody's Bond Survey, October 29, 1945.


MOODY'S WEIGHTED AVERAGES OF YIELDS
ON NEWLY ISSUED DOMESTIC BONDS
INDUSTRIAL BONDS
RAILROAD BONDS
UTILITY BONDS
(LIGHT, POWER AND GAS)
8.00
7.50
7.00
6.50
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
.50
0
1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939 1940 1941 1942 1943 1944 1945 1946 1947

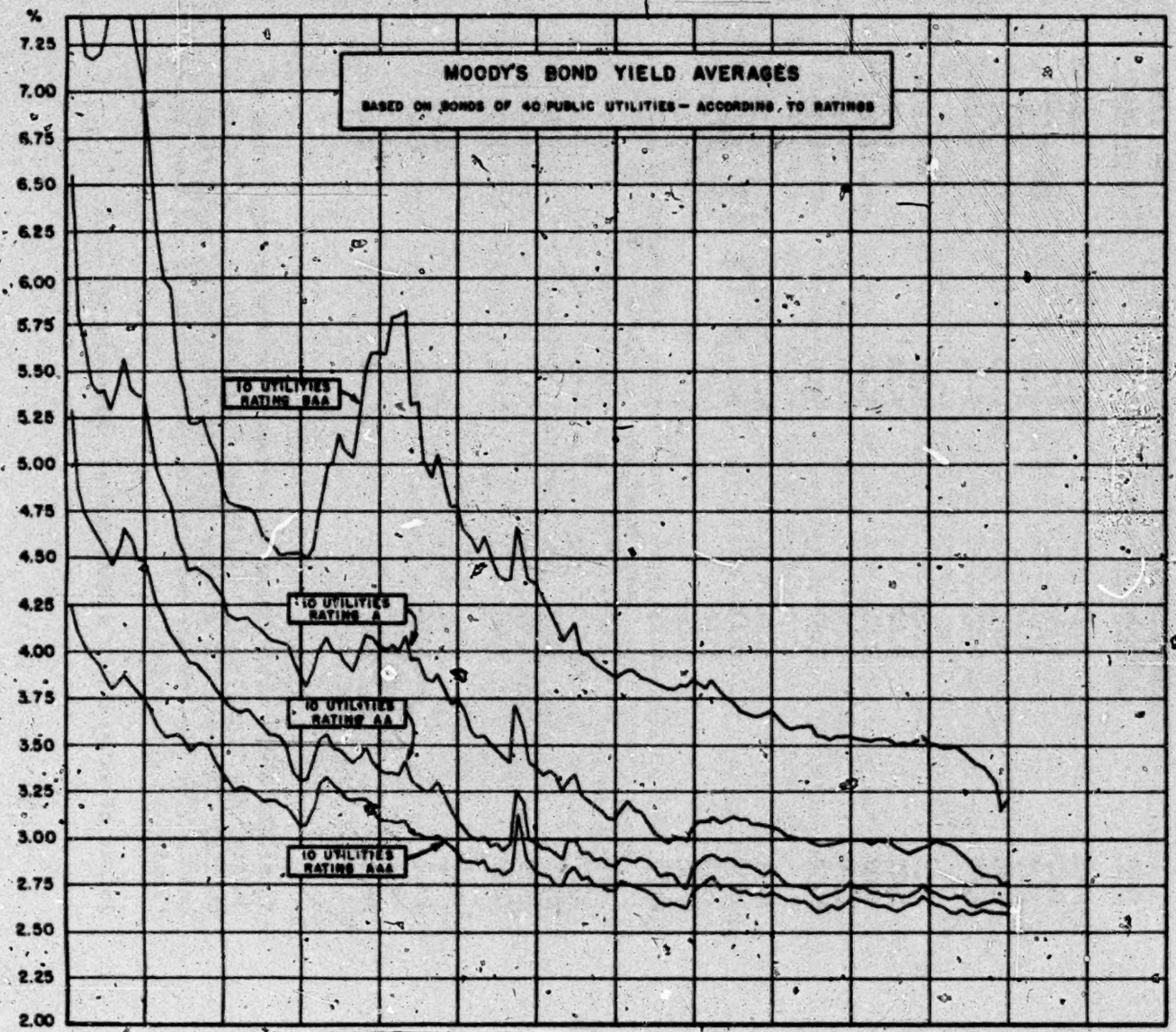
MOODY'S WEIGHTED AVERAGES OF YIELDS ON NEWLY ISSUED DOMESTIC BONDS

UNIT : PER CENT

Year	Industrial Bonds	Utility Bonds	Railroad Bonds
1921	7.57	7.31	6.64
1922	6.62	6.02	5.68
1923	6.37	5.98	5.38
1924	6.43	6.03	5.34
1925	6.05	5.61	5.45
1926	5.83	5.50	5.12
1927	5.62	5.26	4.94
1928	5.64	5.20	4.68
1929	5.76	5.20	5.02
1930	5.57	5.20	4.79
1931	5.26	4.71	4.73
1932	6.12	5.74	5.00
1933	5.56	4.98	5.24
1934	6.04	4.86	5.09
1935	4.19	3.84	4.25
1936	3.87	3.55	3.76
1937	3.70	3.55	3.49
1938	3.52	3.46	3.47
1939	3.09	3.46	3.52
1940	3.05	3.08	3.39
1941	3.08	3.07	3.03
1942	3.16	3.26	4.00
1943	3.53	3.26	3.51
1944	3.22	2.98	3.22

Note: The above table shows the movement of the Average Price of Capital for Industrial, Utility and Railroad Bonds. By "Price of Capital" is meant the average yield to maturity on newly issued bonds. The figures are weighted by the amounts of all new issues floated in any period.

Source of data: Moody's Bond Survey, February 12, 1945.


MOODY'S BOND YIELD AVERAGES
BASED ON BONDS OF 40 PUBLIC UTILITIES — ACCORDING TO RATINGS
%
7.25
7.00
6.75
6.50
6.25
6.00
5.75
5.50
5.25
5.00
4.75
4.50
4.25
4.00
3.75
3.50
3.25
3.00
2.75
2.50
2.25
2.00
10 UTILITIES RATING BAA
10 UTILITIES RATING A
10 UTILITIES RATING AA
10 UTILITIES RATING AAA
1934
1935
1936
1937
1938
1939
1940
1941
1942
1943
1944
1945
1946
1947

18

MOODY'S BOND YIELD AVERAGES

BASED ON BONDS OF 40 PUBLIC UTILITIES - ACCORDING TO RATINGS

10 PUBLIC UTILITIES - RATING AAA

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
1934	4.24	4.10	4.03	3.97	3.93	3.85	3.81	3.83	3.81	3.82	3.78	3.74	3.92
1935	3.69	3.61	3.55	3.55	3.56	3.53	3.47	3.51	3.51	3.48	3.41	3.36	3.52
1936	3.30	3.26	3.28	3.26	3.23	3.21	3.19	3.20	3.18	3.16	3.13	3.07	3.21
1937	3.07	3.16	3.29	3.33	3.28	3.25	3.22	3.20	3.21	3.21	3.15	3.11	3.21
1938	3.10	3.09	3.08	3.10	3.03	3.02	3.01	3.01	3.02	2.98	2.94	2.92	3.03
1939	2.87	2.87	2.86	2.87	2.83	2.83	2.80	2.83	3.14	3.02	2.87	2.82	2.88
1940	2.81	2.80	2.76	2.75	2.82	2.85	2.78	2.79	2.74	2.74	2.72	2.72	2.77
1941	2.77	2.76	2.74	2.75	2.72	2.69	2.65	2.64	2.65	2.63	2.62	2.71	2.69
1942	2.74	2.77	2.79	2.75	2.75	2.74	2.72	2.72	2.71	2.71	2.69	2.71	2.73
1943	2.70	2.67	2.67	2.66	2.66	2.63	2.61	2.62	2.64	2.63	2.64	2.68	2.65
1944	2.67	2.66	2.65	2.64	2.64	2.63	2.62	2.63	2.65	2.66	2.68	2.66	2.65
1945	2.65	2.64	2.62	2.61	2.63	2.60	2.61	2.63	2.61	2.60	2.60	2.60	2.62

10 PUBLIC UTILITIES - RATING AA

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
1934	5.29	4.88	4.73	4.66	4.60	4.52	4.46	4.55	4.65	4.59	4.49	4.48	4.66
1935	4.40	4.26	4.19	4.11	4.05	4.00	3.93	3.93	3.90	3.85	3.81	3.76	4.02
1936	3.70	3.68	3.67	3.69	3.65	3.60	3.57	3.55	3.54	3.48	3.35	3.31	3.57
1937	3.33	3.43	3.53	3.56	3.48	3.47	3.44	3.41	3.43	3.48	3.42	3.37	3.45
1938	3.35	3.35	3.34	3.42	3.31	3.28	3.26	3.26	3.31	3.23	3.14	3.10	3.28
1939	3.05	3.01	2.99	3.01	2.96	2.97	2.93	2.97	3.31	3.20	2.99	2.97	3.03
1940	2.94	2.94	2.92	2.88	2.99	2.99	2.92	2.92	2.88	2.89	2.86	2.85	2.92
1941	2.88	2.88	2.87	2.90	2.87	2.84	2.80	2.81	2.81	2.76	2.74	2.85	2.83
1942	2.87	2.91	2.92	2.89	2.89	2.89	2.86	2.86	2.85	2.83	2.81	2.83	2.87
1943	2.79	2.76	2.75	2.75	2.74	2.71	2.68	2.69	2.70	2.70	2.73	2.77	2.73
1944	2.74	2.74	2.72	2.71	2.70	2.70	2.70	2.69	2.69	2.72	2.75	2.72	2.72
1945	2.72	2.69	2.67	2.69	2.69	2.65	2.63	2.65	2.66	2.67	2.65	2.64	2.67

MOODY'S BOND YIELD AVERAGES

BASED ON BONDS OF 40 PUBLIC UTILITIES - ACCORDING TO RATINGS

10 PUBLIC UTILITIES - RATING A

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
1934	6.56	5.78	5.66	5.44	5.39	5.40	5.29	5.43	5.56	5.40	5.38	5.36	5.55
1935	5.18	4.96	4.88	4.79	4.61	4.53	4.42	4.44	4.43	4.40	4.35	4.29	4.61
1936	4.21	4.17	4.17	4.17	4.14	4.12	4.07	4.06	4.05	4.04	3.95	3.83	4.08
1937	3.82	3.89	4.00	4.07	4.00	3.99	3.94	3.89	3.96	4.09	4.08	4.03	3.98
1938	4.01	4.03	3.99	4.08	3.95	3.95	3.86	3.[illegible]	3.88	3.79	3.73	3.74	3.90
1939	3.68	3.59	3.54	3.55	3.50	3.47	3.43	3.41	3.71	3.58	3.41	3.38	3.52
1940	3.34	3.35	3.34	3.25	3.30	3.34	3.23	3.21	3.18	3.15	3.11	3.10	3.24
1941	3.15	3.20	3.16	3.14	3.08	3.03	3.00	2.98	3.00	3.00	2.98	3.06	3.07
1942	3.09	3.09	3.12	3.09	3.10	3.12	3.10	3.10	3.08	3.08	3.07	3.06	3.09
1943	3.05	3.02	3.01	3.00	3.00	2.98	2.96	2.96	2.96	2.97	2.98	2.99	2.99
1944	2.99	2.99	2.97	2.99	2.99	2.99	2.96	2.94	2.93	2.94	2.96	2.97	2.97
1945	2.99	2.98	2.97	2.95	2.92	2.87	2.83	2.80	2.79	2.79	2.75	2.77	2.87

10 PUBLIC UTILITIES - RATING BAA

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
1934	8.86	7.58	7.58	7.18	7.17	7.20	7.36	7.68	7.62	7.38	7.21	7.03	7.49
1935	6.60	6.20	5.99	5.94	5.51	5.41	5.22	5.22	5.25	5.24	5.12	5.07	5.56
1936	4.88	4.80	4.78	4.77	4.76	4.72	4.62	4.59	4.54	4.53	4.53	4.53	4.67
1937	4.50	4.55	4.76	4.98	5.02	5.17	5.08	5.04	5.25	5.53	5.59	5.60	5.09
1938	5.59	5.79	5.80	5.82	5.32	5.33	5.01	4.93	5.05	4.90	4.77	4.77	5.26
1939	4.66	4.59	4.53	4.62	4.50	4.41	4.39	4.39	4.64	4.48	4.38	4.36	4.50
1940	4.30	4.23	4.14	4.06	4.10	4.15	3.99	3.98	3.94	3.92	3.88	3.86	4.05
1941	3.87	3.90	3.90	3.86	3.85	3.83	3.82	3.80	3.80	3.82	3.82	3.85	3.84
1942	3.83	3.81	3.84	3.79	3.76	3.73	3.68	3.67	3.66	3.66	3.67	3.68	3.73
1943	3.65	3.61	3.58	3.60	3.60	3.60	3.55	3.55	3.55	3.53	3.55	3.55	3.58
1944	3.54	3.53	3.52	3.53	3.53	3.53	3.51	3.51	3.51	3.53	3.54	3.50	3.52
1945	3.50	3.48	3.48	3.49	3.47	3.43	3.40	3.37	3.34	3.29	3.15	3.22	3.39

SUMMARY OF YIELDS AT OFFERING TO DATE OF MATURITY ON ELECTRIC OPERATING UTILITY BONDS ISSUED DURING THE PERIOD 1935 - 1945, INCLUSIVE, BY YEARS

Rating	No. of Issues	Total Principal Amount	Average Yield Percent
1935			
Aaa	12	$ 264,531,000	3.48
Aa	21	505,232,900	3.78
A	20	165,563,500	4.28
Baa	4	11,500,000	5.28
Ba	1	7,500,000	6.00
None*	8	67,130,000	3.63
Total	54	$1,021,457,400	3.81
1936			
Aaa	11	$ 273,178,500	3.18
Aa	22	514,948,500	3.39
A	20	281,509,400	3.73
Baa	5	59,250,000	4.03
Ba	3	4,792,800	4.74
B	1	2,300,000	4.50
None*	15	157,666,500	3.56
Total	77	$1,293,645,700	3.48
1937			
Aaa	4	$ 147,000,000	3.37
Aa	10	252,029,000	3.52
A	7	121,264,000	3.72
Baa	6	13,251,000	4.64
None*	15	36,078,000	3.78
Total	42	$ 569,622,000	3.63
1938			
Aaa	3	$ 27,000,000	3.00
Aa	17	503,075,000	3.31
A	13	273,000,740	3.74
Baa	3	16,800,000	4.24
None*	18	94,912,000	3.18
Total	54	$ 914,787,740	3.43
1939			
Aaa	1	$ 7,000,000	2.75
Aa	3	52,323,000	3.08
A	10	257,183,300	3.31
Baa	12	202,700,000	3.85
Ba	2	1,149,000	4.11
None*	22	262,234,000	3.29
Total	50	$ 782,589,300	3.42
1940			
Aaa	3	$ 107,000,000	2.64
Aa	7	249,094,000	2.80
A	10	218,812,000	3.07
Baa	6	49,100,000	3.81
Ba	2	8,660,000	4.37
None*	22	159,326,300	3.41
Total	50	$ 791,992,300	3.06
1941			
Aaa	3	$ 36,200,000	2.65
Aa	4	140,000,000	2.93
A	5	118,000,000	2.98
Baa	2	4,467,000	2.98
None*	38	238,122,000	3.17
Total	52	$ 536,789,000	3.03
1942			
Aaa	2	$ 35,000,000	2.71
Aa	1	10,000,000	2.87
A	1	32,500,000	3.19
Baa	4	130,000,000	3.44
Ba	4	21,800,000	4.32
None*	12	42,933,000	3.17
Total	24	$ 272,233,000	3.32

SUMMARY OF YIELDS AT OFFERING TO DATE OF MATURITY ON ELECTRIC OPERATING UTILITY BONDS ISSUED DURING THE PERIOD 1935 - 1945, INCLUSIVE, BY YEARS

Rating	No. of Issues	Total Principal Amount	Average Yield Percent
		1943	
Aa	3	$ 43,300,000	2.77
A	4	87,500,000	2.94
Baa	7	198,500,000	3.54
None*	6	5,800,000	3.44
Total	20	$ 335,100,000	3.28
		1944	
Aaa	4	$ 295,000,000	2.77
Aa	8	250,500,000	2.79
A	11	274,443,000	2.96
Baa	4	27,400,000	3.48
None*	3	68,450,000	3.88
Total	30	$ 915,793,000	2.94
		1945	
Aaa	2	$ 60,500,000	2.70
Aa	11	535,775,000	2.79
A	12	322,649,000	2.87
Baa	11	124,950,000	2.94
Ba	1	19,000,000	3.34
Total	37	$1,062,874,000	2.79

Note: The above Summary was prepared from all known bond issues of Electric Operating Utilities sold in years 1935 to 1945, inclusive, except serial bond and serial debenture issues, as shown in "Moody's Public Utilities." Details of the various issues in each rating for years 1941 to 1945, inclusive, appear on

* Denotes that no rating was assigned to these bond issues.

SUMMARY OF YIELDS AT OFFERING TO DATE OF MATURITY ON ELECTRIC OPERATING UTILITY BONDS ISSUED DURING THE PERIOD 1935 - 1945, INCLUSIVE, BY RATINGS

Year	No. of Issues	Total Principal Amount	Average Yield Percent
RATING Aaa			
1935	12	$ 264,531,000	3.48
1936	11	273,178,500	3.18
1937	4	147,000,000	3.37
1938	3	27,000,000	3.00
1939	1	7,000,000	2.75
1940	3	107,000,000	2.64
1941	3	36,200,000	2.65
1942	2	35,000,000	2.71
1943	-	-	-
1944	4	295,000,000	2.77
1945	2	60,500,000	2.70
Total	45	$1,252,409,500	
RATING Aa			
1935	21	$ 505,232,900	3.78
1936	22	514,948,500	3.39
1937	10	252,029,000	3.52
1938	17	503,075,000	3.31
1939	3	52,323,000	3.08
1940	7	249,094,000	2.80
1941	4	140,000,000	2.93
1942	1	10,000,000	2.87
1943	3	43,300,000	2.77
1944	8	250,500,000	2.79
1945	11	535,775,000	2.70
Total	107	$3,056,277,400	
RATING A			
1935	10	$ 165,563,500	4.28
1936	20	281,509,400	3.73
1937	7	121,264,000	3.72
1938	13	273,000,740	3.74
1939	10	257,183,300	3.31
1940	10	218,812,000	3.07
1941	5	118,000,000	2.98
1942	1	32,500,000	3.19
1943	4	87,500,000	2.94
1944	11	274,443,000	2.98
1945	12	322,649,000	2.87
Total	103	$2,152,424,940	

Year	No. of Issues	Total Principal Amount	Average Yield Percent
RATING Baa			
1935	4	$ 11,500,000	5.28
1936	5	59,250,000	4.03
1937	6	13,251,000	4.64
1938	3	16,800,000	4.24
1939	12	202,700,000	3.85
1940	6	49,100,000	3.81
1941	2	4,467,000	2.98
1942	4	130,000,000	3.44
1943	7	198,500,000	3.54
1944	4	27,400,000	3.48
1945	11	124,950,000	2.94
Total	64	$ 837,918,000	
RATING Ba			
1935	1	$ 7,500,000	6.00
1936	3	4,782,800	4.74
1939	2	1,149,000	4.11
1940	2	8,660,000	4.37
1941	4	21,800,000	4.32
1945	1	19,000,000	3.34
Total	13	$ 62,891,800	
RATING B			
1936	1	$ 2,300,000	4.50
	1	$ 2,300,000	
NO RATING ASSIGNED			
1935	6	$ 67,130,000	3.63
1936	15	157,666,500	3.56
1937	15	36,078,000	3.78
1938	18	94,912,000	3.18
1939	22	262,234,000	3.29
1940	22	159,326,300	3.41
1941	38	238,122,000	3.17
1942	12	42,933,000	3.17
1943	6	5,800,000	3.44
1944	3	68,450,000	3.88
1945	-	-	
Total	157	$1,132,651,800	

Note: The above Summary was prepared from all known bond issues of Electric Operating Utilities sold in years 1935 to 1945, inclusive, except serial bond and serial debenture issues, as shown in "Moody's Public Utilities." Details of the various issues in each rating for the years 1941 to 1945, inclusive, appear on

YIELDS AT OFFERING TO DATE OF MATURITY ON
ELECTRIC OPERATING UTILITY BONDS ISSUED DURING THE YEAR
1941

Name of Issue		Principal Amount	Price to Public	Yield Percent
	RATING Aaa			
Cons.G.E.L. & P.Co. of Baltimore	First & Ref. 2-3/4%, 1976	$ 12,000,000	103.50	2.60
Hartford Electric Light Co.	Debentures, 3-1/4%, 1971	4,200,000	100.00	3.25
Philadelphia Electric Co.	First & Ref. 2-3/4%, 1971	20,000,000	104.18	2.55
Total - Rating Aaa		36,200,000		2.65
	RATING Aa			
Ohio Power Co.	First Mtge. 3%, 1971	15,000,000	102.25	2.89
Pacific Gas & Electric Co.	First & Ref. J, 3%, 1970	20,000,000	101.75	2.91
Union Electric Co. of Missouri	First Mtge. 3-3/8%, 1971	80,000,000	107.38	3.00
Pacific Gas & Electric Co.	First & Ref. K, 3%, 1971	25,000,000	105.00	2.75
Total - Rating Aa		140,000,000		2.93
	RATING A			
Central Illinois Pub. Service Co.	First Mtge. 3-3/8%, 1971	38,000,000	107.00	3.01
Luzerne County Gas & El. Corp.	First Mtge. 3-1/4%, 1966	7,500,000	104.75	2.98
Public Service Company of Oklahoma	First Mtge. 3-1/4%, 1971	16,000,000	103.50	3.07
Wisconsin Power & Light Co.	First Mtge. 3-1/4%, 1971	30,000,000	106.88	2.91
Wisconsin Public Service Co.	First Mtge. 3-1/4%, 1971	26,500,000	106.00	2.95
Total - Rating A		118,000,000		2.98
	RATING Baa			
Gulf Power Co.	First Mtge. 3-1/8%, 1971	2,600,000	103.00	2.97
Mississippi Power Co.	First Mtge. 3-1/8%, 1971	1,867,000	102.45	3.00
Total - Rating Baa		4,467,000		2.98
	NO RATING ASSIGNED			
Albuquerque Gas & Electric Co.	First Mtge. 3-1/2%, 1966	3,600,000	102.00	3.38
Albuquerque Gas & Electric Co.	First Mtge. 3-1/2%, 1966	267,000	104.25	3.25
Black Hills Power & Light Co.	First Mtge. A, 3-1/2%, 1971	2,000,000	103.75	3.30
Buffalo Niagara Electric Corp.	Debentures, 2-1/4%, 1951	7,200,000	100.00	2.25
Central Maine Power Co.	First & Gen. 3-1/2%, 1970	1,250,000	108.00	3.08
Central Maine Power Co.	First & Gen. 3-1/2%, 1970	1,000,000	111.00	2.92
Central New York Power Corp.	Gen. Mtge. 3-1/2%, 1965	5,000,000	101.00	3.44
Central Ohio Light & Power Co.	First Mtge. D, 3-1/2%, 1966	400,000	100.00	3.50
Coast Counties Gas & Electric Co.	First Mtge. 3-1/4%, 1971	3,500,000	104.75	3.01
Deming Ice & Electric Co.	First Mtge. 3-1/2%, 1966	300,000	100.00	3.50
Derby Gas & Electric Corp.	Coll. Tr. Deb. 3%, 1949	2,750,000	100.00	3.00
East Tennessee Light & Power Co.	First Mtge. A, 3-1/2%, 1966	4,800,000	102.50	3.35
Florida Power Corp.	First Mtge. C, 4%, 1966	1,000,000	104.20	3.75
Georgia Power Co.	First Mtge. 3-1/2%, 1971	101,271,000	103.75	3.30
Glen Rock Electric Lt. & Pr. Co.	First Mtge. 3-1/2%, 1966	325,000	100.00	3.50
Gulf Power Co.	First Mtge. 3-1/8%, 1971	3,000,000	102.46	3.00
Iowa Electric Light & Power Co.	First Mtge. B, 3-1/4%, 1971	2,000,000	101.50	3.17
Las Vegas Light & Power Co.	First Mtge. 3-1/2%, 1966	225,000	100.00	3.50
Louisiana Ice & Electric Co.	First Mtge. A, 3-1/2%, 1961	570,000	99.00	3.57
Mississippi Power Co.	First Mtge. 3-1/8%, 1971	7,060,000	102.45	3.00
Mississippi Public Service Co.	First Mtge. A, 4%, 1956	500,000	100.00	4.00
Missouri Utilities Co.	First Mtge. A, 3-1/2%, 1971	3,150,000	104.75	3.25
New Hampshire Gas & Elec. Co.	First Mtge. B, 3-1/2%, 1971	1,000,000	103.79	3.25
New Mexico Power Co.	First Mtge. 3-1/2%, 1966	2,000,000	101.00	3.44

YIELDS AT OFFERING TO DATE OF MATURITY ON
ELECTRIC OPERATING UTILITY BONDS ISSUED DURING THE YEAR
1941

Name of Issue		Principal Amount	Price to Public	Yield Percent
NO RATING ASSIGNED (Continued)				
Central Hudson Gas & Elec. Corp.	First Mtge. 3%, 1971	$ 13,265,000	105.00	2.75
New York State Electric & Gas Corp.	First Mtge. 3-1/4%, 1971	35,393,000	104.02	3.05
Northwestern Wisconsin Electric Co.	First Mtge. B, 3-3/4%, 1954	75,000	100.00	3.75
Otter Tail Power Co.	First Mtge. 3%, 1971	5,600,000	100.00	3.00
Otter Tail Power Co.	First Mtge. 3%, 1971	200,000	100.00	3.00
Public Service Co. of Indiana	First Mtge. 3-1/2%, 1971	4,650,000	104.75	3.25
Public Electric Light Co.	First Mtge. D, 3-3/4%, 1961	100,000	100.00	3.75
Public Service Co. of Indiana, Inc.	First Mtge. 3-3/8%, 1971	13,200,000	105.00	3.12
Rawlins Electric Co.	First Mtge. 3-1/2%, 1966	200,000	100.00	3.50
Sheridan County Electric Co.	First Mtge. 3-1/2%, 1966	750,000	100.00	3.50
Southwestern Public Service Co.	First Mtge. S.F. 3-3/4%, 1966	3,121,000	105.50	3.42
Tucson Gas, Electric Light & Pr. Co.	First Mtge. 3-1/2%, 1966	3,500,000	102.00	3.63
Virginia Electric & Power Co.	First & Ref. C, 3-1/8%, 1971	3,000,000	106.50	2.80
Total - No rating assigned		$236,922,000		3.17
Grand Total		$535,589,000		3.03

YIELDS AT OFFERING TO DATE OF MATURITY ON
ELECTRIC OPERATING UTILITY BONDS ISSUED DURING THE YEAR
1942

Name of Issue		Principal Amount	Price to Public	Yield Percent
RATING Aaa				
Potomac Electric Power Co.	First Mtge. 3-1/4%, 1977	$ 20,000,000	113.00	2.67
Public Serv. Elec. & Gas Co.	First & Ref. 3%, 1972	15,000,000	104.50	2.77
Total - Rating Aaa		35,000,000		2.71
RATING Aa				
Union Electric Co. of Missouri	First Mtge. 3-3/8%, 1971	10,000,000	109.88	2.87
Total - Rating Aa		10,000,000		2.87
RATING A				
Pennsylvania Electric Co.	First Mtge. 3-3/8%, 1972	32,500,000	103.50	3.19
Total - Rating A		32,500,000		3.19
RATING Baa				
Alabama Power Co.	First Mtge. 3-1/4%, 1972	80,000,000	101.75	3.14
Public Service Co. of Indiana	First Mtge. D, 3-3/8%, 1972	4,000,000	102.75	3.23
Southwestern Public Service Co.	First Mtge. 4%, 1972	20,000,000	107.50	3.59
Virginia Public Service Co.	First Mtge. 3-3/4%, 1972	26,000,000	105.65	3.45
Total - Rating Baa		130,000,000		3.44
RATING Ba				
Casco Bay Light & Power Co.	First S. F., B, 4%, 1962	300,000	100.00	4.00
Iowa Southern Utilities Co.	Debentures, S. F., 4-1/2%, 1966	5,000,000	100.00	4.50
Southwestern Public Service Co.	Serial Notes, 2-1/2-3%, 1943-54	6,000,000	100.16	2.75
Virginia Public Service Co.	S. F. Debentures, 5%, 1957	10,500,000	98.77	5.15
Total - Rating Ba		21,800,000		4.32
NO RATING ASSIGNED				
Brockton Edison Co.	Ten Year Notes, 3%, 1952	1,900,000	100.00	3.00
California Oregon Power Co.	Ten Year Serial Notes, 2-7/8%	1,750,000	100.00	2.88
Central New York Power Corp.	Gen. Mtge. 2-7/8%, 1965	1,000,000	97.90	3.00
Consumers Public Service Co.	First Mtge. 4-1/2%	225,000	100.00	4.50
Commonwealth Edison Co.	First Mtge. 3%, 1977	25,000,000	100.00	3.00
East Missouri Power Co.	First Mtge. 3-3/4%, 1967	218,000	105.02	3.45
Edison Sault Electric Co.	First Mtge. 3-3/4%, 1972	990,000	104.00	3.53
Indianapolis Power & Light Co.	First Mtge. 3%, 1970	2,000,000	101.00	2.95
Kentucky Utilities Co.	First Mtge. 4%, 1970	1,000,000	106.50	3.63
Long Island Lighting Co.	S. F. Debentures 3-3/4%	4,800,000	100.00	3.75
Michigan Gas & Electric Co.	First Mtge. A, 3-3/4%, 1972	3,500,000	102.74	3.60
Missouri Edison Co.	First Mtge. 3-3/4%, 1967	550,000	101.52	3.65
Total - No rating assigned		$ 42,933,000		3.17
Grand Total		$272,233,000		3.32

YIELDS AT OFFERING TO DATE OF MATURITY ON ELECTRIC OPERATING UTILITY BONDS ISSUED DURING THE YEAR 1943

Name of Issue		Principal Amount	Price to Public	Yield Percent
RATING Aa				
Delaware Power & Light Co.	First Mtge. & Coll.Tr.3%,1973	$ 15,000,000	106.14	2.70
Blackstone Valley Gas & Elec. Corp.	First Mtge. & Coll.Tr.3%,1973	11,300,000	104.75	2.77
Iowa Power & Light Co.	First Mtge. 3-1/4%, 1973	17,000,000	108.50	2.83
Total - Rating Aa		43,300,000		2.77
RATING A				
Public Service Co. of New Hamp.	First Mtge. A, 3-1/4%, 1973	20,500,000	108.00	2.85
Northern Indiana Public Service Co.	First Mtge. C, 3-1/8%, 1973	45,000,000	102.88	2.98
Pennsylvania Electric Co.	First Mtge. 3-1/8%, 1973	4,000,000	106.50	2.80
West Texas Utilities Co.	First Mtge. 3-1/8%, 1973	18,000,000	102.46	3.00
Total - Rating A		87,500,000		2.94
RATING Baa				
Puget Sound Power & Light Co.	First Mtge. 4-1/4%, 1972	52,000,000	104.25	4.01
Public Service Co. of Indiana, Inc.	First Mtge. E, 3-1/4%, 1973	38,000,000	102.38	3.13
South Carolina Electric & Gas Co.	First Mtge. 3-5/8%, 1973	20,000,000	104.21	3.40
California Electric Power Co.	First Mtge. 3-1/2%, 1968	16,000,000	103.50	3.29
Southern Colorado Power Co.	First Mtge. 3-1/2%, 1968	5,500,000	102.00	3.38
Central Power & Light Co.	First Mtge. A, 3-1/8%, 1973	25,000,000	99.50	3.15
Utah Power & Light Co.	First Mtge. 3-3/4%, 1968	42,000,000	100.63	3.71
Total - Rating Baa		198,500,000		3.54
NO RATING ASSIGNED				
Superior Water, Light & Power Co.	First Mtge. 3-3/8%, 1973	2,500,000	100.45	3.35
West Coast Power Co.	First Mtge. 4%, 1973	600,000	100.00	4.00
Maine Public Service Co.	First Mtge. 3-1/2%, 1973	300,000	102.00	3.39
Public Service Co. of New Hampshire	First Mtge. 3-1/4%, 1973	900,000	105.26	2.98
Central Vermont Pub. Service Corp.	First Mtge. 3-1/4%, 1973	500,000	105.33	2.98
Superior Water, Light & Power Co.	Debentures, 4%, 1958	1,000,000	100.00	4.00
Total - No rating assigned		$ 5,800,000		3.44
Grand Total		$335,100,000		3.28

[22403] Exhibit No. 46 3417

YIELDS AT OFFERING TO DATE OF MATURITY ON ELECTRIC OPERATING UTILITY BONDS ISSUED DURING THE YEAR 1944

Name of Issue		Principal Amount	Price to Public	Yield Percent
RATING Aaa				
Connecticut Light & Power Co.	First & Ref. 3%, 1974	$ 10,000,000	105.75	2.72
Commonwealth Edison Co.	First & Ref. 3%, 1977	155,000,000	104.25	2.80
Philadelphia Electric Co.	First & Ref. 2-3/4%, 1967	65,000,000	100.50	2.72
Philadelphia Electric Co.	First & Ref. 2-3/4%, 1974	65,000,000	100.00	2.75
Total - Rating Aaa		295,000,000		2.77
RATING Aa				
Northern States Power Co.	First Mtge. 2-3/4%, 1974	5,000,000	101.00	2.70
New Jersey Power & Light Co.	First Mtge. 3%, 1974	9,000,000	104.63	2.77
Virginia Electric & Power Co.	First & Ref. 3%, 1974	23,000,000	103.25	2.84
West Penn Power Co.	First Mtge. 3%, 1974	12,500,000	104.50	2.78
Narragansett Electric Co.	First Mtge. 3%, 1974	31,500,000	105.08	2.75
Pacific Gas and Electric Co.	First & Ref. 3%, 1974	115,000,000	104.00	2.80
Metropolitan Edison Co.	First Mtge. 2-7/8%, 1974	24,500,000	101.38	2.81
Houston Lighting & Power Co.	First Mtge. 2-7/8%, 1974	30,000,000	102.50	2.75
Total - Rating Aa		250,500,000		2.79
RATING A				
Florida Power & Light Co.	First Mtge. 3-1/2%, 1974	45,000,000	105.50	3.21
Florida Power Corp.	First Mtge. 3-3/8%, 1974	16,500,000	104.83	3.13
Louisiana Power & Light Co.	First Mtge. 3%, 1974	17,000,000	103.00	2.85
New Orleans Public Service, Inc.	First Mtge. 3-1/8%, 1974	34,500,000	103.88	2.93
Mississippi Power & Light Co.	First Mtge. 3-1/8%, 1974	12,000,000	104.49	2.90
Birmingham Electric Co.	First Mtge. 3%, 1974	10,000,000	101.00	2.95
Ohio Edison Co.	First Mtge. 3%, 1974	30,962,000	102.50	2.88
Arkansas Power & Light Co.	First Mtge. 3-1/8%, 1974	30,000,000	104.00	2.92
Potomac Edison Co., The	First Mtge. & Coll. Tr. 3%, 1974	16,981,000	102.50	2.88
California Oregon Power Co., The	First Mtge. 3-1/8%, 1974	13,500,000	102.86	2.98
Central New York Power Corp.	Gen. Mtge. 3%, 1974	48,000,000	103.00	2.85
Total - Rating A		274,443,000		2.96
RATING Baa				
Central Ohio Light and Power Co.	First Mtge. A, 3-1/2%, 1974	4,300,000	105.75	3.20
Arizona Edison Co., Inc.	First Mtge. 3-1/2%, 1974	2,500,000	105.75	3.20
Empire District Electric Co.	First Mtge. 3-1/2%, 1969	10,600,000	106.92	3.10
Florida Power & Light Co.	S. F. Debentures, 4-1/8%, 1979	10,000,000	100.46	4.10
Total - Rating Baa		27,400,000		3.48
NO RATING ASSIGNED				
Illinois Power Co.	First Mtge. & Coll. Tr. 4%, 1973	63,000,000	101.00	3.94
Florida Power Corp.	Serial Debentures, 3-1/4%, 1944-57	4,000,000	100.00	3.25
Derby Gas & Electric Corp.	Coll. Tr. Debentures, 3%, 1954	1,450,000	100.00	3.00
Total - No rating assigned		$ 68,450,000		3.98
Grand Total		$915,793,000		2.94

[22404] Exhibit No. 46 3418

YIELDS AT OFFERING TO DATE OF MATURITY ON ELECTRIC OPERATING UTILITY BONDS ISSUED DURING THE YEAR 1945

Name of Issue		Principal Amount	Price to Public	Yield Percent
RATING Aaa				
Connecticut Light & Power Co.	First & Ref. 3%, K, 1980	$ 15,000,000	106.75	2.70
Cincinnati Gas & Electric Co.	First Mtge., 2-3/4%, 1975	45,500,000	101.00	2.70
Total - Rating Aaa		60,500,000		2.70
RATING Aa				
Pacific Gas & Electric Co.	First & Ref. 3%, M, 1979	80,000,000	107.63	2.66
New York Power & Light Corp.	First Mtge. 2-3/4%, 1975	50,000,000	102.50	2.63
Texas Electric Service Co.	First Mtge. 2-3/4%, 1975	18,000,000	101.00	2.70
Virginia Electric & Power Co.	First & Ref. 2-3/4%, E, 1975	59,000,000	101.50	2.68
Texas Power & Light Co.	First Mtge. 2-3/4%, 1975	26,600,000	100.75	2.71
Consumers Power Co.	First Mtge. 2-7/8%, 1975	113,825,000	102.37	2.76
Pacific Gas & Electric Co.	First & Ref. 3%, N, 1977	49,000,000	105.30	2.75
Public Service Co. of Oklahoma	First Mtge. 2-3/4%, A, 1975	22,500,000	99.50	2.78
Dayton Power & Light Co.	First Mtge. 2-3/4%, 1975	28,850,000	101.63	2.67
Northern States Power Co.	First Mtge. 2-3/4%, 1975	75,000,000	101.00	2.70
Union Electric Co. of Missouri	First Mtge. & Coll. 2-3/4%, 1975	13,000,000	101.02	2.70
Total - Rating Aa		535,775,000		2.70
RATING A				
Oklahoma Gas & Electric Co.	First Mtge. 2-3/4%, 1975	35,000,000	101.00	2.70
Northern Pennsylvania Power Co.	First Mtge. 2-3/4%, 1975	4,000,000	101.00	2.70
Central Vermont Public Service Corp.	First Mtge. 2-3/4%, D, 1975	6,967,000	101.50	2.68
Ohio Edison Co.	First Mtge. 2-3/4%, 1975	26,089,000	101.00	2.70
Monongahela Power Co.	First Mtge. 3%, 1975	22,000,000	102.50	2.88
Western Light & Telephone Co.	First Mtge. 3%, 1975	6,200,000	101.95	2.90
Minnesota Power & Light Co.	First Mtge. 3-1/8%, 1975	26,000,000	102.46	3.00
Public Service Co. of Indiana, Inc.	First Mtge. 3-1/8%, F, 1975	48,000,000	102.46	3.00
Pennsylvania Power & Light Co.	First Mtge. 3%, 1975	93,000,000	101.38	2.93
Montana Power Co.	First Mtge. 2-7/8%, 1975	40,000,000	101.00	2.83
Pennsylvania Power Co.	First Mtge. 2-7/8%, 1975	9,793,000	102.50	2.75
Lake Superior District Power Co.	First Mtge. 3%, A, 1975	5,600,000	102.50	2.88
Total - Rating A		322,649,000		2.87
RATING Baa				
South Carolina Power Co.	First & Ref. 3%, 1975	8,000,000	101.38	2.93
Southwestern Public Service Co.	First Mtge. 3-1/8%, 1974	17,500,000	103.75	2.93
Montana Dakota Utilities Co.	First Mtge. 3%, 1965	7,500,000	102.63	2.83
Central Illinois Electric & Gas Co.	First Mtge. 3%, 1975	14,000,000	103.00	3.00
Georgia Power & Light Co.	First Mtge. 3%, 1975	2,500,000	101.95	2.90
Mountain States Power Co.	First Mtge. 3%, 1975	7,500,000	101.95	2.90
Portland General Electric Co.	First Mtge. 3-1/8%, 1975	34,000,000	102.41	3.00
Kings County Lighting Co.	First Mtge. 3-1/8%, 1975	4,200,000	102.41	3.00
Southwestern Electric Service Co.	First Mtge. 3-1/8%, 1975	1,550,000	102.25	3.01
Pennsylvania Power & Light Co.	Debenture 3%, 1965	27,000,000	101.50	2.90
Maine Public Service Co.	First Mtge. & Coll. 2-7/8% 1975	1,200,000	101.25	2.81
Total - Rating Baa		124,950,000		2.94
RATING Ba				
Laclede Gas Light Co.	First Mtge. 3-1/2%, 1965	19,000,000	102.75	3.34
Total - Rating Ba		19,000,000		3.34
Grand Total		$1,062,874,000		2.79

[22405]

Exhibit No. 46

3419

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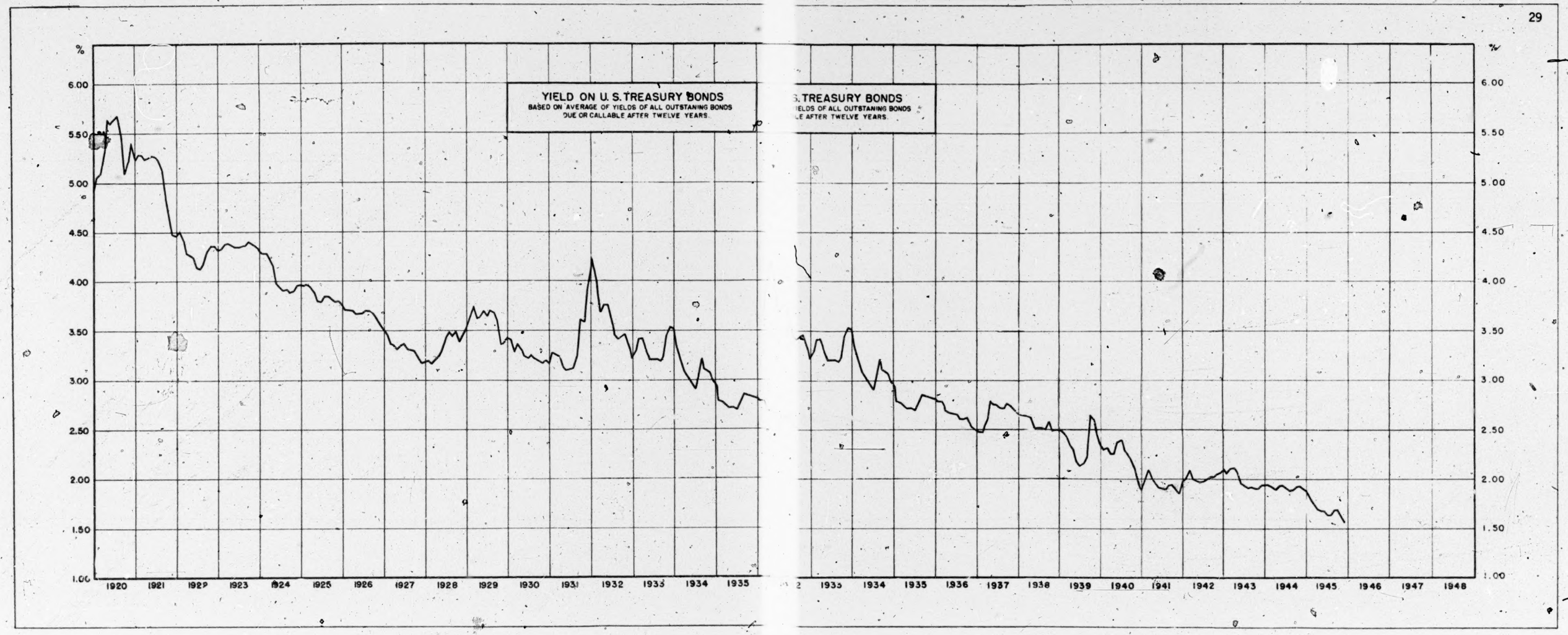

YIELD ON U. S. TREASURY BONDS
BASED ON AVERAGE OF YIELDS OF ALL OUTSTANING BONDS
DUE OR CALLABLE AFTER TWELVE YEARS.
%
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935
TREASURY BONDS
ELDS OF ALL OUTSTANING BONDS
E AFTER TWELVE YEARS.
1935 1934 1935 1936 1937 1938 1939 1940 1941 1942 1943 1944 1945 1946 1947 1948

YIELD ON UNITED STATES TREASURY BONDS

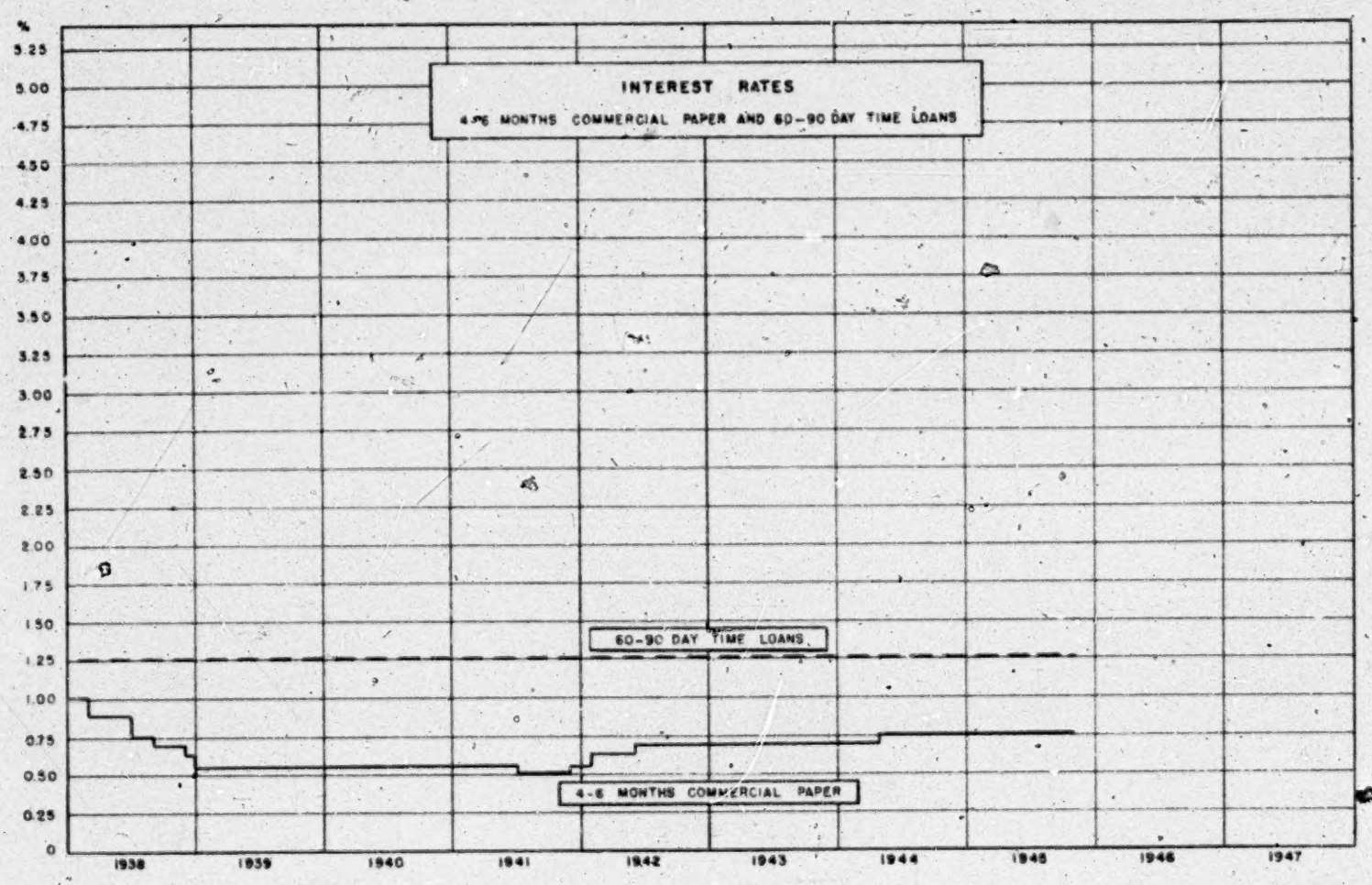
BASED ON AVERAGE OF YIELDS OF ALL OUTSTANDING BONDS DUE OR CALLABLE AFTER TWELVE YEARS 1/

UNIT: PERCENT PER ANNUM

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
1920	4.93	5.05	5.09	5.28	5.58	5.53	5.57	5.67	5.44	5.08	5.21	5.40	5.32
1921	5.23	5.28	5.27	5.24	5.27	5.27	5.26	5.22	5.12	4.83	4.64	4.47	5.09
1922	4.45	4.50	4.42	4.28	4.26	4.24	4.14	4.12	4.19	4.30	4.30	4.35	4.30
1923	4.32	4.33	4.38	4.39	4.37	4.34	4.34	4.35	4.36	4.40	4.37	4.35	4.36
1924	4.30	4.28	4.28	4.23	4.15	3.98	3.94	3.91	3.92	3.87	3.90	3.96	4.06
1925	3.96	3.95	3.96	3.93	3.87	3.79	3.79	3.85	3.85	3.82	3.79	3.80	3.86
1926	3.77	3.71	3.71	3.70	3.67	3.67	3.68	3.70	3.70	3.68	3.62	3.56	3.68
1927	3.51	3.48	3.37	3.35	3.31	3.34	3.36	3.32	3.30	3.29	3.23	3.17	3.34
1928	3.18	3.19	3.17	3.20	3.24	3.29	3.42	3.49	3.46	3.48	3.39	3.46	3.33
1929	3.52	3.62	3.74	3.63	3.64	3.69	3.64	3.70	3.68	3.60	3.36	3.37	3.60
1930	3.43	3.41	3.29	3.37	3.31	3.25	3.25	3.26	3.24	3.21	3.19	3.22	3.29
1931	3.20	3.30	3.27	3.26	3.16	3.13	3.15	3.18	3.25	3.63	3.63	3.93	3.34
1932	4.26	4.11	3.92	3.68	3.76	3.76	3.58	3.45	3.42	3.43	3.45	3.35	3.68
1933	3.22	3.31	3.42	3.42	3.30	3.21	3.20	3.21	3.19	3.22	3.46	3.53	3.31
1934	3.50	3.32	3.20	3.11	3.02	2.98	2.92	3.03	3.20	3.10	3.07	3.01	3.12
1935	2.88	2.79	2.77	2.74	2.72	2.72	2.69	2.76	2.85	2.85	2.83	2.83	2.79
1936	2.80	2.77	2.71	2.68	2.66	2.66	2.65	2.61	2.60	2.62	2.53	2.51	2.65
1937	2.47	2.46	2.60	2.80	2.76	2.76	2.72	2.72	2.77	2.76	2.71	2.67	2.68
1938	2.65	2.64	2.64	2.62	2.51	2.52	2.52	2.51	2.58	2.48	2.50	2.49	2.56
1939	2.47	2.44	2.34	2.30	2.17	2.13	2.16	2.21	2.65	2.60	2.46	2.35	2.36
1940	2.30	2.32	2.25	2.25	2.38	2.39	2.26	2.25	2.18	2.10	1.97	1.89	2.21
1941	1.99	2.10	2.01	1.96	1.92	1.91	1.90	1.94	1.94	1.88	1.85	1.97	1.95
1942	2.01	2.09	2.00	1.98	1.97	1.97	2.00	2.02	2.03	2.05	2.06	2.09	2.02
1943	2.06	2.11	2.12	2.06	1.96	1.93	1.91	1.92	1.90	1.90	1.94	1.94	1.98
1944	1.95	1.93	1.91	1.94	1.94	1.91	1.89	1.90	1.93	1.93	1.90	1.87	1.92
1945	1.81	1.75	1.70	1.68	1.68	1.63	1.63	1.68	1.68	1.62	1.56		

Source of data: The computations were made by the U. S. Treasury Department and represent monthly data which are averages of daily figures. Beginning January 1926, average yields are based on all outstanding Treasury bonds not due or callable for 12 years or more. Earlier figures are for Treasury bonds not due or callable for eight years or more, together with certain Liberty Loan issues. The yields are published in the Survey of Current Business from which the above figures were taken for the period prior to September 1942. Since then figures are from the Federal Reserve Bulletin.

1/ In April 1944, the series was revised (beginning February 1943) to include all outstanding partially tax exempt issues due or callable in more than 15 years.


%
5.25
5.00
4.75
4.50
4.25
4.00
3.75
3.50
3.25
3.00
2.75
2.50
2.25
2.00
1.75
1.50
1.25
1.00
0.75
0.50
0.25
0
INTEREST RATES
4-6 MONTHS COMMERCIAL PAPER AND 60-90 DAY TIME LOANS
60-90 DAY TIME LOANS
4-6 MONTHS COMMERCIAL PAPER
1938
1939
1940
1941
1942
1943
1944
1945
1946
1947

SHORT TERM INTEREST RATES

4-6 MONTHS COMMERCIAL PAPER AND 60-90 DAY TIME LOANS

4-6 MONTHS COMMERCIAL PAPER

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
1938	1.00	1.00	0.88	0.88	0.88	0.88	0.75	0.75	0.69	0.69	0.69	0.63	0.81
1939	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.69	0.69	0.63	0.56	0.59
1940	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56
1941	0.56	0.56	0.56	0.56	0.56	0.56	0.50	0.50	0.50	0.50	0.50	0.56	0.54
1942	0.56	0.63	0.63	0.63	0.63	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.66
1943	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69
1944	0.69	0.69	0.69	0.69	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.73
1945	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75			

60-90 DAY TIME LOANS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
1938	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
1939	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
1940	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
1941	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
1942	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
1943	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
1944	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
1945	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25			

Source of data: Standard & Poor's Trade and Securities-Statistics, Current Statistics Section. (Published by Standard & Poor's Corporation)

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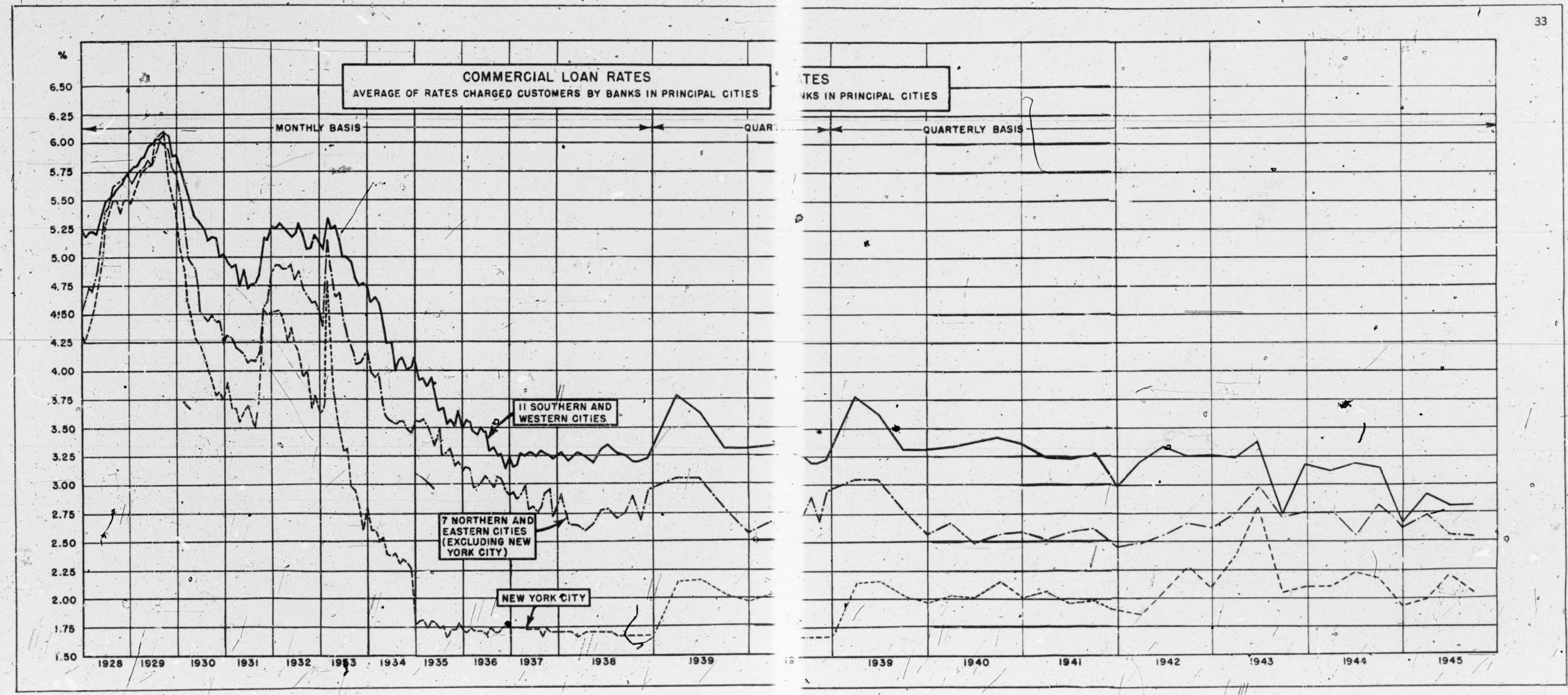
COMMERCIAL LOAN RATES
AVERAGE OF RATES CHARGED CUSTOMERS BY BANKS IN PRINCIPAL CITIES
TES
NKS IN PRINCIPAL CITIES
%
6.50
6.25
6.00
5.75
5.50
5.25
5.00
4.75
4.50
4.25
4.00
3.75
3.50
3.25
3.00
2.75
2.50
2.25
2.00
1.75
1.50
MONTHLY BASIS
QUAR
QUARTERLY BASIS
11 SOUTHERN AND WESTERN CITIES
7 NORTHERN AND EASTERN CITIES (EXCLUDING NEW YORK CITY)
NEW YORK CITY
1928
1929
1930
1931
1932
1933
1934
1935
1936
1937
1938
1939
1939
1940
1941
1942
1943
1944
1945

COMMERCIAL LOAN RATES

AVERAGES OF RATES CHARGED CUSTOMERS BY BANKS IN PRINCIPAL CITIES

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
NEW YORK CITY													
1928	4.38	4.25	4.38	4.50	4.63	4.88	5.25	5.38	5.50	5.50	5.38	5.50	4.96
1929	5.50	5.48	5.57	5.72	5.76	5.79	5.80	6.03	6.09	6.11	5.70	5.54	5.76
1930	5.43	5.10	4.91	4.61	4.44	4.28	4.22	4.14	4.00	3.92	3.79	3.82	4.39
1931	3.74	3.89	3.67	3.67	3.57	3.66	3.70	3.58	3.50	3.82	4.55	4.48	3.82
1932	4.51	4.52	4.53	4.46	4.24	4.38	4.22	4.14	3.94	4.01	3.66	3.78	4.20
1933	3.62	3.66	4.79	3.94	3.71	3.51	3.29	3.32	3.00	2.96	2.80	2.61	3.43
1934	2.81	2.62	2.61	2.50	2.55	2.34	2.33	2.42	2.32	2.36	2.32	2.27	2.45
1935	1.79	1.81	1.81	1.74	1.81	1.79	1.74	1.76	1.66	1.73	1.73	1.78	1.76
1936	1.71	1.71	1.74	1.71	1.71	1.71	1.67	1.74	1.70	1.70	1.74	1.74	1.72
1937	1.75	1.75	1.75	1.75	1.73	1.73	1.73	1.73	1.65	1.73	1.70	1.70	1.73
1938	1.70	1.70	1.65	1.70	1.70	1.70	1.70	1.67	1.67	1.67	1.67	1.67	1.69
1939[1]			2.13			2.15			2.04			1.96	2.07
1940			2.03			2.00			2.14			2.00	2.04
1941			2.06			1.95			1.98			1.88	1.97
1942			1.85			2.07			2.28			2.09	2.07
1943			2.36			2.70			2.05			2.10	2.30
1944			2.10			2.23			2.18			1.93	2.11
1945			1.99			2.20			2.05				
SEVEN NORTHERN AND EASTERN CITIES (EXCLUDING NEW YORK CITY)													
1928	4.52	4.59	4.74	4.69	4.87	5.12	5.39	5.42	5.62	5.64	5.66	5.70	5.16
1929	5.70	5.64	5.71	5.75	5.79	5.85	5.80	5.92	6.01	5.99	5.93	5.78	5.82
1930	5.72	5.55	5.30	4.98	4.93	4.89	4.53	4.47	4.44	4.49	4.38	4.38	4.84
1931	4.23	4.31	4.29	4.22	4.19	4.15	4.08	4.10	4.09	4.30	4.53	4.60	4.26
1932	4.86	4.93	4.93	4.89	4.89	4.92	4.80	4.88	4.71	4.68	4.60	4.61	4.81
1933	4.53	4.38	5.14	4.88	4.66	4.68	4.50	4.31	4.20	4.05	4.07	4.09	4.46
1934	4.17	3.98	3.94	3.97	3.68	3.59	3.55	3.53	3.56	3.56	3.48	3.45	3.71
1935	3.57	3.55	3.57	3.53	3.41	3.34	3.46	3.26	3.29	3.32	3.16	3.22	3.39
1936	3.12	3.16	3.14	2.96	2.99	3.02	3.09	3.02	2.97	3.07	3.05	2.94	3.04
1937	2.93	2.95	2.87	2.93	3.01	2.79	2.82	2.76	2.83	2.93	2.98	2.72	2.88
1938	2.92	2.65	2.64	2.60	2.64	2.78	2.78	2.71	2.74	2.90	2.68	2.95	2.75
1939[1]			3.05			3.05			2.78			2.59	2.87
1940			2.67			2.49			2.56			2.53	2.56
1941			2.53			2.58			2.62			2.45	2.55
1942			2.48			2.56			2.66			2.63	2.58
1943			2.76			2.98			2.71			2.76	2.80
1944			2.75			2.55			2.62			2.61	2.68
1945			2.73			2.55			2.53				

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COMMERCIAL LOAN RATES

AVERAGES OF RATES CHARGED CUSTOMERS BY BANKS IN PRINCIPAL CITIES

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
ELEVEN SOUTHERN AND WESTERN CITIES													
1928	5.25	5.18	5.23	5.23	5.22	5.34	5.50	5.51	5.52	5.59	5.64	5.70	5.41
1929	5.73	5.77	5.80	5.86	5.88	5.97	5.98	6.03	6.04	6.08	6.07	5.93	5.93
1930	5.90	5.80	5.73	5.56	5.42	5.36	5.31	5.25	5.15	5.18	5.17	5.01	5.40
1931	5.01	4.96	4.90	4.93	4.74	4.89	4.72	4.75	4.76	4.85	5.18	5.15	4.90
1932	5.26	5.25	5.29	5.25	5.22	5.18	5.20	5.29	5.20	5.07	5.07	5.19	5.21
1933	5.11	5.05	5.35	5.25	5.27	5.15	4.99	5.00	4.95	4.82	4.74	4.76	5.04
1934	4.74	4.60	4.65	4.60	4.46	4.24	4.25	4.00	4.10	4.12	4.01	4.03	4.32
1935	4.12	3.92	3.94	3.85	3.94	3.80	3.65	3.67	3.53	3.57	3.52	3.65	3.76
1936	3.50	3.56	3.55	3.46	3.43	3.51	3.45	3.23	3.33	3.25	3.27	3.14	3.40
1937	3.23	3.15	3.17	3.28	3.25	3.29	3.27	3.26	3.30	3.28	3.26	3.23	3.25
1938	3.28	3.21	3.28	3.25	3.20	3.31	3.35	3.28	3.26	3.21	3.20	3.23	3.26
1939 1/			3.77			3.62			3.31			3.32	3.51
1940			3.35			3.38			3.43			3.36	3.38
1941			3.25			3.23			3.29			2.99	3.19
1942			3.20			3.34			3.25			3.26	3.26
1943			3.24			3.38			2.73			3.17	3.13
1944			3.12			3.18			3.14			2.65	3.02
1945			2.91			2.80			2.81				

1/ On a quarterly basis, beginning with 1939.

COMMERCIAL LOAN RATES

AVERAGES OF RATES CHARGED CUSTOMERS BY BANKS IN PRINCIPAL CITIES

Cities Included - Reports are received by the Board of Governors of the Federal Reserve System from banks in 19 leading cities scattered throughout the country. These cities are as follows:

New York City

Seven Northern and Eastern Cities

Chicago	Buffalo
Boston	Cleveland
Philadelphia	Detroit
Pittsburgh	

Eleven Western and Southern Cities

San Francisco	New Orleans
Los Angeles	Seattle
St. Louis	Atlanta
Dallas	Baltimore
Minneapolis	Richmond
Kansas City, Mo.	

The 19 cities included in this list are representative financial centers of the country. They have large loan markets and interest rates charged by banks in these cities are probably more responsive to changes in general monetary conditions than are rates in other places. Because of the financial importance of these cities, their influence would predominate in any compilations of rates designed to show movements of interest rates in large cities. This would be true even though many more cities were covered. In other cities, and especially at country banks, rates are generally higher and fluctuate less in accordance with changes in money market conditions.

Banks that report customer rates have been selected by each Federal Reserve Bank from those that report their statement of condition each Wednesday. They account for at least three-quarters of the commercial loans made by all banks in the city where they are located. At the present time reports are submitted by 87 banks. Reports are requested for loans of branches or any other office that is not the head office only where such loans are made in substantial amounts.

Since March 1939, loans with maturity of 30 days to 12 months, inclusive, are reported separately from those with maturity of over 12 months. Loans with maturity of less than 30 days are not reported. In compiling published averages, only those rates on loans with maturity of 30 days to 12 months are used. Renewals during the period of loans previously made are included in the reports.

Source of Data: Commercial Loan Rates are compiled by the Board of Governors of the Federal Reserve System, and are contained in the Federal Reserve Bulletin.

REDISCOUNT RATES OF ALL FEDERAL RESERVE BANKS

YEAR-END RATES

Banks	1929	1930	1931	1932	1933	1934	1935-1936	1937-1941	1942-1945
Atlanta	4 %	3½%	3½%	3½%	3½%	2½%	2 %	1½%	1 %
Boston	4½	3	3½	3½	2½	2	2	1	1
Chicago	4½	3½	3½	2½	2½	2½	2	1½	1
Cleveland	5	3	3½	3½	2½	2	1½	1½	1
Dallas	5	3½	4	3½	3½	3	2	1½	1
Kansas City	4½	3½	3½	3½	3½	2½	2	1½	1
Minneapolis	5	3½	3½	3½	3½	3	2	1½	1
New York	4½	2	3½	2½	2	1½	1½	1	1
Philadelphia	5	3½	3½	3½	2½	2½	2	1½	1
Richmond	5	3½	4	3½	3½	3	2	1½	1
St. Louis	5	3½	3½	3½	3	2½	2	1½	1
San Francisco	4½	3½	3½	3½	2½	2	2	1½	1

Source: Federal Reserve Bulletins.

EARNINGS-PRICE RATIOS ON OUTSTANDING COMMON STOCKS OF FOURTEEN ELECTRIC OPERATING UTILITIES - JANUARY 1940 TO MARCH 1946, INCLUSIVE

	1940	1941	1942	1943	1944	1945	1946
January	7.11 %	8.38 %	11.03 %	7.99 %	6.97 %	6.18 %	4.79 %
February	7.18	8.54	11.70	7.79	7.02	5.82	5.11
March	7.02	8.65	12.92	7.57	6.91	5.94	4.88
April	7.16	9.18	12.20	7.61	6.95	5.82	
May	8.63	9.72	11.52	7.60	6.80	5.75	
June	7.80	9.35	10.69	7.32	6.61	5.66	
July	7.62	9.16	10.50	7.30	6.60	5.65	
August	7.76	9.45	10.25	7.22	6.74	5.61	
September	7.78	9.95	9.55	7.14	6.79	5.39	
October	7.78	10.45	8.80	7.04	6.62	5.15	
November	8.40	11.02	8.87	7.24	6.55	5.09	
December	8.15	11.14	8.92	6.97	6.42	5.18	

Note:

The above data is based on the closing market quotations at the end of the month and the latest available earnings for a twelve months' period immediately preceeding the particular month. Also, the earnings-price ratios are based on weighted figures.

EARNINGS-PRICE RATIOS ON OUTSTANDING COMMON STOCKS OF FOURTEEN ELECTRIC OPERATING COMPANIES

MARCH 30, 1946

Company	Common Shares Outstanding	Market Price March 30, 1946	Total Market Price	Latest Earnings		Earnings-Price Relation
Bangor Hydro-Electric Co.	217,216	25 1/2	$ 5,539,008	$ 212,146	Year 1945	3.83%
Boston Edison Co.	2,468,656	48 7/8	120,655,562	5,103,206	Year 1945	4.23
Cleveland Electric Illuminating Co.	2,324,564	45 1/4	105,186,521	4,534,672	Year 1945	4.31
Commonwealth Edison Co.	12,951,748	35 3/8	459,229,335	24,577,746	Year 1945	5.35
Consolidated Edison Company of N.Y., Inc.	11,471,027	34 5/8	449,493,025	20,043,175	Year 1945	4.46
Consolidated Gas Electric Lt. & Pr. Co. of Baltimore	1,167,397	84 1/2	98,645,047	5,151,088	Year 1945	5.22
Detroit Edison Co.	6,361,300	27 1/4	173,345,425	7,973,350	Twelve months to Feb. 28, 1946	4.60
Houston Lighting and Power Co.	517,999	87 1/2	45,324,913	2,603,272	Year 1945	5.74
Idaho Power Co.	450,000	41 1/2	18,675,000	1,316,226	Year 1945	7.05
Indianapolis Power & Light Co.	714,835	31 3/4	22,696,011	1,383,187	Year 1945	6.09
Pacific Gas & Electric Co.	6,261,357	44	275,499,708	13,523,200	Year 1945	4.91
Pennsylvania Water & Power Co.	429,848	78	33,528,144	2,180,086	Year 1945	6.50
Philadelphia Electric Co.	8,160,317	30	244,809,510	15,133,505	Year 1945	4.80
" " " $1 Preference	2,368,913	29 5/8	70,179,048			
Southern California Edison Co., Ltd.	3,182,805	36 3/4	116,968,084	5,472,196	Year 1945	4.68
Total			$2,239,774,341	$109,207,055		4.88%

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YIELDS ON OUTSTANDING PREFERRED STOCKS OF FOURTEEN ELECTRIC OPERATING UTILITIES

JANUARY 1940 TO MARCH 1946, INCLUSIVE

	1940	1941	1942	1943	1944	1945	1946
January	4.55 %	4.56 %	5.26 %	4.85 %	4.45%	4.28 %	4.09 %
February	4.54	4.61	5.54	4.80	4.48	4.23	4.08
March	4.55	4.60	5.75	4.78	4.45	4.25	4.07
April	4.56	4.68	5.60	4.73	4.50	4.17	
May	5.01	4.83	5.45	4.67	4.42	4.19	
June	4.67	4.80	5.30	4.57	4.39	4.17	
July	4.67	4.83	5.30	4.45	4.32	4.19	
August	4.68	4.80	5.30	4.43	4.34	4.23	
September	4.66	4.78	5.20	4.44	4.33	4.25	
October	4.65	4.80	5.13	4.49	4.33	4.17	
November	4.58	4.85	5.10	4.57	4.29	4.15	
December	4.57	4.97	5.06	4.51	4.27	4.11	

Note:

The above data are based on the closing market quotations at the end of the month and the latest available twelve months' earnings immediately preceeding the particular month. Also, the earnings-price ratios are based on weighted figures.

YIELDS ON OUTSTANDING PREFERRED STOCKS OF FOURTEEN ELECTRIC OPERATING UTILITIES

MARCH 30, 1946

Company	Preferred Shares Outstanding	Market Price March 30, 1946	Total Market Price	Total Dividends	Yield
Bangor Hydro-Electric Co. 7%, $100	25,000	161	$ 4,025,000	$ 175,000	4.35%
" " 6%, $100	21,799	110	2,397,890	130,794	5.46
Cleveland Electric Illuminating Co. $4.50, No par	254,989	111 1/2	28,431,274	1,147,451	4.04
Consolidated Edison Company of N. Y. Inc. $5, No par	2,181,290	108	235,579,320	10,906,450	4.63
Consolidated Gas Elec. Lt. & Pr. Co. of Balto. B, 4¼%, $100	222,921	118	26,304,678	1,003,145	3.81
" " " C, 4%, $100	68,928	110 1/2	7,616,544	275,712	3.62
Houston Lighting & Power Co. $4, No par	97,397	111 1/2	10,859,765	389,588	3.59
Idaho Power Co. 4%, $100	100,000	106	10,600,000	400,000	3.77
Indianapolis Power & Light Co. 5 1/4%, $100	140,591	112 3/4	15,851,635	738,103	4.66
Pacific Gas & Electric Co. 5 1/2%, $25	1,173,163	40 1/4	47,219,811	1,613,099	3.42
" " 6%, $25	4,211,662	44 1/4	186,366,043	6,317,493	3.39
" " 5%, $25	400,000	35 3/4	14,300,000	500,000	3.50
Pennsylvania Water & Power Co. $5, No par	21,493	112 1/2	2,417,962	107,465	4.44
Philadelphia Electric Co. 4.40%, $100	274,472	120	32,936,640	1,207,676	3.68
Southern California Edison Co., Ltd. 5%, $25	160,000	49	7,840,000	200,000	2.55
" " " B, 6%, $25	1,907,256	31 1/4	59,601,750	2,860,884	4.80
" " " C, 5½%, $25	1,399,601	30 3/8	42,512,880	1,924,451	4.53
Total			$734,861,192	$ 29,897,311	4.07%

ELECTRIC OPERATING UTILITY PREFERRED STOCKS ISSUED DURING THE PERIOD 1935 - 1945, INCLUSIVE, WITH EFFECTIVE DIVIDEND RATE TO COMPANIES AND YIELDS TO PUBLIC AT DATE OF OFFERING

Company and Name of Issue (Cumulative Unless Otherwise Noted)		No. of Shares Offered to Public	Net Proceeds to Companies Per Share	Net Proceeds to Companies Total	Effective Dividend Rate to Companies	Price to Public Per Share	Price to Public Total	Yield to Public (Percent)
			1935					
Cleveland Elec. Illum. Co.	$4.50, no par	254,995	100.00	$25,499,500	4.50%	102.75	$26,200,736	4.38%
Total				$25,499,500	4.50%		$26,200,736	4.38%
			1936					
Central Hudson Gas & Elec. Corp.	4-1/2%, $100 par	3,404	103.53	$ 352,416	4.35%	107.50	$ 365,930	4.19%
Central Illinois Light Co.	4-1/2%, $100 par	117,037	98.73	11,555,063	4.56	102.00	11,937,774	4.41
Cumberland County Pr. & Lt. Co.	5-1/2%, $100 par	10,000	99.38	993,800	5.53	103.00	1,030,000	5.34
Dayton Power & Light Co.	4-1/2%, $100 par	100,000	99.41	9,941,000	4.52	102.50	10,250,000	4.39
Missouri Power & Light Co.	$6, no par	15,000	98.39	1,475,850	6.10	101.50	1,522,500	5.91
Public Service Co. of N. H.	$5, no par	4,860	94.19	457,763	5.31	97.25	472,635	5.14
Public Service Co. of N. H.	$5, no par	11,500	96.75	1,112,625	5.17	100.00	1,150,000	5.00
Rochester Gas & Electric Corp.	5%, $100 par, E	40,000	98.30	3,932,000	5.09	102.00	4,080,000	4.90
Southern Ind. Gas & Elec. Co.	4.8%, $100 par	85,895	99.38	8,536,245	4.83	102.75	8,825,711	4.67
Total				$38,356,762	4.77%		$39,634,350	4.62%
			1937					
Consumers Power Co.	$4.50, no par	547,788	97.23	$53,261,427	4.63%	100.50	$55,052,664	4.48%
Northern States Power Co.	$5, no par	275,000	99.94	27,483,500	5.00	103.00	28,325,000	4.85
Ohio Public Service Co.	5-1/2%, $100 par, First Pfd.	16,000	87.89	1,406,240	6.26	92.50	1,480,000	5.95
Total				$82,151,167	4.78%		$84,857,664	4.63%
			1938					
Cumberland County Pr. & Lt. Co.	5-1/2%, $100 par	10,000	92.39	$ 923,900	5.95%	97.00	$ 970,000	5.67%
New York & Queens E. L. & P. Co.	5%, $100 par, Non-Cum.	8,772	97.49	855,182	5.13	100.00	877,200	5.00
Pennsylvania Power Co.	$5, no par	42,000	97.31	4,087,020	5.14	101.00	4,242,000	4.95
Public Service Co. of N. H.	$5, no par	8,737	85.84	749,984	5.82	91.00	795,067	5.49
Union Electric Co. of Mo.	$5, no par	130,000	102.03	13,263,900	4.90	106.00	13,780,000	4.72
Total				$19,879,986	5.04%		$20,664,267	4.85%
			1939					
Central Ohio Lt. & Pr. Co.	$6, no par	2,200	84.19	$ 185,218	7.13%	90.00	$ 198,000	6.67%
Cons. Gas E. L. & P.Co. of Balto.	4-1/2%, $100 par, E	1,705	110.14	188,300	4.07	112.50	191,813	4.00
New York State El. & Gas Corp.	5-1/2%, $100 par	60,000	95.42	5,725,200	5.76	100.00	6,000,000	5.50
San Antonio Pub. Service Co.	6%, $100 par	2,740	100.61	275,671	5.96	104.00	284,960	5.77
Wisconsin Gas & Electric Co.	4-1/2%, $100 par	4,186	95.93	401,563	4.69	100.00	418,600	4.50
Wisconsin Michigan Power Co.	4-1/2%, $100 par	11,617	96.11	1,116,510	4.68	100.00	1,161,700	4.50
West Penn Power Co.	4-1/2%, $100 par	26,279	106.49	2,798,451	4.23	110.00	2,890,690	4.09
Total				$10,690,913	5.21%		$11,145,763	4.99%
			1940					
Appalachian Electric Power Co.	4-1/2%, $100 par	68,981	102.50	$ 7,070,553	4.39%	106.00	$ 7,311,986	4.25%
Central Kansas Power Co.	4-3/4%, $100 par	5,821	96.48	561,610	4.92	100.00	582,100	4.75
Central Maine Power Co.	5%, $50 par	20,000	44.14	882,800	5.66	46.25	925,000	5.41
Coast Counties Gas & Elec. Co.	5%, $25 par, First	58,080	25.99	1,509,499	4.81	27.00	1,568,160	4.63
Cons. Gas E. L. & P.Co. of Balto.	4%, $100 par, C	66,928	101.13	6,770,689	3.96	104.00	7,168,512	3.85
El Paso Electric Co.	$4.50, no par	15,000	101.08	1,516,200	4.45	105.00	1,575,000	4.29
Indianapolis Power & Lt. Co.	6%, $100 par	2,500	104.00	260,000	5.77	104.00	260,000	5.77
Indianapolis Power & Lt. Co.	5-1/4%, $100 par	30,738	103.32	3,175,850	5.08	107.50	3,304,335	4.88
Kansas Power & Light Co.	4-1/2%, $100 par	81,592	99.30	8,102,606	4.53	103.00	8,403,976	4.37
Marion Reserve Power Co.	$5, no par	7,500	94.23	706,725	5.31	98.00	735,000	5.10
Narragansett Electric Co.	4-1/2%, $50 par	180,000	51.28	9,230,400	4.39	53.25	9,585,000	4.23
San Diego Gas & Electric Co.	5%, $20 par	126,135	22.27	2,809,586	4.49	23.00	2,901,105	4.35
Southwestern Gas & Electric Co.	5%, $100 par	4,705	101.57	477,887	4.92	103.00	484,615	4.85
Wisconsin Electric Power Co.	4-3/4%, $100 par	36,170	96.41	3,487,150	4.93	100.00	3,617,000	4.75
Total				$46,760,475	4.52%		$48,421,789	4.36%
			1941					
Black Hills Power & Light Co.	5%, $100 par	8,500	94.94	$ 806,990	5.27%	100.00	$ 850,000	5.00%
Kansas Electric Power Co.	5%, $100 par	9,161	99.05	907,397	5.05	103.00	943,583	4.85
Lake Superior Dist. Power Co.	5%, $100 par	13,439	98.79	1,327,639	5.06	102.50	1,377,498	4.88
Louisville Gas & El. Co. (Ky.)	5%, $25 par	114,804	26.37	3,027,381	4.74	27.25	3,128,409	4.59
Luzerne County Gas & El. Co.	5-1/4%, $100 par	4,000	102.09	480,360	5.14	105.00	420,000	5.00
Missouri Utilities Co.	5%, $100 par	14,000	94.37	1,321,160	5.30	99.00	1,386,000	5.05
New York State El. & Gas Corp.	5.10%, $100 par	120,000	100.49	12,058,800	5.08	103.50	12,420,000	4.93
Ohio Power Co.	4-1/2%, $100 par	110,706	104.58	11,577,633	4.30	108.00	11,956,248	4.17
Pacific Gas & Electric Co.	5%, $25 par	400,000	26.87	10,748,000	4.65	27.00	10,800,000	4.63
Public Serv. Co. of Oklahoma	5%, $100 par	58,691	101.55	5,960,071	4.92	105.00	6,162,555	4.76
San Diego Gas & Elec. Co.	5%, $20 par	60,375	23.05	1,391,644	4.34	24.25	1,464,094	4.12
Union Electric Co. of Mo.	$4.50, no par	150,000	102.40	15,360,000	4.39	105.50	15,825,000	4.27
Wisconsin Pub. Service Corp.	5%, $100 par	41,823	101.46	4,243,362	4.93	105.00	4,391,415	4.76
Total				$69,210,437	4.68%		$71,124,802	4.55%
			1942					
Connecticut Light & Power Co.	$2.20, no par	220,004	50.44	$11,097,002	4.36%	52.00	$11,440,208	4.23%
Pennsylvania Electric Co.	5.10%, $100 par	34,000	99.59	3,386,060	5.12	103.75	3,527,500	4.92
Philadelphia Electric Co.	4.4%, $100 par	48,221	109.97	5,302,863	4.00	110.00	5,304,310	4.00
Southwestern Public Service Co.	6-1/2%, $100 par	60,000	98.50	5,910,000	6.60	100.00	6,000,000	6.50
Total				$25,695,925	4.90%		$26,272,018	4.79%

[224191]

Exhibit No. 46

3433

ELECTRIC OPERATING UTILITY PREFERRED STOCKS ISSUED DURING THE PERIOD 1935 - 1945, INCLUSIVE, WITH EFFECTIVE DIVIDEND RATE TO COMPANIES AND YIELDS TO PUBLIC AT DATE OF OFFERING

Company and Name of Issue (Cumulative Unless Otherwise Noted)		No. of Shares Offered to Public	Net Proceeds to Companies Per Share	Net Proceeds to Companies Total	Effective Dividend Rate to Companies	Price to Public Per Share	Price to Public Total	Yield to Public (Percent)
			1943					
Pennsylvania Electric Co.	4.40%, $100 par, B	35,000	102.63	$ 3,592,050	4.29%	105.25	$ 3,683,750	4.18%
California Electric Power Co.	5-1/4%, $100 par, Pr.	40,000	97.80	3,912,000	5.37	102.50	4,100,000	5.12
Delaware Power & Light Co.	4%, $100 par	40,000	101.83	4,073,200	3.93	104.50	4,180,000	3.83
Pennsylvania Electric Co.	4.40%, $100 par, Pr.	3,032	106.91	324,151	4.09	108.75	329,730	4.05
Total				$11,901,401	4.51%		$12,293,480	4.37%
			1944					
Houston Lighting & Power Co.	$4, no par	60,000	99.32	$ 5,959,200	4.03%	102.00	$ 6,120,000	3.98%
Atlantic City Electric Co.	4%, $100 par	55,000	100.29	5,515,950	3.99	102.50	5,637,500	3.90
Arizona Electric Co., Inc.	$5, no par	4,500	95.28	428,760	5.25	100.00	450,000	5.00
New Jersey Power & Light Co.	4%, $100 par	30,000	99.03	2,970,900	4.04	101.50	3,045,000	3.94
Mississippi Valley Pub. Serv. Co.	5%, $100 par	1,850	99.87	184,760	5.01	104.00	192,400	4.81
Idaho Power Co.	4%, $100 par	21,000	100.04	2,100,840	4.00	102.00	2,142,000	3.92
Virginia Electric & Power Co.	$5, $100 par	15,008	112.50	1,688,400	4.44	114.00	1,710,912	4.39
New Orleans Public Serv.Co.,Inc.	4-3/4%, $100 par	77,798	103.19	8,027,976	4.60	106.50	8,285,487	4.46
Indiana & Michigan Elec. Co.	4-1/8%, $100 par	120,000	100.40	12,048,000	4.11	103.13	12,375,600	4.00
Northern Indiana Public Serv. Co.	5%, $100 par	34,692	99.69	3,458,145	5.02	103.50	3,590,622	4.83
Empire District Elec. Co.	5%, $100 par	6,500	99.07	643,955	5.05	102.00	663,000	4.90
Gulf States Utilities Co.	$4.40, $100 par	51,145	103.55	5,296,065	4.25	106.00	5,421,370	4.15
Ohio Edison Co.	4.40%, $100 par	180,000	100.41	18,073,800	4.38	103.00	18,540,000	4.27
Metropolitan Edison Co.	3.90%, $100 par	125,000	100.96	12,620,000	3.86	102.63	12,828,750	3.80
Central Vermont Pub. Serv. Corp.	4.15%, $100 par	19,580	100.00	1,959,762	4.15	102.50	2,006,950	4.05
Total				$80,976,813	4.25%		$83,009,991	4.13%
			1945					
Southwestern Public Service Co.	4-3/4%, $100 par	50,000	(A)	$ (A)		110.50	$ 5,525,000	4.13%
Florida Power Corporation	4%, $100 par	40,000	100.18	4,007,080	3.99%	101.25	4,050,000	3.95
Central Illinois Elec. & Gas Co.	4.10%, $100 par, A	30,000	100.09	3,002,670	4.10	102.00	3,060,000	4.02
New York Power & Light Corp.	3.90%, $100 par	240,000	102.30	24,552,000	3.81	104.00	24,960,000	3.75
Panhandle Eastern Pipeline Co.	4%, $100 par	140,000	102.00	14,280,000	3.92	104.00	14,560,000	3.85
Idaho Power Co.	4%, $100 par	39,413	103.50	4,079,245	3.86	105.50	4,158,072	3.79
Monongahela Power Co.	4.40%, $100 par	90,000	101.03	9,092,700	4.36	103.50	9,315,000	4.25
Southwestern Electric Service Co.	4.40%, $100 par	10,150	100.77	1,022,816	4.37	103.00	1,045,450	4.27
Central Electric & Gas Co.	4.75%, $50 par, A	29,322	(A)	(A)		53.00	1,554,066	4.48
Union Electric Co. of Missouri	3.70%, no par	40,000	100.55	4,021,996	3.68	101.75	4,070,000	3.64
Public Serv. Co. of Oklahoma	4.00%, $100 par	28,859	101.20	2,920,531	3.95	102.75	2,965,262	3.89
Central Power & Lt. Co. (Texas)	4.00%, $100 par	(A)	101.15	(A)	3.95	102.75	10,275,000	3.89%
Total (B)				$86,979,038	3.90%		$88,185,784	3.87%

(A) Data not available.
(B) The figures for the Southwestern Public Service Co., Central Electric & Gas Co. and Central Power & Light Co. (Texas) have been excluded from the totals inasmuch as data on these companies are incomplete.

Note: Above information taken from "Moody's Public Utilities," and "Security Issues of Electric and Gas Utilities 1935-1944" - Securities and Exchange Commission.

[224201]

Exhibit No. 46

3434

ELECTRIC OPERATING UTILITY COMMON STOCKS OFFERED TO THE PUBLIC DURING THE PERIOD 1935 - 1945, INCLUSIVE, WITH EARNINGS - OFFERING PRICE RATIO

Name of Issue (A)	Offering Date (B)	No. of Shares Offered (C)	Price to Public: Total (D)	Price to Public: Per Share (E)	Price Per Share to Underwriter (F)	Net Proceeds Per Share to Company (G)	Cost of Floatation Per Share: Amount (E - G) (H)	Cost of Floatation Per Share: Percent of Price to Public (H ÷ E) (I)	Earnings: 12 Mo. Ended (J)	Earnings: Per Share (K)	Earnings-Offering Price Ratio (Percent) (L)
Boston Edison Co., Par $100 (Now $25)	Dec. 1935	4,760	$ 790,160	$166.00	$ Not Underwritten	$ -	$ -	-	9/30/35	$9.73	5.86
Newport Electric Corp., Par $20	May 1939	59,550 (1)	1,756,725	29.50	27.00	26.85	2.65	8.98	3/31/39	2.85	9.66
Indianapolis Power & Lt. Co., No Par	Apr. 1940	(645,980 (1)	15,503,520	24.00	22.00	20.00	-	-	-	-	-
		(68,855	1,652,520	24.00	22.00	21.73	-	-	-	-	-
		714,835	17,156,040	24.00	22.00	21.97	2.03	8.46	12/31/39	1.83	7.63
West Penn[redacted] Power Co., No Par	Apr. 1940	160,000	4,320,000	27.00	25.00	24.76	2.24	8.30	12/31/39	1.62	6.00
Michigan Public Service Co., No Par	Oct. 1940	85,000 (1)	1,211,250	14.25	12.30	(2)	1.95	13.68	6/30/40	1.16	8.14
San Diego Gas & Elec. Co., $10 Par	July 1941	590,527 (1)	8,488,826	14.375	-	13.43	0.95	6.59	6/30/41	1.63	11.34
Missouri Utilities Co., $1.00 Par	Sept. 1941	125,000 (1)	1,687,500	13.50	11.80	11.64	1.86	13.78	12/31/40	1.58	11.70
United Illuminating Co., No Par	Sept. 1941	28,336 (1)	2,833,600	100.00	(2)	(2)	(2)	(2)	12/31/40	5.80	5.80
Louisville Gas & Elec. Co., No Par	Oct. 1941	150,000	3,525,000	23.50	Not Underwritten	22.46	1.04	4.43	9/30/41	1.49	6.34
Black Hills Power & Light Co.	Oct. 1941	100,000	1,650,000	16.50	14.60	14.34	2.16	13.09	(2)	(2)	(2)
San Diego Gas & Elec. Co., $10 Par	Nov. 1941	246,750	3,207,750	13.00	12.00	12.00	1.00	7.69	10/31/41	1.25	9.62
Southwestern Public Service Co., No Par	Sept. 1942	140,482	702,410	5.00	4.50	4.43	0.57	11.40	(2)	(2)	(2)
Central Vermont Public Serv. Corp., No Par	Dec. 1943	194,295	3,108,720	16.00	14.92	14.74	1.26	7.88	2/28/44	0.71	4.44
Derby Gas & Electric Corp., No Par	Jan. 1944	91,577 (1)	1,648,386	18.00	15.50	15.50	2.50	13.89	12/31/43	2.36	13.1
Central Ill. Elec. & Gas Co., $15 Par	Feb. 1944	400,000 (1)	7,650,000	19.13	17.63	17.63	1.50	7.81	12/31/43	2.33	12.2
Lake Superior District Pr. Co., $20 Par	May 1945	133,500 (1)	3,003,750	22.50	21.16	(2)	1.34 (3)	5.96	12/31/44	1.68	7.44
Central Hudson Gas & Elec. Corp., No Par	Sept. 1945	445,778 (1)	4,157,518	9.70	9.33	(2)	.37 (3)	3.85	3/31/45	.56	5.77
Pacific Gas & Electric Co., $25 Par	Sept. 1945	700,000 (1)	28,000,000	40.00	38.96	(2)	1.04 (3)	2.60	6/30/45	2.13	5.37
Central Arizona Light & Power Co.	Nov. 1945	840,000 (1)	11,025,000	13.13	12.42	(2)	.71 (3)	5.37	9/30/45	.85	6.47
Florida Power Corp., $7.50 Par	Oct. 1945	142,857 (1)	2,428,569	17.00	16.26	(2)	.74 (3)	4.35	7/31/45	1.02	6.00
Montana Dakota Utilities Co., $5.00 Par	Oct. 1945	233,351-4/7	2,568,544	11.50	10.55	(2)	.95 (3)	8.26	12/31/44	.72	6.26
Sioux City Gas & Elec. Co., $12.50 Par	Dec. 1945	51,102	1,475,570	28.88	27.78	(2)	1.10 (3)	3.79	10/31/45	2.76	9.55

(1) This offering does not represent new financing. Shares had been held by a former parent company or its trustee.
(2) Information not available.
(3) Computed by deducting column F from column E.

Source of Data: "Moody's Public Utilities," "Standard Corporation Descriptions" and A-2 Registration Statements and Related Prospectuses filed with the S.E.C.

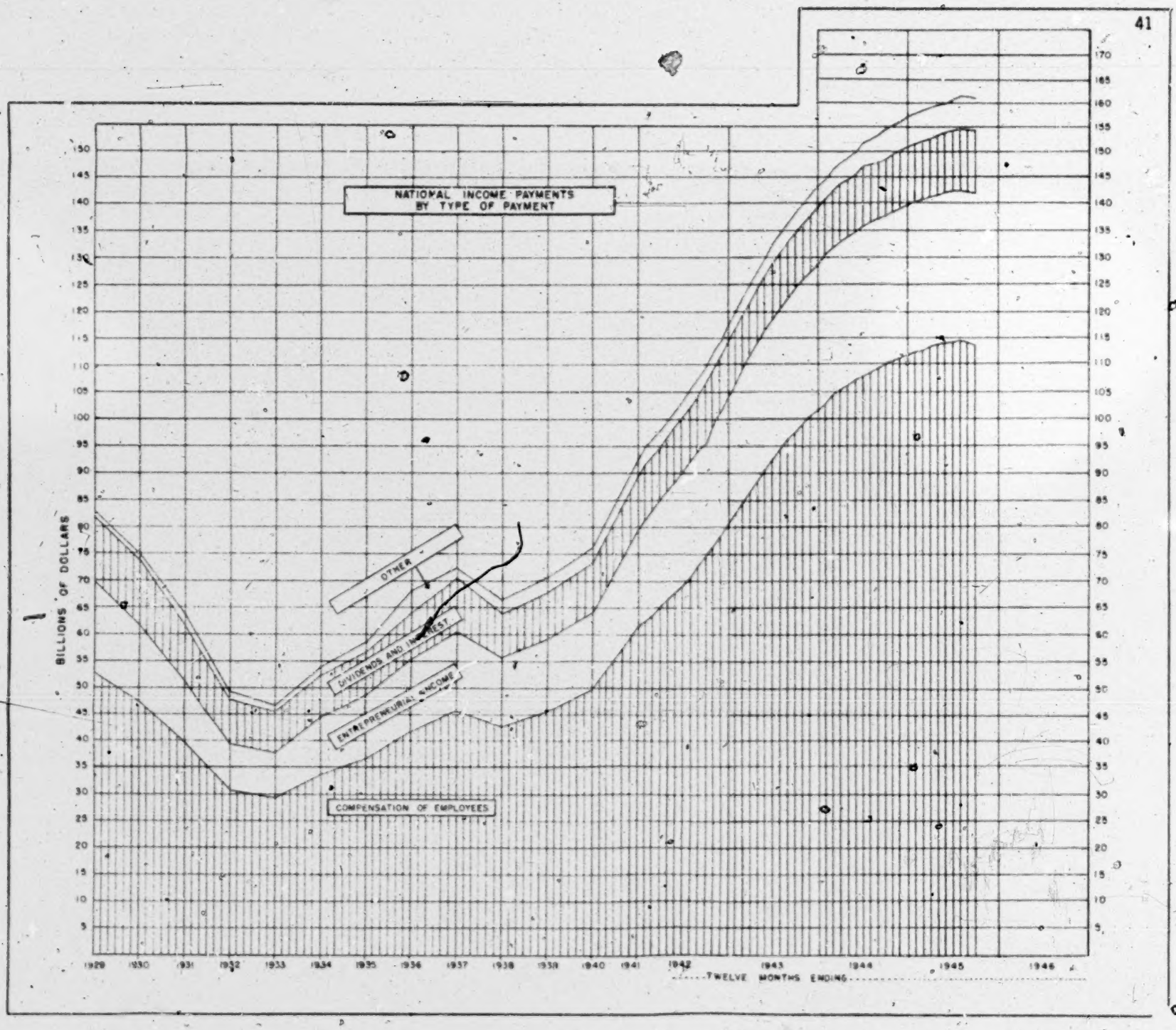


Exhibit No. 46

42

NATIONAL INCOME PAYMENTS

(MILLIONS OF DOLLARS)

Year or Period	Total Income Payments	Compensation of Employees(1)	Entrepreneurial Income and Net Rents and Royalties	Dividends and Interest	Direct and Other Relief	Social Security Benefits and Other Labor Income(2)
1929	$ 82,374	$ 52,202	$17,332	$11,845	$ 60	$ 935
1930	74,646	47,343	14,506	11,714	94	989
1931	63,520	39,810	11,295	10,266	158	1,991
1932	49,295	30,964	8,374	8,383	326	1,248
1933	46,808	29,085	8,770	7,331	580	1,042
1934	53,978	33,722	10,548	7,919	828	961
1935	58,728	36,636	11,919	8,034	1,099	1,040
1936	68,116	41,739	13,533	9,700	672	2,472
1937	72,213	45,811	14,586	9,762	837	1,217
1938	66,584	42,770	13,139	8,026	1,008	1,641
1939	70,829	45,658	13,441	8,891	1,071	1,768
1940	76,237	49,700	14,313	9,175	1,098	1,951
1941	92,732	61,374	18,599	9,761	1,112	1,886
Twelve Months Ended						
1942						
Jan. 31	94,514	62,603	19,109	9,797	1,110	1,895
Feb. 28	96,170	63,843	19,512	9,798	1,109	1,908
Mar. 31	97,971	65,158	19,931	9,853	1,105	1,924
Apr. 30	99,841	66,562	20,381	9,877	1,101	1,940
May 31	101,581	67,904	20,758	9,875	1,097	1,947
June 30	103,432	69,354	21,137	9,896	1,091	1,954
July 31	105,427	70,942	21,530	9,900	1,087	1,968
Aug. 31	107,478	72,[illegible]	21,909	9,877	1,083	1,978
Sept. 30	109,758	74,392	22,406	9,869	1,079	2,012
Oct. 31	112,203	76,279	22,985	9,815	1,075	2,049
Nov. 30	114,878	78,377	23,545	9,806	1,069	2,081
Dec. 31	117,285	80,407	23,933	9,771	1,061	2,113
1943						
Jan. 31	119,749	82,562	24,224	9,765	1,050	2,148
Feb. 28	122,292	84,738	24,554	9,779	1,036	2,185
Mar. 31	124,887	86,879	24,954	9,808	1,020	2,226
Apr. 30	127,321	88,979	25,272	9,785	1,005	2,280
May 31	129,710	90,952	25,636	9,791	992	2,339
June 30	132,158	92,821	25,923	10,028	982	2,404
July 31	134,269	94,581	26,214	10,033	973	2,468
Aug. 31	136,305	96,205	26,538	10,054	968	2,544
Sept. 30	138,187	97,744	26,716	10,164	957	2,606
Oct. 31	139,900	99,165	26,893	10,220	950	2,672
Nov. 30	141,474	100,507	27,043	10,226	944	2,754
Dec. 31	143,134	101,791	27,161	10,389	939	2,854

43

NATIONAL INCOME PAYMENTS

(MILLIONS OF DOLLARS)

Year or Period	Total Income Payments	Compensation of Employees(1)	Entrepreneurial Income and Net Rents and Royalties	Dividends and Interest	Direct and Other Relief	Social Security Benefits and Other Labor Income(2)
Twelve Months Ended						
1944						
Jan. 31	$144,643	$102,993	$27,350	$10,406	$ 935	$2,959
Feb. 29	146,162	104,226	27,494	10,409	933	3,100
Mar. 31	147,676	105,259	27,569	10,617	934	3,297
Apr. 30	148,819	106,154	27,599	10,638	935	3,493
May 31	149,953	107,049	27,648	10,634	937	3,685
June 30	151,199	107,874	27,724	10,801	938	3,862
July 31	152,209	108,675	27,746	10,811	939	4,038
Aug. 31	153,066	109,431	27,753	10,827	940	4,215
Sept. 30	154,195	110,083	27,659	11,120	940	4,393
Oct. 31	155,113	110,712	27,788	11,099	941	4,573
Nov. 30	155,946	111,208	27,958	11,090	942	4,748
Dec. 31	156,794	111,734	28,017	11,195	943	4,905
1945						
Jan. 31	157,610	112,211	28,111	11,297	944	5,047
Feb. 28	158,147	112,557	28,164	11,328	945	5,153
Mar. 31	158,854	113,004	28,190	11,511	946	5,203
Apr. 30	159,452	113,411	28,334	11,508	948	5,251
May 31	159,900	113,706	28,411	11,512	951	5,320
June 30	160,724	113,934	28,497	11,811	954	5,528
July 31	161,381	114,095	28,779	11,852	957	5,698
Aug. 31	161,469	113,812	28,983	11,861	961	5,852
Sept. 30	161,223	113,145	29,095	11,927	966	6,090

(1) Includes income in kind as well as cash income.

(2) In addition to benefits payable under the Social Security program, this item includes pensions paid out by private industries and governmental agencies, compensation for industrial accidents, pensions to veterans, and also loans to World War veterans on their adjusted service certificates, and since June 1936 adjusted service certificate payments less prior loans. These latter items account for the sharp increase in this type of income in 1931 and 1936.

Source of Data: Statistics compiled by the U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce, and published in the Survey of Current Business. The above data for the years 1929 to 1941, inclusive, were taken from, and the twelve-months' totals for the years 1942 to 1945, inclusive, are based on the monthly figures contained in the aforementioned publication.

44

NATIONAL INCOME PAYMENTS AND COST OF LIVING INDEXES

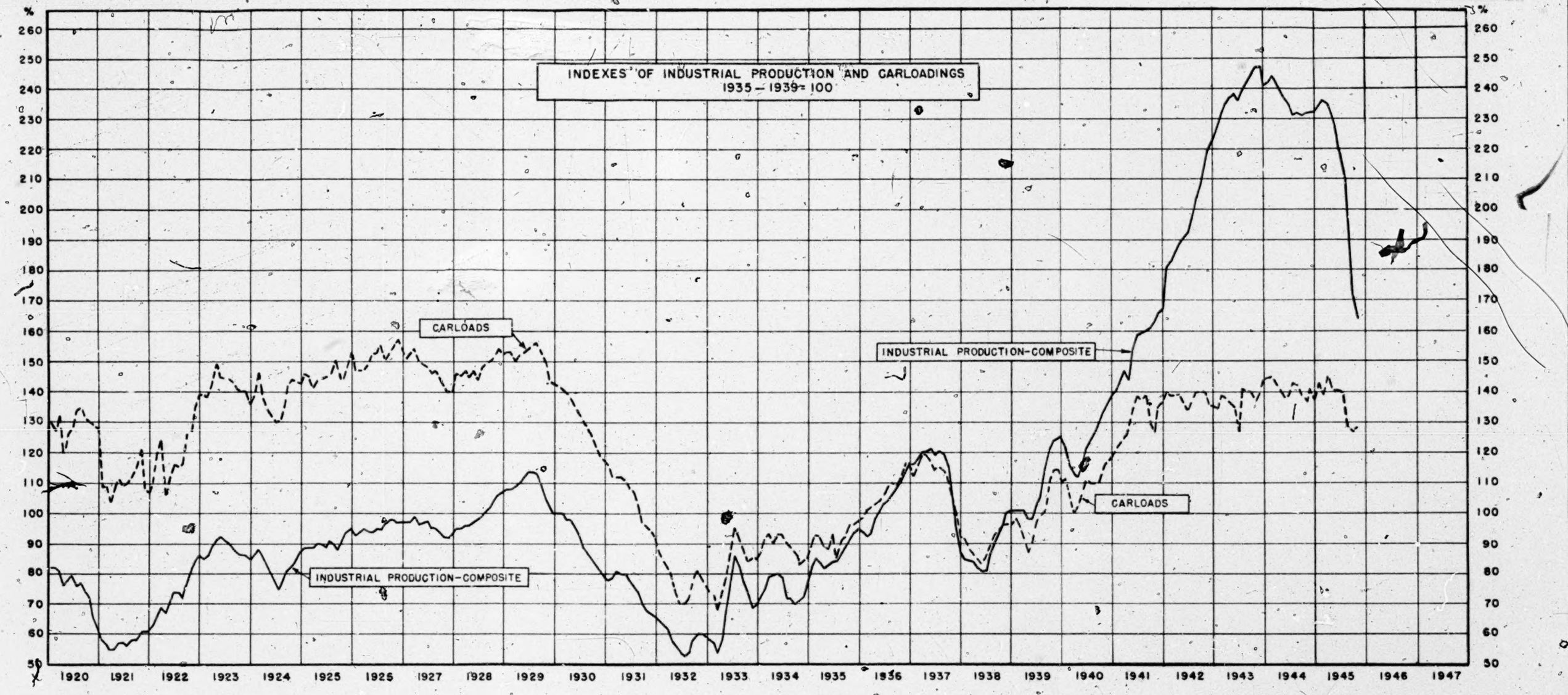
1929 to 1945

Year or Period	National Income Payments 1935-39=100(1)	Cost of Living 1935-39=100(2)	National Income Payments at 1935-39 Prices
1929	122.4	122.5	99.9
1930	110.9	119.4	92.9
1931	94.4	108.7	86.8
1932	73.3	97.6	75.1
1933	69.6	92.4	75.3
1934	80.2	95.7	83.8
1935	87.3	98.1	90.0
1936	101.2	99.1	102.1
1937	107.3	102.7	104.5
1938	98.9	100.8	98.1
1939	105.3	99.4	105.9
1940	113.3	100.1	113.2
1941	137.8	105.2	131.0
1942	174.3	116.5	149.6
1943	212.7	123.5	172.2
1944	233.0	125.5	185.7
1945			
January	234.2	127.1	184.3
February	235.0	126.0	186.5
March	236.1	126.8	186.1
April	236.9	127.1	186.3
May	237.6	128.1	185.4
June	238.8	129.0	185.1
July	239.8	129.4	185.3
August	239.9	129.3	185.6
September	239.6	128.9	185.9

(1) Index numbers based on National Income Payments, compiled by U. S. Department of Commerce.
(2) Index numbers compiled by U. S. Bureau of Labor Statistics.

45

INDEXES OF INDUSTRIAL PRODUCTION AND CARLOADINGS
1935 – 1939 = 100



46

INDEXES OF INDUSTRIAL PRODUCTION AND CARLOADINGS

1935-1939= 100

INDUSTRIAL PRODUCTION - COMPOSITE

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
1920	82	82	81	76	78	79	76	77	74	72	66	62	75
1921	58	57	55	55	57	57	56	58	58	62	61	61	58
1922	63	66	69	67	70	74	74	72	76	81	84	86	73
1923	85	86	89	91	92	91	90	88	87	86	86	85	88
1924	86	88	84	83	80	77	75	78	81	82	84	87	82
1925	89	89	89	90	90	89	91	90	88	92	94	95	91
1926	93	94	95	94	94	95	95	97	98	98	97	97	96
1927	97	97	99	96	97	97	95	95	94	92	92	93	95
1928	95	95	96	96	97	98	99	101	102	104	106	107	99
1929	108	108	109	110	112	114	114	114	113	110	105	100	110
1930	100	100	98	98	96	93	89	87	85	83	81	79	91
1931	78	79	81	80	80	78	76	74	70	68	67	66	75
1932	65	63	62	58	56	54	53	54	58	60	60	58	58
1933	58	57	54	58	68	78	86	82	77	73	69	70	69
1934	72	75	79	80	80	79	73	72	70	71	72	77	75
1935	83	85	84	82	83	84	84	87	89	92	94	95	87
1936	94	92	93	98	100	103	104	106	108	110	113	116	103
1937	116	118	120	120	121	119	120	119	115	107	96	87	113
1938	85	84	84	82	81	81	86	90	93	96	100	101	89
1939	101	101	101	98	98	103	105	105	114	121	124	125	108
1940	122	116	113	112	116	122	122	124	127	130	134	139	123
1941	140	144	147	144	154	159	160	160	161	163	166	167	155
1942	181	183	186	189	191	193	197	204	208	215	220	223	199
1943	227	232	235	237	238	236	239	242	244	247	247	241	239
1944	242	244	242	239	237	235	231	232	231	232	232	232	236
1945	234	236	235	231	226	220	211	187	171	164			

Above figures are adjusted for seasonal variation.

Source of Data: Federal Reserve Board Index of Industrial Production as reproduced in Standard & Poor's Trade and Securities-Statistics.

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INDEXES OF INDUSTRIAL PRODUCTION AND CARLOADINGS

1935-1939= 100

CARLOADINGS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
1920	130	127	132	119	126	128	134	135	132	130	129	128	129
1921	109	109	104	108	111	109	110	112	115	121	108	107	110
1922	110	120	124	106	112	116	115	116	126	127	135	139	121
1923	139	138	142	149	145	144	144	143	141	140	140	136	142
1924	139	146	139	134	132	130	131	135	142	144	143	143	139
1925	146	145	141	144	144	145	146	150	145	144	148	153	146
1926	147	147	147	149	152	153	155	151	152	155	157	154	152
1927	151	153	154	150	149	148	146	147	147	144	141	140	147
1928	146	145	147	145	147	144	148	149	150	151	154	152	148
1929	153	153	150	152	153	154	155	156	154	150	144	143	152
1930	142	141	136	138	135	133	131	129	126	122	119	117	131
1931	116	112	112	112	111	108	107	103	97	96	95	92	105
1932	87	84	82	80	74	70	70	72	77	81	78	76	78
1933	74	73	68	74	79	88	95	92	87	84	85	85	82
1934	87	91	93	90	93	93	90	89	87	83	84	85	89
1935	89	93	92	89	88	93	85	91	92	96	96	97	92
1936	98	101	94	103	104	106	109	110	109	111	116	116	107
1937	112	116	119	119	117	114	115	114	112	106	99	92	111
1938	91	88	86	82	83	85	88	90	92	95	95	96	89
1939	98	95	94	87	90	97	99	101	111	114	114	110	101
1940	111	105	100	103	106	111	110	112	112	110	116	119	109
1941	122	124	126	112	135	139	138	139	130	127	135	137	130
1942	140	138	138	138	136	134	137	140	140	140	136	135	138
1943	135	139	138	136	135	127	141	140	140	137	139	144	137
1944	145	143	140	138	138	139	143	142	139	137	141	137	140
1945	143	139	145	141	140	140	139	128	127	118			

Above figures are adjusted for seasonal variation.

Source of Data: Statistics computed by the Board of Governors of the Federal Reserve System from weekly data compiled by the Association of American Railroads, and published in the Federal Reserve Bulletin. The above data for the years 1924-40, inclusive, were taken from Federal Reserve Bulletin for June 1941 (pp.530-533); and for subsequent months from various issues of the Federal Reserve Bulletin.

48

WHOLESALE COMMODITY PRICE INDEXES

ALL COMMODITIES, FARM PRODUCTS, FOODS AND INDUSTRIAL PRODUCTS

1926 = 100

FARM PRODUCTS

ALL COMMODITIES

FOODS

INDUSTRIAL PRODUCTS

FARM PRODUCTS

INDUSTRIAL PRODUCTS

ALL COMMODITIES

FOODS

150 140 130 120 110 100 90 80 70 60 50 40

1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939 1940 1941 1942 1943 1944 1945 1946 1947

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WHOLESALE COMMODITY PRICE INDEXES

ALL COMMODITIES, FARM PRODUCTS, FOODS AND INDUSTRIAL PRODUCTS

1926 = 100

ALL COMMODITIES

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
1920	157.7	157.1	158.6	165.5	167.2	166.5	165.8	161.4	155.2	144.2	133.4	120.7	154.4
1921	114.0	104.9	102.4	98.9	96.2	93.4	93.4	93.5	93.4	94.1	94.2	92.9	97.6
1922	91.4	92.9	92.8	93.2	96.1	96.3	99.4	98.6	99.3	99.6	100.5	100.7	96.7
1923	102.0	103.3	104.5	103.9	101.9	100.3	98.4	97.8	99.7	99.4	98.4	98.1	100.6
1924	99.6	99.7	98.5	97.3	95.9	94.9	95.6	97.0	97.1	98.2	99.1	101.5	98.1
1925	102.9	104.0	104.2	101.9	101.6	103.0	104.3	103.9	103.4	103.6	104.5	103.4	103.5
1926	103.2	102.0	100.6	100.3	100.5	100.4	99.5	99.1	99.7	99.4	98.4	97.9	100.0
1927	96.5	95.8	94.7	94.1	94.2	94.1	94.3	95.2	96.3	96.6	96.3	96.4	95.4
1928	96.4	95.8	95.5	96.6	97.5	96.7	97.4	97.6	98.6	96.7	95.8	95.8	96.7
1929	95.9	95.4	96.1	95.5	94.7	95.2	96.5	96.3	96.1	95.1	93.5	93.3	95.3
1930	92.5	91.4	90.2	90.0	88.8	86.8	84.4	84.3	84.4	83.0	81.3	79.6	86.4
1931	78.2	76.8	76.0	74.8	73.2	72.1	72.0	72.1	71.2	70.3	70.2	68.6	73.0
1932	67.3	66.3	66.0	65.5	64.4	63.9	64.5	65.2	65.3	64.4	63.9	62.6	64.9
1933	61.0	59.8	60.2	60.4	62.7	65.0	68.9	69.5	70.8	71.2	71.1	70.8	66.0
1934	72.2	73.6	73.7	73.3	73.7	74.6	74.8	76.4	77.6	76.5	76.5	76.9	75.0
1935	78.8	79.5	79.4	80.1	80.2	79.8	79.4	80.5	80.7	80.5	80.6	80.9	80.0
1936	80.6	80.6	79.6	79.7	78.6	79.2	80.5	81.6	81.6	81.5	82.4	84.2	80.8
1937	85.9	86.3	87.8	88.0	87.4	87.2	87.9	87.5	87.4	85.4	83.3	81.7	86.3
1938	80.9	79.8	79.7	78.7	78.1	78.3	78.8	78.1	78.3	77.6	77.5	77.0	78.6
1939	76.9	76.9	76.7	76.2	76.2	75.6	75.4	75.0	79.1	79.4	79.2	79.2	77.1
1940	79.4	78.7	78.4	78.6	78.4	77.5	77.7	77.4	78.0	78.7	79.6	80.0	78.6
1941	80.8	80.6	81.5	83.2	84.9	87.1	88.8	90.3	91.8	92.4	92.5	93.6	87.3
1942	96.0	96.7	97.6	98.7	98.8	98.6	98.7	99.2	99.6	100.0	100.3	101.0	98.8
1943	101.9	102.5	103.4	103.7	104.1	103.8	103.2	103.1	103.1	103.0	102.9	103.2	103.2
1944	103.3	103.6	103.8	103.9	104.0	104.3	104.1	103.9	104.0	104.1	104.4	104.7	104.0
1945	104.9	105.2	105.3	105.7	106.0	106.1	105.9	105.7	105.2	105.9			

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WHOLESALE COMMODITY PRICE INDEXES

ALL COMMODITIES, FARM PRODUCTS, FOODS AND INDUSTRIAL PRODUCTS

1926 = 100

FARM PRODUCTS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
1920	170.2	163.3	164.5	168.7	169.8	167.4	160.4	149.9	143.9	127.8	118.7	104.6	150.7
1921	101.6	92.7	89.9	82.8	83.1	80.6	86.5	88.9	89.7	89.7	87.6	87.9	88.4
1922	88.0	95.1	93.4	92.6	94.3	92.8	95.6	91.2	92.4	94.2	97.8	99.2	93.8
1923	99.6	100.0	100.2	98.5	96.7	96.0	94.0	95.8	100.0	100.6	101.8	101.0	98.6
1924	101.4	98.8	95.7	97.3	95.1	94.3	98.6	102.0	100.4	103.2	103.6	108.3	100.0
1925	113.8	112.4	112.8	107.6	107.3	109.3	112.1	111.6	110.0	107.0	108.1	105.4	109.8
1926	107.4	105.1	101.7	102.8	102.4	100.9	98.6	97.2	99.3	97.9	94.7	94.9	100.0
1927	96.5	95.4	94.2	94.3	96.3	96.5	97.6	102.3	105.9	105.0	104.3	104.4	99.4
1928	106.1	104.5	103.5	107.6	109.8	106.7	108.5	106.9	108.8	103.4	101.6	103.6	105.9
1929	105.9	105.4	107.2	104.9	102.2	103.3	107.6	107.5	106.6	104.0	101.1	101.9	104.9
1930	101.0	98.0	94.7	95.8	93.0	88.9	83.1	84.9	85.3	82.5	79.3	75.2	88.3
1931	73.1	70.1	70.6	70.1	67.1	65.4	64.9	63.5	60.5	58.8	58.7	55.7	64.8
1932	52.8	50.6	50.2	49.2	46.6	45.7	47.9	49.1	49.1	46.9	46.7	44.1	48.2
1933	42.6	40.9	42.8	44.5	50.2	53.2	60.1	57.6	57.0	55.1	56.6	55.5	52.1
1934	58.7	61.3	61.3	59.6	59.6	63.3	64.5	69.8	73.4	70.6	70.8	72.0	65.4
1935	77.6	79.1	78.3	80.4	80.6	78.3	77.1	79.3	79.5	78.2	77.5	78.3	78.8
1936	78.2	79.5	76.5	76.9	75.2	78.1	81.3	83.8	84.0	84.0	85.1	88.5	80.9
1937	91.3	91.4	91.1	92.2	89.8	88.5	89.3	86.4	85.9	80.4	75.7	72.8	86.4
1938	71.6	69.8	70.3	68.4	67.5	68.7	69.4	67.3	68.1	66.8	67.8	67.6	68.6
1939	67.2	67.2	65.8	63.7	63.7	62.4	62.6	61.0	68.7	67.1	67.3	67.6	65.3
1940	69.1	68.7	69.7	69.4	67.9	66.2	66.5	65.6	66.2	66.4	68.2	69.7	67.7
1941	71.6	70.3	71.6	74.4	76.4	82.1	85.8	87.4	91.0	90.0	90.6	94.7	82.4
1942	100.8	101.3	102.8	104.5	104.4	104.4	105.3	106.1	107.8	109.0	110.5	113.8	105.9
1943	117.0	119.0	122.8	123.9	125.7	126.2	125.0	123.5	123.1	122.2	121.4	121.8	122.6
1944	121.8	122.5	123.6	123.2	122.9	125.0	124.1	122.6	122.7	123.4	124.4	125.5	123.5
1945	126.2	127.0	127.2	129.0	129.9	130.4	129.0	126.9	124.3	127.3			

WHOLESALE COMMODITY PRICE INDEXES

ALL COMMODITIES, FARM PRODUCTS, FOODS AND INDUSTRIAL PRODUCTS

1926 = 100

FOODS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
1920	145.1	138.2	136.1	144.6	147.3	149.0	146.8	138.4	134.8	127.7	123.9	109.7	137.4
1921	103.9	94.6	93.6	89.9	86.0	83.9	87.5	91.8	90.6	89.6	89.4	86.8	90.6
1922	83.8	83.7	84.2	84.3	84.8	86.2	88.4	87.3	88.6	91.6	94.8	95.0	87.8
1923	92.3	91.2	92.6	93.3	92.3	91.7	90.5	89.9	94.0	95.8	95.1	92.9	92.7
1924	91.4	90.8	89.2	86.7	85.3	86.5	87.4	90.3	92.8	94.9	97.1	99.3	91.0
1925	99.7	97.7	99.1	97.3	96.7	97.8	99.4	101.2	101.6	103.8	106.2	102.4	100.2
1926	102.6	100.6	99.3	100.5	100.1	100.5	98.7	97.5	99.8	100.7	100.4	100.6	100.0
1927	97.1	96.1	94.7	94.9	95.3	94.8	94.3	94.5	96.6	100.0	101.4	100.7	96.7
1928	100.9	98.8	98.2	99.7	101.2	100.3	102.2	103.8	106.5	102.1	100.0	98.1	101.0
1929	98.9	98.1	98.3	98.0	98.0	99.1	102.9	103.5	103.3	101.4	98.9	98.7	99.9
1930	97.3	95.8	94.3	94.9	92.2	90.8	86.8	87.6	89.5	88.8	86.2	82.4	90.5
1931	80.7	78.0	77.6	76.3	73.8	73.3	74.0	74.6	73.7	73.3	71.0	69.1	74.6
1932	64.7	62.5	62.3	61.0	59.3	58.8	60.9	61.8	61.8	60.5	60.6	58.3	61.0
1933	55.8	53.7	54.6	56.1	59.4	61.2	65.5	64.8	64.9	64.2	64.3	62.5	60.6
1934	64.3	66.7	67.3	66.2	67.1	69.8	70.6	73.9	76.1	74.8	75.1	75.3	70.6
1935	79.9	82.7	81.9	84.5	84.1	82.8	82.1	84.9	86.1	85.0	85.1	85.7	83.7
1936	83.5	83.3	80.1	80.2	78.0	79.9	81.4	83.1	83.3	82.6	83.9	85.5	82.1
1937	87.1	87.0	87.5	85.5	84.2	84.7	86.2	86.7	88.0	85.5	83.1	79.8	85.5
1938	76.3	73.5	73.5	72.3	72.1	73.1	74.3	73.0	74.5	73.5	74.3	73.1	73.6
1939	71.5	71.5	70.2	68.6	68.2	67.6	67.5	67.2	75.1	73.3	72.3	71.9	70.4
1940	71.7	71.1	70.2	71.6	71.4	70.3	70.3	70.1	71.5	71.1	72.5	73.5	71.3
1941	73.7	73.5	75.2	77.9	79.5	83.1	84.7	87.2	89.5	88.9	89.3	90.5	82.7
1942	93.7	94.6	96.1	98.7	98.9	99.3	99.2	100.8	102.4	103.4	103.5	104.3	99.6
1943	105.2	105.8	107.4	108.4	110.5	109.6	107.2	105.8	105.0	105.1	105.8	105.6	106.8
1944	104.9	104.5	104.6	104.9	105.0	106.5	105.8	104.8	104.2	104.2	105.1	105.5	105.0
1945	104.7	104.7	104.6	105.8	107.0	107.5	106.9	106.4	104.9	105.7			

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WHOLESALE COMMODITY PRICE INDEXES

ALL COMMODITIES, FARM PRODUCTS, FOODS AND INDUSTRIAL PRODUCTS

1926 = 100

INDUSTRIAL PRODUCTS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
1920	153.3	159.2	162.8	169.0	170.6	170.5	173.4	174.2	167 4	158.0	144.0	133.3	161.3
1921	124.2	114.1	110.0	108.3	105.5	102.4	99.2	96.7	96.8	99.8	101.4	100.1	104.9
1922	98.1	97.5	97.0	97.8	101.9	102.2	106.3	106.9	107.1	105.4	104.3	104.1	102.4
1923	107.0	109.3	110.6	110.0	107.4	105.1	103.4	102.0	101.8	100.6	99.3	99.5	104.3
1924	102.4	103.5	102.8	101.4	100.0	98.1	97.4	97.7	97.7	97.7	98.8	100.6	99.7
1925	101.4	104.0	102.8	101.3	101.6	102.9	103.8	102.3	101.9	102.7	103.8	103.7	102.6
1926	102.5	101.7	100.8	100.0	100.1	100.1	99.4	99.6	99.6	99.4	99.1	98.0	100.0
1927	96.5	95.8	94.5	93.5	93.4	93.5	93.4	93.6	93.9	93.5	93.0	93.3	94.0
1928	92.8	92.9	92.6	92.7	92.9	92.6	92.6	92.9	93.0	92.9	92.9	93.0	92.9
1929	92.3	91.9	92.1	91.8	91.5	91.9	91.7	91.4	91.6	91.6	90.8	90.5	91.6
1930	89.5	89.0	88.2	87.8	87.3	85.7	84.5	83.6	83.2	82.1	81.1	80.3	85.2
1931	79.0	78.3	77.2	75.9	75.1	74.1	73.9	74.2	73.9	72.9	73.5	72.3	75.0
1932	71.7	71.3	70.9	70.9	70.4	70.1	69.7	70.1	70.4	70.2	69.8	69.0	70.4
1933	67.3	66.0	65.8	65.3	66.5	68.9	72.2	74.1	76.1	77.2	77.2	77.5	71.2
1934	78.3	78.7	78.5	78.6	78.9	78.2	78.4	78.3	78.3	78.0	78.0	78.0	78.4
1935	77.7	77.4	77.3	77.2	77.6	78.0	77.9	77.8	78.3	78.8	78.7	78.7	77.9
1936	78.8	79.0	78.9	78.9	78.8	78.8	79.5	79.7	79.6	80.1	81.0	82.2	79.6
1937	83.4	84.1	85.5	86.5	86.3	86.1	86.3	86.1	85.9	85.1	84.3	83.6	85.3
1938	83.5	83.0	82.6	82.0	81.6	81.3	81.4	81.4	81.3	81.1	80.6	80.3	81.7
1939	80.2	80.2	80.4	80.5	80.6	80.2	80.2	80.1	82.1	83.8	84.0	83.9	81.4
1940	83.9	83.2	82.9	82.5	82.5	82.2	82.3	82.0	82.3	83.5	84.1	84.1	83.0
1941	84.3	84.4	84.9	85.9	87.4	88.6	89.7	90.8	91.6	93.4	93.5	93.7	89.0
1942	94.6	94.9	95.2	95.6	95.7	95.6	95.7	95.5	95.5	95.5	95.8	95.9	95.5
1943	96.0	96.2	96.5	96.6	96.7	96.8	96.9	97.1	97.2	97.3	97.4	97.6	96.9
1944	97.8	98.0	98.1	98.4	98.5	98.5	98.5	98.6	98.6	98.7	98.8	98.9	98.5
1945	99.1	99.2	99.2	99.3	99.4	99.6	99.7	99.9	99.8	100.1			

Source of Data: The Wholesale Commodity Price Indexes were computed by the United States Bureau of Labor Statistics and are contained in their publications. The Price Indexes are reproduced in Standard & Poor's Trade and Securities (Published by Standard & Poor's Corporation) Volume 3, Pages D-8 and D-9, dated April 29, 1938, and Current Statistics Section. The above figures were taken from Standard & Poor's Trade and Securities.

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LIQUID ASSET HOLDINGS OF BUSINESS AND INDIVIDUALS

1939 - 1944

(In Billions of Dollars)

	Dec. 1939	Dec. 1940	Dec. 1941	Dec. 1942	Dec. 1943	Dec. 1944
Financial Corporations	$ 1.7	$ 1.9	$ 2.2	$ 2.6	$ 3.0	$ 3.5
Non-Financial Corporations	11.3	13.0	15.3	24.4	35.1	43.6
Unincorporated Business	4.5	5.4	6.7	10.0	13.5	18.9
Total Business Holdings	17.5	20.3	24.2	37.0	51.6	66.0
Trust Funds	4.4	4.6	5.3	7.5	10.7	12.7
Other Personal Holdings	44.0	46.7	52.6	68.2	90.7	114.9
Total Personal Holdings	48.4	51.3	57.9	75.7	101.4	127.6
Grand Total	65.9	71.6	82.1	112.7	153.0	193.6
Made up as Follows:						
Currency	6.2	7.1	9.4	13.7	18.6	23.3
Demand Deposits	21.3	25.1	28.3	37.2	48.3	54.7
Time Deposits	26.3	26.9	26.9	27.7	32.0	38.9
U.S.Government Securities	12.1	12.5	17.5	34.1	54.1	76.7
Grand Total	$65.9	$71.6	$82.1	$112.7	$153.0	$193.6

Source: Federal Reserve Bulletin, June 1945.

Vol. IX

TRANSCRIPT OF RECORD

(Pages 3449 to 3638)

Supreme Court of the United States

OCTOBER TERM, 1951

No. 428

PENNSYLVANIA WATER AND POWER COMPANY AND SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND, PETITIONERS,

vs.

FEDERAL POWER COMMISSION ET AL.

No. 429

PENNSYLVANIA PUBLIC UTILITY COMMISSION, PETITIONER,

vs.

FEDERAL POWER COMMISSION.

ON WRITS OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

PETITIONS FOR CERTIORARI FILED NOVEMBER 16, 1951

CERTIORARI GRANTED FEBRUARY 4, 1952

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EXHIBIT NO. 47.

[22435]

REPORT ON

FACILITIES, OPERATIONS AND CONTRACTS

OF THE

PENNSYLVANIA WATER & POWER COMPANY

AND THE

SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND

Table V

PENNSYLVANIA WATER & POWER COMPANY

DOCKET 17-5915

Summary of Interconnected System Energy Transactions - 1939 through 1944

Company	INCOMING					OUTGOING			
				From Outside System				To Outside System	
	Internal Combustion	Hydro Generation	Steam Generation	Purchases	Interchange In (Gross)	To Ultimate Customers	Losses and Company Use	Sales for Resale	Interchange Out (Gross)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Safe Harbor Water Power Corporation	-	658,586,200	-	-	-	-	7,185,900	-	-
Pennsylvania Water & Power Company	-	464,192,000	178,199,000	-	101,126,600	159,255,800	44,992,500	286,693,600	82,908,700
Consolidated Gas Electric Light & Power Company	18,000	-	701,961,000	2,604,600	-	1,483,333,370	152,996,530	-	-
Potomac Electric Power Company	-	-	1,103,819,809	-	-	858,476,787	119,438,484	15,283,538	-
Total - 1939	18,000	1,122,778,200	1,983,979,809	2,604,600	101,126,600	2,501,005,957	324,615,414	301,977,138	82,908,700
Safe Harbor Water Power Corporation	-	790,177,600	-	-	-	-	11,704,400	-	-
Pennsylvania Water & Power Company	-	560,628,000	175,546,000	-	82,464,000	175,275,400	47,277,800	312,674,800	87,684,200
Consolidated Gas Electric Light & Power Company	-	-	577,528,000	2,071,400	-	1,752,566,866	160,241,534	-	-
Potomac Electric Power Company	-	-	1,149,712,737	-	-	944,381,503	128,145,972	18,175,262	-
Total - 1940	-	1,350,805,600	2,202,786,737	2,071,400	82,464,000	2,872,223,769	347,369,706	330,850,062	87,684,200
Safe Harbor Water Power Corporation	-	595,806,000	-	-	-	-	10,896,100	-	-
Pennsylvania Water & Power Company	-	435,957,000	184,487,000	-	57,081,700	192,331,800	38,662,900	368,702,000	73,847,900
Consolidated Gas Electric Light & Power Company	-	-	1,396,691,000	1,390,300	-	2,064,693,711	177,547,589	-	-
Potomac Electric Power Company	-	-	1,528,115,900	-	-	1,113,675,579	138,430,916	20,740,405	-
Total - 1941	-	1,031,763,000	3,109,293,900	1,390,300	57,081,700	3,370,701,090	365,537,505	389,442,405	73,847,900
Safe Harbor Water Power Corporation	-	1,009,399,400	-	-	-	-	15,819,700	-	-
Pennsylvania Water & Power Company	-	670,768,000	172,496,000	-	30,233,900	177,044,900	49,343,500	398,031,800	152,722,900
Consolidated Gas Electric Light & Power Company	-	-	1,401,270,000	1,589,700	-	2,337,071,134	190,150,066	-	-
Potomac Electric Power Company	-	-	1,528,634,000	-	-	1,299,419,740	147,463,501	47,323,759	-
Total - 1942	-	1,680,167,400	3,102,400,000	1,589,700	30,233,900	3,813,535,774	402,776,767	445,355,559	152,722,900
Safe Harbor Water Power Corporation	-	993,490,200	-	-	-	-	15,235,000	-	-
Pennsylvania Water & Power Company	-	583,134,000	150,104,000	-	20,062,700	175,665,100	57,753,200	443,097,800	224,780,500
Consolidated Gas Electric Light & Power Company	-	-	1,895,345,000	3,084,300	-	2,575,583,649	192,501,951	-	-
Potomac Electric Power Company	-	-	1,748,376,000	-	-	1,430,897,131	150,794,772	127,289,097	-
Total - 1943	-	1,576,624,200	3,793,825,000	3,084,300	20,062,700	4,182,143,880	416,284,923	570,386,897	224,780,500
Safe Harbor Water Power Corporation	--	772,142,000	-	-	-	-	12,092,000	-	-
Pennsylvania Water & Power Company	-	512,765,000	171,091,000	-	39,709,000	194,082,000	57,252,300	542,484,700	160,309,000
Consolidated Gas Electric Light & Power Company	-	-	2,225,737,000	3,131,600	-	2,658,688,428	199,190,172	-	-
Potomac Electric Power Company	-	-	1,904,907,000	-	-	1,491,665,070	163,606,786	150,112,144	-
Total - 1944	-	1,284,907,000	4,301,735,000	3,131,600	39,709,000	4,344,435,498	432,141,258	692,596,844	160,309,000

EXHIBIT NO. 51

[22572]

FEDERAL POWER COMMISSION

Docket IT-5915

PENNSYLVANIA WATER & POWER COMPANY
CORPORATE AND FINANCIAL HISTORY
EARLY HISTORY OF THE HOLTWOOD PROJECT
PLANT INVESTMENT

Bureau of Accounts, Finance and Rates
Division of Accounts

[22573] (page i)

Docket IT-5915

PENNSYLVANIA WATER & POWER COMPANY

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PART I

Written Statement

By order dated September 1, 1944 in Docket No. IT-5915, the Federal Power Commission instituted an investigation of the rates of Pennsylvania Water & Power Company (hereinafter sometimes "Holtwood"). Subsequently, on October 3, 1944, the Commission, by order, enlarged the scope of the investigation to include Susquehanna Transmission Company of Maryland (hereinafter sometimes "Susquehanna"), the wholly-owned subsidiary of Pennsylvania Water & Power Company.

Pursuant to the aforesaid orders, the staff of the Commission undertook an examination, among other things, of the accounts and records of Holtwood and Susquehanna. This report reflects the results of that examination.

Scope of Report

This report deals with the Companies' history, capitalization and plant investment. It includes a written statement which has been divided into three chapters as follows:

I. Corporate and Financial History

II. Early History of the Holtwood Project

III. Plant Investment

[22579] (page 2)

In addition to the written statement there are 39 schedules and 6 appendices. Schedule 1 is a consolidated balance sheet of Holtwood and Susquehanna at December 31, 1945 per books and as adjusted by the examiners to reflect adjustments and transfers from the companies' plant accounts. Schedule 2 shows the details of the adjusted plant balances. Electric plant in service as reclassified by Holtwood in its original cost studies is reconciled with the

original cost determined by the F. P. C. examiners on Schedule 3. The remaining schedules present the details of certain plant accounts and list and explain the examiners' adjusting entries. All schedules have been prepared on a consolidated basis. The appendices consist of balance sheets and statements of cash receipts and disbursements for predecessor companies.

Corporate and Financial History

Incorporation and Purposes

Pennsylvania Water & Power Company was incorporated January 13, 1910 in the State of Pennsylvania under the provisions of the Act of April 27, 1909 as a reorganization of McCall Ferry Power Company, which had in turn been formed by the merger on April 14, 1905 of Hillside Water & Power Company and Susquehanna Water & Power Company. Each of the latter companies had been incorporated in Pennsylvania on September 2, 1902 for the purpose of the storage and transportation of water and water power for commercial and manufacturing purposes and the development by [22580] (page 3) the use of the same, of electric current and power. Pennsylvania Water & Power Company derived its original franchise privileges from these early charters. The corporation has perpetual life.

Capitalization

Since its acquisition of the properties and franchises of McCall Ferry Power Company on January 13, 1910, in exchange for common stock and bonds, Pennsylvania Water & Power Company has been financed by additional issues of common and preferred stock and several bond issues, which are described in the following paragraphs:

Capital Stock: The various capital stock issues of the company are listed in the table below:

	Year	Shares Issued No. of Shares	Shares Issued Par or Stated Value	Shares Outstanding December 31, 1945 No. of Shares	Shares Outstanding December 31, 1945 Par or Stated Value
Capital Stock—$100 Par					
Authorized—					
85,000 shares (1910)					
50,000 shares (1923)					
Initial Issue—Note (a)	1910	84,950	$ 8,495,000)	Exchanged for No Par	
Issued for cash at 100	1923	12,743	1,274,300)	Stock in 1927—Four	
Issued for cash at 112½ (b)	1924	9,769	976,900)	New for One Old	
		107,462	$10,746,200		
Common Stock—No Par					
Authorized—					
540,000 shares (1927)					
Exchanged for Par Stock (b)	1927	429,848	$10,868,312	429,848	$10,868,312
$5 Cumulative Preferred Stock—No Par (c)					
Authorized—					
100,000 shares (1932)					
Issued for cash at 97½	1933	3,829	$ 373,327		
Issued for cash at 99½	1935	17,664	1,757,568		
		21,493	$ 2,130,895	21,493	$ 2,130,895

(a) Of the total initial issue of $8,495,000 par value of capital stock, $4,995,000 was given in exchange for an equal principal amount of McCall Ferry Power Company bonds on which $4,495,500 had been paid in (at 90). The remaining [22581] (page 4) $3,500,000 par value of stock was issued as a bonus in marketing $4,170,000 of Pennsylvania Water & Power Company bonds.

(b) The premium of $122,112.50 on the par value capital stock issued in 1924 was carried in a separate account for premium on capital stock until the exchange for no par stock in 1927 when the amount was transferred to the capital stock account.

(c) The preferred stock is redeemable at $110. per share plus accrued dividends, and is entitled to $100. per share plus accrued dividends in any liquidation.

The initial issue of capital stock was held in a voting trust from the time of its issue until November 1, 1912 when the trust expired by its own terms.

Bonds Issued: A summary of the Company's several bond issues is given below:

	Year	Issued Amount	Outstanding Dec. 31, 1945
First Mtge. 5% S. F. Bonds, due 1940			
Initial Issue (at 90) Note (a)	1910	$ 7,500,000	
Issued at various prices (85 to 95)	1911-23	5,000,000	
		12,500,000	
First Refunding Mtge. 5½% Bonds, due 1953			
Issued at 91-3/8	1923	2,000,000	
Issued at 96	1924	1,000,000	
		3,000,000	
First Mtge. 6% S. F. Bonds, due 1954 (b)			
Issued at 95	1924	2,750,000	
First Refunding Mtge. 4½% Bonds, due 1968 (c)			
Issued at 96	1928	6,000,000	
Issued at 88½	1930	1,750,000	
Issued at 93	1931	3,500,000	
		11,250,000	

	Year	Issued Amount	Outstanding Dec. 31, 1945
Refunding Mtge. and Collateral Trust Bonds 3¼% due 1964 (d) Issued at 102	1939	10,900,000	10,383,000
Refunding Mtge. and Collateral Trust Bonds 3¼% due 1970 (e) Issued at 103	1940	$10,962,000	10,450,000

[22582] (page 5)

(a) All bonds were sold for cash with the exception of the initial issue of $7,500,000 of 5% bonds due 1940 of which $3,330,000 were issued in exchange for an equal principal amount of McCall Ferry Power Company bonds (sold at 90) and the remaining $4,170,000 were sold for cash at 90 with a 50% common stock bonus.

(b) The First Mortgage 6% Sinking Fund Bonds due 1954 were issued in 1924 by Holtwood Power Company, a wholly-owned subsidiary, and were assumed by the parent company in 1927 when the subsidiary was merged.

(c) Proceeds from the sale of $6,000,000 of 4½% bonds in 1928 were used to redeem $3,000,000 of 5½% bonds due 1953 and $2,750,000 of 6% bonds due 1954.

(d) Proceeds from the sale of the 3¼% bonds due 1964 were used to redeem $10,903,000 of 5% bonds due 1940.

(e) Proceeds from the sale of the 3¼% bonds due 1970 were used to redeem $10,962,000 of 4½% bonds due 1968.

The indenture for the two series of 3¼% bonds now outstanding provide for their partial retirement through purchase or redemption by means of annual sinking fund payments of approximately $109,000 for each series. Specified premiums are payable for sinking fund redemptions beginning with 5% for the 1964 bonds and 6% for the 1970 bonds declining to 3/8% near the maturity of the issues. In addition the bonds of either series may be retired in whole or in part at any time on 30 days notice upon the payment of a declining rate of premium which at the present time stands at 5½% and 6½% for the 1964 and 1970 bonds, respectively, reducing to 3/8% for both issues near maturity.

Directors and Officers

The officers and directors of the Company as of April 6, 1946 were as follows:

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Officers

President	J. A. Walls
Executive Vice President	J. L. Rintoul
Vice President	G. W. Spaulding
Treasurer	J. U. Diehl
Secretary and Asst. Treas.	W. H. Eichhorn, Jr.
Assistant Secretary	R. L. Bortner

Directors

P. S. Bush*	M. E. Noyes	G. W. Spaulding
G. T. Hambright	J. L. Rintoul	L. G. Tighe
E. B. Leisenring	T. E. Seelye	J. A. Walls
D. E. Williams, Jr.		J. S. Young

* Chairman of the Board.

Associated Companies

As at December 31, 1945, Pennsylvania Water & Power Company owned the entire issued capital stock and bonds of Susquehanna Transmission Company of Maryland and one-third of the capital stock of Safe Harbor Water Power Corporation. It also owned the entire issued stock of two inactive subsidiaries, Holtwood Coal Company and Susquehanna Canal and Power Company.

Susquehanna Transmission Company of Maryland: This company was organized by Pennsylvania Water & Power Company on April 19, 1910 under the laws of the State of Maryland by the consolidation of Susquehanna Pole Line Company of Harford County and Susquehanna Pole Line Company of Baltimore County, two companies which had been incorporated by McCall Ferry Power Company in 1907 in connection with the acquisition of rights of way for the Baltimore transmission line. Among other things, it was authorized in its charter to erect and operate pole lines for the transmission of electric current, and substations for raising or lowering the voltage of any electricity received. It has perpetual life.

[22584] (page 7)

The company owns the Maryland section of all transmission lines operated by its parent company. This construction was financed by the parent company in return for securities of the subsidiary. The transmission company has no net income and no surplus. All operating expenses are paid by the parent company which also waives all interest due on the subsidiary's outstanding bonds. The company is consolidated with its parent company in the statements appearing in this report.

Safe Harbor Water Power Corporation: This company was incorporated under the laws of Pennsylvania on January 6, 1930. It owns and operates a hydroelectric plant

on the Susquehanna River about eight miles above Holtwood, Pa. Pennsylvania Water & Power Company owns one-half of its Voting Class B stock for which it paid $3,000,000 to the affiliate. The remainder of the Class B stock and all of the Non-Voting Class A stock, representing two-thirds of the entire capital stock, are owned by Consolidated Gas Electric Light and Power Company of Baltimore.

Mergers of Subsidiary Companies

Holtwood Power Company: In December 1927, Pennsylvania Water & Power Company acquired all the franchises and properties of Holtwood Power Company, a wholly-owned subsidiary, in consideration for the delivery to that company of all its capital stock and the assumption by the parent company of the subsidiary's indebtedness. The subsidiary had been organized on August 9, 1924 to own and operate the steam-electric plant completed on August 15, 1925. The entire electric output of the plant was sold to the parent company.

[22585] (page 8)

Transmission Companies: In December 1939 Pennsylvania Water & Power Company acquired all the franchises and properties of Susquehanna Transmission Company of Pennsylvania and Pennsylvania Transmission Company, wholly-owned subsidiaries, in consideration for the assumption of the subsidiaries' liabilities and the cancellation of all their outstanding capital stock and bonds. Susquehanna Transmission Company of Pennsylvania was organized by the parent company on April 26, 1910 to own the Pennsylvania section of the Baltimore transmission line. Pennsylvania Transmission Company was organized on April 1, 1932 to own the Pennsylvania sections of the Safe Harbor-Westport and Safe Harbor-Riverside trans-

mission lines. The construction of the transmission lines was entirely financed by the parent company.

Other Subsidiary Companies

In addition to its utility subsidiaries, Pennsylvania Water & Power Company during its history organized two other companies which operated briefly. These were the Baltimore Electro Alloys Company, organized in 1915 for the manufacture of electric furnace products, chiefly ferrosilicon, and Holtwood Coal Company, formed in 1920 to develop a river coal market. The Electro Alloys Company discontinued its manufacturing operations in 1919, and after several years of inactivity was liquidated in 1931. Holtwood Coal Company was actively engaged in marketing river coal from 1921 to 1923 and later purchased coal for the parent Company's steam plant. It is now inactive.

[22586] (page 9)

Early History of the Holtwood Project

Promotion

The project for a hydroelectric development at McCall Ferry on the Susquehanna River was originated by Carl T. Hutchinson, an electrical engineer, who began the acquisition of properties and riparian rights on the river about 1901. His early acquisitions included an option on the properties of the York Furnace Power Company, a partnership which controlled the properties necessary for a development originally considered at York Furnace. These properties became the nucleus of the project which was finally located a few miles downstream at McCall Ferry.

In order to secure the right to build his dam, Hutchinson on September 2, 1902 formed two water power companies, Hillside Water and Power Company and Susquehanna Water and Power Company, located on opposite sides of the Susquehanna River in Lower Chanceford Township, York County and in Martic Township, Lancaster

County, Pennsylvania. His efforts to secure absolute control of the river above McCall Ferry were blocked by the Harlow-McGaw interests who were primarily interested in a development lower down on the river but owned an old canal which extended along the west bank of the river from Havre de Grace, Maryland, to Wrightsville, Pennsylvania. These canal rights were absolutely essential to Hutchinson's project. Failing in an attempt to have the canal charter rescinded, Hutchinson on April 14, 1903 entered into an agreement with the Harlow-McGaw interests under which he would be able to secure the necessary canal rights to build his dam in return for certain cash payments, some property transfers [22587] (page 10) on the lower river and the withdrawal of his interference at all other places on the river. Originally for six months, this agreement was extended to May 15, 1905. The agreement, although never carried out enabled Hutchinson to go ahead with his project.

Formation of Initial Syndicate

In February or March 1905 a syndicate was formed for the financing of the McCall Ferry project, managed by Henry F. Dimock (Hutchinson's father-in-law), S. R. Bertron (of Bertron, Storrs and Griscom, Bankers), and Charles F. Barney (President of Knickerbocker Trust Company), and a combined prospectus and underwriting agreement was issued dated March 1, 1905. This agreement proposed an initial development of 50,000 horsepower at McCall Ferry to be financed by the sale of $8,000,000 of 5% thirty-year bonds at 90 with a 50% stock bonus consisting of $4,000,000 of 5% cumulative preferred stock. The agreement was to become effective when subscriptions for $6,000,000 of bonds had been received. $4,000,000 of common stock was also proposed to be issued.

The chief financial interests behind the original underwriting were Bertron, Storrs & Griscom and Lee, Higginson & Company.

Harvey Fisk & Sons Enters Syndicate

In order to secure sufficient subscriptions, the original syndicate found it necessary to enlist the aid of Harvey Fisk & Sons of New York City. The exact nature of the arrangements made with the latter firm are obscure because no agreement has been found, if any existed, covering their arrangements with the original syndicate. However, Harvey Fisk & Sons apparently became Syndicate Managers and Bankers and on March 25, 1905 issued a Bond and Stock Purchase [22588] (page 11) Agreement between themselves as "Bankers" and the subscribers, severally, proposing the organization of a company to develop the McCall Ferry site, capitalized substantially as in the original plan but calling for a 45% Preferred Stock Bonus instead of a 50% bonus with the sale of the bonds, and for the present issuance of the entire $5,000,000 of Common Stock instead of $4,000,000 as proposed earlier. Harvey Fisk & Sons stated in the Bond and Stock Purchase Agreement that they "have been requested and are willing to aid in financing the said plan to the extent of taking agreements from the Subscribers for the purchase of bonds and preferred stock of the Power Company, of acquiring the bonds and stocks for delivery under such purchase, and of making or procuring the loans hereinafter mentioned." It was also stated in the agreement that the Bankers do not "assume any fiduciary relation of any kind, or any obligation to cause the plan aforesaid to be undertaken or carried out." Harvey Fisk & Sons performed the usual functions of a syndicate manager and banker. The firm subscribed to $100,000 principal amount of bonds.

Subscribers had the option of deferring payment of their subscriptions for at least three years after the initial installment of 20% had been paid, to be financed by loans to be secured by the Bankers, and the Bankers had the option, at any time before final delivery, to repurchase from Subscribers all or any part of their bonds at 90. This

option would permit the Bankers to sell the bonds at a profit if the opportunity arose before final delivery of the securities.

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The subscriptions secured by the original syndicate (about half of the total) were apparently kept in force under the new arrangement and appear to have received the full 50% preferred stock bonus called for under the earlier plan.

Incorporation of McCall Ferry Power Company

On April 14, 1905 the two water power companies which Hutchinson had formed in 1902, The Hillside Water and Power Company and Susquehanna Water and Power Company, were merged to form the McCall Ferry Power Company by an exchange of one share of stock in the new company for each share of the outstanding stock of the old companies (5 shares each). The new company had the same incorporators, stockholders, directors, and officers as its predecessor companies, all nominees of Cary T. Hutchinson and his associates.

The initial capitalization of McCall Ferry Power Company was 10 shares, par value $100 each, but was increased to the following on June 13, 1905:—

First Mortgage 5%, 30 Year Bonds, dated June 15, 1905	$10,000,000
5% Cumulative Preferred Stock, $100 Par Value	5,000,000
Common Stock, $100 Par Value	5,000,000

Management of McCall Ferry Power Company

The management of the company was in the hands of its officers and directors, with an Executive Committee meeting frequently and performing most of the functions of the directors. They had the assistance of a Board of Advisory Engineers appointed by the directors.

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The initial members of the Executive Committee and their business or other connections are given below:

H. F. Dimock	Hutchinson's father-in-law
C. A. Coffin	President of General Electric Co.
Gardiner M. Lane	Lee, Higginson & Company, Bankers
William M. Barnum	Harvey Fisk & Sons, Bankers
W. Barclay Parsons	Consulting Engineer

S. R. Bertron of Bertron, Storrs & Griscom replaced Gardiner M. Lane on the Committee in September 1905.

It is apparent from the above that all interests shared in the direction of the enterprise. The promoters were represented by H. F. Dimock, the original syndicate by Gardiner M. Lane (later S. R. Bertron), and Harvey Fisk & Sons by William M. Barnum. C. A. Coffin was identified with the original syndicate. W. Barclay Parsons was a member of the Board of Advisory Engineers. The examiners found no evidence that any one interest was primarily responsible for the management of the project or dominated it to the exclusion of the others. The active day by day management of the Company, including supervision of the construction work, was exercised by its officers.

The principal officers during the period of active construction were as follows:

President	H. F. Dimock
Vice President	J. A. Keppelman (later J. W. Kirkland)
Treasurer	W. H. Barnum
Secretary	Harold Pender
Chief Engineer	Cary T. Hutchinson

The company's stock was held in a voting trust formed under the terms of a stock agreement dated January 20, 1906 with H. F. Dimock, William M. Barnum and S. R. Bertron as the voting committee.

[22591] (page 14)

Acquisition of the Harlow-McGaw Properties

The distribution of the plans for the McCall Ferry project caused the Harlow-McGaw interests to protest to Harvey, Fisk & Sons that the proposal exceeded the limits intended by their agreement of April 14, 1903 and conflicted with their own plans for the development of the entire river from tidewater to Columbia by means of a series of five dams. Negotiations between the parties resulted in two agreements dated April 27, 1905 whereby Harlow-McGaw agreed to sell their entire interest along the river from Columbia to Havre de Grace to Harvey Fisk & Sons and S. R. Bertron for $200,000 in cash and $250,000 principal amount of bonds and $100,000 par value of common stock of McCall Ferry Power Company. These agreements superseded the April 14, 1903 agreement between Harlow-McGaw and Hutchinson and gave the McCall interests control of the vital west bank canal from tidewater to Wrightsville. The agreements were subject to a prior option for the river properties which Harlow-McGaw had granted to Charles D. Pullen who had also been attempting a consolidation of the conflicting interests along the river. The Pullen options were purchased by Bertron, Storrs and Griscom on April 29, 1905 for $10,000 in cash and the promise to deliver $15,000 par value of common stock of McCall Ferry Power Company.

Incorporation of Susquehanna Contracting Company

To provide a vehicle for the refinancing of the project, Susquehanna Contracting Company was organized in New York on June 12, 1905 with a capital of $500 divided into five shares of $100 each. The original directors, stockholders and officers of the company were as follows:

[22592] (page 15)

Name and Position Held	*Shares Held*
A. P. Bartlett, President and Director	3 shares
Ross A. Mackey, Secy-Treas. and Director	1 share
James E. Hopkins, Director	1 share

Shortly after its formation Harvey Fisk & Sons transferred to the new corporation the firm's entire rights and obligations under the Bond and Stock Purchase Agreement, but retained the right to repurchase the bonds from the subscribers at 90. The agreements for the purchase of the Harlow-McGaw properties and the Pullen options were also assigned to the Contracting Company.

Transfer of Properties to McCall Ferry Power Company.

On June 13th, the day following its incorporation, Susquehanna Contracting Company entered into an agreement with McCall Ferry Power Company whereby it agreed to transfer to the latter company all the properties and options to be acquired from Cary T. Hutchinson and associates, Harlow-McGaw, and Charles Pullen and to pay $6,400,000 in cash within three years as required by McCall Company, in exchange for $8,483,000 principal amount of 5% bonds, $4,116,500 par value of preferred stock and $4,999,000 par value of common stock of McCall Ferry Power Company. It was further agreed that the Contracting Company would refund to McCall Company the excess of bond interest received from McCall over interest and commissions paid by the Contracting Company in obtaining loans to finance the project.

Acquisition of Cary T. Hutchinson Properties.

On the following day, June 14, 1905, the Contracting Company entered into a contract whereby Cary T. Hutchinson was to transfer to the Contracting Company all property rights owned by him [22593] (page 16) or his associates on the Susquehanna River between Columbia and Havre de Grace, in exchange for $750,000 in cash and

$400,000 par value of preferred stock and $4,884,000 par value of common stock of McCall Ferry Power Company.

Distribution of McCall Company Securities

The execution of the above contracts left McCall Company in possession of most of the lands and riparian rights necessary for the construction of its project, and the right to call on Susquehanna Contracting Company for $6,400,000 cash for construction costs. The distribution to be made of McCall Company's securities on the basis of the various contracts already signed was as follows:

	Shares		*Principal*
	Common Stock	*Preferred Stock*	*Amount Bonds*
Issued in exchange for Cary T. Hutchinson's stock in merged predecessor companies	10		
Issued to Susquehanna Contracting Company in exchange for properties—			
Cary T. Hutchinson	48,840	4,000	
Harlow-McGaw Interests	1,000		$ 250,000
Charles D. Pullen	150		
Retained for Bond Subscriptions		37,165	8,233,000
	50,000	41,165	$8,483,000

Hutchinson apparently did not retain all the securities due him under his agreement with the Contracting Company but the circumstances of the ultimate distribution of the shares are not known definitely since none of the existing agreements cover this phase of the transaction. The common stock was held in a voting trust and the trustee's records are not available.

[22594] (page 17)

The common stock certificate book shows two certificates issued to the Contracting Company in August 1905; one for 18,840 shares and the other for 30,000 shares. No further change took place in these certificates until 1909 when 1,000 shares were issued to Thomas Newhall and another 1,000 shares to Lorenzo Semple in May and July respectively from the certificate for 18,840 shares. Photostatic copies of Bertron, Storrs & Griscom's investment records secured by the Company show the receipt of 12,462½ shares of common stock of which 5,000 shares were later transferred to Lee, Higginson & Company. Presumably, these represent part of the shares due Hutchinson under the contract of June 14, 1905. The distribution of the preferred stock due Hutchinson is similarly obscure.

Sale of Properties Below the Tailrace.

The properties acquired from the Harlow-McGaw interests were equally useful for the upper river development which was later made at Safe Harbor and the lower development now existing at Conowingo, since the Susquehanna and Tidewater canal extended along the river from Havre de Grace to Wrightsville. The McCall Company actively considered a development near Conowingo to be undertaken after the completion of the dam at McCall Ferry and made some studies to that end. In drawing up the agreement for the relocation of the Columbia and Port Deposit Railroad, provision was made for the eventual relocation of the railroad when the lower dam was built. In addition to the west bank canal, the McCall Company owned a large part of the additional properties which would be required for the Conowingo dam. Most of these had been [22595] (page 18) acquired from Harlow-McGaw.

In July 1906, Susquehanna Power Company, a competing interest on the lower river with which James H. Harlow had become associated, instituted condemnation proceedings against that portion of McCall Company's properties on the lower river lying in Maryland which

would be required by a dam Susquehanna proposed to erect to elevation 65, a half mile above Shure's Landing near Conowingo. This dam would back water almost to the Pennsylvania State line in flood time. McCall Company fought the suit, complaining that it interfered with their own plans at Conowingo and would render valueless the remainder of their property rights between the Pennsylvania State line and the McCall Ferry tailrace. The case was decided against the McCall Company in the lower courts, but before a final decision had been handed down on an appeal, a consolidation of all competing interests on the lower river had been effected through negotiations undertaken by Bertron, Storrs & Griscom who had in the meantime secretly secured control of a third competitor for the lower river rights, Susquehanna Electric Power Company. The consolidation was accomplished by an agreement dated February 20, 1908, modified on June 30, 1908, whereby the competing interests were to transfer their holdings on the river from tidewater to elevation 103 to Susquehanna Power Company and its subsidiary Sowego Water and Power Company, and in return were to receive General Mortgage 5% bonds and the entire outstanding capital stock of Susquehanna Power Company in proportion to the amount of the fall in the river between elevation 12 and elevation 103 which each interest was deemed to control, as follows:

[22596] (page 19)

		Shares Stock	Bonds
McCall Ferry Power Company	38/91	1,670	$ 760,000
Susquehanna Power Company	30/91	1,319	600,000
Susquehanna Electric Power Company	23/91	1,011	460,000
		4,000	$1,820,000

The McCall Company's share was based on the fall in the river between their tailrace (elevation 103) and the Pennsylvania State line (elevation 65). None of these properties had been included in the condemnation proceedings.

The entire capital stock of Susquehanna Power Company was to be exchanged for an equal number of shares of a new holding company to be formed under the name of Susquehanna Properties Company. After the deduction of a portion of the securities for legal fees, etc., McCall Company received 1,500 shares of capital stock of Susquehanna Properties Company and $703,000 principal amount of the General Mortgage 5% bonds of Susquehanna Power Company.

Financing of the McCall Ferry Project

The construction of the project was financed through Susquehanna Contracting Company with funds secured by payments received on bond subscriptions and from loans secured from Knickerbocker Trust Company upon the pledge of deferred bond purchase agreements. A total of $8,075,000 principal amount of bonds was subscribed, divided into $6,180,000 of deferred subscriptions and $1,895,000 of non-deferred subscriptions. This provided total funds of $7,267,500 of which $2,817,900 was paid in on subscriptions and $4,449,600 was borrowed from Knickerbocker Trust Company. An additional $250,000 principal amount of bonds was issued to Harlow-McGaw in part payment for properties acquired.

[22597] (page 20)

A $400,000 loan was secured by Contracting Company on October 28, 1908 from four of the principal syndicate participants, ($100,000 each from Harvey Fisk & Sons, Lee, Higginson & Company, Bertron, Storrs & Griscom and C. A. Coffin) upon pledge of $702,000 principal amount of McCall Company bonds, a $25,000 mortgage of the Conowingo Land Company, and the McCall Company's equity in

a $250,000 railroad relocation deposit. The Contracting Company had only $158,000 of bonds left from the original financing but acquired $544,000 additional from McCall Company and the right to pledge the railroad relocation deposit, under two agreements dated October 20, 1908 whereby the Contracting Company cancelled all indebtedness due from McCall Company (totalling $566,750) and agreed to pay that company $62,000 in cash and transfer certain additional property rights which had cost the Contracting Company $55,853.00. The indebtedness cancelled consisted of $130,000 cash advanced to McCall Company against its note and $436,750 due on open account for unpaid bond interest.

Construction Activities

Upon the advice of its Board of Advisory Engineers, McCall Company undertook to construct the dam itself. The Executive Committee employed Hugh T. Cooper (who had resigned from the Board of Advisory Engineers to make a proposition) as Hydraulic Engineer and Manager of Construction and employed Sanderson & Porter as Superintendent of Electrical Construction. Clearing of the site for the dam started on October 24, 1905, but actual construction did not get under way until 1906.

[22598] (page 21)

The McCall Company agreed to relocate the existing single track line of the Columbia and Port Deposit Railway Company on the East Bank of the river by constructing a new double track roadbed and a single track. The railroad was to pay McCall Company $200,000 when it made use of the roadbed for a second track. McCall Company provided a cash deposit of $250,000 with the Knickerbocker Trust Company as a bond for faithful performance of its contract.

H. S. Kerbaugh, Incorporated, was employed to do the railroad relocation work for a lump sum of $1,250,000. Other large contracts were executed in 1907 with I. P. Morris

Company for turbines and with General Electric Company for generators and switchboards.

It had originally been estimated that construction might be completed and the plant in operation early in 1908. Delays occurred, however, and by May 1, 1907 it was estimated that the first unit might be in operation by June 1, 1908 with all units installed by January 1, 1909.

Financing Difficulties

The original plans for financing the McCall project based on a 155 foot dam with 50,000 horsepower installed plus an auxiliary steam plant became inadequate almost immediately, for on August 8, 1905 the Executive Committee called for bids on a 185 foot dam, and on June 19, 1906 officially adopted a height of 165 feet, either of which would require more funds than had been provided. Although the need for additional funds was recognized, no definite plans were prepared for securing any. On June 5, 1907 when it was apparent that the available cash could not last beyond the Fall the Executive Committee authorized [22599] (page 22) the sale of the Company's treasury bonds at "not less than 90 per cent of its face value with each bond to be given fifty (50%) of its face value in preferred stock." Some preliminary discussions occurred at this time of an additional underwriting proposed for the Fall but no actual underwriting resulted.

Suspension of Work

On November 1, 1907 all construction work on the project and on the machinery contracts was halted except for maintenance and cleaning up work and the placing of a small amount of concrete necessary to protect the existing plant. The suspension was primarily due to the company's failure to provide adequate financing to complete the project although the immediate cause may have been the closing of the Knickerbocker Trust Company on October 21, 1907. This closing temporarily embarrassed the Company

for, although it had no current funds on deposit there, a balance of approximately $345,000 was still due under the loan arrangement with that company. However, no request had been made to the Trust Company for the payment of the balance due, and by December 7, the Receivers for the Trust Company had taken steps to complete the loan originally agreed upon. McCall Company also had available for call at this time, the balance of $164,700 due on the non-deferred bond subscriptions. The sum of these amounts, however, was totally inadequate for the completion of the work and although received on January 8, 1908 the work suspension was not lifted. Construction work was not thereafter resumed, except for some excavation of the tailrace, until the project was reopened by the Receiver for the McCall Company in the Fall of 1909.

[22600] (page 23)

A skeleton organization was maintained throughout the period of suspension until November 1, 1908 when all employees were discharged except for a few men to care for the property at McCall Ferry and a few administrative employees in New York.

Formation of the Bondholders' Committee

In anticipation of the default on the McCall Company bond interest payment due on December 15, 1908, the leading syndicate participants, Harvey Fisk & Sons, Lee, Higginson & Company, Bertron, Storrs and Griscom, H. F. Dimock, and C. A. Coffin, formed a bondholders' committee on December 7, 1908, consisting of William M. Barnum, A. C. Bedford, S. R. Bertron, Charles A. Coffin, and Gardiner M. Lane, who resigned from their positions as directors of the McCall Company and invited the deposit of McCall Company bonds and preferred stock under the terms of a preliminary agreement dated December 7, 1908.

The committee investigated several reorganization plans and finally adopted one submitted by J. E. Aldred,

President of Shawinigan Water and Power Company, which was embodied in a "Memorandum of Understanding" dated April 24, 1907 between Aldred and the Committee. Under the terms of this agreement a new company was to be formed (or the old one recapitalized) with a total capitalization consisting of $8,500,000 par value of capital stock and $12,500,000 principal amount of First Mortgage 30 year 5% Bonds. The $8,325,000 principal amount of McCall Company bonds outstanding were to be exchanged for 40% of new bonds. ($3,330,000) and 60% of new stock ($4,995,000). An additional $4,000,000 of bonds and $3,500,000 [22601] (page 24) of stock were to be used for construction and other corporate purposes. It was agreed that "Mr. Aldred will use his best efforts to sell $4,170,000 of new bonds at 90% of their par value, * * * and the said $3,500,000 of stock shall go to him for use in connection with the sale of such bonds, or otherwise as he may determine." All stock was to be placed in a voting trust for three years from November 1, 1909, two of the trustees to be nominated by Aldred and one by the Committee.

A voting trust was considered necessary to protect the new interests, who would own less than 50% of the stock, by giving them stock control of the Company until the project was completed and in successful operation.

A "Plan and Agreement" was issued by the Committee on May 28, 1909 with substantially the same financial provisions as were contained in the "Memorandum of Understanding" and became effective July 1, 1909.

Receivership and Resumption of Construction

Foreclosure proceedings were brought against McCall Ferry Power Company on July 13, 1909 on behalf of the depositing bondholders because of the default on the bond interest due December 15, 1908. The McCall Company admitted the allegations of the bill of complaint and on July 17 J. E. Aldred was appointed Receiver. In accordance with the Plan and Agreement, Aldred made arrangements to reopen the project. On August 16, 1909 The Empire

Engineering Corporation was employed for a fee of $60,000 to complete the hydraulic construction which Cooper had originally undertaken and been paid for. Empire [22602] (page 25) immediately started to get the project in shape for renewed construction after its long shut down. No substantial amount of work was done until September, but construction thereafter continued first during the receivership and later under the direction of Pennsylvania Water & Power Company, until the plant was completed.

Financing of Construction

It had originally been planned that construction work would be carried on during the receivership with funds advanced by a new Syndicate against Receiver's Certificates which would constitute a first lien on the property. On legal advice that such a lien would not rank ahead of non-assenting bonds and would give no security beyond that which could be given by the Committee itself, it was decided that the Syndicate would make the required advances against notes to be issued by the Committee, secured by the deposited McCall Company bonds. This plan would obviate any trouble or delay involved in applications to the Court.

The Committee obtained loans of $1,100,000 from Montreal Trust Company and the Bank of Scotland who were acting on behalf of the Syndicate participants. Of this amount $450,000 was advanced to Aldred up to December 31, 1909. The balance was used to buy the $400,000 outstanding note payable of Susquehanna Contracting Company held by the old McCall Company syndicate members, to settle outstanding obligations of McCall Company, and to pay the Committee's own expenses.

Because the use of Receiver's Certificates was discarded, Aldred in submitting a report of his activities to the court and to Pennsylvania Water & Power Company and the Bondholder's Committee, [22603] (page 26) segregated his expenditures in connection with construction, acquisition of rights of way and purchase of undeposited Mc-

Call Company securities, from purely maintenance expenditures which he classified as receivership expenses. This was undoubtedly done because of his failure to request Court approval for the issue of Receiver's Certificates. This segregation was not maintained on the Receiver's books.

Aldred's expenditures were financed entirely from funds received from the McCall Ferry Power Company and Committee advances. He used none of his personal funds for this purpose and incurred no liabilities without the backing of the Committee. Most of the larger contracts made during this period were either signed by Aldred as Receiver, or provision was made for his release from personal liability through assignment to the Bondholders' Committee or the new company. Aldred received a fee of $7,000 for his services during this period.

Sale of McCall Ferry Power Company Properties

The property of McCall Company was sold at public auction on December 7, 1909 for $2,000,000 to William M. Barnum acting for the Bondholders' Committee. The Court ordered the distribution of the proceeds pro rata to the bondholders. This was accomplished by cancelling the past due interest coupons and stamping the McCall Company bonds with the proportion of the sale price and Receiver's funds applicable to each. The transfer of the properties to Pennsylvania Water & Power Company did not take place until January 13, 1910.

Underwriting of Pennsylvania Water & Power Company Bonds

Bondholders of McCall Company subscribed to $500,000 principal amount of the total amount of $4,170,000 of bonds which Aldred had undertaken to sell. One-half of the balance, or $1,835,000, was underwritten [22604] (page 27) by a syndicate formed in England by Kitcat & Aitken whom Aldred had interested in the proposition. Subscriptions for the remaining $1,835,000 of bonds were secured, mainly

in Canada, by Aldred and two associates, E. R. Wood, Vice President of the Dominion Securities Corporation of Toronto, and H. S. Holt, President of Montreal Light, Heat & Power Company.

The entire $4,170,000 principal amount of bonds was sold at 90. With these bonds went a 50% stock bonus totaling $2,085,000 par value of capital stock, leaving $1,415,000 par value remaining of the original total of $3,500,000 placed at Aldred's disposal. These were divided among the chief participants in the underwriting as a special bonus for carrying out the refinancing as follows:

J. E. Aldred	$ 655,000
Kitcat & Aitken	457,500
E. R. Wood	152,500
H. S. Holt	150,000
Total	$1,415,000

Aldred retained a proportionately greater amount of the capital stock than he allotted to his associates, presumably in recognition of his leadership in the financing operations. The "Memorandum of Understanding" had placed no restriction on Aldred's distribution of these shares and he had undertaken no obligation therein except to sell the required amount of bonds. With the completion of the financing Aldred had completed his part of the bargain and the capital stock was his unconditionally.

Organization of Pennsylvania Water & Power Company

Pennsylvania Water & Power Company was organized by the members of the Bondholders' Committee with an authorized capital stock [22605] (page 28) of $8,500,000 at an organization meeting held January 13, 1910. The directors of the new company immediately authorized the issuance to the Committee of $7,580,000 principal amount of 5% bonds and $8,495,000 par value of capital stock of the

Company in exchange for the properties and franchises of McCall Ferry Power Company and the assets remaining in the hands of the Bondholders' Committee, including the unpaid bond subscriptions. The Company also agreed to assume the Committee's obligations under the "Plan and Agreement." The bonds originally issued were to be temporary one year bonds which were to be replaced by 30 year 5% bonds dated January 13, 1910. The directors on January 22, 1910 approved a $12,500,000 bond issue for the above purpose. On March 3, 1910 the Directors approved the assumption of all contracts entered into by Aldred.

The voting trust called for by the Plan and Agreement was formed on January 27, 1910 with J. E. Aldred, W. M. Barnum and C. E. F. Clarke, Treasurer of the Company, as trustees.

Temporary directors were elected on January 13, 1910 who were replaced on March 3, 1910 by the following persons:

J. E. Aldred	W. M. Canby	S. L. Lewis
R. M. Aitken	A. V. Davis	F. C. McCown, Jr.
Wm. M. Barnum	R. E. Griscom	M. E. Olmsted
A. C. Bedford	H. S. Holt	E. R. Wood
C. E. F. Clarke	G. M. Lane	W. R. Warren

An Executive Committee was also elected on March 3, consisting of the following persons:

J. E. Aldred	A. C. Bedford	W. M. Barnum
C. E. F. Clarke	E. R. Wood	

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Management of Pennsylvania Water & Power Company

In making his proposition to the Bondholder's Committee, for the refinancing of McCall Ferry Power Company, Aldred suggested that, inasmuch as the new interest would be in the minority, an arrangement be made to pool

the shares in the hands of a committee of management, to retain control until the project was completed successfully. The opportunity to share in the management was a privilege which was advantageous to Aldred and his associates in the underwriting, for in order to realize on the stock they would receive under the refinancing, it was necessary that the new company be placed on a profitable operating basis.

Aldred became President of Pennsylvania Water & Power Company upon its inception in January 1910 at a salary of $10,000 a year. So far as is known no management contract existed requiring Aldred to devote his services to the Company. He was at liberty to resign at any time.

Distribution of Pennsylvania Water & Power Company Securities

A summary of the distribution of the securities of Pennsylvania Water & Power Company is given in the following table:

	Bonds	Stock
Exchanged for $8,325,000 McCall Company Bonds	$3,330,000	$4,995,000
New Subscriptions to Bonds at 90 (with 50% stock bonus)	4,170,000	2,085,000
Special Stock Bonus Issued to Underwriters:		
J. E. Aldred		655,000
Kitcat & Aitken		457,500
E. R. Wood		152,500
H. S. Holt		150,000
	$7,500,000	$8,495,000

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Only $8,259,000 principal amount of McCall Company bonds were deposited for exchange. The $66,000 of undeposited bonds were purchased for cash by J. E. Aldred, Receiver, prior to January 1, 1910. The $39,600 of new stock and $26,400 of new bonds exchangeable therefor were treated as treasury stock and bonds by Pennsylvania Water & Power Company.

Transmission Companies

McCall Ferry Power Company organized separate companies during 1907 and 1908 in each of the Maryland Counties and Pennsylvania Townships through which the transmission line to Baltimore would pass, as follows:

	Incorporated Date	State	Capital Stock Authorized	Issued
Susquehanna Pole Line Company of Baltimore County	6/27/07	Maryland	$50,000	$500
Susquehanna Pole Line Company of Harford County	8/13/07	Maryland	50,000	500
Lower Chanceford Township Transmission Company	11/18/08	Penna.	5,000	500
Peach Bottom Electric Transmission Company	11/18/08	Penna.	5,000	500

Expenditures totaling $100,134.91 were made for rights of way by McCall Company prior to the Receivership. These were carried on its books as an advance to Susquehanna Pole Line Co. of Baltimore County.

Merger of Pole Line Companies

The Maryland Pole Line Companies were merged on April 19, 1910 under the laws of the State of Maryland to form Susquehanna Transmission Company of Maryland.

The Pennsylvania companies were merged on April 26, 1910 under the laws of the State of Pennsylvania to form Susquehanna Transmission Company of Pennsylvania. In each case one share of the stock of the new company was given in exchange for two shares of stock of the merged companies.

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Plant Investment

General

This section deals with the Companies' investment in Electric Plant and the adjustments made by the examiners to reduce the amounts recorded on the books to original cost as at December 31, 1945. Schedule 2 summarizes the plant as recorded on the books and as adjusted by the examiners. Schedule 3 shows a summary of Electric Plant in Service as reclassified by the Company in its original cost studies, reconciled with the original cost as determined by the examiners.

A summary of the consolidated Electric Plant Accounts as at December 31, 1945, per books and as adjusted, is given below:

	Per Books	Examiners' Adjustments	As Adjusted
Electric Plant			
In Service	$ 5,244,832	$(3,596)	$ 5,241.236
In Process of Reclassification	33,339,399	(5,659,897)	27,679,502
Subtotal	38,584,231	(5,663,493)	32,920,738
Construction Work in Progress	237,362		237,362
Held for Future Use	2,196	75,722	77,918
Total	$38,823,789	$(5,587,771)	$33,236,018

The details of construction work in progress at December 31, 1945 are shown on Schedule 4. The details at December 31, 1944 and 1943 are shown on Schedules 5 and 6, respectively. A summary of Plant Held for Future Use, showing the purpose for which it is held, is shown on Schedule 7.

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The examiners' adjusting entries are listed on Schedule 8 with a recapitulation on Schedule 9. Schedules 10 to 27 contain supporting details of the adjustments. A further explanation of the more important adjustments is given in the following paragraphs:

Acquisition of Properties on January 13, 1910
(Entry No. 1—$4,770,379.07)

The amount of $11,946,831.77 charged to plant account on the books of Holtwood to record the transfer of properties on January 13, 1910 from the Bondholders' Committee of McCall Ferry Power Company represented the excess of the face and par value of the securities issued to the Committee over the amount recorded on the books for the other net assets acquired. (Schedule 10) The examiners have substituted $7,472,991.83, being the original cost of the properties, including an allowance for interest during construction.

McCall Ferry Power Company: In determining the original cost of the properties acquired from this company, bond expense and cessation costs have been eliminated so far as could be determined, and the general overheads applicable to the period of suspension of construction from November 1, 1907 to September 1, 1909 have been disallowed as not proper construction costs.

During the period of suspension overheads which could be considered to contribute directly to construction work without duplication, have been allowed. In this category are the expenses [22610] (page 33) of the hydraulic de-

partment (consisting mainly of the salaries of foremen, draftsmen, watchmen, the local office personnel and the hydraulic construction superintendent) who were actually engaged in the limited amount of work done on the tailrace excavation from May to October 1908. Although the period of activity is limited as stated, the examiners have allowed the hydraulic department expenses for the full suspension period in order to provide a liberal allowance for contingencies and delayed items including any repair work on construction equipment, etc.

Taxes paid during the suspension period were largely applicable to the period prior to November 1, 1907 and have been allowed as has the New York Office expense of Sanderson & Porter, apparently representing the time and expenses of draftsmen engaged on drawings of electrical equipment. Legal expenses were probably increased by the Company's financial difficulties but the entire amount has nevertheless been allowed because of the examiners' inability to make any segregation on the basis of the available information. (Schedules 12, 12a) The engineering experts' salaries disallowed include payments made to Hugh L. Cooper and Sanderson & Porter covering the period of suspension. (Schedule 12b) These are discussed below under "Bondholders' Committee."

J. E. Aldred: The entire expense of the receivership period has been allowed with the exception of $5,000 paid to Cary T. Hutchinson, covering back salary due him during the period of suspension. The expenses prior to September 1, 1909, the date of [22611] (page 34) full resumption of work on the project, have been allowed as an offset against any delayed items at the beginning of the period of suspension. (Schedule 13)

Bondholders' Committee: The examiners have disallowed the payments made to Hugh L. Cooper, manager of hydraulic construction, and Sanderson & Porter, superintendent of electrical construction, covering the period of

cessation, since they did not complete the work for which they had contracted. Sanderson & Porter's contract called for a flat fee of $50,000 payable in thirty-eight equal monthly installments from November 1, 1905 to December 1, 1908. Cooper's contract called for a flat fee of $100,000 payable in twenty-five equal monthly installments beginning November 1, 1905, with a bonus of $30,000 payable in monthly installments of $4,000 each beginning January 1, 1908 if the work had reached a specified stage of completion. A fee of $60,000 was later paid to The Empire Engineering Corporation to complete the hydraulic construction started by Cooper.

Sanderson & Porter had contracted to prepare plans and superintend all electrical construction including transmission lines and substations, none of which had been installed when the work was suspended. The electrical construction and installation was finally supervised by Pennsylvania Water & Power Company employees with the assistance of R. S. Kelsch, consulting engineer.

Since the reorganization effected by the Bondholders' Committee was primarily a matter of refinancing, it is probable [22612] (page 35) that a portion of the reorganization expenses should be treated as a financial expense, but for the purpose of these proceedings the entire amount, not disallowed, has been treated as a capital charge subject to the Commission's review. (Schedule 14)

Property Acquired from Susquehanna Contracting Company: The original cost of the property and riparian rights acquired by the McCall Ferry Power Company from its associated company, Susquehanna Contracting Company, has been determined by an examination of the purchase contracts made by the Contracting Company, which merely acted as a vehicle for the acquisition of the properties and their transfer to the McCall Company. (Schedule 12c)

Cary T. Hutchinson Properties: This acquisition represented, essentially, a transfer by Hutchinson in 1905 of

properties and options held by him individually to the McCall Company, which he and the associated Bankers controlled, by using the Susquehanna Contracting Company as a conduit. The price paid, consisting of $750,000 cash, in addition to $4,884,000 par value of common stock and $400,000 par value of preferred stock of McCall Ferry Power Company, was not the result of arm's-length bargaining and should be disregarded in determining original cost. (Schedule 12c)

Proof of the cost of the properties to Cary T. Hutchinson has not been presented to the examiners who were informed that Hutchinson's records could not be located. In the absence of this information the examiners have allowed the cash consideration of $750,000 paid to Hutchinson. This amount is ample when the known prices paid by Hutchinson for some of the properties acquired by him are considered.

[22613] (page 36)

Harlow-McGaw Properties and Pullen Options: The examiners have allowed the cash cost of these properties, plus a valuation of 90 for the $250,000 principal amount of McCall Company bonds given as part consideration, representing the price at which the remainder of the bonds had been subscribed. No cash value has been proven for the 1000 shares of common stock given to Harlow-McGaw and the 150 shares given to Charles Pullen, and none has been allowed. (Schedule 12c) At that time there was no market for the stock and no known sales. None was ever issued for cash. In fact the 1150 shares given in connection with these purchases plus the 48,850 shares issuable to Hutchinson in connection with the acquisition of his properties and the incorporation of McCall Ferry Power Company, comprised the entire authorized common stock.

In April 1905 when these contracts were made, the McCall Company had no tangible assets, and in June 1905 when the purchase prices were paid, it had no source of

revenue except bank interest. Its only assets consisted of the various properties to be secured from Hutchinson and Harlow-McGaw, and the right to receive $6,400,000 cash for construction purposes from Susquehanna Contracting Company. Construction was not started until October 1905. At the date of execution of the contracts the common stock appeared to represent only a speculative interest in the future profits of the project if built, and if successful in earning a return above the heavy prior charges for bond interest and preferred stock dividends.

[22614½ (page 37)

There is a complete absence of proof that any cash could have been realized for the stock at the time it was issued—the criterion of cash value under Electric Plant Accounts Instruction 3-D of the Commission's system of accounts. And it is significant that neither the common nor the preferred stock of the McCall Company were allotted any value in the reorganization of the company in 1909.

Sale of River Property Below the Dam: The examiners have reduced the cost of properties and riparian rights acquired through Susquehanna Contracting Company by $200,000 to reflect the transfer in 1908 by McCall Ferry Power Company of its property and riparian rights on the Susquehanna River below its tailrace to the Susquehanna Power Company interests in exchange for $703,000 principal amount of General Mortgage 5% Thirty-Year Bonds of Susquehanna Power Company and 1500 shares of capital stock of Susquehanna Properties Company. No entry was made in McCall Company's books of account to record the transfer of the properties.

The securities were sold by Pennsylvania Water & Power Company in March 1912 to Bertron, Griscom & Jenks, for $200,000 in cash. Susquehanna Power Company at that time was in serious financial difficulties which re-

sulted in an application for receivership for the company in July 1912, and the subsequent public sale of its entire assets on February 24, 1913, by order of the court, to the nominee of the interests holding the general [22615] (page 38) Mortgage bonds and certain creditors. In view of the financial condition of the company at the date of the sale of the securities by the Pennsylvania Water & Power Company, it is considered that their value in 1908, when they were first issued, must have been at least as great, if not greater, but the examiners have only applied the smaller amount in reduction of the cost of the project.

Interest During Construction to December 31, 1910 (Entries Nos. 1 and 2)

Interest has been calculated by the examiners at 6% on the allowed construction costs for the actual construction period from April 14, 1905 to December 31, 1910, exclusive of the period of suspension which lasted from November 1, 1907 to August 31, 1909. An allowance at the same rate has also been made for working capital during the construction period. (Schedules 15 and 16)

Interest during construction is an allowable addition to plant cost only during the period which contributes to the completion of the project through unretarded construction activity, and during the necessary preliminary period prior to the beginning of construction.

The interest rate was determined after a study of the loans outstanding during the construction period, which averaged somewhat less than 6% as shown by the following table:

[22616] (page 39)

	Actual Interest Rate	Largest Amount Outstanding	Annual Interest Charge	Average or Effective* Rate
Period Apr. 1905 to Nov. 1, 1907				
Loans and Advances—				
Payments by Non-deferred Subscribers.	5%	1,526,400	76,320	
Payments by Deferred Subscribers	5%	1,112,400	55,620	
Knickerbocker Trust Co. Loan	6%	3,909,600	234,576	
Knickerbocker Trust Co. Comm.	½%		22,410	
Total Loans and Advances		6,548,400	388,926	5.94
McCall Ferry Power Co. 30 year bonds (at 90)	5%	250,000	12,500	5.70*
Period Sept. 1, 1909 to Dec. 31, 1909				
Loans and Advances—				
Loans from Syndicate Participants (Period Oct. 28, 1908 to Oct. 15, 1909)	6%	400,000	24,000	
Payments by P. W. & P. Co. Bond Subscribers (Period July 1, 1909 to Dec. 31, 1909)	5%	1,442,875	72,144	
Total Loans and Advances		1,842,875	96,144	5.22
McCall Ferry Power Co. 30 year bonds (at 90)	5%	8,325,000	No Interest Paid	
Period Jan. 1, 1910 to Dec. 31, 1910				
Penna. Water & Power Co. 30 year bonds (at 90)	5%	7,473,600	373,680	5.70*

In addition to bonds, Pennsylvania Water & Power Company and the Bondholders' Committee had sundry bank loans outstanding during a portion of the year 1910 at 5% interest, but the total interest paid on these loans would have no significant effect on the average cost of money.

The annual interest charge for loans and advances shown on the above table does not represent actual payments but the annual amount computed on the basis of the largest principal amount [22617] (page 40) outstanding during the period. If the calculation is adjusted to reflect the time that each loan was actually outstanding during the period, the weighted average interest rate on loans and advances becomes 5.98% instead of 5.94% for the period to November 1, 1907, and 5.08% instead of 5.22% for the period from September 1, 1909 to December 31, 1909. The rate of 5.7% shown for bonds represents the effective rate for 30 year 5% bonds sold at 90.

The only bonds outstanding prior to November 1, 1907 were the $250,000 principal amount of bonds given to the Harlow-McGaw interests in part payment for their properties. An additional amount of $1,895,000 was issued to non-deferred subscribers about February 1, 1908 and the balance, $6,180,000, was issued after November 1, 1908 as the individual subscribers paid off their loans to Knickerbocker Trust Company. No bond interest was paid by McCall Ferry Power Company after June 15, 1908.

A comparison of the total interest allowed on construction expenditures by the examiners to December 31, 1910 with the total interest paid by Pennsylvania Water & Power Company and predecessor companies for the same period (including interest paid during the period of suspension) is shown below:

Interest allowed by examiners—	
Period from April 1905 to Dec. 31, 1909, Schedule 15	$ 622,150.87
Period from Jan. 1 to Dec. 31, 1910, Schedule 16	479,232.72
	$1,101,383.59
Interest paid during the period from April 1905 to December 31, 1910 (net)—	
McCall Ferry Power Company—Note (a)	65,271.48
Susquehanna Contracting Company	728,467.36
J. E. Aldred, Receiver	(9,627.14)
Bondholders' Committee	13,807.80
Pennsylvania Water & Power Company	321,725.93
	$1,119,645.43

Note (a): Exclusive of bond interest paid to Susquehanna Contracting Co.

[22618] (page 41)

Interest During Construction—Year 1911 (Entry No. 3—$6,285.22)

The first hydro unit went into operation in October 1910. Four more units, on which construction had commenced in 1910, were completed during 1911 after the close of the initial construction period. The examiners have allowed interest during 1911 on the construction cost of the turbines, generators, and gate mechanisms, (including a proportional part of the cost of the switchboard and accessory electrical equipment) until the end of the month in which each unit went into service. Unit costs installed not being available for each turbine and generator with accessory equipment, the average cost of the first five units has been used in this calculation as determined on Schedule

17a. Overheads have been added at the average rate used for this type of equipment by the company in preparing its plant reclassification studies, reduced to reflect the overhead disallowances made by the examiners.

The interest (as recalculated by the examiners) has been substituted for the interest charged to plant on the books during 1911 as shown on Schedule 17. No interest has been allowed during 1911 on the powerhouse and dam structures which are considered to have been in operation as a whole as of January 1, 1911.

Interest During Construction—Years 1912 to 1945, Inclusive

During the years prior to 1930 the company capitalized interest during construction only when major construction projects were under way. Thus interest was capitalized during the years 1912, 1913, and 1914 and 1923, 1924, and 1925, all representing periods during which additional hydro units were added or transmission lines constructed. During the intervening years no interest was capitalized. [22619] (page 42) Beginning with 1930 the Company has consistently capitalized interest at 6% on the larger plant additions although interest rates are now considerably lower. The examiners have allowed the interest actually capitalized on the books during this period.

Capital Stock Taxes (Entry No. 4—$3,450)

This represents capital stock taxes, and legal expenses in connection therewith, applicable to the period prior to the beginning of operations and are therefore a proper charge to plant account.

Promotion Expenses Disallowed (Entry No. 7—$30,787.34)

These expenses were accumulated in a separate account which was closed at the end of each year to the plant con-

trol account. The examiners have received no adequate explanation of the nature of the promotion involved. The only information received was to the effect that it may represent, to some extent, expenses in connection with the negotiation of power sale contracts. (Schedule 18)

Abandoned Projects Disallowed (*Entry No. 8—$44,173.17*)

This represents the amount expended on preliminary investigations of sundry projects which were later abandoned but not removed from the plant account. (Schedule 19)

Survey of Storage Reservoir Sites: This investigation was made to determine favorable locations for storage reservoirs on the Susquehanna River and its tributaries, above the dam, with secondary consideration being given to their possible use for power development. The Company later abandoned the idea of such a development for itself, but was instrumental in the formation of a Water Conservation Association to work for state assistance in the construction of storage [22620] (page 43) reservoirs. The Association disbanded after legislation which it had supported was defeated.

Lancaster Transmission Line: This represents expenditures made during 1910 and 1911 for the survey and acquisition of right-of-way options for a proposed transmission line to Lancaster to be built by the Company to serve the Edison Electric Company of Lancaster. Contract negotiations were terminated in 1911 and the options allowed to lapse. When a contract was finally signed in October 1912, Edison undertook to build the line itself. Further expenses were incurred by Pennsylvania Water & Power Company in assisting Edison with the construction of the transmission line. These expenses were also charged to plant account and have been disallowed.

Roller Dam Investigation: This represents expenditures made in studies of a proposed roller dam, some fifteen feet high, to be built on the crest of the dam to replace the flashboards previously installed, in order to obtain additional head for the turbines. The project was later abandoned.

Flowage Basin (Entry No. 9—$296,630.42)

For a considerable number of years after it commenced operations, the Company continued to charge to a Flowage Basin Account, not only the cost of additional properties acquired for the reservoir, but large amounts of engineering salaries and expenses, Lancaster office expenses, legal fees and miscellaneous expenses with in most cases no adequate explanation of the nature of the charges. The examiners' investigation of the entries and such additional information as the Company has given has failed to disclose any reasonable basis for their [22621] (page 44) capitalization in plant account. The examiners on Schedules 20 and 21 and supporting schedules, have made a segregation of those charges believed to be a proper charge to plant account, and have disallowed the remainder.

The items allowed include such charges as could be identified as the cost of road and bridge relocations, the first survey of properties, the clearing of the flowage basin, and the purchase of property (including not only the purchase price but the direct costs associated therewith). The items disallowed are believed to be a proper charge to operations or surplus and are summarized below:

	Job Order	Year Expended	Amount Disallowed
Period 1910-1924 (Schedule 20)			
Motion pictures and panorama expense		1919-24	$ 4,098.56
River observations		1911-24	4,988.45
Engineering salaries and expenses		1911-24	45,515.19
Miscellaneous office expenses		1911-23	561.65
Interest		1911-14	3,959.15
Lancaster office expenses, Schedule 20a			
Salary of M. E. Bushong		1916-24	50,423.24
Expenses		1916-24	27,127.82
Sundry legal fees, Schedule 20b		1915-24	36,920.00
Miscellaneous expenses, Schedule 20c		1916-23	14,075.18
Total 1910-1924			$187,669.24
Period 1925-1936 (Schedule 21)			
Lower development studies, Schedule 21a	C-283-8	1925-28	$ 38,804.95
Survey of railroad property north of Holtwood	C-283-11	1925-26	1,764.59
Philadelphia transmission line link (Project abandoned)	C-325	1925-26	8,396.10
Susquehanna River aerial survey	C-370-3	1925	1,631.31
Philadelphia-Safe Harbor transmission line link (project abandoned)	C-326	1925	153.30

	Job Order	Year Expended	Amount Disallowed
McCall Ferry topographical survey	C-613	1927-28	3,658.24
Lancaster office expenses, Schedule 21b	M-387	1926-30	36,959.06
Flowage Basin, Schedule 21b	M-388	1926-29	11,097.67
Extension of triangulation system	C-791	1929-32	3,338.25
Property ties to triangulation system	C-970	1932-34	3,157.71
Total 1925-1936			$108,961.18
Grand Total			$296,630.42

[22622] (page 45)

Engineers' Salaries and Expenses: The nature of the work performed by the engineers whose salaries and expenses are charged to the flowage basin are not given in the original entries in most cases. No time sheets or other data have been submitted to the examiners to support the items except a general explanation of the nature of the charges prepared during 1945 by Mr. R. L. Bortner, Assistant Secretary of the Company. Mr. Bortner's explanation indicates that the work includes high water observations, back water observations, ice observations, water surface readings, river cross sections, topographic surveys, river flow characteristics, rates of run off, establishment of bench marks, property levels, surveys and investigations necessary for the defense of law suits, and property surveys. The distribution of the total cost between the different types of work is unknown. To the extent that these expenses represent the first survey of properties in connection with their acquisition they would represent a proper charge to

plant account. No segregation of the cost of these surveys has been presented if they are in fact included in the total. The Company's classification of accounts provided a separate sub-account for "Surveying Property", and the amounts so segregated have been allowed by the examiners as a proper charge to plant. The entire amount of unclassified engineers' salaries and expenses has been disallowed because it is properly a charge to operations.

Lancaster Office Expenses: This represents the cost of operating the Lancaster office, including the salary of M. E. Bushong, from the time the office was opened in March 1916 until December 1929, with the exception of the months of April and May 1924 when the [22623] (page 46) expenses were charged to the Lancaster Transmission Line, and the period from June 1924 to December 1925 when they were charged to Holtwood Power Company organization expense. A portion of Mr. Bushong's salary for the years 1926 through 1929 was charged to Property Maintenance and Repairs—Supervision. After 1929 the expense of the Lancaster Office was divided between Pennsylvania Water & Power Company, Safe Harbor Water Power Corporation, various construction job orders, and property maintenance. Since 1933 it appears to have been charged entirely to operating expenses of the two corporations.

The Company claims that the main function of the Lancaster office during the period it was capitalized in the Flowage Basin Account, was to acquire property for the Holtwood development. The examiners' investigation discloses that Mr. Bushong was active in the acquisition of properties on a per diem basis during the years 1912 and 1913, mainly along Conestoga Creek. This work tapered off in 1914 and 1915 and practically ceased with the purchase of the Woelpper property in March 1916. After the opening of the Lancaster office comparatively few properties were acquired. There were no acquisitions at all from April 1916 to July 1920 except for the foreclosure in 1919

of the Benjamin Davis mortgage which had previously been acquired in 1913. Later acquisitions have also been few in number. The examiners have allowed Mr. Bushong's entire expenses and salary during the years 1912 to 1915 during the period of greatest property acquisitions, but have disallowed Lancaster office expenses from March 1916.

[22624] (page 7)

Sundry Expenses Eliminated from the Flowage Basin: The examiner has disallowed sundry legal fees which were charged to the Flowage Basin without explanation of the nature of the services performed, also expenses in connection with the negotiation of the "Backwater Agreement" with the Susquehanna Power Company (Lower development studies), motion picture and panorama expense, the cost of river observations, and miscellaneous office expenses. These expenses are all believed to be proper charges to operations or surplus since there is no evidence that they were incurred in connection with construction or property acquisitions. The entire amount of interest charged to the Flowage Basin after the beginning of operations, has been disallowed because new acquisitions are immediately in service upon purchase and no interest should be added thereafter.

The miscellaneous expenses disallowed are listed on Schedule 20c. A portion represents expenses in connection with the project for the recovery and marketing of river coal and are all believed to be proper charges to income or surplus.

Several job orders for surveys not in connection with the acquisition of properties, and for the cost of the preliminary investigation for the Philadelpha Transmission Line, subsequently abandoned, have been disallowed as well as payments to sundry persons which were charged to Job Orders M-387 and M-388 without any explanation of the services performed.

Expense in Connection with Coal Storage Facilities (Entry No. 10—$1,340.98)

These expenses were incurred in connection with the coal marketing activities of Holtwood Coal Company and should have been [22625] (page 48) charged to that company or to income.

Flashboard Renewal Expense (Entry No. 11—$44,961.06)

This represents the cost of testing and renewal of flashboards, and the cost of experiments to increase operating efficiency, including the cost of experimental swing gates erected in 1916 and 1917. Flashboards are an expendable item that are so regularly carried away, in whole or in part, by high water that their renewal is treated as an operating expense. The examiners have allowed the entire expense for the years 1911 and 1912 which is deemed to be ample to cover the original construction cost of the flashboard system. (Schedule 22)

Capital Stock Expense (Entry No. 12—$82,963.12)

This consists of expenses incurred for the issuance and sale of capital stock from 1923 to 1935 long after the organization of the Company, and is a proper charge to Capital Stock Expense rather than Organization Expense. (Schedule 23)

Construction Fee Charged to Holtwood Power Company (Entry No. 13—$50,194.73)

This represents an intercompany profit on construction work performed by Pennsylvania Water & Power Company for its subsidiary and has therefore been eliminated from the plant accounts by the examiners. The steam station construction jobs received a regular proration of the parent company's construction overheads in the same proportion as other jobs.

Holtwood Power Company Organization Expenses (Entry No. 14—$28,213.34)

The organization expenses of Holtwood Power Company have been allowed as a proper charge to plant because the Company was advised by its counsel that it was necessary to organize the subsidiary [22626] (page 49) in order to obtain the legal right to operate a steam plant. The examiners have eliminated therefrom amounts classified by the Company as "Promotion Expenses," consisting of the entire Lancaster office expense from June 1924 to December 1925, and sundry legal fees in connection with the negotiation of power contracts by Pennsylvania Water & Power Company. (Schedule 24)

Construction Costs Charged to Operations (Entry No. 18—$76,915.93)

The examiner has added to plant the cost of sundry plant additions, charged in error to operations on the books, which did not represent a replacement of existing facilities. (Schedule 26)

Westport Line Overheads (Entry No. 19—$26,234.97)

The elimination of overheads on the Westport Line after March 1, 1932 has been made to make the date in service coincide with that for the Safe Harbor Project which the line was built to serve.

Intercompany Profit on the Transfer of Land (Entry No. 20—$24,151.83)

The book value of land acquired by the Susquehanna Transmission Company of Maryland from The Baltimore Electro Alloys Company has been reduced to cost to the latter company to eliminate the intercompany profit from the plant account. (Schedule 27)

Takoma Substation Engineering (Entry No. 21—$5,668.48)

This expense was incurred in connection with the Ellicott-Washington Line, the lower end of which was constructed for and charged to the Potomac Electric Power Company. The engineering supervision of Potomac's Takoma Substation should also have been charged to Potomac or written off to surplus if uncollectible, rather than to plant account.

[22627] (page 50)

Plant Additions Charged to Depreciation Reserve (Entry No. 23—$122,488.49)

This item represents the cost of new plant additions charged erroneously to the depreciation reserve, apparently as representing replacements or deferred maintenance, which it was the company's practice to charge to the reserve during the period from 1921 to 1930. The items added back to plant by the examiner represent new plant additions rather than replacements.

Unrecorded Retirements (Entry No. 24—$343,928.42)

This represents the total cost of plant items retired from service which had not been removed from plant account on the books, as determined by the Company in its plant reclassification studies. The examiner has reduced the total amount by the cost of equipment reinstalled in new locations, the cost of plant items which were replaced by charges to the depreciation reserve under the accounting practices in effect from 1921 to 1930, and by an over-all reduction in the overheads applicable to the retirements due to other disallowances made by the examiners.

Plant Held for Future Use (Entry No. 26—$78,343.06)
Other Physical Property (Entry No. 27—$59,915.65)

The amounts transferred by the examiners to "Plant Held for Future Use" and "Other Physical Property" represent the amounts as determined by the Company in its

plant reclassification studies. The Land included in the transfer to "Other Physical Property" has been valued by the Company in most cases at a purely nominal value as representing land remnants of little use for agricultural purposes. The Commission has not yet determined the project boundaries.

[22628] (page 51)

Adjustment of Retirements 1937-1945 (Entries Nos. 28 and 29)

These entries adjust retirements and property sales recorded on the books since January 1, 1937 to bring them into agreement with the disposition made of the property by the examiners in previous entries for unrecorded retirements or transfers to "Plant Held for Future Use" or to "Other Physical Property."

JOHN M. NEWLANDS
John M. Newlands
Chief Examiner of Accounts
EDWARD L. DUNN
Edward L. Dunn
Supervising Accountant

[22629]

PENNSYLVANIA WATER & POWER COMPANY

Docket IT-5915

PART II

SCHEDULES AND APPENDICES

Docket IT-5915

PENNSYLVANIA WATER & POWER COMPANY

Consolidated Balance Sheet - December 31, 1945
Per Books and as Adjusted

Schedule 1
Sheet 1 of 2

Assets and Other Debits	Per Books: Pennsylvania Water & Power Company (1)	Per Books: Susquehanna Transmission Company of Maryland (2)	Per Books: Eliminations (3)	Per Books: Consolidated (4)	Examiners' Adjustments (5)	As Adjusted (6)
Electric Plant						
In Service, Schedule 2	$ 3,764,575.53	$1,480,256.64	$	$ 5,244,832.17	($ 3,595.95)	$ 5,241,236.22
In Process of Reclassification, Schedule 2	29,224,160.22	4,115,239.74		33,339,399.96	(5,659,897.95)	27,679,502.01
Construction Work in Progress, Schedule 4	236,788.98	572.81		237,361.79		237,361.79
Held for Future Use, Schedule 7	2,142.77	53.26		2,196.03	75,722.25	77,918.28
Total	33,227,667.50	5,596,122.45	-	38,823,789.95	(5,587,771.65)	33,236,018.30
Investment and Fund Accounts						
Other Physical Property					46,221.15	46,221.15
Investments in Associated Companies	3,749,958.13		(3,748,458.13)	1,500.00		1,500.00
Other Investments	9,264,342.38			9,264,342.38		9,264,342.38
Sinking Funds	110,666.66			110,666.66		110,666.66
Total	13,124,967.17		(3,748,458.13)	9,376,509.04	46,221.15	9,422,730.19
Current and Accrued Assets						
Cash	1,689,084.04			1,689,084.04		1,689,084.04
Special Deposits	538,624.89	11,922.42		550,547.31		550,547.31
Working Funds	18,378.27			18,378.27		18,378.27
Accounts Receivable	626,056.16			626,056.16		626,056.16
Receivables from Associated Companies	36,283.57		(36,283.57)			
Interest and Dividends Receivable	157,963.51			157,963.51		157,963.51
Rents Receivable	1,210.82			1,210.82		1,210.82
Materials and Supplies	357,269.71	36,283.57		393,553.28	14,000.00	407,553.28
Prepayments	61,668.14			61,668.14		61,668.14
Total	3,486,539.11	48,205.99	(36,283.57)	3,498,461.53	14,000.00	3,512,461.53
Deferred Debits						
Unamortized Debt Discount and Expense		234,800.00	(234,800.00)			
Preliminary Survey and Investigation Charges	591.28			591.28		591.28
Clearing Accounts	3,835.12			3,835.12		3,835.12
Other Work in Progress	13,222.77			13,222.77		13,222.77
Other Deferred Debits	1,250.00			1,250.00		1,250.00
Total	18,899.17	234,800.00	(234,800.00)	18,899.17	-	18,899.17
Capital Stock Expense		-			82,963.12	82,963.12
Total Assets and Other Debits	$49,858,072.95	$5,879,128.44	($4,019,541.70)	$51,717,659.69	($5,444,587.38)	$46,273,072.31

( ) Denotes Decrease

Docket IT-5915

PENNSYLVANIA WATER & POWER COMPANY

Consolidated Balance Sheet - December 31, 1945
Per Books and as Adjusted

Schedule 1
Sheet 2 of 2

Liabilities and Other Credits	Per Books: Pennsylvania Water & Power Company (1)	Per Books: Susquehanna Transmission Company of Maryland (2)	Per Books: Eliminations (3)	Per Books: Consolidated (4)	Examiners' Adjustments (5)	As Adjusted (6)
Capital Stock						
Common Stock						
Outstanding - 429,848 shares, no par value	$10,868,312.50			$10,868,312.50		$10,868,312.50
Outstanding - 12,055 shares, $100 par value		$ 1,205,500.00	(1,205,500.00)			
Cumulative Preferred Stock						
Outstanding - 21,493 shares, no par value	2,130,895.50			2,130,895.50		2,130,895.50
Total	12,999,208.00	1,205,500.00	(1,205,500.00)	12,999,208.00	-	12,999,208.00
Long Term Debt						
Bonds						
Ref. Mtge. & Col. Trust Bonds - 3¼% 1964	10,383,000.00			10,383,000.00		10,383,000.00
Ref. Mtge. & Col. Trust Bonds - 3¼% 1970	10,450,000.00			10,450,000.00		10,450,000.00
First Mtge. 5% Bonds, Jan. 1, 1940		2,348,000.00	(2,348,000.00)			
Advances from Associated Companies		429,758.13	(429,758.13)			
Total	20,833,000.00	2,777,758.13	(2,777,758.13)	20,833,000.00	-	20,833,000.00
Current and Accrued Liabilities						
Accounts Payable	202,137.25			202,137.25		202,137.25
Payables to Associated Companies	1,655.95	36,283.57	(36,283.57)	1,655.95	(28.50)	1,627.45
Dividends Declared	456,714.25			456,714.25		456,714.25
Matured Long-Term Debt	2,000.00			2,000.00		2,000.00
Matured Interest	1,885.00			1,885.00		1,885.00
Taxes Accrued	1,439,674.16			1,439,674.16		1,439,674.16
Interest Accrued	169,721.77			169,721.77		169,721.77
Other Current and Accrued Liabilities	14,767.06			14,767.06		14,767.06
Total	2,288,555.44	36,283.57	(36,283.57)	2,288,555.44	(28.50)	2,288,526.94
Deferred Credits						
Unamortized Premium on Debt	243,963.79	-	-	243,963.79	-	243,963.79
Reserves						
Reserve for Depreciation of Electric Plant	7,116,771.59	1,859,586.74		8,976,358.33	(213,239.71)	8,763,118.62
Reserve for Retirement Annuities	78,244.98			78,244.98		78,244.98
Total	7,195,016.57	1,859,586.74	-	9,054,603.31	(213,239.71)	8,841,363.60
Earned Surplus	6,298,329.15			6,298,329.15	(5,231,319.17)	1,067,009.98
Total Liabilities and Other Credits	$49,858,072.95	$5,879,128.44	($4,019,541.70)	$51,717,659.69	($5,444,587.38)	$46,273,072.31

( ) Denotes Decrease

Docket No. IT-5915

Schedule 2
Sheet 1 of 4

PENNSYLVANIA WATER & POWER COMPANY

Summary of Electric Plant as at December 31, 1945
Per Books and As Adjusted

Balances Per Books, December 31, 1945

	Pennsylvania Water & Power Company	Susquehanna Transmission Company of Maryland	Consolidated	Examiners' Adjustments	As Adjusted
Electric Plant In Service	3,764,575.53	$ 1,480,256.64	$ 5,244,832.17	$(3,595.95)	$ 5,241,236.22
In Process of Reclassification	29,224,160.22	4,115,239.74	33,339,399.96	(5,659,897.95)	27,679,502.01
Subtotal, Sch. 2, Sheet 4	$32,988,735.75	$ 5,595,496.38	$38,584,232.13	$(5,663,493.90)	$32,920,738.23
Construction Work in Progress, Schedule 4	236,788.98	572.81	237,361.79		237,361.79
Held for Future Use, Schedule 7	2,142.77	53.26	2,196.03	75,722.25	77,918.28
Total Electric Plant	$33,227,667.50	$ 5,596,122.45	$38,823,789.95	$(5,587,771.65)	$33,236,018.30

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PENNSYLVANIA WATER & POWER COMPANY

Schedule 2
Sheet 2 of 4

Electric Plant in Service and in Process of Reclassification as at December 31, 1945
Per Books and as Adjusted

Electric Plant in Service	Balance per Books - Dec. 31, 1945 (a) Pennsylvania Water & Power Company	Susquehanna Transmission Co. of Maryland	Total	Examiners' Adjustments	Adjusted Balances Dec. 31, 1945
	(1)	(2)	(3)	(4)	(5)
Production Plant					
Steam Production					
Land and Land Rights	$ 2,000.00	$	$ 2,000.00	$	$ 2,000.00
Structures and Improvements	129,826.51		129,826.51		129,826.51
Boiler Plant Equipment	602,907.27		602,907.27		602,907.27
Turbo-Generator Units	33,876.88		33,876.88		33,876.88
Accessory Electric Equipment	103,592.24		103,592.24		103,592.24
Miscellaneous Power Plant Equipment	225,822.08		225,822.08		225,822.08
Total Steam Production	1,098,024.98		1,098,024.98		1,098,024.98
Hydraulic Production					
Land and Land Rights	85,515.58		85,515.58		85,515.58
Structures and Improvements	203,059.27		203,059.27		203,059.27
Reservoirs, Dams and Waterways	476,566.07		476,566.07		476,566.07
Water Wheels, Turbines and Generators	72,486.78		72,486.78		72,486.78
Accessory Electric Equipment	209,427.01		209,427.01		209,427.01
Miscellaneous Power Plant Equipment	53,352.55		53,352.55		53,352.55
Total Hydraulic Production	1,100,407.26		1,100,407.26		1,100,407.26
Total Production Plant	2,198,432.24		2,198,432.24		2,198,432.24
Transmission Plant					
Land and Land Rights	186,709.42	591,266.36	777,975.78		777,975.78
Clearing Land and Rights of Way	30,109.03	43,529.66	73,638.69		73,638.69
Structures and Improvements	94,867.74	65,082.90	159,950.64		159,950.64
Station Equipment	662,253.30	53,831.40	716,084.70		716,084.70
Towers and Fixtures	144,214.93	354,094.73	498,309.66	(3,595.95)	494,713.71
Poles and Fixtures	9,764.06	490.57	10,254.63		10,254.63
Overhead Conductors and Devices	174,792.49	356,388.71	531,181.20		531,181.20
Roads and Trails	13,739.96	4,025.35	17,765.31		17,765.31
Total Transmission Plant	1,316,450.93	1,468,709.68	2,785,160.61	(3,595.95)	2,781,564.66
General Plant					
Structures and Improvements	73,341.47	542.77	73,884.24		73,884.24
Office Furniture and Fixtures	48,576.59	142.83	48,719.42		48,719.42
Transportation Equipment	46,893.35	410.00	47,303.35		47,303.35
Stores Equipment	4,916.72	27.04	4,943.76		4,943.76
Shop Equipment	20,605.18	-	20,605.18		20,605.18
Laboratory Equipment	13,319.02	82.38	13,401.40		13,401.40
Tools and Work Equipment	16,954.95	1,743.87	18,698.82		18,698.82
Communication Equipment	26,682.31	23,960.39	50,642.70		50,642.70
Miscellaneous Equipment	1,776.45	.01	1,776.46		1,776.46
Donations in Aid of Construction - Credit	(3,373.68)	(15,362.33)	(18,736.01)		(18,736.01)
Total General Plant	249,692.36	11,546.96	261,239.32		261,239.32
Total Electric Plant in Service	$3,764,575.53	$1,480,256.64	$5,244,832.17	($3,595.95)	$5,241,236.22

Docket IT-5915

PENNSYLVANIA WATER & POWER COMPANY

Schedule 2
Sheet 3 of 4

Electric Plant in Service and in Process of Reclassification as at December 31, 1945
Per Books and as Adjusted

Electric Plant in Process of Reclassification	Balance per Books - Dec. 31, 1945 (a) Pennsylvania Water & Power Company (1)	Susquehanna Transmission Co. of Maryland (2)	Total (3)	Examiners' Adjustments (4)	Adjusted Balances Dec. 31, 1945 (5)
Production Plant					
Steam Production					
Organization Expense	$ 51,790.16		$ 51,790.16	$ (28,213.34)	$ 23,576.82
Land and Land Rights	500,000.00		500,000.00		500,000.00
Power Plant Structures	1,124,533.85		1,124,533.85	(4,667.57)	1,119,866.28
Railroad Sidings and Trestles	41,259.72		41,259.72	(396.82)	40,862.90
Boiler Plant Equipment	1,204,711.37		1,204,711.37	2,508.97	1,207,220.34
Steam Engines and Turbines	202,103.80		202,103.80	3,080.00	205,183.80
Turbo-Generators	516,582.50		516,582.50		516,582.50
Other Electrical Equipment	398,747.84		398,747.84	(1,802.87)	396,944.97
Coal Storage and Washing Equipment	213,627.41		213,627.41	818.84	214,446.25
Other Power Plant Equipment	61,209.20		61,209.20		61,209.20
General Office Equipment	102.21		102.21		102.21
General Laboratory Equipment	4,260.67		4,260.67		4,260.67
Other General Equipment	136.50		136.50		136.50
Overheads Eliminated				(50,194.73)	(50,194.73)
Total Steam Production	4,319,365.23		4,319,365.23	(78,867.52)	4,270,497.71
Hydraulic Production					
Plant and Power Development					
Initial Entry	10,103,700.80		10,103,700.80	(2,830,708.97)	7,272,991.83
Sundry Overheads and Adjustments	152,819.08		152,819.08	491,061.45	643,880.53
Property and Riparian Rights	1,738,772.30		1,738,772.30	(2,361,046.67)	(622,274.37)(b)
Flowage Basin	598,129.59		598,129.59	(300,695.09)	297,434.50
Reservoir Surveys	24,645.11		24,645.11	(24,520.03)	125.08
Main Dam	116,361.97		116,361.97	(3,098.82)	113,263.15
General Hydraulics	713,234.12		713,234.12	30,565.39	743,799.51
Power House Building	967,233.98		967,233.98	(15,686.52)	951,547.46
Transformer House Building	603,115.41		603,115.41	38,486.16	641,601.57
Gate House Building	202,824.88		202,824.88	(2,469.01)	200,355.87
Power House Machinery	4,074,780.73		4,074,780.73	(400,832.39)	3,673,948.34
Miscellaneous Holtwood Construction	769,828.66		769,828.66	(2,935.32)	766,893.34
Telephone Crossing - McCall Ferry	13,170.50		13,170.50		13,170.50
"C" Job Accounts	66,037.92		66,037.92	(8,393.67)	57,644.25
Total Hydraulic Production	20,144,664.05		20,144,664.05	(5,390,273.49)	14,754,390.56
Total Production Plant	$24,464,029.28		$24,464,029.28	($5,469,141.01)	$19,024,888.27

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PENNSYLVANIA WATER & POWER COMPANY

Schedule 2
Sheet 4 of 4

Electric Plant in Service and in Process of Reclassification as at December 31, 1945
Per Books and as Adjusted

Electric Plant in Process of Reclassification (Cont'd)	Balance per Books - Dec. 31, 1945 (a) Pennsylvania Water & Power Company (1)	Susquehanna Transmission Co. of Maryland (2)	Total (3)	Examiners' Adjustments (4)	Adjusted Balances Dec. 31, 1945 (5)
Transmission Plant					
Organization Expense	1,421.47(c)	1,999.25	3,421.72		3,421.72
Holtwood Substation Building	31,152.00		31,152.00	(2,940.00)	28,212.00
Holtwood Substation Machinery	551,900.22		551,900.22	(5,613.86)	546,286.36
Baltimore Substation Building		265,671.85	265,671.85	(29,337.23)	236,334.62
Baltimore Substation Machinery		630,105.31	630,105.31	(11,373.16)	618,031.85
Lancaster Substation Machinery	2,107.33		2,107.33	(437.44)	1,669.89
Manor Substation	18,841.53		18,841.53		18,841.53
Conestoga Substation	898,687.87		898,687.87		898,687.87
Ellicott Substation Building		20,290.93	20,290.93	(515.00)	19,775.93
Ellicott Substation Machinery		56,161.83	56,161.83	(5,668.48)	50,496.35
Baltimore Transmission Lines	267,822.75	970,053.54	1,237,875.89	(12,022.52)	1,225,853.37
Gunpowder Transmission Line		186,158.19	186,158.19		186,158.19
York Transmission Line	839,627.35		839,627.35	(7,029.62)	832,793.73
Coatesville Transmission Line	516,988.15		516,988.15	(7,669.16)	509,318.99
Lancaster Transmission Line	475,945.77		475,945.77	(78,169.13)	397,776.64
Delta Transmission Line	3,351.92		3,351.92	(616.09)	2,735.83
Westport Transmission Line	451,861.84	1,250,680.94	1,702,542.78	(28,769.39)	1,673,773.39
Washington Transmission Line		317,641.11	317,641.11	(3,036.56)	314,604.55
Perryville Transmission Line	573,328.90	106,912.26	680,241.16	(10,630.79)	669,610.37
Total Transmission Plant	4,633,236.00	4,105,976.51	8,739,212.51	(203,829.03)	8,535,383.48
General Plant					
Furniture	55,737.60		55,737.60	5,995.26	61,732.86
Transportation Equipment	8,286.68		8,286.68		8,286.68
Tools and Construction Equipment	32,870.66	9,263.23	42,133.89	7,076.83	49,210.72
Total General Plant	96,894.94	9,263.23	106,158.17	13,072.09	119,230.26
Total Plant in Process of Reclassification	29,224,160.22	4,115,239.74	33,339,399.96	(5,659,897.95)	27,679,502.01
Total Plant in Service and in Process of Reclassification	$32,968,735.75	$5,595,496.38	$38,584,232.13	($5,663,493.90)	$32,920,738.23

(a) The Company does not keep continuing property records for Plant in Process of Reclassification by its former account classification. The "book" balances represent the balances at December 31, 1936 as accumulated by the Company in its original cost study, less retirements made during the period from January 1, 1937 to December 31, 1945.
(b) Includes credits of $500,000 and $194,615 for transfers of land and riparian rights to the steam station and Safe Harbor Water Power Corporation respectively. These credits are applicable to the property included in the "Initial Entry".
(c) Represents organization expense of Pennsylvania Transmission Company.
( ) Denotes deduction.

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PENNSYLVANIA WATER & POWER COMPANY

Electric Plant in Service - Reclassified*
As of December 31, 1945

Schedule 3
Sheet 1 of 2

	Reclassified Balances Dec. 31, 1945				
	Pennsylvania Water & Power Company (1)	Susquehanna Transmission Co. of Maryland (2)	Total (3)	Examiners' Eliminations (4)	Original Cost Dec. 31, 1945 (5)
Intangible Plant					
301 Organization	$ 668,530.28	$ 3,331.58	$ 671,861.86	($498,792.34)	$ 173,069.52
302 Franchises and Consents	64,004.61	-	64,004.61	(64,004.61)	
303 Miscellaneous Intangible Plant	58,267.70	5,668.48	63,936.18	(63,936.18)	
Total Intangible Plant	790,802.59	9,000.06	799,802.65	(626,733.13)	173,069.52
Steam Production Plant					
310 Land and Land Rights	2,000.00		2,000.00		2,000.00
311 Structures and Improvements	1,214,709.65		1,214,709.65	(1,507.18)	1,213,202.47
312 Boiler Plant Equipment	1,866,969.04		1,866,969.04	(267.71)	1,866,701.33
314 Turbo-Generator Units	806,225.51		806,225.51		806,225.51
315 Accessory Electric Equipment	401,463.87		401,463.87	914.93	402,378.80
316 Miscellaneous Power Plant Equipment	303,434.28		303,434.28	(38.00)	303,396.28
Overheads Eliminated from Depreciable Plant				(27,569.00)	(27,569.00)
Total Steam Production Plant	4,594,802.35		4,594,802.35	(28,466.96)	4,566,335.39
Hydraulic Production Plant					
320 Land and Land Rights	4,248,416.69		4,248,416.69	(1,214,864.55)	3,033,552.14
321 Structures and Improvements	4,958,608.57		4,958,608.57	(68,333.45)	4,890,275.12
322 Reservoirs, Dams and Waterways	4,020,318.28		4,020,318.28	(31,699.63)	3,988,618.65
323 Water Wheels, Turbines and Generators	3,458,956.95		3,458,956.95	(28,784.70)	3,430,172.25
324 Accessory Electric Equipment	1,529,177.69		1,529,177.69	(10,222.24)	1,518,955.45
325 Power Plant Equipment	194,521.60		194,521.60	(7,148.50)	187,373.10
326 Roads, Railroads and Bridges	71,916.58		71,916.58	(28,972.73)	42,943.85
Overheads Eliminated from Depreciable Plant				(1,231,952.00)	(1,231,952.00)
Total Hydraulic Production Plant	18,481,916.36		18,481,916.36	(2,621,977.80)	15,859,938.56
Transmission Plant					
340 Land and Land Rights	807,106.97	1,909,136.51	2,716,243.48	(29,099.83)	2,687,143.65
341 Clearing Land and Rights of Way	116,266.66	136,614.21	252,880.87		252,880.87
342 Structures and Improvements	330,844.45	364,941.47	695,785.92	(981.68)	694,804.24
343 Station Equipment	2,781,223.79	716,071.09	3,497,294.88	(20,406.34)	3,476,888.54
344 Towers and Fixtures	1,102,909.39	1,171,896.23	2,274,805.62	(3,595.95)	2,271,209.67
345 Poles and Fixtures	10,892.12	490.57	11,382.69		11,382.69
346 Overhead Conductors and Devices	989,514.12	1,237,115.14	2,226,629.26	(9,394.31)	2,217,234.95
349 Roads and Trails	36,718.88	29,287.38	66,036.26	(336.24)	65,700.02
Overheads Eliminated from Depreciable Plant				(139,702.00)	(139,702.00)
Total Transmission Plant	$6,175,506.38	$5,565,552.60	$11,741,058.98	($ 203,516.35)	$11,537,542.63

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PENNSYLVANIA WATER & POWER COMPANY

Electric Plant in Service - Reclassified*
As at December 31, 1945

Schedule 3
Sheet 2 of 2

	Reclassified Balances - Dec. 31, 1945				
	Pennsylvania Water & Power Company (1)	Susquehanna Transmission Co. of Maryland (2)	Total (3)	Examiners' Eliminations (4)	Original Cost Dec. 31, 1945 (5)
General Plant					
371 Structures and Improvements	$ 248,011.49	$ 6,943.67	$ 254,958.16	($ 816.25)	$ 254,141.91
372 Office Furniture and Equipment	115,090.02	4,216.42	119,306.44	(967.40)	118,339.04
373 Transportation Equipment	56,664.58	(1,074.55)	55,590.03		55,590.03
374 Stores Equipment	13,958.27	1,257.41	15,215.68		15,215.68
375 Shop Equipment	31,761.36	926.75	32,688.11		32,688.11
376 Laboratory Equipment	40,186.46	241.30	40,427.76	(90.44)	40,337.32
377 Tools and Work Equipment	118,635.49	6,918.68	125,554.17	(2,020.63)	123,533.54
378 Communication Equipment	104,969.20	40,600.29	145,569.49	(1,855.23)	143,714.26
379 Miscellaneous Equipment	17,668.30	.01	17,668.31		17,668.31
393 Donations in Aid of Construction	(3,373.68)	(15,952.60)	(19,326.28)	(1,242.79)	(20,569.07)
Overheads Eliminated From Depreciable Plant				(5,807.00)	(5,807.00)
Total General Plant	752,574.49	44,077.38	796,651.87	(12,799.74)	783,852.13
Total Electric Plant in Service	$30,795,602.17	$5,618,630.04	436,414,232.21	($3,493,493.98)(a)	$32,920,738.23

* This schedule presents the electric plant in service as reclassified by the Company in its original cost study (Columns 1, 2 and 3), with the examiners' eliminations allocated thereto on an approximate basis only because of the intricate methods of cost redistribution involved. No attempt has been made to distribute the overhead eliminations applicable to depreciable plant to the individual plant accounts.

(a) The examiners' eliminations from the Company's reclassified plant balances shown above, are less than the total examiners' adjustments to the plant balances per books shown on Schedule 2, because the Company had already made some eliminations in preparing its reclassification.

( ) Denotes deductions.

Docket IT-5915

Schedule 4
Sheet 1 of 2

PENNSYLVANIA WATER & POWER COMPANY

Summary of Construction Work in Progress (Consolidated)
As at December 31, 1945

Job Order No.	Description	Amount
	Non-Project Property-	
C-1315	Purchase of Flowage Basin Property above Safe Harbor	$ 52,015.33
C-2696	Purchase of Cook and Kilgore Properties	125.00
	Total	52,140.33
	Property Held For Future Use-	
C-2167	Purchase of Rights of Way, Lehman Farm to Lancaster	51,089.82
C-1187	Rights of Way Study, Safe Harbor to Lancaster	2,122.58
C-1281	Renewals of Options, Lehman Farm-Lancaster Right of Way	4,090.85
C-2031	Renewals of Options, Lehman Farm - Lancaster Right of Way	10,280.81
C-2280	Lehman Farm-Lancaster Transmission Line Right of Way	264.00
	Total	67,848.06
	Work in Progress Not Included in 1945 Power Bill-	
C-1400	Engineering and Overhead-General Budget	9,565.78
C-1401	Construction Suspense - General Budget	4,897.45
C-2456	New Drainage Pump Header - Units 8, 9, 10	453.07
C-2462	New Lower Runner for Unit No. 1 - Material Purchase	21,700.00
C-2582	New Intake Screen	559.25
C-2626	Ramp Unloading Hoist Operating Improvements	3,048.49
C-2640	Fireless Steam Locomotive	20,615.00
C-2646	Safety Improvements for Engines	243.16
C-2654	Interior Painting of Machine and Blacksmith Shop	838.08
C-2663	Sound Insulation for Vibrating Screens	277.34
C-2678	New Screens Over Draft Tube Sumps (2 Units)	45.34
C-2689	New Dry Type E-21, Potential Transformer	629.21
C-2693	Improve Water Supply to Lower Turbine Guide Bearing - Unit No. 2	1,502.48
B-2694	Sale of Portion of Rever Property	(2,771.27)
C-2699	Install Poles Nos. 20 and 20A - Village	124.14
B-2695	String Ground Wire for Riverside Line	1,149.08
C-2740	Miscellaneous Construction Jobs	207.82
B-2711	Insulation of Patrol Houses - Maryland	2,195.00
C-2722	Furniture Additions	1,071.13
C-2725	Purchase of T. S. Martin and Pequea Fuel Company Properties	14,992.75

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Schedule 4
Sheet 2 of 2

PENNSYLVANIA WATER & POWER COMPANY

Summary of Construction Work in Progress (Consolidated)
As at December 31, 1945

Job Order No.	Description	Amount
Work in Progress Not Included in 1945 Power Bill- (Cont'd)		
C-2727	Vent Stack - No. 1 Dryer Cyclone	$ 686.29
C-2642	Extension to Reactor Screens - Nos. 3 and 4 Transformers	463.20
C-2672	Platforms Under Nos. 9 and 10 Potential Transformer Compartments	678.75
C-2701	Enclosure in Operating Tunnel - Holtwood Hydro Plant	886.51
C-2704	Sound Insulation for Telephone Switchboard Room	396.57
C-2707	Purchase of Martin Coal Fleet	800.00
	Total	85,254.62
	Total Work Orders Not Included in 1945 Power Bill	$205,243.01
Work	Progress Included in 1945 Power Bill -	
C-178	Purchase of Additional Rights, Coatesville Transmission Line	$ 30,124.49
C-2604	Hot Line Equipment for Changing Insulators	956.71
C-2679	Current Balance Relays for Sleet Feeders	661.28
C-2650	Additional Neutral Current Relays for Nos. 13 and 14 Transformers	376.30
	Total Work Orders Included in 1945 Power Bill	32,118.78
	Total Construction Work in Progress at December 31, 1945	$237,361.79

( ) Denotes Credit

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Docket No. IT-5915 Schedule 5

PENNSYLVANIA WATER & POWER COMPANY

Summary of Construction Work in Progress (Consolidated)
As at December 31, 1944

Job Order No.	Description	Amount
Non-Project Property		
C-1315	Purchase of Flowage Basin Property above Safe Harbor	$ 51,532.71
C-1354	Purchase of Property above Safe Harbor	25,427.74
	Total	$ 76,960.45
Property Held for Future Use		
C-2467	Purchase of Rights-of-Way, Lehman Farm to Lancaster	40,424.66
C-1187	Rights-of-Way Study, Safe Harbor to Lancaster	2,122.58
C-1281	Renewals of Options, Lehman Farm - Lancaster Right-of-Way	4,090.85
C-2031	Renewals of Options, Lehman Farm - Lancaster Right-of-Way	10,280.81
C-2280	Lehman Farm - Lancaster Transmission Line Right-of-Way	264.00
	Total	$ 57,182.90
Work in Progress Not Included in 1944 Power Bill		
C-1400	Engineering and Overhead - General Budget	11,368.38
C-1401	Construction Suspense - General Budget	3,267.08
C-2326	Rotary Feeders - No. 1 Drag Conveyor	4,314.11
C-2462	New Lower Runner for Unit No. 1 - Material Purchase	21,700.00
C-2582	New Intake Screen	564.89
C-2599	New Control Battery - Violet Hill	110.58
C-2626	Ramp Unloading Hoist Operating Improvements	33.41
C-2593	Install Lamp Lowering Hangers for Lighting Fixtures	219.56
C-2607	Partition between Generator Room and Machine Shop	1,081.50
C-2609	Purchase of Strain Gage Set	230.00
C-2627	Retirement of Right-of-Way Expense - Perryville Line	(2,133.93)
B-2632	Heating Plant for Long Green Garage	215.47
B-2634	Sale of Anna M. Simons Property	(2,725.00)
B-2611	Installation of Brickwork in Window Openings	607.75
B-2618	New Lightning Arrestor for No. 1 Circuit	2,222.30
	Total	$ 41,076.10
	Total Work Orders Not Included in 1944 Power Bill	175,219.45
Work in Progress Included in 1944 Power Bill		
C-1789	Purchase of Additional Rights, Coatesville Transmission Line	30,124.49
	Total Construction Work in Progress at Dec. 31, 1944	$205,343.94

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Schedule 6
Sheet 1 of 2

PENNSYLVANIA WATER & POWER COMPANY

Summary of Construction Work in Progress (Consolidated)
As at December 31, 1943

Job Order No.	Description	Amount
Non-Project Property		
C-1315	Purchase of Flowage Basin Property above Safe Harbor	$ 51,241.74
C-1354	Purchase of Property above Safe Harbor	25,427.74
	Total	$ 76,669.48
Property Held for Future Use		
C-2467	Purchase of Rights-of-Way, Lehman Farm to Lancaster	38,868.96
C-1187	Rights-of-Way Study - Safe Harbor to Lancaster	2,122.58
C-1281	Renewals of Options - Lehman Farm - Lancaster Right-of-Way	4,090.85
C-2031	Renewals of Options - Lehman Farm - Lancaster Right-of-Way	10,280.81
C-2280	Lehman Farm - Lancaster Transmission Line Right-of-Way	264.00
	Total	$ 55,627.20
Work in Progress not Included in 1943 Power Bill		
C-1400	Engineering and Overhead - General Budget	10,278.74
C-1401	Construction Suspense - General Budget	1,467.39
C-2326	Rotary Feeders - No. 1 Drag Conveyor	3,389.53
C-2462	New Lower Runner for Unit No. 1 - Material Purchase	21,700.00
C-2395	New Drainage Pump Header Units 1 to 7 inclusive and Exciters	8,538.79
C-2470	Emergency Water Supply Line to Unit #4 Turbine Guide Bearing	48.80
C-2544	Furniture Additions	33.81
C-2547	Cathodic Protection for Nos. 13 and 14 Transformer Main Cable	405.06
C-2548	Sale of Shoff Iron Mine Property to Susquehanna Real Estate Company	(1,000.00)
C-2549	Purchase of Property from Susquehanna Real Estate Company	2,721.00
	Total	$ 47,583.12
	Total Work Orders Not Included in 1943 Power Bill	$179,879.80

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Docket No. IT-5915

Schedule 6
Sheet 2 of 2

PENNSYLVANIA WATER & POWER COMPANY

Summary of Construction Work in Progress (Consolidated)
As at December 31, 1943

Job Order No.	Description	Amount
Work in Progress Included in 1943 Power Bill		
C-1789	Purchase of Additional Rights - Coatesville Transmission Line	$ 30,124.49
C-2357	Capacitators on Station Service Feeders	14,889.58
C-2526	Voltage Compensators for Nos. 15 and 16 Circuit Impedance Relays	1,658.15
	Total Work Orders Included in 1943 Power Bill	46,672.22
	Total Construction Work in Progress at Dec. 31, 1943	$226,552.02

( ) Denotes credit.

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PENNSYLVANIA WATER & POWER COMPANY

Electric Plant Held for Future Use
As at December 31, 1945

Real Estate and Rights-of-Way		Amount
Pennsylvania Water & Power Company		
Held for Possible Future Parallel Lines		
Perryville Transmission Line	$ 6,532.10	
York Transmission Line	431.46	
Coatesville Transmission Line	612.81	$ 7,576.37
Held for Projected New Lancaster Transmission Line and Substation		64,440.87
Held for Possible Future Connection with Pennsylvania Power & Light Company System		
Lancaster Transmission Line		1,539.25
Total		$73,556.49
Susquehanna Transmission Company of Maryland		
Held for Possible Future Parallel Lines		
Ellicott-Washington Transmission Line	3,471.50	
Safe Harbor-Perryville Transmission Line	713.17	4,184.67
Held for Possible Future Additions to Ellicott Substation		177.12
Total		4,361.79
Total Electric Plant Held for Future Use		$ 77,918.28

PENNSYLVANIA WATER & POWER COMPANY

Examiners' Adjusting Entries
Plant Accounts - December 31, 1945

Particulars		Debit	Credit
Entry No. 1			
EARNED SURPLUS		$4,770,379.07	
Electric Plant in Process of Reclassification			$4,770,379.07
To eliminate from plant account the excess amount recorded on the books for the plant acquired from the Bondholders' Committee of McCall Ferry Power Company on January 13, 1910 over the original cost of the property			
Amount charged to plant accounts in opening entry, Schedule 10	$11,946,831.77		
Add Adjustments to opening entry recorded on books (Net), Schedule 11	296,539.13		
Adjusted charge to plant accounts per books	12,243,370.90		
Deduct Original Cost of Plant Acquired			
McCall Ferry Power Company, Schedule 12	$6,323,915.57		
J. E. Aldred, Receiver, Schedule 13	400,327.30		
Bondholders' Committee, Schedule 14	126,598.09		
Total original cost exclusive of interest	6,850,840.96		

PENNSYLVANIA WATER & POWER COMPANY

Examiners' Adjusting Entries
Plant Accounts - December 31, 1945

Particulars		Debit	Credit
Entry No. 1 (Cont'd)			
Interest during construction from April 14, 1905 to December 31, 1909 at 6%, Schedule 15	$ 622,150.87	$ 7,472,991.88	
Excess of book amount of plant over original cost			$ 4,770,379.07
Entry No. 2			
Electric Plant in Process of Reclassification		$ 157,506.79	
EARNED SURPLUS			$ 157,506.79
To add to plant additional interest during construction allowed for the year 1910 at 6%, Schedule 16			
Entry No. 3			
Electric Plant in Process of Reclassification		6,285.22	
EARNED SURPLUS			6,285.22
To add to plant account additional interest allowed at 6% during 1911 on the construction cost of the hydro units completed during that year, Schedule 17			

PENNSYLVANIA WATER & POWER COMPANY

Examiners' Adjusting Entries
Plant Accounts - December 31, 1945

Particulars		Debit	Credit
Entry No. 4			
Electric Plant in Process of Reclassification		$ 3,450.00	
EARNED SURPLUS			$ 3,450.00
To add to plant account Pennsylvania Capital Stock tax and legal fees in connection therewith, applicable to the year 1910, which were included in 1911 and 1912 operating expenses on the books.			
1911 Vou. 5211 Estimated 1910 Capital Stock Tax	$ 1,000.00		
1912 Vou. 6218 Final payment on 1910 Capital Stock Tax	750.00		
1912 Vou. 6474 Legal fee re 1910 Capital Stock Tax	1,700.00		
	$ 3,450.00		
Entry No. 5			
EARNED SURPLUS		1,250.00	
Electric Plant in Process of Reclassification			1,250.00
To eliminate from plant account the bonus of 25 shares of common treasury stock given in March 1911 with the sale of $10,000 treasury bonds to F. D. Carney (J 34)			

3526 Exhibit No. 51 [22645]

[22646] Exhibit No. 51 3527

PENNSYLVANIA WATER & POWER COMPANY

Examiners' Adjusting Entries
Plant Accounts - December 31, 1945

Particulars	Debit	Credit
Entry No. 6		
EARNED SURPLUS	$ 200,000.00	
Electric Plant in Process of Reclassification		$ 200,000.00
To credit plant account with a rebate of $200,000 on railroad relocation costs received in 1913 from the Pennsylvania Railroad Company by reason of their use of the relocated roadbed to lay a second track. This payment was first credited to the Depreciation Reserve and the Sinking Fund Reserve ($100,000 each) but was later closed to Surplus.		
Entry No. 7		
EARNED SURPLUS	30,787.34	
Electric Plant in Process of Reclassification		30,787.34
To eliminate from plant account promotion expenses charged thereto during the period from 1910 to 1915 inclusive, Schedule 18		

PENNSYLVANIA WATER & POWER COMPANY

Examiners' Adjusting Entries
Plant Accounts - December 31, 1945

Particulars		Debit	Credit
Entry No. 8			
EARNED SURPLUS		$ 44,173.17	
Electric Plant in Process of Reclassification			$ 44,173.17
To eliminate from plant account expenses in connection with sundry abandoned projects as follows:			
Survey of Storage Reservoir Sites	$ 26,920.03		
Lancaster Transmission Line	12,459.23		
Roller Dam Investigation	4,793.91		
Total, Schedule 19	$ 44,173.17		
Entry No. 9			
EARNED SURPLUS		296,630.42	
Electric Plant in Process of Reclassification			296,630.42
To eliminate from plant account Lancaster Office operating expenses and sundry other expenses erroneously capitalized in the flowage Basin Account			
Period 1910-1924 Schedule 20	$ 187,669.24		
Period 1925-1936, Schedule 21	108,961.18		
	$ 296,630.42		

3528 Exhibit No. 51 [22647]

[22648] Exhibit No. 51 3529

PENNSYLVANIA WATER & POWER COMPANY

Examiners' Adjusting Entries.
Plant Accounts - December 31, 1945

Particulars	Debit	Credit
Entry No. 10		
EARNED SURPLUS	$ 1,340.98	
Electric Plant in Process of Reclassification		$ 1,340.98
To eliminate from plant account labor and material expended largely in connection with the assistance given the Anthracite Production Corporation on their coal storage facilities at Shenks Ferry (Job C136, River Coal Development) This expense was charged to Property and Riparian Rights Account on the books in 1921 and 1922.		
Entry No. 11		
EARNED SURPLUS	44,961.06	
Electric Plant in Process of Reclassification		44,961.06
To eliminate from plant account the cost of replacing and testing flashboards, pins, etc. during the period from 1913 to 1921 erroneously capitalized in the General Hydraulic and Plant and Power Development Accounts on the books, Schedule 22		

PENNSYLVANIA WATER & POWER COMPANY

Examiners' Adjusting Entries
Plant Accounts - December 31, 1945

Particulars	Debit	Credit
Entry No. 12		
Capital Stock Expense	$ 82,963.12	
Electric Plant in Process of Reclassification		$ 82,963.12
To eliminate from plant account expenses in connection with the authorization, issue and sale of capital stock, which were capitalized on the books during the period from 1923 to 1935, Schedule 23		
Entry No. 13		
EARNED SURPLUS	50,194.73	
Electric Plant in Process of Reclassification		50,194.73
To eliminate from plant account the construction fee charged by Pennsylvania Water & Power Company to its subsidiary, Holtwood Power Company, in December 1924 (Journal Page 119) and now included in the merged plant accounts on the parent company's books. The latter company credited the fee to Corporate Surplus Unappropriated.		

3532 Exhibit No. 51 [22651]

PENNSYLVANIA WATER & POWER COMPANY

Examiners' Adjusting Entries
Plant Accounts - December 31, 1945

Particulars	Debit	Credit
Entry No. 14		
EARNED SURPLUS	$ 28,213.34	
Electric Plant in Process of Reclassification		$ 28,213.34
To eliminate from plant account Lancaster office operating expenses, and sundry legal fees in connection with the financing of Holtwood Power Company and the renewals by Pennsylvania Water & Power Company of its power sales contract with Edison Electric Company of Lancaster, Pennsylvania. These expenses were erroneously capitalized as organization expense on the Holtwood Power Company's books in 1924 and 1925 and are now included in the merged plant account on the parent company's books, Schedule 24		
Entry No. 15		
Materials and Supplies	14,000.00	
EARNED SURPLUS	7,057.74	
Electric Plant in Process of Reclassification		21,057.74
To eliminate from plant account sundry spare machine and equipment parts capitalized on the books prior to 1937 as determined by the Company in its plant reclassification study. An estimated amount of $14,000 still on hand at December 31, 1945 has been added to Materials and Supplies Account		

PENNSYLVANIA WATER & POWER COMPANY

Examiner's Adjusting Entries
Plant Accounts - December 31, 1945

Particulars		Debit	Credit
Entry No. 16			
EARNED SURPLUS		$ 922.22	
Electric Plant in Process of Reclassification			$ 922.22
To eliminate from plant account sundry engineering studies from which no completed work has resulted.			
P.W. & P. Co. -			
J.O. - C 1218 Ventilation for Exciter #14	$ 73.44		
J.O. - C 795 Air cooling for Transformers	234.56		
S.T. Co. Md. -			
J.O. - C 274 Change design of Highlandtown substation	614.22		
	$ 922.22		
Entry No. 17			
Electric Plant in Process of Reclassification		60,084.19	
EARNED SURPLUS			60,084.19
To remove from plant account sundry incorrect charges and credits eliminated by the Company in its plant reclassification study, and proposed by them to be disposed of by transfer to Surplus account, Schedule 25			

[22652] Exhibit No. 51 (P. 3533)

PENNSYLVANIA WATER & POWER COMPANY

Examiners' Adjusting Entries
Plant Accounts - December 31, 1945

Particulars	Debit	Credit
Entry No. 18		
Electric Plant in Process of Reclassification	$ 76,915.93	
EARNED SURPLUS		$ 76,915.93
To add to plant, construction costs and equipment charged to operating and maintenance expense accounts on the books but claimed as a plant addition by the company in its plant reclassification study, Schedule 26		
Entry No. 19		
EARNED SURPLUS	26,234.97	
Electric Plant in Process of Reclassification		26,234.97
To eliminate from plant account interest, taxes and net operating revenue, charged or credited to the Westport Transmission Line after the date on which it was placed in service - March 1, 1932		

	P.W.&P.Co.	S.T.Co.Md.	Total
Interest	$10,059.28	$24,010.69	$34,069.97
Taxes		5,013.93	5,013.93
Revenue	(5,157.18)	(13,601.90)	(18,759.08)
Expenses	1,624.80	4,285.35	5,910.15
	$ 6,526.90	$19,708.07	$26,234.97

( ) denotes income

PENNSYLVANIA WATER & POWER COMPANY

Examiners' Adjusting Entries
Plant Accounts - December 31, 1945

Particulars	Debit	Credit
Entry No. 20		
EARNED SURPLUS	$ 24,151.83	
Electric Plant in Process of Reclassification		$ 24,151.83
To eliminate from plant account the intercompany profit on land acquired in 1931 by Susquehanna Transmission Company of Maryland from The Baltimore Electro Alloys Company, an associated company, Schedule 27		

Excess of recorded cost at January 1, 1937 over cost to Baltimore Electro Alloys Company	$25,194.58
Profit on portion of land sold in 1937 and removed from plant account at sale price	1,042.75
	$24,151.83

Entry No. 21		
EARNED SURPLUS	5,668.48	
Electric Plant in Process of Reclassification		5,668.48
To eliminate from plant account the expense incurred by Pennsylvania Water & Power Company in providing engineering supervision for the design and equipment of Potomac Electric Power Company's Takoma substation. This expense was erroneously charged to Ellicott Substation plant account in 1933 on the books of Susquehanna Transmission Company of Maryland (Job Order C 996)		

PENNSYLVANIA WATER & POWER COMPANY

Examiners' Adjusting Entries
Plant Accounts - December 31, 1945

Particulars	Debit	Credit
Entry No. 22		
EARNED SURPLUS	$ 3,595.95	
Electric Plant in Service		$ 3,595.95
To eliminate from plant account the cost of four transmission line tower foundations built in 1932 by Consolidated Gas Electric Light & Power Company of Baltimore for the projected Riverside transmission line but not used by Susquehanna Transmission Company of Maryland when the line was finally constructed in 1937, due to a change in the location of the line (Voucher No. 5488-1932)		
Entry No. 23		
Electric Plant in Process of Reclassification	122,488.49	
Reserve for Depreciation		122,488.49
To add to plant account the following construction costs and equipment charged to the Depreciation Reserve on the books but claimed as plant additions by the company in its plant reclassification study		

PENNSYLVANIA WATER & POWER COMPANY

Examiners' Adjusting Entries
Plant Accounts - December 31, 1945

Particulars — Debit — Credit

Entry No. 23 (Cont'd)

Job Order	Description	Year	Amount
P.W. & P. Co. -			
K531	Extension of toe of dam	1927-8-9	$114,696.61
K753	Exciter Board Ventilation	1928-9	1,212.66
M843	Lathe	1929	2,653.92
S.T. Co. Md. -			
K837	New Oil Filter	1929	3,387.73
K824	New Fence at Highlandtown	1929	637.57
	Total		$122,488.49

Entry No. 24

Reserve for Depreciation	$ 343,928.42	
Electric Plant in Process of Reclassification		$ 343,928.42
To charge the Depreciation Reserve with plant items retired prior to January 1, 1937 but not removed from plant account on the books.		

PENNSYLVANIA WATER & POWER COMPANY

Examiners' Adjusting Entries
Plant Accounts - December 31, 1945

Particulars		Debit	Credit
Entry No. 24 (Cont'd)			
Total unrecorded retirements per Company's plant reclassification study	$ 462,650.31		
Deduct			
Items reinstalled in new locations	18,042.53		
Items replaced through charges to the Depreciation Reserve or Maintenance Expense	50,679.36		
Estimated excessive overhead on unrecorded retirements	50,000.00		
	$ 118,721.89		
Total	$ 343,928.42		
Entry No. 25			
Receivables from Associated Companies		$ 1,000.00	
Payables to Associated Companies-		28.50	
Electric Plant in Process of Reclassification			$ 1,028.50
To transfer from plant account sundry expenditures for associated companies			
Susquehanna Real Estate Company (1931)	$ 1,000.00		
Holtwood Coal Company (1920-21)	28.50		
	$ 1,028.50		

PENNSYLVANIA WATER & POWER COMPANY

Examiners' Adjusting Entries
Plant Accounts - December 31, 1945

Particulars	Debit	Credit
Entry No. 26		
Electric Plant Held for Future Use	$ 78,343.06	
Electric Plant in Process of Reclassification		$ 78,343.06
To segregate real estate and rights of way held for future use, as determined by the Company in its plant reclassification study		
Entry No. 27		
Other Physical Property	59,915.65	
Electric Plant in Process of Reclassification		59,915.65
To transfer the value of real estate located outside the project boundary (as determined by the Company), and the cost of the hydraulic testing laboratory, to Other Physical Property		
P.W. & P. Co. -		
Real estate outside the project boundary	$ 20,078.00	
Hydraulic testing laboratory	30,778.65	
S.T. Co. Md. -		
Real estate outside the project boundary	9,059.00	
	$ 59,915.65	

PENNSYLVANIA WATER & POWER COMPANY

Examiners' Adjusting Entries
Plant Accounts - December 31, 1945

Particulars		Debit	Credit
Entry No. 28			
Electric Plant in Process of Reclassification		$ 21,975.02	
Reserve for Depreciation			$ 7,489.71
Other Physical Property			10,864.50
Electric Plant Held for Future Use			2,620.81
Receivables from Associated Companies			1,000.00
To adjust book entries for the sale or retirement of property during the period from January 1, 1937 to December 31, 1944, to reflect the plant reclassifications made as of January 1, 1937			
Cancellation of duplicate retirements	$ 7,489.71		
Transfer credits for sale of property to reclassified accounts			
Othe Physical Property	10,864.50		
Electric Plant Held for Future Use	2,620.81		
Receivables from Associated Companies	1,000.00		
	$ 21,975.02		

PENNSYLVANIA WATER & POWER COMPANY

Examiners' Adjusting Entries
Plant Accounts - December 31, 1945

Particulars		Debit	Credit
Entry No. 29			
Electric Plant in Process of Reclassification		$ 3,540.51	
Reserve for Depreciation			$ 710.51
Other Physical Property			2,830.00
To adjust tuck entries for the sale or retirement of property during the year 1945, to reflect the plant reclassifications made as of January 1, 1937			
Cancellation of duplicate retirements	$ 710.51		
Transfer credit for sale of property to Other Physical Property	2,830.00		
	$ 3,540.51		

[22660]

Exhibit No. 51

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Schedule 9
Sheet 1 of 2

PENNSYLVANIA WATER & POWER COMPANY

Recapitulation of Examiners' Adjusting Entries
Plant Accounts - December 31, 1945

Account	Entry No. (1)	Debit or (Credit) (2)	Total (3)
Electric Plant in Service	22	$(3,595.95)	$(3,595.95)
Electric Plant in Process of Reclassification	1	(4,770,379.07)	
" " " "	2	157,506.79	
" " " "	3	6,285.22	
" " " "	4	3,450.00	
" " " "	5	(1,250.00)	
" " " "	6	(200,000.00)	
" " " "	7	(30,787.34)	
" " " "	8	(44,173.17)	
" " " "	9	(296,630.42)	
" " " "	10	(1,340.98)	
" " " "	11	(44,961.06)	
" " " "	12	(82,963.12)	
" " " "	13	(50,194.73)	
" " " "	14	(28,213.34)	
" " " "	15	(21,057.74)	
" " " "	16	(922.22)	
" " " "	17	60,084.19	
" " " "	18	76,915.93	
" " " "	19	(26,234.97)	
" " " "	20	(24,151.83)	
" " " "	21	(5,668.48)	
" " " "	23	122,488.49	
" " " "	24	(343,928.42)	
" " " "	25	(1,028.50)	
" " " "	26	(78,343.06)	
" " " "	27	(59,915.65)	
" " " "	28	21,975.02	
" " " "	29	3,540.51	(5,659,897.95)
Electric Plant Held For Future Use	26	78,343.06	
" " " " "	28	(2,620.81)	75,722.25
Other Physical Property	27	59,915.65	
" " "	28	(10,864.50)	
" " "	29	(2,830.00)	46,221.15
Receivables From Associated Companies	25	1,000.00	
" " "	28	(1,000.00)	-0-

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Schedule
Sheet 2 of 2

PENNSYLVANIA WATER & POWER COMPANY

Recapitulation of Examiners' Adjusting Entries
Plant Accounts - December 31, 1945

Account	Entry No.	Debit or (Credit)	Total
Materials and Supplies	15	$ 14,000.00	$ 14,000.00
Capital Stock Expense	12	82,963.12	82,963.12
Payables to Associated Companies	25	28.50	28.50
Reserve for Depreciation of Electric Plant	23	(122,488.49)	
Reserve for Depreciation of Electric Plant	24	343,928.42	
Reserve for Depreciation of Electric Plant	28	(7,489.71)	
Reserve for Depreciation of Electric Plant	29	(710.51)	213,239.71
Earned Surplus	1	4,770,379.07	
" "	2	(157,506.79)	
" "	3	(6,285.22)	
" "	4	(3,450.00)	
" "	5	1,250.00	
" "	6	200,000.00	
" "	7	30,787.34	
" "	8	44,173.17	
" "	9	296,630.42	
" "	10	1,340.98	
" "	11	44,961.06	
" "	13	50,194.73	
" "	14	28,213.34	
" "	15	7,057.74	
" "	16	922.22	
" "	17	(60,088.19)	
" "	18	(76,915.93)	
" "	19	26,234.97	
" "	20	24,151.83	
" "	21	5,668.48	
" "	22	3,595.95	5,232,319.17
			$ -0-

( ) Denotes credit

Docket No. IT-5915 Schedule 10

PENNSYLVANIA WATER & POWER COMPANY

Summary of Opening Entry, January 13, 1910

Particulars	Debit	Credit
Plant Accounts	$11,946,831.77	
Bills Receivable, Susquehanna Pole Line Company	105,134.91	
Cash	155,503.61	
Special Deposit, Railroad Relocation	159,402.96	
Accounts Receivable	1,192.58	
Stocks and Bonds in Other Companies	129,320.00	
Conowingo Land Company Mortgage	25,000.00	
Treasury Stocks	39,600.00	
Treasury Bonds	106,400.00	
Subscribers to Bonds ($4,170,000 @ 90)	3,753,000.00	
First Mortgage 5% Bonds		$ 7,580,000.00
Common Stock		8,495,000.00
Accounts Payable		11,442.74
Payroll Accrued		15,183.04
Bondholders' Committee		319,760.05
	$16,421,385.83	$16,421,385.83

Summary of Distribution of Securities

	Bonds	Stock
Exchangeable for $8,325,000 McCall Ferry Power Company Bonds, Note (a)	$3,330,000.00	$4,995,000.00
Now Subscriptions to Bonds at 90 (with 50% stock bonus)	4,170,000.00	2,085,000.00
Special Stock Bonus issued to Underwriters		
Kitcat & Aitken		457,500.00
E. R. Wood		152,500.00
H. S. Holt		150,000.00
J. E. Aldred		655,000.00
Unsubscribed Bonds held in Treasury, Note (a)	80,000.00	
	$7,580,000.00	$8,495,000.00

Note (a): Only $8,259,000 principal amount McCall Ferry Power Company bonds were deposited for exchange. The $66,000 principal amount of undeposited bonds were purchased for cash by J.E. Aldred, Receiver, prior to January 1, 1910. In the opening entry, the $39,600 of new stock and $26,400 of new bonds exchangeable for the undeposited old bonds were treated as treasury stock and bonds in addition to the $80,000 of unsubscribed bonds.

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Schedule 11
Sheet 1 of 2

PENNSYLVANIA WATER & POWER COMPANY

Summary of Adjustments to Opening Entry, Per Books

Particulars			Amount
Expenditures of Bondholders' Committee -			
Jan. 1910, J 3	Acquisition of Susquehanna Contracting Company notes payable, including accrued interest	$ 422,983.32	
Mar. 1910, J 8	Sundry expenditures to March 1, 1910	148,702.79	
Dec. 1910, J 19	To exclude interest expense from preceding entry	(3,763.88)	
Dec. 1910, J 19	Net collection of interest by the Committee	(9,175.52)	
Dec. 1910, J 21	Refund of foreclosure expenses	(976.19)	
Dec. 1910, J 21	Sundry expenditures to December 31, 1910	7,664.95	$ 565,435.47
Additional Expenditures of J. B. Aldred, Receiver -			
Jan. 1910, J 3	Sundry disbursements to Dec. 31, 1909	134,888.77	
Jan. 1910, J 3	Sundry income	(1,649.82)	
Dec. 1910, J 19	Overstatement of payment to W. U. Hensel	(3,000.00)	130,238.95
Transfer Stores Inventories at December 31, 1909 to Stores Accounts -			
Mar. 1910, J 7	Sundry stores as at December 31, 1909	(8,419.91)	
- 1910,	various old cement used in construction during 1910, not previously inventoried	(8,308.90)	
Mar. 1910, J 7	Cement on hand at December 31, 1909	(6,535.01)	
Dec. 1911, J 61	Reversal of entry setting up cement inventory at December 31, 1909 because cement proved valueless	6,535.01	(16,728.81)

Docket No. IT-5915

Schedule 11
Sheet 2 of 2

PENNSYLVANIA WATER & POWER COMPANY
Summary of Adjustments to Opening Entry, Per Books

Particulars		Amount
Miscellaneous Adjustments -		
Dec. 1910, J 19	Difference in valuation of Susquehanna Power Bonds	$ 1.00
Dec. 1910, J 20	Correction of amount of railroad relocation deposit, recorded in opening entry as $159,402.96, should be $151,410.44	7,992.52
Dec. 1910, J 24	Correction of bills receivable from Susquehanna Pole Line Company recorded in opening entry as $105,134.91, should be $100,134.91	5,000.00
Dec. 1910, J 25	To record $200 par value of McCall Ferry Company capital stock omitted from opening entry	(200.00)
Dec. 1910, J 26	To decrease value recorded in opening entry for 396 shares of treasury stock, from $100 (par value) to $50 per share	19,800.00
Mar. 1911, J 35	Reduction of amount of advances to subsidiary pole line companies, as recorded in the opening entry, by the portion representing the subscription to their capital stock. The capital stock was recorded separately as an investment in the opening entry	2,000.00
Dec. 1932, J 299	To transfer the discount on $4,170,000 new money bonds included in the opening entry, from plant account to Unamortized Debt Discount and Expense	(417,000.00)
	Total Adjustments to Opening Entry	$296,539.13

( ) Denotes credit.

Docket IT-5915 PENNSYLVANIA WATER & POWER COMPANY Schedule 12

McCall Ferry Power Company
Net Additions to Utility Plant from April 14, 1905 to July 17, 1909

	Construction Period			Period of Cessation					
	Apr. 14, 1905 to Dec. 31, 1905	1906	Jan. 1, 1907 to Oct. 31, 1907	Nov. 1, 1907 to Dec. 31, 1907	1908	Jan. 1, 1909 to July 17, 1909	Total per Books	Disallowed	Allowed
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Construction Expenditures									
Real Estate Purchases and Expenses	$ 6,473.00	$ 60,499.83	$ 71,153.74	$	$ 7,133.98	$	$ 145,260.55	$	$ 145,260.55
Railroad Relocation		240,547.68	918,753.17	8,856.68			1,168,157.53		1,168,157.53
Building Public Roads			4,500.00	3,802.36	2,634.00		10,936.36		10,936.36
Cofferdam		58,253.22	78,402.82	789.66	3,532.24		140,977.94		140,977.94
Main Dam		215,074.09	385,380.69	54,837.96	6,368.62	2.97	661,664.33		661,664.33
Power House Substructure		68,478.51	311,131.83	16,788.49	7,864.12	2.98	404,265.93		404,265.93
Power House Superstructure			32,699.09	12,199.08	5,339.64	107.46	50,345.27		50,345.27
Hydraulic Machinery			125,104.82	2,506.37	30,693.33(d)	1,475.00	159,780.02		159,780.02
Excavation of Tailrace - Kerbaugh Contract		101,574.00	21,291.00				122,865.00		122,865.00
Excavation of Tailrace - Company Work			37,051.52		118,114.10		155,165.62		155,165.62
Improvement of Tailrace			14,005.86		16,795.09		30,800.95		30,800.95
Tools and Machinery	19,709.60	721,168.07	(126,048.95)	(552.77)	479.37	(15,971.41)	598,783.91		598,783.91
Quarry		69,114.49	447,063.79	24,041.30	6,013.26	100.33	546,333.17		546,333.17
Forebay Ice Protection			39,604.71	3,347.61	11,888.75		54,841.07		54,841.07
Advances to McCall Ferry Supply Company		40,500.00			(4,000.00)		36,500.00		36,500.00
Permanent Buildings and Real Estate Expense	90.00	64,273.99	(166.06)	481.36	(478.47)	(14.19)	64,186.63		64,186.63
Miscellaneous									
Sand (Including Equipment)		9,786.67	63,483.77	834.58	(5,283.08)	2,475.00	71,296.96		71,296.96
Cleaning, Grading and Roadmaking	2,205.39	14,241.69	1,888.19	(27.00)	(99.90)	4.24	18,251.61		18,251.61
Electric Light and Telephone Installation		9,706.05	5,482.04	1,770.07	2,317.66	207.72	19,483.54		19,483.54
Water, Fire and Sewer Systems		18,027.17	4,836.94	489.06	2,015.30	505.47	25,873.94		25,873.94
Central Power Plant		18,433.33	34,236.49	5,014.79	7,533.07	385.36	65,603.04		65,603.04
Company Quarters, Hospital, Stables, etc.	1,011.33	7,805.03	8,463.10	(122.08)	(5,766.18)	1,295.08	12,686.28		12,686.28
Subtotal	29,489.32	1,717,483.84	2,478,318.56	135,058.02	213,094.90	(9,384.99)	4,584,059.65		4,584,059.65
Overheads, Schedule 12a	66,167.20	251,799.00	225,512.53	21,695.40	135,981.41	17,207.83	718,363.37	77,506.67	640,856.70
Organization Expense	35,485.00				6,500.00		41,985.00	11,600.00(b)	30,385.00
Cessation Expense				9,334.00	23,326.55	3,784.66	36,445.21	36,445.21	
Subtotal	131,141.52	1,969,282.84	2,703,831.09	166,087.42 (a)	378,902.86	11,607.50	5,360,853.23	125,551.88	5,235,301.35
Properties, Stocks, Franchises and Contracts, Schedule 12c	11,199,500.00						11,199,500.00	10,110,885.78	1,088,614.22
Interest, Schedule 12e	210,218.51	433,261.16	345,405.04	52,792.76	361,179.47	225,498.08	1,628,355.02	1,628,355.02	(c)
Total	$11,540,860.03	$2,402,544.00	$3,049,236.13	$218,880.18	$740,082.33	$237,105.58	$18,188,708.25	$11,864,792.68	$6,323,915.57

(a) Includes approximately $114,000 of expenditures applicable to October 1907.

(b) Represents expense of certifying and printing First Mortgage Bonds.

(c) Interest has been allowed on the above construction expenditures in a separate calculation on Schedule 15.

(d) Represents payments on machinery contracts mainly.

( ) Denotes credit.

Docket IT-5915

PENNSYLVANIA WATER & POWER COMPANY

Schedule 12a

McCall Ferry Power Company
Details of Overheads and Interest for the Period from April 14, 1905 to July 17, 1909

	Construction Period			Period of Cessation			Total per Books	Disallowed	Allowed
	Apr. 14, 1905 to Dec. 31, 1905	1906	Jan. 1, 1907 to Oct. 31, 1907	Nov. 1, 1907 to Dec. 31, 1907	1908	Jan. 1, 1909 to July 17, 1909			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Overheads									
Administration									
Local Office - Hydraulic	$ 6,170.36	$ 28,058.56	$ 27,059.69	$ 3,857.00	$ 14,125.15	$ 55.74	$ 79,326.50	$	$ 79,326.50
New York Office - Hydraulic		23,685.81	20,433.61	3,114.39	15,599.28		62,833.09		62,833.09
Traveling Expenses - Hydraulic		9,918.93	4,939.66	355.78	736.26		15,950.63		15,950.63
Local Office - Accounting	56.09	(56.09)	9,239.16	689.52	2,484.45	1,803.40	14,216.53	4,977.37(a)	9,239.16
New York Office - Accounting	112.42	(112.42)	3,625.57				3,625.57		3,625.57
Traveling Expenses - Accounting	89.99	(89.99)	1,605.17	70.20	56.19		1,731.56	126.39(a)	1,605.17
New York Office of Sanderson & Porter		656.45	3,031.22		6,567.40		10,255.07		10,255.07
General Office Salaries	1,235.28	9,054.98	18,959.03	2,884.15	5,534.29	1,837.50	39,505.23	10,255.94(b)	29,249.29
General Office Supplies and Expenses	3,681.14	21,182.73	(6,178.88)	957.56	8,443.61	4,450.22	32,536.38	13,851.39(a)	18,684.99
Engineering Experts	49,951.05	111,676.52	76,131.15	4,148.32	34,998.83	2,275.00	279,180.87	35,832.15(b)	243,348.72
General Engineering Expenses	4,370.87	7,098.77	3,179.80	439.12	1,188.85	425.30	16,702.71	2,053.27(a)	14,649.44
Engineering Instruments and Supplies		2,449.17	949.64	2.10	566.51		3,967.42		3,967.42
Legal Expense	100.00	22,742.61	46,079.56	3,494.81	25,780.73	3,474.01	101,671.72		101,671.72
Legal Expense - Willis & Homer						567.45	567.45		567.45
Taxes other than Real Estate		250.00	1,249.20		875.34	15.00	2,389.54		2,389.54
Insurance		14,165.68	13,382.51	34.13	17,954.56	1,883.09	47,419.97	7,500.00(c)	39,919.97
Unclaimed Wages			(963.41)	13.25	(162.00)	6.95	(1,105.21)		(1,105.21)
Miscellaneous Expenses	400.00	1,117.29	2,789.85	1,635.07	1,231.96	414.17	7,588.34	2,910.16(d)	4,678.18
Total	$ 68,167.20	$251,799.00	$225,512.53	$21,695.40	$135,981.41	$ 17,207.83	$ 718,363.37	$ 77,506.67	$640,856.70
Interest									
Bond Interest Accrued (5%)									
Paid in Cash to Outside Interests									
Harlow-McGaw Interests	$ 6,250.00	$ 13,020.83	$ 10,416.67	$ 1,562.50	$ 6,250.00		$ 37,500.00	$ 37,500.00	
Non-Deferred Bond Subscribers					47,375.00		47,375.00	47,375.00	
Total Paid to Outside Interests	6,250.00	13,020.83	10,416.67	1,562.50	53,625.00		84,875.00	84,875.00(e)	
Other									
Credited to Susquehanna Contracting Company	205,825.00	428,802.09	343,041.65	51,456.26	158,450.00		1,187,575.00	1,187,575.00	
Interest Accrued only					234,583.54	$225,675.00	460,258.54	460,258.54	
Adjustment of Susquehanna Contracting Company Account					(84,750.00)		(84,750.00)	(84,750.00)	
Total Bond Interest	212,075.00	441,822.92	353,458.32	53,018.76	361,908.54	225,675.00	1,647,958.54	1,647,958.54	
Interest Earned on Bank Balances	(1,856.49)	(8,561.76)	(8,053.28)	(226.00)	(729.07)	(176.92)	(19,603.52)	(19,603.52)	
Total Interest	$210,218.51	$433,261.16	$345,405.04	$52,792.76	$361,179.47	$225,498.08	$1,628,355.02	$1,628,355.02	(f)

(a) Represents the entire expense during the period of cessation.
(b) Represents the entire expense during the period of cessation with the exception of architects' fees for designing the power house, $5,500, and October salaries, $90. (See Schedule 12b.)
(c) Represents the estimated amount of insurance applicable to the period of cessation.
(d) Represents the entire expense during the period of cessation except $371.04 paid for flowage basin records.
(e) This amount represents the only interest actually paid to outside interests. No bond interest was paid after June 15, 1908.
(f) Interest has been allowed on construction expenditures in a separate calculation on Schedule 15.
( ) Denotes credit.

Docket No. IT-5915 Schedule 12b

PENNSYLVANIA WATER & POWER COMPANY

McCall Ferry Power Company

Detail of General Office Salaries and Engineering Experts' Salaries Disallowed During Cessation Period

Particulars		Amount Disallowed
General Office Salaries:		
J. W. Kirkland, Vice President	Nov. 1907 - Feb. 1908	$ 2,500.00
W. H. Barnum, Treasurer	Nov. 1907 - Nov. 15, 1908	2,500.00
G. A. Foote, Chief Accountant	Nov. 1907 - July, 1908	1,662.44
O. M. Hinton, Chief Accountant	July 1908 - July 1909	1,695.85
F. H. Sillick, Accountant	Nov. 1907 - Jay 1908	350.00
Harold Pender, Secretary	Nov. 1907 - July 1909	512.50
L. F. Deutzman, Ass't to Treas'r	Nov. 1907 - Dec. 1908	260.00
Stenographers and Clerical	Nov. 1907 - Jan. 1908	761.00
Miscellaneous Office Expense		14.15
Total General Office Salaries Disallowed, Sch.12a		$10,255.94
Engineering Experts' Salaries		
Cary T. Hutchinson, Chief Engineer	Nov. 1907 - July 1908	$10,499.94
Hugh L. Cooper, Hydraulic Engr.	(Completion Bonus)	14,107.21
Boyd Ehle, Resident Engineer	Nov. 1907 - Aug. 1908	2,200.00
R. H. Anderson, Ass't, Resident Engineer	Nov. 1907 - Aug. 1908	1,100.00
J. W. Young, Ass't. Engineer	Nov. 1907 - July 16, 1909	5,125.00
Harold Pender, Ass't to Chief Engineer	Nov. 1907 - July 16, 1909	2,050.00
R. Beeuwkes, Electrical Inspector	Nov. 1907 - Oct. 1908	750.00
Total Engineering Experts' Salaries Disallosed, Schedule 12a		$25,832.15

Docket IT-5915 PENNSYLVANIA WATER POWER COMPANY Schedule 12c

McCALL FERRY POWER COMPANY

Determination of Excess of Properties, Stocks, Franchises and Contracts Account Over Original Cost of Properties Acquired from Susquehanna Contracting Company

Properties, Stocks, Franchises and Contracts Account, Per Books		
Par value of McCall Ferry Power Company common stock issued in April 1905 in exchange for the outstanding stock of its merged predecessor companies, The Hillside Water and Power Company and Susquehanna Water and Power Company, owned by Cary T. Hutchinson		$ 1,000.00
Securities of McCall Ferry Power Company issued to Susquehanna contracting company under Agreement of June 13, 1905 in exchange for land riparian rights and cash -		
First Mortgage 5% Bonds, principal amount	$ 8,183,000.00	
Preferred Stock, 411,650 shares at $100. par	4,116,500.00	
Common Stock, 499,900 shares at $10.00. par	4,999,000.00	
	17,598,500.00	
Less-cash due from Susquehanna Contracting Company Balance per books, July 17, 1909	6,400,000.00	11,198,500.00
		11,199,500.00

Cost to Susquehanna Contracting Company of Property and Riparian Rights transferred to McCall Ferry Power Company -	Per Books	Allowed by Examiner	
Under Agreement of June 13, 1905			
Cary T. Hutchinson Properties and Rights			
Cash paid to Cary T. Hutchinson June 20, 1905	750,000.00	750,000.00	
4,000 shares McCall Ferry Power Company Preferred stock, Note(a)	-	-	
48,840 shares McCall Ferry Power Company Common stock, Note(a).	-	-	
Harlow-McCaw Properties and Rights			
Cash paid to Harlow-McCaw interests June 16, 1905	200,432.00	200,432.00	
$250,000 McCall Ferry Power Company 5% Bonds (at $90.)		225,000.00	
1,000 shares McCall Ferry Power Company Common stock	-	-	
Pullen Options to Purchase Harlow-McCaw Properties, etc.			
Cash paid to Bertron Storrs & Griscom May 15, 1905	10,022.22	10,022.22	
150 shares McCall Ferry Power Company Common Stock	-	-	
Simpson, Thacher & Bartlett, legal services	47,307.00	47,307.00	
Under Agreement of October 20, 1908, Note(b)			
Cash paid for sundry properties and riparian rights	47,762.65	47,762.65	
Lorenzo Semple, legal services re Susquehanna matter	5,000.00	5,000.00	
Sundry legal fees and expenses	3,090.35	3,090.35	
Total cost to Susquehanna Contracting Company	$1,063,614.22	$1,288,614.22	
Less Property and Riparian Rights below the dam, given in August 1908 in exchange for $703,000 First Mortgage 5% Bonds of Susquehanna Power Company and 1500 shares of capital stock of Susquehanna Properties Company- Valued at proceeds of sale of these securities in 1912		200,000.00	
Cost of remaining properties at July 17, 1909			1,088,614.22
Excess of Ledger Balance over cost of Properties and Riparian Rights at July 17, 1909			$10,110,885.78

Notes-

(a) The Company claims that the entire 4,000 shares of preferred stock and 30,000 shares of common stock were transferred by C. T. Hutchinson to the bankers and underwriters for the project.

(b) An additional $544,000 principal amount of McCall Ferry Power Company 5% bonds was issued to Susquehanna Contracting Company under the Agreement of October 20, 1908, but McCall Ferry Power Company made no entry in its plant accounts, the bonds being offset against amounts due the Contracting Company and additional cash to be received.

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Docket IT-5915

Schedule 13
Sheet 1 of 2

PENNSYLVANIA WATER & POWER COMPANY

J. E. Aldred, Receiver
Net Additions to Utility Plant from July 17, 1909 to December 31, 1909

	Total Per Books Adjusted (a) (1)	Disallowed (2)	Allowed (3)
Construction Expenditures			
Railroad Relocation			
Settlement of H. S. Kerbough claim	$ 35,051.17	$	$ 35,051.17
Columbia and Port Deposit Railway Company -			
Purchase of New Right of Way	47,217.44		47,217.44
Main Dam	38,531.19		38,531.19
Power House Substructure	32,841.51		32,841.51
Power House Superstructure	6,140.32		6,140.32
Hydraulic Machinery and Equipment	1,902.79		1,902.79
Hydraulic Machinery - Payments on Turbine Contract	100,000.00		100,000.00
Electric Light and Telephone	734.02		734.02
Central Power Plant	6,740.24		6,740.24
Electrical Equipment of Power House	1,257.42		1,257.42
Transformer and Switch House	831.42		831.42
Transmission Lines	96.77		96.77
Sand Account - Charleston	10,658.21		10,658.21
Cooper Sand Contract	910.14		910.14
Delaware River Quarry and Construction Company Contract	10,766.27		10,766.27
Empire Engineering Corporation Contract	34,826.57		34,826.57
Tools and Machinery	10,537.32		10,537.32
Quarry	34,924.00		34,924.00
Cash received from liquidation of McCall Ferry Supply Company	(2,815.43)		(2,815.43)
Cash received from sale of material	(28.19)		(28.19)
Miscellaneous	262.91		262.91
Total Construction Expenditures	371,386.09	-	371,386.09
General Overheads			
New York Office Salaries and Expenses	12,270.50	5,000.00(b)	7,270.50
McCall Ferry Office Salaries and Expenses	5,615.72		5,615.72
Receiver's Fee	7,000.00		7,000.00
Legal Expenses	7,215.01		7,215.01
Real Estate Expenses, Rent and Insurance	(983.94)		(983.94)
Taxes (other than Real Estate)	2,011.68		2,011.68
Liability Insurance	812.21		812.21
Total General Overheads	33,941.21	5,000.00	28,941.21
Subtotal	405,327.30	5,000.00	400,327.30

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Docket IT-5915

Schedule 13
Sheet 2 of 2

PENNSYLVANIA WATER & POWER COMPANY

J. E. Aldred, Receiver
Net Additions to Utility Plant from July 17, 1909 to December 31, 1909

	Total Per Books Adjusted (a) (1)	Disallowed (2)	Allowed (3)
Interest			
Interest at 5% Paid on Installments Received from Subscribers to New Bonds	$ 28,197.60	$ 28,197.60	
Interest Earned on Bank Deposits	(37,824.74)	(37,824.74)	
Total Interest	(9,627.14)	(9,627.14)	(c)
	$395,700.16	(4,627.14)	$400,327.30

Notes:-

(a) Represents the total expenditures per books at December 31, 1909, adjusted for additional expenditures made and additional bank interest received by the Receiver prior to the transfer of his cash balances to Pennsylvania Water & Power Company.

(b) Represents settlement of Cary T. Hutchinson's claim for salary after August 1, 1908.

(c) Interest has been allowed on the above construction expenditures in a separate calculation on Schedule 15.

( ) Denotes credit.

Docket IT-5915 PENNSYLVANIA WATER & POWER COMPANY Schedule 14

Bondholders' Committee
Net Additions to Utility Plant During the Years 1909 and 1910

	Per Books 1909 (1)	Per Books 1910 (2)	Total (3)	Disallowed (4)	Allowed (5)
Claims against McCall Ferry Power Company					
Hugh L. Cooper, Balance of Completion Bonus	$	$ 15,819.06	$ 15,819.06	$15,819.06(a)	$
Simpson, Thacher & Bartlett, Legal Services		15,000.00	15,000.00		15,000.00
Bertron, Storrs & Griscom, Services of E. E. Pruessing		4,162.14	4,162.14		4,162.14
Sanderson & Porter, Fee for period Nov. 1907 to Dec. 1908		9,210.52	9,210.52	9,210.52(a)	
Morgan Engineering Company (Crane)		2,137.50	2,137.50		2,137.50
Sundry Legal Services		9,894.92	9,894.92		9,894.92
Miscellaneous Claims		1,625.00	1,625.00		1,625.00
	-	57,849.14	57,849.14	25,029.58	32,819.56
Reorganization Expenses					
Wm. M. Barnum, Services as Chairman of Reorganization Committee		20,750.00	20,750.00		20,750.00
Services of other members of Reorganization Committee		20,000.00	20,000.00		20,000.00
Simpson, Thacher & Bartlett, Legal Services	5,000.00	23,827.21	28,287.21		28,287.21
Knickerbocker Trust Company, Services as depository, etc.		5,000.00	5,000.00		5,000.00
John H. Kelly, Services as Secretary of Committee	250.00	1,443.85	1,693.85		1,693.85
City Trust Company (of Boston), Services as depository		1,573.62	1,573.62		1,573.62
John G. Johnson, Legal Services		500.00	500.00		500.00
Miscellaneous Expenses	606.09	522.15	1,128.24		1,128.24
	5,856.09	73,076.83	78,932.92	-	78,932.92
Foreclosure Expenses					
Henry P. Brown, Services as Special Master	5,000.00	-	5,000.00		5,000.00
Knickerbocker Trust Company, Sundry Disbursements	5,000.00	3,509.10	8,509.10		8,509.10
Expense of foreclosure sale		514.71	514.71		514.71
Winthrop & Stimson, Legal Services and Expenses		821.80	821.80		821.80
	10,000.00	4,845.61	14,845.61	-	14,845.61
Subtotal	15,856.09	135,771.58	151,627.67	25,029.58	126,598.09
Interest					
Paid on Susquehanna Contracting Company Notes Payable to Syndicate Participants, period Oct. 1908 to Oct. 1909, at 6%	22,983.32	-	22,983.32	22,983.32	
Paid on Committee's Notes Payable, January 1 to January 27, 1910, at 5%		3,763.88	3,763.88	3,763.88	
Interest Accrued on 5% Bonds to date of issue(b)		(8,405.50)	(8,405.50)	(8,405.50)	
Total	22,983.32	(4,641.62)	18,341.70	18,341.70	(c)
Grand Total	$38,839.41	$131,129.96	$169,969.37	$43,371.28	$126,598.09

(a) Represents contractors' fees payable during the period of cessation.

(b) An additional $4,533.90 of accrued bond interest was collected and turned over to Pennsylvania Water & Power Company but not recorded on the Committee's books.

(c) Interest has been allowed on the above construction expenditures in a separate calculation on Schedule 15.

( ) Denotes income.

Docket IT-5915 PENNSYLVANIA WATER & POWER COMPANY Schedule 15

Calculation of Interest During Construction for the Period from April 14, 1905 to December 31, 1909

Month	1905 Additions (1)	1905 Monthly Balances (2)	1906 Additions (3)	1906 Monthly Balances (4)	1907 Additions (5)	1907 Monthly Balances (6)	1908 Additions (7)	1908 Monthly Balances (8)	1909 Additions (9)	1909 Monthly Balances (10)	Total Interest (11)
Plant Expenditures(a)											
January			$ 125,924.20	$ 1,497,226.94	$ 243,471.31	$ 3,625,698.67	$ 66,974.68 (c)	•	$ (3,397.22)	$ •	
February			104,006.98	1,601,233.92	343,638.41	3,969,337.08	(2,942.34)	•	474.12	•	
March			111,864.41	1,713,098.33	369,027.88	4,338,364.96	11,463.27	•	(1,353.28)	•	
April			96,039.15	1,809,137.48	320,285.13	4,658,650.09	6,861.80	•	(3,432.35)	•	
May	$ 10,022.22	$ 10,022.22	182,306.76	1,991,444.24	318,283.00	4,976,933.09	22,776.12	•	587.97	•	
June	1,175,432.00	1,185,454.22	168,097.42	2,159,541.66	275,177.90	5,252,110.99	28,141.55	•	4,067.75	•	
July	47,307.00	1,232,761.22	126,596.28	2,286,137.94	210,774.15	5,462,885.14	48,750.41	•	1,004.81	•	
August	12,500.00	1,245,261.22	105,870.39	2,392,008.33	262,837.66	5,725,722.80	(153,275.22) (d)	•	1,025.88	•	
September	44,843.40	1,290,104.62	180,301.88	2,572,310.21	161,229.12	5,886,951.92	42,934.88		50,910.12	6,376,755.08	
October	18,474.51	1,308,579.13	246,606.51	2,818,916.72	200,817.75	6,087,769.67	17,459.13	•	147,446.34	6,524,201.42	
November	25,486.93	1,334,066.06	275,759.33	3,094,676.05	130,032.48 (b)	•	(455.22)	•	126,524.71	6,650,726.13	
December	37,236.68	1,371,302.74	287,551.31	3,382,227.36	15,987.00	•	4,149.07	•	89,372.83	6,740,098.96	
Total	1,371,302.74	8,977,551.43	2,010,924.62	27,317,959.18	2,851,561.79	19,984,424.41	93,138.13		413,171.68	26,291,781.59	
Advances to Susquehanna Pole Line Company(e)											
January								•		•	
February							17,534.91	•		•	
March							15,000.00	•	1,500.00	•	
April								•		•	
May					- 1,000.00	1,000.00	15,000.00	•	8,700.00	•	
June					5,000.00	6,000.00		•		•	
July						6,000.00	4,000.00	•		•	
August						6,000.00		•		•	
September					6,500.00	12,500.00	3,400.00	•		100,134.91	
October						12,500.00		•		100,134.91	
November						•	20,000.00	•		100,134.91	
December					7,500.00	•	(1,000.00)	•		100,134.91	
Total					20,000.00	44,000.00	73,934.91	•	6,200.00	400,539.64	
Grand Total	$1,371,302.74	$8,977,551.43	$2,010,924.62	$27,317,959.18	$2,871,561.79	$50,028,424.41	$167,073.04		$419,371.68	$26,692,321.23	
Interest Computed on Expenditures at 6%											
½% of Total Monthly Balances	$134,887.76		$136,589.80		$250,142.12				$133,461.61		
Less ½% of Additions during construction period	3,428.26		5,027.31		6,795.11 (f)				1,035.63 (g)		
Total	$131,459.50		$131,562.49		$243,347.01				$132,425.98		$548,794.98
Interest on Working Capital at 6%											
For the Period from April 14, 1905 to October 31, 1907, Schedule 15a											69,549.83
For the Period from September 1, 1909 to December 31, 1909, Schedule 15b											3,806.06
Total Interest Allowed for Period from April 14, 1905 to December 31, 1909 at 6%											$622,150.87

(a) Plant expenditures include the original cost of land acquired from Susquehanna Contracting Company and expenditures of McCall Ferry Power Company, J. B. Aldred, Receiver, and the Bondholders' Committee, to December 31, 1909.

(b) November 1907 expenditures include October payroll, petty cash expenditures and store issues totalling approximately $114,000.

(c) The increased expenditures during January 1908 were not due to construction activities, but resulted from large payments for legal services, insurance premiums, machinery, equipment and structural steel.

(d) Includes credit of $200,000 for the sale of property and riparian rights below the dam, in exchange for securities of Susquehanna Power Company and Susquehanna Properties Company.

(e) Represents advances to agents for purchase of transmission line right-of-way, recorded by McCall Ferry Power Company as a loan to Susquehanna Pole Line Company of Baltimore County, a wholly-owned subsidiary.

(f) Represents interest at ½% on additions from January 1 to October 31, 1907.

(g) Represents interest at ½% on additions from September 1 to December 31, 1909.

• Denotes period of cessation of construction from November 1, 1907 to August 31, 1909.

( ) Denotes credit.

Calculation of Interest on Working Capital for the Period from April 14, 1905 to October 31, 1907

	McCall Ferry Power Company			Susquehanna Contracting Company	Total Monthly	Average Monthly
	Materials and Supplies	Advances and Accounts Receivable	Cash	Cash	Balances	Balances
	(1)	(2)	(3)	(4)	(5)	(6)
1905						
May 31	$	$	$	$1,429,977.78	$1,429,977.78	$ 714,988.89
June 30				479,545.78	479,545.78	954,761.78
July 31				432,238.78	432,238.78	455,892.28
Aug. 31			300,283.33	119,657.53	419,940.86	426,089.82
Sept. 30			255,888.35	119,657.53	375,545.88	397,743.37
Oct. 31		10,500.00	227,373.60	119,657.53	357,531.13	366,538.50
Nov. 30	290.16	2,747.82	204,950.22	97,221.33	305,209.53	331,370.33
Dec. 31	5,229.88	2,000.00	147,482.10	108,046.33	262,758.31	283,983.92
1906						
Jan. 31	30,984.25		238,296.76	71,114.76	340,395.77	301,577.04
Feb. 28	48,402.84		120,726.53	284,048.37	453,177.74	396,786.75
Mar. 31	69,281.96		187,466.99	86,289.62	343,038.57	398,108.15
Apr. 30	63,614.76		91,894.32	86,274.62	241,783.70	292,411.13
May 31	60,547.97		733,607.14	48,866.32	843,021.43	542,402.56
June 30	59,503.66		558,950.00	47,338.01	665,791.67	754,406.55
July 31	72,976.85		404,120.33	48,328.01	525,425.19	595,608.43
Aug. 31	136,838.47		1,034,967.36	23,166.81	1,194,972.64	860,198.91
Sept. 30	164,583.33		828,552.56	24,764.56	1,017,900.45	1,106,436.54
Oct. 31	198,783.29	10,008.60	541,907.07	24,742.49	775,441.45	898,670.95
Nov. 30	202,751.65	11,008.60	962,241.47	31,490.00	1,207,491.72	991,466.58
Dec. 31	210,074.94	10,000.00	660,345.95	32,372.72	912,791.61	1,060,141.66
1907						
Jan. 31	220,528.88	10,200.00	406,606.38	32,360.47	669,695.73	791,243.67
Feb. 28	229,781.50	6,381.76	858,612.71	27,055.97	1,121,831.94	895,763.83
Mar. 31	226,737.28	6,381.76	494,954.56	25,344.75	753,418.35	937,625.14
Apr. 30	222,736.43	6,643.70	879,348.73	9,491.07	1,118,219.93	935,819.14
May 31	186,444.54	3,498.26	686,348.91	6,217.94	882,509.65	1,000,364.79
June 30	204,482.46	3,498.26	1,183,059.71	(898.81)	1,390,141.62	1,136,325.63
July 31	184,899.91	3,498.26	993,150.01	8,101.65	1,189,649.83	1,289,895.72
Aug. 31	173,567.18	1,181.75	744,886.26	8,101.65	927,736.84	1,058,693.33
Sept. 30	129,226.54	41,072.75	582,146.46	8,082.15	760,527.90	844,132.37
Oct. 31	113,283.69	41,072.75	397,534.64	8,052.15	559,943.23	660,235.56
Total Average Monthly Balances						$21,677,683.32

Interest Calculation at 6%

Interest Allowed - ½% of Total Average Monthly Balances		$108,388.42
Less Interest Income		
Interest Received on Bank Balances to October 31, 1907		
McCall Ferry Power Company	$18,471.53	
Susquehanna Contracting Company	7,277.98	
Interest Accrued on McCall Ferry Power Company's $250,000 Railroad Relocation Deposit from August 29, 1906 to October 31, 1907	13,089.08	38,838.59
Net Interest Allowed on Working Capital for the Period at 6%		$ 69,549.83

[22674] Exhibit No. 51 3555

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Docket IT-5915 Schedule 15 b

PENNSYLVANIA WATER & POWER COMPANY

Calculation of Interest on Working Capital

For the Period from September 1, 1909 to December 31, 1909

	J. E. Aldred, Receiver			Bondholders' Committee		
1909	Materials and Supplies (1)	Cash in Banks (2)	Railroad Relocation Deposit (3)	Cash in Banks (4)	Total Monthly Balances (5)	Average Monthly Balances (6)
Sept. 1	$ 7,436.93	$ 22,299.93	$250,000.00	-	$279,736.86	$
Sept. 30	7,922.36	3,072.28	250,000.00	-	260,994.64	270,365.75
Oct. 31	23,313.75	82,699.07	250,000.00	$26,671.00	382,683.82	321,839.23
Nov. 30	20,214.75	160,231.73	250,000.00	25,916.94	456,363.42	419,523.62
Dec. 31	14,854.39	154,442.81	151,410.44	10,651.19	331,358.83	393,861.12
	Total Average Monthly Balances					$1,405,589.72

Interest Calculation at 6%

Interest Allowed - ½% of Total Average Monthly Balances	$ 7,027.95
Less Interest Accrued on Railroad Relocation Deposit from September 1 to December 31, 1909 at 4%	3,221.89
Net Interest Allowed on Working Capital for the Year 1910 at 6%	$ 3,806.06

Docket IT-5915

PENNSYLVANIA WATER & POWER COMPANY

Schedule 16

Calculation of Interest During Construction
for the Year 1910

	Pennsylvania Water & Power Company		Bondholders' Committee(a)		Subsidiary Transmission Companies(b)		
	Additions (1)	Monthly Balances (2)	Additions (3)	Monthly Balances (4)	Additions (5)	Monthly Balances (6)	Total Interest (7)
Total Construction Expenditures at December 31, 1909							
McCall Ferry Power Company - Advance						$ 100,134.91	
McCall Ferry Power Company - Construction		$ 6,323,915.57					
J. E. Aldred, Receiver		400,327.30					
Bondholders' Committee				$ 15,856.09			
Balance - December 31, 1909		$ 6,724,242.87		$ 15,856.09		$ 100,134.91	
Construction Expenditures - Year 1910							
January	$ 48,893.79	$ 6,773,136.66	$ 5,000.00	$ 20,856.09	$ 15,156.34	$ 115,291.25	
February	40,500.26	6,813,636.92	99,053.24	119,909.33	15,843.88	131,135.13	
March	37,423.79	6,851,060.71	(976.19)	118,933.14	20,458.48	151,593.61	
April	57,053.13	6,908,113.84	5,014.95	123,948.09	44,948.92	196,542.53	
May	176,140.86	7,084,254.70	1,500.00	125,448.09	143,604.09	340,146.62	
June	140,368.12	7,224,622.82	-	125,448.09	29,960.16	370,106.78	
July	250,382.43	7,475,005.25	-	125,448.09	266,733.98	636,840.76	
August	130,439.65	7,605,444.90	-	125,448.09	208,733.89	845,574.65	
September	37,139.04	7,642,583.94	-	125,448.09	15,122.67	860,697.32	
October	112,933.71	7,755,517.65	300.00	125,748.09	121,078.74	981,776.06	
November	55,205.33	7,810,722.98	-	125,748.09	35,532.58	1,017,308.64	
December	171,961.81	7,982,686.79	850.00	126,598.09	13,087.93	1,030,396.57	
Total	$1,258,441.92	$87,926,787.16	$110,742.00	$1,388,981.37	$930,261.66	$6,677,409.92	
Interest Calculation at 6%							
½% of Total Monthly Balances		$ 439,633.94		$ 6,944.91		$ 33,387.05	
Less ½% of Additions during year		3,146.11		276.86		2,325.65	
Total Interest		$ 436,487.83		$ 6,668.05		$ 31,061.40	$474,217.28
Interest on Working Capital at 6%, Schedule 16a							5,015.44
Total Interest Allowable for the Year 1910							479,232.72
Less Interest Charged to Plant Account on Books							
Pennsylvania Water & Power Company						$ 283,340.19	
Susquehanna Transmission Company of Maryland						31,714.29	
Susquehanna Transmission Company of Pennsylvania						6,671.45	321,725.93
Additional Interest Allowed for the Year 1910 at 6%							$157,506.79

(a) The expenditures of the Bondholders' Committee were assumed by the Pennsylvania Water & Power Company, but are shown separately in the above schedule because the Committee's expenditures for the years 1909 and 1910 are shown separately on Schedule 14.

(b) Susquehanna Transmission Company of Maryland and Susquehanna Transmission Company of Pennsylvania.

( ) Denotes credit.

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Docket IT-5915 Schedule 16 a

PENNSYLVANIA WATER & POWER COMPANY

Calculation of Interest on Working Capital

For the Year 1910

	Pennsylvania Water & Power Company			Bondholders' Committee		
1910	Materials and Supplies (1)	Cash in Banks (2)	Railroad Relocation Deposit (3)	Cash in Banks (4)	Total (5)	Average Monthly Balances (6)
Jan. 1	$16,728.81	$154,442.81	$151,410.44	$10,651.19	$333,233.25	
Jan. 31	30,063.15	75,981.43	151,410.44	81,980.04	339,435.06	$336,334.15
Feb. 28	35,954.23	132,354.62	151,410.44	85,719.39	405,438.68	372,436.87
Mar. 31	49,351.58	106,218.28	151,410.44	24,037.28	331,017.52	368,228.10
Apr. 30	53,090.24	42,068.78	151,410.44	19,022.33	265,591.79	298,304.65
May 31	42,438.92	121,209.85	151,410.44	18,522.33	333,581.54	299,586.66
June 30	44,463.79	35,784.80	151,410.44	18,522.33	250,181.36	291,881.45
July 31	46,331.97	8,216.67	151,410.44	18,522.33	224,481.41	237,331.38
Aug. 31	34,556.57	36,746.42	151,410.44	17,522.33	240,235.76	232,358.58
Sept. 30	35,616.09	44,625.99	20,408.09	17,522.33	118,172.50	179,204.13
Oct. 31	20,383.29	68,018.84	20,408.09	17,222.33	126,032.55	122,102.52
Nov. 30	16,762.69	38,404.77	20,408.09	17,222.33	92,797.88	109,415.22
Dec. 31	22,072.14	32,931.49	25,377.59	2,588.01	82,969.23	87,883.55
Total Average Monthly Balances						$2,935,067.26

Interest Calculation at 6%

Interest Allowed - ½% of Total Average Monthly Balances	$ 14,675.34
Less Interest Received on Bank Deposits during the year 1910	9,659.90
Net Interest Allowed on Working Capital for the year 1910	$ 5,015.44

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Docket IT-5915 Schedule 17

PENNSYLVANIA WATER & POWER COMPANY

Calculation of Interest During Construction for the Year 1911

On Hydro Units Placed in Service During the Year

Particulars	Amount	
Calculation of Expenditures Applicable to Uncompleted Hydro Units at December 31, 1910		
Total expenditures applicable to first five units, Schedule 17a		$1,779,987.58
Less expenditures made after December 31, 1910		
Expenditures January 1 to July 31, 1911	$333,103.48	
Expenditures made in 1912	26,237.00	359,340.48
Total expenditures to December 31, 1910		$1,420,647.10
Less expenditures applicable to first unit, in service October 23, 1910		355,997.51
Balance of expenditures at December 31, 1910 applicable to four units not in service at that date		$1,064,649.59

Construction Expenditures during the Year 1911 Applicable to Uncompleted Hydro Units

	Expenditures Jan. 1-July 31 1911	Deduct Cost of Units Placed in Service	Monthly Balances Work in Progress
Balance Dec. 31, 1910			$1,064,649.59
January	$ 69,060.84	$	1,133,710.43
February	44,155.17	355,997.51	821,868.09
March	11,649.72	355,997.51	477,520.30
April	121,382.99		598,903.29
May	49,428.18	355,997.51	292,333.96
June	19,307.63		311,641.59
July	18,118.95	329,760.54(a)	-
	$333,103.48	$1,397,753.07	$4,700,627.25

Interest Calculation at 6%

½% of total monthly balances	$ 23,503.14	
Add ½% of total expenditures from Jan. 1 to July 31, 1911	832.76	
Total interest allowable for the year 1911		24,335.90
Less interest charged to plant account on books		
Total interest charged to plant	19,692.85	
Less interest eliminated elsewhere		
Flowage Basin 469.19		
Lancaster Line Investigation 703.79		
Reservoir Surveys 469.19	1,642.17	18,050.68

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Docket IT-5915 Schedule 17 a

PENNSYLVANIA WATER & POWER COMPANY

Construction Expenditures Applicable to

The First Five Hydro Units

Particulars		Amount
Expenditures to December 31, 1910		
McCall Ferry Power Company -		
Hydraulic Machinery		$159,780.02
J. E. Aldred, Receiver -		
Hydraulic Machinery and Equipment	$ 1,902.79	
Electrical Equipment of Power House	1,257.42	
Proportion of Labor for August, September and October, 1909	1,434.11	
Payments on Turbine Contract	100,000.00	104,594.32
Bondholders' Committee -		
R. Weber - Governor design		500.00
Pennsylvania Water & Power Company -		
Additions During Year 1910		
Power House Machinery	655,507.14	
General Hydraulics - Headgates, Racks and Stoplogs	45,425.76	
	700,932.90	
Less Castings for No. 6 Turbine	6,638.40	694,294.50
Accumulated Expenditures, to Dec. 31, 1910		959,168.84
Expenditures from January 1, 1911 to July 31, 1911		
Pennsylvania Water & Power Company -		
Power House Machinery	323,296.35	
General Hydraulics - Headgates, Racks and Stoplogs	36,360.53	
	359,657.08	
Less Castings for Turbines 7 to 10	26,553.60	333,103.48
Accumulated Expenditures to July 31, 1911		1,292,272.32
Contract Expenditures after July 31, 1911		
I. P. Morris Company - Final payment on turbine contract (1912)	19,837.00	
Standard Roller Bearing Company - Payment on contract for roller thrust bearings (1912)	6,400.00	26,237.00
Subtotal		$1,318,509.32
Overheads exclusive of interest - 35%		461,478.26
Total Expenditures Applicable to First Five Units		$1,779,987.58
Average Expenditure Applicable to Each Unit		$ 355,997.51

Docket IT-5915

PENNSLYVANIA WATER & POWER COMPANY

Schedule 18

Promotion Expenses Charged to Plant Account, Disallowed

	1910 (1)	1911 (2)	1912 (3)	1913 (4)	1914 (5)	1915 (6)	Total (7)
Salary - J. E. Aldred, President (1/2 of Salary)		$4,999.95	$3,749.94	$2,500.00	$2,500.00		$13,749.89
Salary - C.E.F. Clark, Vice President and Treasurer, (1911 and 1912 - $100 Per Month; 1913 - 1/3 of Salary)		500.00	1,200.00	1,999.96	-		3,699.96
New York Office Rent			600.00	600.00	600.00		1,800.00
Traveling Expenses		633.69	382.99	35.50	185.66		1,237.84
Printing Booklets			297.00		1,451.34		1,748.34
Making Photographs of Holtwood Plant, etc.		69.50	283.80	703.48	56.00		1,112.78
Entertainment and Special Trains	591.54	123.50	150.00	148.00	371.47		1,384.51
Printing Stock Certificates					1,548.00		1,548.00
Legal Services and Expenses:							
Simpson, Thacher and Bartlett, Services re Delaware Electric Transmission Company, etc.		400.00		400.00			800.00
J.E. Malone, Applying for Charter for Martic Electric Light, Heat and Power Company			206.00				206.00
Willis & Homer, Securing Approval of Public Service Commission to make Contracts, etc.			400.00				400.00
Listing Securities:							
Simpson, Thacher and Bartlett, Legal Services in Connection with Listing Securities on Philadelphia and Montreal Stock Exchanges					554.74		554.74
Fees for Listing Securities on the Philadelphia and Montreal Stock Exchanges					1,575.00		1,575.00
Maps for Insertion in 1914 Moody's Manual					320.00		320.00
Miscellaneous Expenses		96.18	276.95	135.65	115.98	25.52	650.28
Total Promotion Expenses Disallowed	$591.54	$6,822.82	$7,546.68	$6,522.59	$9,278.19	$25.52	$30,787.34

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PENNSYLVANIA WATER & POWER COMPANY

Schedule 19

Expenses of Abandoned Projects Charged to Plant Account, Disallowed

	1910 (1)	1911 (2)	1912 (3)	1913 (4)	1914-1916 (5)	Total (6)	Allowed (7)	Disallowed (8)
Survey of Storage Reservoir Sites								
Reservoir Surveys Account								
Survey Work	$ 818.41	$ 4,823.85	$	$	$	$ 5,642.26	$	$ 5,642.26
General Office Charges	50.00	963.91				1,013.91	125.08(a)	888.83
Automobile Expenses	132.28	1,080.02				1,212.30		1,212.30
Olmstead and Stamm - Legal Opinion on Rights of Water Power Companies		850.00				850.00		850.00
Superintendence		2,185.78				2,185.78		2,185.78
Harrisburg Office Expenses	358.92	1,105.67				1,464.59		1,464.59
Instruments		204.34				204.34		204.34
Water Conservation Association Expenses			2,881.82	8,163.36		11,045.18		11,045.18
Salary W. E. Bennett	353.48					353.48		353.48
Interest		169.19		204.08		673.27		673.27
Total Reservoir Surveys	1,713.09	11,682.76	2,881.82	8,367.44		24,645.11	125.08	24,520.03
General Hydraulics Account								
W.E. Bennett, Investigation of Reservoir Sites	2,400.00					2,400.00		2,400.00
Total Survey of Storage Reservoir Sites	4,113.09	11,682.76	2,881.82	8,367.44	-	27,045.11	125.08	26,920.03
Lancaster Transmission Line								
Lancaster Transmission Line Account								
M. E. Bushong - Salary and Expenses		1,878.84				1,878.84		1,878.84
Right of Way Options		329.00				329.00		329.00
Right of Way Surveys	2,764.11	2,484.81				5,248.92		5,248.92
Distribution of Salaries and Wages	90.70	183.50	468.39	1,442.95		2,185.54		2,185.54
Materials		(232.65)	52.50	218.91	22.91	61.67		61.67
Automobile Expense		542.17		15.00		557.17		557.17
Miscellaneous Expenses and Overheads	37.25	376.94	30.26	198.02	2.20	644.67		644.67
Simpson, Thacher & Bartlett, Legal Services		400.00				400.00		400.00
Interest		703.79		197.33		1,201.12		1,201.12
Adjustment Included in Plant Control Account.				(47.70)		(47.70)		(47.70)
Total Lancaster Transmission Line	2,892.06	6,666.40	551.15	2,324.51	25.11	12,459.23	-	12,459.23
Roller Dam Investigation								
General Hydraulics Account								
Engineering Salaries and Expenses (Year 1914)					1,695.09	1,695.09		1,695.09
Main Dam Account								
Salary of Marshall Thomas (Year 1915)					250.00	250.00		250.00
Engineering Salaries and Expenses (Year 1916)					2,848.82	2,848.82		2,848.82
Total Roller Dam Investigation	-	-	-	-	4,793.91	4,793.91	-	4,793.91
Grand Total	$7,005.15	$18,349.16	$3,432.97	$10,691.95	$4,819.02	$44,298.25	$125.08	$44,173.17

(a) Represents instruments found in physical inventory.

( ) Denotes credit.

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PENNSYLVANIA WATER & POWER COMPANY

Summary of Flowage Basin Account
Years 1910 to 1924 Inclusive

Schedule 20

Year	Pequea Bridge A (1)	Surveying Property B (2)	(a) Clearing Flowage Basin (b) Motion Picture and Panorama Expense C (3)	Submerged Roads D (4)	River Observations E (5)	Purchasing Property and Flowage Rights, Roads, Etc. F (6)	Office-Engineering Salaries and Expenses 6 (7)	Office-Engineering Expenses 6E (8)	Office-Engineering Salaries 6L (9)	Office Expenses Miscellaneous 6N-O-T (10)	Sundry 7, 8, G Note(d) (11)	Interest (12)	Total (13)
1910	$ 4.80	$1,864.75	$1,227.31(a)	$	$	$	$ 522.71	$	$	$	$ 686.05	$	$ 4,355.62
1911	222.95	3,017.78	380.74(a)	2,016.30	3,602.18		1,000.18				1,488.82	469.19	12,198.14
1912	83.25	2,147.43		1,138.96	476.23	22,926.30	1,433.82				12.69		28,218.68
1913		1,035.48		5.83	566.89	83,229.21		123.04	3,785.69	394.04	85.00	3,169.76	92,394.94
1914		357.73			33.16	9,966.00		118.28	666.66	119.86		320.20	11,581.89
1915						25,284.76		100.79		.66			25,386.21
1916					.93	14,163.71	2.38	390.54	625.71	18.72	3.53		15,205.52
1917		.55				14,027.23		505.33	1,775.47	27.80	6.78		16,343.16
1918						6,791.72		496.11	1,163.06		24.60		8,475.79
1919			1,128.65(b)			15,193.74		650.78	5,253.51		2.87		22,229.55
1920			854.65(b)		63.15	33,419.79		1,072.55	5,506.21				40,916.65
1921			1,100.02(b)		114.53	73,402.12		2,398.07	6,988.48				84,093.22
1922		318.93	767.29(b)		(10.10)	22,522.40		607.67	5,074.08		943.06		30,223.33
1923	3.75	217.68	631.97(b)	16,251.26	119.02	66,820.07		625.77	4,711.22	.57	821.91		90,233.22
1924		1.78	25.14(b)	2.52	22.16	27,285.24		40.64	368.85		1.70		27,748.03
Total	314.75	8,962.11	6,165.77	19,414.87	4,988.15	445,122.29	2,959.09	7,129.87	35,918.94	561.65	4,077.01	3,959.15	509,603.95
Allowed	314.75	8,962.11	2,067.21	19,414.87	-	286,576.05	522.71(c)	-	-	-	4,077.01	-	321,934.71
Disallowed	$	$	$4,098.56(b)	$	$4,988.15	$158,546.24	$2,436.38	$7,129.87	$35,918.94	$561.65	$	$3,959.15	$187,669.24

Schedule 20a

Notes-

(a) Expenses charged to Account 338-C during 1910 and 1911 ($1,658.05) represent cost of clearing the flowage basin and have been allowed in their entirety.
(b) Expenses charged to Account 338-C during the years 1919 to 1924 represent motion picture and panorama expense of which $140.10 representing existing photographic equipment has been allowed, and the balance, $4,098.56, disallowed.
(c) Represents engineering office salaries and expenses for the year 1910.
(d) Expenses from 1910 to 1919 were charged to Account 7, "Miscellaneous". Expenses from 1922 to 1924 were charged to Account G, "Property Improvements", except $16.87 in 1922 charged to Account 8, "Operating Tests".
( ) Denotes credit.

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PENNSYLVANIA WATER & POWER COMPANY

Schedule 20a

Analysis of Flowage Basin, Sub Account F
Purchasing Property and Flowage Rights, Heads, Etc.
Years 1912 to 1924, Inclusive

Year	Expenses Allowed: Cost of Properties Transferred to Safe Harbor Water Power Corporation Number (1)	Cost (2)	Cost of Pennsylvania Water & Power Company Properties Number (3)	Cost (4)	Other Expenses: Legal Fees (5)	Miscellaneous Expenses (6)	Salary M.E. Bushong (7)	Sundry Credits (8)	Total Allowed (9)	Expenses Disallowed: Lancaster Office Expense(b) Salary M.E. Bushong (10)	Expenses (11)	Legal Fees (12)	Miscellaneous (13)	Total Disallowed (14)	Grand Total (15)
1912	7	$ 11,205.17	2	$ 5,411.83	$	$ 2,136.30	$1,170.00		$ 22,926.30	$	$	$	$	$	$ 22,926.30
1913	20	56,018.00	6	21,200.00	2,250.00	2,561.21	1,200.00		83,229.21						83,229.21
1914			4	2,676.00	1,220.00	3,710.00	2,330.00		9,966.00						9,966.00
1915			7	18,158.00	140.00	3,506.76	2,730.00	(250.00)(f)	24,284.76			1,000.00		1,000.00	25,284.76
1916			1	35,299.16	395.00	923.53	120.00	(30,000.00)(d)	7,037.69	2,590.00	2,675.76	600.00	1,260.26	7,126.02	14,163.71
1917					2,300.00	512.78			2,812.78	6,000.00	2,527.84	2,150.00	536.61	11,214.46	14,027.23
1918					250.00	669.89		(9,000.00)(e)	(1,090.11)	6,000.00	2,381.83	2,500.00		10,881.83	6,791.72
1919					350.00	727.42			1,077.42	6,883.33	2,532.99	5,500.00		14,916.32	15,193.74
1920			3	11,650.00	2,000.00	1,860.34			15,510.34	6,999.96	3,239.49	5,170.00	2,500.00	17,909.45	33,419.79
1921			4	49,000.00	5,500.00	2,217.13			56,717.13	7,000.00	4,274.99	5,580.00		16,774.99	73,492.12
1922			1	125.00	250.00	1,783.11		(200.00)(f)	2,258.11	6,999.36	4,253.00	7,500.00	1,511.25	20,264.29	22,522.40
1923	2	26,350.00	3	4,473.34	500.00	10,124.14(a)		(175.00)(f)	41,272.48	7,000.00	4,280.53	6,000.00	8,267.06	25,547.59	66,820.07
1924	3	23,371.65		40.00		662.29		(500.00)(f)	23,573.94	1,749.99(c)	961.31(c)	1,000.00		3,711.30	27,285.24
	32	$119,944.82(g)	31	$118,336.33	$15,195.00	$31,111.90	$7,850.00	$(36,125.00)	$286,576.05	$50,123.24	$27,127.82	$36,620.00	$14,075.18	$128,946.24	$415,522.29

Schedule 20b - Schedule 20c

Notes -
(a) Includes $7,400.00 payment for Conestoga Township road relocation.
(b) The Lancaster office was opened in March 1916. The purchase of the Woelpper property (George B. Atlee fee) was closed during the same month resulting in the dismissal of the flashboard injunction suit.
(c) Lancaster office expense was charged to the Lancaster Transmission Line or to Holtwood Power Company organization expense from April to December 1924.
(d) Transfer of Woelpper property to Property and Riparian Rights Account.
(e) Sale of the Woelpper property (George B. Atlee fee), retaining flowage rights.
(f) Amounts received from the sale or salvage of buildings on acquired properties.
(g) Flowage basin was credited with $120,314.82 in 1930 representing the transfer of these properties to Safe Harbor Water Power Corporation. Fourteen of the properties costing $28,520.00 were sold back to Pennsylvania Water & Power Company in 1933.
( ) Denotes Credit.

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PENNSYLVANIA WATER & POWER COMPANY

Legal Fees Erroneously Charged to Flowage Basin Account

Year	Voucher Number	Particulars	Amount
1915	6892	Simpson, Thacher & Bartlett, Professional Services from December 28, 1914 to December 20, 1915 -	
		Total bill $2,000 - proportional part	$ 1,000.00
1916			
	10044	J. E. Malone, Professional Services for the year 1916	
		Total bill $1,800 - proportional part	600.00
1917			
	13756	J. E. Malone, Professional Services for year ending December 31, 1917	
		Total bill $2,500 - proportional part	1,650.00
	12995	John M. Groff, Legal Fees	500.00
1918			
	2913	J. E. Malone, Professional Services for the year 1918	2,500.00
1919			
	3767	John M. Groff, Legal Fees	500.00
	6207	John M. Groff, Legal Services	500.00
	6208	J. E. Malone, Professional Services for the year 1919	2,500.00
		Extra Legal Expenses for 1919	2,000.00
1920			
	7883	John M. Groff, Legal Services	3,500.00
	9184	J. E. Malone, Professional Services and Expenses for year 1920	
		Total bill $3,000 - proportional part	1,500.00
	9329	Simpson, Thacher & Bartlett, Professional Services	
		Total bill $1,500 - proportional part	170.00
1921			
	10850	J. E. Malone, Additional Legal Fees	5,500.00
1922			
	15077	John M. Groff, Legal Expenditures	5,000.00
	15688	J. E. Malone, Professional Services for the year 1922	
		Total bill $3,000 - proportional part	2,500.00

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Schedule 20 b
Page 2 of 2

PENNSYLVANIA WATER & POWER COMPANY

Legal Fees Erroneously Charged to Flowage Basin Account

Year	Voucher Number	Particulars	Amount
1923			
	16535	John M. Groff, Legal Services Total bill $1,000 - proportional part	$ 500.00
	18986	J. E. Malone, Legal Services, first six months of 1923 Total bill $5,000 - proportional part	1,000.00
	20622	John M. Groff, Legal Services	2,500.00
	21729	John M. Groff, Legal Services to August 1, 1923	1,000.00
	21781	J. E. Malone, Legal Services Total bill $5,000 - proportional part	1,000.00
1924			
	23440	John M. Groff, Legal Services	1,000.00
		Total Legal Fees Disallowed	$ 36,920.00

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Docket IT-5915 Schedule 20 c

PENNSYLVANIA WATER & POWER COMPANY

Miscellaneous Expenses Erroneously Charged to Flowage Basin Account

Year	Voucher Number	Particulars	Amount
1916			
	9185	Commission paid to Aldred & Company on 1,000 chares of Pennsylvania Water & Power Company capital stock distributed in Lancaster, Pa.	$ 1,000.00
	8056 8244	Expenses of employees attending National Conservation Congress Convention	260.26
1917			
	11068 11141	Transportation and meals in connection with meeting at Holtwood with Governor and party	536.61
1920			
	7831	Services of Carney and Lindemuth in preparing "Report on Susquehanna River Coal"	2,500.00
1922			
	15794	7500 Booklets	1,511.25
1923			
	19589	Services and disbursements of Simpson, Thacher & Bartlett in connection with new legislation in Pennsylvania conferring powers of eminent domain upon water power and electric companies.	3,587.77
		Services in connection with proposed water power development at Conowingo	200.00
		Traveling, stenography and petty disbursements	187.86
	21284	Payment to Anthracite Production Corporation to cover cost incurred by that company in moving transformers and transmission line, and building new office, laboratory and machine shop, to provide additional coal storage area for its coal recovery plant at Shenks Ferry	2,291.43
	19542	Gannett, Seelye & Fleming, Inc., Engineering Services during the year 1923	2,000.00
		Total Miscellaneous Expenses Disallowed	$14,075.18

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PENNSYLVANIA WATER & POWER COMPANY

Schedule 21
Sheet 1 of 2

Summary of Flowage Basin Account
Years 1925 to 1936, Inclusive

Job Order	Description	Year Expended	Amount	Transferred to Safe Harbor Water Power Corporation August, 1930	Balance Remaining in Flowage Basin	Allowed	Disallowed
			(1)	(2)	(3)	(4)	(5)
1925							
C-278	Safe Harbor second stage investigation	1924-1925	$ 16,695.58	$ 15,837.68	$ 857.90	$ 857.90	$
C-283	Flowage Basin (former Bushong Account No. 1)	1924-1925	3,051.23	2,513.05	538.18	538.18	
C-283-8	Lower development studies	1925	8,026.68	-	8,026.68	114.59(b)	7,912.09(a)
C-283-9	Settlement of dower - Donahue property	1925	298.01	-	298.01	298.01	
C-283-10	Survey of river property	1925	300.57	300.57			
C-283-11	Survey of railroad property north of Holtwood	1925	1,671.76		1,671.76		1,671.76
C-283-12	Relocation of highway - Safe Harbor	1925	155.51		155.51	155.51	
C-325	Philadelphia transmission line link (never built)	1925	8,326.10		8,326.10		8,326.10
C-328	Tree planting - Urey, York Furnace and Safe Harbor farms	1925	883.44		883.44	883.44	
C-370-3	Susquehanna River aerial surveys	1925	1,631.31		1,631.31		1,631.31
	Cash receipts from sales and salvage of buildings, etc.	1925	(100.00)		(100.00)	(100.00)	
	Total		40,940.19	18,651.30	22,288.89	2,747.63	19,541.26
1926							
C-246	Conestoga Bottoms survey	1924-1926	32,888.40	32,673.27	215.13	215.13	
C-281	Tree planting - 1924	1924	444.78		444.78	444.78	
C-283	Flowage Basin (former Bushong Account No. 1)	1926	563.36	563.36	-		
C-283-11	Survey of railroad property north of Holtwood	1926	92.83		92.83		92.83
C-283-12	Relocation of highway - Safe Harbor	1926	90.09		90.09	90.09	
C-285	Purchase of Geo. G. Cully property	1924	1,554.72		1,554.72	1,554.72	
C-325	Philadelphia transmission line link (never built)	1926	70.00		70.00		70.00
C-326	Philadelphia-Safe Harbor transmission line link (never built)	1925	153.30		153.30		153.30
C-372	Purchase of McCormick Island	1925-1926	5,278.72		5,278.72	5,278.72	
C-385	Purchase of De Pue Property - Conestoga Creek	1925-1926	3,107.26	3,200.00	(92.74)	(92.74)	
C-396	Tree planting	1926	734.92		734.92	734.92	
	Cash receipts from sales and salvage of buildings, etc.	1926	(50.00)		(50.00)	(50.00)	
	Total		44,928.38	36,436.63	8,491.75	8,175.62	316.13
1927							
C-246	Conestoga Bottoms survey	1926-1927	12,368.72	12,368.72			
C-283-8	Lower development studies	1926-1927	30,398.59		30,398.59		30,398.59(a)
C-283-10	Survey of river property	1926-1927	5,832.41	5,832.41			
	Cash receipts from sales and salvage of buildings, etc.	1927	(150.00)		(150.00)	(150.00)	
	Total		48,449.72	18,201.13	30,248.59	(150.00)	30,398.59
1928							
C-283-8	Lower development studies	1927-1928	606.01		606.01	111.74(b)	494.27(a)
C-504	Property surveys and miscellaneous work in Flowage Basin	1926-1928	7,780.73		7,780.73	7,780.73	
C-613	McCall Ferry topographical survey	1927-1928	3,658.24		3,658.24		3,658.24
C-631	Property survey of Cully, Hess, and De Pue properties	1928	619.87		619.87	619.87	
C-649	Survey of Willson property	1928	1,496.21		1,496.21	1,496.21	
	Cash receipts from sales and salvage of buildings, etc.	1928	(30.00)		(30.00)	(30.00)	
	Total		$ 14,131.06		$ 14,131.06	$ 9,978.55	$ 4,152.51

Docket IT-5915

PENNSYLVANIA WATER & POWER COMPANY

Summary of Flowage Basin Account
Years 1925 to 1936, Inclusive

Schedule 21
Sheet 2 of 2

Job Order	Description	Year Expended	Amount	Transferred to Safe Harbor Water Power Corporation August, 1930	Balance Remaining in Flowage Basin	Allowed	Disallowed
			(1)	(2)	(3)	(4)	(5)
1929							
C-815	Survey of Willson property	1929	$ 134.41	$ -	$ 134.41	$ 134.41	$
C-815	Tree planting - York Furnace property	1929	1,452.53		1,452.53	1,452.53	
	Total		1,586.94	-	1,586.94	1,586.94	-
1930							
M-387	Lancaster Office Expense, Schedule 21b	1926-1930	41,018.19		41,018.19	4,059.13	36,959.06
M-388	Flowage Basin, Schedule 21b	1926-1929	51,097.67		51,097.67	40,000.00	11,097.67
C-783	Property surveys - Flowage Basin	1929	971.13		971.13	971.13	
	Cash receipts from sales and salvage of buildings, etc.	1929	(80.00)		(80.00)	(80.00)	
	Transfer properties to Safe Harbor Water Power Corporation	1930	(193,603.88)	(193,603.88)			
	Total		(100,596.89)	(193,603.88)	93,006.99	44,950.26	48,056.73
1931							
C-777	Investigation, survey and purchase of Shoff tracts	1928-1931	29,372.34		29,372.34	29,372.34	
C-862	Holtwood power development - purchase of Shoff flowage rights	1930	4,000.00		4,000.00	4,000.00	
C-929	Tree planting and clearing fire breaks	1931	591.24		591.24	591.24	
	Total		33,963.58	-	33,963.58	33,963.58	-
1932							
C-777	Investigation and survey of Shoff tracts	1932	189.94		189.94	189.94	
C-791	Extension of triangulation system - Flowage Basin	1929-1932	3,525.49		3,525.49	187.24(b)	3,338.25
	Total		3,715.43	-	3,715.43	377.18	3,338.25
1933							
C-777	Investigation and survey of Shoff tracts (railroad right-of-way sold to Safe Harbor Water Power Corporation)	1933	(4,000.00)		(4,000.00)	(4,000.00)	
C-1153	Settlement of Harnish dower	1933	268.08		268.08	268.08	
C-1176	Removal and sales of barns on watershed properties	1933	(105.00)		(105.00)	(105.00)	
C-1231	Purchase of Fehl's Fishery	1933	1,093.69		1,093.69	1,093.69	
	Total		(2,743.23)	-	(2,743.23)	(2,743.23)	
1934							
C-1231	Purchase of Fehl's Fishery	1934	19.06		19.06	19.06	
C-1307	Sale of buildings - Flowage Basin property	1934	(825.00)		(825.00)	(825.00)	
	Total		(805.94)	-	(805.94)	(805.94)	-
1935							
C-970	Property ties to triangulation system	1932 & 1934	3,157.71		3,157.71		3,157.71
C-1275	Acquisition of Boyd Mill tract	1934-1935	3,163.19		3,163.19	3,163.19	
C-1365	Sale of buildings - Flowage Basin property	1935	(200.00)		(200.00)	(200.00)	
	Total		6,120.90	-	6,120.90	2,963.19	3,157.71
1936							
C-601	Holtwood power development studies	1929	15.00		15.00	15.00	
C-1275	Acquisition of Boyd Mill tract	1936	(13.50)		(13.50)	(13.50)	
	Total		1.50	-	1.50	1.50	-
	Grand Total - Years 1925 to 1936, Inclusive		$ 89,691.64	$(120,314.82)	$210,006.46	$101,045.28	$108,961.18

(a) The details of the Lower Development Study Expense disallowed are shown on Schedule 21a.
(b) Represents equipment found in physical inventory.
( ) Denotes credit.

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Docket IT-5915 Schedule 21 a

PENNSYLVANIA WATER & POWER COMPANY

Lower Development Study Expense Disallowed

(Job Order C-283-8)

Particulars	Amount	
Expenses Disallowed		
Legal Expenses		
Harmoff, Cook, Chestnut & Markel - Services	$12,793.30	
Keech, Deming & Carman - Services in connection with controversy with Susquehanna Power Company	7,500.00	
Robert H. Anderson, Services re flooding agreement with Conowingo companies	400.00	
Hambright and Hambright, Searching titles of island properties	360.00	$21,053.30
Consulting Engineers' Services		
Boyd Ehle, Services in connection with Conowingo job	1,687.50	
Charles B. Hawley & Company, Services in preparation of estimates of cost of flood gates for proposed Conowingo dam	485.44	
Sundry engineering services	100.00	2,272.94
Distribution of salaries and wages		12,223.36
Miscellaneous expenses, supplies and overheads		2,963.36
Interest		291.99
Total Expenses Disallowed		$38,804.95

Note: The above expenses were incurred by Pennsylvania Water & Power Company in connection with the negotiation of a contract with The Susquehanna Power Company, The Susquehanna Electric Company and Philadelphia Electric Power Company covering annual compensation to be paid Pennsylvania Water & Power Company for loss of energy output and demand value due to the erection of a dam on the Susquehanna River below the Company's property thereby backing water into the Company's tailrace.

Additional expenditures of $226.33 representing mainly instruments found in the physical inventory have been allowed as a plant cost.

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PENNSYLVANIA WATER & POWER COMPANY

Schedule 21b

Analysis of Job Order M-387, Lancaster Office Expense
And Job Order M-388, Flowage Basin

Particulars	1926 (1)	1927 (2)	1928 (3)	1929 (4)	1930 (5)	Total (6)	Allowed (7)	Disallowed (8)
Job Order M-387 - Lancaster Office Expense								
Lancaster Office Expenses	$5,154.51	$ 5,588.68	$ 5,699.60	$ 5,857.95	$ -	$22,300.74	$	$22,300.74
Salary of M. E. Bushong (Part Only)	2,041.67	2,000.00	3,000.00	3,000.00	-	10,041.67		10,041.67
Services of Sundry Persons (Duties not Stated)	70.00	1,830.00	50.00	60.00	-	2,010.00		2,010.00
Title Searches, Recording and Sundry Expenses	196.36	1,812.80	1,563.22	361.75	125.00	4,059.13	4,059.13	
Liability Insurance	114.32	126.79	138.46	138.66	-	518.23		518.23
Distribution of Suspense Accounts	560.83	927.61	599.98		-	2,088.42		2,088.42
Property Purchased, Later Transferred to Safe Harbor Water Power Corporation		5,105.31			(5,105.31)	-		
Total	$8,137.69	$17,391.19	$11,051.26	$9,418.36	($4,980.31)	$41,018.19	$4,059.13	$36,959.06
Description of Job as Shown on Job Order Estimate "This covers salaries, office expenses, and the regular current expenses in connection with the Lancaster office, and including the regular activities of that office. It is not to include charges on specific jobs, such as purchases of real estate, etc., which will be covered by job numbers authorized therefor." "Refer to letter of Jan. 18, 1926 - J.A.W. to J.L.R."								
Job Order M-388 - Flowage Basin								
Services of Sundry Persons (Duties not Stated)	$1,555.00	$ 2,005.00	$ 4,065.00	$2,530.00		$10,155.00	$	$10,155.00
Traveling Expenses of J. A. Walls re Conowingo Contract	296.51					296.51		296.51
Automobile Repairs	28.83					28.83		28.83
Distribution of Suspense Accounts	291.40	100.87	225.06			617.33		617.33
Purchase Price of G. B. Willson Property		40,000.00				40,000.00	40,000.00	
Total	$2,171.74	$42,105.87	$ 4,290.06	$2,530.00		$51,097.67	$40,000.00	$11,097.67
Description of Job as Shown on Job Order Estimate "This will comprise special expenditures in connection with flowage basin, exclusive of specific jobs in connection therewith, such as purchases of real estate, etc., which will be covered by the job numbers authorized therefor." "Refer to letter of Jan. 18, 1926 - J.A.W. to J.L.R."								

( ) Denotes credit

Docket IT-5915 Schedule 22

PENNSYLVANIA WATER & POWER COMPANY

Expenditures for Erection, Renewal and Testing of Flashboards on the Dam Charged to Plant Account Years 1911 to 1921, Inclusive

Year	Job or Estimate No.		Total Amount (1)	Allowed (2)	Disallowed (3)
1911	C-12		$18,784.44	$18,784.44	$
1912	C-12		13,979.06	13,979.06	
1913	C-12		5,924.71		5,924.71
1914	C-12		2,468.96		2,468.96
1916	Est. 626		16,845.54		16,845.54
1917	C-51	$10,896.18			
	Various	155.54	11,051.72		11,051.72
1918	C-51		3,826.22		3,826.22
1919	C-51		3,209.44		3,209.44
1920	C-51		1,466.02		1,466.02
1921	C-51		168.45		168.45
	Totals		$77,724.56	$32,763.50	$ 44,961.06

Note: In the latter part of 1911 a complete system of flashboards was erected on the dam and tested. Minor improvements and additional tests were made in 1912 and the flashboards placed in operation. A large part of the expenditures in 1912 and all the expenditures in 1913 and 1914 were in connection with the renewal of flashboards and pins, and testing to improve operating conditions. The expenditures from 1916 through 1919 were largely in connection with experimental swing gates which were used to replace the conventional type flashboards at various times along a portion of the crest of the dam. These experimental gates proved a failure and were completely abandoned in 1919.

The flashboards were in operation from 1912 through 1914. They were not erected in 1915 because of a restraining injunction secured by a river property owner. This injunction was extinguished in March 1916 by the purchase of the property, but the flashboards were not replaced until July 1917. The flashboards have been in use each year since that date.

Docket IT-5915

PENNSYLVANIA WATER & POWER COMPANY

Stock Issue Expense Charged to Plant Account
Years 1923 to 1935, Inclusive

Schedule 23

Particulars	1923 (1)	1924 (2)	1925 (3)	1932 (4)	1933 (5)	1934 (6)	1935 (7)	Total (8)	Allowed (9)	Disallowed (10)
EXPENSES IN CONNECTION WITH AUTHORIZATION FOR INCREASE IN CAPITALIZATION										
Pennsylvania Bonus Tax	$ 2,176.00	$3,256.34	$	$	$	$	$ 1,261.80	$ 6,694.14	$6,694.14	$
Documentary Stamps	739.65	1,86.45			382.90		1,766.40	3,377.40		3,377.40
Filing Fees in Connection with Increase in Stock	56.00	15.00		30.00	15.00		5.00	121.00		121.00
Advertising Stockholders' Meetings	24.04			597.82				621.86		621.86
Simpson, Thacher & Bartlett:										
Legal Services in Connection with Increase in Capital Stock and Listing Stock on Philadelphia, Baltimore, Montreal and London Stock Exchanges	2,500.00							2,500.00		2,500.00
Legal Services and Expense in Connection with Authorization for Issue of Preferred Stock				5,207.32				5,207.32		5,207.32
Printing and Issuing Proxies and Notices				222.55				222.55		222.55
Total	5,495.69	3,759.79	-	6,057.69	397.90	-	3,033.20	18,744.27	6,694.14	12,050.13
EXPENSES IN CONNECTION WITH SALE AND ISSUANCE OF CAPITAL STOCK, ETC.										
Fees for Listing Stock on Baltimore, Philadelphia, Montreal and London Stock Exchanges	200.00	200.00				200.00	100.00	700.00		700.00
Aldred & Company - Services and Expenses in London Covering New Stock Issues	596.53	534.42			246.00			1,376.95		1,376.95
Fidelity Trust Company - Services in Connection with Subscriptions to Capital Stock	3,000.00	3,027.80			2,054.60			8,082.40		8,082.40
Simpson, Thacher & Bartlett:										
Legal Services re Proposed Issue of Preferred Stock	500.00							500.00		500.00
Legal Services in Connection with Subscriptions to and Sale of Capital Stock		500.00			4,500.00	1,000.00	750.00	6,750.00		6,750.00
Cook-Marshall - Legal Services Regarding Requirements of Regulatory Bodies						100.00		100.00		100.00
Auditing Fee for Preparing Registration Statement and Application to the Pennsylvania Public Service Commission in Connection with Sale of Preferred Stock						4,861.50		4,861.50		4,861.50
Expenses of Company Employees Assisting in Preparing Registration Statement and Application						1,597.82		1,597.82		1,597.82
Fee for Filing Application for Approval to Issue Preferred Stock (Pennsylvania Public Service Comm.)					10.00	1,723.99	35.33	1,769.32		1,769.32
White, Weld & Company - Services in Connection with Sale of 17,664 Shares Preferred Stock							30,912.00	30,912.00		30,912.00
Aldred & Company - 1/2% Commission on Sale of 17,664 Shares of Preferred Stock at 99.50							8,787.84	8,787.84		8,787.84
Printing Subscription Warrants and Notices	979.00	1,030.25			672.84			2,682.09		2,682.09
Printing Stock Certificates	302.50			930.00	575.00	(930.00)		877.50		877.50
Printing Circulars and 1932 Report					492.94			492.94		492.94
Miscellaneous - Stationery, Ledgers, Postage, etc.	165.54	432.57	1.67		280.95	228.40	13.50	1,122.63		1,122.63
Total	6,043.57	5,723.04	1.67	930.00	8,834.33	8,781.71	40,598.67	70,912.99	-	70,912.99
Total Stock Issue Expense	$11,539.26	$9,482.83	$1.67	$6,987.69	$9,232.23	$8,781.71	$43,631.87	$89,657.26	$6,694.14	$82,963.12

( ) Denotes credit.

Docket IT-5915

PENNSYLVANIA WATER & POWER COMPANY

Schedule 24

Holtwood Power Company Organization Expense
Charged to Plant Account During 1924 and 1925

Account No.	Particulars	1924 (1)	1925 (2)	Total (3)	Allowed (4)	Disallowed (5)
EA 1	Promotion					
	Lancaster Office Expense					
	M. E. Bughong, Salary June 1924 to Dec. 1925	$ 4,125.01	$ 8,000.00	$12,125.01	$	$12,125.01(a)
	Office Salaries, Expenses and Traveling, June 1924 to Jan. 1925 and March 1925 to Dec. 1925	2,512.07	5,515.82	8,027.89		8,027.89(a)
	Record Books, Stationery and Printing	283.51	29.00	312.51	312.51	
	Sundry Advertising, Recording Deeds, etc.	124.95	71.76	196.71	196.71	
	Total Promotion	7,045.54	13,616.58	20,662.12	509.22	20,152.90
EA 2	Incorporation Fees					
	Pennsylvania Bonus Tax	4,983.34		4,983.34	4,983.34	
	Documentary Stamps	750.00		750.00	750.00	
	Directors Fees	210.00		210.00	210.00	
	Filing Fees	85.00	106.40	191.40	191.40	
	Miscellaneous	66.38		66.38	66.38	
	Total Incorporation Fees	6,094.72	106.40	6,201.12	6,201.12	-
EA 3	Counsel Fees					
	John E. Malone, Professional Services January 1, 1924 to July 1, 1925	7,500.00	5,000.00	12,500.00	12,500.00	
	William S. Haskell, Professional Services in Preparing Proposed Contract for Steam Generated Electric Service	310.00		310.00	310.00	
	Stewart & Gerber - Legal Opinion on Auxiliary Steam Plant, Purchase of Power and Guarantee of Bonds	300.00		300.00	300.00	
	J. M. Groff, Legal Services July 1, 1924 to July 1, 1925	1,000.00	1,000.00	2,000.00		2,000.00(b)
	S. R. Zimmerman, Legal Services to December 31, 1924	2,500.00		2,500.00		2,500.00(b)
	Simpson, Thacher & Bartlett, Legal Services in Connection with Organization, Financing, Proposed Contract with Pennsylvania Water & Power Company, Preparing Mortgages, etc.	6,141.18		6,141.18	3,070.59	3,070.59(c)
	Lancaster Office Expense, Salaries and Traveling during February 1925		189.85	189.85		189.85(a)
	Notary Fee		.75	.75	.75	
	Total Counsel Fees	17,751.18	6,190.60	24,241.78	16,181.34	8,060.44
	Total Organization Expenses	$30,891.44	$20,213.58	$51,105.02	$22,891.68	$28,213.34

(a) Lancaster office expenses have been disallowed as properly chargeable to operations of Pennsylvania Water & Power Company.
(b) No explanation of these payments appeared on the vouchers, but we were informed by Mr. Wetzell, of the Company's budget department, that these lawyers were engaged during this period in negotiating the renewal of Pennsylvania Water & Power Company's power contract with Edison Electric Company of Lancaster, Pennsylvania.
(c) Half of Simpson, Thacher & Bartlett's bill has been disallowed as applicable to financing activities.

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Schedule 25
Sheet 1 of 3

PENNSYLVANIA WATER & POWER COMPANY

Miscellaneous Eliminations from Plant Accou

Job Order	Description	Year	Amount
Pennsylvania Water & Power Company			
Holtwood Substation Account			
K-1216	Loss on sale of portion of Lancaster Line	1933	$ 3,168.13
General Hydraulics Account			
-	Periodic painting of head gates	1914	92.73
Power House Machinery Account			
C-42	Rebuilding control battery	1917	1,472.56
C-84	Educational course	1918-1922	700.45
C-314	Welding equipment for repairing turbine runners	1925	606.77
M-376	Operating engineering	1925	2,969.91
M-377	Maintenance engineering	1925	3,138.26
M-378	Test engineering	1925	2,800.80
C-805	Carrier current equipment not removed from plant account when sold to Pennsylvania Power & Light Company	1929	383.26
C-1216	Loss on sale of portion of Lancaster Line	1933	2,637.05
-	Replacement of 8 temperature coils	1919	124.64
-	Replacement of chain for ventilating fan	1919	211.05
-	Re-installation of bath tub	1919	6.25
-	Expense in connection with N.E.L.A. meeting	1921	93.29
Miscellaneous Holtwood Construction Account			
	Operating expense of employees' club house	1915	534.15
Property and Riparian Rights Accounts			
	Write down book value of investment in subsidiary pole line companies upon merger	1910	1,000.00
York Transmission Line Account			
K-1216	Loss on sale of portion of Lancaster Line	1933	661.90
	Change transformer bushings from 73 kv to 88 kv.	1936	1,765.61
Lancaster Transmission Line Account			
C-276.1	Taxes, insurance, fertilizer, etc. properly chargeable to maintenance	1924	1,358.31
K-1216	Profit on sale of portion of Lancaster Line	1933	(4,177.08)
Coatesville Transmission Line Account			
H-287	Moving transformer from Violet Hill Substation to Newlinville for sale	1925	3,693.62
K-1216	Loss on sale of portion of Lancaster Line	1933	223.56

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Schedule 25
Sheet 2 of 3

PENNSYLVANIA WATER & POWER COMPANY

Miscellaneous Eliminations from Plant Account

Job Order	Description	Year	Amount
Baltimore Transmission Line Accounts			
C-344	Right-of-way investigation on Gunpower Transmission Line (right-of-way not acquired)	1927	$ 76.68
-	Par value of original issue of Susquehanna Transmission Company of Pennsylvania Capital Stock, erroneously charged to plant account	1910	500.00
-	Original subscription to capital stock of predecessor pole line companies erroneously credited to plant account	1911	(1,000.00)
Westport Transmission Line Account			
C-1311	Tax adjustment in connection with sale of excess land	1934	6.88
Office Furniture Account			
-	Office supplies - Baltimore	1936	30.55
Steam Station Accounts			
C-443	Maintenance expense included in charge to plant	1927	14.27
Miscellaneous			
-	Exchange transfer fee, Bank of Scotland	1910	.30
-	Bond issue expense - 1914	1914	3,255.06
-	Counsel fee for examining mortgage	1917	30.00
-	Printing Annual Report	1912	167.50
-	Sundry taxes and expenses paid for associated companies	1913-1914	414.93
-	Discount on water bill	1912	(3.13)
-	Discount on taxes	1912	(27.55)
-	Discount on bonds purchased for Sinking Fund	1915	(5,500.00)
-	Interest received on Conowingo Land Company mortgage	1910	(8,125.00)
-	Dividends received on Consolidated Gas, Electric Light and Power Company of Baltimore Preferred Stock	1910	(60,000.00)
	Total Pennsylvania Water & Power Company		(46,694.29)

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Schedule 25
Sheet 3 of 3

PENNSYLVANIA WATER & POWER COMPANY

Miscellaneous Eliminations from Plant Accounts

Job Order	Description	Year	Amount
Susquehanna Transmission Company of Maryland			
	Baltimore Transmission Line Accounts		
C-344	Right-of-way investigation on Gunpowder Transmission Line (right-of-way not acquired)	1927	311.06
-	Par value of original issue of Susquehanna Transmission Co. of Maryland Capital Stock erroneously charged to plant account	1910	500.00
-	Loss on sale of Rever property	1926	126.30
-	Loss on sale of Shriver property	1931	12.45
-	Cut-off parcel of land sold to Frederick Smith (no record of sale credit)	1910	1.00
-	Profit on sale of Rever property	1920	(1,239.87)
-	Correction of price at which insulators were returned to stores	1917	(1,083.85)
-	Original subscription to capital stock of predecessor pole line companies erroneously credited to plant account	1911	(1,000.00)
-	Profit on sale of Erdman Avenue land to city	1931	(202.27)
	Highlandtown Substation Building Account		
C-879	Profit on sale of land to city	1930	(380.78)
	Highlandtown Substation Machinery Account		
-	Lessons in electricity	1921	6.00
-	Freight on transformers	1915	26.02
-	Educational course	1919	28.14
-	Shawinigan Electro Products Company furnace tests	1919	35.40
C-135	Tests on Pratt Street cables	1920	477.96
C-755	Engineering study on reactors for transformers	1932	81.60
-	Profit on sale of Pratt Street cables	1928	(10,612.48)
	Ellicott City-Washington Transmission Line Account		
C-747	Profit on sale of Hanna M. Preston property (outside project boundary)	1934	(476.58)
	Total Susquehanna Transmission Company of Maryland		(13,389.90)
	Total Miscellaneous Eliminations		$(60,084.19)

( ) Denotes credit.

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Schedule 26
Sheet 1 of 2

PENNSYLVANIA WATER & POWER COMPANY

Plant Additions Charged to Operating or Maintenance Expense on the Books

Job Order or Maintenance Account No.	Description	Year	Amount
R-4131	Labor and material to make up 12 sets of ground clamps	1920	$ 284.53
C-512	Additions to operating room lighting at Highlandtown Substation	1926	368.45
C-365	Permanent lighting for hydro bench board at Holtwood	1927	1,960.74
C-525	New connections to new city sewer line at Highlandtown Substation	1927	652.98
C-546	Install safety platforms in #1 and #2 drainage pump sump pits	1927	117.12
K-547	Purchase of new Vulcan steam locomotive	1927	7,602.20
C-568	Install control circuit for forebay gauge	1927	212.62
C-697	Installation of submerged greasing system to #13 Exciter turbine	1928	339.41
C-767	Foundation for bungalow #22A	1928	171.88
M-1001	Coal chute to #1 dryer furnace	1928	[illegible] 63
R-4531S	Watt-hour meter	1928	37.47
R-4131	Vacuum cleaner	1928	70.89
R-4131	Portable ammeter	1928	81.20
C-452	Priming pump for circulating water system	1928	2,221.80
C-454	Priming tank	1928	961.10
C-457	Addition of Hays recording meters for boilers 1, 2, and 3	1928	1,080.60
C-459	Install current transformers and relays on boiler room switchboard	1928	849.27
K-544	Paving #9 tailrace bay	1928	41,668.25
K-569	Watt-hour meter terminal blocks for current and potential transformer leads	1928	133.85
C-572	Ladders for river crossing and B.& O. towers	1928	416.24
C-598	Modification of sleet bus feeders	1928	3,066.22
C-599	Voltmeter and audibility meter	1928	45.33
C-605	Install oil gauges on permanent oil filter drums	1928	32.50
C-604	Installation of electric circuit for tailrace recording gauge	1928	205.50
C-617	Installation of fire alarm siren	1928	844.48
C-622	Installation of smoke indicator	1928	137.99
C-623	Installation of ladders for top section of river crossing towers	1928	127.72
C-628	Ammeter and wattmeter for testing #5 transformer at Holtwood	1928	204.14

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Schedule 26
Sheet 2 of 2

PENNSYLVANIA WATER & POWER COMPANY

Plant Additions Charged to Operating or Maintenance Expense on the Books

Job Order or Maintenance Account No.	Description	Year	Amount
C-460	Vacuum heating pump	1929	$ 1,211.15
M-611	Haskell current meter wheels and bearing housing for hydraulic tests on pumps and turbines at Holtwood	1929	222.50
K-778	Install pipe and fittings for ven to heater return connections to vacuum pump	1929	336.12
C-814	WEMCo Klydonograph and Locke insulators used for lightning investigations on York circuit	1929	505.50
R-412	Telescoping towers and platforms	1929	659.76
R-3033	Installation of 6 Foxboro thermometers	1930	238.64
R-3038	Geared pipe threader, power drive and threading device	1930	499.92
R-3035	Addition of two CV relays	1930	68.64
R-4435-S	Addition of B.& D. grinder and pedestal	1930	70.00
M-918	Installation of close off gates on discharge side of No. 1 and 2 bucket elevators	1931	443.87
M-920	Coal chute to No. 2 dryer furnace	1931	337.16
M-1043	Ladder to circulating water screen operating platform	1931	268.98
-	Fire extinguishers for Mill House	1931	355.00
R-3035	Vacuum cleaner and accessories	1931	431.25
R-3038	Internal-external grinder for #16 Greaves Klusman lathe	1931	233.00
-	Addition of pressure regulator	1933	135.83
R-3035	Installation of one magnetic switch in the field circuit breaker circuit for each of the 25 volt generators	1934	337.41
-	Two pull lift hoists	1935	115.61
-	One rotary condenser tube cleaner	1935	49.84
R-4435-S	Three WEMCo current transformers	1936	273.51
M-1500-H	Addition of potheads	1936	274.22
M-1500-H	Two Sturtevant dryers	1936	712.80
M-1500-S	Construction of barge	1936	617.54
R-412	Lux fire extinguisher	1936	47.78
-	Safety devices for gasoline handling on dredge	1936	105.84
-	Miscellaneous equipment charged to maintenance	1915-1936	3,660.95
	Total		$76,915.93

Docket IY-5915 Schedule 27

PENNSYLVANIA WATER & POWER COMPANY

Excess Cost of Property Acquired by Susquehanna Transmission Company of Maryland from The Baltimore Electro Alloys Company, an Associated Company

	Acres (1)	Amount (2)	Total (3)
Cost of Property to The Baltimore Electro Alloys Company			
Property purchased from Consolidated Gas Electric Light & Power Company			
June, 1915, Vo. 1, Land in fee	1.000	$ 4,000.00	
Jan., 1917, Vo. 1893, Land in fee	.941	4,234.50	
			$ 8,234.50
Property purchased from Howard Jackson			
June, 1918, Vo. 4255, Land in fee	2.477	22,538.35	
Oct., 1918, Vo. 4617, Title exam'n		176.75	
		22,715.10	
Less portion sold to Williamson Veneer Company			
December, 1919 (Journal page 109)			
Sales Price $8,059.73			
Average Cost ($9,170.40 per acre)	.670	6,144.18	
			16,570.92
Total Cost	3.748		24,805.42
Amount Recorded in Plant Account by Susquehanna Transmission Company of Maryland upon acquisition of above property in December 1931			
Par Value of capital stock issued to Pennsylvania Water & Power Company as per contract dated December 15, 1931			50,000.00
Excess of recorded cost over original cost as at January 1, 1937			25,194.58
Less adjustment to correct entry recording sale of a portion of the tract to Schluderberg-Kurdle Company in 1937 (J. O. B-1700)			
Sales price credited to plant account on books		4,500.00	
Average Cost ($9,170.40 per acre)	.377	3,457.25	
Excess amount credited to plant account			1,042.75
Excess of recorded cost over original cost as at December 31, 1945			$24,151.83

Docket IT-5915 Appendix 1

PENNSYLVANIA WATER & POWER COMPANY

McCall Ferry Power Company
Statement of Cash Receipts and Disbursements
For the Period from April 14, 1905 to July 17, 1909

Sources of Funds		
Received from Susquehanna Contracting Company		
Agreement of June 13, 1905	$5,660,000.00	
Loan of July 30, 1908	130,000.00	
Agreement of October 20, 1908	62,000.00	
		$ 5,852,000.00
Interest earned on Bank Balances		19,603.52
Total Receipts		$ 5,871,603.52
Disbursements of Funds		
Construction Expenditures and Overheads		
Per Books	$5,323,785.78	
Advances to McCall Ferry Supply Company	36,000.00	
Capital Stock of McCall Ferry Supply Company	500.00	
Advance to Willis & Homer	567.45	
		$ 5,360,853.23
Advances to Susquehanna Pole Line Company (For purchase of right of way)		100,134.91
Stock of Material and Supplies		35,019.16
Interest Paid on First Mortgage 5% Bonds		
To Susquehanna Contracting Company	10,825.00	
To Others	84,875.00	
		95,700.00
Total Disbursements		$ 5,591,707.30
Cash Balance July 17, 1909		
Knickerbocker Trust Company - Railroad Relocation Deposit	$ 250,000.00	
Cash in Banks	28,604.71	
Petty Cash Funds	1,291.51	
		$ 279,896.22

Docket IT-5915 Appendix 2

PENNSYLVANIA WATER & POWER COMPANY

McCall Ferry Power Company
Balance Sheet as at July 17, 1907

Assets and Other Debits

Properties, Stocks, Franchises and Contracts		$11,199,500.00
Construction Expenditures and Overheads		
Per Detail Accounts	$5,323,785.78	
Advances to McCall Ferry Supply Company	36,000.00	
Capital Stock of McCall Ferry Supply Company	500.00	
Advance to Willis & Homer	567.45	
		$ 5,360,853.23
Interest		
Interest on First Mortgage 5% Bonds	1,647,958.54	
Less - Interest received on Bank Balances	19,603.52	
		1,628,355.02
Advances to Susquehanna Pole Line Company (For purchase of right of way)		100,134.91
Stock of Material and Supplies		35,019.16
Knickerbocker Trust Company - Railroad Relocation Deposit		250,000.00
Cash in Bank and on Hand		29,896.22
Total Assets and Other Debits		$18,603,758.54

Liabilities and Other Credits

Capital Stock		
5% Preferred Stock - 41,165 shares $100 par value	$4,116,500.00	
Common Stock - 50,000 shares, $100 par value	5,000,000.00	
		$ 9,116,500.00
First Mortgage, 30 years, 5% Bonds dated June 15, 1905		9,027,000.00
Accrued Interest on First Mortgage Bonds		460,258.54
Total Liabilities and Other Credits		$18,603,758.54

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Appendix 3

PENNSYLVANIA WATER & POWER COMPANY

Susquehanna Contracting Company
Statement of Cash Receipts and Disbursements
For the Period from M[illegible] 15, 1905 to July 17, 1909

Sources of Funds

Capital Stock Subscriptions		$ 500.00
Payments Received from Subscribers to McCall Ferry Power Company First Mortgage 5% Bonds		2,817,900.00
Loans from Knickerbocker Trust Company		4,449,600.00
Loans from Syndicate Participants		
Harvey, Fisk & Sons	$ 100,000.00	
Lee, Higginson & Company	100,000.00	
Bertron, Storrs & Griscom	100,000.00	
C. A. Coffin	100,000.00	400,000.00
Cash Received from McCall Ferry Power Company in partial payment of Interest due Dec. 15, 1905 on its First Mortgage 5% Bonds		10,825.00
Interest Received on Bank Balances		15,739.68
Total Receipts		$7,694,564.68

Disbursement of Funds

Cash Paid to McCall Ferry Power Company			
Under agreement of June 13, 1905		5,660,000.00	
Loan of July 30, 1908		130,000.00	
Under agreement of October 20, 1908		62,000.00	$5,852,000.00
Cash Paid for acquisition of Real Estate Flowage Rights, etc.			
For Property subsequently transferred to McCall Ferry Power Company			
Under agreement of June 13, 1905	$1,007,761.22		
Under agreement of October 20, 1908	55,853.00	1,063,614.22	
For Property subsequently transferred to Bondholders' Committee			
Conowingo Land Company Mortgage		27,621.57	1,091,235.79
Interest Paid			
Interest at 5% to Nov. 1, 1908 due Deferred Bond Subscribers (Applied in reduction of loan from Knickerbocker Trust Company		74,366.00	
Interest at 6% to Nov. 1, 1908 paid on Knickerbocker Trust Company Loans		487,843.94	

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Appendix 3
(Cont'd)

PENNSYLVANIA WATER & POWER COMPANY

Susquehanna Contracting Company
Statement of Cash Receipts and Disbursements
For the Period from May 15, 1905 to July 17, 1909

Disbursement of Funds (Cont'd)

Interest Paid (Cont'd)		
Commission at 2% paid on Knickerbocker Trust Company Loans to Nov. 1, 1908	$ 67,230.00	
Interest at 5% to Feb. 1, 1908 on payments received from Non-Deferred Subscribers to McCall Ferry Company First Mortgage Bonds	114,767.10	$ 744,207.04
Miscellaneous Expenses		
Compensation of Officers, Jan. 1, 1907 to July 1, 1909	2,250.00	
Attorney's Fees	2,500.00	
Printing and Stationery	332.54	5,082.54
Total Disbursements		$7,692,525.37
Cash Balance July 17, 1909		$ 2,039.31

Docket IT-5915 Appendix 4

PENNSYLVANIA WATER & POWER COMPANY

Susquehanna Contracting Company
Balance Sheet as at July 17, 1909

Assets and Other Debits

Securities and Contracts, Note (a)		$8,119,985.79
Cash		2,039.31
Interest Paid, Note (b)		
Knickerbocker Trust Company Loan - Interest	$487,843.94	
Knickerbocker Trust Company Loan - Commission	67,230.00	
Non-Deferred Bond Subscriptions	114,767.10	669,841.04
Expenses Paid		5,082.54
Total Assets and Other Debits		$8,796,948.68

Liabilities and Other Credits

Capital Stock	$ 500.00
Loans Payable	
Knickerbocker Trust Company, Note (b)	4,375,234.00 (c)
Syndicate Participants	400,000.00
Payments Received from Subscribers to McCall Ferry Power Company 5% Bonds	2,817,900.00 (c)
Interest Income on McCall Ferry Power Co. 5% Bonds	1,187,575.00
Interest Received on Bank Balances	15,739.68
Total Liabilities and Other Credits	$8,796,948.68

Notes -

(a) Summary of Securities and Contract Account -

Purchase of Properties	$1,091,235.79
Cash Paid to McCall Ferry Power Company	5,852,000.00
Unpaid Interest on McCall Ferry Power Co. Bonds	1,176,750.00
	$8,119,985.79

(b) Interest payment of $74,366.00 due to Deferred Bond Subscribers at November 1, 1908 was applied as a reduction of the Knickerbocker Trust Company Loan.

(c) The Knickerbocker Trust Company Loan has been reduced by $14,400 and Payments from Subscribers increased by the same amount to record the change of F. L. Eldridge's subscription from deferred to non-dferred.

Docket IT-5915 Appendix 5

PENNSYLVANIA WATER & POWER COMPANY

J. E. Aldred, Receiver
Balance Sheet as at December 31, 1909, as Adjusted*

Assets and Other Debits

Utility Plant		
Construction Expenditures and General Overheads	$ 405,327.30	
Less Net Interest Received	9,627.14	
		$ 395,700.16
Other Assets		
Cash in Bank and on Hand		155,503.61
Cash Deposit for Railroad Relocation		151,410.44
Accounts Receivable		1,192.58
McCall Ferry Power Company Securities Reacquired		51,540.00
Material and Supplies		14,854.39
Total Assets and Other Debits		$ 770,201.18

Liabilities and Other Credits

Cash and Materials Taken Over from McCall Ferry Power Company		
Cash in Banks and on Hand July 17, 1909	$ 29,765.23	
Cash Deposit for Railroad Relocation	250,000.00	
Material and Supplies, etc.	13,576.69	
		$ 293,341.92
Cash Advances Received from Bondholders' Committee		450,000.00
Accounts Payable and Accrued Wages		26,625.78
Income Received from McCall Ferry Company		233.48
Total Liabilities and Other Credits		$ 770,201.18

* The book balances have been adjusted to record the uncollected balance of the Railroad Relocation Deposit at December 31, 1909, $151,410.44, and sundry additional disbursements made, bank interest received and liabilities incurred prior to the transfer of the Receiver's funds to Pennsylvania Water & Power Company.

IT-5915 Appendix

PENNSYLVANIA WATER & POWER COMPANY

Bondholders' Committee
Statement of Cash Receipts and Disbursements
For the Period From October 1909 to November 28, 1911

Sources of Funds

Proceeds of Committee's Notes Payable	$1,100,000.00
Installments Received on Bond Subscriptions	1,999,000.00
Accrued Interest Received on Bonds to Date of Issue, Note (a)	8,405.50
Interest Received on Bank Balances	274.61
Total Receipts	$3,107,680.11

Disbursement of Funds

Payment of Committee's Notes Payable	$1,100,000.00
Advances to J. E. Aldred, Receiver	450,000.00
Cash paid to Pennsylvania Water & Power Company	979,305.24
Purchase of Susquehanna Contracting Company Notes Payable	
Principal amount of notes	400,000.00
Interest accrued at 6% (October 1908 to October 1909)	22,983.32
Foreclosure Expenses	14,845.61
Reorganization Expenses	78,932.92
Claims Against McCall Ferry Power Company Settled	57,849.14
Interest paid on Committee's Notes at 5% (Jan. 1 to Jan. 27, 1910	3,763.88
Total Disbursements	$3,107,680.11

Note (a) An additional $4,533.90 of accrued bond interest was collected by the Bondholders' Committee and turned over to Pennsylvania Water & Power Company, but was not recorded on the Committee's books.

Docket IT-5915

PENNSYLVANIA WATER & POWER COMPANY

Exhibit No.
Sheet 1 of 2

CONDENSED CONSOLIDATED BALANCE SHEETS, PER BOOKS (c)
DECEMBER 31, 1910 TO DECEMBER 31, 1945, INCLUSIVE

ASSETS AND OTHER DEBITS

Dec. 31	Electric Plant (1)	Work in Progress (a) (2)	Total Electric Plant (3)	Investment and Fund Accounts (4)	Current and Accrued Assets (5)	Restricted Assets (6)	Deferred Debits (b) (7)	Total (8)
1910	$14,774,574.00	$	$14,774,574.00	$1,027,520.00	$ 135,064.38	$	$ 433,752.00	$16,370,910.38
1911	15,491,027.03		15,491,027.03	136,303.33	172,933.90		453,244.53	16,253,508.79
1912	16,382,215.90		16,382,215.90	74,803.33	295,005.59		472,244.53	17,224,269.35
1913	17,206,113.56		17,206,113.56	99,803.33	262,045.21		528,371.03	18,096,333.13
1914	18,008,067.12		18,008,067.12	98,180.00	230,901.94		606,564.36	18,943,713.42
1915	18,044,286.30		18,044,286.30	881,532.91	262,470.26		816,407.10	20,004,696.57
1916	18,176,020.80		18,176,020.80	807,488.55	421,862.45		824,228.77	20,229,600.57
1917	18,464,052.13		18,464,052.13	1,349,438.00	412,729.29		825,528.77	21,051,748.19
1918	18,562,454.05		18,562,454.05	1,418,380.46	291,289.73		880,694.27	21,152,818.51
1919	18,674,021.87		18,674,021.87	1,300,630.46	448,975.49		880,694.27	21,304,322.09
1920	18,873,923.44		18,873,923.44	1,304,335.39	550,491.19		869,717.77	21,598,467.79
1921	19,016,779.37	12,686.16	19,029,465.53	1,303,102.80	618,759.55		880,731.72	21,832,059.60
1922	19,147,293.84	26,110.97	19,173,404.81	1,419,967.90	559,393.93		890,599.72	22,043,366.36
1923	19,218,282.31	3,586,181.51	22,804,463.82	1,373,028.32	1,615,919.10		1,121,300.37	26,914,711.61
1924	23,236,960.91	2,005,037.76	25,241,998.67	1,397,704.32	4,144,035.19		1,318,799.62	32,102,537.80
1925	27,689,963.95	348,523.81	28,038,487.76	1,431,429.44	1,850,340.49		1,325,318.20	32,645,575.89
1926	28,185,021.27	102,687.30	28,287,708.57	1,680,881.36	2,408,848.96		1,322,201.92	33,699,640.81
1927	28,434,821.24	196,217.22	28,631,038.46	2,114,742.09	2,413,837.02		1,174,657.07	34,334,274.64
1928	28,622,407.66	355,348.90	28,977,756.56	2,114,002.15	2,788,333.24		1,858,958.19	35,739,050.14
1929	28,897,638.65	842,856.60	29,740,495.25	3,020,703.15	2,271,092.72		1,862,480.39	36,894,771.51
1930	29,009,015.54	320,288.43	29,329,303.97	3,279,938.81	4,566,151.93		2,075,462.42	39,250,857.13
1931	30,922,198.10	1,403,286.57	32,325,484.67	4,869,382.99	3,989,981.67		1,728,102.59	42,912,951.92
1932	31,394,931.81	1,593,988.28	32,988,920.09	4,747,842.26	3,521,312.70		946,918.06	42,204,993.11
1933	31,861,786.42	1,474,844.89	33,336,631.31	5,659,534.39	3,865,165.44	479,022.95	889,144.09	44,229,498.18
1934	32,243,180.97	2,273,798.93	34,516,979.90	5,639,729.02	2,336,759.13	1,490,097.76	834,943.08	44,818,508.89
1935	33,845,702.98	934,606.90	34,780,309.88	5,650,245.70	4,985,839.84	1,480,097.76	778,064.86	47,674,558.04
1936	33,992,295.15	1,581,495.24	35,573,790.39	5,822,452.47	3,886,427.89	1,433,516.32	725,016.63	47,441,203.70
1937	36,583,736.39	456,891.82	37,040,628.21	5,783,988.87	2,941,788.15	1,319,183.13	803,286.06	47,888,874.42
1938	37,103,974.69	101,653.03	37,205,627.72	5,777,297.37	3,795,679.56	1,297,621.82	739,910.11	48,816,136.58
1939	37,312,226.17	292,879.96	37,605,106.13	5,679,836.13	4,081,717.93	1,266,050.45	833,537.93	49,466,248.57
1940	37,390,949.06	671,152.94	38,062,102.00	5,154,010.38	3,602,948.86	1,245,322.44	1,023,111.39	49,087,495.07
1941	37,647,335.76	737,159.35	38,384,495.11	5,155,153.35	4,084,451.87	149,186.12	805,478.53	48,578,764.98
1942	38,413,635.47	226,736.92	38,640,372.39	5,250,339.17	4,983,069.92		301,129.64	49,174,911.12
1943	38,479,090.01	226,552.02	38,705,642.03	7,669,055.92	3,862,345.38		14,918.77	50,251,962.10
1944	38,522,266.70	205,343.94	38,727,610.64	8,976,518.62	3,572,878.33		13,136.63	51,290,144.22
1945	38,586,428.16	237,361.79	38,823,789.95	9,376,509.04	3,498,461.53		18,899.17	51,717,659.69

Notes:

(a) Work in Progress was not segregated on the books prior to 1921.

(b) The deferred debits for the years 1910 through 1931 represent discount, profit and loss, and expense on bond issues, which were carried in plant account on the books during that period. During 1931 and 1932 the entire amount was removed from plant account and charged to Unamortized Debt Discount and Expense Account and Miscellaneous Reserve Account.

(c) The consolidation includes merged subsidiaries and Susquehanna Transmission Company of Maryland.

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PENNSYLVANIA WATER & POWER COMPANY

Sheet 2 of 2

CONDENSED CONSOLIDATED BALANCE SHEETS, PER BOOKS
DECEMBER 31, 1910 TO DECEMBER 31, 1945, INCLUSIVE

LIABILITIES AND OTHER CREDITS

Dec. 31	Common Stock Outstanding (1)	Preferred Stock Outstanding (2)	Long-Term Debt Outstanding (3)	Current and Accrued Liabilities (4)	Deferred Credits (5)	Reserve for Depreciation (6)	Other Reserves (a) (7)	Earned Surplus (a) (8)	Total (9)
1910	$ 8,455,400.00	$	$ 7,465,000.00	$ 450,510.38	$	$	$	$	$16,370,910.38
1911	8,457,900.00		7,680,000.00	49,757.27			30,000.00	35,851.52	16,253,508.79
1912	8,495,000.00		7,880,000.00	441,098.29			186,561.83	221,609.23	17,224,269.35
1913	8,495,000.00		8,505,000.00	228,301.85		250,000.00	600,000.00	18,031.28	18,096,333.13
1914	8,495,000.00		9,176,000.00	439,844.37		250,000.00	582,660.19	208.86	18,943,713.42
1915	8,495,000.00		10,427,000.00	111,597.50		250,000.00	700,000.00	21,099.07	20,004,696.57
1916	8,495,000.00		10,371,000.00	254,926.73		400,000.00	700,000.00	8,673.84	20,229,600.57
1917	8,495,000.00		10,312,000.00	771,606.89		400,000.00	1,067,000.00	6,141.30	21,051,758.19
1918	8,495,000.00		10,657,000.00	302,906.40		400,000.00	1,292,000.00	5,912.11	21,051,748.19
1919	8,495,000.00		10,657,000.00	212,703.68		400,000.00	1,537,000.00	2,618.41	21,304,322.09
1920	8,495,000.00		10,571,000.00	335,837.54		569,037.77	1,526,739.55	852.93	21,598,467.79
1921	8,495,000.00		10,724,000.00	272,815.90		733,249.01	1,504,439.55	2,555.14	21,832,059.60
1922	8,495,000.00		11,039,000.00	226,771.55		985,104.20	1,296,539.55	951.06	22,043,366.36
1923	9,769,300.00		13,878,000.00	744,678.60		1,142,028.74	1,380,539.55	164.72	26,914,711.61
1924	10,868,312.50		17,552,000.00	756,376.60		1,312,800.72	1,610,539.55	3,508.43	32,102,537.80
1925	10,868,312.50		17,450,000.00	869,047.09		1,565,276.66	1,850,539.55	42,400.09	32,645,575.89
1926	10,868,312.50		17,352,000.00	936,138.24		1,869,104.23	2,564,539.55	109,546.29	33,699,640.81
1927	10,868,312.50		17,256,000.00	905,949.80	10,277.78	2,080,141.88	3,191,539.55	22,053.13	34,334,274.64
1928	10,868,312.50		17,500,000.00	971,926.04		2,307,352.18	3,741,539.55	349,919.87	35,739,050.14
1929	10,868,312.50		17,404,000.00	1,207,073.45		2,574,895.87	3,961,539.55	878,950.14	36,894,771.51
1930	10,868,312.50		19,057,000.00	1,245,927.84		2,875,440.89	2,861,539.55	2,342,636.35	39,250,857.13
1931	10,868,312.50		22,462,000.00	1,006,075.91		3,208,735.33	2,337,671.35	3,030,156.83	42,912,951.92
1932	10,868,312.50		22,363,000.00	1,000,024.76		3,550,495.70	2,300,180.77	2,122,979.38	42,204,993.11
1933	10,868,312.50	373,327.50	22,228,000.00	2,253,108.48		3,883,026.67	2,787,813.05	1,835,909.98	44,229,498.18
1934	10,868,312.50	373,327.50	22,197,000.00	1,873,719.12		4,241,747.37	3,149,840.84	2,114,561.56	44,818,508.89
1935	10,868,312.50	2,130,895.50	22,133,000.00	2,088,551.88		4,651,164.72	3,582,962.62	2,219,670.82	47,674,558.04
1936	10,868,312.50	2,130,895.50	22,132,000.00	2,184,027.35		4,853,039.87	2,583,626.62	2,689,301.86	47,441,203.70
1937	10,868,312.50	2,130,895.50	22,055,000.00	2,266,589.97		5,153,456.21	2,127,915.63	3,285,704.61	47,888,874.42
1938	10,868,312.50	2,130,895.50	22,008,000.00	2,420,430.91		5,593,538.01	2,055,805.22	3,739,154.44	48,816,136.58
1939	10,868,312.50	2,130,895.50	21,862,000.00	2,336,566.03	81,465.58	6,086,538.02	1,971,604.82	4,128,866.12	49,466,248.57
1940	10,868,312.50	2,130,895.50	21,862,000.00	1,728,895.54	312,559.76	6,440,271.52	1,397,757.03	4,346,803.22	49,087,495.07
1941	10,868,312.50	2,130,895.50	21,657,000.00	1,764,978.42	298,426.70	6,829,401.97	217,470.07	4,812,279.82	48,578,764.98
1942	10,868,312.50	2,130,895.50	21,451,000.00	2,134,314.14	284,484.66	7,363,780.45	75,276.74	4,866,847.13	49,174,911.12
1943	10,868,312.50	2,130,895.50	21,238,000.00	2,139,171.60	270,634.03	7,920,305.70	79,427.85	5,605,214.92	50,251,962.10
1944	10,868,312.50	2,130,895.50	21,039,000.00	2,347,266.14	257,254.07	8,463,859.25	80,871.68	6,102,685.08	51,290,144.22
1945	10,868,312.50	2,130,895.50	20,833,000.00	2,288,555.44	243,963.79	8,976,358.33	78,244.98	6,298,329.15	51,717,659.69

Note (a): Until 1930 most of the available surplus was appropriated to various surplus reserves included in column 7.

Docket IT-3915 Exhibit No.

PENNSYLVANIA WATER & POWER COMPANY

ANALYSIS OF CONSOLIDATED SURPLUS ACCOUNT, PER BOOKS (b)
FOR THE PERIOD FROM JANUARY 1, 1911 TO DECEMBER 31, 1945

Year	Net Income (1)	Income Adjustments (2)	Dividend Appropriations Common (3)	Dividend Appropriations Preferred (4)	Transfers to and from Reserves: Equalization Reserves (5)	Sinking Fund Reserve (6)	Miscellaneous Reserve (7)	Reserve for Restricted Assets (8)	Reserve for Retirement Annuities (9)	Reserve for Debt Discount and Expense (10)	Miscellaneous Credits and (Charges) (Schedule) (11)	Surplus Balance December 31 (12)
1911	$ 66,200.63	$	$	$	$(30,000.00)	$	$	$	$	$	$(349.11)	$ 35,851.52
1912	235,769.25				(50,000.00)						(11.54)	221,509.23
1913	152,662.41				(256,100.36)	(100,000.00)					(140.00)	18,031.28
1914	411,977.58		(339,800.00)		(90,000.00)							208.86
1915	434,052.93		(339,800.00)		(73,164.37)						(198.15)	21,099.07
1916	469,849.77		(382,275.00)								(100,000.00)	8,673.84
1917	697,717.46		(424,750.00)		(150,000.00)	(75,000.00)					(50,500.00)	6,141.30
1918	737,495.81		(467,225.00)		(150,000.00)	(75,000.00)					(45,500.00)	5,912.11
1919	766,406.30		(509,700.00)		(150,000.00)	(75,000.00)					(35,000.00)	2,618.41
1920	645,409.52	(305,260.45)(a)	(552,175.00)		10,260.45						200,000.00	852.93
1921	671,352.21		(594,650.00)			(75,000.00)						2,355.14
1922	748,045.92		(594,650.00)		(80,000.00)	(75,000.00)						951.06
1923	806,484.16		(639,250.50)		(93,000.00)	(75,000.00)						184.72
1924	1,003,768.98		(820,620.00)		(130,000.00)	(100,000.00)					50,194.73	3,508.43
1925	1,138,887.66		(859,696.00)		(140,000.00)	(100,000.00)					(300.00)	42,400.09
1926	1,226,799.95		(859,696.00)		(200,000.00)	(100,000.00)					42.25	109,546.29
1927	1,325,318.82		(967,158.00)		(200,000.00)	(100,000.00)					(145,653.98)	22,055.13
1928	1,652,486.74		(1,074,620.00)			(100,000.00)	(150,000.00)					349,919.87
1929	1,877,381.27		(1,128,351.00)			(100,000.00)	(120,000.00)					878,950.14
1930	1,957,797.24		(1,299,544.00)		(400,000.00)	1,250,000.00	(120,000.00)				65,432.97	2,342,636.35
1931	2,056,141.51	95,046.83	(1,289,544.00)				(100,000.00)				(74,123.86)	3,030,156.83
1932	2,122,106.67	(39,334.57)	(1,289,544.00)				(1,700,000.00)				(405.55)	2,122,979.38
1933	2,105,419.73	(18,961.08)	(1,289,544.00)	(16,873.28)			(750,000.00)				(317,110.77)	1,835,909.98
1934	2,138,217.22	160,069.11	(1,289,544.00)	(19,145.00)				(642,802.53)			(68,163.22)	2,114,561.56
1935	2,272,189.63	(22,047.66)	(1,397,006.00)	(85,385.00)	72,054.41			10,000.00	(750,000.00)		5,303.98	2,219,670.82
1936	2,177,939.56	(4,677.71)	(1,719,392.00)	(107,465.00)	114,857.86			46,581.44			(38,213.21)	2,689,301.86
1937	2,257,110.40	60,986.14	(1,934,316.00)	(107,465.00)	287,400.00			40,645.69			(6,958.48)	3,296,704.61
1938	2,494,236.82	(19,922.35)	(1,934,316.00)	(107,465.00)				21,561.31			(1,844.95)	3,739,154.44
1939	2,173,843.17	17,419.14	(1,719,392.00)	(107,465.00)				31,571.57			(6,265.00)	4,128,866.12
1940	2,115,500.70	(7,851.02)	(1,719,392.00)	(107,465.00)				20,728.01		553,783.85	(637,361.44)	4,346,803.22
1941	2,110,689.91	80,691.91	(1,719,392.00)	(107,465.00)				41,984.23	87,360.73		(28,393.13)	4,812,279.82
1942	2,400,420.74	15,346.03	(1,719,392.00)	(107,465.00)				34,157.71			(568,500.17)	4,866,847.13
1943	2,289,137.88	61,197.61	(1,719,392.00)	(107,465.00)							214,889.30	5,605,214.92
1944	2,335,510.33	(2,892.02)	(1,719,392.00)	(107,465.00)							(6,291.15)	6,102,685.08
1945	2,331,161.37	(1.80)	(1,719,392.00)	(107,465.00)							(508,658.80)	6,298,329.15
Totals	$50,403,470.15	$ 69,828.41	$(36,022,910.50)	$(1,196,053.28)	$(1,707,692.21)	$ 100,000.00	$(2,940,000.00)	$(395,572.77)	$(662,639.27)	$553,783.85	$(1,903,885.23)	

Notes: (a) Detail of 1920 Income Adjustments

Additional federal income taxes 1917-18-19	$106,222.68
Additional provision for depreciation	199,037.77

(b) The consolidation includes merged subsidiaries and Susquehanna Transmission Company of Maryland.

() denote debit to Surplus.

Docket IT-5915

PENNSYLVANIA WATER & POWER COMPANY

CONDENSED CONSOLIDATED INCOME STATEMENT, PER BOOKS (c)
FOR THE YEARS 1911 TO 1945, INCLUSIVE

Year	Operating Revenue (a) (1)	Revenue Deductions: Operating Expenses (2)	Depreciation Provision (3)	Taxes (4)	Total (5)	Net Operating Income (6)	Adjustments to Operating Income thru Reserves (b) (7)	Net Operating Income per Books (8)	Other Income (9)	Gross Income (10)	Income Deductions (11)	Net Income Transferred to Surplus (12)
1911	$ 385,294.11	$ 63,893.57	$	$ 5,060.93	$ 68,959.50	$ 316,334.61	$	$ 316,334.61	$ 130,991.02	$ 447,325.63	$ 381,125.00	$ 66,200.63
1912	713,416.82	91,363.20		10,611.75	101,974.95	611,441.87		611,441.87	8,466.27	619,908.14	384,138.89	235,769.25
1913	784,252.60	107,394.84	150,000.00	9,652.83	267,047.67	517,204.93	19,337.79	536,542.72	23,224.56	559,767.28	407,104.87	152,662.41
1914	878,496.49	135,399.78		18,420.92	153,820.70	724,675.79	107,339.81	832,015.60	23,536.52	855,552.12	443,571.54	411,977.51
1915	1,113,076.92	145,180.87		31,226.70	176,407.57	936,669.35	(56,000.00)	880,669.35	67,661.72	948,331.07	514,278.14	434,052.93
1916	1,292,023.77	175,312.86	150,000.00	42,606.40	367,919.26	924,104.51		924,104.51	66,895.26	990,999.77	521,150.00	469,849.77
1917	1,685,072.83	263,909.63		130,640.66	394,550.29	1,290,522.54	(142,000.00)	1,148,522.54	67,744.92	1,216,267.46	518,550.00	697,717.46
1918	1,640,804.64	286,175.88		142,173.99	428,349.87	1,212,454.77		1,212,454.77	43,380.91	1,255,835.68	518,339.87	737,495.81
1919	1,823,161.33	371,618.68		152,191.39	523,810.07	1,299,351.26	(20,000.00)	1,279,351.26	19,902.04	1,299,256.30	532,850.00	766,406.30
1920	1,847,308.40	363,870.26	170,000.00	160,040.01	693,910.27	1,153,598.13		1,153,598.13	20,361.39	1,173,959.52	528,550.00	645,409.52
1921	1,836,726.31	429,637.27	170,124.66	166,200.00	765,961.93	1,070,764.38	97,300.00	1,168,064.38	28,226.03	1,196,290.41	524,938.20	671,352.21
1922	1,574,608.22	422,077.85	173,210.10	125,000.00	720,287.95	854,320.27	362,900.00	1,217,220.27	65,970.11	1,283,190.38	535,144.46	748,045.92
1923	1,942,790.56	444,203.55	175,410.11	150,200.00	769,813.66	1,172,976.90	84,000.00	1,256,976.90	97,637.26	1,354,614.16	548,150.00	806,464.16
1924	2,521,362.12	552,258.94	210,010.00	222,100.00	984,368.94	1,536,993.18		1,536,993.18	114,909.14	1,651,902.32	648,133.34	1,003,768.98
1925	3,104,702.37	755,625.35	260,225.00	308,680.77	1,324,531.12	1,780,171.25		1,780,171.25	160,486.27	1,940,657.52	801,769.86	1,138,887.66
1926	4,085,196.99	989,987.53	335,052.59	378,675.00	1,703,715.12	2,381,481.87	(414,000.00)	1,967,481.87	174,804.61	2,142,326.48	915,526.53	1,226,799.95
1927	4,283,087.15	1,191,053.11	339,393.65	412,954.20	1,943,400.96	2,339,686.19	(327,000.00)	2,012,686.19	222,906.93	2,235,593.11	910,274.32	1,325,318.82
1928	4,503,816.39	1,171,927.15	345,573.38	363,100.00	1,880,600.53	2,623,215.86	(300,000.00)	2,323,215.86	184,270.88	2,507,486.74	855,000.00	1,652,486.74
1929	4,529,041.70	1,302,073.93	352,101.64	384,000.00	2,038,175.57	2,490,866.13		2,490,866.13	226,715.14	2,717,581.27	840,200.00	1,877,381.27
1930	4,136,999.21	1,224,338.55	355,146.73	401,000.00	1,980,485.28	2,156,513.93	370,000.00	2,526,513.93	328,558.31	2,855,072.24	897,275.00	1,957,797.24
1931	4,684,282.87	1,184,088.63	358,406.52	425,271.13	1,967,766.28	2,716,516.59		2,716,516.59	379,787.42	3,096,304.01	1,040,162.50	2,056,141.51
1932	4,735,077.30	1,243,107.67	386,038.02	427,556.24	2,056,701.93	2,678,375.37	175,000.00	2,853,375.37	330,631.30	3,184,006.67	1,061,900.00	2,122,106.67
1933	4,974,693.64	1,392,103.70	411,717.24	459,422.43	2,263,243.37	2,711,250.27	200,000.00	2,911,250.27	258,389.67	3,169,639.94	1,064,220.21	2,105,419.73
1934	5,217,268.00	1,552,984.61	413,698.99	477,804.35	2,444,447.95	2,772,820.05	225,000.00	2,997,820.05	199,843.50	3,197,663.55	1,059,146.33	2,138,217.22
1935	5,671,037.37	1,713,747.63	464,336.18	588,623.04	2,766,706.85	2,904,330.52	177,945.59	3,082,276.11	245,693.44	3,327,969.55	1,055,780.02	2,272,189.53
1936	6,061,813.91	2,143,066.29	468,526.38	666,229.00	3,277,851.67	2,783,959.24	172,542.14	2,956,501.38	275,956.74	3,232,458.12	1,054,518.56	2,177,939.56
1937	6,925,528.49	1,878,050.98	483,091.93	698,092.28	3,059,235.19	2,966,293.30		2,966,293.30	390,479.34	3,356,772.64	1,099,662.21	2,257,110.40
1938	6,881,799.91	2,377,843.80	533,022.42	844,418.38	3,755,284.60	3,126,515.31		3,126,515.31	163,278.58	3,289,793.89	1,095,557.07	2,194,236.82
1939	6,702,785.45	2,579,473.37	539,895.09	755,881.90	3,875,250.36	2,827,539.09		2,827,539.09	161,652.96	3,289,192.05	1,115,348.88	2,173,843.17
1940	6,319,455.63	2,448,557.28	548,564.70	704,195.90	3,701,317.88	2,618,147.75		2,618,147.75	120,936.32	3,039,084.07	923,583.37	2,115,500.70
1941	6,461,701.61	2,413,403.39	558,591.31	821,521.62	3,793,316.32	2,668,385.29		2,668,385.29	335,030.48	3,003,415.77	892,725.86	2,110,689.91
1942	6,904,823.82	2,260,330.49	568,805.38	1,417,729.24	4,286,865.11	2,617,958.71		2,617,958.71	482,884.86	3,100,843.57	700,422.83	2,400,420.74
1943	6,643,075.14	2,041,109.39	570,873.61	1,454,248.75	4,066,231.79	2,576,843.35		2,576,843.35	412,569.05	2,989,392.40	700,254.52	2,289,137.88
1944	7,148,668.66	2,385,262.98	572,364.86	1,577,826.08	4,535,453.92	2,613,214.74		2,613,214.74	424,253.13	3,037,467.87	703,957.54	2,333,510.33
1945	7,051,676.04	2,348,110.32	574,245.15	1,528,942.76	4,451,298.23	2,600,377.81		2,600,377.81	442,166.91	3,042,544.72	711,383.35	2,331,161.37
Totals	$136,164,943.77	$40,448,541.33	$10,638,425.64	$16,502,098.69	$67,589,065.66	$68,575,878.11	$ 732,365.33	$69,308,243.44	$7,600,223.01	$76,908,466.45	$26,504,996.30	$50,403,470.15

Notes: (a) Exclusive of transfers from Equalization Reserves.
(b) This represents additions to (or deductions from) operating revenues transferred from Equalization Reserves. Prior to 1931, the transfers were made to equalize the income in high and low water years. After 1931, the transfers were made to offset special allowances made in the power bill to Consolidated Gas, Electric Light and Power Company of Baltimore under Article 3g of the Supplemental Agreement of June 1, 1931.
(c) The consolidation includes merged subsidiaries and Susquehanna Transmission Company of Maryland.

( ) denote deduction.

Docket IT-5915

PENNSYLVANIA WATER & POWER COMPANY

CALCULATION OF RETURN TO COMMON STOCKHOLDERS
ON THEIR ORIGINAL CASH INVESTMENT FOR THE PERIOD FROM
FROM JANUARY 1, 1911 TO DECEMBER 31, 1945

Year	Cash Paid in on Common Stock (a) (1)	Dividends Paid on Common Stock (2)	Percentage of Dividends to Cash Paid in (3)
1911	$ 4,495,500.00	$	
1912	4,495,500.00		
1913	4,495,500.00		
1914	4,495,500.00	339,800.00	7.6%
1915	4,495,500.00	339,800.00	7.6
1916	4,495,500.00	382,275.00	8.5
1917	4,495,500.00	424,750.00	9.4
1918	4,495,500.00	467,225.00	10.4
1919	4,495,500.00	509,700.00	11.3
1920	4,495,500.00	552,175.00	12.3
1921	4,495,500.00	594,650.00	13.2
1922	4,495,500.00	594,650.00	13.2
1923	5,769,800.00	639,250.50	11.1
1924	6,868,812.50	820,620.00	11.9
1925	6,868,812.50	859,696.00	12.5
1926	6,868,812.50	859,696.00	12.5
1927	6,868,812.50	967,158.00	14.1
1928	6,868,812.50	1,074,620.00	15.6
1929	6,868,812.50	1,128,351.00	16.4
1930	6,868,812.50	1,289,544.00	18.8
1931	6,868,812.50	1,289,544.00	18.8
1932	6,868,812.50	1,289,544.00	18.8
1933	6,868,812.50	1,289,544.00	18.8
1934	6,868,812.50	1,289,544.00	18.8
1935	6,868,812.50	1,397,006.00	20.3
1936	6,868,812.50	1,719,392.00	25.0
1937	6,868,812.50	1,934,316.00	28.2
1938	6,868,812.50	1,934,316.00	28.2
1939	6,868,812.50	1,719,392.00	25.0
1940	6,868,812.50	1,719,392.00	25.0
1941	6,868,812.50	1,719,392.00	25.0
1942	6,868,812.50	1,719,392.00	25.0
1943	6,868,812.50	1,719,392.00	25.0
1944	6,868,812.50	1,719,392.00	25.0
1945	6,868,812.50	1,719,392.00	25.0
Total	$210,829,675.00	$36,022,910.50	17.1%

Note: (a) Represents $4,495,500 cash paid in on the portion of McCall Ferry Power Company bonds exchanged for Pennsylvania Water & Power Company common stock as of January 13, 1910, plus the consideration received for subsequent issues of common stock.

Docket I7-5915

PENNSYLVANIA WATER & POWER COMPANY

CALCULATION OF PERCENTAGE EARNED ON ADJUSTED NET PLANT INVESTMENT PLUS WORKING CAPITAL
FOR THE PERIOD FROM JANUARY 1, 1911 TO DECEMBER 31, 1945

	Adjusted Net Plant Investment						Average Investment Base				
		Deduct			Deduct						
Year	Consolidated Plant Per Books at End of Year(a) (1)	Plant Held for Future Use Per Books (2)	Examiners' Adjustments (3)	Adjusted Plant (4)	Adjusted Reserve for Depreciation (5)	Adjusted Net Plant (6)	Average Net Plant Balances (7)	Add Working Capital (8)	Average Base (7 & 8) (9)	Net Operating Income Per Books(b) (10)	Percentage Earned (11)
1910	$14,774,574.00	$	$4,527,870.26	$10,246,703.74	$	$10,246,703.74	$	$	$	$	
1911	15,491,027.03		4,581,043.50	10,909,983.53		10,909,983.53	10,578,343.63	75,000.00	10,653,343.63	316,334.61	3.0%
1912	16,382,215.90		4,670,627.84	11,711,588.06	(57,900.24)	11,769,488.30	11,339,735.91	75,000.00	11,414,735.91	611,441.87	5.4
1913	17,206,113.66		4,893,455.61	12,312,657.95	189,783.94	12,123,874.01	11,946,681.15	75,000.00	12,021,681.15	517,204.93	4.3
1914	18,008,067.12		4,927,479.31	13,080,587.81	173,661.75	12,906,926.06	12,515,400.03	75,000.00	12,590,400.03	724,675.79	5.8
1915	18,044,286.30		4,924,218.12	13,120,068.18	173,282.18	12,946,786.00	12,926,856.03	75,000.00	13,001,856.03	936,669.35	7.2
1916	18,176,020.80		4,952,516.79	13,223,504.01	322,842.17	12,900,661.84	12,923,723.92	75,000.00	12,998,723.92	924,104.51	7.1
1917	18,461,052.13		4,980,167.05	13,483,885.08	320,247.89	13,163,637.19	13,032,149.51	100,000.00	13,132,149.51	1,290,522.51	9.8
1918	18,562,454.05		5,004,426.84	13,558,027.21	312,418.16	13,245,609.05	13,204,523.12	100,000.00	13,304,623.12	1,212,454.77	9.1
1919	18,674,021.87		5,071,045.68	13,602,976.19	270,366.88	13,332,609.31	13,289,109.18	100,000.00	13,389,109.18	1,299,354.26	9.7
1920	18,873,923.44		5,098,378.86	13,775,544.58	538,362.97	13,237,181.61	13,284,895.46	100,000.00	13,384,895.46	1,153,398.13	8.6
1921	19,016,779.37		5,127,750.68	13,889,028.69	701,181.79	13,187,846.90	13,212,514.25	100,000.00	13,312,514.25	1,070,764.38	8.0
1922	19,147,293.84		5,165,223.32	13,982,070.52	843,494.67	13,138,575.85	13,163,211.37	100,000.00	13,263,211.37	854,320.27	6.4
1923	19,218,282.31		5,273,940.31	13,944,342.00	941,202.32	13,003,049.68	13,070,812.76	150,000.00	13,220,812.76	1,172,976.90	8.9
1924	23,236,960.91		5,314,153.89	17,922,807.02	1,098,476.01	16,824,331.01	14,913,690.34	150,000.00	15,063,690.34	1,536,993.18	10.2
1925	27,689,963.95		5,494,622.67	22,195,341.28	1,336,781.36	20,858,559.92	18,841,445.46	250,000.00	19,091,445.46	1,780,171.25	9.3
1926	28,185,021.27		5,501,400.81	22,683,620.46	1,633,814.22	21,049,806.24	20,954,183.08	250,000.00	21,204,183.08	2,381,481.87	11.2
1927	28,434,821.24		5,415,246.55	23,019,574.69	1,951,792.44	21,067,782.25	21,058,794.24	300,000.00	21,358,794.24	2,339,686.19	11.0
1928	28,622,407.66		5,378,019.88	23,244,387.78	2,157,350.84	21,087,036.94	21,077,409.59	300,000.00	21,377,409.59	2,623,215.86	12.3
1929	28,897,638.65		5,383,847.17	23,513,791.48	2,416,086.03	21,097,705.45	21,092,371.19	350,000.00	21,442,371.19	2,490,866.13	11.6
1930	29,009,015.54		5,477,433.49	23,531,582.05	2,670,472.41	20,861,109.64	20,979,407.54	350,000.00	21,329,407.54	2,156,513.93	10.1
1931	30,922,198.10		5,904,151.43	25,018,046.67	3,002,356.07	22,015,690.60	21,638,400.12	350,000.00	21,988,400.12	2,716,516.59	12.4
1932	31,394,931.81		5,574,502.79	25,820,429.02	3,341,178.80	22,479,250.22	22,247,470.41	350,000.00	22,797,470.41	2,678,375.37	11.8
1933	31,861,786.42		5,598,209.19	26,263,577.23	3,670,148.61	22,593,428.62	22,536,339.42	350,000.00	22,886,339.42	2,711,250.27	11.9
1934	32,243,180.97		5,620,391.74	26,622,789.23	4,024,640.41	22,598,148.82	22,595,788.72	350,000.00	22,945,788.72	2,772,820.05	12.1
1935	33,845,702.98		5,680,229.39	28,165,473.59	4,435,388.40	23,730,085.19	23,164,117.00	350,000.00	23,514,117.00	2,904,330.52	12.4
1936	33,992,295.15		5,685,413.48	28,306,881.67	4,631,599.94	23,675,281.73	23,702,683.46	450,000.00	24,152,683.46	2,783,959.24	11.5
1937	36,583,736.39		5,688,599.43	30,895,136.96	4,932,391.28	25,962,745.68	24,819,013.70	450,000.00	25,269,013.70	2,966,293.30	11.7
1938	37,103,974.69		5,688,564.43	31,415,410.26	5,372,473.08	26,042,937.18	26,002,641.43	450,000.00	26,452,641.43	3,126,515.31	11.8
1939	37,312,226.17		5,679,639.43	31,632,586.74	5,865,473.09	25,767,113.65	25,905,025.41	450,000.00	26,355,025.41	2,827,539.09	10.7
1940	37,390,949.06	560.02	5,676,401.02	31,713,988.02	6,219,824.19	25,494,163.83	25,630,638.74	550,000.00	26,180,638.74	2,618,117.75	10.0
1941	37,647,335.76	2,082.77	5,674,327.48	31,970,925.51	6,611,028.18	25,359,897.33	25,427,030.58	550,000.00	25,977,030.58	2,668,385.29	10.3
1942	38,413,635.47	2,082.77	5,670,503.23	32,741,049.47	7,119,229.91	25,621,819.56	25,475,858.44	550,000.00	26,025,858.44	2,617,958.71	10.1
1943	38,479,090.01	2,196.03	5,668,063.66	32,808,830.32	7,706,326.23	25,102,504.09	25,347,161.82	575,000.00	25,922,161.82	2,576,843.35	9.9
1944	38,522,266.70	2,196.03	5,667,034.41	32,853,036.26	8,249,909.03	24,603,127.23	24,852,815.66	590,000.00	25,442,815.66	2,613,214.74	10.3
1945	38,586,428.16	2,196.03	5,663,493.90	32,920,738.23	8,763,118.62	24,157,619.61	24,380,373.42	620,000.00	25,000,373.42	2,600,377.81	10.4
Totals									$677,465,716.09	$68,575,878.11	10.12

Notes: (a) Exclusive of Construction Work in Progress and Bond Discount and Expense.
(b) Represents net operating income per books, less $732,365.33 transferred from the Equalization Reserve.

Docket IT-5915

PENNSYLVANIA WATER & POWER COMPANY

RATIO OF NET INCOME AVAILABLE FOR COMMON STOCK (PER BOOKS)
TO ADJUSTED COMMON STOCK EQUITY

Year	Common Stock Equity, Adjusted				Net Income Available for Common Stock, Per Books			Per Cent Earned on Common Stock Equity
	Common Stock Per Books	Adjusted Surplus (a)	Reserves, Other Than Depreciation Per Books	Total Common Stock, Surplus and Reserves	Net Income Per Books	Deduct Dividends On Preferred Stock	Net Income Available For Common Stock	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1911	$ 8,457,900.00	$ (4,540,576.98)	$ 30,000.00	$ 3,947,323.02	$ 66,200.63	$	$ 66,200.63	1.7%
1912	8,495,000.00	(4,365,395.79)	186,561.83	4,316,166.04	235,769.25		235,769.25	5.5
1913	8,495,000.00	(4,700,224.41)	600,000.00	4,394,775.59	152,662.41		152,662.41	3.5
1914	8,495,000.00	(4,736,463.06)	582,660.19	4,341,197.13	411,977.58		411,977.58	9.5
1915	8,495,000.00	(4,711,932.09)	700,000.00	4,483,067.91	434,052.93		434,052.93	9.7
1916	8,495,000.00	(4,752,215.98)	700,000.00	4,442,784.02	469,849.77		469,849.77	10.6
1917	8,495,000.00	(4,779,742.00)	1,067,000.00	4,782,258.00	697,717.46		697,717.46	14.6
1918	8,495,000.00	(4,796,401.25)	1,292,000.00	4,990,598.75	737,495.81		737,495.81	14.8
1919	8,495,000.00	(4,824,262.51)	1,537,000.00	5,207,737.49	766,406.30		766,406.30	14.7
1920	8,495,000.00	(4,952,165.49)	1,526,739.55	5,069,574.06	645,409.52		645,409.52	12.7
1921	8,495,000.00	(4,978,267.18)	1,504,439.55	5,021,172.37	671,352.21		671,352.21	13.4
1922	8,495,000.00	(5,007,801.59)	1,296,539.55	4,783,737.96	748,045.92		748,045.92	15.6
1923	9,769,300.00	(5,040,193.26)	1,380,539.55	6,109,646.29	806,464.16		806,464.16	13.2
1924	10,868,312.50	(5,105,745.12)	1,610,539.55	7,373,106.93	1,003,768.98		1,003,768.98	13.6
1925	10,868,312.50	(5,114,515.24)	1,850,539.55	7,604,336.81	1,138,887.66		1,138,887.66	15.0
1926	10,868,312.50	(5,047,265.86)	2,564,539.55	8,385,586.19	1,226,799.95		1,226,799.95	14.6
1927	10,868,312.50	(5,154,884.97)	3,191,539.55	8,904,967.08	1,325,318.82		1,325,318.82	14.9
1928	10,868,312.50	(4,766,806.66)	3,741,539.55	9,843,045.39	1,652,486.74		1,652,486.74	16.8
1929	10,868,312.50	(4,234,761.18)	3,961,539.55	10,595,090.87	1,877,381.27		1,877,381.27	17.7
1930	10,868,312.50	(2,817,247.21)	2,861,539.55	10,912,604.84	1,957,797.24		1,957,797.24	17.9
1931	10,868,312.50	(2,151,414.06)	2,337,671.35	11,054,569.79	2,056,141.51		2,056,141.51	18.6
1932	10,868,312.50	(3,088,142.01)	2,300,180.77	10,080,351.26	2,122,106.67		2,122,106.67	21.1
1933	10,868,312.50	(3,383,159.20)	2,787,813.05	10,272,966.35	2,105,419.73	16,873.28	2,088,546.45	20.3
1934	10,868,312.50	(3,103,660.41)	3,149,840.84	10,914,492.93	2,138,217.22	19,145.00	2,119,072.22	19.4
1935	10,868,312.50	(3,001,474.18)	3,582,962.62	11,449,800.94	2,272,189.53	85,385.00	2,186,804.53	19.1
1936	10,868,312.50	(2,538,421.36)	2,583,626.62	10,913,517.76	2,177,939.56	107,465.00	2,070,474.56	19.0
1937	10,868,312.50	(2,944,614.56)	2,127,915.63	11,051,613.57	2,257,110.40	107,465.00	2,149,645.40	19.3
1938	10,868,312.50	(1,492,164.73)	2,055,805.22	11,431,952.99	2,494,236.82	107,465.00	2,386,771.82	20.9
1939	10,868,312.50	(1,102,453.05)	1,971,604.82	11,737,464.27	2,173,843.17	107,465.00	2,066,378.17	17.6
1940	10,868,312.50	(884,515.95)	1,397,757.03	11,381,553.58	2,115,500.70	107,465.00	2,008,035.70	17.6
1941	10,868,312.50	(419,039.35)	217,470.07	10,666,743.22	2,110,689.91	107,465.00	2,003,224.91	18.8
1942	10,868,312.50	(364,472.04)	75,276.74	10,579,117.20	2,400,420.74	107,465.00	2,292,955.74	21.7
1943	10,868,312.50	373,895.75	79,427.85	11,321,636.10	2,289,137.88	107,465.00	2,181,672.88	19.3
1944	10,868,312.50	871,365.91	80,871.68	11,820,550.09	2,333,510.33	107,465.00	2,226,045.33	18.8
1945	10,868,312.50	1,067,009.98	78,244.98	12,013,567.46	2,331,161.37	107,465.00	2,223,696.37	18.5
Totals	$350,775,075.00	$(115,588,127.09)	$57,011,726.34	$292,198,674.25	$50,403,470.15	$1,196,053.28	$49,207,416.87	16.8

Note (a): Surplus has been adjusted to reflect the examiners' adjustments.

EXHIBIT NO. 60.

[22718]

FEDERAL POWER COMMISSION

Docket No. IT-5915

* * *

PENNSYLVANIA WATER & POWER COMPANY

CONSOLIDATED INCOME STATEMENT

Bureau of Accounts, Finance and Rates
Division of Accounts

* * *

[22729] (page 9)

* * *

The reserve for depreciation at December 31, 1939 was $6,086,538.02. The limitation provision in the power contract compelled the management of both companies to review the estimated service lives and to determine whether the annual expense of $355,000 and the accumulated depreciation reserve of $6,000,000 were excessive. Both parties agreed that the depreciation rates and depreciation reserve were not excessive and found it desirable to continue the depreciation charge based upon the same service life estimates and to remove the limitation upon the balance in the depreciation reserve. The 1931 power contract was revised accordingly, by the supplemental agreement dated September 29, 1939, effective December 1, 1939.

The depreciation rates reviewed in 1939 are shown in Schedule No. 9A. The composite depreciation rate is 1.89% and the composite service life 53 years for the plant installed prior to January 1, 1931 (Col. 4).

[22737] (page 17)

* * *

Depreciation Expense (Schedule No. 9, 9A):

The Company uses the straight line depreciation method and estimated service lives to determine depreciation rates. The depreciation rates are applied to the cost of depreciable plant to compute the annual depreciation expense. The depreciation expense so computed is recorded in the books and financial statements, included in the power bill to Baltimore Company and reported in the income tax returns to the Bureau of Internal Revenue.

Schedule No. 9A shows the details of the depreciation calculations for the year 1944. The composite service lives and depreciation rates are shown on Schedule No. 9. The composite service life for the depreciable plant is estimated by the Company to be 48 years. At December 31, 1944, the depreciable plant was $27,630,429 and the depreciation reserve balance was $8,463,859 which is 30.6% of the depreciable plant.

* * *

35.

Docket IT-5915. Schedule 9

PENNSYLVANIA WATER & POWER COMPANY

DEPRECIATION EXPENSE - PER BOOKS

	Depreciation Base	Ave. Life Yrs.	Depr. Rate %	Depreciation Expense
1942 DEPRECIATION EXPENSE:				
Hydro Plant	$13,115,217	65.4	1.53	$200,456
Steam Plant	4,466,436	34.6	2.89	129,019
Transmission Plant	9,979,641	40.8	2.45	244,356
Total	27,561,294	48.1	2.08	573,831
Auto Depr. (Clearing Acct.)				5,026
Acct. 503 Depreciation Expense				$568,805
1943 DEPRECIATION EXPENSE:				
Hydro Plant	$13,133,837	65.4	1.53	$201,065
Steam Plant	4,485,174	34.6	2.89	129,400
Transmission Plant	9,988,098	40.8	2.45	244,526
Total	27,607,109	48.1	2.08	574,991
Auto Depr. (Clearing Acct.)				4,117
Acct. 503 Depreciation Expense				$570,874
1944 DEPRECIATION EXPENSE:				
Hydro Plant	$13,154,292	65.4	1.53	$201,729
Steam Plant	4,487,415	34.6	2.89	129,675
Transmission Plant	9,988,722	40.8	2.45	244,585
Total	27,630,429	48.1	2.08	575,989
Auto Depr. (Clearing Acct.)				3,624
Account 503 Depreciation Expense				$572,365
1945 DEPRECIATION EXPENSE:				$576,974
Auto Depr. (Clearing Acct.)				2,729
Account 503 Depreciation Expense				$574,245

Docket IT-5915

PENNSYLVANIA WATER & POWER COMPANY

Schedule 9A

1944 DEPRECIATION SCHEDULE, SHOWING COMPANY CLASSIFICATION OF DEPRECIABLE PLANT AND DEPRECIATION RATES

	Depreciable Plant			Depreciation Provision - Year 1944				Depreciation reserve as at December 31, 1944			
				On Property as at 1-1-31		On Additions Since 1-1-31 at 2½%		Accumulated Credits	Accumulated Charges		
	Property as at 1-1-31	Additions Since 1-1-31	Total	Ave. Rate	Amount		Total	as at 12-31-44	Charges During Year 1944	Total Charges as at 12-31-44	Reserve Balance as at 12-31-44
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Pennsylvania Water & Power Company											
Buildings											
Concrete	$ 2,234,389.50	$ -	$ 2,234,389.50	1.0	$ 22,343.90	$ -	$ 22,343.90	$ 624,132.20	$	$ 43,739.64	$ 580,392.56
Brick	173,621.08	-	173,621.08	2.0	3,517.43	-	3,517.43	98,844.72		- -	98,844.72
Frame	221,472.42	-	221,472.42	4.0	9,023.07	-	9,023.07	249,873.25		20,046.98	229,826.27
Holtwood Substation	19,048.48	-	19,048.48	.52	100.52	-	100.52	2,095.62		208.95	1,886.67
Power House	410,401.75	60,990.90	471,392.65	.62	2,601.01	1,524.77	4,125.78	67,785.99		71,641.93	(3,855.94)
Transformer House	235,380.27	34,729.81	270,110.08	.78	1,865.53	868.25	2,733.78	44,499.56		4,623.14	39,876.42
Gate House	91,077.98	8,570.45	99,648.43	.84	790.10	214.26	1,004.36	17,219.99		19,429.24	(2,209.25)
Total Buildings	3,385,391.48	104,291.16	3,489,682.64	-	40,241.56	2,607.28	42,848.84	1,104,451.33		159,689.88	944,761.45
Machinery											
Turbines	1,282,421.07		1,282,421.07	2.0	25,648.42	-	25,648.42	717,222.82		21,736.35	695,486.27
Generators	699,742.49		699,742.49	2.5	17,493.56	-	17,493.56	485,666.91		2,595.72	482,771.19
Transformers	310,808.91		310,808.91	2.5	7,508.21	-	7,508.24	226,188.33		64,960.39	161,227.94
Auxiliary Machinery	264,594.09		264,594.09	2.5	6,589.28	-	6,589.28	185,765.36		51,206.18	134,559.18
Switchboard	504,913.28		504,913.28	2.5	11,982.15	-	11,982.15	320,635.37		-	320,635.37
Holtwood Substation Machinery	222,736.71	501,821.90	724,558.61	1.57	4,674.43	12,545.55	17,219.98	228,965.24		159,948.01	69,017.23
Power House Machinery	1,377,087.53	457,114.06	1,834,201.59	1.53	21,087.59	11,337.50	32,425.09	499,132.21	2,639.32	285,369.18	213,763.03
Total Machinery	4,662,304.08	958,935.96	5,621,240.04	-	94,983.64	23,883.05	118,866.69	2,663,576.04	2,639.32	586,115.83	2,077,460.21
Transmission											
Towers	63,095.19		63,095.19	4.22	2,661.67	-	2,661.67	67,187.59		1,179.53	66,008.06
Cables - Overhead	38,674.86	-	38,674.86	1.0	404.22	-	404.22	10,167.56		-	10,167.56
Lines											
Baltimore	104,162.16	36,890.23	141,052.39	2.94	2,740.92	919.99	3,660.91	83,533.38	755.42	15,729.54	67,803.84
Westport	-	502,341.47	502,341.47	-	-	12,547.89	12,547.89	152,080.81		263.15	151,817.66
York	397,879.02	220,803.27	618,682.29	2.27	7,539.15	5,497.52	13,036.67	217,912.74	468.64	35,579.08	182,333.66
Coatesville	262,911.60	75,670.06	338,581.66	1.79	5,843.11	1,843.56	7,686.67	133,624.87	218.00	12,714.67	120,910.20
Lancaster	415,388.41	(231,185.78)	184,202.63	1.69	7,316.04	(5,779.64)	1,536.40	74,966.46		34,088.48	40,877.98
Delta	33,241.30	(637.00)	32,604.30	1.62	537.26	(15.92)	521.34	10,023.10		526.19	9,496.91
Perryville	-	636,293.91	636,293.91	-	-	15,907.35	15,907.35	154,646.84		1.24	154,645.60
Riverside	-	362,657.76	362,657.76	-	-	9,055.80	9,055.80	63,489.38		-	63,489.38
Substations											
Conestoga	-	1,094,566.42	1,094,566.42	-	-	27,364.15	27,364.15	255,938.22		7,073.86	248,864.36
Manor	-	162,759.15	162,759.15	-	-	4,069.60	4,069.60	29,152.56		3,397.19	25,755.37
Manheim	-	1,389.16	1,389.16	-	-	34.73	34.73	193.91		-	193.91
Total Transmission	1,315,332.54	2,861,548.65	4,176,881.19	-	27,042.37	71,445.03	98,487.40	1,252,917.42	1,442.06	110,552.93	1,142,364.49
Rocks, Headgates, Hydraulics											
Rocks and Headgates	625,227.91	-	625,227.91	2.0	12,504.56	-	12,504.56	348,931.21		10,624.48	338,306.73
Dam and Hydraulic Structures	3,283,805.12	59,550.78	3,343,355.90	.5	17,519.61	1,488.77	19,008.38	490,227.88		419,824.84	70,403.04
Total Rocks, Headgates, Hydraulics	3,909,033.03	59,550.78	3,968,583.81	-	30,024.17	1,488.77	31,512.94	839,159.09		430,449.32	408,709.77
Miscellaneous Holtwood Construction	374,366.19	141,550.21	515,916.40	3.85	14,766.51	3,476.83	18,263.34	278,606.98	1,660.52	50,385.11	228,211.87
Miscellaneous Property	-	302,476.40	302,476.40	-	-	7,557.81	7,557.81	51,992.53	1,466.32	77,764.91	(25,772.38)
Total Hydro and Transmission	$13,646,427.32	$4,428,353.16	$18,074,780.48	-	$207,078.25	$110,458.77	$317,537.02	$5,190,703.39	$ 7,206.22	$1,415,167.98	$4,775,535.41
Steam Station Property	$ 3,500,000.00	$ 987,415.48	$ 4,487,415.48	3.0	$105,000.00	$ 24,675.38	$129,675.38	$2,177,804.99	$22,231.99	$ 225,129.16	$1,952,675.81
Total Penna. Water & Power Company	$17,146,427.32	$5,415,768.64	$22,562,195.96	1.24	$312,078.25	$135,134.15	$447,212.40	$8,368,508.38	$29,438.21	$1,640,297.16	$6,728,211.22
Susquehanna Transmission Company of Maryland											
Buildings											
Baltimore Substation	113,180.45	(2,857.67)	110,322.78	2.89	3,269.55	(54.95)	3,214.60	87,700.08	2,424.29	26,707.34	60,992.74
Machinery											
Baltimore Substation	655,113.09	39,296.69	694,409.78	2.48	16,234.91	982.42	17,217.33	418,348.73	-	83,785.77	334,562.96
Transmission											
Lines											
Baltimore	613,960.28	91,200.52	705,160.80	2.59	15,894.80	2,276.80	18,171.60	456,179.47	393.32	66,078.89	390,100.58
Gunpowder	116,220.13	8,412.60	124,632.73	2.93	3,407.10	210.31	3,617.41	66,751.81		2,164.60	64,587.21
Westport	-	1,248,399.24	1,248,399.24	-	-	31,209.98	31,209.98	388,031.07		461.35	387,569.72
Washington	-	323,651.48	323,651.48	-	-	8,091.29	8,091.29	94,845.51		266.98	94,578.53
Perryville	-	488,881.99	488,881.99	-	-	12,222.05	12,222.05	116,206.37		-	116,206.37
Riverside	-	1,156,797.84	1,156,797.84	-	-	28,919.95	28,919.95	207,370.79		-	207,370.79
Substation											
Ellicott	-	72,570.46	72,570.46	-	-	1,814.26	1,814.26	21,289.03		-	21,289.03
Total Transmission	730,180.41	3,389,914.13	4,120,094.54	-	19,301.70	84,744.64	104,046.34	1,350,674.05	393.32	68,971.82	1,281,702.23
Miscellaneous Property	142,077.34	1,348.80	143,426.14	3.0	4,262.32	35.93	4,298.25	119,997.87	187.55	61,407.57	58,590.30
Total Susquehanna Transmission Co. of Md.	1,640,531.29	3,427,701.95	5,068,233.24	2.62	43,068.48	85,708.04	128,776.52	1,976,520.73	3,005.16	240,872.70	1,735,648.03
Grand Total	$18,786,958.61	$8,843,470.59	$27,630,429.20	1.89	$355,146.73	$220,842.19	$575,988.92	$10,345,029.11	$ 32,443.37	$1,881,169.68	$8,463,859.25

[22753]

Exhibit No. 60

3598

EXHIBIT NO. 61.

[22766]

FEDERAL POWER COMMISSION

Docket No. IT-5915

PENNSYLVANIA WATER & POWER COMPANY

ANNUAL AND ACCRUED DEPRECIATION

Bureau of Accounts, Finance and Rates
Division of Accounts

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[22768]

Annual and Accrued Depreciation

Summary:

A comparison of annual and accrued depreciation, per books, as adjusted, and as computed by the Commission's staff, is presented on Schedule 1. A summary of these figures follows:

	Per Books As Adjusted	Depreciation Requirement	Difference
Annual Depr. Expense—1944	$ 572,365	$ 464,212	$108,153
Annual Depr. Expense—1945	574,245	465,277	108,968
Average Depr. Reserve—1944	7,978,118	7,783,095	195,023
Average Depr. Reserve—1945	8,506,513	8,204,770	301,743
Depreciation Reserve Balance 12/31/45	$8,763,118	$8,408,373	$354,745

The required annual depreciation expense is $108,968 less than the amount presently being charged. The reduction is primarily due to the longer service lives recommended by the Commission's staff, which result in lower annual depreciation rates. The reclassified depreciation base is somewhat less than the depreciation base used by the Company, due to a redistribution of overheads which assigned more overheads to non-depreciable plant, but this difference has much less effect on the amount of depreciation expense than the change in service lives.

The reserve requirement is $354,745 less than the depreciation reserve per books, as adjusted. This is an indication that the Company has included some provision for maintenance in its [22769] (page 2) depreciation reserve, as it has stated in its depreciation plan. One reason why the excess of the adjusted book reserve over the reserve

requirement should be retained is to provide for the repair of the surface of the dam, estimated to cost from $500,000 to $750,000. Since the deterioration of the surface of the dam has occurred in the past and the Company has provided for some of this cost in the past, through depreciation charged to and collected from its customers, the adjusted book reserve is deducted from the gross investment in plant.

The staff has not recomputed the depreciation expense for automobiles and trucks. The Company keeps a separate record for tax purposes showing the cost, depreciation and reserve for each auto, so that adjustments for over or under depreciation are made currently. Since no provisions for auto retirements have been made in the required annual expense, such retirements, in the amount of $46,774.77, have been excluded from the charges to the reserve requirement and only the balance of the auto depreciation reserve, amounting to $39,825.74, has been included. The annual depreciation expense for autos is the same as the amount provided by the Company and does not appear in depreciation expense because it is distributed to other accounts through a clearing account.

Required Annual Depreciation Expense and Depreciation Reserve:

The purpose of this study is to show the required annual allowance for depreciation expense and the amount of depreciation which has accrued in the depreciable electric plant.

[22770] (page 3)

It is necessary, in order to determine the required annual depreciation cost, to ascertain the service capacity or service life of the depreciable plant. The service capacity which is used or expires in one year is the most accurate measure of the annual depreciation cost. The ratio of the expired service capacity to total service capacity is the most accurate measure of the accrued depreciation.

Service Lives and Depreciation Rates:

The plant service capacity has been determined by means of service life estimates of the various classes of depreciable electric plant. Service lives determined by the Federal Power Commission staff engineers, which are set forth in another exhibit, have been applied in this study. These service lives and the equivalent depreciation rates are summarized below:

	Estimated Life Years	Depr. Rate
Intangible Plant	Non-Depr.	—
Land and Land Rights	Non-Depr.	—
Steam Plant	42	2.38%
Hydro Plant	69	1.45%
Transmission Plant	57	1.75%
General Plant	35	2.86%

Depreciation Method:

In order to give equitable treatment to the Company's customers and investors, depreciation cost must be accounted for. The depreciation accounting must necessarily be stated to conform with an orderly and consistent plan of depreciation.

[22771] (page 4)

The depreciation plan used in this study is the straight line depreciation method. Each annual accounting period is charged with its pro-rata part of the investment in service capacity. The annual depreciation cost is computed by applying the anual depreciation rate to the average investment for the year.

The amount of accrued depreciation is measured by the cumulative depreciation cost less items retired. Obviously, when the total service life has been reached the depreciation cost is the original investment in the plant, less any salvage value. Prior to the retirement of the plant, the accrued de-

preciation sustained is the cost which has accrued to date, less the net loss on items which have been retired in the past. This balance of accrued depreciation is referred to as the depreciation reserve requirement, because it measures the amount which is required to date in order to provide for the ultimate retirement of the investment in plant.

The following table shows that the required depreciation expense for 1944 and 1945 was $464,212 and $465,277, respectively, and that the depreciation reserve requirement is $8,408,373 as of December 31, 1945.

[22772] (page 5)

	Average Investment	Depreciation Rate	Depreciation Provision
Depreciable Plant—1944			
Steam	$ 4,527,532	2.38%	$ 107,755
Hydro	12,815,941	1.45	185,831
Transmission	8,561,435	1.75	149,825
General	727,325	2.86	20,801
Total	$ 26,632,233	1.74%	$ 464,212
Depreciable Plant—1945			
Steam	$ 4,551,943	2.38%	$ 108,336
Hydro	12,825,433	1.45	185,969
Transmission	8,579,897	1.75	150,148
General	728,127	2.86	20,824
Total	$ 26,685,400	1.74%	$ 465,277
Depreciable Plant Cumulative 1911-1945, incl.			
Steam	$ 75,239,524	2.38%	$ 1,790,701
Hydro	362,791,312	1.45	5,260,474
Transmission	149,971,064	1.75	2,624,493
General (except auto)	12,908,093	2.86	369,171
Total Cumulative Provisions			$10,044,839

Less Retirements and Adjustments:		
Retirements—per books (1930-1945)	$1,193,416	
Unrecorded retirements (1911-1936)	343,928	
Adjustment for duplicate retirements (1937-45)	(8,200)	
Adjustment for automobile retirements	(46,775)	1,482,369
Replacements charged to reserve in lieu of retirements		193,923
Total Charges		1,676,292
Add Reserve for Automoblie Depreciation		39,826
Depreciation Reserve Requirement, December 31, 1945		$8,406,373

Depreciation Base:

The details of the depreciable plant cost, by years, are shown on Schedule 2.

[22773] (page 6)

Schedule 2 is a summary taken from a statement of the Company's claimed original cost. The statement shows the additions and retirements, by years, and by Federal Power Commission plant account classification, as classified by the Company.

For purposes of this study, the plant has been summarized by the functional groups of steam, hydro, transmis-

sion and general plant. This classification is necessary because the steam plant, with a shorter service life than hydro and transmission plant, was placed in service in 1925; therefore an over-all composite rate would not apply prior to 1925.

Eliminations from Company's Claimed Cost Statement by F. P. C. Examiners:

Schedule 3 shows a reconciliation of the Company's claimed cost with the original cost as of December 31, 1945. The total eliminations from the Company's claimed cost amount to $3,493,494 of which $1,622,797 applies to depreciable property. As shown on Schedule 2, the eliminations were applied to the year in which such items were initially claimed in depreciable plant. The eliminations, as well as the initial claims are, in certain instances, applied to an approximate year rather than attempt an exact determination of every item by years. An exact determination by years and accounts would be virtually impossible because practically all of the claims eliminated relate to computed overheads rather than specific plant items.

[22774] (page 7)

The eliminations from the claimed cost have been distributed as follows:

Organization and Franchises	$ 545,357
Land	800,757
Depreciable Plant	217,766
General Overheads	1,929,614
Total	$3,493,494

The eliminations from the claimed general overheads for the period 1905-1915, inclusive, have been distributed on

the basis of the Company's initial overhead distribution. In its claimed cost study the Company accumulated overheads for the period 1905-1915, inclusive, and made the initial distribution to the direct costs as of December 31, 1915, thus distributing the construction overheads on a broader base than at the date of initial operation in 1911.

A summary of the claimed direct construction cost and initial overhead distribution is presented on Schedule 4. The ratio of overheads to direct cost of depreciable plant is 70.8% in the Company's claimed cost study. This ratio is reduced to 47.6%, by reason of the FPC Examiners' eliminations.

An amount of $917,735 has been eliminated from the 1905-1915 claimed direct cost of intangible plant and land. The following tabulation shows the application to non-depreciable accounts.

[22775] (page 8)

Non-Depr. Accounts	Claimed Direct Cost	Eliminations	Per Cent
301.2	$ 366,972	$335,056	91.3
301.3	94,919	250	—
302	34,542	34,542	100.0
303	8,873	8,873	100.0
320	3,082,555	539,014	17.5
340	1,224	—	—
341	1,135	—	—
	$3,590,220	$917,735	25.3

The elimination of $917,735 is largely the claimed value for McCall Ferry Power Company stock, except the item of $34,542, which is the direct cost of fishways transferred from intangible to depreciable plant.

The staff eliminations of $917,735 of claimed direct costs of intangible plant and land affects the Company's distribution of overheads as between depreciable and non-depreciable plant. The following computation shows the

calculation of overheads which have been eliminated from non-depreciable plant and redistributed:

Non-Depr. Accounts	Ratio of Direct Cost Eliminated	Total Overheads 1905-15	Amount Eliminated	Transferred from Intangible to Tangible	Adjusted Overheads
301.1		$ 7	$	$	$ 7
301.2	91.3	71,219	65,023		6,196
301.3		17,822			17,822
302	100	26,358		26,358	
303	100	8,861	8,861		
320	17.5	881,040	154,182		726,858
340.2		2,238			2,238
341		1,036			1,036
Total	25.3	$1,008,581	$228,066	$26,358	$754,157

[22776] (page 9)

The staff elimination of claimed overheads is prorated on the basis of the original overhead allocation as follows:

	Overheads 1905-1915 Amount	Ratio	FPC Staff Adjustments	Adjusted Overheads
Intangible	$ 24,025	.5%	$ 7,493	$ 16,532
Hydro Land	726,858	16.0	239,765	487,093
Trans. Land	3,274			3,274
Non-Depr.	754,157	16.5	247,258	506,899
Steam	5,984			5,984
Hydro	3,624,829	79.5	1,191,152	2,433,677
Trans.	179,388	4.0	59,941	119,447
General	11,124			11,124
Depr.	3,821,325	83.5	1,251,093	2,570,232
Total	4,575,482	100.0%	1,498,351	3,077,131
Retirements	234,455			234,455
Amt. Eliminated from N. D.	228,066		228,066	
Total per claim	$5,038,003		$1,726,417	$3,311,586

The adjustment to be made to the Company's claimed cost as of December 31, 1915, is the difference between the claimed overheads and the adjusted overheads as follows:

	Overheads 1905-1915		
	Claimed	As Adjusted	Elimination
Intangible	$ 97,908	$ 16,532	$ 81,376
Hydro Land	881,040	487,093	393,947
Trans. Land	3,274	3,274	
Non-Depr.	982,222	506,899	475,323
Steam	5,984	5,984	
Hydro	3,624,829	2,433,677	1,191,152
Trans.	179,389	119,447	59,942
General	11,124	11,124	
Depr.	3,821,326	2,570,232	1,251,094
Retirements	234,455	234,455	
Total	$5,038,003	$3,311,586	$1,726,417

An amount of $55,771.65 has been eliminated from claimed interest during construction on the transmission lines. This elimination is allocated on this basis of total transmission at December 31, 1915, as follows:

[22777] (page 10)

Transmission (Pa. & Md.):	Amount	Ratio	Elimination
Depreciable	$1,463,527	75%	$41,829
Non-Depr.	485,871	25%	13,943
Total	$1,949,398	100%	$55,772

An amount of $111,210.30 has been eliminated from the flowage basin account. Since items were charged to this

account during the period 1911-1935, inclusive, an average date of 1920 was determined for purpose of prorating the amount eliminated. Another item of $1,340.98 erroneously charged to Property and Riparian Rights account is also eliminated in 1920, both amounts being prorated to total dollars claimed:

Total Claim as of Dec. 31, 1920:	Amount	Ratio	Elimination
Hydro-Depr.	$9,004,702	56.7	$63,816
Trans.-Depr.	1,752,707	11.0	12,381
Gen.-Depr.	110,560	.8	900
Non.-Depr.	5,005,677	31.5	35,454
	$15,882,646	100.0%	$112,551

Overhead eliminations are summarized as follows, by years:

Plant	1905-1915	1920	1925	1932	1936	Total
Hydro	$1,191,152	$ 63,816	$ 5,508	$	$(28,524)	$1,231,952
Trans.	101,779	12,381	32,941	13,714	(21,104)	139,702
Steam			27,569			27,569
General		900	5,279		(372)	5,807
Non-Depr.	489,266	35,454	(136)			524,584
Total	$1,782,188	$112,551	$71,161	$13,714	$(50,000)	$1,929,614

The total eliminations from the Company's claimed cost as of December 31, 1945, are summarized below:

Plant	Overheads	Direct Cost	Intangibles	Land	Total
Hydro-Depr.	$1,231,952	$175,161	$	$	$1,407,113
Trans.-Depr.	139,702	34,714			174,416
Steam-Depr.	27,569	898			28,467
General-Depr.	5,807	6,993			12,800
Intangible	81,376		545,357		626,733
Hydro Land	429,265			785,600	1,214,865
Trans. Land	13,943			15,157	29,100
Total	$1,929,614	$217,766	$545,357	$800,757	$3,493,494

[22778] (page 11)

Based upon the data described above, the original cost of depreciable plant has been classified by functional groups and by yearly plant balances as set forth in Schedule 2.

The Company's Depreciation Plan:

As shown in Column 2 of Schedule 5, prior to 1920 the Company had set up a reserve for depreciation in the amount of $400,000 by a credit of $250,000 in the year 1913 and a credit of $150,000 in 1916. Then, in 1920, the Company instituted its present depreciation plan by transferring the entire balance of $400,000 from the depreciation reserve to earned surplus and setting up a new reserve covering the years 1917, 1918, and 1919. Thus, no depreciation was recorded for the period 1911-1916, inclusive, in lieu of the $400,000 transferred to earned surplus although $813,258.71 was applicable to this period. The various amounts referred to are summarized as follow:

	Straight Line Depreciation Expense		Recorded and Transferred to
Year	Recorded	Not Recorded	Surplus
1911		$ 99,945.01	
1912		115,271.87	
1913		131,409.01	$250,000.00
1914		148,721.40	
1915		158,485.95	150,000.00
1916		159,425.47	
1917	$162,647.42		
1918	166,390.35		
1919	168,377.64		
Total	$497,415.41	$813,258.71	$400,000.00

The depreciation plan adopted in 1920 has been followed for the entire period 1917 to 1945, inclusive. The

plan has also been used for tax purposes and is described as follows by the Company in its tax returns to the Bureau of Internal Revenue:

[22779] (page 12)

"The Company acquired at organization the dam power house and incidental properties then in course of construction, of McCall Ferry Power Company and proceeded to complete the plant and put it into operation.

"A schedule showing the proper depreciation deductions for the years 1910 to 1918, inclusive, is attached hereto and marked Exhibit "A." The value of depreciable property was obtained by taking from a statement of McCall Ferry Power Company as of January 31, 1909, the actual cost figures shown in various accounts, eliminating non-depreciable property and apportioning certain general accounts to the proper classes of depreciable property.

"To these figures have been added the figures of actual expenditures for the year 1910 and for each succeeding year. There were expenditures made between January 31, 1909 and the end of that year by McCall Ferry Power Company and by receivers of McCall Ferry Power Company, but the amounts and apportionment thereof are indefinite and have been neglected.

"The rates of depreciation have been worked out by Mr. Walls, Vice President of the Company, who is a practical engineer, thoroughly familiar with water power developments, and they are based on his own knowledge of the conditions existing at this particular development.

"In its return the Company took the position that there was no depreciation in the early years of its operations. This was wrong and the Bureau of In-

ternal Revenue made a rough adjustment of invested capital to allow for such depreciation. The Bureau, however, permitted no deduction for depreciation for 1917 and 1918.

"The failure to allow for current depreciation is inconsistent and unjust and is so contrary to the usual practice of the Bureau that it is assumed the depreciation deductions for 1917 and 1918 will be allowed without question, and the only question to be settled is the exact amount which should be deducted."

Two additional depreciation studies have been prepared by Sharp, Milne & Co., accountants and auditors employed by the Company. The first report covers the period 1917-1930, inclusive, and the second report covers the period 1931-1937, inclusive. The depreciation base and depreciation charge shown in the Sharp, Milne & Co. [22780] (page 13) reports have been summarized on Schedule 6. The composite lives and rates shown on Schedule 6 have been computed from the annual charge and depreciation base figures. The depreciation base figures are as of the end of each year instead of the average for the year which causes a fluctuation in the computed composite rates when large additions occur.

The Company's registration statement, filed with the Securities and Exchange Commission in connection with the present 3¼% bonds, contains the following statement of the Company's depreciation policy and service lives:

"The Company and its wholly-owned subsidiary transmission companies have provided depreciation reserves applicable to their properties to cover losses suffered by structures and equipment from wear and tear and obsolescence, including deferred maintenance but excluding current maintenance or repairs. A depreciation reserve account was opened as of 1917 and from the year until January 1, 1931, the annual de-

preciation charges as well as the corresponding credits to the reserve account were computed upon an age-life basis. Beginning January 1, 1931 the depreciation policy has been as follows:

"With respect to plant, property and equipment installed prior to January 1, 1931, the Company and its wholly-owned subsidiary transmission companies have set aside annually from earnings, for depreciation the same amount ($355,146.73) which had been included in operating expenses during the year 1930, plus an amount computed at the rate of 2½% per annum on the cost of net additions to properties by months subsequent to January 1, 1931.

"Deductions for depreciation claimed for income tax purposes have also been computed on the basis outlined above.

"The estimated lives of various classes of depreciable property, upon which the annual depreciation charges for 1930 and prior years were calculated, are the equivalent of the following annual rates:

[22781] (page 14)

Service Life-Yrs.	Annual Rate	Classification
200	.5%	Dam and Hydraulic Structures (Including Massive Concrete or Equally Permanent Foundation Structures)
50	2.0%	Turbines (Older Types)
100	1.0%	Turbines (Moody Draft Type)
40	2.5%	Generators (Older Types)
66	1.5%	Generators (Class "B" Insulation)
40	2.5%	Auxiliary Machinery (Iron and Steel)
66	1.5%	Auxiliary Machinery (Brass, Galvanized Steel, etc.)
40	2.5%	Switchboard

Service Life-Yrs.	Annual Rate	Classification
66	1.5%	Bulk Power Switch Equipment
100	1.0%	Concrete Building (or Mainly Concrete)
50	2.0%	Brick Building (or Mainly Brick)
25	4.0%	Frame Buildings
25	4.0%	Transmission Line Towers
100	1.0%	Transmission Line Cables—Aluminum
200	.5%	Transmission Line Cables—Copper
33	3.0%	Underground Cables (Street Service)
50	2.0%	Racks, Headgates, Booms, etc. (Immersed Equipment, etc.)
20	5.0%	Transmission Lines, etc. (Local Lines)
40	2.5%	Transformers (Older Types)
66	1.5%	Transformers (Outdoor Conservatore Type)
25	4.0%	Buildings (Special Steel Buildings, etc.)
20	5.0%	Transformers (High Current Type)
33	3.0%	Steam Generating System Properties

The effective service lives at the present time are shorter than indicated by the above statement because plant additions since 1930 have an estimated life of 40 years as compared with the composite life of 53 years for plant installed prior to 1931. In effect, the Company shortened the service lives for hydro plant and transmission plant, and lengthened the service life for the steam plant, when it adjusted the depreciation rates in 1931.

Retirements Charged to the Depreciation Reserve:

When the Company began its plan of depreciation accounting in 1920 it did not record the retirements from plant accounts and [22782] (page 15) consequently there were no retirements charged to the reserve. In the case of certain items which were renewed or replaced, the cost of the re-

placement was charged to the depreciation reserve and no retirement was recorded. This method is, in effect, the capitalization of the renewals and replacements by an indirect method of accounting and no adjustment to plant or depreciation reserve is necessary.

Since 1930 the net loss on property retired has been charged to the depreciation reserve. Schedule 5 shows the recorded gross retirements from plant in Column 3 in the amount of $1,306,537.63 and the net loss in Column 6, in the amount of $1,193,415.66. Unrecorded retirements for the period 1911-1936 were determined in connection with the original cost study. The amount of $343,928.42 covers the unrecorded retirements and an adjustment of the recorded retirements, to reflect the new classification and overhead distribution made in the original cost study. Overheads applicable to retirements since 1937 have been computed by the standard 25% overhead rate used prior to January 1, 1937.

Deferred Maintenance Charged to the Depreciation Reserve:

Column 7 of Schedule 5 shows that a total of $680,180.03 has been charged to the depreciation reserve as replacements and "deferred maintenance." The items included in such charges have been classified as follows by the staff:

Plant Additions	$122,488.49
Plant Replacements	193,922.49
Plant Maintenance	363,769.05
Total	$680,180.03

[22783] (page 16)

The following plant additions have been transferred from the depreciation reserve to plant account:

Year	Job Order No.	Description	Amount
1927-8-9	K-531	Extension of Toe of Dam	$114,596.61
1928-9	K-753	Exciter Board Ventilation	1,212.66
1929	K-837	New Oil Filter	3,387.73
1929	M-843	Lathe for Hydro Plant	2,653.92
1929	K-824	New Fence at Highlandtown	637.57
		Total	$122,488.49

The details of plant replacements as shown on Schedule 7 and the details of plant maintenance are shown on Schedule 8.

The Company claims that its depreciation rates include provisions for "deferred maintenance" but exclude current maintenance or repairs. Its definition of "deferred maintenance" is that it covers, in general, repair and resurfacing of concrete structures, including dam, welding turbines, resurfacing turbine distributors, rewinding generators and rewinding transformers.

The Company has not determined how much it is providing for the so called "deferred maintenance" in its depreciation charge to expense, or how much of the depreciation reserve balance is available for "deferred maintenance."

The service lives estimated by the Commission's staff do not include provisions for maintenance and it follows that if the recommended service lives are used by the Company in the future no maintenance expense is properly chargeable to the depreciation reserve.

[22784] (page 17)

The balance of the adjusted book reserve for depreciation is $354,745 in excess of the reserve requirement as of December 31, 1945. In view of the Company's practice of

providing for and charging certain maintenance to the reserve in the past, it is reasonable to conclude that this excess is available for a large item of maintenance on the dam which the Company expects to incur.

In a letter to the Commission's staff, dated November 28, 1945, the Company's chief engineer estimated that the approximate cost of resurfacing the spillway of the Holtwood dam would be from $500,000 to $750,000, depending upon whether the work was done with concrete or with granite blocks. A reasonable method of handling this expense, when it is incurred, would be to charge it to the excess of the adjusted book reserve over the reserve requirement, to the extent of such excess, and charge the balance to current maintenance expense.

JOHN M. NEWLANDS
John M. Newlands
Chief Examiner of Accounts
EDWARD L. DUNN
Edward L. Dunn
Supervising Accountant

[22785] (page 18)

PENNSYLVANIA WATER & POWER COMPANY

Docket IT-5915 Schedule 1

COMPARISON OF ANNUAL AND ACCRUED DEPRECIATION PER BOOKS, PER BOOKS AS ADJUSTED AND RESERVE REQUIREMENT AS OF DECEMBER 31, 1945

	Depreciation Reserve Per Books		
	Per Books	As Adjusted	Reserve Requirement
Total Provisions—December 31, 1945	$10,921,712	$10,921,712	$10,044,839
Retirements and Adjustments:			
Recorded Retirements (1930-1945)	1,193,416	1,193,416	1,193,416
Unrecorded Retirements (1911-1936)		343,928	343,928
Duplicate Retirements (1937-1945)		(8,200)	(8,200)
Auto and Truck Retirements			(46,775)
Total Retirements	1,193,416	1,529,144	1,482,369
Plant Additions	122,488	—	—
Replacements	193,923	193,923	193,923
Deferred Maintenance	363,769	363,769	--
Total	680,180	557,692	193,923
Depreciation on Plant Sold:	71,758	71,758	—
Total Retirements and Adjustments	1,945,354	2,158,594	1,676,292
Add: Reserve for Automobile Depr.			39,826
Balance — December 31, 1945	$ 8,976,358	$ 8,763,118	$ 8,408,373

	Depreciation Reserve Per Books		
	Per Books	As Adjusted	Reserve Requirement
COMPUTATION OF AVERAGE RESERVES FOR 1944 AND 1945:			
Balance, December 31, 1943	$ 7,920,305	$ 7,706,326	$ 7,565,023
Depreciation Expense—1944	572,365	572,365	464,212
Auto Depr.—Clearing Account	3,624	3,624	3,624
Retirements [1]	(31,721)	(31,692)	(31,692)
Deferred Maintenance	(714)	(714)	—
Balance, December 31, 1944	8,463,859	8,249,909	8,001,167
Average Reserve — 1944	$ 8,192,082	$ 7,978,118	$ 7,783,095
Depreciation Expense—1945	574,245	574,245	465,277
Auto Depr.—Clearing Account	2,729	2,729	2,729
Retirements [1]	(61,510)	(60,800)	(60,800)
Deferred Maintenance	(2,965)	(2,965)	—
Balance, December 31, 1945	8,976,358	8,763,118	8,408,373
Average Reserve — 1945	$ 8,720,108	$ 8,506,513	$ 8,204,770

1. Recorded retirements adjusted for duplicate retirement of $29 in 1944 and $710.00 in 1945.

EXHIBIT NO. 64.

ALLOCATION

Table I

HOLTWOOD AND SUSQUEHANNA AVERAGE PLANT IN SERVICE - 1944
ITEMS ASSIGNED TO INDIVIDUAL CUSTOMERS AND THE POOL

		P.P. & L. Co. (1)	P.E. Co. (2)	Ed. Lt. & Pr. Co. (3)	P.R.R. Co. (4)
	Plant In Service				
	Production Plant				
1	Hydro				
2	Steam				
3	Total Production Plant				
	Transmission Plant				
4	Holtwood - Baltimore Line				
5	Highlandtown Substation				
6	Baltimore - Gunpowder Line				
7	Safe Harbor - Westport Line (2/3 Balt., 1/3 Pool)				
8	Safe Harbor - Riverside Line (2/3 Balt., 1/3 Pool)				
9	Washington - Ellicott Line (2/3 Balt., 1/3 Pool)				
10	Ellicott Switching Station (2/3 Balt., 1/3 Pool)				
11	Safe Harbor - Perryville Line (61% P.R.R. 39% Baltimore)				674,216
12	Conestoga Substation (61% P.R.R. 39% Baltimore)				719,925
13	Perryville Switching Station (61% P.R.R. 39% Baltimore)				444
14	Violet Hill Substation			393,418	
15	Holtwood - York Line (29% Ed. Lt. Pr. Co.)			116,426	
16	Holtwood - Coatesville Line		586,725		
17	Newlinville Switching Station		9,959		
18	Holtwood - Lancaster Line	17,025			
19	Engleside Switching Station	6,635			
20	Donegal and Donegal Tap Switching Stations	12,609			
21	Manheim and South Akron Switching Stations	3,149			
22	Balance of Transmission				
23	Total Transmission Plant	$39,418	$596,684	$539,844	$1,394,615
24	Intangible Plant				
25	General Plant				
26	Total Plant in Service	$39,418	$596,684	$539,844	$1,394,615
27	Percent of Total	0.1	1.8	1.7	4.2

E - 1944
POOL

Pr. Co.	P.R.R. Co.	Baltimore	Pool	Total Service
5	4	5	6	7
	$	$	$15,847,486	$15,847,486
			4,527,533	4,527,533
			$20,375,019	$20,375,019
		$1,371,281		$ 1,371,281
		971,877		971,877
		171,357		171,357
		1,158,300	579,150	1,737,450
		1,012,710	506,355	1,519,065
		210,772	105,385	316,157
		43,590	21,794	65,384
	674,216	431,076		1,105,322
	719,925	460,280		1,180,205
	444	284		728
418				393,418
426			358,492	504,918
				586,725
				9,959
				17,025
				6,635
				12,609
				3,119
844			1,560,090	1,560,090
	$1,394,615	$5,831,527	$ 3,131,266	$11,533,354
			173,070	173,070
			779,707	779,707
844	$1,394,615	$5,831,527	$24,459,062	$32,861,150
7	4.2	17.8	74.4	100.0

Table II

DEVELOPMENT OF RATE BASE
FOR
FACILITIES ASSIGNED TO INDIVIDUAL CUSTOMERS AND THE POOL

		P.P. & L. Co. 1	P.E. Co. 2	Ed. Lt. & Pr. Co. 3	P.R.P. Co. 4	Baltimore 5	Pool 6	Total Service 7
1	Total Plant in Service	$39,418	$596,684	$539,844	$1,394,615	$5,831,527	$24,459,062	$32,861,150
2	Depreciation Reserve	4,375	106,365	136,034	184,098	1,007,017	6,540,229	7,978,118
3	Net Plant in Service	35,043	490,319	403,810	1,210,517	4,824,510	17,918,833	24,883,032
	Working Capital							
4	Cash Working Capital	-	2,016	4,032	2,464	22,848	192,640	224,000
5	Materials and Supplies	290	5,224	4,933	12,188	51,654	291,711	366,000
6	Total Working Capital	290	7,240	8,965	14,652	74,502	484,351	590,000
7	Rate Base	$35,333	$497,559	$412,775	$1,225,169	$4,899,012	$18,403,184	$25,473,032

Table III

HOLTWOOD AND SUSQUEHANNA OPERATING EXPENSE - 1944
ITEMS ASSIGNED TO INDIVIDUAL CUSTOMERS AND THE POOL

	Holtwood and Susquehanna	P.P. & L. Co. 1	P.E. Co. 2	Ed. Lt. & Pr. Co. 3	P.R.R. Co. 4	Baltimo 5	P.R.R. Co. 4	Baltimore 5	Pool 6	Total Service 7
	Production Cost Exclusive of Purchased Power									
1	Hydro	$	$	$	$	$	$	$	$ 357,980	$ 357,980
2	Steam - Fuel and Water								332,035	332,035
3	Steam - Boiler Plant & Coal Handling Equip. Mt.								53,152	53,152
4	Steam - Other Operating and Maintenance								201,310	201,310
5	Total Production Expenses								944,477	944,477
	Transmission									
6	Highlandtown Substation					78,66		78,661		78,661
7	Holtwood - Highlandtown & Baltimore - Gunpowder Lines					41,47		41,474		41,474
8	Ellicott Switching Station (2/3 Baltimore)					73		739	369	1,108
9	Safe Harbor - Westport, Safe Harbor - Riverside, and Ellicott - Washington Lines (2/3 Baltimore)					49,63		49,633	24,817	74,450
10	Conestoga Substation (61% P.R.R. 39% Balt.)				8,477	5,41	8,477	5,419		13,896
11	Safe Harbor - Perryville Line (61% P.R.R. 39% Balt.)				10,415	6,65	10,415	6,659		17,074
12	Holtwood - Coatesville Line		15,012							15,012
13	Violet Hill Substation			30,195						30,195
14	Holtwood - York Line (29% Ed. Lt. & Pr. Co.)			2,518					6,164	8,682
15	Balance of Transmission Expense	788							73,166	73,954
16	Total Transmission Expense	$ 788	$15,012	$32,713	$18,892	$182,58	$18,892	$182,585	$ 104,516	$ 354,506
17	Administrative and General Expenses								490,891	490,891
18	Total Operating Expense Exclusive of Purchased Power	$ 788	$15,012	$32,713	$18,892	$182,58	$18,892	$182,585	$1,539,884	$1,789,874
19	Percent of Total	-	0.9	1.8	1.1	10.2	1.1	10.2	86.0	100.0

Table III - a

RECONCILIATION OF OPERATING EXPENSE ALLOCATED IN TABLE III WITH EXPENSE REPORTED BY HOLTWOOD IN F.P.C. FORM 1

Operating Expense, 1944, as reported		$2,579,099
Revenue from Interchange Sales in Pennsylvania 1/		628,867
		3,207,966
Susquehanna Capital Stock and Property Taxes	$128,776 2/	
Susquehanna Depreciation	65,060	
		193,836
		3,014,130
Less Safe Harbor Bill as rendered		1,214,553
		1,799,577
Less Adjustment Credit to Admin. and Gen. Exp.		9,703
Balance of Operating Expense as allocated in Table III		$1,789,874

1/ Revenue from interchange sales to customers in Pennsylvania is shown in the company's report as a credit to Operating Expenses. In this study the amount of these sales has been transferred to Revenue.

2/ Operating Expenses as reported contain the total costs of Susquehanna Transmission Company of Maryland, which include Taxes and Depreciation. These are taken out for separate handling and are combined with Taxes and Depreciation of Holtwood.

Table IV

ASSEMBLY OF TOTAL COSTS ASSIGNED DIRECTLY TO CUSTOMERS AND THE POOL

		P.P. & L. Co. 1	P.E. Co. 2	Ed. Lt. & Pr. Co. 3	P.E.P. Co. 4	Baltimore 5	Pool 6	Total Service 7
1	Operating Expense	$ 788	$15,012	$32,713	$ 18,892	$182,585	$1,539,884	$1,789,874
2	Bill for Safe Harbor Power						992,535	992,535
3	Taxes	7,696	12,251	9,931	25,546	98,560	382,980	536,964
4	Depreciation Expense	723	6,548	9,385	21,566	65,858	360,132	464,212
5	Return 5 Percent	1,766	24,878	20,639	61,258	244,951	920,159	1,273,651
6	Total Cost	$10,973	$58,689	$72,668	$127,262	$591,954	$4,195,690	$5,057,236

Table V

ALLOCATION OF POOL COSTS TO CAPACITY AND ENERGY COMPONENTS AND DEVELOPMENT OF UNIT COSTS PER KILOWATT AND PER KILOWATT-HOUR

		Production Facilities			Transmission Facilities	Total Jointly Used Plant
			Steam			
		Hydro	Variable	Fixed		
		1	2	3	4	5
1	Production Plant	$15,847,486		$4,527,533	$	$20,375,019
2	Transmission System				3,131,266	3,131,266
3	Total Jointly Used Plant Directly Classified	15,847,486		4,527,533	3,131,266	23,506,285
4	Percent Total	67.4		19.3	13.3	100.0
5	Intangible and General Allocated	642,172		183,886	126,719	952,777
6	Total Jointly Used Plant in Service	16,489,658		4,711,419	3,257,985	24,459,062
7	Depreciation Reserve	4,383,139		1,489,064	668,026	6,540,229
8	Net Investment	12,106,519		3,222,355	2,589,959	17,918,833
9	Working Capital	65,690		107,686	19,264	192,640
10	Materials and Supplies	196,613		56,300	38,798	291,711
11	Total Working Capital	262,303		163,986	58,062	484,351
12	Rate Base	$12,368,822		$3,386,341	$2,648,021	$18,403,184
	Total Cost of Service					
13	Operating Expense excluding Purchased Power	$ 525,374	$ 565,344	$ 295,561	$ 153,605	$ 1,539,884
14	Taxes					
15	Property and Capital Stock and Income (Plant Ratio)	244,269		69,916	48,201	362,416
16	Retirement and Unemployment and Misc. (Operating Ratio)	7,012	7,547	3,948	2,057	20,564
17	Depreciation Expense	197,230		114,349	48,553	360,132
18	Return - 5% of Rate Base	618,441		169,317	132,401	920,159
19	Purchased Power	992,535				992,535
20	Total Pool Cost	$ 2,584,861	$ 572,891	$ 653,121	$ 384,817	$ 4,195,690
	Classification to Demand and Energy Components		Total	Capacity	Energy	
21	Total Hydro Power Cost, 67.5% Capacity		$2,584,861	$1,744,781	$ 840,080	
22	Variable Steam Costs		572,891		572,891	
23	Fixed Steam Cost		653,121	653,121		
24	Transmission Cost		384,817	384,817		
25	Total Cost		$4,195,690	$2,782,719	$1,412,971	
26	Unit Costs			$19.22/Kw	1.43 Mills/Kwh	

Table V-A

BALANCE OF DEPENDABLE CAPACITY AVAILABLE FOR BALTIMORE CO. INCLUDING ONE-HALF OF ADDITIONAL CAPACITY FROM S.H. PONDAGE

		Holtwood Steam (1)	Holtwood Hydro (2)	Safe Harbor (3)	Total Hydro (4)	Total Hydro and Steam (5)
1	Installed Capacity	26,000 kw	104,000 kw	230,000 kw	334,000 kw	360,000 kw
2	Holtwood and Safe Harbor - % of total hydro		31.14	68.86	100.0	
3						
4	Dependable Capacity on regular weekly cycle of draw and refill				197,000 kw	
5	Plus one-half of additional capacity from use of S.H. pondage				28,500 kw	
6	Total dependable capacity allocated on basis of installed capacity	26,000 kw	70,221 kw	155,279 kw	225,500 kw	251,500 kw
7	Percent of total	10.3	27.9	61.8	89.7	100.00
8	Percent of Installed Capacity	100.0			67.5%	
9						
10	Reported station use and trans. loss allocated to dependable capacity	2,370 kw	6,416 kw	14,214 kw	20,630 kw	23,000 kw
11						
12	Net Dependable Capacity available for load	23,630 kw	63,805 kw	141,065 kw	204,870 kw	228,500 kw
13						
14	Demands of Pa. Customers on System Peak Form 12 - Pool					

	Non Firm	Firm	Firm Loads Plus 10% Reserve
P.P. & L. Co.	2,000 kw	52,000 kw	57,200 kw
P.E. Co.	10,000 kw	23,000 kw	25,300 kw
Ed. L. & P. Co.		9,000 kw	9,900 kw
M.E. Co.	12,000 kw		
Total for Resale	24,000 kw	84,000 kw	92,400 kw

20		92,400 kw
21	Balance for Baltimore	
22	and P.R.R.	136,100 kw
23	P.R.R. Co. in Pa. Dec. billing 28,397 kw	31,237 kw
24	Total coincident firm demand 112,397 kw	123,637 kw
25	Balance available for Baltimore from Holtwood and Safe Harbor	104,863 kw
26		
27	Less Baltimore's two-third share of S.H.	94,043 kw
28		
29	Balance available for Baltimore from Holtwood Co.	10,820 kw

SYSTEM LOAD DATA NET ENERGY FROM HOLTWOOD PLANT
PLUS ONE-THIRD OF SAFE HARBOR 1944 WITH ADDITION TO ADJUST FOR AN AVERAGE WATER YEAR

			Hydro (1)	Steam (2)	Total Generation (3)	Total Holtwood Plus 1/3 S.H. (4)
1	Net Generation					
2	Holtwood		512,769,000	171,091,000		683,856,000
3	Safe Harbor		772,112,000			257,381,000
4	Total		1,284,907,000	171,091,000	1,455,998,000	941,237,000
5	Transmission Loss					57,252,300
6	Net delivered					883,984,700
7	Delivery to Firm Loads					
8	Pennsylvania RR Co. in Pennsylvania	194,082,000				
9	Wholesale Sales to Utility Companies in Penna.	512,484,756				
10	Total					736,566,756
11	Balance available to Baltimore Co.					147,417,944
12	Net Sales of Baltimore's energy in interchange 2/					120,600,000
13	Net delivery to Baltimore					26,817,944
15	Total delivered from generating stations - 1944					883,984,700
16	Additional delivery in average water year 1/					104,182,056
17	Total available in average water year					988,166,756
18	Total available to Baltimore - 1944					147,417,944
19	Additional available in average water year 1/					104,182,056
20	Total available to Baltimore average water year					251,600,000

1/ Actual Delivery to Baltimore 1944 152,134,944
Actual Received from Baltimore 1944 125,317,000
Actual Net Sale to Baltimore 1944 26,817,944
Company's Estimate of Sales to Baltimore in Avg. Year 131,000,000
Additional Sales in Average Year over 1944 104,182,056

2/ Energy to which Baltimore is entitled but chooses to sell in interchange in Pa.

Company	Purchased	Sold	Net Sales	Net Bill
M. E. Co.	6,133,000	65,456,000	59,323,000	$296,993
P. E. Co.	21,771,000	40,901,000	19,130,000	91,739
P.P. & L. Co.	11,805,000	53,952,000	42,147,000	240,136
Total	39,709,000	160,309,000	120,600,000	$628,868

[22812]

TABLE V-c.

Operating Expense

Operation and Maintenance of Jointly Used Facilities

Production

		Steam			
	Hydro	Fixed	Variable	Trans-mission	Total
	1	2	3	4	5
1 Total Hydro Steam	357,980				357,980
2 Fuel and Water			332,035		332,035
3 Boiler and Coal Equip. Mt.			53,152		53,152
4 Other Steam		201,310			201,310
5 Transmission				104,516	104,516
6 Subtotal	357,980	201,310	385,187	104,516	1,048,993
7 Percent Total	34.1	19.2	36.7	10.0	100.0
8 Adminis. and General	167,394	94,251	180,157	49,089	490,891
9 Total	525,374	295,561	565,344	153,605	1,539,884

[22813]

Table V - d

NONCOINCIDENT MAXIMUM DEMANDS

ENERGY SALES IN PENNSYLVANIA AND AVAILABLE FOR BALTIMORE IN A YEAR OF AVERAGE RIVER FLOW

		Annual Maximum Demand Kw	Percent Total	Holtwood Energy Sales in a Year of Average Flow Kwh	Percent Total	Load Factor
		1	2	3	4	
1	P. P. & L. Co..	66,000	45.6	345,329,221	35.0	60
2	P. E. Co.	24,500	16.9	152,292,000	15.4	71
3	Ed. Lt. & Pr. Co.	9,560	6.6	44,863,535	4.5	53
4	P. R. R. in Pa.	33,900	23.4	194,082,000	19.6	65
5	Baltimore	10,820	7.5	251,600,000	25.5	265
6	Total Noncoincident Demand	144,780	100.0	988,166,756	100.0	

Table VI

APPLICATION OF UNIT COSTS TO CUSTOMERS' MEASURED LOADS
ASSEMBLY OF CAPACITY, ENERGY AND SPECIAL FACILITY COSTS FOR EACH CUSTOMER
COMPARISON OF TOTAL COST OF SERVICE WITH REVENUES COLLECTED

		Noncoincident Maximum Demands	Energy Sales in Year of Average River Flow	Capacity Costs	Energy Costs	Special Facilities Cost	Energy Supply from Baltimore: Charge to Customers at 4 Mills	Energy Supply from Baltimore: Credit to Baltimore	Total Cost	Total Amount	[illegible]cal [illegible]st	Total Revenue: Amount	Total Revenue: Percent	Revenue in Excess of Allocated Costs: Amount	Revenue in Excess of Allocated Costs: Percent
		1	2	3	4	5	6	7	8	9	[illegible]	9	10	11	12
1	P. P. & L. Co.	66,000	345,329,221	$1,268,541	$ 493,783	$ 10,973	$175,175	$	$1,948,472	$2,176,[illegible]	[illegible],472	$2,176,256	28.0	$ 227,784	8.4
2	P. E. Co.	24,500	152,292,000	470,898	217,761	58,689	77,254		824,602	986,[illegible]	[illegible],602	986,360	12.7	161,758	5.9
3	Ed. Lt. & Pr. Co.	9,560	44,863,535	183,747	64,150	72,668	22,758		343,323	368,[illegible]	[illegible],323	368,904	4.7	25,581	0.9
4	R. R. Co. in Pa.	33,900	194,082,000	651,569	277,516	127,262	98,452		1,154,799	1,455,[illegible]	[illegible],799	1,455,514	18.7	300,715	-11.1
5	Baltimore	10,820	251,600,000	207,964	359,761	591,954	127,629	(501,268)	786,040	2,790,[illegible]	[illegible],040	2,790,166	35.9	2,004,426	73.7
6	Total	144,780	988,166,756	$2,782,719	$1,412,971	$861,546	$501,268	$(501,268)	$5,057,236	$7,777,[illegible]	[illegible],236	$7,777,500	100.0	$2,720,264	100.0

Table VI - a

RECONCILIATION OF REVENUE SHOWN FOR BALTIMORE WITH HOLTWOOD BILL TO BALTIMORE FOR 1944

Holtwood bill as rendered	$2,027,849
Net interchange sales	628,867
Conowingo backwater payment	133,750
Total	$2,790,466

EXHIBIT NO. 65.

[22816]

BEFORE THE FEDERAL POWER COMMISSION

In the Matter of

Pennsylvania Water & Power Company and Susquehanna Transmission Company of Maryland

IT-5915

EXHIBIT OF DOCTOR H. B. DORAU

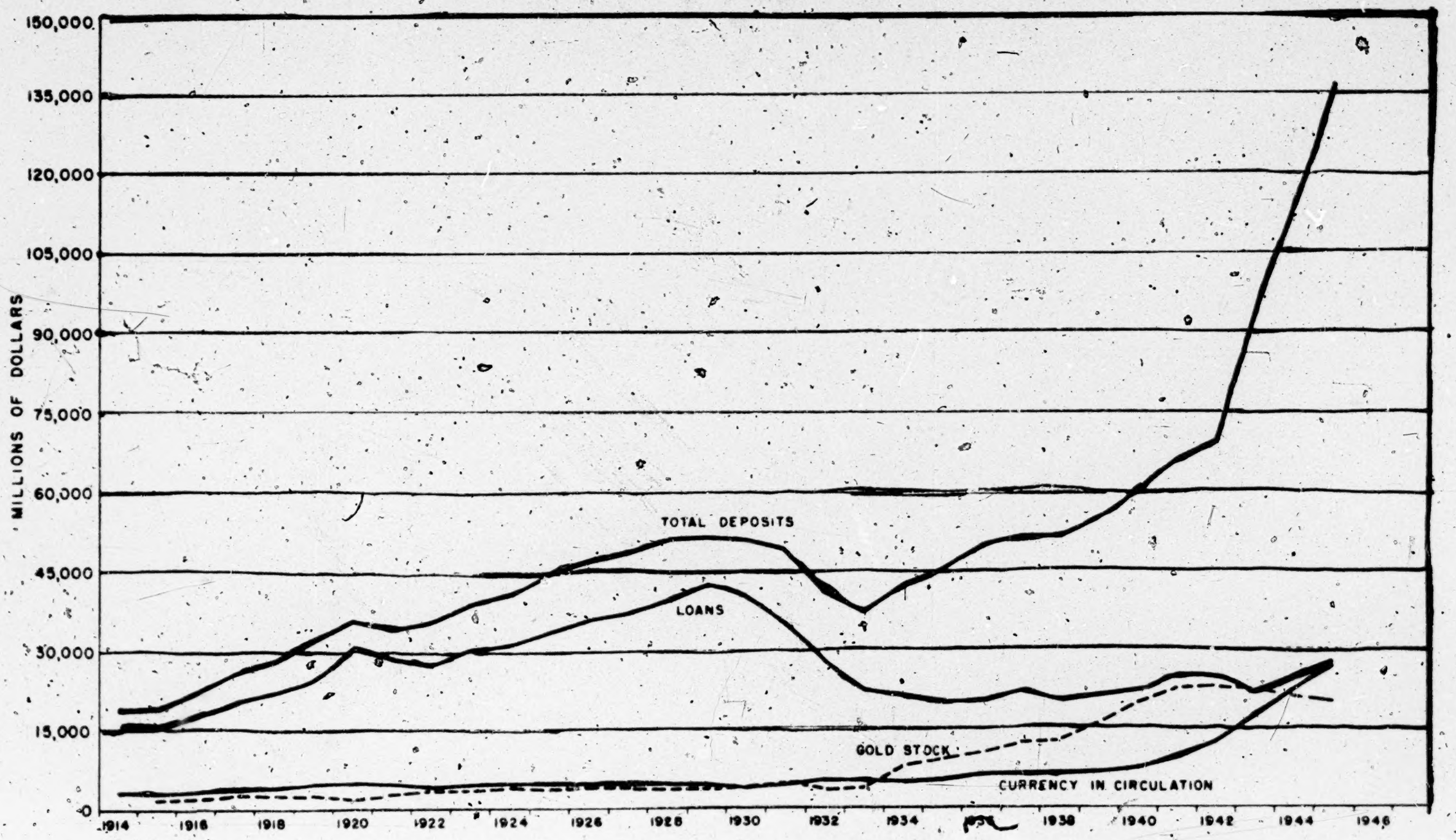
RELATING TO

THE SUPPLY OF MONEY AND THE VALUE OF THE DOLLAR

Washington, D. C.
May 6, 1946

DEPOSITS, INVESTMENTS AND LOANS OF ALL BANKS,
CURRENCY IN CIRCULATION AND GOLD STOCK

YEARS ENDING JUNE 30, 1914 - 1946



DEPOSITS, INVESTMENTS AND LOANS OF ALL BANKS;
CURRENCY IN CIRCULATION AND GOLD STOCKS
1914 -01946
(Millions of Dollars)

Year ending June 30	Deposits				Investments			Loans	Currency in Circulation	Gold Stocks
	Total Deposits	Demand Deposits*	U. S. Government Deposits	Time Deposits	Total Investments	U. S. Gov't. Obligations	Other Securities			
1914	18,498	10,082	66	8,350	5,525	829	4,696	15,263	3,172	
1915	19,107	9,828	48	9,231	5,808	812	4,996	15,658	3,033	1,699
1916	22,325	11,973	39	10,313	6,607	763	5,844	17,980	3,362	2,158
1917	25,878	13,501	834	11,543	7,769	1,642	6,127	20,522	3,779	2,933
1918	28,125	14,843	1,565	11,717	9,440	3,507	5,933	22,374	4,195	2,876
1919	32,018	17,624	965	13,423	11,881	5,813	6,068	24,690	4,590	2,826
1920	35,754	19,616	304	15,834	10,840	4,583	6,257	30,732	5,181	2,578
1921	34,114	17,113	418	16,583	10,968	4,331	6,637	28,927	4,624	2,988
1922	35,652	18,045	170	17,437	12,210	4,989	7,221	27,627	4,176	3,498
1923	39,007	18,958	327	19,722	13,341	5,828	7,513	30,272	4,536	3,763
1924	40,860	19,412	189	21,259	13,658	5,592	8,066	31,409	4,562	4,201
1925	44,750	21,376	180	23,194	14,980	5,760	9,220	33,729	4,524	4,073
1926	46,969	22,000	228	24,741	15,439	5,512	9,927	36,035	4,598	4,160
1927	48,673	21,983	225	26,465	16,437	5,403	11,034	37,208	4,564	4,300
1928	51,056	22,259	271	28,526	18,176	5,880	12,296	39,507	4,510	3,822
1929	51,532	22,540	381	28,611	17,318	5,499	11,819	41,581	4,459	4,037
1930	51,020	21,706	322	28,992	18,059	5,497	12,562	40,497	4,235	4,248
1931	49,232	19,832	439	28,961	19,982	6,662	13,320	35,285	4,535	4,669
1932	40,799	15,625	418	24,756	18,422	6,895	11,527	27,888	5,408	3,632
1933	36,919	14,411	852	21,656	18,062	8,199	9,863	22,243	5,434	4,031
1934	41,302	16,394	1,733	22,875	21,246	11,278	9,968	21,306	5,373	7,856
1935	45,098	20,433	811	23,854	24,134	14,258	9,876	20,213	5,568	9,116
1936	49,830	23,780	1,142	24,908	27,776	17,323	10,453	20,636	6,241	10,608
1937	51,769	25,198	666	25,905	27,155	16,954	10,201	22,410	6,447	12,318
1938	51,148	24,313	599	26,236	26,230	16,727	9,503	20,982	6,461	12,963
1939	54,938	27,355	792	26,791	28,296	18,743	9,553	21,320	7,047	16,110
1940	60,253	31,962	828	27,463	28,996	19,666	9,330	22,340	7,848	19,963
1941	65,949	37,317	753	27,879	32,635	23,521	9,114	25,311	9,612	22,624
1942	71,027	41,870	1,837	27,320	38,928	30,301	8,627	25,081	12,383	22,737
1943	94,347	56,039	8,048	30,260	65,640	57,748	7,892	22,241	17,421	22,388
1944	115,291	60,065	19,506	35,720	83,284	75,737	7,547	25,424	22,504	21,173
1945	137,688	69,053	24,381	44,254	101,661	93,657	8,004	27,979	28,746	20,213

*Adjusted to include demand deposits, other than interbank and U. S. Government, less cash items in process of collection.

Source: Banking and Monetary Statistics, Board of Governors of Federal Reserve System, published November 1943, pp. 18, 34, 409, 373 (for data through 1941); Federal Reserve Bulletins, February 1946, May and August 1945, August 1944, August 1943.

Pennsylvania Water & Power Company
and
Susquehanna Transmission Company of Maryland

THE PURCHASING POWER OF THE DOLLAR AS MEASURED BY WHOLESALE PRICES AS REFLECTED BY A SEVEN-YEAR MOVING AVERAGE
1905-1945

(1)	(2)	(3)	(4)	(5)	(6)
	Wholesale Price Index	Purchasing Power of the Dollar			
		Annual Index	Seven-Year Moving		Dollar Index
Year	1926 = 100	1926 = 100[a]	Total	Average	1945 = 100[b]
1902	58.9	169.8			
1903	59.6	167.8			
1904	59.7	167.5			
1905	60.1	166.4	1145.7	163.7	173.2
1906	61.8	161.8	1123.8	160.5	169.8
1907	65.2	153.4	1098.0	156.9	166.0
1908	62.9	159.0	1084.6	154.9	163.9
1909	67.6	147.9	1062.9	151.8	160.6
1910	70.4	142.0	1044.4	149.2	157.9
1911	64.9	154.1	1037.8	148.3	156.9
1912	69.1	144.7	1022.7	146.1	154.6
1913	69.8	143.3	991.8	141.7	149.9
1914	68.1	146.8	934.9	133.6	141.4
1915	69.5	143.9	857.0	122.4	129.5
1916	85.5	117.0	784.5	112.1	118.6
1917	117.5	85.1	706.0	100.9	106.8
1918	131.3	76.2	661.7	94.5	100.0
1919	138.6	72.2	621.2	88.7	93.9
1920	154.4	64.8	603.6	86.2	91.2
1921	97.6	102.5	620.4	88.6	93.8
1922	96.7	103.4	640.8	91.5	96.8
1923	100.6	99.4	668.6	95.5	101.1
1924	98.1	101.9	708.6	101.2	107.1
1925	103.5	96.6	709.5	101.4	107.3
1926	100.0	100.0	711.0	101.6	107.5
1927	95.4	104.8	727.3	103.9	109.9
1928	96.7	103.4	762.4	108.9	115.2
1929	95.3	104.9	820.1	117.2	124.0
1930	86.4	115.7	871.8	124.5	131.7
1931	73.0	137.0	900.5	128.6	136.1
1932	64.8	154.3	922.1	131.7	139.4
1933	65.9	151.7	941.0	134.4	142.2
1934	74.9	133.5	941.2	134.5	142.3
1935	80.0	125.0	931.4	133.1	140.8
1936	80.8	123.8	906.8	129.5	137.0

(2)

(1) Year	(2) Wholesale Price Index 1926 = 100	(3) Purchasing Power of the Dollar: Annual Index 1926 = 100[a]	(4) Purchasing Power of the Dollar: Seven-Year Moving Total	(5) Purchasing Power of the Dollar: Seven-Year Moving Average	(6) Purchasing Power of the Dollar: Dollar Index 1945 = 100[b]
1937	86.3	115.9	882.3	126.0	133.3
1938	78.6	127.2	863.3	123.3	130.5
1939	77.1	129.7	839.5	119.9	126.9
1940	78.6	127.2	812.7	116.1	122.9
1941	87.3	114.5	793.0	113.3	119.9
1942	98.8	101.2	760.3	108.6	114.9
1943	103.1	97.0	503.5[c]	100.7[c]	106.6
1944	104.0	96.2	287.7[d]	95.9[d]	101.5
1945	105.8	94.5	94.5[e]	94.5[e]	100.0

[a] Reciprocal of wholesale price index, 1926 - 100.
[b] Purchasing power index converted to relatives with 1945 as the base (1945 - 100).
[c] Five-year moving total and average.
[d] Three-year moving total and average.
[e] Spot index number for the year.

Source: United States Department of Labor, Bureau of Labor Statistics, Monthly Labor Review, March 1943, p. 615; March 1944, p. 659; 1945. 1
Department of Commerce, Statistical Abstract of the United States.
p. 342.

Vol. X

TRANSCRIPT OF RECORD

(Pages 3639 to 3974)

Supreme Court of the United States

OCTOBER TERM, 1951

No. 428

PENNSYLVANIA WATER AND POWER COMPANY AND SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND, PETITIONERS,

vs.

FEDERAL POWER COMMISSION ET AL.

No. 429

PENNSYLVANIA PUBLIC UTILITY COMMISSION, PETITIONER,

vs.

FEDERAL POWER COMMISSION

ON WRITS OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

PETITIONS FOR CERTIORARI FILED NOVEMBER 16, 1951

CERTIORARI GRANTED FEBRUARY 4, 1952

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[22851]

CONTRACT

Agreement made as of this fifteenth day of November, 1945, by and between Metropolitan Edison Company (hereinafter called "Metropolitan") party of the first part, and Pennsylvania Water & Power Company (hereinafter called "Holtwood") party of the second part, both of the said companies being corporations organized and existing under the laws of the Commonwealth of Pennsylvania.

WHEREAS, each of the parties hereto owns and operates electric generating plants and a transmission system, which transmission systems are presently interconnected at Violet Hill in Spring Garden Township, York County, Pennsylvania by means of two 66,000 volt transmission lines; and

WHEREAS, Holtwood and its affiliated company, Safe Harbor Water Power Corporation (hereinafter called "Safe Harbor") with which it is interconnected, are primarily engaged in generating electrical energy by means of hydro-electric plants on the Susquehanna River and, because of the varying flow of the river, will have a variable amount of energy available from time to time and it is the intent that the parties hereto utilize the energy which may be made available by Holtwood to Metropolitan to the fullest extent consistent with good operating practice; and

WHEREAS, Metropolitan and Holtwood and Safe Harbor are now supplying electric power and energy to Edison Light and Power Company (which latter is affiliated with Metropolitan) under an agreement dated January 1, 1935, as supplemented in March of 1945, which expires at midnight March 31, 1946; and

WHEREAS, the parties hereto now interchange economy energy and capacity and supply emergency service to each other at various times under an agreement between them dated March 11, 1931 which expires at midnight March 31, 1946; and

WHEREAS, the continued effective use by the parties hereto of the existing interconnection of their facilities is advantageous to them and will likewise be of benefit to the public served by them; and

WHEREAS, Metropolitan desires to purchase and Holtwood [22852] (page 2) is willing to sell to Metropolitan certain capacity and energy:

NOW, THEREFORE, THIS AGREEMENT WITNESSETH that, in consideration of the premises and of the mutual covenants, promises and agreements hereinafter set forth, the parties hereto do hereby covenant and agree with each other as follows:

ARTICLE I

TERMINATION OF EXISTING AGREEMENTS

SECTION 1. The agreement dated March 11, 1931 between the parties hereto providing for the interconnection of their facilities, the furnishing of emergency service and the interchange of economy energy is hereby terminated as of midnight, December 31, 1945.

SECTION 2. The agreement dated January 1, 1935, as supplemented in March of 1945, between Metropolitan, Holtwood, Safe Harbor and Edison Light and Power Company is hereby terminated as of midnight, December 31, 1945. Holtwood shall secure written consent to such cancellation by Safe Harbor and Metropolitan shall secure written consent to such cancellation by Edison Light and Power Company.

ARTICLE II

Effective Date and Duration of Agreement

This agreement shall become effective at midnight of December 31, 1945, and shall continue to midnight of December 31, 1950, and thereafter for successive periods of three (3) years each, unless and until one of the parties hereto shall have given to the other, at least eighteen (18) months prior to the expiration of the original term of this contract or of any three (3) years' renewal period thereof, written notice of a desire to terminate this agreement at the end of such period.

ARTICLE III

Definition of "Metropolitan's Total Requirements" and "Metropolitan's Steam Line"

Section 1. The phrase "Metropolitan's total requirements", when used in this agreement, shall include all the firm power [22853] (page 3) and energy requirements of Metropolitan and its affiliated companies, Edison Light and Power Company, Glen Rock Electric Light and Power Company and New Jersey Power & Light Company.

Section 2. The phrase "Metropolitan's steam line", when used in this agreement, shall mean a value in kilowatts determined by deducting from the maximum clock one-hour integration of Metropolitan's total requirements during the current month or any of the prior eleven (11) months the amount of firm power in kilowatts provided for in Article IV, Section 1.

ARTICLE IV

Amount of Firm Power and Energy to Be Supplied to Metropolitan by Holtwood

Section 1. (a) Subject to future decreases or increases in the amount thereof as provided in Subsection (b) of this

Section, Holtwood shall supply and Metropolitan shall receive 20,000 kilowatts of firm power.

(b) The amount of firm power to be supplied by Holtwood and received by Metropolitan may be decreased below or increased above 20,000 kw. under the following conditions:

1. At the election of Metropolitan, the amount of firm power may be decreased 1,000 kw. for each 10,000 kw. that the maximum clock one-hour integration of Metropolitan's total requirements during the current month or any of the prior eleven (11) months, is less than 275,000 kw. and any such decrease shall be effective with the current month upon notice to Holtwood of Metropolitan's election prior to rendition of the bill for such month, and shall continue only so long as such decreased maximum load condition continues.

2. At the election of Holtwood, the amount of firm power may be increased 1,000 kw. for each 10,000 kw. that the maximum clock one-hour integration of Metropolitan's total requirements during the current month or any of the prior eleven (11) months, is greater than 275,000 kw. and any such increase shall be effective with the current month upon notice to Metropolitan of Holtwood's election prior to rendition of the bill for such month, and shall continue only so long as such increased maximum load condition continues.

[22854] (page 4)

The adjustments in the amount of firm power resulting from the operation of this Subsection shall be limited to a maximum of 10,000 kw. below or above the 20,000 kw. of firm power provided for in Subsection (a) above.

(c) The firm power to be provided by Holtwood under Subsections (a) and (b), above, shall be measured on a clock one-hour integrated basis, and the swings that Holtwood shall be obligated to provide above this firm power supply to Metropolitan during such clock hour shall be limited to five (5) per cent of Holtwood's firm power obligation.

SECTION 2. Holtwood shall, upon request of Metropolitan, provide spinning reserve capacity (without firm energy commitment) for Metropolitan to the extent that the firm power provided for in Section 1 above, exceeds the hourly amounts of firm energy supply as provided for in Section 3 hereof.

SECTION 3. Holtwood shall supply to Metropolitan, and Metropolitan shall receive, hourly amounts of firm energy equal to the hourly integrated generation of Holtwood and Safe Harbor in excess of 50,000 kwh. per hour multiplied by the ratio of Holtwood's firm power obligation to Metropolitan as specified in Section 1, hereof, to the rated effective generating capacity of Holtwood and Safe Harbor minus 50,000 kw., but never less than Metropolitan's total energy requirements above Metropolitan's steam line; except that Metropolitan shall not be obligated to receive firm energy under the provisions of this Section in excess of that which it is able to absorb during its minimum load hours as Metropolitan may determine on the basis of desirable minimum steam requirements.

ARTICLE V

CHARGES FOR FIRM POWER AND ENERGY

SECTION 1. Subject to adjustments provided for hereinafter in Sections 4, 5 and 6 of this Article and in Article X hereof, Metropolitan shall pay Holtwood for the firm power and energy supplied, as provided for in Article IV

hereof, a Demand Charge and an Energy Charge as specified in Sections 2 and 3 hereof.

SECTION 2. *Demand Charges*

(a) $25,000.00 per month for the 20,000 kw. of firm power specified in Section 1 (a) of Article IV, plus or minus $1,250.00 per month per 1,000 kw. of firm power increase or decrease as provided for under Section 1 (b) of Article IV.

[22855] (page 5)

(b) $0.50 per 1,000 kw. of spinning reserve capacity as provided for in Section 2 of Article IV, for each clock hour in which such reserve capacity is provided.

SECTION 3. *Energy Charges*

(a) 4.0 mills per kilowatthour for firm energy supplied in any month in the portion of Metropolitan's total requirements above Metropolitan's steam line.

(b) 3.5 mills per kilowatthour for firm energy supplied in any month between the hours of 7 A. M. and 9 P. M. on all days except Sundays and major holidays in Metropolitan's territory in excess of that billed under Subsection 3 (a) hereof.

(c) 2.5 mills per kilowatthour for all additional firm energy supplied in any month in excess of that billed under Subsections 3 (a) and (b).

SECTION 4. The monthly energy charges specified in Section 3 hereof shall be subject to adjustment for variations in the power factor of the energy supplied by Holtwood to Metropolitan, except that no adjustment shall be made if and to the extent that the lowering of the power factor below the percentages hereinafter prescribed is caused by changes by Holtwood in the operation of its own

system. If in any month the average lagging power factor of such supply to Metropolitan at the points of delivery specified in Article VII during the hours from 7 A. M. to 9 P. M. on all days except Sundays and major holidays in Metropolitan's territory is less than 90%, the energy charges for the month under Subsections 3 (a) and (b) hereof shall be increased 1% for each whole per cent that the average power factor is below 90%. When the average power factor is less than 85% during the remaining hours of the month the energy charges for the month under Subsection 3 (c) hereof shall be increased by 1% for each whole per cent that the power factor is below 85%. In computing the average lagging power factor no account shall be taken of periods during which Metropolitan is prevented by accident or other abnormal conditions from utilizing its power factor corrective apparatus. Since firm energy as provided for in Article IV and interchange energy as provided for in Article IX are both measured at the same delivery points, it is mutually [22856] (page 6) agreed that no correction will be made for excessive lagging power factor caused by interchanging blocks of energy in excess of 5,000 kw. during emergencies or other abnormal periods or when transmitting blocks of energy in excess of 5,000 kw. through Metropolitan to third parties. The average lagging power factor shall be computed from the readings of the integrating reactive kilovolt-ampere-hour meters and of kilowatthour meters, both at the delivery points specified in Article VII. The kilovolt-ampere-hour meters shall be equipped with ratchets to prevent them from running backward on leading power factor.

SECTION 5. The monthly energy charges specified in Sections 3 and 4 hereof shall be subject to monthly adjustment based upon changes in cost of fuel to Metropolitan. The charges per kilowatthour in any month shall be increased or decreased one (1) per cent for each ten (10) cent increase above or decrease below $5.00 per net or short ton

in the average cost of bituminous coal and freight only, on hand and delivered at Metropolitan's steam generating stations during the second preceding calendar month.

SECTION 6. So long as the monthly demand and energy charges specified in Sections 2, 3, 4 and 5 hereof remain in effect, they, together with the special facilities charge specified in Article VI, shall be subject to adjustment for variations in the taxes accrued by Holtwood and Safe Harbor. For the purpose of such adjustment 20% of these monthly charges shall be considered as payment for all taxes other than: (1) such portion of income or other taxes applicable to non-operating incomes or assets, (2) taxes specifically assignable to individual customers of Holtwood and Safe Harbor and (3) all local taxes assessed on real or personal property that are now levied by counties, cities, townships or other political subdivisions of the States. This adjustment for variations in the amount of taxes accrued by Holtwood and Safe Harbor and not excluded by the exceptions above, shall be made in accordance with the following formula:

$$Ma = M \times 0.8 \times \frac{Ha}{Ha\text{-}Ta}$$

in which

Ma = the amount payable by Metropolitan after adjustment for taxes has been made to M.

M = the charges provided for under Sections 2, 3, 4 and 5 [22857] (page 7) hereof and under Article VI.

Ha = the consolidated operating revenues of Holtwood and Safe Harbor adjusted (1) by subtracting (a) the actual income taxes or other taxes of a similar nature accrued on operating incomes, and (b) the taxes specifically assignable to individual customers of Holtwood and Safe Harbor, excluding, however, such taxes which result from intercompany transactions

between Holtwood and Safe Harbor, and (2) by adding the amounts of income taxes or taxes of a similar nature which would accrue if such taxes were computed on operating incomes, after excluding therefrom all non-operating incomes and all non-operating deductions. For example, and without limiting the generality of the foregoing, any deduction allowable for income tax purposes resulting from the retirement of an entire issue of bonds shall be treated as non-operating deductions.

Ta = the total taxes accrued by Holtwood and Safe Harbor adjusted (1) by subtracting (a) the actual income taxes or other taxes of a similar nature accrued on operating incomes and (b) the taxes excepted in the first paragraph of this Section 6, and (2) by adding the amounts of income taxes or taxes of a similar nature which would accrue if such taxes were computed on operating incomes, after excluding therefrom all non-operating incomes and all non-operating deductions. For example, and without limiting the generality of the foregoing, any deduction allowable for income tax purposes resulting from the retirement of an entire issue of bonds shall be treated as non-operating deductions.

Such adjustment shall be estimated from time to time during the calendar year and the effect of any revision shall be applied retroactively where applicable.

Metropolitan shall pay to Holtwood in addition to payments otherwise provided for in this Article and in Article VI all taxes which now or hereafter may be levied and which apply specifically to Holtwood's supply and services to Metropolitan or to the revenues received therefor.

SECTION 7. On or before the tenth day of every calendar month Holtwood shall render to Metropolitan a bill for the total charges under this Article and under Article

VI for the preceding month and Metropolitan shall pay said bill on or before the [22858] (page 8) twenty-fifth day of said month.

ARTICLE VI

Special Facilities

Metropolitan shall pay Holtwood at the rate of 1% per month on the cost of terminal and interconnection facilities at the Violet Hill Substation owned by Holtwood.

ARTICLE VII

Characteristics of Supply and Points of Delivery

Section 1. The electric power and energy supplied to Metropolitan hereunder shall be in the form of three phase alternating current at a frequency of approximately sixty (60) cycles per second at the points of delivery specified in Section 3 of this Article. Voltage and frequency are to be held within the limits of good commercial practice.

Section 2. Each party hereto shall adjust, maintain and operate its system in such manner as will, to the greatest extent practicable, protect the equipment and service of the other from damage and interruption.

Section 3. The points of delivery shall be as follows:

(a) The bus side of the present oil circuit breakers on Holtwood's 66,000 volt circuits (now known as Circuits Nos. 11 and 12) at Violet Hill Substation; and

(b) Such other points of delivery between the parties hereto as may be mutually agreed upon either as additional points of delivery or in substitution for the foregoing specified point of delivery.

ARTICLE VIII

Metering

Section 1. Suitable metering equipment for measuring the energy, and reactive kva. supplied to Metropolitan

hereunder shall be [22859] (page 9) installed and maintained at the delivery points specified in Sections 3 (a) and (b) of Article VII, by and at the expense of Holtwood. Metropolitan may install, at its own expense, duplicate meters, to be known as "Checking Meters" at the specified points of delivery.

SECTION 2. Metropolitan shall provide suitable metering equipment, other than that provided for under Section 1 of this Article, for measuring the demand and energy necessary to the determination of Metropolitan's total requirements as specified in Article III.

SECTION 3. Routine calibration tests of billing and check meters shall be made at least once in every twelve months or at such shorter intervals as may be mutually agreed upon. At the request of either party hereto, these routine tests shall be made in the presence of representatives of both parties. In addition to these routine tests, in case either party at any time believes that any billing metering equipment registers incorrectly, it shall have the right to make or have made a special test on such equipment using methods mutually agreeable; such tests shall be made in the presence of representatives of both parties. After every test the meter shall be adjusted to read with as near absolute accuracy as possible within the then prevailing range of use, allowing for inaccuracy in the instrument transformers as determined by tests. Calibration of the ratio of instrument transformers, which involves considerable expense, shall be made only if found necessary.

Any metering equipment shall be considered accurate for billing purposes if, as the result of tests, the weighted average error above or below accuracy is found to be not greater thant two (2) per cent. The calibration points (selected according to the prevailing range of use) and the

method of weighing the results are to be agreed upon before the tests, by the parties concerned.

If the weighted average error of any billing metering equipment is bound to be greater than two (2) per cent but the error of the check meter, if one is available, is two (2) per cent or less, the consumption since the last monthly reading preceding the request of test shall be billed according to the registration of the check meter. If the billing and check meters are both found to be more than two (2) per cent inaccurate, the probable consumption since the last monthly reading preceding the request for test shall be estimated and paid for as may be agreed upon between the parties. In no case shall any correction [22860] (page 10) whatever on account of inaccuracy of metering equipment extend back beyond thirty (30) days prior to the day of request for test or beyond the last preceding test in case this was within the thirty (30) day period.

ARTICLE IX

Interchange

Section 1. Metropolitan and Holtwood shall in addition to the firm power supply provided for in Article IV hereof, interchange electric energy and capacity for the purpose of obtaining economies in the production of energy and in the protection of service. Holtwood represents that for the purposes of this Article it is in a position to include the energy and/or capacity of Safe Harbor and for such purposes the same shall be treated as though it were owned and controlled by Holtwood. The interchange energy and capacity provided for hereunder shall be billed and paid for as follows:

(a) "Steam Economy Energy"

The billing for this interchange, between the parties hereto, shall be such that the savings resulting therefrom shall be equally divided betwen them.

(b) "Hydro Economy Energy"

The billing for this interchange, between the parties hereto, on Sundays and major holidays in Metropolitan's territory and between the hours of 9 P. M. and 7 A. M. on weekdays shall be at 70% of the cost of the displaced steam generated energy.

(c) "Steam Economy Capacity"

The billing for this interchange, between the parties hereto, shall be such that the savings resulting therefrom shall be equally divided between them.

(d) "Hydro Economy Capacity"

The billing for this interchange, between the parties hereto, shall be at rates agreed upon [22861] (page 11) from time to time.

(e) "Emergency Supply"

The billing for this interchange, between the parties hereto, for energy and/or capacity shall be on the basis of economy transactions based on the receiving company's next available capacity (if receiving company has no next available capacity and the supply is from hydro the receiving company's top 20,000 kw. of capacity shall be considered as its next available capacity), or the supplying company's cost plus 10%, whichever is the greater.

(f) The billing for interchange, involving others in addition to the parties hereto, shall be at rates agreed upon from time to time.

(g) "Energy without Replacement Value"

The billing for energy generated by Metropolitan or purchased by it from others and supplied to Holtwood for which Holtwood may have no re-

placement value, shall be at the rates provided for in Subsections (e) and (f) hereof.

SECTION 2. On or before the tenth day of every calendar month Holtwood and Metropolitan each shall send to the other a bill for the total charges under this Article for the preceding month and each shall pay said bill to the other on or before the twenty-fifth of said month.

ARTICLE X

INTERRUPTIONS TO SERVICE

In case Holtwood is prevented from delivering or Metropolitan is prevented from taking the electric power and energy provided for in Article IV, by strike, riot, fire, invasion, explosion, flood, storm, lightning, judicial or administrative order, act of God or public enemies, no party shall be under any liability to the other by reason of such failure; provided, however, that nothing herein contained shall be construed as permitting Holtwood to refuse to deliver electric power and [22862] (page 12) energy or Metropolitan to refuse to receive the same, as provided for in this agreement, as soon as the cause of such interruption is removed, and each party hereto shall be prompt and diligent in restoring equipment to service for the delivery and receipt of power and energy.

In case Metropolitan is prevented from taking said electric energy, in whole or in part, by reason of any of the causes enumerated in this Article, a proportionate adjustment in the energy charges provided for hereunder shall be made by Holtwood.

ARTICLE XI

OPERATING COMMITTEE

Each of the parties hereto shall appoint a representative who may be changed from time to time, at the pleasure

of the appointing party. The representatives so appointed shall meet from time to time and as often as may be desirable for the purpose of carrying out the terms of this agreement in a mutually satisfactory manner.

ARTICLE XII

Waiver of Rights

The failure of either party hereto to enforce from time to time a strict performance of any of the covenants and agreements herein contained, or the waiving from time to time of a default on the part of either party hereto, shall not be construed as a waiver of any continuing or subsequent default or defaults, nor impair the rights of any of the parties hereto subsequently to require the strict performance of each and every convenant, agreement and understanding herein contained.

ARTICLE XIII

Jurisdiction of Regulatory Bodies

The charges provided for in this agreement shall be subject to increase or decrease from time to time by order of regulatory authorities having jurisdiction to regulate such charges under the constitution and laws of the Commonwealth [22863] (page 13) of Pennsylvania and of the United States.

ARTICLE XIV

Assignment

The terms and provisions of this Agreement shall enure to and be binding upon the respective successors and assigns of the parties hereto.

In Witness Whereof, the parties hereto have caused these presents to be duly executed by their respective

officers, thereunto duly authorized, and their respective corporate seals to be hereunto affixed, as of the day and year first above written.

PENNSYLVANIA WATER & POWER COMPANY

(Signed) G. W. SPAULDING (Seal)
Vice President

Attest:

(Signed) WM. H. EICHHORN, JR.
Secretary

METROPOLITAN EDISON COMPANY

(Signed) O. TITUS (Seal)
President

Attest:

(Signed) E. L. BARTH
Asst. Secretary

EXHIBIT NO. 73.

[22867]

COATESVILLE POWER SUPPLY CONTRACT

AGREEMENT made this first day of August, 1933, by and between PHILADELPHIA ELECTRIC COMPANY (hereinafter called "PX"), party of the first part, and PENNSYLVANIA WATER & POWER COMPANY (hereinafter called "Holtwood Company") and SAFE HARBOR WATER POWER CORPORATION (hereinafter called "Safe Harbor Company"), parties of the second part (hereinafter called "Hydro"), all of said companies being corporations of the Commonwealth of Pennsylvania.

PX, as successor to Chester Valley Electric Company, has been purchasing from Holtwood Company a large part of the electrical requirements of the territory formerly served by Chester Valley Electric Company under an agreement dated April 2, 1923, and extending until midnight of March 31, 1934, between Chester Valley Electric Company and Holtwood Company. PX desires to continue to purchase such supply under the terms contained herein.

Holtwood Company desires to continue to sell electric supply to PX under the terms contained herein.

Safe Harbor Company, affiliated with Holtwood Company, desires to become a party to this agreement, and to undertake with Holtwood Company to furnish the electric supply desired by PX, which is satisfactory to Holtwood Company and PX.

[22868] (page 2)

NOW, THEREFORE, in consideration of the premises and of the mutual covenants, promises and agreements hereinafter set forth, the parties hereto do hereby agree with each other as follows:

ARTICLE I

Effective Date and Duration of Agreement

This agreement shall become effective at midnight of March 31, 1934, and shall continue in force until midnight of March 31, 1939, and thereafter for successive periods of three (3) years duration each unless and until either party shall have given to the other party, at least eighteen (18) months prior to the expiration of the original term or of any extension thereof, written notice of its desire to terminate the agreement at the end of that period.

ARTICLE II

Amount of Power and Energy

Section 1. Hydro shall be obligated to supply and PX shall be obligated to receive and pay for the entire electrical power and energy requirements of PX for use and/or sale within the territory now supplied by the distribution system of the former Chester Valley Electric Company, or by any extension of the said distribution system which PX may make, except that

(a) PX at its option may furnish from sources other than Hydro the requirements of those portions of said territory which lie east of an imaginary line running from Whitford in a northerly direction to Nantmeal Village, [22869] (page 3) and south of an imaginary line running in a westerly direction from Embreeville south of Buck Run to Lenover, provided such portion of said territory can be connected, in the judgment of PX, to such other sources more economically than to the Newlinville Substation;

(b) PX may generate, by means of non-condensing generating units at its Coatesville steam plant, an amount of power and energy not greater than that incidentally generated in connection with the supply

of steam required for the steam heating load of PX in Coatesville;

(c) PX may supply from its own system any electrical power and energy necessary in said territory for the electrification of railroads;

(d) PX may obtain electrical energy from its industrial customers in said territory under interchange arrangements if the generation of such energy by such customers is incidental to the supply of steam required by said industrial customers in their processes and if such supply does not affect adversely the quality of service under this contract or introduce unsatisfactory parallel operating conditions, provided, however, that PX shall not receive from any such industrial customer in any one month substantially more energy than PX supplies to that industrial customer in the same month;

(e) Nothing herein contained shall obligate Hydro to increase the capacity of Holtwood Company's existing transmission line from Holtwood to Coatesville, or to provide an additional line or lines, at any time. Furthermore Hydro shall not be obligated to provide step-up transformer capacity for service to PX in addition to [22870] (page 4) that now owned and operated by Holtwood Company at Holtwood, on account of increases in load occurring after either party hereto has notified the other party of its desire to terminate this agreement under the provisions of Article I.

SECTION 2. In the event of emergency in PX's system outside of the charter territory of the former Chester Valley Electric Company, PX may request Hydro, and Hydro shall be obligated, to supply through the Newlinville Substation the emergency requirements of PX, in addition to the electrical requirements of the territory stated in Sec-

tion 1 of this Article, to the extent that Hydro may judge it has generating and transmission capacity available for such emergency supply without detriment to service to its other customers.

SECTION 3. In case of emergency in the system of Hydro, Hydro may request PX and PX shall be obligated to generate at its Coatesville steam plant, and/or to supply over its 33 Kv. circuit from Cromby and any other interconnection PX may make between Coatesville and other parts of its system, the emergency requirements of Hydro, for supply to the territory described in Section 1 of this Article and/or for backfeed to Holtwood, through the Newlinville Substation, to the extent that PX may judge it has generating and transmission capacity available for such emergency supply without detriment to service to its other customers.

ARTICLE III

RATES AND PAYMENTS

SECTION 1. PX shall pay Hydro for the electrical supply described in Article II, Section 1, hereof a Demand Charge, [22871] (page 5) an Energy Charge and a Transmission Charge according to the following schedules:

Demand Charge:

$1.35 per month per Kw. for the first 2,500 Kw. of the Billing Demand.

$1.05 per month per Kw. of Billing Demand above 2,500 Kw.

Energy Charge:

4.0 mills per Kwh. for the first 150 Kwh. per month per Kw. of the monthly maximum demand.

3.5 mills per Kwh. for the next 250 Kwh. per month per Kw. of the monthly maximum demand.

3.0 mills per Kwh. for all excess Kwh.

Transmission Charge:

$5,000.00 per month.

SECTION 2. The maximum demand in any month, to be used in determining Billing Demands and in the blocking of energy, shall be the highest demand in kilowatts of supply under Article II, Section 1, in that month, averaged over any period of thirty (30) consecutive minutes, subject to increase for low power factor as provided in Article V.

The Billing Demand for any month shall be the greater of the following quantities (a) and (b):

(a) The maximum demand in that month.

(b) The average of the maximum demand in that month and the highest maximum demand in any of the preceding eleven (11) months.

[22872] (page 6)

In no event shall the Billing Demand be less than 2,500 Kw.

SECTION 3. For emergency supply by Hydro at PX's request as described in Article II, Section 2, PX shall pay Hydro the latter's actual additional expense for such emergency supply plus twenty-five (25) per cent, but the unit rate for such emergency supply shall not be less than 3.0 mills per Kwh. as metered at Newlinville.

For emergency supply by PX at Hydro's request as described in Article II, Section 3, which is supplied to the territory described in Section 1 of Article II, Hydro shall pay to PX the latter's actual additional expense for such emergency supply plus twenty-five (25) per cent, but the unit rate for such emergency supply shall not be less than 3.0 mills per Kwh. PX will consider such emergency supply to Hydro as being resold to PX by Hydro, and Hydro shall include such supply in the demand and energy which it will bill to PX at the rates set forth in Section 1 of this Article.

For emergency supply by PX at Hydro's request as described in Article II, Section 3, which is fed back to Holtwood, Hydro shall pay PX the latter's actual additional

expense for such emergency supply, plus twenty-five (25) per cent, but the unit rate for such emergency supply shall not be less than 3.0 mills per Kwh.

SECTION 4. In the event of a material increase or decrease in the cost of fuel as compared with the date of this agreement, at the request of either party an equitable adjustment shall be made in the bill for energy supplied by Hydro as computed according to the provisions of Section 1 of this Article. This adjustment shall be based on the amount of [22873] (page 7) energy supplied PX which is obtained from steam-electric generation.

SECTION 5. PX shall reimburse Hydro for any additional taxes, such as taxes based upon the volume of generation, transmission and/or sale of electricity, which may in the future be imposed upon and paid by Hydro over and above taxes in effect upon the date of the signing of this agreement but not in excess of the amount in dollars of such additional taxes that would have been incurred by PX instead of Hydro if PX had supplied from its own generating stations the energy purchased from Hydro.

SECTION 6. On or before the fifth day of every calendar month Hydro shall render to PX a bill for, and on or before the twentieth day of said month PX shall pay the sum of, all charges as billed by Hydro for the preceding month. In case of dispute as to the correctness of the bill PX shall make payment of that amount of the charge as billed which is not in dispute. When decision or agreement with respect to the disputed amount is reached, interest at the rate of six (6) per cent per annum on the amount of the delayed payment shall be paid by PX from the date on which such amount was originally due.

ARTICLE IV

CHARACTERISTICS OF SUPPLY AND POINTS OF DELIVERY

SECTION 1. Power and energy supplied PX shall be in the form of three phase alternating current at a fre-

quency of approximately 60 cycles per second and at a voltage of approximately 67,000 volts or such other voltage as may be agreed upon as normal voltage, at the point of delivery. The [22874] (page 8) deviation of the voltage shall not exceed 5% above or 5% below normal. PX shall maintain a practically balanced load between phases.

SECTION 2. Electrical supply under this agreement shall be delivered by Hydro at the high tension terminals of PX's step-down transformers at its Newlinville Substation, and shall be metered on the low tension side of PX's said step-down transformers.

ARTICLE V

POWER FACTOR

PX shall maintain a power factor at the points of metering specified in Article IV, Section 2, of not less than 90% lagging unless a lower power factor is requested by Hydro or is necessary because of Hydro's failure to deliver the voltage specified in Article IV, Section 1. If in any month the average power factor at the points of metering during the hours from 6 A. M. to 10 P. M. on all days except Sundays and national holidays is less than 90% lagging, and if such lower power factor was not caused by request of Hydro or by failure of Hydro to deliver the voltage specified in Article IV, Section 1, the maximum demand for that month to be used in determining the Billing Demand under the provisions of Article III, Section 2, either in that month or in any subsequent month, shall be the measured maximum demand in kilowatts multiplied by 90% and divided by the said average power factor in per cent. The average power factor shall be computed from the readings (totalized for the above mentioned hours of the month) of integrating reactive kilovolt-ampere-hour meters equipped with ratchets to prevent the meters from running backward on leading power factor, and of energy [22875] (page 9) meters, at the metering points specified in Article IV, Section 2.

ARTICLE VI

Metering

Section 1. Billing metering equipment of approved type for measuring the demand, energy and reactive supplied to PX hereunder shall be installed and maintained at the metering points specified in Article IV, Section 2, by and at the expense of Hydro. PX may install at its own expense duplicate meters, to be known as "Checking Meters."

Section 2. All meters shall be kept under seal, and all checking, calibration and adjustment of such meters shall be made in the presence of authorized representatives of each of the parties. All meters shall be tested and calibrated by comparison with accurate standards at regular intervals as may be mutually agreed upon. In case either PX or Hydro shall at any time believe that any meter registers incorrectly, the party holding such belief shall have the right to require that an extra test outside the regular schedule be made of such meter. The party desiring such test shall make written request to the other party, and thereupon such meter shall be tested and calibrated. If as a result of any test, a meter shall be found incorrect or inaccurate, it shall be restored to an accurate condition or a new meter shall be substituted.

If as a result of any test, any billing meter shall be found to register in excess of two per cent (2%) either above or below normal, than the readings of the checking meter if available and if found correct within two per cent (2%) shall be substituted. If no checking meter is available then the readings of the normal billing meter previously taken [22876] (page 10) shall be corrected according to the percentage of inaccuracy so found, but no such correction, either in respect to demand or kilowatt hours drawn and consumed, shall extend back beyond thirty (30) days previous to the day on which such inaccuracy shall be dis-

covered by such test, and if during such previous thirty (30) days one or more prior tests shall have been made under provisions hereof, then no such correction shall extend back beyond the date of the last of such prior tests.

ARTICLE VII

Holtwood Company Agent for Safe Harbor Company

Safe Harbor Company hereby authorizes and empowers Holtwood Company to act as its agent, for and on its behalf, in all transactions and relations with PX under this agreement, and PX shall be entitled to deal with Holtwood Company in all respects as if Holtwood Company were the only party contracting with it hereunder.

ARTICLE VIII

Suspension of Service Due to Unavoidable Causes

In case Hydro shall be prevented from delivering electrical supply under this agreement or in case PX shall be prevented from receiving said electrical supply by reason of strike, riot, fire, invasion, explosion, flood, storm, lightning, judicial or administrative order, Act of God or public enemies, or any other cause or causes resonably beyond their control, PX shall not be obligated to pay the Demand Charge during the period of such interruption and Hydro shall not be obligated to deliver electrical supply during such period, [22877] (page 11) provided, however, that nothing herein contained shall be construed as permitting Hydro to refuse to deliver electrical supply or PX to refuse to receive same as soon as the cause of interruption is removed, and each of the parties hereto shall be prompt and diligent in removing or overcoming such causes. No consequential damages for loss of profits of PX or based upon the cost of substituted energy shall be allowable against Hydro for any failure under this Article VIII to deliver electrical supply to PX.

ARTICLE IX

Liability

Each party shall save the other party harmless of and from any damages which may occur to the whole or any part of its own equipment, and from any liability for or on account of injuries to persons or damage to property caused by or sustained on its own equipment, notwithstanding that a judgment may be rendered against the other party hereto, except that each party shall be responsible for all claims from its own employees, agents or servants under any Workmen's Compensation Law, and neither party shall be called upon to indemnify or save harmless the other party against claims, demands, cost or expense for injuries to persons or damage to property occurring on the equipment or property of the other.

ARTICLE X

Waiver of Rights

The failure of either of the parties hereto to enforce from time to time the strict performance of any of the convenants and agreements herein contained, or the waiving from time to time of a default on the part of either party hereto, shall [22878] (page 12) not be construed as a waiver of any continuing or subsequent default or defaults, nor impair the right of either of the parties hereto subsequently to require the strict performance of each and every covenant, agreement and understanding herein contained.

ARTICLE XI

Arbitration

In case of any dispute arising between the parties to this agreement, the said dispute shall be referred to a Board of Arbitration upon service of written notice by either party to the other party hereto.

The said Board of Arbitration shall consist of three members, the first member to be chosen by the party complaining, the second member to be chosen by the other party, and the third member to be chosen by the first and second members. Should the second or third member remain unselected at the expiration of thirty (30) days after notice of arbitration is given, then upon the request of the complaining party, and upon notice thereof having been given to the other party hereto, the second or third member, or both, of the Arbitration Board shall be selected by the senior Judge in the U. S. District Court for the Eastern District of Pennsylvania or, in the event of the said Judge's disinclination or failure to act within thirty (30) days, by the President Judge of the Court of Common Pleas of Chester County.

The Board of Arbitrators shall proceed at its earliest convenience to hear and determine the questions at issue after having given each party hereto not less than five days notice of the time and place of the first meeting.

[22879] (page 13)

Each party shall be permitted to be represented by counsel before the Board of Arbitrators, and to present in full, by competent witnesses, all facts, figures and statements which might aid the Board of Arbitrators to give a final and fair judgment as to the questions in dispute.

The determination of the Board of Arbitrators, or a majority thereof, shall be made within sixty (60) days after the submission to said Board, unless prevented by circumstances unforeseen, and the decision of the Board of Arbitrators, or a majority thereof, shall be final and conclusive upon the parties hereto and said parties shall abide by such decision.

All expenses in connection with such arbitration, including a reasonable compensation for the arbitrators, shall be divided equally between the two parties, with the exception of expenses of counsel, witnesses and employees of the par-

ties hereto, which expenses shall be borne by the parties incurring them, provided, however, that the award may specify a different division of costs and expenses.

All notices herein provided for may be given by serving the same in writing, or by sending the same by registered mail addressed to the parties interested at their respective principal places of business.

ARTICLE XII

Assignment

The terms and provisions of this agreement shall enure to and be binding upon the respective successors and assigns of the parties hereto.

[22880] (page 14)

In Testimony Whereof the parties hereto have caused these presents to be signed in their corporate names by their authorized officers and their corporate seals to be hereunto affixed, and duly attested as of the day and year first above written.

Philadelphia Electric Company,

By—

(Signed) N. E. Funk,
Vice-President

Attest:

(Signed) P. A. Wilson,
Assistant Secretary

Pennsylvania Water & Power Company,

By—

(Signed) J. A. Walls,
Vice President

Attest:

(Signed) J. E. O'Connor,
Assistant Secretary

SAFE HARBOR WATER POWER CORPORATION,

By

(Signed) J. A. WALLS,
Vice President

Attest:

(Signed) J. E. O'CONNOR,
Assistant Secretary

[22881] (page 15)

Lexington Building,
Baltimore, Maryland.
August 1, 1933.

Subject: *Supplement to Coatesville Power Supply Contract Re Night Service Rider.*

Philadelphia Electric Company,
1000 Chestnut Street,
Philadelphia, Pennsylvania.

Gentlemen:

1. The following agreement supplements our agreement (hereinafter called the "Power Contract") of even date herewith for electric supply to the territory of the former Chester Valley Electric Company.

2. You have expressed your intention of offering a "Night-Service Rider" tariff to industrial customers served from your Coatesville distribution system, whereby those customers who may elect to take service under the night-service rider will be billed by your Company at reduced rates per kilowatt for their excess off-peak billing demand and possibly also at reduced rates for energy taken during off-peak hours. Excess off-peak billing demand is understood to be the amount by which the greatest demand during off-peak hours exceeds the billing demand during on-

peak hours. On-peak hours are the hours between 7 A. M. and 7 P. M. Eastern Standard Time, omitting Sundays. During the period when Daylight Saving Time, as now known, is commonly adopted, on-peak hours will be those hours between 6 A. M. and 6 P. M. Eastern Standard Time. Off-peak hours are all other hours. Service during on-peak hours to be subject to your regular tariffs. You have asked that a provision of this character be added [22882] (page 16) to our Coatesville power agreement in order that the rate reduction effected by your night-service rider tariff be shared with the companies from whom you purchase your Coatesville supply. Therefore, it is agreed as follows:

AS TO DEMAND CHARGE:

3. In determining PX's maximum demand for any month in which PX sells under its night-service rider power and/or energy to one or more industrial customers in the territory supplied with energy purchased from Hydro, (which maximum demand is used for determining the Billing Demand in that month or in any subsequent month), only demands established by PX during on-peak hours (as defined in Paragraph 2 hereof) shall be considered.

4. In any month in which PX's off-peak demand upon Hydro is greater than the Billing Demand determined as set forth in Paragraph 3 hereof and Article III, Section 2 of the Power Contract, the amount of the difference shall be paid for by PX at the rate of Forty Cents ($0.40) per Kw. per month.

AS TO ENERGY CHARGE:

5. If and when in any month PX shall sell, under its night-service rider, to one or more industrial customers in the territory supplied with energy purchased from Hydro, electrical energy during off-peak hours at the rate of 4 mills per Kwh. or less, Hydro shall sell to PX in that month

at the rate of 3 mills per Kwh. the same amount of off-peak energy that PX sells under the above mentioned arrangement. The rates for the remainder of the Kwh. supplied under Article II, Section 1 of the Power Contract, shall be as specified in Article III, Section 1 of said Power Contract, the blocking of the energy charge being based on the maximum [22883] (page 17) demand in that month during the on-peak hours only (as defined in Paragraph 2 hereof).

Your countersignature below will indicate your acceptance of this proposal.

PENNSYLVANIA WATER & POWER COMPANY,

By—

(Signed) J. A. WALLS,
Vice President

SAFE HARBOR WATER POWER CORPORATION,

By—

(Signed) J. A. WALLS,
Vice President

Accepted on August 1, 1933.

At Philadelphia, Pa.

PHILADELPHIA ELECTRIC COMPANY,

By—

N. E. FUNK

EXHIBIT NO. 74.

[22886]

THIS SUPPLEMENTAL AGREEMENT, made the 13th day of December, 1938 by and between PHILADELPHIA ELECTRIC COMPANY (hereinafter called PX), party of the first part, and PENNSYLVANIA WATER & POWER COMPANY and SAFE HARBOR WATER POWER CORPORATION (hereinafter together called HYDRO), parties of the second part, all of said parties being corporations duly organized under the laws of the Commonwealth of Pennsylvania.

WITNESSETH THAT

WHEREAS, HYDRO AND PX, under date of August 1, 1933, entered into an agreement and supplement thereto providing for the purchase from HYDRO by PX, with exceptions therein set forth, of its electrical power and energy requirements within the territory formerly served by Chester Valley Electric Company, said agreement and supplement being herein collectively referred to as the 1933 Agreement; and

WHEREAS, the parties hereto desire further to supplement and amend the 1933 Agreement as hereinafter set forth:

NOW, THEREFORE, in consideration of the premises and of the mutual agreements herein set forth, the parties hereto do hereby mutually agree as follows:

[22887] (page 2)

SECTION 1. Article I of the 1933 Agreement is hereby amended by striking out the date March 31, 1939, and inserting in place thereof the date March 31, 1942.

SECTION 2. Section I of Article II of the 1933 Agreement is hereby amended by striking out paragraph (a) and

substituting in lieu thereof a new paragraph (a), reading as follows:

"(a) PX at its option may furnish from sources other than HYDRO the requirements of those portions of said territory which lie east of an imaginary line located by projecting the West Whiteland-East Caln township line in the northeasterly direction, and south of an imaginary line running in a westerly direction from Embreeville south of Buck Run to Lenover, provided such portion of said territory can be connected, in the judgment of PX, to such other sources more economically than to the Newlinville Substation."

SECTION 3. Section I of Article II of the 1933 Agreement is hereby amended by striking out paragraph (c) and substituting in lieu thereof a new paragraph (c), reading as follows:

"(c) PX may supply from its own system any electrical power and energy necessary in said territory for the electrification of railroads, except as the parties hereto have or may hereafter otherwise agree from time to time;"

SECTION 4. Article II of the 1933 Agreement is hereby amended by adding at the end thereof a new Section 4, reading as follows:

"Section 4. In the event of emergency in PX's system inside the territory described in Section 1 of this Article of a nature which prevents HYDRO from supplying all of its contractual requirements through the Newlinville [22888] (page 3) Substation, PX may supply such emergency requirements over its 33 kv. circuit from Cromby and West Chester and/or its Newlinville-Cochranville circuit and such sections so supplied may be electrically separated from HYDRO's supply through Newlinville during the period of such emergency."

SECTION 5. Section 3 of Article III of the 1933 Agreement is hereby amended by adding at the end thereof an additional paragraph, reading as follows:

"For emergency supply by PX as described in Article II, Section 4, which is supplied to the territory described in Section 1 of Article II, the energy so supplied shall not be included in the computation of monthly energy charge under Section 1 of this Article, provided the amount and period of such emergency supply does not exceed the extent and duration of the actual emergency and that PX makes every effort with due regard to its service obligations to promptly reestablish the normal flow of energy supply from HYDRO through the Newlinville Substation."

SECTION 6. Section 1 of Article VI of the 1933 Agreement is hereby amended by adding at the end thereof an additional paragraph, reading as follows:

"PX shall provide and maintain at its own expense similar metering equipment at mutually agreed upon locations in each of its own interconnections with the territory described in Section 1 of Article II for the purpose of determining the amount of interchange at such points under the several emergency conditions described in Section 3 of Article III."

[22889] (page 4)

SECTION 7. Except as hereinabove expressly supplemented and amended, all terms and conditions of the 1933 Agreement shall remain in full force and effect. This Agreement shall be effective when all legal prerequisites before any regulatory authority with respect thereto shall have been consummated. The parties hereto shall cooperate in conforming to such prerequisites.

IN WITNESS WHEREOF, the parties hereto have caused this Supplemental Agreement to be executed by their re-

spective officers thereunto duly authorized and their respective corporate seals to be hereunto affixed and attested, as of the day and year first above mentioned.

PHILADELPHIA ELECTRIC COMPANY

By N. E. FUNK,
Vice-President

[SEAL]

Attest:
V. A. SOMMAR,
Secretary

PENNSYLVANIA WATER & POWER COMPANY

By F. A. ALLNER,
Vice-President

[SEAL]

Attest:
J. E. O'CONNOR,
Asst. Secretary

SAFE HARBOR WATER POWER CORPORATION

By J. A. WALLS,
President

[SEAL]

Attest:
J. E. O'CONNOR,
Asst. Secretary

EXHIBIT NO. 75.

[22890]

PHILADELPHIA ELECTRIC COMPANY
1000 Chestnut Street
Philadelphia 5

N. E. Funk
Vice-President

February 9, 1944

Mr. G. W. Spaulding, Vice-President,
Pennsylvania Water & Power Company,
Lexington Building
Baltimore 1, Md.

Re: Coatesville Power Supply Contract

Dear Sir:

Your letter of February 8, regarding the fuel rate adjustment received.

I agree that the method outlined by you is "an equitable adjustment" in accordance with the terms of Section 4 of Article III of the Coatesville Power Supply Contract.

Very truly yours,

(Signed) K. M. IRWIN
Assistant to Vice-President

KMI:C

[22891]

(Letterhead of)

PENNSYLVANIA WATER & POWER COMPANY
Lexington Building
Baltimore 3, Md.

February 8, 1944

Mr. K. M. Irwin, Assistant to Vice-President
The Philadelphia Electric Company
1000 Chestnut Street, Philadelphia, Pa.

RE: *Coatesville Power Supply Contract*

Dear Mr. Irwin:

This will confirm our considerations of a fuel rate adjustment under our Coatesville power supply contract because of the recent marked increase in the price of fuel.

We propose to make such an adjustment to the energy billed monthly under this contract beginning with the bill for energy delivered during the month of January 1944. This fuel rate adjustment is considered to be in accordance with the terms of Section 4 of Article III of our Coatesville power supply contract dated August 1, 1933, which provides that either party may request that an equitable adjustment be made in the bill in the event of a material increase or decrease in the cost of fuel as compared with the price of fuel as of the date of that agreement.

The monthly fuel rate adjustment will apply to the total energy delivered at Newlinville Substation under this contract; will be based on the proportion of steam electric generation to the total generation of a combined system (which for this purpose includes the power systems of this Company, Safe Harbor Water Power Corporation and Consolidated Gas Electric Light and Power Company of Baltimore) after adjustment for power interchange transactions by this Company; will vary with the average pounds of coal used per Kwh. (station send-out) in all of the steam elec-

tric generating plants of the Consolidated Gas Electric Light and Power Company of Baltimore; and will vary with the increase or decrease in the average cost of coal as reported monthly by Consolidated Gas Electric Light and Power Company of Baltimore to the Public Service Commission of Maryland, from a base price of $4.25 per net ton. The details of such monthly fuel rate adjustment computations are shown on an attached sheet and will apply so long as the average price of coal per net ton during any month as reported by Consolidated Gas Electric Light and Power Company of Baltimore to the Public Service Commission of Maryland exceeds $4.50, or is less than $4.00 per net ton.

Will you please advise us whether the above is in accordance with your understanding.

Yours very truly,

(Signed) G. W. SPAULDING
G. W. Spaulding
Vice-President

GWS/js

[22892]

February 8, 1944

FUEL RATE ADJUSTMENT UNDER
COATESVILLE POWER SUPPLY CONTRACT

A—Ratio $\frac{\text{Net Steam Gen.}^*}{\text{Net Total Gen.}^{**}}$ %

B—Total energy delivered at Newlinville Kwh.

C—Average Pounds Coal per Kwh. (Baltimore Steam Plants) #/Kwh.

D—Cost of Coal per Net Ton (in bunkers of Baltimore steam plants) $

E—Variation in Dollars per Net Ton from $4.25 base price $

$$\text{Fuel Rate Adjustment} = A \times B \times C \times \frac{E}{2{,}000} = \$$$

*—Total Baltimore and Holtwood net steam generation
Less steam interchange sales to Penna. ties
Plus steam interchange purchased from Penna. ties

**—Total steam and hydro net generation
Less all interchange sales to Penna. ties
Plus all interchange purchased from Penna. ties

EXHIBIT NO. 76.

[22896]

THIS RENEWAL AGREEMENT, made as of the first day of May, 1933, by and between PENNSYLVANIA WATER & POWER COMPANY (hereinafter sometimes called "Holtwood Company"), and SAFE HARBOR WATER POWER CORPORATION (hereinafter sometimes called "Safe Harbor Company"), parties of the first part (hereinafter called "Generating Companies"), and PENNSYLVANIA POWER & LIGHT COMPANY (hereinafter called "Receiving Company"), party of the second part, all of said companies being corporations of the State of Pennsylvania:

WITNESSETH:

WHEREAS, by agreement dated October 9, 1912, Holtwood Company agreed to supply and Edison Electric Company (to which company Receiving Company is successor) agreed to purchase certain electric power and electric energy required by said Edison Electric Company, in accordance with the terms and conditions set forth in said agreement, and

WHEREAS, by renewal agreement dated October 19, 1923, the term of said agreement of October 9, 1912 was extended for a period of ten (10) years from May 1, 1923, and certain provisions thereof modified, and

WHEREAS, the parties thereto desire to modify certain provisions of said agreement of October 9, 1912, cancel other provisions thereof and extend the term thereof, and cancel the said renewal agreement of October 19, 1923, and

[22897] (page 2)

WHEREAS, Safe Harbor Company desires to become a party to this agreement and to undertake, jointly and severally, with the Holtwood Company, to the extent per-

mitted by law, the obligations formerly the sole obligation of Holtwood Company under said agreement of October 9, 1912, as herein modified and extended, all of which is satisfactory to both Holtwood Company and Receiving Company:

NOW, THEREFORE, in consideration of the premises and of the mutual covenants, promises and agreements hereinafter set forth, the parties hereto do hereby agree with each other as follows:

ARTICLE I

TERM OF CONTRACT

All the provisions of said agreement of October 9, 1912, as herein modified or extended, shall continue in force until midnight of October 31, 1940, and thereafter for successive periods of two (2) years' duration unless and until either shall have given to the other party written notice at least eighteen (18) months prior to the expiration of the original term or of any extension thereof of its desire to terminate the same at the end of the current contract period.

ARTICLE II

CANCELLATION OF PROVISIONS IN PREVIOUS AGREEMENTS

SECTION 1. All the provisions in the said renewal agreement of October 19, 1923, are hereby cancelled without prejudice to the proceedings referred to in Section 3 of Article IX hereof, provided however that, except as hereinafter specifically provided, such cancellation shall not release either party from any payment accruing thereunder.

[22898] (page 3)

SECTION 2. The following provisions of said agreement of October 9, 1912 are hereby cancelled:

Article II, AMOUNT OF ENERGY TO BE SUPPLIED.

The First Paragraph, PRICE AND PAYMENTS, of Article III.

The words "at as near as possible to unity power factor, and," in the second sentence of the second section, RECEIVING COMPANY'S EQUIPMENT AND USE OF POWER, of Article IV,

And all other provisions therein and all other agreements and arrangements inconsistent with this renewal agreement.

ARTICLE III

CHARACTERISTICS OF POWER AND ENERGY AND POINTS OF DELIVERY

SECTION 1. Electric power and electric energy (hereinafter referred to as "power and energy") supplied under this agreement shall be 3-phase alternating current at frequencies of approximately 25 and 60 cycles per second in such quantities as Receiving Company may require hereunder. It is expected that during the first few years of this agreement there will be considerable decrease in Receiving Company's 25 cycle energy requirements. The parties hereto shall cooperate to prevent inefficient use of equipment as a result of such decrease, and to prevent tying up a large amount of 25 cycle equipment to supply a relatively small 25 cycle load.

SECTION 2. Receiving Company may at any time at its own expense adapt either or both circuits of its existing double circuit 25 cycle transmission line and corresponding substation equipment for the receipt of 60 cycle power and energy.

[22899] (page 4)

If Receiving Company's 25 cycle energy requirements shall for six (6) consecutive months average less than 1,200,000 Kwh. per month, Receiving Company shall upon request by Generating Companies, adapt, at its own expense, either or both circuits of its existing 25 cycle transmission line and corresponding substation equipment for delivery of 60 cycle energy by Generating Companies.

In either of these events, Holtwood Company shall (provided neither party has indicated its intention to terminate this agreement) make at its own expense whatever changes in its facilities are necessary to enable it to supply 60 cycle power and energy at approximately 66,000 volts to said line or lines in the required amount.

SECTION 3. The point of delivery of 25 cycle energy for transmission over Receiving Company's existing 25 cycle transmission line, or of 60 cycle energy for transmission over said line if and when it is converted to 60 cycle service, shall continue to be at the beginning of Receiving Company's said 25 cycle line near the Holtwood Power Station of the Holtwood Company. Other 60 cycle power and energy shall be delivered at the beginning of Receiving Company's 60 cycle transmission line (purchased from Holtwood Company) at Lehman's Farm Switching Structure, near Safe Harbor.

SECTION 4. All power and energy delivered hereunder shall be metered at, or in case this is not practicable, shall be corrected to, the low tension terminals of the step-down transformers at Engleside Substation. Necessary billing meters shall be installed and maintained by and at the expense of Generating Companies.

Receiving Company shall provide such additional metering equipment that may be necessary for determining the [22900] (page 5) Lancaster Load Requirements referred to in Article IV, Sections 2 and 3, subsequent to the interconnection of Receiving Company's electric system in Lancaster County, Pennsylvania, with its main system or with those of other utilities.

ARTICLE IV

AMOUNT OF POWER AND ENERGY AND FLEXIBILITY PROVISIONS

SECTION 1. Until Receiving Company shall connect its electric system in Lancaster County, Pennsylvania, with its

main system, or with those of other utilities, Generating Companies shall be obligated to supply and Receiving Company shall be obligated to receive and pay for Receiving Company's Lancaster Load Requirements. For purposes of this agreement, this amount, hereinafter referred to as "Lancaster Load Requirements," shall be considered to be all of the power and energy requirements of Receiving Company for use and sale for use in Lancaster County and adjacent areas now supplied with power and energy purchased from the Holtwood Company, except such amount as may be supplied to railroads for electrification purposes by Receiving Company from its own system, and such amounts as may be obtained from Receiving Company's existing Conestoga Creek Hydro Plants and its Engleside Steam Electric Station (or any substitute therefor) or from industrial customers in said territory under interchange arrangements, provided, however, that in any calendar year the amount of generation at said steam electric generating station of Receiving Company shall not exceed 5,000,000 Kwh., and the amount of energy received from any such customer shall not exceed the amount of energy supplied to that customer.

[22901] (page 6)

SECTION 2. After such interconnection, Generating Companies shall be obligated—

(a) to supply at all times the Lancaster Load Requirements, except that during the on-peak periods of days of low flow (hereinafter defined), Generating Companies may at their option reduce their supply to Receiving Company to 80% of the Lancaster Load Requirements during such on-peak periods, provided, however, that in emergencies affecting Receiving Company's ability to supply a portion of the load from other sources, Generating Companies shall, if possible, supply for the duration of such emergencies the entire Lancaster Load Requirements.

(b) to supply upon request of Receiving Company at times of high flow (hereinafter defined), an additional amount equal to 20% of the Lancaster Load Requirements, provided, however, that Generating Companies shall not be obligated to install generating capacity to furnish such additional supply, or to interfere with the firm power supply to their other customers. This additional amount above the Lancaster Load Requirements shall be known as Excess Energy.

SECTION 3. After such interconnection, Receiving Company shall be obligated to receive and pay for energy (hereinafter called Firm Requirements) as follows:

During all off-peak periods, the Lancaster Load Requirements.

During on-peak periods of days of high flow, 90% of the Lancaster Load Requirements.

During on-peak periods of all other days, 80% of the Lancaster Load Requirements.

[22902] (page 7)

On-peak periods, as used herein, shall be the periods between the hours of 7 A. M. to 8 P. M. weekdays, and 7 A. M. to 12 Noon and 5 P. M. to 8 P. M. Saturdays (excluding legal holidays and Sundays). Off-peak periods, as used herein, shall be all other periods of the year.

Days of high flow, as used herein, shall be those days on which the average flow of the Susquehanna River at Holtwood Plant of Holtwood Company equals or exceeds 25,000 c.f.s. Days of low flow, as used herein, shall be all other days of the year.

SECTION 4. The accumulated amount of reduction in energy supply below the Lancaster Load Requirements at Receiving Company's option under Section 3 shall at no time exceed the accumulated amount of Excess Energy supplied at the request of, and/or the amount requested by, Receiving Company under Section 2 by more than 10,000,000 Kwh.

ARTICLE V

Use of Power and Energy

Section 1. None of the power and energy supplied hereunder to Receiving Company by Generating Companies shall be sold or disposed of by Receiving Company to the Pennsylvania Railroad for electrification of its railroad lines, provided, however, that this provision shall not be construed to prevent Receiving Company from selling or continuing to sell to said Railroad Company any of such power and energy for its power and lighting requirements in its stations, shops, yards and for the operation of its signals, switches, etc.

[22903] (page 8)

ARTICLE VI

Rate for Power and Energy

Section 1. The rates to be paid by Receiving Company to Generating Companies for power and energy shall be as follows:—

6.60 mills per kilowatt hour of Lancaster Load Requirements supplied hereunder, provided, however, that the payment made by Receiving Company in any month for such supply shall not exceed that shown in or calculated from the tabulation attached hereto and made a part hereof and marked "Appendix A."

3.5 mills per kilowatt hour of Excess Energy supplied hereunder.

ARTICLE VII

Supply by Receiving Company to Generating Companies

Receiving Company agrees to supply to Generating Companies power and energy which they may request from time to time for sleet melting, correction of voltage of Generating Companies' supply and similar uses. So long

as Receiving Company shall continue to take 25 cycle power and energy, it shall at its own expense maintain its existing frequency changing equipment and when and as requested by Generating Companies to the extent that it is practicable to do so operate same up to its present capacity for conversion of 25 cycle power and energy to 60 cycle power and energy, or vice versa, provided, however, that the amount of power and energy thus supplied to Generating Companies or consumed as losses in frequency changers operated at Generating Companies' request shall be deducted by Generating Companies before calculating their bills against Receiving Company.

[22904] (page 9)

APTICLE VIII

Interconnection and Parallel Operation

It is the understanding of the parties that Receiving Company intends to interconnect its Lancaster system with its main system (which main system is itself normally operated in parallel with numerous other large electric systems) and with the electric systems of other companies. The various provisions of this renewal agreement are agreed to between the parties with the understanding that Receiving Company's Lancaster system will be so connected and will be operated in parallel with other systems and that each of the parties hereto will arrange and operate its facilities in such manner as may be necessary for such parallel operation.

As soon as Receiving Company shall have definitely determined the date upon which it expects to initiate parallel operation of its Lancaster system with its main system and/or with the electric systems of other companies, it shall advise Generating Companies of such expected date and of the nature of the interconnecting facilities which it proposes to install. In this event, Generating Companies and Receiving Company shall endeavor promptly to effect

arrangements and methods of operation which will make possible parallel operation without undue interference with the service of either party, as well as arrangements for an equitable division of the cost of any changes in or additions to the facilities or equipment of either party necessary to accomplish these results.

ARTICLE IX

Competition

Section 1. Generating Companies covenant that during the term of this agreement or any renewal thereof, prior to receipt by Generating Companies of notification from Receiving [22905]-(page 10) Company of the latter's intent not to renew this agreement, and except as hereinafter provided in Section 3 of this Article, neither they nor either of them, nor any of their affiliated, subsidiary, allied or controlled companies will, directly or indirectly, transmit, distribute, sell and/or otherwise dispose of power and energy (except to Receiving Company) for use within the charter territory of Receiving Company, or of any of its present or future affiliated, subsidiary, allied or controlled companies in Pennsylvania, said territory as now constituted being shown in green on the map attached hereto and made a part hereof, marked "Appendix B," or in the territory shown in red on said map, which is identified by the signatures of the officers executing this agreement on behalf of their respective companies, without the written consent of Receiving Company, unless ordered to do so by The Public Service Commission of Pennsylvania or other competent governmental authority.

Section 2. Generating Companies further covenant that neither they nor either of them, nor any of their affiliated, subsidiary, allied or controlled companies will, directly or indirectly, seek from any regulatory body the right to perform any of the acts described in Section 1 of this Article.

SECTION 3. The restrictions upon Generating Companies stipulated in Sections 1 and 2 of this Article shall not—

(a) apply to Martic and Manor Townships of Lancaster County;

(b) prevent Generating Companies, or either of them, or any of their affiliated, subsidiary, allied or controlled companies from selling power and energy to a non-affiliated electric public utility at a point outside of the territory shown in green on the attached map, or in a portion of said territory shown in green, in which said electric [22906] (page 11) public utility and Receiving Company both have charter rights, for use in such common territory or under border line agreements;

(c) prevent either party hereto from maintaining and prosecuting its respective contentions with respect to the specific matters and things involved in the Reports and Orders of The Public Service Commission of the Commonwealth of Pennsylvania, dated January 10, 1933, in the proceedings at Application Docket Numbers 21579 (Folder No. 2) and 24491, and it is understood that Generating Companies may avail themselves of the rights granted by such Reports and Orders as finally determined;

(d) be construed to prevent or interfere with the free flow or interchange of energy between the several sources of power of Holtwood Company and Safe Harbor Company, or any of their affiliated, subsidiary, allied or controlled companies, or to prevent the use by said companies of their own power and energy for station load and auxiliary services;

(e) be construed to prevent Generating Companies from continuing to sell power and energy (other than firm power and energy) to Metropolitan Edison Company in the vicinity of York, which power and energy

is transmitted and used by said company in its chartered territory shown in red on the attached map:

(f) prevent Generating Companies or any of their affiliated, subsidiary, allied or controlled companies, from supplying power and energy at a point or points outside of the charter territory of Receiving Company to a railroad company for use in the charter territory of Receiving Company or any of its affiliated, subsidiary, allied or [22907] (page 12) controlled companies, (excepting, however, the territory described in Section 1 of Article IV hereof) each party hereto, however, retaining the right to maintain or prosecute its respective contentions as to such supply.

SECTION 4. Receiving Company covenants that during the term of this agreement or any renewal thereof, prior to receipt by Receiving Company of notification from Generating Company of the latter's intent not to renew this agreement, neither it nor any of its affiliated, subsidiary, allied or controlled companies will, directly or indirectly, oppose the construction, maintenance or operation on the right-of-way described in Appendix C, by Generating Companies or any of their affiliated, subsidiary, allied or controlled companies, of any transmission lines with appurtenant equipment, provided such transmission lines and appurtenant equipment are not to be used for the purpose of violating the provisions of Sections 1 and 2 of this Article, of which fact Generating Companies will give Receiving Company assurance, and furthermore will not oppose the free flow, interchange and use of power and energy mentioned in paragraph (d) of Section 3 of this Article, provided, however, that nothing herein contained shall be construed as an admission by either party as to the charters and/or approvals required for the construction, maintenance and/or operation of such lines.

SECTION 5. In the event of a breach of these covenants by either party, the other party, in addition to any and all other remedies at law or in equity which it or they may

have, shall have the right, at its or their option, to terminate this agreement upon eighteen (18) months' prior written notice.

SECTION 6. This Article supersedes all former agreements, arrangements, or understandings on the subject herein covered.

[22908] (page 13)

ARTICLE X

HOLTWOOD COMPANY AS AGENT FOR SAFE HARBOR COMPANY

Safe Harbor Company hereby authorizes and empowers Holtwood Company to act as its agent, for and on its behalf, in all transactions and relations with Receiving Company under this agreement, and Receiving Company shall be entitled to deal with Holtwood Company in all respects as if Holtwood Company were the only party contracting with it hereunder.

ARTICLE XI

CANCELLATION ON ACCOUNT OF TAXES

SECTION 1. In case any additional tax or taxes (as compared with the present time), such as taxes based upon the volume of generation, transmission, and/or sale of electricity, are imposed upon and paid by Generating Companies during the term of this agreement or any extension thereof, Generating Companies may bill Receiving Company for such additional taxes to the amount that would have been incurred by Receiving Company instead of Generating Companies if Receiving Company had supplied from its own generating stations the energy purchased from Generating Companies. Receiving Company shall either pay such bills or notify Generating Companies of its unwillingness to reimburse Generating Companies. In this latter event, Generating Companies shall have the right upon notice to Receiving Company to cancel this agreement at a date eighteen (18) months after the rendering of any such bill or bills for taxes equal to or in excess

of $15,000 in any year, on which payment is refused by Receiving Company.

[22909] (page 14)

ARTICLE XII

Assignment

This contract shall enure to and be binding upon the successors and assigns of the respective parties hereto.

In Testimony Whereof the parties hereto have caused these presents to be signed in their corporate names by their authorized officers and their corporate seals to be hereunto affixed, and duly attested as of the day and year first above written.

Pennsylvania Water & Power Company,

By—

(Signed) J. A. Walls,
Vice-President

Attest:

(Signed) J. E. O'Connor,
Asst. Secretary

Safe Harbor Water Power Corporation,

By—

(Signed) J. A. Walls,
Vice-President

Attest:

(Signed) J. E. O'Connor,
Asst. Secretary

Pennsylvania Power & Light Company,

By—

(Signed) J. S. Wise, Jr.,
President

Attest:

(Signed) C. M. Walter,
Secretary

[22910] (page 15)

APPENDIX "A"

Lancaster Power Supply Contract of May 1, 1933

Million KWH of Lancaster Load Requirements Supplied per Month	Amount to be Billed
7.0	$43,411.00
7.1	44,086.00
7.2	44,761.00
7.3	45,436.00
7.4	46,111.00
7.5	46,786.00
7.6	47,461.00
7.7	48,136.00
7.8	48,811.00
7.9	49,486.00
8.0	50,161.00
8.1	50,836.00
8.2	51,511.00
8.3	52,186.00
8.4	52,861.00
8.5	53,536.00
8.59	54,143.50
8.6	54,243.50
8.7	55,243.50
8.8	56,243.50
8.9	57,243.50
9.0	58,243.50
9.1	59,243.50

[22911] (page 16)

9.2	60,243.50
9.3	61,243.50
9.340147	61,644.97
Above 9.340147	See Note

Note: For supply of less than 7,000,000 Kwh., deduct $675.00 for each 100,000 Kwh. of deficiency below 7,000,000 Kwh.

For supply in excess of 9,340,147, add $660.00 for each 100,000 Kwh. of such excess.

If in any twelve months' period ending April 30th, the monthly Lancaster Load Requirements supplied under the Lancaster Power Supply Contract of May 1, 1933, fluctuate above and below 9,340,147 Kwh. per month, an ADJUSTMENT in payments shall be made at the end of the twelve months' period as follows: Receiving Company shall pay Generating Company an ADJUSTMENT which shall be *the smaller* of the two following amounts:

A. An amount determined by multiplying (3.4 mills) by (The sum of the differences between the Kwh. of Lancaster Load Requirements actually supplied and 9,340,147 Kwh. for those months in which this actual supply shall have exceeded 9,340,147 Kwh.).

B. An amount determined by subtracting (The sum of the amounts actually paid during the twelve months' period for Lancaster Load Requirements) from (The product of "the total kilowatt-hours of Lancaster Load Requirements supplied during the twelve months' period" and "6.6 mills").

(*Initialed*) J. A. W.
J. S. W., JR.

[22912] (page 17)

NOTE REGARDING

APPENDICES "B" AND "C"

Attached to the signed copies of the contract were maps initialed J. A. W. and J. S. W., Jr. and entitled:

Appendix B—Lancaster Power Supply Contract of May 1, 1933—
Map, Showing Territory Referred to in Article IX, Section 1 and Section 3 (e).

Appendix C—Lancaster Power Supply Contract of May 1, 1933—
Map Showing Transmission Line Right-of-Way Referred to in Article IX, Section 4.

EXHIBIT NO. 77.

[22914]

[Letterhead of]

PENNSYLVANIA WATER & POWER COMPANY
LEXINGTON BUILDING
Baltimore, Md.

April 28, 1939

Re: Provisions in Connection with Parallel Operation of Lancaster Division with Main System of Pennsylvania Power & Light Company

Mr. J. S. Wise, Jr. President
Pennsylvania Power & Light Company
Allentown, Pennsylvania

Dear Sir:

The Renewal Agreement of May 1, 1933 (Main Contract), and the Letter Agreement of June 11, 1934 contain certain provisions in regard to parallel operation with Receiving Company's main system, requiring both parties to jointly work out numerous details concerning the character and division of cost of facilities, methods of operation, etc. A practical solution of these composite problems has been reached as the result of many tests, engineering studies and conferences, followed by prolonged periods of experimental operation, and represents a mutually satisfactory interpretation of those clauses in the existing agreements for the conditions at present obtaining and applicable until modified by mutual consent as further investigations or changed conditions may require in order to fulfill the intent of the above Renewal Agreement.

(1) *Letter Agreement of June 11, 1934 Superseded:*

The Letter Agreement of June 11, 1934 which has served the purpose of covering the interim period between initial Donegal service and regular parallel op-

eration is hereby superseded with respect to all its provisions except Paragraph (7) which shall continue in effect until Manor Substation is put into service.

(2) *Right-of-Way:*

Holtwood Company will grant Receiving Company a [22915] (Folio 2) right-of-way on a temporary easement basis for the duration of the Contract along the route now occupied by Receiving Company's Donegal circuit and extending to Manor Substation. In the event of termination of the Contract, Holtwood Company will grant Receiving Company without charge a right-of-way on a permanent easement basis across its property at a point about one-half mile above Witmer's Mill Bridge over Conestoga Creek.

(3) *Termination:*

Each party agrees not to exercise its right of eighteen months' notice of termination (Article I of the Main Contract) prior to midnight of April 30, 1945. The original term of the Contract is thereby extended from October 31, 1940 by three successive two-year periods to October 31, 1946.

(4) *Delivery Points:*

Supplementing Article III, Section 3 of the Main Contract 60 cycle power and energy, in addition to the points specified therein, shall also be delivered at the Safe Harbor end of Receiving Company's 60 cycle Safe Harbor-Donegal-Harrisburg transmission line.

(5) *Continuation of 4,000 Volt Service at Holtwood Power House:*

The low voltage supply for a portion of the territory of the former Pioneer Electric Light Company (now part of and connected to Receiving Company system), which supply, subsequent to the expiration of the agreement of March 13, 1926 has been furnished

under a verbal understanding at the rate of 15 mills per Kwh. shall be continued at the same rate and under the same conditions as at present. The energy supplied at 4,000 volts at Holtwood shall be billed separately and shall not be included in the Lancaster Load Requirements as defined in Article IV, Section 1, of the Main Contract.

(6) *Metering:*

Supplementing Article III, Section 4, of the Main Contract:

Previous to completion of Manor Substation, power and energy delivered hereunder at Safe Harbor referred to in Paragraph (4) above, for use in the Lancaster [22916] (Folio 3) Division shall be metered at the low tension terminals of the step-down transformers at Donegal and South Manheim Substations. Power and energy delivered at Safe Harbor for use or interchange, outside the Lancaster Division shall be metered at Harrisburg Substation at 66 Kv.

After completion of Manor Substation, the net amount of power and energy delivered by, or to, Safe Harbor and Harrisburg over the Donegal circuit, for use or interchange either inside or outside the Lancaster Division, shall be determined as of the 66 Kv. side of Donegal Substation, by employing directional billing Kwh. meters and a so-called "loss" Kwh. meter installed at Harrisburg, together with a like installation at Safe Harbor. The "loss" meter at Harrisburg shall be calibrated to record losses in the 66 Kv. line between Harrisburg and Donegal, and the "loss" meter at Safe Harbor shall be calibrated to record the losses in the 66 Kv. line between Manor Substation and Donegal. The registration of billing meters and loss meters shall be used to compute as accurately as practicable the net amount of power and energy interchanged as

of Donegal Substation between Manor Substation and Harrisburg, as well as the net amount of power and energy delivered at Donegal for use in the Lancaster Division.

Necessary billing meters shall be installed and maintained by and at the expense of Generating Companies, with the exception of those at Harrisburg Substation which shall be at the expense of Receiving Company.

(7) *Manor Substation and Transmission Line:*

On or before November 1, 1941, (unless development of a new type of circuit breaker will require a longer time in which event a date not later than May 1, 1943 shall be agreed upon between the parties) Generating Companies will construct and thereafter will operate and maintain at a location near the Safe Harbor plant, a high tension bus and switching station (to be known as Manor Substation), shown schematically on attached diagram, Exhibit M, and will construct a double circuit steel tower transmission line to connect Receiving Company's [22917] (Folio 4) double circuit line at Lehman Farm with Manor Substation.

Receiving Company is hereby granted the right to use said line as a part of its system. Receiving Company shall, at its expense, operate said line and maintain it in good operating condition. However, all renewals and replacements necessary to keep said line in good operating condition shall be made by Generating Companies at their expense.

For the right to use said line Receiving Company shall make monthly payments to Generating Companies at the rate of 1% per month of the actual cost of constructing said line, which cost shall not exceed $40,000.00, beginning with the first full calendar month after said line and Manor Substation are put into operation.

Upon completion of the construction work, Generating Companies will send Receiving Company a statement of the actual cost of constructing the said line, including reasonable charges for overhead, and will give Receiving Company an opportunity to verify any or all of the cost items for this work.

(8) *Method of Operation:*

As the control of the flow of power in conformity with Sections 2 and 3 of Article IV of the Main Contract might under certain conditions require costly and special facilities not otherwise justified Generating Companies and Receiving Company hereby adopt the practical interpretation of these provisions described below, including conditions covering intentional and unintentional flow of power and energy in excess of the minimum or maximum limits specified in the Flexibility Provisions in Article IV. Under this plan, Generating Companies with the aid of telemetered load indications transmitted by Receiving Company from Harrisburg to Safe Harbor, will endeavor to regulate, approximately in accordance with the desired schedule, the net flow of power over Receiving Company's Harrisburg-Donegal line and over paralleling lines of other parties.

[22918] (Folio 5)

(9) *Flexibility Provisions:*

Receiving Company, effective as of November 1, 1939, shall have the following options with respect to the Flexibility Provisions of the Main Contract:

Option A—Continue to operate as at present, taking excess energy and supplying portions of the Lancaster Load Requirements, as provided in Sections 2, 3 and 4 of Article IV.

Option B—Receive and pay for the amount of energy which Generating Companies are obligated to supply under the provisions of Section 2 (a) of Article IV of the Main Contract; and suspend all the other Flexibility Provisions (Sections 2 (b), 3 and 4 of Article IV) except the last two paragraphs of Section 3. During the period of such suspension Generating Companies will credit Receiving Company with an amount equal to 0.10 mill ($0.0001) times the number of Kwh. of Lancaster Load Requirements.

Option C—Receive and pay for the entire Lancaster Load Requirements and suspend all of the Flexibility Provisions (Sections 2, 3 and 4 of Article IV). During the period of such suspension Generating Companies shall be obligated to supply the Lancaster Load Requirements at all times.

Such options or change of one plan of operation to another shall be exercised by Receiving Company after written notice to Generating Companies, as follows:

From Option A to Option B or from Option B to Option A—60 days' notice.

From Option A or Option B to Option C—18 months' notice.

From Option C to Option A or Option B—12 months' notice.

[22919] (Folio 6)

The minimum length of time each option shall continue in effect shall be:

Option A—12 months. Option B—12 months.
Option C—24 months.

(10) *Capacity Service in Excess of Generating Companies' Obligation Under Section 2 of Article IV of the Main Contract:*

(A) *Firm Peak Service:*

In case Receiving Company becomes deficient in Firm Load Carrying Capacity for its Harrisburg area it shall purchase and Generating Companies shall supply the amount of such deficiency (not exceeding 15,000 Kw.) at the rate of 75¢ per kilowatt per month during the first month in which such deficiency occurs and in succeeding months until such deficiency is eliminated. Receiving Company may eliminate such deficiencies by increasing the Firm Load Carrying Capacity for its Harrisburg area by increasing generating capacity in that area, increasing firm capacity delivered over transmission lines from its main system (directly or indirectly) or purchasing firm capacity from neighboring systems.

The Firm Load Carrying Capacity for the Harrisburg area shall be the total capacity available for that area with the generating unit, transmission line, transformer or other facility out of service which results in the second largest reduction in available capacity.

The Deficiency in Firm Load Carrying Capacity for the Harrisburg area for any month shall be the positive difference between Receiving Company's maximum one-hour integrated load in the Harrisburg area in that month or any of the twenty-three preceding months and the Firm Load Carrying Capacity for the Harrisburg area. The Firm Loading Carrying Capacity for the Harrisburg area has been determined under the now existing conditions and shall be redetermined from time to time when requested by Generating Companies.

[22920] (Folio 7)

As to energy commitment, Generating Companies shall be obligated to supply to Receiving Company, when requested by Receiving Company, the energy represented by the area under a load curve consisting of the Harrisburg area load above a horizontal line (on the same curve) which is obtained as the maximum one-hour integrated load in the Harrisburg area less Receiving Company's Deficiency in Firm Load Carrying Capacity for that area as defined in the preceding paragraph. That part of such energy which is delivered to the Harrisburg area shall be paid for by Receiving Company on the basis of economy flow, except when needed under emergency conditions in which case the charges specified in Paragraph (12) below shall apply. The above defined energy and capacity service shall be known as "Firm Peak Service."

(B) *Secondary Capacity Service:*

During those months when Receiving Company purchases the above described "Deficiency in Capacity" from Generating Companies, Receiving Company in addition to the energy service specified in the preceding paragraph shall also be entitled to Secondary Capacity Service supplementary to, but not exceeding the amount of Deficiency in Capacity purchased during that month and Generating Companies shall supply such additional capacity service when requested by Receiving Company under the following conditions:

(a) *Week-end Service:*

From 1:00 P. M. on Saturday until 7:00 A. M. on Monday.

(b) *Work Week Service:*

In any calendar week when the unregulated river flow at Holtwood, i. e., the effect of

pondage and up-river storage (if any) eliminated, is greater than 6,000 c. f. s., but not greater than 10,000 c. f. s., Receiving Company may call on Generating [22921] (Folio 8) Companies for Secondary Capacity Service over and above the week-end service under paragraph (a) above, up to an amount equal to 30 hours' use, including therein the Kwh. comprised in Firm Peak Service, of the Kw. Firm Capacity currently paid for by Receiving Company, provided, however, that the amount of capacity service hours thus supplied shall not in any four consecutive weeks aggregate more than 60 hours' use of the Firm Capacity Service paid for.

In any calendar week when the average unregulated river flow at Holtwood is greater than 10,000 c. f. s., Receiving Company may call on Generating Companies for Secondary Capacity Service over and above the week-end capacity service up to an amount equal to 60 hours' use, including therein the Kwh. comprised in Firm Peak Service, of the Kw. Firm Capacity currently paid for by Receiving Company.

(c) All energy supplied under this Secondary Capacity Service shall be paid for at the same rates as the energy supplied under Firm Peak Service, i. e., on the basis of economy flow, except when needed under emergency conditions, in which case the charges specified in Paragraph (12) below shall apply. Generating Companies, except for week-end capacity service, shall not be obligated to supply Secondary Capacity Service on days when the river flow is greater than 300,000 c. f. s.

Receiving Company's entitlement for Firm and Secondary Capacity Service shall not be used intentionally for delivery or resale to Metropolitan Edison Co. or to other parties outside of Receiving Company's own power and distribution system, except as may be agreed upon from time to time between the parties hereto.

[22922] (Folio 9)

(11) *Interchange:*

The parties will interchange electric energy and capacity for the purpose of securing economies in the production of energy and in the protection of service. Energy so interchanged shall be paid for commencing with the month of November 1939 as follows:

(a) "Steam Economy Flow" energy and capacity shall be paid for on a basis which will give each party one-half of the total savings resulting from such interchange.

(b) "Hydro Economy Flow" energy shall be paid for on a basis which will give Receiving Company a saving of 0.6 mill per Kwh. plus an additional saving, if any, equal to one-half of the excess of Receiving Company's incremental cost above 2.3 mills per Kwh. Receiving Company will make every reasonable effort to utilize a maximum amount of hydro energy offered by Generating Companies.

(c) "Unintentional" energy shall be accounted for as steam economy flow and shall be paid for on the same basis as steam economy flow. Interchange of unintentional energy shall be kept at a minimum and whenever possible such flow of energy that is unavoidable will be maintained toward the system with the higher cost.

(12) *Emergency Supply:*

Each party agrees that it will not depend on the other for capacity, either installed or operating, in excess of the amount to which it is entitled under the provisions hereof. In case of breakdowns of generating equipment, transmission lines or of any other emergency, each party will upon request assist the other to the graetest extent possible without, however, curtailing or adversely affecting its own services or firm power commitments to third parties. Such emergency assistance shall be paid for at actual out-of-pocket cost to the assisting [22923] (Folio 10) party plus ten per cent. Hydro energy supply which may form part of such emergency assistance shall be paid for at 2.5 mills per Kwh.

(13) *Credit for Greater Utilization of Generating Companies' Present Facilities:*

During those months in which the amount of energy actually supplied by Generating Companies for use in the Lancaster Division is greater than 13.5 million Kwh, Generating Companies shall credit Receiving Company, commencing with the month of November, 1939, at the rate of 0.6 mill per Kwh. on the monthly energy supplied at the rate of 6.6 mills per Kwh. in excess of 13.5 million Kwh.

(14) *Joint Use of Transmission Facilities:*

In order to secure the greatest practical benefit in the utilization of those tie-in facilities in the Harrisburg and Lancaster areas which may be available to either party providing a path between Generating Companies and Receiving Company in parallel with a path owned by or available to third parties with whom both parties are interconnected, each party will permit the free-of-charge use by the other party of the capacity, not needed for its own requirements at the time, of

transmission facilities owned or controlled by it for the purpose of transmitting or receiving capacity and energy to or from third parties. The transmitting party will be compensated for actual out-of-pocket operating cost involved in such transactions.

Nothing contained herein shall be construed to permit either party to use the other party's facilities directly or indirectly in competition with the other party, or in a manner that may otherwise affect adversely the interests of the other party.

[22924] (Folio 11)

If the foregoing is acceptable to you as a mutually satisfactory solution and interpretation of features previously referred to in existing agreements, at least in so far as these problems can be anticipated at this time in a practical manner, please indicate your acceptance by signing this letter in the space provided and return one copy to us, retaining the other for your files.

Yours very truly,

PENNSYLVANIA WATER & POWER COMPANY

By (Signed) F. A. ALLNER
F. A. Allner
Vice President

SAFE HARBOR WATER POWER CORPORATION

By (Signed) J. A. WALLS
J. A. Walls
President

Accepted at Allentown, Pa., on
this 13th day of July 1939.

PENNSYLVANIA POWER & LIGHT COMPANY

By (Signed) J. S. WISE, JR.
J. S. Wise, Jr.
President

FAA:MFK

EXHIBIT No. 87

[22950]

IN THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA.

PENNSYLVANIA WATER & POWER COMPANY,
A CORPORATION,
Petitioner,

v.

FEDERAL POWER COMMISSION,
Respondent.

To the Honorable, the Judges of the United States Court of Appeals for the District of Columbia:

Pennsylvania Water & Power Company, a corporation, petitioner, files its petition under Section 313 (b) of the Federal Power Act (49 Stat. 860. 16 U. S. C. 825 (1), Title II of the Public Utility Act of 1935, approved August 25, 1935, amending the Federal Water Power Act, approved June 10, 1920, 41 Stat. 1063, 16 U. S. C. 791-823) against the Federal Power Commission, hereinafter designated as respondent or the Commission, to review and set aside an order entered by it on the 3rd day of November, 1939, and thereupon shows unto the Court:

1. Petitioner is a corporation, incorporated under the laws of the Commonwealth of Pennsylvania on January 13, 1910 by the purchasers at foreclosure of the property and franchises of McCall's Ferry Power Company, a Pennsylvania corporation. Continuously since October, 1910, petitioner has owned, maintained and operated, for the purpose of developing electric power, a dam, reservoir, power house and other [22951] (page 2) works incidental thereto (hereinafter sometimes called the Holtwood Development)

across and in the Susquehanna River, at Holtwood, near McCall's Ferry, Pennsylvania. For many years petitioner has sold electric energy, so developed, at wholesale in interstate commerce. The Holtwood Development was constructed by petitioner and its predecessor, McCall's Ferry Power Company and the receiver thereof, at a cost of millions of dollars, in the exercise of the rights of petitioner and its predecessor as owners of land on both banks of the Susquehanna River and of rights under various statutes and laws of Pennsylvania and under various proceedings thereunder, and in compliance with all applicable laws of Pennsylvania or of the United States. In the operation of the Holtwood Development petitioner conserves and utilizes, and always has conserved and utilized, the water-power resources available to it to the utmost, and also cooperates with other users of water-power in conserving and utilizing the water-power resources of the region to the utmost. There is no navigation in the region and there are no navigation resources of the region. Construction of the dam and other works was begun in 1905, and the first unit was completed and put in operation in October, 1910. The Holtwood Development is about 24.5 miles above the mouth of the Susquehanna, 20 miles above tidewater, 9 miles above the state line between Pennsylvania and Maryland, 18 miles below Columbia and Wrightsville and 35.5 miles below Middletown.

EXHIBIT No. 93.

[22961] (page 2)

S. H. W. P. CORP. ANNUAL REPORT TO S. E. C. FOR YEAR ENDED 12/31/35

* * *

By a contract dated June 1, 1931, between Registrant and Holtwood and Consolidated Companies, to remain in force until April 22, 1980, Holtwood Company is entitled to one-third and Consolidated Company to two-thirds of all the capacity and energy available from Registrant's initial hydroelectric development and the two purchasing companies are to make annual payments to Registrant in the same proportion. By a contract made as of June 1, 1931, between Holtwood Company and Consolidated Company, (supplementing contract of December 31, 1927) to remain in force until April 22, 1980, Consolidated Company is entitled to all the electrical capacity and energy available to Holtwood Company at its own plant and also from that of Registrant under the above mentioned three party contract, not otherwise disposed of in performance of other contracts or legal obligations to serve. In return, Consolidated Company is to make to Holtwood Company annual payments computed in accordance with the provisions of the contract, subject to modification by regulatory authorities.

* * *

[22964] (page 24)

SAFE HARBOR WATER POWER CORPORATION, REGISTRANT, PROFIT AND LOSS STATEMENT FOR YEAR ENDED DECEMBER 31, 1935.

Explanation	Item	Amount
1.B. *Operating Revenues:*		
From Sale of Electrical Energy in Bulk to the Follow-Customers:		
Consolidated Gas Electric Light and Power Company of Baltimore (Note)		$ 1,200,000.00
Pennsylvania Water & Power Company (Note)		600,000.00
TOTAL OPERATING REVENUE		$ 1,800,000.00
2.B. *Operating Expenses:*		
(a) Hydraulic Generating System Expenses	$ 196,654.66	
(b) Administrative and Other General Expenses	126,348.11	$ 323,002.77
(c) Maintenance and Repairs (Schedule X)		45,390.97
(d) Renewals and Replacements Expense (Depreciation) (Schedule X)		147,152.98
(e) Taxes (Other Than Income Taxes) (Schedule X)		95,177.11
TOTAL OPERATING EXPENSES		$ 610,723.83

INCOME FROM OPERATIONS		$ 1,189,276.17
OTHER INCOME:		
10. *Miscellaneous Other Income*		37.60
GROSS INCOME		$ 1,189,313.77
INCOME DEDUCTIONS:		
13. *Interest And Debt Discount And Expense*		
(a) Interest on Funded Debt	$ 945,000.00	
(b) Amortization of Debt Discount and Expense	55,506.00	
TOTAL INCOME DEDUCTIONS		$ 1,000,506.00
16. NET INCOME		$ 188,807.77

Note—The revenues from sale of electrical energy to Consolidated Gas Electric Light and Power Company of Baltimore and Pennsylvania Water & Power Company were received pursuant to the terms and conditions of an agreement dated June 1, 1931 between these companies and Registrant. These two customers each own 50% of the outstanding voting stock of Registrant. Registrant does not admit that either of these companies is an affiliate or parent of Registrant. (See Item 1, Page 1.)

EXHIBIT NO. 97.

[22979]

SAFE HARBOR WATER POWER CORPORATION

ANNUAL REPORT TO S. E. C. FOR YEAR ENDED DECEMBER 31, 1939

NOTES TO PROFIT AND LOSS STATEMENT

Note 1.—

The revenues from sales of electric energy to Consolidated Gas Electric Light and Power Company of Baltimore and Pennsylvania Water & Power Company were received pursuant to the terms and conditions of an agreement dated June 1, 1931 between these companies and the Registrant. These two customers each own 50% of the outstanding voting stock of the Registrant.

On November 9, 1937, the Federal Power Commission instituted an investigation of the rates and other terms of the contract dated June 1, 1931, between the Registrant, Pennsylvania Water & Power Company and Consolidated Gas Electric Light and Power Company of Baltimore, under which the Registrant sells its entire output to the two latter companies, to determine whether any of the provisions of the Federal Power Act, or any rule or regulation of the Commission is being violated, and whether the rates are unjust, unreasonable or discriminatory. The Federal Power Commission by an order dated September 19, 1939 granted leave to the People's Counsel to the Maryland Commission to intervene in these proceedings. A hearing before an examiner was held on October 9, 10, 11, 12, 16, 17, 18, 19 and November 6, 1939. The Commission has not yet made a decision. At the hearing, and in briefs filed since the hearing, counsel for the Commission have contended that the rates that the Registrant is receiving under the contract are excessive and should be substantially reduced.

EXHIBIT NO. 105.

[23001] (page 1)

S. H. W. P. CORP. ANNUAL REPORT TO S.E.C. FOR YEAR ENDED 12/31/45

* * *

By a contract dated June 1, 1931, and a supplemental contract dated November 22, 1939, with the Holtwood Company and the Consolidated Company, to remain in force until April 22, 1980, the Holtwood [23002] (page 2) Company is entitled to one-third and the Consolidated Company to two-thirds of all the capacity and energy available from the Registrant's hydroelectric plant and the two purchasing companies are to make annual payments to the Registrant in the same proportion. By supplemental contracts, made as of June 1, 1931, and September 29, 1939, between the Holtwood Company and the Consolidated Company (supplementing contract of December 31, 1927) to remain in force until April 22, 1980, the Consolidated Company is entitled to all the electric capacity and energy available to the Holtwood Company at its own plant and also from that of the Registrant under the above-mentioned three-party contracts, not otherwise disposed of in performance of other contracts or legal obligations to serve. In return, the Consolidated Company is to make to the Holtwood Company annual payments computed in accordance with the provisions of the contracts.

* * *

[23003] (page 5)

SAFE HARBOR WATER POWER CORPORATION

PROFIT AND LOSS STATEMENT
FOR THE YEAR ENDED DECEMBER 31, 1945

OPERATING REVENUES:		
Sales of Electric Energy (Note 6):		
Consolidated Gas Electric Light and Power Company of Baltimore		$2,463,544.94
Pennsylvania Water & Power Company		1,231,772.47
Other Electric Revenues		168.00
Total Operating Revenues		$3,695,485.41
OPERATING REVENUE DEDUCTIONS (Schedule XVI):		
Operating Expenses:		
Production	$ 353,402.14	
Transmission	57,850.26	
Administrative and General	285,615.34	
Totals	$ 696,867.74	
Depreciation (Note 5)		173,962.59
Taxes:		
Federal Income Taxes		371,431.48
Federal Excess Profits Tax		221,490.48
State Income Tax		26,000.00
Other than Income and Excess Profits Taxes		101,309.29
Total Operating Revenue Deductions		$1,591,061.58
Operating Income		$2,104,423.83
OTHER INCOME:		
Other Interest Revenues		$ 13,263.59
Gross Income		$2,117,687.42

INCOME DEDUCTIONS:	
Interest on Long-Term Debt	$ 875,674.56
Amortization of Debt Discount and Expense	29,331.27
Taxes Assumed on Interest (Schedule XVI)	17,626.20
Other Interest Charges	16.77
Interest Charged to Construction—Credit	(293.03)
Miscellaneous Income Deductions	1,375.00
Appropriated to Reserve for Depreciation (Note 5)	80,783.87
Total Income Deductions	$1,004,514.64
NET INCOME (Note 6)	$1,113,172.78

[23004] (page 10)

SAFE HARBOR WATER POWER CORPORATION

NOTES PERTAINING TO FINANCIAL STATEMENTS

(Concluded)

Note 6.—

The revenues from sales of electric energy to Consolidated Gas Electric Light and Power Company of Baltimore and Pennsylvania Water & Power Company were received pursuant to the terms and conditions of an agreement dated June 1, 1931 between these companies and the Registrant. These two customers each own 50% of the outstanding voting stock of the Registrant.

On September 1, 1944, the Federal Power Commission issued an order instituting an investigation to determine whether, in connection with any transmission or sale of electrical energy subject to the jurisdiction of that Commission under the Federal Power Act, any rates, charges

or classifications demanded, observed, charged or collected by Registrant, or any rules, regulations, practices or contracts affecting such rates, charges or classifications are unjust, unreasonable, unduly discriminatory or preferential; and if, after hearing, it should be found that any of such rates, charges, classifications, rules, regulations, practices or contracts are unjust, unreasonable, unduly discriminatory or preferential to determine and fix just and reasonable rates, charges, classifications, rules, regulations, practices or contracts to be thereafter observed and in force. Hearings in this matter were concluded March 16, 1945 and briefs have been filed by the Registrant and the Commission, but no decision has been rendered by the Commission and the Registrant cannot determine at this time the extent to which its future net income may be affected thereby.

* * *

EXHIBIT NO. 106.

[23005] (page 2)

PENNSYLVANIA WATER & POWER CO.

ANNUAL REPORT TO S. E. C. FOR YEAR ENDED DECEMBER 31, 1935.

1. (Concluded)

By a contract, dated June 1, 1931 with Safe Harbor Company and Consolidated Company, to remain in force until April 22, 1980, Registrant is entitled to one-third and Consolidated Company to two-thirds of all the capacity and energy available from Safe Harbor Company's initial hydroelectric development and the two purchasing companies are to make annual payments to Safe Harbor Company in the same proportion. By a contract, made as of June 1, 1931, between Registrant and Consolidated Company (supplementing contract of December 31, 1927) to remain in force until April 22, 1980, Consolidated Company is entitled to all the electrical capacity and energy available to Registrant at its own plant and also from that of Safe Harbor Company, under the above mentioned three party contract, not otherwise disposed of in performance of other contracts or legal obligations to serve. In return, Consolidated Company is to make to Registrant annual payments, computed in accordance with the provisions of the contract, subject to modification by regulatory authorities.

* * *

[23010] (page 38)

PENNSYLVANIA WATER & POWER COMPANY SYSTEM

CONSOLIDATED PROFIT AND LOSS STATEMENT
FOR YEAR ENDED DECEMBER 31, 1935

(NOTE 1.)

Explanation	*Item*	*Amount*
1. B. *Operating Revenues:*		
(a) From sale of electrical energy, in bulk (Note 2)		$5,819,560.21
(b) Other operating revenues		29,422.75
TOTAL OPERATING REVENUES		$5,848,982.96
2. B. *Operating Expenses:*		
(a) Hydraulic Generating System Expenses	$173,058.81	
(b) Steam Generating System Expenses	200,289.98	
(c) Electricity Purchased from Others (Note 3)	628,284.82	
(d) Transmission System Expenses	99,763.12	
(e) Administrative and Other General Expenses	239,235.94	$1,340,632.67
(f) Maintenance and Repairs (By Functional Group) (Schedule X) Hydraulic Generating System Properties	$138,534.46	
Steam Generating System Properties	44,140.67	
Transmission System Properties	148,434.14	
Other General Properties	42,005.69	$ 373,114.96

(g) Renewals and Replacements Expense (Depreciation) (Schedule X)			464,336.18
(h) Taxes (Other Than Income Taxes) (Schedule X)			291,354.10
TOTAL OPERATING EXPENSES			$2,469,437.91
INCOME FROM OPERATIONS			$3,379,545.05
OTHER INCOME:			
7. *Dividends* (Schedule XI)			$ 164,322.55
8. *Interest on Securities* (Marketable Securities)			45,740.60
9. *Profits on Securities* (See Schedule IX—Surplus)			—
10. *Miscellaneous Other Income:*			
(a) Interest Received on Notes Receivable from Fiscal Agent	$34,889.74		
(b) Interest Received on Deposits, Notes and Accounts	740.55		35,630.29
TOTAL OTHER INCOME			$ 245,693.44
GROSS INCOME			$3,625,238.49
INCOME DEDUCTIONS:			
11. *Losses on Securities* (See Schedule IX—Surplus)			$ —
13. *Interest and Debt Discount and Expenses:*			
(a) Interest on Funded Debt			1,055,780.02
(b) Amortization of Debt Discount and Expense (See Schedule VII)			—
TOTAL INCOME DEDUCTIONS			$1,055,780.02

14. *Net Income Before Provision for Federal Income Taxes*	$2,569,458.47
15. *Provision for Federal Income Taxes*	297,268.94
NET INCOME	$2,272,189.53

[23011] (page 39)

PENNSYLVANIA WATER & POWER COMPANY SYSTEM

NOTES PERTAINING TO CONSOLIDATED PROFIT AND LOSS STATEMENT FOR YEAR ENDED DECEMBER 31, 1935

NOTE 1.

Registrant's books of account reflect all revenues and expenses, including depreciation expense and the accompanying depreciation reserve accounts, applicable to its wholly-owned subsidiary transmission companies; Susquehanna Transmission Company of Maryland, Susquehanna Transmission Company of Pennsylvania and Pennsylvania Transmission Company. This policy was adopted by virtue of the contractual relationship which has existed between Registrant and these particular Companies since their inception and which made it possible for the Registrant to retain direct control over these Companies at all times through ownership of all their outstanding securities. The properties of Registrant and these subsidiaries are coordinated and operated as a unit by a common organization and contracts for the sale of electrical energy have been predicated on this basis. This policy was first adopted January 1, 1911, when the Registrant's properties were placed on a commercial operating basis and has been followed consistently since that date, both with respect to its accounts and reports to the investing public.

The same principle of consolidation has been adopted in the preparation of this statement as was followed in the consolidated balance sheet presented herein.

NOTE 2. (Caption 1. B.)

This amount ($5,819,560.21) represents, with the exception stated below, the revenues received from the sale of electrical energy to five customers and, of this sum, $4,074,939.59 represents the revenue from the sale of power to the Consolidated Gas Electric Light and Power Company of Baltimore under an agreement dated June 1, 1931. The latter amount is stated before the application of a credit of $177,945.59 which was allowed the Consolidated Company pursuant to the above agreement. In this connection, reference is made to the descriptive data covering the "Reserve for Special Equalization" of "Schedule VII, Reserves". Registrant does not admit that this Company is a subsidiary, affiliate or parent of Registrant. (See Item 1, page 1)

There is also included under this caption the sum of $133,750.00 which was received from the "Conowingo Companies" in 1935 as compensation for Registrant's loss in energy output and demand value of its plant as well as other losses, all of which arise from the construction and operation of former's hydroelectric plant at Conowingo, Md. The "Conowingo Companies" comprise The Susquehanna Power Company, The Susquehanna Electric Company and Philadelphia Electric Power Company.

NOTE 3. (Caption 2. B. (c))

The cost of electricity purchased from others was $628,284.82 in 1935 and of this amount $600,000.00 represents the cost of electrical energy purchased by Registrant from the Safe Harbor Water Power Corporation. This electricity was purchased pursuant to an agreement dated June 1, 1931, between Consolidated Gas Electric Light & Power Company and Registrant and the Safe Harbor Water Power Corporation. Registrant does not admit that either of these Companies is a subsidiary, affiliate, or parent of Registrant. (See Item 1, page 1)

EXHIBIT NO. 116.

[23058] (page 2)

PENNSYLVANIA WATER & POWER CO.

ANNUAL REPORT TO S. E. C. FOR YEAR ENDED DECEMBER 31, 1945

* * *

By a contract, dated June 1, 1931, and a supplemental contract dated November 22, 1939, with the Safe Harbor Corporation and the Consolidated Company, to remain in force until April 22, 1980, the Registrant is entitled to one-third and the Consolidated Company to two-thirds of all the capacity and energy available from the Safe Harbor Corporation's hydroelectric plant and the two purchasing companies are to make annual payments to the Safe Harbor Corporation in the same proportion. By supplemental contracts, made as of June 1, 1931 and September 29, 1939 between the Registrant and the Consolidated Company (supplementing contract of December 31, 1927) to remain in force until April 22, 1980, the Consolidated Company is entitled to all the electric capacity and energy available to the Registrant at its own plant and also from that of the Safe Harbor Corporation under the above-mentioned three party contracts, not otherwise disposed of in performance of other contracts or legal obligations to serve. In return, the Consolidated Company is to make to the Registrant annual payments computed in accordance with the provisions of the contracts.

* * *

[23059] (page 5)

PENNSYLVANIA WATER & POWER COMPANY
AND SUSQUEHANNA TRANSMISSION COMPANY
OF MARYLAND
A WHOLLY-OWNED SUBSIDIARY

CONSOLIDATED PROFIT AND LOSS STATEMENT
FOR THE YEAR ENDED DECEMBER 31, 1945

OPERATING REVENUES (Note 2):	
Sales of Electric Energy:	
Consolidated Gas Electric Light and Power Company of Baltimore	$2,084,216.67
Other	4,833,709.37
Other Electric Revenues	133,750.00
Total Operating Revenues	$7,051,676.04
OPERATING REVENUE DEDUCTIONS (Schedule XVI):	
Operating Expenses:	
Production:	
Power Purchased from Safe Harbor Water Power Corporation	$1,231,772.47
Interchange Power—Net	(812,133.77)
Other Production Expenses	936,562.70
Transmission	366,367.37
Administrative and General	625,541.55
Total	$2,348,110.32
Depreciation (Note 8)	574,245.15

Taxes:	
Federal Income Tax	945,223.26
Federal Excess Profits Tax	266,470.56
State Income Taxes	60,544.32
Other than Income and Excess Profits Taxes	256,704.62
Total Operating Revenue Deductions	$4,451,298.23
Operating Income	$2,600,377.81
OTHER INCOME:	
Income (Loss) from Non-Utility Operations	(362.33)
Dividend Revenues (Schedule XVII):	
Safe Harbor Water Power Corporation	280,000.00
Consolidated Gas Electric Light and Power Company of Baltimore	105,264.00
Interest on Securities Owned (Marketable Securities)	57,265.24
Total Other Income	$ 442,166.91
Gross Income	$3,042,544.72
INCOME DEDUCTIONS:	
Interest on Long-Term Debt	$ 680,449.37
Amortization of Debt Discount, Premium and Expense (Refunded Issue) (Note 5)	43,610.10
Amortization of Premium on Debt—Credit (Note 7)	(10,834.08)
Other Interest Charges	36.35
Interest Charged to Construction—Credit	(280.29)
Miscellaneous Income Deductions	42,012.00
Total Income Deductions	$ 754,993.45
NET INCOME (Note 2)	$2,287,551.27

EXHIBIT NO. 117.

[23060] (page 3)

REGISTRATION STATEMENT FILED MAY 28, 1935 WITH S. E. C.

BY PENNSYLVANIA WATER & POWER CO.

* * *

By a contract, dated June 1, 1931, with Safe Harbor Company and Consolidated Company, to remain in force until April 22, 1980, Registrant is entitled to one-third and Consolidated Company to two-thirds of all the capacity and energy available from Safe Harbor Company's initial hydroelectric development and the two purchasing companies are to make annual payments to the Safe Harbor Company in the same proportion. (See Exhibit H-1). By a contract, made as of June 1, 1931, (supplementing contract of December 31, 1927) to remain in force until April 22, 1980, the Consolidated Company is entitled to all the electrical capacity and energy available to Registrant at its own plant and also from that of the Safe Harbor Company, under the above mentioned three party contract, not otherwise disposed of in performance of other contracts or legal obligations to serve. In return, the Consolidated Company is to make to Registrant annual payments, computed in accordance with the provisions of the contract, subject to modification by regulatory authorities. (See Exhibit H-2).

* * *

[23061] (page 4)

* * *

The electric energy of Registrant is delivered to its customers over the transmission systems of Registrant and its wholly owned subsidiaries, Susquehanna Transmission Company of Pennsylvania, Pennsylvania Transmission Company, and Susquehanna Transmission Company of Maryland, which companies are engaged in no other business than the transmission of electric energy for Registrant and Safe Harbor Water Power Corporation.

* * *

Exhibit No. 117

[23063] (page 57)

PENNSYLVANIA WATER & POWER COMPANY,
REGISTRANT
CONSOLIDATED PROFIT AND LOSS STATEMENT
FOR YEAR ENDED DECEMBER 31, 1934
(NOTE 1.)

	Explanation	*Item*	*Amount*
1. B.	*Operating Revenues:*		
	(a) From sale of electrical energy, in bulk, (Note 2)		$5,415,433.06
	(b) Other operating revenues		26,834.94
	TOTAL OPERATING REVENUES		$5,442,268.00
2. B.	*Operating Expenses* (By Functional Group) Other Than Those Listed Below:		
	(a) Hydraulic Generating System Expenses	$160,502.98	
	(b) Steam Generating System Expenses	197,801.38	
	(c) Electricity Purchased from Others (Note 3)	558,071.21	
	(d) Transmission System Expenses	84,054.17	
	(e) Administrative and Other General Expenses	219,532.51	$1,219,962.25
3.	*Maintenance and Repairs* (By Functional Group) (Schedule VIII)		
	(a) Hydraulic Generating System Properties	$124,270.07	
	(b) Steam Generating System Properties	35,336.80	
	(c) Transmission System Properties	112,000.60	
	(d) Other General Properties	39,594.89	311,202.36

4.	*Renewals and Replacements Expense* (Depreciation) (Schedule VIII)		413,698.99
5.	*Taxes (Other Than Income Taxes)* (Schedule VIII)		201,748.25
6.	*Management and Service Contract Fees*		—
7.	*Rents and Royalties* (Schedule VIII)		21,780.00
8.	*Other Operating Expenses*		—
9.	*Selling, General and Administrative Expenses* (Included above under item 2B (e))		—
10.	*Provision for Doubtful Accounts*		—
11.	*Other General Expenses* (Included above under Item 2B (e))		—
	TOTAL OPERATING EXPENSES		$2,168,391.85
	INCOME FROM OPERATIONS		$3,273,876.15
OTHER INCOME:			
12.	*Dividends* (Schedule IX)		$ 100,861.92
13.	*Interest on Securities* (Other Security Investments)		44,715.48
14.	*Profits on Securities*		—
15.	*Miscellaneous Other Income*		
	(a) Interest during Construction (Note 4)	$18,788.07	
	(b) Interest received on Note Receivable from Fiscal Agent	35,325.18	
	(c) Interest received on deposits, notes and accounts	1,248.70	
	(d) Dividends on Registrant's Common Stock (Note 5)	612.00	55,973.95
	TOTAL OTHER INCOME		$ 201,551.35
	GROSS INCOME		$3,475,427.50

[23064] (page 58)

* * *

NOTE 2. (Item 1. B.)

This amount ($5,415,433.06) represents, with the exception stated below, the revenues received from sale of electrical energy to five customers and, of this sum, $3,654,652.43 represents the revenues from sale of power to the Consolidated Gas Electric Light and Power Company of Baltimore under an agreement, dated June 1, 1931 (See Exhibit H-2). The latter amount is stated before the application of a credit of $225,000 which was allowed the Consolidated Company pursuant to paragraph (g) of Article III of the above agreement. In this connection, reference is made to the descriptive data covering the "Reserve for Special Equalization" of "Schedule VI. Reserves". Registrant does not admit that this company is a subsidiary, affiliate or parent of Registrant. (See Item 10, page 2)

[23065] (page 59)

* * *

NOTE 3. (Item 2. B. (c))

The cost of electricity purchased from others was $558,071.21 in 1934 and of this amount $533,333.33 represents the cost of electrical energy purchased by Registrant from the Safe Harbor Water Power Corporation. This electricity was purchased pursuant to an agreement dated June 1, 1931, between Consolidated Gas Electric Light and Power Company and Registrant and the Safe Harbor Water Power Corporation: a copy of which is submitted herewith and identified as Exhibit H-1. Registrant does not admit that this company is a subsidiary or affiilate of Registrant. (See Item 10, page 2)

* * *

EXHIBIT NO. 120.

[23078] (page 3)

REGISTRATION STATEMENT FILED 1/4/40 WITH S. E. C. BY P. W. & P. CO.

* * *

By a contract, dated June 1, 1931, and a supplemental contract dated November 22, 1939, with the Safe Harbor Corporation and the Consolidated Company, to remain in force until April 22, 1980, the Company is entitled to one-third and the Consolidated Company to two-thirds of all the capacity and energy available from the Safe Harbor Corporation's hydroelectric plant and the two purchasing companies are to make annual payments to the Safe Harbor Corporation in the same proportion. By supplemental contracts, made as of June 1, 1931, and September 29, 1939, between the Company and the Consolidated Company (supplementing contract of December 31, 1927) to remain in force until April 22, 1980, the Consolidated Company is entitled to all the electric capacity and energy available to the Company at its own plant and also from that of the Safe Harbor Corporation under the above mentioned three party contracts, not otherwise disposed of in performance of other contracts or legal obligations to serve. In return, the Consolidated Company is to make to the Company annual payments computed in accordance with the provisions of the contracts. Copies of these contracts are filed herewith as Exhibits I-6(a), I-6(c), I-5(c), I-5(d) and I-5(a), respectively to which reference is hereby made. Reference is also made to subdivision (2) of the answer to Item 40 regarding the investigation of the contract with the Safe Harbor Corporation by the Federal Power Commission and the answer to Item 5 under the caption "State Regulation" regarding a recent investigation by the Maryland Public Service Commission of the contract with the Consolidated Company.

[23079] (page 4)

HISTORY AND BUSINESS.

5. Outline briefly the general character of the business done and intended to be done by the registrant and its subsidiaries.

The Company is a public utility engaged in the business of generating, purchasing, selling and transmitting electric power and energy, largely at wholesale. Its generating properties consist of a 111,000 k.w. hydroelectric plant and a 20,000 k.w. steam-electric plant located at Holtwood, Pa., on the Susquehanna River. It does no distribution business. The transmission lines of the Company and its wholly-owned subsidiary, Susquehanna Transmission Company of Maryland, are an integral part of the regional power supply system referred to below (see the map referred to in Item 7).

The hydroelectric plant of Safe Harbor Water Power Corporation, located about eight miles above the Company's generating plants at Holtwood, Pa., has a capacity of 180,000 k.w. and has been tied in with the Company's hydroelectric and steam-electric plants and the steam-electric plants of Consolidated Gas Electric Light and Power Company of Baltimore by transmission lines owned by the Company or its wholly-owned transmission subsidiary. Power resources of the three companies are thus coordinated and operated as a regional power supply system. Most of the transmission lines were constructed primarily for the purpose of supplying individual customers of the Company. Those lines and the other lines owned by the Company or its wholly-owned transmission subsidiary, also serve as tie lines between the companies composing this regional power supply system, one to the other, and as lines for the delivery of power from or to the wholesale customers of one or more of such companies.

Pursuant to individual contracts with customers, the Company sells electric energy to six customers. The names

of the Company's customers, the date when such customer (or its predecessor) was first served by the Company, together with a reference to the subdivision or subdivisions of the answer to Item 41 in which the principal sales contract or contracts with such customer are summarized, are as follows:

Name of Customer	Date First Served	Reference to Subdivisions of the Answer to Item 41
Consolidated Gas Electric Light and Power Company of Baltimore	1910	5 & 6
Pennsylvania Power & Light Company	1913	7
Edison Light & Power Company	1923	8
Philadelphia Electric Company	1923	9 & 10
The Pennsylvania Railroad Company	1938	10, 12 & 13
Metropolitan Edison Company (interchange only)	1932	11

The Company delivers to the Consolidated Company under contracts (referred to in subdivisions (5) and (6) of the answer to Item 41) all the electric energy available at its own plants and available to it from the Safe Harbor Corporation's plant (pursuant to the contract referred to in subdivision (6) of the answer to Item 41) and elsewhere not otherwise disposed of in performance of other contracts or legal obligation to serve and permits the Consolidated Company to use certain transmission and substation facilities.

The Company, the Consolidated Company, the Safe Harbor Corporation and Potomac Electric Power Company supply electric energy to The Pennsylvania Railroad Company under contracts (referred to in subdivisions (10), (12) and (13) of the answer to Item 41), covering the entire electrification requirements for its railroad system between Perryville, Md. and Washington, D. C., between Thorndale,

Pa. and Harrisburg and Enola, Pa., and between Columbia, Pa. and Perryville, Md. and in yards adjacent thereto and supporting these services. Service to the Railroad Company for its lines in Maryland and the District of Columbia began in February, 1935 and for its lines in Pennsylvania in January, 1938.

Substantially all of the fuel for the operation of its steam-electric plant is provided by the recovery and treatment of coal which the Susquehanna River and its tributaries wash down from the anthracite regions of Pennsylvania and which is deposited in the bed of the River. The Company obtains this coal by having it dredged, and purchases coal dredged by others, from the River above the dam at Holtwood.

The Company and its wholly-owned subsidiary, Susquehanna Transmission Company of Maryland, intend to continue in business of the general character described above.

The Company does not undertake to indicate either what, if any, hydroelectric sites are or may become susceptible of economic development by private or governmental interests or what, if any, effect any such development would have on the Company's business.

* * *

[23080] (page 6)

* * *

FEDERAL REGULATION

FEDERAL POWER ACT

The Company and its wholly-owned subsidiary, Susquehanna Transmission Company of Maryland, are subject to the jurisdiction of the Federal Power Commission under Part II of the Federal Power Act which provides that the Commission shall have jurisdiction over the business of, and facilities for, transmission of electric energy in interstate commerce and sale of electric energy at wholesale in interstate commerce. Such jurisdiction as set forth in Parts

II and III of said Act, extends to the interconnection and coordination of facilities, the sale; lease or other disposition of facilities, the merger or consolidation of facilities, the issuance and purchase of securities, the assumption of liabilities, rates, charges, services, accounting, valuation, rates of depreciation, generation of electric energy (during wars in which the United States is engaged and other emergencies) and other matters.

Under the provisions of the Federal Power Act authorization from said Commission, in the opinion of counsel for the Company, is not necessary for the issuance of the securities registered hereunder because the Company is organized and operating in Pennsylvania, a State under the laws of which its security issues are regulated by a State Commission.

Reference is made to the statements above under "State Regulation" with respect to the system of accounts prescribed by the Federal Power Commission effective January 1, 1937.

Certain officers and directors of the Company have filed applications pursuant to Section 305 (b) of the Federal Power Act, with the Commission for authorization to continue to hold the position of officer and/or director in two or more public utilities and certain other companies, including the Company, the Consolidated Company, the Safe Harbor Corporation and the wholly-owned subsidiary transmission companies of the Company. In 1938, the Commission conducted public hearings on these applications and similar applications filed by certain officers and directors of the Consolidated Company and the Safe Harbor Corporation. On October 2, 1939, the Commission held another hearing for the purpose of hearing further evidence, but has not, as yet rendered any decision. Reference is made to the answer to Item 30 for names of officers and directors of the Company involved in these proceedings.

Reference is made to subdivision (1) of the answer to Item 40 relating to the investigation by the Federal Power

Commission to determine the authority, if any, under which the Company's hydroelectric plant is maintained and operated, and to the order of the Commission therein.

Reference is made to subdivision (2) of the answer to Item 40 relative to an investigation ordered by the Commission of the rates charged by the Safe Harbor Corporation to the Company and the Consolidated Company.

* * *

STATISTICAL INFORMATION

The following statistics indicate the general development of the Company's business since January 1 1934:

	Eight Months ended August 31, 1939	Eight Months ended August 31,1938	1938	1937	1936	1935	1934
ENERGY GENERATED AND PURCHASED (in Thousand Kilowatt-Hours):							
Net Generated:							
Hydro	375,695	439,331	595,528	683,431	468,009	564,774	517,268
Steam	110,724	97,343	161,649	146,635	155,445	110,342	91,114
Total Generated	486,419	536,674	757,177	830,066	623,454	675,116	608,382
Purchased:							
Safe Harbor Water Power Corp.	190,328	208,819	274,271	329,093	222,302	247,978	198,844
Other Companies (Interchange)	49,099	28,300	58,242	31,296	29,713	10,644	11,499
Total Purchased	239,427	237,119	332,513	360,389	252,015	258,622	210,343
Total Energy Generated and Purchased	725,846	773,793	1,089,690	1,190,455	875,469	933,738	818,725
Less Energy Losses	34,850	39,223	53,675	66,817	49,385	58,031	59,248
Balance	690,996	73' 570	1,036,015	1,123,638	826,084	875,707	759,477
SALES (in Thousand Kilowatt-Hours):							
Consolidated Gas Electric Light and Power Company of Baltimore	329,346	448,918	590,473	713,126	507,805	563,033	510,640
Pennsylvania Power & Light Company	115,742	101,341	159,346	167,161	159,440	145,967	127,713
Edison Light & Power Company	20,567	19,830	30,889	30,730	28,460	21,055	43,985
Philadelphia Electric Company	42,930	37,688	58,482	69,342	58,913	44,113	36,805
The Pennsylvania Railroad Company	101,770	59,699	106,757	22	—	—	—
Total Sales (excluding interchange)	610,355	667,476	945,947	980,381	754,618	774,168	719,143
Sales under Interchange Agreements	80,641	67,094	90,068	143,257	71,466	101,539	40,334
Total Sales	690,996	734,570	1,036,015	1,123,638	826,084	875,707	759,477
OPERATING REVENUES:							
Consolidated Gas Electric Light and Power Company of Baltimore (Note 1)	$2,256,666	$2,866,170	$4,187,398	$4,091,925 (2)	$4,252,950 (2)	$4,074,939 (2)	$3,654,652 (2)
Pennsylvania Power & Light Company	767,079	671,900	1,056,309	1,107,351	1,055,979	966,615	844,881
Edison Light & Power Company	160,415	154,634	237,895	234,572	220,021	166,657	404,981
Philadelphia Electric Company	290,752	272,436	414,922	457,611	398,262	326,844	310,914
The Pennsylvania Railroad Company	765,494	488,706	851,512	225	—	—	—
Total Sales (excluding interchange)	$4,240,406	$4,453,846	$6,748,036	$5,891,684	$5,927,212	$5,535,055	$5,215,428
Sales under Interchange Agreements	185,134 (3)	136,718 (3)	194,424 (3)	307,988 (3)	144,362	150,755	66,255
Total Sales of Electric Energy	$4,425,540	$4,590,564	$6,942,460	$6,199,672	$6,071,574	$5,685,810	$5,281,683
Other Operating Revenues	89,566	89,179	133,764	133,845	162,782	163,173	160,585
Total Operating Revenues	$4,515,106	$4,679,743	$7,076,224	$6,333,517	$6,234,356	$5,848,983	$5,442,268

NOTE 1:

A supplemental contract dated September 29, 1939 between the Company and the Consolidated Company was made, providing for a substantial reduction commencing December 1, 1939 in the charge to be made by the Company for power sales to the Consolidated Company. The Company estimates that, had the supplemental agreement been in effect during the entire year 1939, its operating revenues for that year would be approximately $300,000 less than the operating revenues expected for the year 1939; see subdivision (5) of the answer to Item 41 for a summary of the original and supplemental contract and other possible effects of the latter.

NOTE 2:

The amounts shown for the years 1936, 1935 and 1934 are without deductions of special allowances of $172,542.14, $177,945.59 and $225,000.00, respectively, granted the Consolidated Company, such allowances having been offset by transfers of like amounts from Reserve for Special Equalization to Operating Revenues. The amount shown for the year 1937 is after deduction of a similar allowance of $162,660.20, the Company having discontinued the operation of its Reserve for Special Equalization with the year 1936. Special allowances such as referred to above ceased at December 31, 1937. Reference is made to Note 2 of the consolidated profit and loss statement for further explanation of such special allowances and of the purpose and operation of the Reserve for Special Equalization.

NOTE 3:

These amounts represent revenues from sales of electric energy under interchange agreements. Under the new system of accounts prescribed by the Federal Power Commission, effective January 1, 1937, and adopted by the Pennsylvania Public Utility Commission as of the same date, the Company is required to treat the amount of such revenues as a credit to operating expenses, whereas under the system of accounts in effect prior to January 1, 1937, such revenues were credited to operating revenues.

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* * *

CONTRACTS RELATING TO SALE, PURCHASE AND/OR INTERCHANGE OF ELECTRIC ENERGY

(5) *Contract dated December 31, 1927, and supplemental contracts dated December 27, 1928, June 1, 1931 and September 29, 1939, between the Company and Consolidated Gas Electric Light and Power Company of Baltimore (here called Consolidated Company) covering electric supply and other services to Consolidated Company.*

Under the terms of these contracts, the Company is to deliver to Consolidated Company all the electric capacity and energy available to the Company at its own plants and under the contract dated June 1, 1931 with Consolidated Company and Safe Harbor Water Power Corporation, herein designated as Exhibit I-6 (a), (not otherwise disposed of in performance of other contracts or any legal obligation to serve) and to permit Consolidated Company to use certain transmission and substation facilities. For this service Consolidated Company makes annual payments to the Company (prorated on a monthly basis and subject to increase or decrease by order of or pursuant to determination by regulatory authorities) which will consist of a net sum of $2,832,259.75 [23083] (page 41) (reduced to $2,762,179.69 by the operation of a contract provision) and in addition all the Company's reasonable operating expenses (as defined in the supplemental contracts of June 1, 1931 and September 29, 1939) plus and minus other items in the computation thereof, fully set forth in the supplemental contracts of June 1, 1931 and September 29, 1939. The latter supplemental contract was made as a result of an investigation by the Maryland Public Service Commission of the Company's contract with the Consolidated Company; see the answer to Item 5 under the caption State Regulation. Among the deductions in the computation is

the Company's revenue from Pennsylvania customers. An additional deduction will be made under the supplemental contract of September 29, 1939 in the amount of $600,000 per year commencing December 1, 1939. Included in operating expenses as defined in the supplemental contract of June 1, 1931 was a specified allowance for credit to the Company's reserve for renewals and replacements (depreciation) to continue only so long as such reserve did not exceed 15% of the Company's plant, property and equipment account. During 1938, credits to such reserve resulted in an excess over such 15% and payment to the Company in respect to its operating expenses did not therefore include the full amount of such specified allowance during that year and has not included any part of such allowance during 1939. This limitation on payment in respect to the Company's renewals and replacements (depreciation) reserve will cease on December 1, 1939. The Company estimates that the combined effect of these two provisions of the supplemental contract of September 29, 1939 will be approximately as follows: (1) A reduction in operating revenues of approximately $300,000 in each year when payment to the Company would not have included, under the June 1, 1931 supplemental contract, any part of the specified allowance for credit to renewals and replacements reserve; (2) A reduction in operating revenues of approximately $750,000 ($600,000 adjusted for effect of Federal and State income taxes) in each year when the full amount of the specified allowance for credit to renewals and replacements reserve would have been included. The supplemental contract of June 1, 1931, among other things, contains various provisions for cooperation between the Company and Consolidated Company in their operations, for a joint Operating Committee for this purpose and requires approval by Consolidated Company of certain contracts and other transactions by the Company. These contracts continue in force until April 22, 1980. Copies of the contract dated Decem-

ber 31, 1927, and supplemental contracts dated December 27, 1928, June 1, 1931 and September 29, 1939, are filed herewith as Exhibits I-5 (a), I-5 (b), I-5 (c) and I-5 (d), respectively.

(6) *Contract between the Company, Consolidated Gas Electric Light and Power Company of Baltimore (here called Consolidated Company), and Safe Harbor Water Power Corporation (here called Safe Harbor Corporation), Dated June 1, 1931, and supplemental contracts dated August 1, 1932 and November 22, 1939, covering the purchase of energy from Safe Harbor Corporation, supply of transmission service to Consolidated Company, and guarantee of bonds of Safe Harbor Corporation.*

Under the terms of these contracts, the Company and Consolidated Company are to receive one-third and two-thirds, respectively, of all the electrical capacity and energy available (not required by Safe Harbor Corporation to perform any legal obligation to serve) from Safe Harbor Corporation's initial six unit (255,000 horsepower or 180,000 kw.) hydroelectric development, and from the additional 42,500 horsepower water wheel turbine and generator now being installed in the Safe Harbor Plant in accordance with the supplemental contract of November 22, 1939, and are to make annual payments therefor (prorated on a monthly basis) in the same proportion (from which annual payments are to be deducted any income from other customers of Safe Harbor Corporation). The annual payments (which are subject to increase or decrease by regulatory authorities) increased each year from the rate of $1,400,000 per year for a part of 1932 to $2,500,000 for 1937, and since 1937 are to be amounts required to yield to Safe Harbor Corporation a net income of seven per cent. on its accumulated actual investment in its hydroelectric development (as defined in the contract). The Company transmits for Consolidated Company, Consolidated Company's

share of the energy available from Safe Harbor Corporation, and receives from Consolidated Company annual payments (prorated on a monthly basis) in respect of transmission lines and other facilities constructed for that purpose. The Company is obligated, in the event of its failure so to transmit Consolidated Company's share of such energy, to take, and pay for at the contract rate, Consolidated Company's share of such energy as well as its own share.

[23084] (page 55)

SAFE HARBOR WATER POWER CORPORATION

(The notes and schedules referred to in this profit and loss statement are an integral part thereof)

PROFIT AND LOSS STATEMENT

For the Eight Months Ended August 31, 1939 and the Years Ended December 31, 1938, 1937 and 1936

(Note 1)

	Eight Months Ended August 31,1939	Years Ended December 31, 1938	1937	1936
OPERATING REVENUES:				
Sales of Electric Energy (Note 2):				
Consolidated Gas Electric Light and Power Company of Baltimore	$1,291,486.06	$1,918,494.76	$1,666,666.67	$1,333,333.33
Pennsylvania Water & Power Company	645,743.04	959,247.38	833,333.33	666,666.67
Other Electric Revenues	655.35	1,214.74	576.37	1,337.72
Total Operating Revenues	$1,937,884.45	$2,878,956.88	$2,500,576.37	$2,001,337.72
OPERATING REVENUE DEDUCTIONS:				
Production and Transmission Expenses	$ 130,974.48	$ 194,887.28	$ 207,921.79	$ 207,450.66
Administrative and General Expenses	108,742.57	178,610.73	161,625.78	140,324.24
Maintenance and Repairs Schedule B)	81,173.40	85,142.56	89,852.48	57,676.62
Renewals and Replacements Expense (Depreciation) (See Schedule B and Balance Sheet Note 13) (Note 3)	127,067.35	174,521.06	164,448.44	156,979.21

Taxes:				
Other Than Income Taxes and Surtax on Undistributed Profits (Schedule B)	71,994.91	107,090.77	87,226.85	87,911.73
Federal Income Taxes	97,317.95	144,748.06	80,290.00	13,878.09
Federal Surtax on Undistributed Profits			None	None
State Income Taxes	17,900.00	32,100.00	20,546.00	3,300.00
Total Operating Revenue Deductions	$ 635,170.66	$ 917,100.46	$ 811,911.34	$ 667,520.55
Operating Income	$1,302,713.79	$1,961,856.42	$1,688,665.03	$1,333,817.17
OTHER INCOME:				
Interest on Securities Owned (Marketable Securities)	956.42	1,770.00	79.72	—
Gross Income	$1,303,670.21	$1,963,626.42	$1,688,744.75	$1,333,817.17
INCOME DEDUCTIONS:				
Interest on Long-Term Debt	$ 622,471.66	$ 940,125.25	$ 943,553.25	$ 945,000.00
Amortization of Debt Discount and Expense (Note 4)	28,848.50	38,463.27	54,975.39	55,478.46
Taxes Assumed on Interest (Schedule B)	14,000.00	22,155.52	18,688.96	19,075.38
Other Interest Charges	775.30	534.15	—	—
Total Income Deductions	$ 658,095.46	$1,001,278.19	$1,017,217.60	$1,019,553.84
NET INCOME	$ 645,574.75	$ 962,348.23	$ 671,527.15	$ 314,263.33

[23085] (page 56)

SAFE HARBOR WATER POWER CORPORATION

Notes to Profit and Loss Statement

* * *

NOTE 2:

The revenues from sales of electric energy to Consolidated Gas Electric Light and Power Company of Baltimore and Pennsylvania Water & Power Company were received pursuant to the terms and conditions of an agreement dated June 1, 1931 between these companies and the Safe Harbor Corporation. These two customers each own 50% of the outstanding voting stock of the Safe Harbor Corporation. The Safe Harbor Corporation does not admit that, within the meaning of the Securities Act of 1933, as amended, either of these companies is an affiliate or parent.

On November 9, 1937, the Federal Power Commission instituted an investigation of the rates and other terms of the contract dated June 1, 1931, between the Safe Harbor Corporation, Pennsylvania Water & Power Company and Consolidated Gas Electric Light and Power Company of Baltimore, under which the Safe Harbor Corporation sells its entire output to the Company and the Consolidated Company, to determine whether any of the provisions of the Federal Power Act, or any rule or regulation of the Commission is being violated, and whether the rates are unjust, unreasonable or discriminatory. The Federal Power Commission by an order dated September 19, 1939 granted leave to the People's Counsel to the Maryland Commission to intervene in these proceedings. A hearing before an examiner was held on October 9, 10, 11, 12, 16, 17, 18, 19 and November 6, 1939. The Commission has not yet made a decision. At the hearing, and in a brief filed since the hearing, counsel for the Commission have contended that the rates that the Safe Harbor Corporation is receiving under the contract are excessive and should be substantially reduced.

* * *

EXHIBIT No. 134.

[23109] (page 1)

THIS AGREEMENT, made this 22nd day of June, 1938, beween PHILADELPHIA ELECTRIC COMPANY, a Pennsylvania Corporation, hereinafter referred to as "Philadelphia Company," and PENNSYLVANIA WATER & POWER COMPANY, a Pennsylvania Corporation, hereinafter referred to as "Holtwood Company,"

WITNESSETH THAT:

WHEREAS, Philadelphia Company and Holtwood Company, together with others, supply power from their respective electric power systems to The Pennsylvania Railroad Company for its extensive railroad electrification, under separate contracts; and

WHEREAS, it has been found mutually desirable to The Pennsylvania Railroad Company and the parties hereto to enter with others into an agreement of even date herewith, providing for the parallel operation of such electric systems through the power transmission lines of The Pennsylvania Railroad Company, which agreement is hereinafter referred to as "Railroad Parallel Operation Agreement;" and

WHEREAS, such parallel operation through The Pennsylvania Railroad Company's transmission system involves the unintentional shifting or flow of power at Perryville, Maryland, and Thorndale, Pennsylvania, at which points The Pennsylvania Railroad Company will provide switching and metering facilities for such parallel operation, and at the same time makes possible the intentional shifting of load, under the direction of the parties hereto, between the sources of power supply to The Pennsylvania Railroad Company, and the parties hereto desire to provide for such shifting and accounting between them therefor, as hereinafter set forth;

NOW, THEREFORE, the parties hereto, each in consideration of the undertakings of the other, hereby covenant and agree as follows:

SECTION 1. The shifting of load supplied to The Pennsylvania Railroad Company's transmission system from the electric power systems of the parties hereto, shall be measured by the meters provided by The Pennsylvania Railroad Company at Perryville, Maryland, and Thorndale, Pennsylvania, under the terms of the Railroad Parallel Operation Agreement, and the load so shifted and metered shall be hereinafter referred to as "energy interchange," whether such energy interchange is unintentional or is specifically arranged for by the dispatching organizations of the contracting parties. Energy flowing west through Thorndale and south through Perryville shall be considered for the purpose of this agreement as energy flowing from Philadelphia Company to Holtwood Company. Energy flowing east through Thorndale and north through Perryville shall, except as hereinafter provided, be considered for the purpose of this agreement as energy flowing from Holtwood Company to Philadelphia Company. The recording of and accounting for such energy interchange shall be based on the net hourly integrated flow at the two above-mentioned metering points.

SECTION 2. Each party shall appoint one representative to act as its agent in all operating, engineering and accounting matters pertaining to this agreement, which appointments shall be evidenced by written notice to the other party. Either party at any time may, by similar written notice, change its representative or withhold or withdraw from its representative the authority to act for it in any matters specified in the notice, provided that it designate in such notice another representative in respect to such matters. These representatives, to be known as the "Operating Committee," shall arrange for the exchange of routine operating records and shall have access to such

other records as may be required for obtaining the incremental costs and other essential data pertaining to the proper classification and evaluation of energy interchange. The Operating Committee shall also consider such other operating and engineering matters as may be suggested for securing additional benefits consistent with service standards and safety of equipment.

[23110] (page 2)

SECTION 3. Philadelphia Company and Holtwood Company will endeavor to control the supply of power to The Pennsylvania Railroad Company's transmission system in such a manner that the net energy interchange at Perryville and Thorndale will result in overall operating economies. Such operation shall be regularly carried out through the system load dispatchers under the direction of the Operating Committee. All energy interchange shall be classified as follows, and the rates to be paid for each classification shall be as specified:

(*a*) *Economy Energy* shall be defined, for the purpose of this agreement, as intentional energy interchange delivered or received by the parties hereto, for operating economies when the incremental costs on one system are lower than the incremental costs on the other system. If such energy is generated by steam on one system to replace energy that would otherwise be generated by steam on the second system ("steam economy energy"), the rate to be used for such energy interchange shall be equal to one-half (½) of the sum of the incremental costs on the two systems. If such energy is generated by water power on one system to replace energy that would otherwise be generated by steam on the second system ("hydro economy energy"), the rate to be used for such energy interchange shall be equal to seventy per cent. (70%) of the receiving company's incremental costs.

(*b*) *Emergency Energy* shall be defined, for the purpose of this agreement, as energy interchange supplied by one party to the other during an emergency, either by specific request of the other party or as the result of operating conditions that involve such energy interchange. The rate to be used for such energy interchange shall be equal to the supplying company's incremental costs plus ten per cent. (10%) thereof if such energy is generated by steam, and shall be two and five-tenth mills ($0.0025) per kilowatt hour if such energy is generated by water power.

(*c*) *Unintentional Energy* shall be defined, for the purpose of this agreement, as energy interchange between one system and the other when for operating reasons it is impossible to control exactly at all times the direction of power flow or the amount thereof in a manner which results in overall operating economies. Initially and until changed by mutual agreement, such energy interchange shall be accounted for as economy energy and at the rates specified in paragraph (*a*) of this Section.

SECTION 4. Energy interchange, the measurement and recording of which is described in Section 1 hereof, shall be adjusted for "peak transfer energy" which is specifically provided for in the Railroad Parallel Operation Agreement. Any such peak transfer energy supplied by Holtwood Company for Railroad Company's use north of Perryville or east of Thorndale shall be deducted from the actual metered energy flowing from Holtwood Company to Philadelphia Company. If Philadelphia Company furnishes all or any part of such "peak transfer energy", the amount so furnished shall be accounted for as though such energy actually flowed west through the meters at Thorndale or south through the meters at Perryville, and the rate to be used in accounting for such energy between the

parties hereto shall be the same as specified for economy energy under Section 3(*a*) hereof.

SECTION 5. In addition to the operating economies resulting from interchange of economy energy flow as herein provided, the parties hereto agree that they will effect such further savings as may be found practicable through co-ordinated operations and system planning of the water and steam power resources of their systems, and such savings will be equitably divided between the parties hereto.

SECTION 6. This agreement and the Railroad Parallel Operation Agreement of even date herewith are interdependent, shall become effective simultaneously and shall run concurrently, continuing in full force and effect so long as the Railroad Parallel Operation Agreement is in effect. It is agreed that this agreement shall not take effect until all legal prerequisites, if any, as to both said agreements have been consummated. The parties hereto shall cooperate in conforming to such prerequisites.

[23111] (page 3)

SECTION 7. This agreement shall bind and enure to the benefit of the parties hereto and their respective successors and assigns, but shall not be assigned by either party hereto without the prior written consent of the other.

IN WITNESS WHEREOF the parties hereto have caused this agreement to be executed by their respective officers thereunto duly authorized and their respective corporate seals to be hereunto affixed and attested, as of the day and year first above written.

PHILADELPHIA ELECTRIC COMPANY
By N. E. FUNK
Vice-President

(Seal)
Attest:
P. A. Wilson
Asst. Secretary

PENNSYLVANIA WATER & POWER COMPANY
By F. A. ALLNER
Vice-President

(Seal)

Attest:
F. J. ALLEN
Secretary

EXHIBIT No. 135.

[23113] (page 1)

THIS AGREEMENT, made this 22nd day of June, 1938, between THE PENNSYLVANIA RAILROAD COMPANY, a Pennsylvania corporation, hereinafter referred to as "Railroad Company," of the first part, PHILADELPHIA ELECTRIC COMPANY, a Pennsylvania corporation, hereinafter referred to as "Philadelphia Company," of the second part, and CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE, a Maryland corporation, PENNSYLVANIA WATER & POWER COMPANY, a Pennsylvania corporation, and SAFE HARBOR WATER POWER CORPORATION, a Pennsylvania corporation, the last-mentioned three Companies hereinafter jointly referred to as "Electric Companies," of the third part, and the last-mentioned four Companies being hereinafter jointly referred to as "Supplying Companies,"

WITNESSETH THAT:

WHEREAS, under a contract dated July 21, 1927, between Railroad Company and Philadelphia Company, as heretofore amended and supplemented, including amendments set forth in a supplement thereto of even date herewith (said contract as so amended being hereinafter referred to as "1927 Contract"), and contract dated September 2, 1931, between Railroad Company and Electric Companies, as heretofore amended, including amendments set forth in a supplement thereto of even date herewith (said contract as so amended being hereinafter referred to as "1931 Contract"), Railroad Company has agreed to purchase certain power requirements from Philadelphia Company and Electric Companies, respectively; and

WHEREAS, it is mutually desirable to all parties to operate in parallel through the power transmission lines of Railroad Company by suitable facilities provided by Railroad Company for such operation:

NOW, THEREFORE, the parties hereto, each in consideration of the undertakings of the others, hereby covenant and agree as follows:

SECTION 1. Railroad Company shall supply at Perryville, Maryland, and Thorndale, Pennsylvania, suitable switches and metering equipment to permit parallel operation of the systems of the respective parties under normal operating conditions, and for segregating and disconnecting same in emergencies.

The meters to be installed by Railroad Company shall be of a standard type and manufacture, and shall accurately measure the energy in electrical units and in periods of time as required by the terms of this agreement. Electric Companies and Philadelphia Company shall have the right to be represented at the readings of these meters and at the checking, adjusting or changing thereof.

All meters shall be tested and calibrated when necessary by comparison with accurate standards and if, as a result of any test, a meter shall be found incorrect or inaccurate, it shall be restored to an accurate condition or a new meter shall be substituted. In case any party hereto shall at any time believe that any meter registers incorrectly, the party holding such belief shall have the right to require that a test be made of such meter. The party desiring such test shall make request therefor in writing upon the other parties, and thereupon such meter shall be tested and calibrated, and if it shall be found inaccurate it shall be restored to an accurate condition or a new meter shall be substituted. If, as a result of any test, any meter shall be found to register in excess of two per cent. (2%) either above or below normal, then the readings of such meter previously taken shall be corrected according to the percentage of inaccuracy so found, but no such correction, either in respect to maximum demand or kilowatt hours drawn and consumed, shall extend back beyond thirty (30) days previous to the day on which such inaccuracy shall

have been discovered by such test, and if, during such [23114] (page 2) previous thirty (30) days one or more prior tests of such meter shall have been made under the provisions hereof, then no such correction shall extend back beyond the date of the last of such prior tests. If any test of any meter shall be made at the request of Electric Companies or Philadelphia Company with the result that such meter shall be found to register correctly or within two per cent. (2%) of normal, the party requesting such test shall bear the expense thereof. From time to time, if requested by Electric Companies or Philadelphia Company, a duplicate meter shall be installed temporarily in the circuit with any of such meters for the purpose of comparison with the permanent meters. The expense of all other tests shall be borne by Railroad Company. All meters shall be kept under seal.

SECTION 2. It is agreed between the parties hereto that under normal operating conditions parallel operation shall be regularly and constantly maintained. Whenever an emergency exists or, in the judgment of any party, its operating situation renders such action necessary, the systems shall be separated at Perryville and/or Thorndale, but the systems shall not be separated at both Perryville and Thorndale during the hour of greatest "draught of Railroad Company in Philadelphia Company area" except on Sundays or when an abnormal condition exists. Each party hereto shall be the judge of the existence of such emergency or such abnormal condition in its own system. Such parallel operation shall be re-established as soon as possible after normal conditions are re-established.

SECTION 3. The parties hereto shall cooperate to secure flexibility of power supply and the best utilization of the single-phase generating capacity available in the systems of Philadelphia Company and Electric Companies consistent with adequate protection to the service in the systems of each party. The load dispatching organizations of the

parties hereto shall cooperate and keep each other fully informed, in order to accomplish the purposes of this agreement.

SECTION 4. Philadelphia Company and Electric Companies may, within the limits of the available capacity of the transmission lines and appurtenant equipment of Railroad Company, shift the load between the sources of supply to Railroad Company as they may from time to time determine, provided that Railroad Company's service or system is not adversely affected thereby. Railroad Company will in emergencies endeavor to have all its transmission facilities available for such purpose upon reasonable notice by the load dispatchers of the other parties. Railroad Company's load dispatching organization shall have final jurisdiction over its power system and is to be kept fully informed at all times of such shifting of load and other conditions affecting the supply of power to Railroad Company.

SECTION 5. If during any month such shifting of loads results in an actual net energy flow north at Perryville and east at Thorndale in excess of 12,000,000 kilowatt hours for the month or 40,000 kilowatt hours in any hour (including "peak transfer energy", if any), or an actual net energy flow south at Perryville and west at Thorndale in excess of the difference between 9,000,000 kilowatt hours for the month or 30,000 kilowatt hours in any hour, and such amounts, if any, as Electric Companies may at the time be obligated to supply as "peak transfer energy," Railroad Company may call for an adjustment in the amounts of energy actually accounted for during any such period due to the excess net losses occasioned by such load shifting. When requested, such adjustment shall be mutually determined and the demand and energy values so affected thereby shall be revised accordingly.

SECTION 6. The following terms shall have the meaning specified in this Section wherever used in this agreement:

(*a*) The term "draught of Railroad Company in Philadelphia Company area" for any period shall mean the algebraic sum of the readings of the watthour meters of Railroad Company at Perryville and Thorndale referred to in Section 1 hereof and at the points of supply specified in the 1927 Contract, energy flowing north at Perryville and east at Thorndale and flowing into the system of Railroad Company at said points of supply being deemed positive.

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(*b*) The term "draught of Railroad Company on Electric Companies" for any period shall mean the load of Electric Companies' contractual supply as defined in Article II of the 1931 Contract, being the algebraic sum of the readings of the watthour meters of Railroad Company at Perryville and Thorndale referred to in Section 1 hereof and at the points of supply specified in the 1931 Contract, energy flowing south at Perryville and west at Thorndale and flowing into the system of Railroad Company at said points of supply being deemed positive.

(*c*) The term "draught of Railroad Company on Supplying Companies" for any period shall mean the sum of the "draught of Railroad Company in Philadelphia Company area," as defined in paragraph (*a*) above, and the "draught of Railroad Company on Electric Companies," as defined in paragraph (*b*) above, both for the same period.

(*d*) The term "peak transfer energy" shall mean the sum of the differences between the "draught of Railroad Company in Philadelphia Company area" and the "greatest combined draught" on Philadelphia Company, determined as provided in paragraph (*a*) of Section 7 hereof, for each even or clock hour during which such draught of Railroad Company in

Philadelphia Company area is in excess of such greatest combined draught.

(*e*) The term "waived peaks" shall mean those abnormal demands which are not used in computing maximum demand on Philadelphia Company under the provisions of Section 4 of Article I of the 1927 Contract or in computing the billing demand on Electric Companies under the provisions of Article VI of the 1931 Contract.

(*f*) The term "firm single-phase capacity" shall mean, in the case of Philadelphia Company, the total 25-cycle capacity installed for supplying Railroad Company's requirements at the points of supply specified in the 1927 Contract, less the capacity of the largest 25-cycle unit installed for such supply; and, in the case of Electric Companies, the total 25-cycle capacity installed for supplying Railroad Company's requirements at the points specified in the 1931 Contract, less the capacity of the largest 25-cycle unit installed for such supply. The total firm capacity of Supplying Companies shall mean the sum of these firm capacities.

SECTION 7. Philadelphia Company and Railroad Company agree that the 1927 Contract shall, so long as this agreement shall remain in effect and no longer, be modified as follows:

(*a*) The "greatest combined draught" which will be used in computing the monthly maximum demand under Section 2 of Article I of the 1927 Contract shall be determined daily, as follows:

(*i*) On days other than Sundays such "greatest combined draught" shall be the lower of the two amounts determined in accordance with subparagraphs (*ii*) and (*iii*) hereof; provided, however, that the determination shown

in subparagraph (*iii*) shall not be operative until the amount determined in accordance with subparagraph (*ii*) below on any day during the term hereof shall exceed 125,000 kilowatt hours.

(*ii*) The even or clock hour of greatest draught of Railroad Company on Supplying Companies shall be selected for each day and from such draught shall be subtracted the greatest draught of Railroad Company on Electric Companies occurring during any even or clock hour on the same day; provided, however, that if the resultant peak transfer energy for the day thereby obtained exceeds the obligations of Electric Companies therefor, as provided in Section 8 (*a*) hereof, then such lesser amount will be subtracted as will bring such resultant peak transfer energy within the limits of such obligations. The amount resulting from such subtraction shall be the amount referred to in subparagraph (*i*) above.

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(*iii*) There shall be deducted from the "draught of Railroad Company in Philadelphia Company area" for the day an amount of energy totaling 20,000 kilowatt hours applied to one or more even or clock hours during the day in such a manner that the resulting remainders for such hours are equal and each is greater than such draught in any other even or clock hour of the day. Any such remainder, or 125,000 kilowatt hours, whichever is greater, shall be the amount referred to in subparagraph (*i*) above.

(*iv*) So long as Sundays continue to be light load days in the Philadelphia area the "greatest combined draught" on Sundays shall be the "draught of Railroad Company in Philadelphia Company area" as defined in Section 6(*a*) hereof. Should load conditions so change that Sundays become relatively heavy load days and effective in determining the maximum demand for the month, paragraphs (*i*), (*ii*) and (*iii*) hereof shall apply and include Sundays in determining the "greatest combined draught."

(*b*) The amount of energy used by Railroad Company for each month, to which the rate specified in Section 2 of Article II of the 1927 Contract shall be applied, unless for any month the guaranteed amount shall be greater, shall be the draught of Railroad Company in Philadelphia Company area for the month less peak transfer energy for such month.

(*c*) The guaranteed demand referred to in Section 3 of Article I of the 1927 Contract shall be seventy-five per cent. (75%) of the greatest previous difference between

(1) the average combined draught of Railroad Company on Supplying Companies, exclusive of waived peaks, during the three hours of such greatest combined draught occurring on different days other than Sundays in any month

and

(2) the average draught of Railroad Company on Electric Companies, exclusive of waived peaks, during the three hours of greatest draught of Railroad Company on Electric Companies occurring on different days other than Sundays in the same month;

provided, that should the maximum demand for any month determined from "greatest combined draught" as herein defined be less than the difference between (1) and (2) of this paragraph, then the maximum demand for that month shall be used instead of the said difference; and provided, further, that such guaranteed demand shall not be less than the guaranteed demand established prior to the effective date hereof in accordance with the provisions of said Section 3 of Article I of the 1927 Contract.

(*d*) For the purpose of determining power factor under the provisions of the last paragraph of Section 1 of Article II of the 1927 Contract, the readings of the meters at the points specified in paragraph (*a*) of Section 6 hereof shall be used in lieu of the readings of the meters at the points specified in the 1927 Contract.

(*e*) Railroad Company will not require additional 25-cycle, single-phase capacity to be installed by Philadelphia Company until the greatest combined single-phase draught of Railroad Company on Philadelphia Company (exclusive of any hour in which a peak waived by Philadelphia Company occurs) in any one even or clock hour exceeds the total firm single-phase capacity of Philadelphia Company by more than 15,000 kilowatts; provided, that the combined single-phase draught of Railroad Company on Supplying Companies for any even or clock hour (exclusive of any hour in which a waived peak occurs) is not greater than the total firm single-phase capacity of Supplying Companies.

SECTION 8. Railroad Company and Electric Companies agree that during the term of this agreement:

(*a*) Electric Companies shall provide the peak transfer energy as defined herein, in excess of their contractual supply, within the present terms and con-

ditions of Article X of the 1931 Contract, both as to the amounts of hourly draught and of daily energy. Such energy shall be furnished each day other than Sunday during periods of parallel operation.

[23117] (page 5)

(*b*) The surcharge provided in Article X of the 1931 Contract shall be applicable to and only to the amount of peak transfer energy, whether such energy is supplied by Electric Companies or by Philadelphia Company.

(*c*) Electric Companies will not require Railroad Company to call for additional single-phase capacity to be installed by Electric Companies until the draught of Railroad Company on Electric Companies for any one even or clock hour (exclusive of any hour in which a peak waived by Electric Companies occurs) minus 12,500 kilowatt hours, is equal to or greater than Electric Companies' firm single-phase capacity; provided, that the total firm single-phase capacity of Supplying Companies is greater than the highest combined single-phase draught of Railroad Company on Supplying Companies for any one even or clock hour (exclusive of any hour in which a waived peak occurs). If, however, such highest combined single-phase draught (exclusive of any hour in which a waived peak occurs) is greater than such total firm single-phase capacity, Railroad Company shall call for additional single-phase capacity to be installed by Electric Companies in the event that the highest draught of Railroad Company on Electric Companies; exclusive of the Thorndale-Parkesburg area, for any one even or clock hour (exclusive of any hour in which a peak waived by Electric Companies occurs) is in excess of Electric Companies' then firm single-phase capacity.

SECTION 9. As of the date of this agreement, the firm single-phase capacity of Philadelphia Company, including

the capacity at Somerset Substation to be presently made available for single-phase operation by the installation of a transmission circuit to Richmond Substation, is 134,350 kilowatts, the firm single-phase capacity of Electric Companies is 50,000 kilowatts, and the total firm single-phase capacity of Supplying Companies is 184,350 kilowatts.

If and when Railroad Company decides to discontinue the use of three-phase supply from Somerset Substation, the value of firm single-phase capacity of Philadelphia Company shall then be increased by 6,000 kilowatts.

SECTION 10. It is the intent of this agreement that Electric Companies shall supply the amount of daily peak transfer energy actually accounted for by Philadelphia Company and by Electric Companies to Railroad Company insofar as it can be predetermined by the load dispatching organizations of Supplying Companies, but the accounting for such energy shall be as herein determined, irrespective of whether the said dispatching organizations of Supplying Companies arranged for such distribution or whether for various reasons other arrangements were specifically made.

SECTION 11. This agreement and an agreement of even date herewith between Philadelphia Company and Pennsylvania Water & Power Company, two of the parties hereto, are interdependent and intended to become effective simultaneously, and it is agreed that this agreement shall not take effect until all legal prerequisites, if any, as to said agreements have been consummated. The parties hereto shall cooperate in conforming to such prerequisites. This agreement shall continue in full force and effect only so long as both the 1927 Contract and the 1931 Contract are in full force and effect; provided, however, that any party hereto may terminate this agreement after March 1, 1943, by giving the other parties at least one (1) year's prior written notice of such termination. For such purposes, notice given by or to any one of Consolidated Gas Electric Light and Power Company of Baltimore, Pennsylvania

Water & Power Company or Safe Harbor Water Power Corporation, herein referred to as "Electric Companies," shall be deemed adequate notice by or to all said Electric Companies.

SECTION 12. Railroad Company agrees to make available such circuits or channels for communication, telemetering, supervisory control or other purposes, as may be agreed upon between the parties hereto from time to time.

[23118] (page 6)

SECTION 13. Except as specifically provided herein, the 1927 Contract and the 1931 Contract shall be and remain in full force and effect.

SECTION 14. It is further understood and agreed that neither Philadelphia Company nor Electric Companies shall be in any way liable to Railroad Company for loss or damage because of any matter or thing arising in connection with performance hereunder, which is not directly attributable to the neglect or failure of the party against which the obligation is asserted.

SECTION 15. This agreement shall bind and enure to the benefit of the parties hereto and their respective successors and assigns, but shall not be assigned by any party hereto without the prior written consent of the others.

IN WITNESS WHEREOF the parties hereto have caused this agreement to be executed by their respective officers thereunto duly authorized and their respective corporate seals to be hereunto affixed and attested, as of the day and year first above written.

THE PENNSYLVANIA RAILROAD COMPANY
By J. F. Deasy
Vice-President

(Seal)

Attest: J. Taney Willcox
Secretary

Exhibit No. 135

PHILADELPHIA ELECTRIC COMPANY
By N. E. Funk
Vice-President

(Seal)

Attest: P. A. Wilson
Asst. Secretary

CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE
By Herbert A. Wagner
President

(Seal)

Attest: Herman L. Gruehn
Secretary

PENNSYLVANIA WATER & POWER COMPANY
By F. A. Allner
Vice-President

(Seal)

Attest: F. J. Allen
Secretary

SAFE HARBOR WATER POWER CORPORATION
By J. A. Walls
President

(Seal)

Attest: F. J. Allen
Secretary

EXHIBIT No. 136.

[23120] (page 1)

WHEREAS, an agreement was entered into on the ninth day of October, 1912, by and between the Pennsylvania Water and Power Company, a corporation organized and existing under the laws of the State of Pennsylvania, and referred to in said agreement as the "Generating Company", and the party of the first part, and the Edison Electric Company, a corporation organized and existing under the laws of the State of Pennsylvania, and referred to in said agreement as the "Receiving Company", and the party of the second part;

AND WHEREAS, by the terms of said agreement the said Pennsylvania Water and Power Company, the Generating Company, was to sell and supply electric energy to the Edison Electric Company, the Receiving Company, in accordance with the terms and conditions set forth in said contract, a copy of which contract is hereto attached and made a part of this agreement;

AND WHEREAS, by the terms of said contract it existed for and during the term of ten years from the first day of May, 1913, with the privilege of a renewal for a further period of ten years, upon rates to be agreed upon between the parties to said contract;

AND WHEREAS, the parties to said contract have agreed that the same shall be renewed for the further period of ten years from the first day of May, 1923, upon the terms and conditions hereinafter set forth:

NOW, THIS AGREEMENT, made and concluded this 19th day of October, 1923, by and between the PENNSYLVANIA WATER & POWER COMPANY, a corporation organized and existing under the laws of the State of Pennsylvania, hereinafter called the "Generating Company", party of the first part, and the EDISON ELECTRIC COMPANY, a corporation

organized and existing under the laws of the State of Pennsylvania, hereinafter called the "Receiving [23121] (page 2) Company", party of the second part,

WITNESSETH

1. *Term of Contract*

It is hereby agreed between the parties to this agreement that the said contract bearing date the 9th day of October, 1912, the term of which contract expired on the first day of May, 1923, is hereby extended for a further period of ten years from the first day of May, 1923, upon the following terms and conditions:

2. *Price*

That the electric energy rates and provisions referred to herein are to go into effect as of May 1, 1923.

That for all energy supplied by Generating Company for use or conversion by Receiving Company and measured as provided in Article V of the agreement of October 9, 1912, Generating Company shall bill Receiving Company at the rate of six and seventy-five hundredths (6.75) mills per K.W.H. for the first nine million (9,000,000) K.W.H. per month and at the rate of nine (9) mills per K.W.H. for the energy above nine million (9,000,000) K.W.H. per month.

After December 31, 1924, the energy losses for frequency conversion done by Receiving Company at request of Generating Company in accordance with Paragraph 3 hereunder shall be billed as four hundred and ten thousand (410,000) K.W.H. per month, notwithstanding that the actual losses may be greater or less than such amount and of such four hundred and ten thousand (410,000) K.W.H per month, the Generating Company shall credit Receiving Company with two hundred and five thousand (205,000) K.W.H. per month at six and seventy-five hundredths (6.75) mills per K.W.H.

[23122] (page 3)

3. *Mixed Frequency Supply*

That Generating Company shall supply energy to Receiving Company at both 25 and 60 cycles, and Receiving Company, at no cost to Generating Company, shall maintain its existing frequency changing equipment and operate same, up to its present capacity, for conversion of 25 cycles to 60 cycles, or vice versa, to the extent that it is practicable to do so, when and as requested by Generating Company. Both Generating Company and Receiving Company shall use due diligence in providing equipment and making such changes as may be necessary for the furnishing and taking of 60 cycle energy delivered at the power house of Generating Company, it being agreed that such delivery of 60 cycle energy shall commence not later than December 31, 1924.

4. *Fuel Cost Adjustment*

That the charges for energy stated above shall be modified by a fuel cost adjustment when and only when the average cost of boiler coal used during the month by the Consolidated Gas Electric Light & Power Company of Baltimore as reported by said Company to the Public Service Commission of Maryland, or, in default of such report, as determined in the manner required by the Classification of Accounts of the Public Service Commission of Maryland, is in excess of Seven Dollars ($7.00) or below Four Dollars ($4.00) per long ton. The fuel cost adjustment shall then consist of a charge or credit at the rate of five-tenth (0.5) mills per K.W.H. per dollar increase above $7.00, or decrease below $4.00 in such cost of boiler coal per long ton.

5. *Amount of Power and Energy*

That Receiving Company shall take from and pay for to Generating Company, and Generating Company shall supply and bill [23123] (page 4) Receiving Company for, all of Receiving Company's energy requirements (except

the supply from the Conestoga Creek plants and except a maximum of five million (5,000,000) K.W.H. per year of energy generated by steam at Engleside as hereinafter specified) up to the fifty thousand (50,000) K.W. load line, as shown by the fifteen (15) minute integrated peak, but in no event shall Generating Company be obligated to supply a power draft in excess of said fifty thousand (50,000) K.W., as shown by the fifteen (15) minute integrated peak aforesaid.

6. *Steam Generation at Engleside*

That Receiving Company shall maintain its Engleside steam station and therewith shall generate by steam as requested by Generating Company to an extent not in excess of the available capacity of such station, which in no event shall be less than 2500 K.W. The generation of five million (5,000,000) K.W.H. per year, or any part thereof by steam provided for in Article II of the 1912 Agreement shall hereafter be at the option of Generating Company and the cost thereof shall be borne by Receiving Company and such energy so generated by steam shall not be billed for by Generating Company. All generation by steam at Engleside as requested by Generating Company in excess of five million (5,000,000) K.W.H. per year below the fifty thousand (50,000) K.W. load line shall be for Generating Company's use and shall be paid for by Generating Company at the actual additional cost above standby expense incurred by Receiving Company for fuel, operating materials and operating labor required for such generation, plus a fee of twenty-five per cent (25%) as allowed to Receiving Company to cover profit and additional overhead and maintenance expense assumed to be incurred in connection with such generation.

7. *Conestoga Creek Plants*

Receiving Company's right to draw seven hundred and [23124] (page 5) fifty (750) K.W. for eighteen hours per

day from the Conestoga Creek plants of the Lancaster Light, Heat & Power Company is extended to 1500 K.W. for twenty-four hours per day, except that in times of low flow when these plants operate during less than twelve hours per day, the hours of operation are to fall into the hours of heavy load on Receiving Company's system, so far as is compatible with automatic operation of said plants.

8. *Use of Energy*

That no energy supplied by Generating Company to Receiving Company under this agreement shall directly or indirectly be used for electrification of railroads; nor be used in York County; nor be used in Chester County, except in the territories in which it is now being sold by Receiving Company in West Sadsbury Township, and by Oxford Electric Company, and by Tri-County Electric Company, and to supply the requirements of the present trolley system of the Conestoga Traction Company operating in Chester County; nor be used except under substantially the present conditions of seasonal variation in load.

9. *Transmission Lines and Transmission Charges*

That the sixty (60) cycle supply from the Holtwood power house of the Generating Company shall be delivered at the low tension terminals of step-down transformers at a point near the existing Engleside station from an outdoor 60 cycle transformer station and a transmission line, the voltage of which shall be sixty-six thousand (66,000) volts or higher, to be built, operated and maintained by Generating Company, and to be ready for service not later than December 31, 1924. For providing such service Receiving Company shall pay Generating Company an additional charge of one (1) mill per K.W.H. for all energy supplied in excess of nine million (9,000,000) K.W.H. per month, beginning when the new 60 cycle equipment provided for herein is ready for service.

Generating Company shall then be allowed to utilize [23125] (page 6) the spare capacity of Receiving Company's existing 25 cycle transmission line between Holtwood and Engleside for the delivery of twenty-five (25) cycle energy to transmission lines for conducting such energy outside of Lancaster County; it being provided, however, that such 25 cycle energy shall not directly or indirectly be used in or sold for use in Lancaster County except with written consent of Receiving Company. For and during such use of Receiving Company's transmission line, Generating Company shall pay Receiving Company one (1) mill per K.W.H. of energy transmitted over such line for Generating Company.

That Receiving Company shall have the option at any time after five years from April 30, 1923, upon two years prior notification in writing to Generating Company, to purchase the said sixty (60) cycle line and step-down station, upon payment to Generating Company of their reproduction cost, which shall be a sum sufficient to replace the 60 cycle line and equipment complete, with right of way, and tested and ready for operation as of the date of sale; provided, however, that there shall be deducted from such sum the accumulated depreciation actually charged off by Generating Company against the line and equipment. These depreciation rates on the transmission line and equipment shall be substantially the same as are charged by Generating Company against its other similar transmission lines and equipment.

That in the event of Receiving Company exercising its option as above, Generating Company shall be permitted to utilize the spare capacity of said sixty (60) cycle transmission line between Holtwood and Engleside for the delivery of sixty (60) cycle energy to transmission lines for conducting such energy outside of Lancaster County; it being provided, however, that such 60 cycle energy shall not directly or indirectly be used in or sold for use in Lancaster County, except with written consent [23126] (page 7) of

Receiving Company. For and during such use of Receiving Company's 60 cycle transmission line, Generating Company shall pay Receiving Company one (1) mill per K.W.H. for energy transmitted for it over such line.

10. All the other covenants and terms of the 1912 agreement not inconsistent with the foregoing provisions and conditions shall continue in effect; and the rates as fixed herein shall have the same binding force and effect as if they had been fixed or readjusted in accordance with Article IX of the agreement of October 9, 1912, and the rates specified herein are to be considered as continuing rates specifically arranged for in said agreement and not new rates.

In Witness Whereof, the parties hereto have caused this agreement to be executed by their proper officers thereunto duly authorized and their respective corporate seals to be hereunto affixed the day and year first above written.

Pennsylvania Water and Power Company

By (sgd.) Chas. E. F. Clarke
President

Attest:

(sgd.) F. J. Allen
Secretary

Edison Electric Company

By (sgd.) W. W. Griest
President

Attest:

(sgd.) Anna E. Ranck
Secretary

[23127]

COPY OF CONTRACT DATED OCTOBER 9, 1912, BETWEEN COMPANY AND EDISON ELECTRIC COMPANY

[23128] (page 1)

THIS AGREEMENT, made this ninth day of October, 1912, by and between the PENNSYLVANIA WATER & POWER COMPANY, a corporation organized and existing under the laws of the State of Pennsylvania, hereinafter called the Generating Company, party of the first part, and the Edison Electric Company, a corporation organized and existing under the laws of the State of Pennsylvania, hereinafter called the Receiving Company, party of the second part;

WITNESSETH, whereas the Generating Company is engaged in the business of generating electric power, and, whereas, the Receiving Company is in the business of transmitting and distributing electric energy, and, desires to purchase said electric energy for transmission and distribution;

NOW THEREFORE, the parties hereto, in consideration of the premises and of One Dollar ($1.00) and other valuable considerations, each to the other in hand paid, receipt of which is hereby mutually acknowledged and the covenants hereinafter set forth, mutually agree as follows:

ARTICLE I

TERM OF CONTRACT: For and during the term of ten (10) years, commencing on the first day of May 1913, and during any extended life of this contract effected under the provisions hereinafter set forth, the Generating Company agrees to sell and supply electric energy to the Receiving Company, and the Receiving Company agrees to take and pay for the same in such quantities and in such manner as herein provided, and, under the terms and conditions herein set forth.

Such electric energy available during the twenty-four hours of each day of the year, will be in the form of three phase, alternating current, at a frequency of approximately 25 cycles per second and at a voltage of approximately 66,000 volts, as hereinafter provided and hereinafter referred to as "energy".

PRIOR DELIVERY: It is understood, however, that should the Generating Company and the Receiving Company be ready to supply and take before the above date, that the energy will be supplied and taken and paid for under the terms and conditions provided for herein.

ARTICLE II

AMOUNT OF ENERGY TO BE SUPPLIED: The Generating Company agrees to supply and the Receiving Company agrees to take and pay for, under the terms and provisions hereinafter mentioned, all of the electrical energy required by it during the life of this contract, except the current which the Receiving Company is obligated to take under the contract existing with the Lancaster Electric Light, Heat and Power Company, dated February 8, 1902, which calls for a maximum amount of energy which they can supply of seven hundred and fifty (750) K.W. for eighteen hours a day. [23129] (page 2) And the Receiving Company shall have the right, at its option, to generate by steam at its Engleside Station during any one year energy to an amount not exceeding five million (5,000,000) K.W. hours.

ARTICLE III

PRICE AND PAYMENTS: The Receiving Company agrees to pay for all energy actually supplied under this contract, at the rate of 5 mills per kilowatt hour under the terms and conditions provided for herein.

TIME OF PAYMENTS: The Generating Company shall bill for on or before the 5th day of each month, and the Receiv-

ing Company agrees to pay on or before the 15th day of each month for all energy taken during the preceding month.

POWER RENTAL IN DISPUTE: All claims or counterclaims which the Receiving Company may have or claim to have against the Generating Company, arising out of this contract, shall be presented to the Generating Company in writing during the first fifteen days of the following month.

In case of a dispute between the parties hereto as to the proper amount of any bill for energy delivered, the Receiving Company shall pay the Generating Company the amount of the bill as admitted by it (the Receiving Company) to be correct, and deposit the amount in dispute in some Trust Company in Lancaster accompanied by an authority to pay out such deposit or such part thereof as may be directed by arbitration as provided for in Article VIII hereof, or by order of the Court.

FAILURE TO PAY RENTAL: In case of failure on the part of the Receiving Company to pay the rental for energy as herein provided for, the Generating Company shall have the right, upon sixty days' written notice to discontinue the delivery of power until such payments have been made in full; and, should such delinquency continue for a period of six months after due date, the Generating Company may cancel the contract, without prejudice to any right of action hereunder.

ARTICLE IV

EQUIPMENT AND CHARACTER OF SERVICE OF GENERATING COMPANY: The energy to be furnished by the Generating Company under this agreement shall be delivered to the Receiving Company upon the Receiving Company's high tension transmission line at a point just outside of the step-up transformer station of the Generating Company at Holtwood, Pennsylvania.

The Generating Company agrees to install and maintain all of its apparatus, which in any way affects the

delivery of power to the Receiving Company, in first class condition and in accordance with good engineering practice, and agrees to exercise due care in the operation of its system to give as nearly as practicable continuous service.

The Generating Company agrees to maintain, at the point of delivery to the Receiving Company, the voltage and frequency of the supply at approximately 66,000 volts and approximately 25 cycles, respectively, [23130] (page 3) at all times during which the energy taken by the Receiving Company does not exceed the maximum load to which the Receiving Company is at that time entitled.

The Generating Company agrees that the fluctuation of frequency and voltage shall not be such as to prevent the proper and effective operation of the transforming, converting and controlling apparatus owned by and connected with the circuits of the Receiving Company.

RECEIVING COMPANY'S EQUIPMENT AND USE OF POWER: For the purpose of utilizing the electric energy furnished by the Generating Company, the Receiving Company agrees to install and maintain all of its apparatus and distribution lines, which in any way affect the taking of power from the Generating Company, in first class condition, and, in accordance with good engineering practice.

The said apparatus of the Receiving Company shall be of such character and so operated as to maintain a practically balanced load between phases, and to draw current from the Generating Company at as near as possible to unity power factor, and, at not less than eighty-five per cent (85%) power factor, except at times of load less than two thousand (2,000) Kilowatts, or, unless necessary for regulation purposes. The excess volt amperes taken at times when the average power factor of the three phases, during any day, is less than eighty-five per cent (85%), shall be considered and paid for as energy, unless such low power factor shall have been caused by improper voltage or frequency delivered by the Generating Company.

The Receiving Company shall use all energy contracted for herein in a manner that will not cause undue disturbance to the Generating Company's system or abnormal fluctuations in the demands for energy.

BREAKDOWN OF APPARATUS: Each party hereto agrees that in case of the breakdown or becoming defective of any of its apparatus, which in any way affects the supplying or taking of energy under this contract, it will immediately use due diligence to repair or replace its said apparatus and operate the same so as not to interfere with the supplying of energy or the taking of energy for a longer period than is absolutely necessary.

To insure against long continued interruptions in the supplying of energy by the Generating Company or the taking of energy by the Receiving Company, each Company shall keep in reserve sufficient apparatus to take care of the breakdown of any single piece of its apparatus affecting the supplying or taking of energy under this contract.

Neither party shall assume any liability or be held responsible for any damages which may occur to the whole or any part of the apparatus or lines of the other party, nor for damage to life or property caused by the lines or apparatus of the other party, except for such damages as may be due to the negligence of the other party or its employees.

[23131] (page 4)

ARTICLE V

MEASUREMENT: All electric energy to be supplied hereunder shall be measured by watt-hour meters, to be installed on low tension side of transformers by the Generating Company at its expense, at the Engleside Sub-station, at Lancaster, Pa. The Generating Company may also install graphic meters to check the peak load measurements. Such watt-hour meters, or other meters, shall be of an approved type and shall be so connected as to show the energy delivered to the Receiving Company, the point of

measurement of energy being the terminals of the Receiving Company's step-down transformers at the Engleside Sub-station, at Lancaster, Pa., and, allowance is to be made, as agreed upon between the two companies, for discrepancies in measurement introduced by the current and potential transformer layout.

The Receiving Company shall have the right to install its own check meters in addition to the meters installed by the Generating Company and space and structure for the said check meters shall be provided by the Receiving Company in its step-down transformer station, and, if called upon by the Receiving Company to do so, the Generating Company agrees to install a complete duplicate watt-meter outfit for the purpose of avoiding errors or disputes, and, so long as the two meters, or either of them are not found to be inaccurate, the readings of the two shall be averaged.

Said meters installed by the Generating Company shall be read at midnight on the last day of each calendar month for the purpose of ascertaining the kilowatt hours drawn and used during that month.

The meters shall be tested and calibrated at suitable intervals or upon written request of either party in the presence of duly appointed representatives of both parties, and, if, as the result of such test, any meter shall be found incorrect or inaccurate, it shall be restored promptly to an accurate condition, or a new meter shall be substituted.

The readings of any meter tested and found to be not more than two per cent (2%) from accuracy, at all ranges within the limits between which it is in use, shall be considered correct and accurate. If, as the result of any such tests, any meter shall be found to register in excess of two per cent (2%) either above or below accuracy, then the consumption recorded by such meter since the last monthly reading previous to the request for test, shall be corrected accordingly by one-half (½) of the percentage of the inaccuracy so found, provided that this percentage is less than ten per cent (10%), but no correction shall extend back

beyond thirty (30) days previous to the day on which such tests are requested, and if during such previous thirty (30) days one or more prior tests shall have been made under the provisions hereof, then no correction shall extend back beyond the date of such prior tests. Should the error in the meter exceed ten per cent (10%) the probable consumption shall be estimated and paid for as agreed upon between the parties hereto.

[23132] (page 5)

ARTICLE VI

PERMISSION TO MAKE REPAIRS: In order to make necessary repairs or changes on its system, either party shall have the right to temporarily discontinue the service at such time or times as may be least inconvenient to the other party. Except in cases of extreme emergency, at least twelve (12) hours' notice shall be given by the party desirous of making the repairs to the other party, that such discontinuance of the service is to take place.

SUSPENSION CAUSED BY FIRE, STRIKES, ETC.: If at any time during the continuance of this contract, the Generating Company shall be prevented from supplying, or, the Receiving Company shall be prevented from taking all or any part of the energy herein contracted for, by reason of war, rebellion, civil disturbance, strikes, serious epidemics, fire, lightning, or any other cause of a like nature beyond the control of either party, the obligation of the Generating Company to supply and the obligation of the Receiving Company to take energy contracted for hereunder, shall cease until such time when the party so incapacitated shall, by the exercise of reasonable diligence, be able to resume such supply or use.

DEFICIENCY DUE TO LOW WATER: Deficiency in the supply of power caused by conditions of low water at the Generating Company's dam shall not be considered as a cause excusing supply hereunder.

ARTICLE VII

FEEDERS: The automatic circuit breakers on the outgoing feeders to the Receiving Company in the Generating Company's step-up transformer Station shall be set for at least fifty per cent (50%) in excess of the normal maximum load to which the Receiving Company is at the time entitled, and each feeder shall be of a capacity of approximately 10,000 K.V.A. normal rating, and there shall be two feeders, one for each of the Receiving Company's transmission circuits.

RECEIVING COMPANY'S TRANSMISSION SYSTEM: It is understood that the Receiving Company's transmission line will run in as direct a route from Holtwood to Engleside as is practicable, and that each of the six transmission line conductors shall have conductivity of not less than the equivalent of 90,000 C.M. copper.

ARTICLE VIII

ARBITRATION: In the event of a difference of opinion on any question as to quantity, quality, kind, confirmity with technical standards, value or cost of any energy, property, matter or thing furnished, used, performed or done, or omitted to be furnished, used, performed or done in connection with this contract, the respective parties mutually agree that any and all such questions be submitted to a Board of Arbitration consisting of three members, one to be appointed by the Generating Company, one by the [23133] (page 6) Receiving Company, and the third chosen by these two. In the event of either party failing to appoint an arbitrator within thirty (30) days after written request from the other party, or in the event of a failure of the said two arbitrators to appoint a third, the said arbitrator or arbitrators shall be appointed by the person then occupying the position of President Judge of the Court of Common Pleas of Lancaster County, Pennsylvania.

The expense of the Board of Arbitration shall be shared equally by the parties hereto, except when the dispute shall relate solely to differences in accounts, in which case said expense shall be shared in inverse proportion to the award, by the Arbitrators, or by the Court, to either party.

The decision of any two of the Arbitrators shall be final and binding upon the parties hereto. Such submission to and decision by said Board of any and all questions as to any of the matters aforesaid, is hereby declared to be a condition precedent to the bringing of any action or legal proceedings by either party hereto on account of any matter or thing involving any such question.

ARTICLE IX

RENEWAL OF CONTRACT: This contract shall automatically renew itself for a further period of ten (10) years duration, at the option of the Receiving Company, provided a readjustment of rate for power to be determined by arbitration is made if insisted upon by either party, such readjustment based upon any increase in the cost of steam generated power which might then exist as compared with the cost of steam generated power as of date of this contract.

The provisions herein contained shall extend to and bind the parties hereto and their successors and assigns respectively.

IN WITNESS WHEREOF: the parties hereto have caused this agreement to be executed by their proper officers thereunto duly authorized and their respective corporate seals to be hereunto affixed the day and year first above written.

PENNSYLVANIA WATER AND POWER COMPANY

By (Signed) Chas. E. F. Clarke

Vice-President

(Seal)

Attest:

(Signed) R. M. Smith

Secretary

EDISON ELECTRIC COMPANY
By (Signed) George Bullock
Vice-President

(Seal)

Attest:
(Signed) J. S. Graybill, Jr.
Secretary

EXHIBIT No. 10 (B)

Exhibit No. 140

EXHIBIT No. 140.

[23184]-[23189]

SAFE HARBOR WATER POWER CORPORATION

COMPARATIVE STATEMENT OF OPERATING REVENUES, REVENUE FROM ENERGY SALES AND KWH. SALES

CALENDAR YEARS 1938-1943

		1938	1939	1940	1941	1942	1943
Revenues							
1. Total Operating Revenues—per books		2,878,956.88	2,952,881.21	2,793,208.02	2,855,041.38	3,447,660.45	3,620,411.86
2. Rent from Electric Property—per books		1,214.74	1,471.04	1,651.42	1,327.84	186.84	3,360.95
3. Revenue from Energy Sales—per books	(1—2)	2,877,742.14	2,951,410.17	2,791,556.60	2,853,713.54	3,447,473.61	3,617,050.91
4. Adjustments*		978.62	9,778.58	265,207.03	549,763.81	12,726.73	—
5. Revenue from Energy Sales—Adjusted*	(3+4)	2,878,720.76	2,961,188.75	3,056,763.63	3,403,477.35	3,460,200.34	3,617,050.91
Adjusted* Bills to							
6. Consolidated Gas Electric Light and Power Co. of Baltimore	(5)×2/3	1,919,147.17	1,974,125.83	2,037,842.42	2,268,984.90	2,306,800.23	2,411,367.27
7. Pennsylvania Water & Power Company	(5)×1/3	959,573.59	987,062.92	1,018,921.21	1,134,492.45	1,153,400.11	1,205,683.64
8. Total (same as 5 above)	(6+7)	2,878,720.76	2,961,188.75	3,056,763.63	3,403,477.35	3,460,200.34	3,617,050.91
Kwh. Sales							
9. To Consolidated Gas Electric Light and Power Co. of Baltimore		537,456,900	431,871,400	515,080,700	386,307,800	657,113,200	647,091,800
10. To Pennsylvania Water & Power Company		274,271,100	219,528,900	263,392,500	198,602,100	336,466,500	331,163,400
11. Total Sales—actual	(9+10)	811,728,000	651,400,300	778,473,200	584,909,900	993,579,700	978,255,200
Mills per Kwh.							
12. For energy sold to Consolidated Gas Electric Light and Power Co. of Baltimore	(6/9)	3.57	4.57	3.96	5.87	3.51	3.73
13. For energy sold to Pennsylvania Water & Power Company	(7/10)	3.50	4.50	3.87	5.71	3.43	3.64
14. For all energy—based on actual sales	(8/11)	3.55	4.55	3.93	5.82	3.48	3.70
15. For all energy—after adjustment of sales for average river flow		3.59	3.56	3.63	4.07	3.97	4.05

* Surplus adjustments made in subsequent years are here indicated for the year to which they are applicable.

K.

November 15, 1944.

EXHIBIT No. 141.

[23190] (page 1)

Excerpts from the Direct Testimony of George W. Spaulding in Safe Harbor Water Power Corporation, Docket No. IT-5914, beginning at Transcript 155, Line 9, and Ending on Transcript 158, Line 13.

By Mr. Arthur Hull:

Q. Mr. Spaulding, I show you a paper marked for identification as Exhibit No. 10, and ask you if this exhibit was prepared under your direction.

A. It was.

Q. Will you explain what this exhibit shows?

A. This exhibit shows a comparative statement of operating revenues, the revenue from energy sales by the company, the amount of annual kilowatthour sales by the company and the resultant rates received per kilowatthour sold for the calendar years 1939 to 1943, inclusive.

Item 1 is the total operating revenue received under the contract and item 2 is the rent received by the company from electric properties.

Item 3 is the revenue received from energy sales, as per the books of the company, while item 4 is adjustments made in subsequent years to the annual revenues through surplus accounts. Item 5 is the revenue from energy sales after such adjustments.

Items 6 and 7 show the amounts billed to and revenues received from the Consolidated Gas Electric Light and Power Company of Baltimore and the Pennsylvania Water and Power Company, after adjustments made through surplus accounts as shown above. Item 8 is the sum of items 6 and 7, being the same as item 5.

Items 9 and 10 show the amounts of energy reported to have been delivered by the Safe Harbor Company to its two customers in the annual reports filed with the Federal Power Commission and the Public Utility Commission of Pennsylvania. The energy sales to Baltimore Company in item 9 are equal to two-thirds of the energy generated at the Safe Harbor project as measured at the low tension terminals of the stepup transformers, less the transmission losses between the Safe Harbor plant and the points of delivery at Westport, Riverside and Takoma Park, Maryland, while the energy sales to Pennsylvania Water and Power Company are equal to one-third of the energy generated at the Safe Harbor project as measured at the low tension terminals of the stepup transformers.

Item 11 is the sum of items 9 and 10.

Items 12 and 13 are the revenues received per kilowatthour from each of the company's customers, while item 14 is the average revenue per kilowatthour based on actual sales.

[23191] (page 2)

It is desired to call attention to a note which has appeared on the respective annual reports filed with the Federal Power Commission which reads as follows, and I quote:

"Respondent sells its entire output, under a long-term contract, to Consolidated Gas Electric Light and Power Company of Baltimore and Pennsylvania Water and Power Company. The charges are independent of the amount of energy delivered and do not include any transmission costs. The cost of operating the transmission facilities for transmitting power and energy to Consolidated Gas Electric Light and Power Company of Baltimore in Baltimore and Takoma Park, Maryland, is billed to Consolidated Gas Electric Light and Power Company by Pennsylvania Water and Power Company".

As the charges are independent of the amount of energy delivered, the rates per kilowatthour sold will fluctuate from year to year with variations in usable river flow as will be noted in item 14. To eliminate the effect of variation in flow, the rates per kilowatthour which the company would have received with average river flow in each year are shown in item 15.

Q. Do these two customers of the Safe Harbor Company receive the specific energy shown in items 9 and 10 of this exhibit?

A. Not necessarily. Mr. Walls has testified that it is impossible to tag the energy transmitted from either one of the hydro plants. The total Safe Harbor energy goes into the regional power pool which is fed not only from Safe Harbor but from the Holtwood hydro and steam stations, the Baltimore steam generating stations and the Washington steam generating stations. Reports made to the respective regulatory commissions of energy sold, are in accord with the directions of these commissions.

The combined total of energy sold by Safe Harbor is correct, but the division of energy sales between its customers is not necessarily in accord with the statements given to the several commissions, a fact of which their respective staffs have been continually advised.

ENERGY PURCHASED BY BALTIMORE AND HOLTWOOD COMPANIES FROM SAFE HARBOR COMPANY AND ENERGY PURCHASED BY BALTIMORE COMPANY FROM HOLTWOOD COMPANY

1946

		July	Aug.	Sept.	Oct.	Nov.	Dec.
1	S. H. 230 Kv. Sendout	19,225,000	12,255,000				
2	S. H. 230 Kv. Received	10,412,000	14,100,000				
3	S. H. Net 230 Kv. Sendout (1-2)	8,813,000	- 1,845,000				
4	S. H. 69 Kv. Sendout	19,267,000	25,692,000				
5	S. H. 69 Kv. Received	723,000	374,000				
6	S. H. 69 Kv. Net Sendout (4-5)	18,544,000	25,318,000				
7	S. H. 132 Kv. Sendout	29,152,000	25,096,000				
8	S. H. 132 Kv. Received	133,000	217,000				
9	S. H. Net 132 Kv. Sendout (7-8)	29,019,000	24,879,000				
10	S. H. Net Metered Sendout (3+6+9)	56,376,000	48,352,000				
11	Baltimore Total 230 Kv. Received	19,426,000	12,634,000				
12	Baltimore Total 230 Kv. Sendout	6,493,000	10,621,000				
13	Washington Total 230 Kv. Received	3,396,000	2,847,000				
14	Washington Total 230 Kv. Sendout	8,537,000	7,683,000				
15	Net Delivered to Baltimore Company at Perryville	7,658,000	1,544,000				
16	Net Delivered to Highlandtown and Pratt Street	30,204,000	28,742,000				
17	Total Purchased by Holtwood Company from Baltimore Company	-	-				
18	Metered 230 Kv. Line Loss (1+12+14)-(2+11+13)	1,021,000	978,000				
19	Actual Percent 230 Kv. Line Loss 18/(1+12+14)	2.9806	3.2004				
20	Energy Purchased by Baltimore Company from Safe Harbor Company 2/3 (Item 10) x 100.0-Item 19)	36,464,000	31,203,000				
21	Energy Purchased by Holtwood Company from Safe Harbor Company (1/3(Item 10)	18,792,000	16,117,000				
22	Energy Purchased by Baltimore Company from Holtwood Company (11+13+15+16+17)-(12+14+20)	9,190,000	- 3,740,000				

EXHIBIT No. 158.

[23277]

January 20, 1906.

Cary T. Hutchinson, Esq.,
60 Wall Street,
New York, City.

Dear Sir:

We have furnished to Messrs. Harvey Fisk & Sons the list which you sent us for the distribution of your part of the common stock of McCall Ferry Power Company, and their Stock Deposit Receipts will be re ready for issue in exchange for the Stock Deposit Agreements when turned into them.

Inasmuch as it was stated at the time this stock was left with Messrs. Harvey Fisk & Sons that 48850 shares thereof were held by them for safe keeping for you, they will doubtless like to have a letter from you when you receive your Stock Deposit Receipts terminating their responsibility in the premises. We enclose a suggestion for the form of this letter.

Yours very truly,

Enclosure.

EXHIBIT No. 159.

[23278]

July 17, 1907.

Henry M. Higginson, Esq.,
Messrs. Lee, Higginson & Co.,
44 State Street, Boston, Mass.

My dear Mr. Higginson:—

I am in receipt of your of 16th instant, just as I am leaving my office for Bar Harbor, but I have time, I think to answer all you wish.

It is not necessary for me to say that I do this with great pleasure and you certainly do not need to make any effort to recall yourself to my memory. Like all people who have been favored with your acquaintance my memory of you is of the pleasantest.

In reference to your inquiries, I would say that we expect to be able to commence the delivery of power about June, 1908.

* * *

Very truly yours,

H. F. Dimock
President.

HFD/M.

EXHIBIT No. 160.

[23279]

J. A. Walls, *President*
Jas. L. Rintoul, *Exec. Vice-President*
G. W. Spaulding, *Vice-President*
J. U. Diehl, *Treasurer*
Wm. H. Eichhorn, Jr., *Secretary*

PENNSYLVANIA WATER & POWER COMPANY
LEXINGTON BUILDING
Baltimore 1, Md.

December 1, 1945

Mr. N. B. Higgins, President
Safe Harbor Water Power Corporation
Baltimore, Maryland

Dear Mr. Higgins:

Please find attached, an agreement between Metropolitan Edison Company and Pennsylvania Water & Power Company which will become effective December 31, 1945 and extend for a period of five years with provision for renewal. You will note that this contract will supersede and, therefore, provides for the termination of the existing four party York Power Supply Contract between Edison Light and Power Company, Metropolitan Edison Company, Pennsylvania Water & Power Company and Safe Harbor Water Power Corporation, which expires March 31, 1946.

In as much as the present power supply contract of January 1, 1935, as supplemented in March 1945, to which Safe Harbor Water Power Corporation is a party, is to be terminated by the terms of this new agreement between Pennsylvania Water & Power Company and Metropolitan Edison Company, as of midnight December 31, 1945, and in accord with Section 2 of Article I of this new agreement, will you please advise this Company of Safe Harbor's consent to the termination of the existing four party agreement.

Yours very truly,

(s) G. W. Spaulding
G. W. Spaulding
Vice President

GWS:F

EXHIBIT No. 161.

[23280]

N. B. Higgins, *President*
R. T. Greer, *Vice President*
C. A. Lappe, *Treasurer & Secretary*

SAFE HARBOR WATER POWER CORPORATION
LEXINGTON BUILDING
Baltimore 1, Md.

December 12, 1945

Mr. George W. Spaulding, Vice-President
Pennsylvania Water & Power Company
Lexington Building
Baltimore 1, Maryland

Dear Sir:

There is enclosed herewith the written consent of this Company to the cancellation of the existing York Power Contract as of midnight, December 31, 1945. Neither the giving of this consent nor the fact that this Company is not a party to the proposed new Metropolitan Edison Power Supply Contract of November 15, 1945, shall be deemed a waiver of this Company's rights to sell or dispose of the electric energy or power generated at its plant to either Edison Light and Power Company of York, Pennsylvania, or Metropolitan Edison Company, as that right was granted by certificate of public convenience of the Pennsylvania Public Service Commission, issued January 10, 1933.

Very truly yours,

(s) N. B. Higgins
N. B. Higgins
President

NBH/D
Enclosure

[23281]

N. B. Higgins, *President*

R. T. Greer, *Vice President*
C. A. Lappe, *Treasurer & Secretary*

SAFE HARBOR WATER POWER CORPORATION
LEXINGTON BUILDING
Baltimore 3, Md.

December 12, 1945

Mr. George W. Spaulding, Vice-President
Pennsylvania Water & Power Company
Lexington Building
Baltimore 1, Maryland

Dear Sir:

This will acknowledge receipt of your letter of December 1, 1945, enclosing a copy of a proposed agreement between Metropolitan Edison Company and Pennsylvania Water & Power Company, known as Metropolitan Edison Power Supply Contract of November 15, 1945.

Safe Harbor Water Power Corporation has no objection to and hereby consents to the termination of the agreement dated January 1, 1935, as supplemented in March of 1945, between Metropolitan Edison Company, Pennsylvania Water & Power Company, Safe Harbor Water Power Corporation and Edison Light and Power Company, known as the York Power Contract, as of midnight, December 31, 1945, as provided for in Article I, Section 2, of the new Metropolitan Edison Power Supply Contract.

Very truly yours,

(s) N. B. Higgins
N. B. Higgins
President

NBH/D

EXHIBIT No. 162.

[23283]

IN THE MATTER OF THE RATES OF CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE	BEFORE THE PUBLIC SERVICE COMMISSION OF MARYLAND

The answer of Consolidated Gas Electric Light and Power Company of Baltimore (hereinafter called the Company) to the petition of Philip H. Dorsey, Jr., People's Counsel, and to other proceedings leading up to or following that petition, respectfully shows that:

* * *

[23288] (page 6)

(*b*) The Chief Auditor also contends that the Company's rates should be reduced by reducing "the amounts charged to operating expenses" for payments by the Company to Pennsylvania Water and Power Company (hereinafter called Pennsylvania Company) and Safe Harbor Water Power Corporation (hereinafter called Safe Harbor) for purchased electricity "to the extent that the earnings of these companies are exorbitant". For many years the Company has purchased electricity from Pennsylvania Company under successive contracts at rates which the Company has believed to be advantageous to it and to be less than the cost of producing the electricity or purchasing it elsewhere. The present contract, made in 1931 (and amended in 1939) was based on a number of factors, including Pennsylvania Company's revenue and expenses before the contract was made. The Company has no basis for asserting that Pennsylvania Company's earnings are unreasonable, much less "exorbitant". They are neither exorbitant nor unreasonable merely because they are [23289] (page 7) not based on so-called "original cost". The Company owns no stock or other interest in Pennsylvania Company and has no connection with the management of Pennsylvania Company. Aside from possible legal or jurisdic-

tional questions, if the Commission intends to give consideration to this contention of the Chief Auditor, it would seem appropriate to give Pennsylvania Company notice of the Commission's intention so that the facts may be presented first hand, and the Company and Pennsylvania Company may both participate in the proceedings in respect of their contract rates.

(c) The Company is the owner of two-thirds of the stock (including one-half of the voting stock), of Safe Harbor and, as such, guarantor of Safe Harbor's bonds; it is indemnified to the extent of one-third by Pennsylvania Company, the other stockholder. Safe Harbor's contract rate for power is not exorbitant or unreasonable.

* * *

EXHIBIT No. 163.

[23296] (page 1)

BEFORE THE PUBLIC SERVICE COMMISSION OF THE COMMONWEALTH OF PENNSYLVANIA.

In Re: Application of the Safe Harbor Water Power Corporation for a Certificate of Public Convenience, evidencing the Commission's approval of the modification of the order of the Public Service Commission issued to the Safe Harbor Water Power Corporation on the 31st day of March, A.D. 1930.	Application Docket No..... 19.. Folder No...

To the Public Service Commission of the Commonwealth of Pennsylvania:

The petition of the Safe Harbor Water Power Corporation,

Respectfully Represents:

1. That the names and addresses of the officers of the Safe Harbor Water Power Corporation are:

Charles E. F. Clarke,	President,	40 Wall Street, New York, N. Y.
J. A. Walls,	Vice-President,	Lexington Bldg., Baltimore, Md.
Herbert A. Wagner,	Vice-President,	Lexington Bldg., Baltimore, Md.
James L. Rintoul,	Treasurer,	Lexington Bldg., Baltimore, Md.
F. J. Allen,	Secretary,	40 Wall Street, New York, N. Y.

[23297] (page 2)

2. That the name and address of your petitioner's attorney is

John E. Malone, 56 North Duke Street, Lancaster, Pa.

3. Your petitioner, Safe Harbor Water Power Corporation, is a corporation of the State of Pennsylvania formed by the merger of the Safe Harbor Water Power Corporation and Chanceford Water Power Corporation, for the purpose of the supply, storage or transportation of water and water power for commercial and manufacturing purposes in the Township of Manor, Lancaster County, Pa., and in the Township of Chanceford, York County, Pa., which merger was approved by your Honorable Commission on December 23, 1929, Application Docket No. A-21579, 1929.

Your petitioner, the Safe Harbor Water Power Corporation, was further authorized by your Honorable Commission to begin the exercise of its rights, powers or privileges, as evidenced by Certificate of Public Convenience dated March 31, 1930, Application Docket No. A-21579, 1930, Folder #2.

A statement of the amount of stocks and bonds authorized, issued and outstanding on the 31st day of December, A.D. 1931, is attached hereto and marked "Exhibit A".

4. That your petitioner, Safe Harbor Water Power Corporation is chartered to furnish service in Manor Township, Lancaster County, Pa., and in Chanceford Township, York County, Pa., and is now furnishing service in Manor Township, Lancaster [23298] (page 3) County, Pa., but is not furnishing service in Chanceford Township, York County, Pa. Your petitioner does not hold any franchise grants.

5. This application is made by your petitioner for the purpose of having the Public Service Commission modify its report and order of March 31, 1930, copy of which report

and order is hereto attached and marked "Exhibit B", as follows: By changing the second condition so that the same shall read as follows:

> SECOND: That the Safe Harbor Water Power Corporation shall not, without the approval of the Public Service Commission hereafter first obtained, sell or dispose of the electric energy or power to be generated at its plant at Safe Harbor, Lancaster County, Pennsylvania, to any customer other than: (1) Consolidated Gas Electric Light and Power Company of Baltimore, Maryland, (2) Pennsylvania Power & Light Company, (3) Pennsylvania Railroad Company, (4) Chester Valley Electric Company of Coatesville, Pennsylvania, (5) Edison Light and Power Company of York, Pennsylvania, (6) Metropolitan Edison Company, (7) Philadelphia Electric Company, and (8) Pennsylvania Water & Power Company of Holtwood, Pennsylvania, and to the latter Company only for resale to the other companies enumerated herein.

6. That no additional capital will be required by your petitioner in the near future for the purpose of financing [23299] (page 4) the matters and things involved in this petition, the corporation having already sold or contracted to sell bonds and stocks in amount shown by the balance sheet attached hereto and marked "Exhibit C", and estimated to be sufficient to meet initial requirements. If additional funds are needed, they will be obtained by short term borrowing until such time as additional permanent financing is effected by the sale of additional bonds and/or stock.

7. That no corporation, partnership or individual is now furnishing or has the corporate or franchise right to furnish service similar to that to be rendered by your petitioner in the territory covered by this application, and that no competitive condition will be created by said company, except

(a) Pennsylvania Power & Light Company, successor to The Farmers Electric Company of Manor Township and Edison Electric Company, whose address is Allentown, Pa., which company is engaged in the distribution of electricity to the inhabitants of certain districts in Manor Township.

(b) Edison Light & Power Company, York, Pa., successor to Chanceford Township Light, Heat and Power Company, which company is engaged in the distribution of electricity to the inhabitants of the Township of Chanceford.

(c) Philadelphia Electric Power Company, whose address is Philadelphia, Pa., which company operates the project known as "Conowingo Project".

[23300] (page 5)

(d) Philadelphia Electric Company, whose address is Philadelphia, Pa.

(e) Chester Valley Electric Company, whose address is Coatesville, Pa., which company is engaged in the distribution of electricity to the inhabitants of the Borough of Coatesville, Dowingtown, Parkesburg and neighboring territory in Chester County, Pennsylvania.

B. That the approval is necessary and proper for the service, accommodation and convenience of the public for the following reasons:

At the present time your petitioner, in accordance with the provisions of the Commission's order of March 31, 1930 and the general plan of power disposal set forth in testimony at the hearing of February 5, 1930, is selling the entire output of its Safe Harbor plant to Consolidated Gas Electric Light and Power Company of Baltimore and Pennsylvania Water & Power Company. The latter company resells its portion to the customers specified in the Commission's order. In the future, however, it will probably be

desirable that both your petitioner and Pennsylvania Water & Power Company become parties to power supply contracts with the allowed customers and that your petitioner be able to sell power and energy to such customers directly as well as, or instead of, indirectly. Therefore request is made for the right to make such sales directly and/or indirectly.

Your petitioner is also requesting that three companies be added to the list of customers to which Safe Harbor [23301] (page 6) power may be sold, viz: Metropolitan Edison Company, Philadelphia Electric Company and The Pennsylvania Railroad Company.

Four main generating units, with a total capacity of 170,000 horsepower, are now in operation at Safe Harbor, and your petitioner has available during periods of ample river flow, considerable off-peak hydro energy which is not utilized in serving the customers named in the Commission's order. The sale of such energy to other electric companies would save fuel and utilize water power now going to waste. In particular, Pennsylvania Water & Power Company has made an interconnection with Metropolitan Edison Company at York for interchange of power and energy, which interconnection makes it possible for Pennsylvania Water & Power Company to resell to Metropolitan Edison Company energy generated at Safe Harbor which would otherwise go to waste. At present Pennsylvania Water & Power Company, during periods of ample river flow, is supplying to Lancaster (Pennsylvania Power & Light Company) and to Coatesville (Chester Valley Electric Company) only energy purchased from Safe Harbor, and to Edison Light and Power Company of York and to Metropolitan Edison Company energy generated at its own Holtwood plant. Such separate operation of the hydro plants, made necessary by the present restrictions on sale of Safe Harbor energy, decreases the utilization of hydro energy and causes waste of fuel at the steam-electric plants in the

interconnected system, with consequent economic loss. It also sacrifices reliability and safety of operation.

[23302] (page 7)

Your petitioner believes that there will be an interconnection between its plant and the system of the Philadelphia Electric Company and/or its subsidiaries and desires to be able to sell electric power and energy to that company.

A recent development is the agreement dated September 2, 1931, between Consolidated Gas Electric Light and Power Company of Baltimore, Pennsylvania Water & Power Company and your petitioner, jointly as the "Electric Companies", on the one hand, and the Pennsylvania Railroad Company, on the other hand, under which the Baltimore Company will sell to the Railroad Company in Maryland all of the power and energy required for the electrification of the Railroad Company's lines from the Susquehanna River to Washington, D. C. The same contract covers the supply of power and energy for the electrification of lines of the Railroad Company in the vicinity of Safe Harbor. It is expected that there will be two points of supply of such power and energy to the Railroad Company in Pennsylvania—Safe Harbor in Manor Township and Holtwood in Martic Township, Lancaster County. The bulk of power and energy thus supplied will originate in the Safe Harbor hydro plant, but some of it will be generated at the Holtwood hydro and steam plants and at times of low river flow the supply of hydro energy will be supplemented by steam energy purchased from the Baltimore steam plants or from other sources. It is intended that the sale in Martic Township be made by the Pennsylvania Water & Power Company. It is desirable that the sale in Manor Township be made either by your petitioner or [23303] (page 8) the Pennsylvania Water & Power Company or by both, depending upon the actual conditions existing at the time, such as amount and division of load,

economic source of supply, transmission facilities available, etc. Therefore your petitioner is asking both for the removal of the restriction previously imposed upon the resale of Safe Harbor power and energy by Pennsylvania Water & Power Company and for approval of direct supply to The Pennsylvania Railroad Company in Manor Township.

Approval at this time of the supply of Safe Harbor power and energy to The Pennsylvania Railroad Company in Pennsylvania will make possible (1) the coordination of such supply with supply to the Railroad Company's lines in Maryland; (2) maximum reliability and economy of supply to the Railroad Company from the regional power supply system of the associated "Electric Companies" at several widely separated points, with consequent benefit to the public; and (3) the present design and layout, and the future use for supply in Pennsylvania, of special facilities at Safe Harbor, some of which are about to be installed for supply to the Railroad Company in Maryland. It is essential that your petitioner, the Pennsylvania Water & Power Company, and the Railroad Company be able to plan their investment and equipment installations with the electrification of lines in Pennsylvania in view. If expenditures are made now for facilities which later cannot be used, or if duplication of facilities becomes necessary, there will be an economic loss which will be to the disadvantage of the Railroad Company, your petitioner and the public.

[23304] (page 9)

These two examples show that the limitations on the sale of Safe Harbor power and energy are causing, and if continued will increasingly cause, economic losses to the disadvantage of your petitioner, its customers and the public.

Wherefore, your Petitioner prays your Honorable Commission to issue a Certificate of Public Convenience

under the provisions of Article III, Section 3(a), and Article V, Sections 18 and 19, of the Public Service Company law evidencing its approval of the modification of the order of the Public Service Commission issued to your petitioner, Safe Harbor Water Power Corporation, on the 31st day of March, A.D. 1930.

And it will ever pray, etc.

SAFE HARBOR WATER POWER CORPORATION
By (Signed) Charles E. F. Clarke
President

Attest: (Signed) F. J. Allen
Secretary

Signed and dated this 29th day of March, A.D. 1932.

[23305] (page 10)

STATE OF MARYLAND
CITY OF BALTIMORE } *ss.*

Personally before me, a Notary Public, in and for said State and County, appeared Charles E. F. Clarke, President of the Safe Harbor Water Power Corporation, who being duly affirmed according to law, deposes and says that the facts contained in the foregoing Petition are true and correct to the best of his knowledge and belief.

(Signed) Charles E. F. Clarke

Affirmed and subscribed before me this 29th day of March, A.D. 1932.

(Signed) Margaret S. McCormick
Notary Public

My commission expires May 1st, 1933.

[23306] (page 11)

EXHIBIT "A"

SAFE HARBOR WATER POWER CORPORATION

Statement of stocks and bonds authorized, issued and outstanding as of December 31, 1931

Capital Stock	$ 3,951,000.00
Authorized—100,000 Shares Class "A" Non-Voting	
Issued — 87,532 Shares Class "A" Non-Voting	
Authorized—200,000 Shares Class "B" Voting	
Issued —175,068 Shares Class "B" Voting	
First Mortgage Sinking Fund Gold Bonds 4½%, Series Due 1979	21,000,000.00
	$24,951,000.00

[23307] (page 12)

A. 21579-1930
Folder No. 2.

EXHIBIT "B"

THE PUBLIC SERVICE COMMISSION

OF THE

COMMONWEALTH OF PENNSYLVANIA

IN THE MATTER OF THE APPLICATION OF SAFE HARBOR WATER POWER CORPORATION, under Section 2(b), Article III, and Section 18 and 19, Artivle V, of the Public Service Company Law, for the approval of the beginning of the exercise of the rights, power or privileges of the supply, storage or transportation of water and water power for commercial and manufacturing purposes, in the Township of Manor, Lancaster County, and the Township of Chanceford, York County.	CERTIFICATE OF PUBLIC CONVENIENCE

THE PUBLIC SERVICE COMMISSION OF THE COMMONWEALTH OF PENNSYLVANIA hereby certifies that after an investigation and hearing had on the above entitled application, it has, by its report and order made and entered, a copy of which is hereto attached and made a part hereof, found and determined that the granting of said application is necessary and proper for the service, accommoda-

tion, convenience and safety of the public, and this certificate is issued evidencing its approval of the said application as set forth in said report and order.

IN TESTIMONY WHEREOF, THE PUBLIC SERVICE COMMISSION OF THE COMMONWEALTH OF PENNSYLVANIA has caused these presents to be signed and sealed, and duly attested by its Secretary at its office in the city of Harrisburg this 31st day of March, 1930.

THE PUBLIC SERVICE COMMISSION
OF THE
COMMONWEALTH OF PENNSYLVANIA

Attest:

Signed S. Ray Shelby
Chairman.

(Signed) Jno. G. Hopwood
Secretary.

[23308] (page 1)

THE PUBLIC SERVICE COMMISSION
OF THE
COMMONWEALTH OF PENNSYLVANIA

Application Docket No. 21579 (Folder No. 2)

In re: Application of SAFE HARBOR WATER POWER CORPORATION for approval of the beginning of the exercise of the rights, power or privilege of the supply, storage or transportation of water and water power for commercial and manufacturing purposes, in the Township of Manor, Lancaster County, and the Township of Chanceford, York County.

REPORT OF THE COMMISSION

BY THE COMMISSION:

Safe Harbor Water Power Corporation is a corporation of the State of Pennsylvania, formed on January 6, 1930, by the merger and consolidation of Safe Harbor Water Power Corporation, (incorporated February 19, 1929), and Chanceford Water Power Corporation (incorporated February 19, 1929), with corporate purpose—the supply, storage and transportation of water and water power for commercial and manufacturing purposes in the Township of Manor, Lancaster County, Pennsylvania, and in the Township of Chanceford, York County, Pennsylvania—and possessing the rights and powers conferred upon water and water power companies by the Act of Assembly, approved the 2nd day of July, 1895, P.L. 425, as amended by the Act of the 7th day of May, 1929; P.L. 1688.

The present proceeding is for the Commission's requisite approval under the provision of Article III, Section 2(b), of the Public Service Company Law, of the beginning of the exercise by Safe Harbor Water Power Corporation of its rights, powers and privileges.

[23309] (page 2)

Formal protests were filed by Edison Electric Company, a corporation of the State of Pennsylvania, engaged in furnishing electric energy to the public in Manor Township, Lancaster County, and other municipalities of said county, and by Edison Light and Power Company, a corporation of the State of Pennsylvania engaged in furnishing electric energy to the public in various municipalities of York County, including the Township of Chanceford. These protestants allege that the sale by Safe Harbor Water Power Corporation of electric energy generated at its proposed plant in any manner which would permit such

energy or electric power to be delivered and used in their territory without the consent of The Public Service Commission first had and obtained would be prejudicial to their rights and detrimental to the service being furnished by them. These protests have been satisfied by stipulation filed of record.

Philadelphia Electric Company and Philadelphia Electric Power Company were represented at the hearing by counsel. A stipulation filed by the applicant company satisfied said companies and no protest or objection was entered of record by them.

Certain citizens of Lancaster and York counties residing in the vicinity of the Safe Harbor project appeared at the first hearing and informally stated that their interest in the matter related to the construction of the dam in a manner to provide a roadway for vehicular and pedestrian traffic across the Susquehanna River forming a connecting link between highways on the York and Lancaster sides of the river to be constructed at some future time. The examiner conducting the hearing informed these gentlemen that in his opinion the Commission had no jurisdiction in the present proceeding to compel the applicant corporation to provide a roadway or bridge across the river, but would use its good offices in the matter of such roadway. Conferences were held with representatives of the company who took the position that construction of the dam with a highway crossing was not necessary at this time; that the cost of providing the roadway on the dam—approximately $1,000,000, would not be justified, but that the company was willing to grant to responsible parties a right of way across the dam for the construction of a bridge or highway crossing at any time in the future.

At the second hearing the citizens of York and Lancaster counties were represented by counsel. No formal protest was filed but a motion however was made to call witnesses to prove the benefits and advantages to the public if a highway road was provided on the dam. The examiner

ruled that it would serve no [23310] (page 3) good purpose to extend the record to include testimony on a matter which was not subject to the jurisdiction on the Commission, but granted the counsel for the citizens the right to file brief on the jurisdictional question with the understanding that if the Commission determined it had jurisdiction to grant further hearing. The ruling of the examiner is sustained. The Commission has carefully examined briefs filed on the question and is of the opinion that the general provisions of the Public Service Company Law referred to by counsel are not controlling and without a definite and specific provision conferring such jurisdiction it is without authority.

The Legislature of Pennsylvania has conferred upon the Water Supply Commission (now Water and Power Resources Board) authority to regulate the construction of dams and the development of the water power resources of the state. Similar authority and jurisdiction is conferred by federal statute upon the Federal Power Commission. This jurisdictional question has been decided by the Supreme Court of Pennsylvania in case Pa. Power Co., Appellant, v. Public Service Commission, 261 Pa. 211 "It (Public Service Commission) is not invested with authority to regulate the erection of dams or the development of the water power resources of the State. That is a subject over which the Water Supply Commission has jurisdiction. * * * The authority of the Water Supply Commission to impose regulations and conditions to be observed by a corporation proposing to develop the water power of a stream is broad as shown by the language of the statute. * * * It has undoubted authority to attach any of the conditions necessary to carry out the purposes of the legislation on the subject with a view to the protection of the rights of the public and of individuals or companies having vested interests."

It appears from the record that the Safe Harbor Water Power Corporation will construct a solid concrete gravity type dam crossing the Susquehanna River at a

point about one-quarter of a mile upstream from the mouth of the Conestoga Creek, about eight miles above Holtwood, Pennsylvania, and about 17 miles above the Pennsylvania-Maryland State Line, with total length of 3635 feet of which 1818 feet will be bulk-head or non-flow sections and 1817 feet with be stowaway sections; the reservoir formed by the dam will extend upstream for about ten miles and that its widest point will be one and three-quarter miles wide; and a power house located on the Lancaster County side of the river with total length when completed of 1048 feet and width of 157 feet, with initial installation of six main generating units having a total generator capacity of 168,000 kilowatts.

The estimated cost of the project is $30,000,000, which will be financed by the sale of the company's stock or other [23311] (page 4) securities. The corporate and financial plans including preliminary costs of the project have been examined by the Commission's technical staff and in general conform to the governing ruling and policy of the Commission. The project is feasible and will conserve the natural resources of the state and supplement the present output of the hydro-electric plant of the Pennsylvania Water and Power Company, the present peak demand of which is more than two and one-half times the average high-flow capacity of the plant.

The Commission finds and determines that the approval of the construction, subject to the stipulations filed of record, is necessary and proper for the service, accommodation and convenience of the public.

A certificate will issue accordingly.

THE PUBLIC SERVICE COMMISSION
OF THE
COMMONWEALTH OF PENNSYLVANIA

(Signed) S. Ray Shelby
Acting Chairman.

[23312] (page 5)

Application Docket No. 21579 (Folder No. 2)

In re: Application of SAFE HARBOR WATER POWER CORPORATION, for approval of the beginning of the exercise of the rights, power or privilege of the supply, storage or transportation of water and water power for commercial and manufacturing purposes, in the Township of Manor, Lancaster County, and the Township of Chanceford, York County.

ORDER

This matter being before The Public Service Commission, upon petition and protests on file, and having been duly heard and submitted by the parties and full investigation of the matters and things involved having been had, and the Commission having on the date hereof made and filed of record a report containing its findings of fact and conclusions thereon, which said report is hereby approved and made a part hereof;

Now, to-wit, March 31, 1930, IT IS ORDERED: That a certificate of public convenience issue evidencing the Commission's approval of the beginning of the exercise by the Safe Harbor Water Power Corporation of its rights, powers and privileges subject to the following conditions:

FIRST: That the proposed Safe Harbor Hydro Electric Project shall be so constructed and so operated that it shall not unreasonably interfere with the use of the waters of the Susquehanna River by the Project known as the "Conowingo Project", heretofore approved by this Commission in Application Docket Nos. 12401 to 12405 (both inclusive), year 1925, to the extent that the use of the said waters shall be

reasonably necessary for the purposes of said "Conowingo Project".

SECOND: That the Safe Harbor Water Power Corporation shall not, without the approval of The Public Service Commission hereafter first obtained, [23313] (page 6) sell or dispose of the electric energy or power to be generated at its plant, at Safe Harbor, Lancaster County, Pennsylvania, to any customer other than the Consolidated Gas Electric Light and Power Company, of Baltimore, Maryland, and the Pennsylvania Water and Power Company, of Holtwood, Pennsylvania, and to the latter Company only for re-sale to present customers of said Pennsylvania Water and Power Company, viz: Edison Electric Company, of Lancaster, Pennsylvania; the Chester Valley Electric Company, of Coatesville, Pennsylvania; Edison Light and Power Company of York, Pennsylvania; and the Consolidated Gas Electric Light and Power Company of Baltimore, Maryland.

THE PUBLIC SERVICE COMMISSION
OF THE
COMMONWEALTH OF PENNSYLVANIA

(Signed) S. Ray Shelby
Acting Chairman.

Attest:

Jno. G. Hopwood
Secretary

[23314] (page 7)

EXHIBIT "C"

SAFE HARBOR WATER POWER CORPORATION

Balance Sheet as at December 31, 1931.

ASSETS

Cash in Banks and on Deposit	$ 945,453.94
Accounts and Notes Receivable	128,640.28
Investment Securities	9,100.00
Construction Work in Progress	23,105,868.32
Unamortized Debt Discount and Expense	1,506,927.64
Prepaid Charges	8,752.39
	$25,704,742.57

LIABILITIES

First Mortgage Sinking Fund Gold Bonds 4½% Series Due 1979	21,000,000.00
Accounts Payable	662,014.77
Accrued Liabilities	91,727.80
*Capital Stock	3,951,000.00
Issued— 87,532 Shares Class "A" Non-Voting 175,068 Shares Class "B" Voting	
	$25,704,742.57

*Pennsylvania Water & Power Company and Consolidated Gas Electric Light and Power Company of Baltimore are obligated to acquire upon call by the Safe Harbor Corporation, but in no event later than December 31, 1933, capital stock of Safe Harbor Water Power Corporation amounting to $5,049,000, in addition to their investment of $3,951,000, as of December 31, 1931.

[23315] (page 1)

THE PUBLIC SERVICE COMMISSION OF THE COMMONWEALTH OF PENNSYLVANIA

Application Docket No. 21579, (Folder No. 2)

In re: Application of SAFE HARBOR WATER POWER CORPORATION—For modification of the Certificate of Public Convenience approving the beginning of the exercise of the rights, power or privilege of the supply, storage or transportation of water and water power for commercial and manufacturing purposes in Manor Township, Lancaster County, and Chanceford Township, York County, by amending the restriction which limits service to certain customers named therein.

REPORT AND ORDER OF THE COMMISSION

BY THE COMMISSION:

This is an application for modification of one of two conditions in a certificate of public convenience heretofore issued to the Safe Harbor Water Power Corporation, hereinafter referred to as Safe Harbor Company, a domestic corporation authorized by its charter to supply, store, and transport water and water power for commercial and manufacturing purposes in Manor Township, Lancaster County, and Chanceford Township, York County, in this Commonwealth.

In this certificate granted by this Commission, approving applicant's exercise of its charter rights, there were inserted two conditions. The first related to the method of construction of applicant's hydro-electric project by means

of which its electric power was to be generated. With this condition we are not here concerned. The second condition restricted the sale or disposal of hydro-electric power to "the Consolidated Gas Electric Light and Power Company, of Baltimore, Maryland, and the Pennsylvania Water and Power Company, of Holtwood, Pennsylvania, and to the latter company only for resale to present customers of said Pennsylvania Water and Power Company, viz: Edison Electric Company of Lancaster, Pennsylvania; Chester Valley Electric Company of Coatesville, Pennsylvania; Edison Light and Power Company of York, Pennsylvania; and the Consolidated Gas Electric Light and Power Company of Baltimore, Maryland."

In the instant proceeding applicant asks this Commission so to modify or enlarge the latter condition as to permit it to sell or dispose of its power directly, not only to the companies it is now serving indirectly through Pennsylvania Water and [23316] (page 2) Power Company of Holtwood, Pennsylvania (hereinafter referred to as Holtwood Company), but also to three additional companies not now served either directly or indirectly by it, viz: Metropolitan Edison Company of York, Pennsylvania, The Pennsylvania Railroad Company, and the Philadelphia Electric Company. Applicant also asks the right to sell or dispose of power to Holtwood Company for resale to all companies named in the existing certificate or included in the proposed modification, but to none not so named or included.

Formal protests were filed by the Pennsylvania Power and Light Company, and the Commission has permitted the United Mine Workers of America, the Chambers of Commerce of Pottsville, Hazleton, Shenandoah, Mt. Carmel, Wilkes-Barre and Scranton, and various coal operators and municipalities in the anthracite district of the Commonwealth to intervene in protest. Hearings have been held, briefs filed, oral argument presented, and the matters are now before us for disposition.

The protests so far as they relate to prospective consumers other than the Metropolitan Edison Company, The Pennsylvania Railroad Company and the Philadelphia Electric Company, are based on the contention that the applicant has failed to sustain the burden of proof that approval is necessary or proper in the public interest. The uncontradicted testimony in support of the application is to the effect that contractual relationships and inter-company accounting will be simplified if direct sale by Safe Harbor Company is permitted that it is desirable in the public interest for both that company and Holtwood Company, a nearby electric power producer, to be in a position to make joint contracts with and supplement service to the permitted consumers. In the absence of any showing that approval of direct sale of power by Safe Harbor Company to the said companies now served by Holtwood Company would adversely affect the public interest, the Commission finds and determines that applicant has met the burden of proof resting upon it, and that approval of such direct sale is necessary or proper for the service, accommodation and [23317] (page 3) convenience of the public.

As to the proposed sale of Safe Harbor power direct to Metropolitan Edison Company, the record shows that the loss by reason of Safe Harbor's inability to make such sale amounts to $1,900 per week, due to (1) reduction in amount of energy sold and (2) additional and unnecessary steam generation at Baltimore. There is no testimony or indication that approval of this phase of the application will injure protestant, Pennsylvania Power and Light Company. The Commission therefore finds that it is in the public interest that the applicant be permitted to sell power directly to Metropolitan Edison Company.

With reference to the Philadelphia Electric Company, the record shows that the sale of Safe Harbor power to that company will permit more complete utilization of the water power of the Susquehanna River, prevent the waste of off-peak hydro energy during periods of substantial river flow,

and tend to reduce the overall cost of power supply over a large territory. The Commission, therefore, finds that approval of direct sale of Safe Harbor power to Philadelphia Electric Company is in the public interest.

The major issue in the present proceeding is raised by the application for the right to sell power to The Pennsylvania Railroad Company, a contract for such sale having been entered into between the applicant and the railroad, subject to Commission approval. Much testimony of an involved and technical nature has been presented upon this issue, and the Commission has had the benefit of briefs and oral arguments on both sides.

The majority of protestants' contentions may be disposed of without extended discussion. The argument that applicant has shown bad faith and has violated the terms of stipulations and contracts by asking for these additional rights is unconvincing in view of the fact that the stipulation upon which the contention is based [23318] (page 4) included the condition "without the approval of The Public Service Commission hereafter first obtained". The present application clearly fulfills this condition.

It is further contended that Commission approval would authorize acts ultra vires Safe Harbor Company, since that corporation's charter grants the right to dispose of electric power developed "by means of water power" only, and the proposed operations would involve the sale of steam power produced in Baltimore. A subordinate point is made to the effect that the sale by Safe Harbor Company of the power generated in Baltimore will mean that a foreign corporation is doing business in Pennsylvania without authority from this Commonwealth. These two arguments are answered by the terms of the application. Commission approval of the application as filed would authorize only the sale of power developed "by means of water power", a right specified in applicant's charter. The circle of applicant's consumers would be enlarged but the character of applicant's production of

power and of the power sold would remain unaffected. Similarly, the Commission does not have before it an application for the right to sell electric power generated by steam. Issuance of the certificate prayed for will not confer upon applicant corporation the right to sell steam generated power, nor would the refusal of the certificate operate in any way to prevent the sale of such power by a foreign corporation. The present applicant is a domestic corporation asking the right to expand its business in Pennsylvania, and the question of whether or not a foreign corporation is doing or intends to do business within this State is not, in our opinion, material in this proceeding.

It is sufficient to say, in answer to protestant's argument that this application involves a new class of service by Safe Harbor Company, that if approval of the proposed service is necessary or proper in the public interest the mere novelty of such service cannot avail to prevent favorable action by the Commission.

The contention that approval would reduce the possible consumption of anthracite coal by Pennsylvania Power and Light Company is entitled to great weight [23319] (page 5) and careful consideration. But it loses much of its force in face of the fact that the two major parties in this case are not the sole possible sources of electrification power. Upon refusal of this application the railroad might decide to purchase power from the Philadelphia Electric Company, the Metropolitan Edison Company (which has a distribution point at Middletown, Dauphin County, not far from Safe Harbor, Lancaster County), or from some source outside the State. Even if the Commission were convinced that a negative decision in this case would secure the electrification contract for protestant, and that protestant would generate electric power by steam—which it is in no way bound to do,—with a consequent increased consumption of anthracite coal, this conviction could not, of itself, determine the ultimate decision. The Commission in this case, as in all cases, must balance the interest of various

classes and portions of the public and make that finding which, in comprehensive contemplation of all of the known facts, will confer the greatest benefit upon the greatest number of citizens of this Commonwealth.

The protest of the anthracite mining interests awakens our deep concern. However, the use of electric energy in the place of steam energy in railroad operation is a development of rather recent years. Furthermore, the territory here involved is relatively far removed from the anthracite mines; indeed, it is at the very door of the applicant, a great Pennsylvania enterprise harnessing the Susquehanna River and more directly concerned with electric power production and use than is the mining industry. The Commission could not, even by refusing this application, assure increased business to coal producers or increased consumption of their product. Therefore, although we are fully sensible and appreciative of the unfortunate economic situation which confronts the coal industry in our Commonwealth today, we cannot give controlling weight to this protest.

[23320] (page 6)

The issues of this proceeding may be stated in the form of two questions, viz: (1) Is this application so premature as to prevent proper consideration and decision at this time; and (2) In view of the fact that The Pennsylvania Power and Light Company is at present authorized to furnish and is furnishing electric power to consumers in the territory involved, should Safe Harbor Company be granted the right to sell power to The Pennsylvania Railroad Company in the same territory?

With reference to the first question, the record shows that the parties themselves have for three years been discussing the problem of supply of power in Lancaster County for railroad electrification; that the electrification of the Washington-Perryville Line of the railroad will be inaugurated in the near future; that upon its completion,

Philadelphia-Harrisburg electrification will be the next project to be consummated; and that the present design, location, and character of transmission lines and equipment, and the construction of a substation and a cable tunnel at Safe Harbor depend upon the prospect of the supply of power to the railroad company. The record is replete with references to conferences between the parties upon the subject matter of this case, and it is clear that much time and thought have been expended upon the problems involved and their solution. The Commission, in view of the facts appearing in a very voluminous and carefully developed record, does not feel that the information now before it is inadequate, nor is it persuaded that lapse of time will substantially alter the principles and conditions upon which its decision must be based.

The great bulk of the testimony was directed to the second question. The Pennsylvania Power & Light Company, hereafter referred to as protestant company, stated that it could and would render to The Pennsylvania Railroad Company the same service at the same place and at the same rate as provided by the contract with Safe Harbor Company. In support of this statement, plans were outlined for the construction of a new steam generating plant located near Sunbury and for a transmission line from that plant to Manor Township, Lancaster County, some seventy miles away. The Sunbury plant and the transmission line therefrom are the backbone of the plan, although some additional power [23321] (page 7) would be secured from existing generating plants. Certain construction work and installations at Safe Harbor would be necessary to enable applicant to fulfill the terms of the railroad contract, but it is clear from the record that such construction and installations will be much less extensive and less costly than those which protestant company would provide to render the same service.

Thus the issue is clearly presented whether protestant company is capable of rendering the same service at the

same rates. It is undisputed that the Safe Harbor generating plant is located at approximately the load center of the Pennsylvania's electrification. It would, therefore, seem that more reliable and efficient service could be furnished from that plant than by means of a system involving long distance transmission lines. Protestants did not deny that the Safe Harbor plant was in a very advantageous location and it appears that if protestant company were to supply the railroad load it is entirely possible that it would contract with the Safe Harbor Company for some of its power. Apparently protestant company is willing to have the Safe Harbor Company supply power to the railroad through it and for its account. It is impossible from examination of the record to say definitely that protestant company rather than the Metropolitan Edison Company or the Philadelphia Electric Company will secure the railroad business if this application is refused; or that if it does get the business, supply by it of electrification power purchased from the applicant will not be the ultimate result; or even that the railroad might not generate its own electric energy. Although it is the general policy of the Commission to prevent the establishment of competitive services and to protect public utilities which have developed and served the territory in which they operate, this general policy cannot and should not be applied where the proposed service is necessary in addition to existing service and the applicant company is better able to meet a specific need; especially when the presently effective certificate was granted with no thought that the large new railroad business would develop in the territory.

The fact that The Pennsylvania Railroad Company has chosen the applicant as its most available source of supply may be taken as some indication that protestant [23322] (page 8) company's service would not be equally efficient. The railroad in this instance will be by far the largest consumer of electricity in Manor Township, and its convenience and interest should govern, provided the consuming

public in general is not injured or inconvenienced. Although no utility can, by entering into a contract, compel Commission approval of operation under such contract, nevertheless the Commission in the present case must give some weight to the conclusion reached by The Pennsylvania Railroad Company after a detailed investigation and a comprehensive survey of the entire situation.

After careful consideration of the facts of record and the arguments presented, The Commission is of opinion and finds that approval of this application is necessary or proper for the service, accommodation and convenience of the public: THEREFORE,

NOW, to wit, January 10, 1933, IT IS ORDERED: That the second condition in the certificate of public convenience heretofore granted to the applicant under date of March 31, 1930, be and is hereby modified to read as follows: That the Safe Harbor Water Power Corporation shall not, without the approval of The Public Service Commission hereafter first obtained, sell or dispose of the electric energy or power to be generated at its plant at Safe Harbor, Lancaster County, Pennsylvania, to any customer other than: (1) Consolidated Gas Electric Light and Power Company of Baltimore, Maryland; (2) Pennsylvania Power & Light Company; (3) The Pennsylvania Railroad Company; (4) Chester Valley Electric Company of Coatesville, Pennsylvania; (5) Edison Light and Power Company of York, Pennsylvania; (6) Metropolitan Edison Company; (7) Philadelphia Electric Company; and (8) Pennsylvania Water & Power Company of Holtwood, Pennsylvania, and to the latter company only for resale to the other companies enumerated herein.

THE PUBLIC SERVICE COMMISSION
OF THE
COMMONWEALTH OF PENNSYLVANIA

(Signed) Clyde L. King
Chairman

Attest:

Louis Tevell
Secretary

(Seal of The Public Service Commission
of the Commonwealth of Pennsylvania)

Exhibit No. 164

EXHIBIT No. 164.

[23323]

July 19, 1932

Memorandum to Messrs. Wm. Schmidt, Jr.
James L. Rintoul:

Re: KWH. Accounting after July 1, 1932:

• • •

[23325] (page 3)

• • •

Net daily backfeed by Baltimore Company to Holtwood Company, which is to be billed at cost plus 10%, will be based on the in and out readings at Highlandtown, Pratt Street, Westport, Riverside and Perryville combined.

• • •

[23326] (page 4)

• • •

OPERATING COMMITTEE

(s) F. E. Ricketts
F. E. Ricketts

(s) R. L. Thomas
R. L. Thomas

FER
RLT
/MS.

ILLUSTRATIONS OF DIFFERENT METHODS OF TREATING DEPRECIATION WITHIN THE RATE MAKING FORMULA

	Undepreciated Rate Base		Depreciated Rate Base	
	Case 1	Case 2	Case 3	Case 4
1. Utility plant	$5,300,000	$5,300,000	$5,300,000	$5,300,000
2. Depreciation reserve	700,000	700,000	700,000	700,000
3. Deduction for depreciation			269,000	700,000
4. Rate base	5,300,000	5,300,000	5,031,000	4,600,000
5. Fair rate of return	6.5	6.5	6.5	6.5
6. Return allowed	$ 344,500	344,500	327,000	299,000
7. *Income Statement*				
8. Operating revenues	1,034,568	1,000,000	1,034,568	1,000,000
9. Operating revenue deductions:				
10. Operating expenses	450,000	450,000	450,000	450,000
11. Depreciation expense	88,500	60,500	106,000	106,000
12. Taxes	151,568	145,000	151,568	145,000
13. Total operating revenue deductions	690,068	655,500	707,568	701,000
14. Utility operating income (return allowed)	344,500	344,500	327,000	299,000
15. Other income	26,000	26,000	26,000	26,000
16. Gross income	370,500	370,500	353,000	325,000
17. Income deductions:				
18. Interest on long term debt	105,000	105,000	105,000	105,000
19. Other income deductions (net)	19,000	19,000	19,000	19,000
20. Deduction representing credit to consumers	17,500	45,500		
21. Total income deductions	141,500	169,500	124,000	124,000
22. Net income	$ 229,000	$ 201,000	$ 229,000	$ 201,000

Note:

The data used for these illustrations correspond generally to the operating ratios, the utility plant per dollar of revenue and the ratio of depreciation reserve to total plant shown by the Summary Section of Statistics of Electric Utilities in the United States, Federal Power Commission, 1939.

Case 1 represents the use of an undepreciated rate base and a credit to consumers on the balance in the depreciation reserve at a rate corresponding to a risk free rate of interest (assumed here to be 2.5 per cent).

Case 2 represents the use of an undepreciated rate base and a credit to consumers on the balance in the depreciation reserve at a rate equal to the fair rate of return (assumed here to be 6.5 per cent).

Case 3 represents the use of a depreciated rate base determined by deducting from total utility plant 5/13 of the balance in the depreciation reserve.

Case 4 represents the use of a depreciated rate base determined by deducting the balance in the depreciation reserve from total utility plant.

EXHIBIT No. 166.

[23328]

COMPARATIVE FLUCTUATIONS OF THE TWO LOWEST AND THE TWO HIGHEST EARNINGS-PRICE RATIOS INCLUDED IN THE GROUP OF ELEVEN, TOGETHER WITH THE PENN WATER EARNINGS-PRICE RATIOS, WITHIN PHASES OF CYCLES

	Aug. 1929	June 1932	Aug. 1936	Mar. 1938	July 1939	Apr. 1942	Jan. 1946
Average earnings—price ratios:							
Two lowest in group of eleven (a)	1.74	7.66	4.52	5.78	4.98	7.79	4.77
Two highest in group of eleven (b)	3.02	11.31	5.70	10.50	7.82	14.26	5.08
Penn Water	3.91	13.07	4.98	8.35	6.57	11.94	6.28
Change (increase or decrease) from each preceding date:							
Two lowest in group of eleven	—	5.92	3.14(d)	1.26	.80(d)	2.81	3.02(d)
Two highest in group of eleven	—	8.29	5.61(d)	4.80	2.68(d)	6.44	9.18(d)
Penn Water	—	9.16	8.09(d)	3.37	1.78(d)	5.37	5.66(d)
Percent change (increase or decrease) from each preceding date:							
Two lowest in group of eleven	—	340	41(d)	28	14(d)	56	39(d)
Two highest in group of eleven	—	275	50(d)	84	26(d)	82	64(d)
Penn Water	—	234	62(d)	68	21(d)	82	47(d)

(a) Hartford Electric and Connecticut Power, the two lowest earnings-price ratios among the eleven for the months of June, 1932, March, 1938 and April, 1942.

(b) Consolidated Edison and Pacific Gas & Electric, the two highest earnings-price ratios among the eleven for the months of June, 1932, March, 1938 and April, 1942.

(d) Decrease.

EXHIBIT No. 167.

[23329]

CHANGES IN EARNINGS-PRICE RATIOS FOR THE PENN WATER COMMON STOCK AND FOR THE MEDIAL FOUR OF SIX COMMON STOCKS TO REFLECT EARNINGS DATA BECOMING AVAILABLE AFTER THE PREPARATION OF EXHIBIT 29.

	Penn Water		Mean of Medial Four of Six	
Period	Per Sch. 1	As Revised	Per Sch. 3	As Revised
Sept., 1944	8.64	8.64	6.47	6.47
Oct.	9.28	9.28	6.40	6.43
Nov.	9.06	9.09	6.29	6.38
Dec.	8.66	8.68	6.29	6.41
Jan., 1945	8.65	8.70	6.14	6.29
Feb.	7.95	8.01	6.04	6.12
Mar.	7.94	8.00	5.97	6.09
Apr.	7.51	7.59	5.90	5.92
May	7.30	7.40	5.66	5.62
June	7.11	7.21	5.54	5.47
July	7.15	7.27	5.59	5.49
Aug.	7.10	7.22	5.67	5.56
Sept.	6.72	6.85	5.55	5.44
Oct.	6.41	6.53	5.30	5.31
Nov.	6.24	6.36	5.16	5.30
Dec.	6.38	6.50	5.22	5.38

EXHIBIT No. 169.

[23331]

January 31st, 1907.

To

The Auditor General of Pennsylvania.

Dear Sir:—

In explanation of the report of capital stock of McCall Ferry Power Company submitted herewith and of the omission of any certificate of valuation, the undersigned, Vice-President and Treasurer, respectively, of said Company, beg to state as follows:

It seems to them impossible to estimate and appraise the capital stock of said Company for purposes of taxation at the present time, as it existed between the 1st and 15th days of November A. D. 1906. In the first place, the stock did not have, at that time, nor has it had since, any market value, there having been no sales thereof, according to our information and belief. No price or value is "indicated or measured by net earnings or by the amount of profits made either declared in dividends or carried into surplus or sinking fund"., because there have been no profits of any sort. On the other hand, if the stock were valued by the mere intrinsic value of the tangible property and assets which it represents, that valuation might be too low. This property and assets, at the time under consideration, consisted chiefly of a partially constructed dam and power house, real estate and flowage rights affecting real estate, if the latter may be called tangible property. The Company is engaged in constructing a dam in the Susquehanna River to be used in the development of water power for the manufacture of electricity for sale and it has acquired properties for this purpose. When its dam, power house, transmitting lines, &c. are completed and in operation, and if it shall find customers for its products, it may be demonstrated that its property and good will, when so used and availed of are

such as to make its capital stock of very considerable value. At present it has, of course, no good will nor has it any special franchises or privileges.

In view of the foregoing, the undersigned have found themselves entirely unable to make any estimate and appraisal of the capital stock of said Company for purposes of taxation at the present time.

Yours respectfully,

(S.) J. W. Kirkland
Vice-President.

(S.) Wm. H. Barnum
Treasurer.

EXHIBIT No. 170.

[23332]

MC CALL FERRY POWER COMPANY
Sixty Wall Street
New York

January 19, 1906.

Boyd Ehle, Esq.,
McCall Ferry, Penna.

Dear Ehle:—

I am enclosing form of stock deposit agreement for 100 shares of the common stock of this Company, which I am putting in your name to give you an additional interest in the Company. I also enclose a similar agreement for Anderson for 50 shares. Will you both sign these at the places indicated, and return them to Messrs. Harvey Fisk and Sons, who will return to you copies of the agreement with their signature and that of the Voting Committee; these signed agreements will be your evidence of title to the stock, and the stock certificates themselves will be delivered when the Voting Committee expires. Will you explain this to Anderson, and tell him that I hope the stock before long will be worth something?

Yours very sincerely,

(S.) Cary T. Hutchinson.

Enc 2

EXHIBIT No. 171.

[23333]

(Copied from General file 40B)

EXTRACT OF THE TESTIMONY OF J. H. HARLOW IN THE CASE OF SUSQUEHANNA POWER COMPANY VS. THE PROPRIETORS OF THE SUSQUEHANNA CANAL IN THE CIRCUIT COURT FOR CECIL COUNTY, JANUARY 28TH, 1907.

(Page 99)

* * *

Q. Mr. Harlow, you have been asked as to the value of these bonds and stock that you took from the McCall's Ferry Company and I think you said you had no dsire to sell them; that you were willing to wait and see what their value would be; you do not mean to say that there is a value of 90 on the bonds now?

A. The reason that I said I was willing to hold on to mine is because I believe they are going to be a good thing; they are paying interest on them now so I think I can hold them.

Q. Not out of earnings of course?

A. No, sir; not out of earnings.

Q. You don't mean to say there is any market for that stock at ten cents on the dollar?

A. No, sir; I never heard of it.

MR. WILLIS: There has been none of it put on the market?

WITNESS: No, sir; it has not any market value yet.

THE COURT: How are these bonds bearing interest?

MR. WILLIAMS: Out of money provided until operations begin.

WITNESS: There have been no bonds issued except to Mr. McGaw and myself.

* * *

EXHIBIT No. 172.

[23334]

(Copied from General file 40A)

EXTRACT OF THE TESTIMONY OF JAMES H, HARLOW IN THE CASE OF SUSQUEHANNA POWER COMPANY VS. PROPRIETORS SUSQUEHANNA CANAL, CONDEMNATION PROCEEDINGS IN CECIL COUNTY, SEPT. 4TH 1906. PAGES 39-40.

* * *

Q. Now Mr. Harlow will you please tell the jury what in your judgment is the present value of the first mortgage bonds of the McCall's Ferry Power Company; or I had better say the value at the time you took them a year ago?

A. I was told by the financial agent—

Q. Financial agent for whom?

A. For what they now call the McCall's Ferry Power Co.; a man by the name of Brown connected with Harvey, Fiske & Co., he said there had been 20% paid in; I presume under the terms of the underwriting there had been another 20% paid in and perhaps a third 20%.

Q. I am asking you what was their value when you took them?

A. When we bought them about 20 cents on the dollar; when we sold the properties, I mean.

Q. What in your judgment then apart from the actual cash that was paid in was the then value of those bonds?

A. $50,000.

Q. And the value of the stock?

A. It was practically nothing; you might call it anything you like, it is common stock and maybe a long time before it has any value.

* * *

EXHIBIT No. 173.

[23335]

(Copied from McCall Ferry Power Co file #112)

The only water-power on the Atlantic Seaboard between New York and Washington is on the Susquehanna River. It is now proposed to develop about 60,000 horse-power at McCall's Ferry on the Susquehanna, about forty miles distant from Baltimore, Harrisburg, Reading and Wilmington; fifty miles from Chester, and sixty-five miles from Philadelphia. This means that the Power Company will have 50,000 horse-power to sell. There is no difficulty in carrying the power as far as Philadelphia or further.

Mr. George S. Morrison, whom we knew very well for many years, was the first engineer to investigate this project thoroughly, to make plans for the dam, etc. Since his death, Mr. William Barclay Parsons, who laid out the subway in New York, who was the engineer of the Rapid Transit Commission, and who is now consulting engineer of the Interborough Rapid Transit Company, has taken up the work left by Mr. Morrison. In General, it is sufficient to say that the engineers report that there is no difficulty in building the dam, and that in every way the project is feasible.

In the territory tributary to this development there are at present more than 500,000 steam horse-power in use. There is, in the opinion of the engineers, and in the opinion of other experts whom we have consulted, no doubt of the ability of the Company to sell this power at profitable prices.

We have gone over the figures given us by the Power Company very carefully, and have consulted our experts here in regard to them. The engineers of the Company, including Mr. Parsons, estimate the cost of the development at $7,200,000. In this is included a considerable sum for contingencies. We, however, are inclined to increase

this sum. An outside figure for the total cost, including contingencies, engineering, and everything else, seems to us $7,843,000.

The estimated income, is figured by the engineers of the Company and by our experts at practically the same figure, viz., $900,000 net. This will be sufficient to pay 5 per cent. interest on the bonds issued, depreciation, 5 per cent. on the preferred stock and something on the common.

The net income, it is believed, may be considerably increased by the sale of surplus power available for a part of the year only.

It is proposed to authorize an issue of five percent. bonds, limited to $10,000,000, of which $8,000,000 will now be underwritten at 90. The underwriters will be called upon for twenty per cent. of their underwriting in cash. Nothing further will be called from them for three years, arrangements having been made to borrow the funds required over and above the twenty per cent. called. Messrs. Harvey Fisk & Sons will act as syndicate managers and will agree to get their commission on the sale of the bonds out of the price at which they are sold over and above 90. The bonds will, we believe, be non-taxable in Pennsylvania.

[23336] (page 2)

With the $8,000,000 bonds underwritten will be given a bonus of $4,000,000 five per cent. cumulative preferred stock. This will be the profit to the underwriters.

The common stock issued will be used to pay the promotors, bankers, etc. The bankers receive no cash commission. All preferred stock issued goes to the underwriters.

A subscriber to $100,000 underwriting will therefore be called upon to put up $20,000 for three years or less. When the bonds are sold this will be returned and the underwriter will get $50,000 preferred stock bonus for nothing.

The management of the company will be in the hands of a committee, on which will be a member of the firm of Harvey Fisk & Sons, a member of the firm of Bertron, Storrs & Griscom, Mr. C. A. Coffin, Mr. H. F. Dimock, who has been interested in this project for some years, myself, and possibly one or two others.

We propose to keep part of this underwriting for ourselves.

Very truly yours,

(S.) Gardiner M. Lane.

P.S. The flow of the river is well known. There is a period of low water which averages about a month a year. The longest period of low water ever known was for three months. The above figures include $1,200,000 for a steam plant to be used during periods of low water, and at other times if desirable.

G.M.L.

EXHIBIT No. 174.

[23337]

(Copied from McCall Ferry Power Co. File #112 L. H. & Co.)

Office of
Lee Higginson & Co.
44 State Street,
Boston

PH—F.

July 19, 1907.

Dear Sir:

About two years ago we placed over $2,000,000 Susquehanna Power Company underwriting, consisting of First Mortgage 5 Per Cent bonds, at 90, carrying a bonus in some cases of 45 per cent., and in some cases of 50 per cent 5 per cent preferred stock, cumulative after April 15, 1909.

We have now bought $100,000. more of the bonds, carrying preferred stock as a bonus which we shall want to sell within the next week or so. Perhaps a short summary of the company and statement of earnings will help to refresh your memory.

The Susquehanna Power Company, or McCalls Ferry Power Co., as we believe it is now to be called, is situated on the Susquehanna River, about 40 miles from Baltimore, Harrisburgh, Reading and Wilmington, 50 miles from Chester and 65 miles from Philadelphia. There is no difficulty in carrying the power as far as Philadelphia or further. The only water-power on the Atlantic Seaboard between New York and Washington is on the Susquehanna River. In the territory tributary to this company there are at present more that 500,000 steam horse-power in use. There is no doubt of the ability of the company to sell all of its power at profitable prices,—in fact, we submit a little

later in this letter figures based on contracts already closed and about to be closed.

The company is being built by the best engineers in the country, Mr. William Barclay Parsons, who built the New York subways, being one of the consulting engineers.

The company was formed originally to develop 50,000 horse-power, but finding that 75,000 horse-power could be developed with a very little additional expense and that the company could sell the full amount without trouble, the increased work was undertaken. The main dam is now almost completed and the chief work remaining is the completion of the power-house and the erection of the transmission lines.

About three weeks ago we sent you an illustrated pamphlet showing in detail the construction of the property. We are now sending you, under separate cover, a copy of the syndicate agreement, giving further details regarding the issue of bonds.

The management of the company is in the hands of a committee on which is a member of the firms of Harvey Fisk & Sons, Bertron, Storrs & Griscom, and Lee, Higginson & Company; also on this committee are Mr. C. A. Coffin, and Mr. H. F. Dimock who has been interested in this project for a number of years.

We quote below from a letter received from Messrs. Bertron, Storrs & Griscom. You will notice that the estimate of earnings is based on contracts already signed and on contracts which the company expects to close with a short time; also you will notice the extremely low prices at which these contracts have been made. If the company is able to earn 8 per cent, on its common stock, [23338] selling power at not over $25., it certainly is in a very safe position. You will also see that the earnings are estimated on the sale of only 75,000 horse-power, whereas the company will be able at times to deliver as much as 100,000 horse-power. This extra 25,000 horse-power, if sold, will be practically all net.

* * *

Our idea now is to sell $100,000 underwriting, figuring the bonds at 90, carrying a bonus of 45% preferred stock. The bonds are only 20 per cent paid, and no further call can be made until after May, 1908. You will notice in the syndicate agreement that the underwriters give an option on their bonds to the bankers at 90. It is hoped and expected that the bonds will be sold before any call in excess of the 20 per cent is made. This will leave the underwriters with the preferred stock costing them nothing. If this underwriting was attractive a year and a half or two years ago it is doubly so now as the chief construction work has already been accomplished and a majority of the contracts actually closed; in other words, we are now offering underwriting on a proposition the success of which is practically assured, and the offer seems extremely attractive. It is the same as if we should offer two years from now Central Colorado underwriting on the same terms as we are at present, and after that company had gone so far with its construction work as to prove its success beyond question.

You may offer any part of this $100,000 on the above terms, subject to confirmation with us. This additional amount which we are taking now is part of $600,000 which is being sold to pay for the cost of the 25,000 horse-power to be developed over and above the 50,000 planned at first.

If there are any further questions you wish to ask, kindly advise us.

Very truly yours,

EXHIBIT No. 175.

[23339]

(Copied from Co. File #3951 — 3)

McCALL FERRY POWER COMPANY
Office of the Chief Engineer
Room 2407, Sixty Wall Street.
New York City

April 20th, 1908.

H. F. Dimock, Esq. President,
McCall Ferry Power Company,
#60 Wall Street, New York City.

Dear Sir,—

The following report has been prepared to supplement the joint report of the Advisory Engineers of the Company, dated April 17th 1908, and gives the facts contained in that report in greater detail as well as certain additional information.

The original basis of this project was a dam at McCall Ferry in accordance with the general designs of the late Geo. S. Morison, with a crest elevation of 155 feet and a power house to deliver 50,000 horse power.

Further investigation showed that it was practicable to make the development on a larger scale, and plans were drawn for a dam having a crest elevation of 165 feet, and a power house to deliver 100,000 horse power.

At the time that capacity of the plant was doubled, it was known that it would be necessary to provide more money, but no steps were taken to this end; consequently last November the Company found itself out of funds and the work was discontinued.

This increase in the output of the plant was made possible by the excavation of a tail race, which, together with the increase in the height of the dam, gives an increase of approximately 15 feet in the available head, and also by reason of favorable contracts for the supply of auxiliary steam power required. The minimum power of the river is much less than this, and the economical output is determined principally by the cost of the auxiliary steam power that must be supplied during the low water season.

The condition of the work at present is,—

The dam is finished entirely across the river, with the exception of certain openings left in it for the passage of the spring flood waters; these openings can be closed at any time.

The power house substructure is completed; the intake and discharge passages for the water are finished and part of the superstructure is up. All construction work below the water level has been [23340] (page 2) completed and work can be carried on in the future without regard to the condition of the river, with the single exception of the excavation of the tail race, which must be done at low water. The foundation for both the dam and the power house is solid rock throughout; no artificial foundations of any kind have been used.

From now on the execution of the work will be simple; all the difficulties have been surmounted, and there is no possibility of future complication. Furthermore, the estimates of the cost to complete the work given herewith can be considered eminently safe, inasmuch as the costs are accurately known from our past work, and also because a large part of the total is for machinery and materials which are under contract.

It is the present plan to complete the power house and the works on the river and to install six units, this work to be done by the McCall Ferry Power Company, and to build a transmission line to Baltimore with a capacity of 60,000 horse power by a New Company; later the four additional

units will be placed in the power house, and additional transmission lines will be built, probably to Lancaster and Reading.

The total estimated cost of the power plant with all works on the river, including the hydraulic and electrical equipment for six units, and including allowances for interest and administration based on the assumed date of completion of July 1st, 1909, will be $10,300,000

The total cost of the transmission line to Baltimore, having a capacity of 60,000 h.p. including right-of-way and sub-station equipment complete, will be 800,000

Making the total cost of the plant and lines equipped to deliver 60,000 h. p. in Baltimore $11,100,000

The total cost for the four additional units in the power house, ready for operation, will be $600,000

The total cost of additional transmission lines for 40,000 h.p. to Lancaster and Reading, will be 900,000

Making the total cost of the plant completely equipped with ten units and with transmission lines to deliver 100,000 horse power $12,600,000

The Company has spent, or has in hand, a total of $7,500,000; it will therefore be necessary to provide $3,600,000 to complete the works and transmission lines for six units, and $5,100,000 to complete the works and lines for ten units.

* * *

[23343] (page 5)

Very truly yours

(S.) Cary T. Hutchinson
Chief Engineer.

EXHIBIT No. 176.

[23347]

(Copied from McCall Ferry Power Co. file #31)

KNICKERBOCKER TRUST COMPANY
66 Broadway.

New York
December 10, 1907

H. F. Dimock, Esq., President
McCall Ferry Power Co.,
60 Wall Street, N. Y.

Dear Sir:

On behalf of the Receivers of the Knickerbocker Trust Company, I beg to acknowledge receipt of a circular from you, dated December 3rd, announcing the practical stoppage of work of the McCall Ferry Power Company and stating that Company had no deposit with the Knickerbocker Trust Company, but that "the suspension of that Company did, however, interfere with our arrangements for getting money to carry on the work". It appears to the Receivers that this phrase is perhaps liable to misconception and misunderstanding. It is difficult to see how the suspension of the Knickerbocker Trust Company had anything to do with the stoppage of work of the McCall Ferry Power Company's undertaking, in view of the fact that no money had been called for from the Knickerbocker Trust Company to carry on the work, except $208,756.20, none of which was to be utilized for carrying on the work, but all for the payment of commissions on loans. In other words, none of it was to pass out of the hands of the Knickerbocker Trust Company or the Receivers to your Company of the Susquehanna Contracting Company.

Enclosed herewith I send you copy of a letter written on behalf of the Receivers, to the Susquehanna Contracting Company under date of December 7th, from which you will see that the Receivers have taken steps to complete the loan originally agreed to be made, and to renew the notes due November 1, 1907.

It seems to the Receivers that other causes must have led to the suspension of the work, the more probable one being that it had been ascertained that the sum agreed to be loaned will not be sufficient to complete the work. Neither the circular issued by you, nor the letter from the Chief Engineer attached thereto, give any information as to whether the money already agreed to be furnished will complete the work.

Very truly yours,

(S.) Henry C. Ide
Receiver

HCI/W

EXHIBIT No. 177.

[23348]

(Copied from the Minutes of the Executive Committee of McCall Ferry Power Co.)

October 30 — 1907

H. F. Dimock, Esq.
President McCall Ferry Power Co.
#60 Wall Street, N.Y. City.

Dear Sir,—

In accordance with the instructions given at the last meeting of the Executive Committee, I beg to submit the following estimates of:

"A"—The cost to be incurred if it is decided to shut down work at once and to retain only such employees as are necessary to safeguard the Company's property.

* * *

(2) To clean up and put away plant at Ferry in order to preserve from damage during indefinite suspension of work $25,000.00

* * *

[23349] (page 2)

* * *

Yours very truly

J. W. Kirkland
Vice-President.

K/M

* * *

EXHIBIT No. 178.

[23350]

(Copied from minutes of the Executive Committee of McCall Ferry Power Co held January 17th. 1908.)

Philadelphia, Jan. 11—1908

My dear Mr. Kirkland—

I am very much disappointed not to have heard from you before this in reference to the settlement of our September and October bills and our Executive Committee have now put it up to me to secure some definite information relative to the work of the McCall Ferry Power Company.

You may recall that I spoke to you early in December as to not having in writing any authority for the cessation of the work on this contract it having been done in a telephone communication from Mr. Cooper on October 24th. last.

In my last interview with you, you had great hopes of being able to give us some definite information the first week in January, but I have as yet heard nothing from you.

Will you please therefore write me upon receipt of this letter an official communication in regard to the actual stopping of work on the contract October 24th. last, and also in regard to making payment of our long overdue bills.

I am obliged to have this information to present at the meeting of our directors which takes place some time the week after next.

Trusting you have in the meanwhile been able to make arrangements to send us a substantial remittance, I am with kindest regards

Yours very truly

H. A. Hand
General Manager

EXHIBIT No. 179.

[23351]

(Copied from Co. file #3951—2)

McCALL FERRY POWER CO.

November 26, 1907.

J. W. Kirkland, Esq., Vice President,
McCall Ferry Power Company,
60 Wall Street, New York.

Dear Sir:—

In accordance with your request of yesterday we hand you herewith a statement showing number of men at McCalls Ferry employed each day during the current month to the 22nd inclusive, the work at which they were employed and the cost of same.

The work done during the month includes the placing of about 600 yards of concrete in the power house substructure at a point where ordinary high water would become a menace to the existing permanent work and plant, and also includes about 130 cubic yards of concrete placed in ice protection arches which was necessary to complete the same.

During the first few days of November the extra number of carpenters was employed in rendering all the head gates safe against high water and in general making the power house concrete safe against all possible floods.

The account "Miscellaneous", besides including electrician and watchmen, includes labor of unloading 10 cars of roof tile, office force on daily payroll, stable account, labor charged to Supply Co. and Hospital and labor of taking inventory.

Yours very truly,

(S.) J. P. Allen,
Purchasing Agent.

JPA/C

EXHIBIT No. 180.

[23352]

Day		Removing and Storing Forms, Plant, Lumber and Tracks	Erection of Forms for Concrete	Mixing and Placing Concrete	Repairs to Cars, Locomotives and Plant	Miscellaneous, inc. Electricians, Watchmen	Total
1	Men	133	97	56		9	295
	Cost	$300.10	$296.00	$122.25		$23.70	$742.05
2	Men	4				25	29
	Cost	$12.40				$53.90	$66.30
4	Men	100			4	15	119
	Cost	$253.30			$12.75	$40.95	$307.00
5	Men	111				9	120
	Cost	$280.10				$25.20	$305.30
6	Men	56	13	11	8	24	112
	Cost	$140.80	$37.00	$20.00	$26.25	$54.25	$278.30
7	Men	42	22	29	12	6	111
	Cost	$106.10	$62.25	$58.25	$39.25	$12.50	$278.35
8	Men	33	40	34	7	6	120
	Cost	$77.80	$116.80	$68.25	$21.00	$13.55	$297.40
9	Men	55	12	44	8	5	124
	Cost	$137.85	$29.25	$96.50	$25.75	$17.80	$307.15
11	Men	64	13		12	18	107
	Cost	$129.69	$29.48		$28.31	$31.26	$218.74
12	Men	59	7		9	15	90
	Cost	$113.45	$20.50		$23.45	$24.25	$181.65
13	Men	34		25	9	24	92
	Cost	$73.05		$44.80	$21.40	$45.15	$184.40
14	Men	42	6	25		16	89
	Cost	$91.05	$17.80	$42.05		$25.85	$176.75
15	Men	32	5	30	5	12	84
	Cost	$66.10	$13.75	$54.50	$12.85	$21.35	$168.55
16	Men	51		12	12	9	84
	Cost	$102.15		$20.05	$29.75	$17.55	$169.50
18	Men	47			19	19	85
	Cost	$64.75			$36.85	$65.25	$166.85
19	Men	65			7	24	96
	Cost	$109.75			$18.70	$30.60	$159.05
20	Men	49			9	26	84
	Cost	$100.05			$22.75	$42.80	$165.60
21	Men	13			9	5	27
	Cost	$30.60			$23.00	$9.25	$62.85
22	Men	47			9	24	80
	Cost	$88.60			$23.00	$38.90	$150.50
	Cost	$2,277.69	$622.83	$526.65	$365.06	$594.06	$4,386.29

EXHIBIT No. 185.

[23358]

(Copied from J. E. Aldred, Receiver,

File # 15.)

6th May, 1909

R.M. Aitken, Esqr.,
Messrs. Kitcat & Aitken,
120, Bishopsgate Street Within,
E. C.

Dear Mr. Aitken,

* * *

[23361] (page 4)

* * *

We shall receive as a bonus for carrying out this proposition a total amount of $3,500,000 of Stock, less such amount as shall be necessary to cover the 50% bonus of Stock above mentioned.

* * *

[23364] (page 7)

* * *

The money would be required one-half this year, and one-half next year. The general proposition of Stock would be a 50% bonus of Stock with the Bonds, and I propose to take $500,000 of Stock myself. This would cover my personal requirements, and one or two people on the other side, who furthered the proposition and whom I must take care of. There would be left a balance of something like $900,000 of Common Stock to be divided between your firm and Messrs. Wood and Holt.

EXHIBIT No. 207.

[23404]

* * *

NOW, THEREFORE, THIS AGREEMENT, Made this fourth day of April, one thousand nine hundred and four, between GEORGE B. WILLSON and WILLIAM F. BEYER, all of the County of Lancaster, State of Pennsylvania, parties of the first part, and DR. CARY T. HUTCHINSON of the City of New York, party of the second part, WITNESSETH as follows:

1. The parties of the first part in consideration of the sum of One Dollar ($1.00), receipt of which is hereby acknowledged, and other valuable considerations, DO HEREBY give, grant, bargain and sell unto the party of the second part, DR. CARY T. HUTCHINSON, of the City of New York, his heirs and assigns, executors, and administrators and nominees, the exclusive option, right and privilege to purchase on or before January 1st, 1906, for the sum of One hundred fifty-five thousand five hundred ($155,500.) Dollars all the real estate which they, the said George B. Willson and William F. Beyer, [23405] (page 3) parties of the first part, have acquired, and the necessary flowage rights and releases of damages incident to the development of water power on the Susquehanna River near York Furnace, Pennsylvania, being all the real estate that will be affected by the damming of the river across Duncan's Island to the elevation of one hundred and sixty (160) feet above tide water as set forth in memorandum of real estate, releases, &c., hereto annexed and marked Exhibit "A".

* * *

EXHIBIT No. 208.

ESTIMATES

for

McCALL FERRY PLANT

With Permanent Structures for 75,000 Horse-Power and Equipment for 52,500 Horse-Power

---

December 18, 1905

[23415] (Page 2)

COST OF CONSTRUCTION

of Hydro-Electric Plant at McCall Ferry, with Dam at Elevation 185 feet and Power-house large enough to contain 10 Generating Units with a Capacity to Deliver 75,000 Horse-power, but with Equipment for 7 Units Only, having a Capacity to Deliver 52,500 Horse-power, the Plant being so Constructed that the Other 3 Units can be added at any time.

SUMMARY OF COSTS

1	Dam, Power-house Sub-structure, Raftway, Embankment, including Masonry up to Elevation of Power-house Floor		$2,500,000
2	Buildings		200,000
3	Hydraulic Equipment		275,000
4	Electric Equipment		875,000
5	Transmission Lines to Havre de Grace and Baltimore, with Circuits to deliver one-half of the power to each place		300,000
	Sum		$4,150,000
6	Unclassified and Engineering		415,000
7	Elevation of Tracks of Columbia and Port Deposit Railroad		1,250,000
8	Property, Property Damages and Right-of-way:—		
	McCall Purchase	$750,000	
	Peach Bottom Purchase	425,000	
	Wittmer Purchase	45,000	
	Sundry Small Purchases	15,000	
	Property on Conestoga Creek (estimated)	50,000	
	Damage to Water Plant at Safe Harbor (estimated)	50,000	
	Right-of-way to Baltimore and Havre de Grace	65,000	
	Right-of-way for Railroad	100,000	
			1,500,000
9	Administration		200,000
	Sum		7,515,000
10	Interest during Construction		750,000
	Total		8,265,000

Per Delivered Horse-Power $157

[23416] (page 3)

This leaves a balance of $735,000, from the sale of $10,000,000 bonds @ 90 which is more than enough to pay for the additional three units to make up the total of 75,000 Horse-power.

ANNUAL CHARGES

Interest, 5% on $10,000,000	$ 500,000
Sinking Fund	165,000
All Operating Expenses	250,000
Total	915,000
Income, 52,500 horse-power at $25	1,315,000
Surplus	400,000

This surplus is applicable to the payment of dividends on stock, and would leave $150,000 for the common stock after the payment of $250,000 dividend on preferred stock.

This assumes the delivery of power half to Havre de Grace and half to Baltimore; to deliver one-half to Philadelphia will cost $300,000 more than to deliver it to Havre de Grace.

(S.) Cary T. Hutchinson
Chief Engineer.

EXHIBIT No. 209.

[23417]

(Copied from file #3951—12)

McCALL FERRY POWER COMPANY

Office of the Chief Engineer.

Room 2407, Sixty Wall Street.

New York City

October 3, 1906.

J. W. Kirkland, Esq.
Vice-President and General Manager
McCall Ferry Power Company
60 Wall Street
New York, N. Y.

Dear Sir:—

Referring to your letter of Oct. 3rd, the item headed "Fixed Charges" in Mr. Parsons' report, is made up as follows:

Kerbaugh Contract	$1,250,000
Pennsylvania Railroad Right of Way	180,000
Lands Originally Purchased	1,320,000
Removal of Highways	110,000
Right of Way for Pole Line	180,000
Miscellaneous	100,000
Total	$3,140,000

The details of the item of $1,320,000 is made up as follows:

Original Purchase	$ 750,000
Peach Bottom Purchase	425,000
Witmer Purchase	45,000
Sundry Small Purchases	100,000
Total	$1,320,000

* * *

[23418] (page 2)

* * *

Very truly yours

(S.) Cary T. Hutchinson
Chief Engineer.

EXHIBIT No. 210.

[23419]

(Copied from Co. File #3951 — 13)

McCALL FERRY POWER COMPANY
Sixty Wall Street
New York

May 8th, 1907.

H. F. Dimock, Esq.,
President, McCall Ferry Power Company,
60 Wall Street, N. Y. City

Dear Sir:—

We present herewith in detail and summarized our estimates of the total cost of the works of the McCall Ferry Power Company, including purchases of land and all other expenses, the cost being carried up to Jan. 1st, 1909, at which time the Company will have in operation plant capable of delivery 50,000 horse power.

* * *

[23420] (page 2)

* * *

Very truly yours,

(S.) J. W. Kirkland
General Manager.

(S.) Cary T. Hutchinson
Chief Engineer.

Exhibit No. 210

[23421] (page 3)

McCALL FERRY POWER COMPANY

Cost of Construction of Plant

SUMMARY

Sheet		Total Estimate	Expenditures to Apr. 1, '06	Balance Apr. 1, '06
A.	Hydraulic Construction:			
	Dam & Power House Substrct.	$2,662,300	$1,529,400	$1,152,900
	Improvement of Tail Race	305,000	101,700	203,300
	Removal of Highways	50,000	7,200	42,800
	Clearing Flowage Basin	10,000	100	9,900
A.	Hydraulic Machinery	482,100	4,200	477,900
B.	Elec. Construction & Equipment	1,372,000	2,100	1,369,900
C.	Administration & Gen'l. Exp., and Miscellaneous	962,300	541,900	420,400
	Relocation of Railroad ($1,250,000 less $45,000 for old rails.)	1,205,000	698,400	506,600
	Real Estate:			
	Original Purchase	750,000	750,000	——
	Syndicate Managers	50,000	50,000	——
	Harlow Purchase	435,000	435,000	——
	Pole Line & Balto. Sub. Sta.	185,000	——	185,000
	Pa. R. R. & Misc.	167,000	130,100	36,900
D.	Interest during construction, to Jan. 1, 1909	1,179,300	759,900	419,400
		$9,815,000	$5,010,000	$4,805,000

May 7th, 1907.

Note

Please turn to Card 82
for Exhibit No. 216, Page 3851.

EXHIBIT No. 232.

[23565]

IN THE
UNITED STATES DISTRICT COURT FOR THE DISTRICT OF MARYLAND

IN EQUITY.

PENNSYLVANIA WATER & POWER COMPANY,
A BODY CORPORATE,

v.

THE SUSQUEHANNA POWER COMPANY,
A BODY CORPORATE.

To the Honorable, the Judge of the United States District Court for the District of Maryland:

Pennsylvania Water & Power Company, a body corporate, brings this its bill of complaint against The Susquehanna Power Company, a body corporate, and complaining says:

1. Your orator, Pennsylvania Water & Power Company, is a corporation duly incorporated under the laws of the State of Pennsylvania and is a citizen and a resident of the State of Pennsylvania. The defendant, The Susquehanna Power Company, is a corporation duly incorporated under the laws of the State of Maryland and is a citizen and a resident of [23566] (page 2) the State of Maryland. This is a suit of a civil nature in equity between citizens of different states and the matter in controversy exceeds, exclusive of interest and costs, the sum of three thousand dollars.

2. Your orator is the owner of a large dam and power house in, across and by the Susquehanna River in the

vicinity of McCalls Ferry in Martic Township, Lancaster County, and Lower Chanceford Township, York County, State of Pennsylvania. The erection of said dam and power house was begun by McCall Ferry Power Company, a Pennsylvania corporation, (hereinafter called "McCall Company") and was completed by your orator. Your orator succeeded, through certain foreclosure proceedings hereinafter mentioned, to all the property, rights and franchises of the McCall Company. Said dam and power house were erected for the purpose of developing electric current and power for sale to such persons, partnerships and corporations as might desire to purchase the same. The dam and the first unit of the power plant were completed and the generation of the electric current at said plant and the transmission thereof was begun by your orator on October 14, 1910. Ever since October 14, 1910, your orator has been engaged in generating electricity at said dam and plant and transmitting and selling the same to purchasers [23567] (page 3) in the States of Pennsylvania and Maryland. Said dam is located at the town of Holtwood about half a mile below McCalls Ferry and about ten miles up the river from the Maryland state line. The tailrace of your orator's dam extends over seven thousand feet below the dam itself to the foot of Cully's Falls in the channel in the northeastern side of the bed of the river along the left bank thereof. In connection with the ownership, use and operation of its dam and plant your orator is the owner in fee simple of sundry pieces or parcels of land on both sides of the Susquehanna River and of islands and land under water in said river at, above and below its dam and power house in the Counties of Lancaster and York, in the State of Pennsylvania, and is also the owner of sundry rights of flowage and other riparian rights and other easements, privileges, interests in real property and other properties and rights at, above and below its dam in the counties aforesaid. Among the lands so owned by your orator in fee simple are the lands on both sides of the Susquehanna

River where your orator's dam is located, Fry Island, on which part of your orator's dam is located, Piney Island, Barclay Island and Grave Island, which are below your orator's dam but not below the tailrace of said dam, and also all the land on the left bank of the Susquehanna River extending from your orator's dam to the end of the tailrace of said dam at the foot of Cully's Falls, as well as land on said left bank below the foot of Cully's Falls.

[23568] (page 4)

3. The McCall Company was incorporated by the merger and consolidation of Hillside Water and Power Company and Susquehanna Water and Power Company, two Pennsylvania corporations, by a joint agreement for merger and consolidation dated April 1, 1905, and the issuance of letters patent dated April 14, 1905, recorded among the Lancaster County records in Charter Book No. 2, page 435, and among the York County records in Record Book 14 F, page 579.

Hillside Water and Power Company was incorporated by letters patent issued on September 2, 1902, and a certificate of incorporation recorded in the office of the Secretary of the Commonwealth in Charter Book No. 71, page 49, and in the office for the recording of deeds in York County in Record Book No. 12 J, page 337, for the purpose of "the storage and transportation of water and water power for commercial and maufacturing purposes in Lower Chanceford Township, York County, Pennsylvania, and the supply of the same to the public and to such persons, partnerships and corporations residing therein as may desire the same; and in order that the water and water power may be supplied to the public to the best advantage in furtherance of its corporate purposes, the development by the use of the same of electric current and power to the public, individuals, firms and corporations at any place or places at such prices as may be agreed upon."

[23569] (page 5)

Susquehanna Water and Power Company was incorporated by letters patent issued on September 2, 1902, and a certificate of incorporation recorded in the office of the Secretary of the Commonwealth in Charter Book No. 71, page 48, and in the office for the recording of deeds in Lancaster County in Charter Book No. 2, page 261, for the same purpose, except that the place mentioned was Martic Township, Lancaster County, instead of Lower Chanceford Township, York County.

4. The McCall Company to secure the payment of the principal and interest of an authorized issue of ten million dollars ($10,000,000) principal amount of its bonds executed a certain mortgage dated June 15, 1905, to Knickerbocker Trust Company, a New York corporation, as Trustee, covering all those pieces or parcels of land and of land under water and all those rights of flowage and other riparian rights and all those easements, privileges, interests in real property and other properties and rights in the Counties of Lancaster and York, in the State of Pennsylvania, and the Counties of Harford and Cecil, in the State of Maryland, particularly described in said mortgage or deed of trust and also the several capital stocks and shares thereof described in said mortgage or deed of trust and also the property described in paragraph Seventh of the granting clause of said mortgage, to wit; all patents, inventions, rights or [23570] (page 6) titles in or to patents or inventions, rights to use patented devices, machines, articles or processes, all trade-marks, trade-names and rights to use trade-marks or trade-names, all other land, land under water, water, water rights, water powers, easements, rights to flood lands, real property of every kind and all interests or rights therein, all structures, power plants, hydro-electric works, buildings, dams, raceways, canals, pole lines, transmission lines, fixtures, machinery, appliances, apparatus, equipment and tools, all rights, privileges and franchises

and all other shares of stock in any incorporated company, then owned or which should thereafter be acquired by the McCall Company; it being the intent of said mortgage to convey not only the property therein specifically described but also all other property of the McCall Company of the character mentioned in said paragraph Seventh of the granting clause thereof whether then owned or thereafter acquired.

5. Said mortgage or deed of trust was duly executed, acknowledged and recorded, bonds were duly issued thereunder and secured thereby and, defaults having been made by the McCall Company in the payment of interest and principal of said bonds, said mortgage or deed of trust was duly foreclosed by proceedings in the Circuit Court of the United States for the Eastern District of Pennsylvania instituted by Knickerbocker Trust Company, Trustee as aforesaid, and [23571] (page 7) ancillary proceedings in the Circuit Court of the United States for the Southern District of New York and the Circuit Court of the United States for the District of Maryland, which foreclosure proceedings resulted in a decree of foreclosure and sale in the Circuit Court of the United States for the Eastern District of Pennsylvania dated October 12, 1909, and ancillary decrees in the Circuit Court of the United States for the Southern District of New York dated October 15, 1909, and in the Circuit Court of the United States for the District of Maryland dated October 20, 1909, pursuant to which decree all the property, both real and personal, then owned by the McCall Company, wheresoever situated and every part and parcel thereof, including the property particularly described in said decrees as subject to the lien of said mortgage or deed of trust, was sold together as an entirety by Henry P. Brown, Esq., Special Master, to William M. Barnum, and was conveyed by said Henry P. Brown, as Special Master, to William M. Barnum by a deed dated January 13, 1910, and was also successively conveyed by two deeds of the same date, viz., January 13, 1910, the first from said

William M. Barnum and wife to William M. Barnum and others for and on account of whom said property had been purchased by said William M. Barnum, the second from said William M. Barnum and others to your orator, said William M. Barnum and others under the laws of the State of [23572] (page 8) Pennsylvania having become constituted a body politic and corporate and having after due publication of notice organized such corporation, to wit, your orator, in the manner by law provided and having adopted the corporate name of Pennsylvania Water & Power Company therefor. Said mortgage or deed of trust was duly recorded in the office for recording of deeds in and for Lancaster County, State of Pennsylvania, in Mortgage Book 108, page 77, in the office for recording of deeds in and for York County, State of Pennsylvania, in Record Book 5A, page 20, among the Mortgage Records of Cecil County, State of Maryland, in Liber M. D. No. 3, folio 338, and among the Land Records of Harford County, State of Maryland, in Liber W. S. F. No. 116, folio 328. The three last mentioned deeds, viz., from Henry P. Brown, Esq., Special Master, to William M. Barnum, from William M. Barnum and wife to William M. Barnum and others, and from William M. Barnum and others to your orator, were each duly recorded in the office for recording of deeds in and for Lancaster County, State of Pennsylvania, in Record Book Z, Vol. 19, page 202, Record Book A, Vol. 20, page 120, and Record Book Y, Vol. 19, page 506, respectively, and in the office for recording of deeds in and for York County, State of Pennsylvania, in Record Book 16 Y, page 91, Record Book 16 O, page 662, and Record Book 16 O, page 664, respectively. Copies of said mortgage or deed of trust and said three deeds are filed herewith marked respectively [23573] (page 9) "Plaintiff's Exhibits Nos. 1, 2, 3 and 4."

6. The defendant, The Susquehanna Power Company, claims to have succeeded in the year 1919 through foreclosure proceedings to the property, rights and franchises

of Susquehanna Power Company, a Maryland corporation, hereinafter called "Susquehanna Company".

7. Before proceedings for foreclosure of the mortgage or deed of trust of the McCall Company were begun and before default had been made by McCall Company under said mortgage the McCall Company conveyed and Knickerbocker Trust Company, Trustee as aforesaid, released from the lien of said mortgage in accordance with the provisions thereof by two deeds each dated August 11, 1908, upon the conditions stated in said deeds (1) to Sowego Water & Power Company, hereinafter called "Sowego Company", a Pennsylvania corporation, by one of said deeds the property, privileges and rights, real, personal and mixed, and all and singular the rights, titles, interests, and estates in law or in equity of the McCall Company and the Trustee and of either of them in, near, by or along the Susquehanna River in the Counties of York and Lancaster, in the State of Pennsylvania, lying below the foot of Cully's Falls and more particularly described in said deed, and (2) by the other of said deeds to the Susquehanna Company the property of the McCall Company in Maryland more particularly described in said deed. [23574] (page 10) Simultaneously with the execution and delivery of the two last mentioned deeds the McCall Company acquired, so as to pass under the lien of its mortgage or deed of trust and so as to be held thereunder in like manner as other property conveyed thereby, by two quit-claim deeds to it each dated August 7, 1908, one from the Susquehanna Company and Sowego Company, the other from Susquehanna Electric Power Company, a Maryland corporation, all the right, title and interest of said three last mentioned corporations respectively to the real property, franchises, interests, flowage rights and easements on, along, near, in or by the Susquehanna River in the State of Pennsylvania above the foot of Cully's Falls. Said deed to Sowego Company and said quit-claim deeds to the McCall Company from the Susquehanna Company and Sowego Company and to the McCall Com-

pany from Susquehanna Electric Power Company were each duly recorded in the office for recording of deeds in and for Lancaster County, State of Pennsylvania, in Record Book N, Volume 19, page 377, etc., Record Book O, Volume 19, page 286, etc., and Record Book N, Volume 19, page 332, etc., respectively, and in the office for recording of deeds in and for York County, State of Pennsylvania, in Record Book 16 I, page 416, Record Book 16 J, page 648, and Record Book 16 J, page 647, respectively. Said deed to the Susquehanna Company was duly recorded among the Land Records of Cecil County, State of Maryland, in Liber M. D., No. 8, Folio 339, and [23575] (page 11) among the Land Records of Harford County, in Liber W. S. F., No. 125, Folio 362. Copies of said two deeds from the McCall Company and said two quit-claim deeds to the McCall Company are filed herewith marked "Plaintiff's Exhibits Nos. 5, 6, 7, and 8," respectively.

8. In the aforesaid deed from the McCall Company and Knickerbocker Trust Company, Trustee, to Sowego Company, it is recited, among other things, that it appears to the Trustee that a release from the lien of the aforesaid mortgage or deed of trust of the properties in said deed described and of the properties described in the deed from the McCall Company and the Trustee to the Susquehanna Company conveying properties in Maryland bearing the same date as said deed is desirable in the conduct of the business of the McCall Company and that the McCall Company acquires simultaneously so as to pass under the lien of said mortgage or deed of trust and so as to be held thereunder in like manner as other property conveyed thereby property to an amount equal in value to the property released by said deed and by said conveyance to the Susquehanna Company, including the right, title and interest in the real property, franchises, interests, flowage rights and easements in the Susquehanna River above the foot of Cully's Falls quit-claimed and released by the Susquehanna Company and Sowego Company and by the Susquehanna

Electric Power Company [23576] (page 12) respectively, and that the Trustee accordingly joins in the execution of said deed for the purpose of releasing the properties therein described from the lien of said mortgage or deed of trust. The aforesaid deed from the McCall Company and Knickerbocker Trust Company, Trustee, to the Susquehanna Company contains recitals to the same effect and, *mutatis mutandis*, in the same words.

The properties conveyed and released by and particularly described in the aforesaid deed to Sowego Company include:

> Those more particularly referred to and described in the deeds and instruments mentioned in the following sub-divisions of paragraph First of the granting clause of the mortgage or deed of trust, viz.
>
> (a) 16 specified sub-divisions in which are mentioned deeds of certain pieces or parcels of land (subject as to two of said 16 sub-divisions to certain grants or leases not now material).
>
> (b) "So much of the undivided one-half interest described in Subdivision 40 (A. Randolph Kilgore property) as lies below the foot of Cully's Falls."
>
> (c) "So much of the property described in Subdivision 65 (William Sweigart property) as lies between the river and the right of way of the Columbia and Port Deposit Railroad, as located, constructed and operated prior to 1907. Also the right to flow and flood [23577] (page 13) water over, and utilize for water-power purposes, the balance of the property described in said Subdivision 65, by the erection and operation of a dam or dams having a crest elevation of not exceeding 100 feet above mean sea level."
>
> (d) "Subdivision 71, consent and release of and from the Susquehanna Canal & Power Com-

pany, and Subdivision 72, consent and release of and from the Tidewater and Susquehanna River Railroad Company, in so far only as the said consents and releases relate to lands, right and franchises below the foot of Cully's Falls, expresly reserving to the McCall Company and the Trustee the benefit and advantage of said consents and releases in so far as the same relate to lands, rights and franchises above the foot of Cully's Falls; and the McCall Company does hereby authorize the Sowego Company, its successors and assigns, to construct, maintain and operate a dam or dams, and water-power plant or plants and appurtenances at any point or points upon the Susquehanna River below the foot of Cully's Falls."

"Together with the following described property, privileges and rights not specifically described in said deed of trust or mortgage ,which are or may be covered and [23578] (page 14) included by the terms and provisions of paragraph 'Seventh' of the description of property contained in said deed of trust and mortgage, that is to say:

(1) The right to flow and flood water over, and acquire for water-power purposes, by the erection and operation of a dam or dams having a crest elevation of not exceeding 100 feet above mean sea level, so much of the following described parcel of land as lies below the foot of Cully's Falls, that is to say: That certain parcel of land in Martic Township, Lancaster County, conveyed by Amer Kline and wife to Cary T. Hutchinson by deed dated the 28th day of April, 1905, recorded in the Land Records of Lancaster County in Deed Book X, No. 17, at page 416, and conveyed by Cary T. Hutchinson to the McCall Company by deed dated the 6th day of August, 1908, subject to a grant to

the Chanceford Telephone Company of an easement to maintain a telephone line, executed the 29th day of January, 1908.

(2) All those certain pieces or parcels of land in Lancaster County, conveyed to McCall Company by John W. Kephart and wife by deed, dated the 20th day of November, 1907, recorded in the Land Records of Lancaster County, in Deed Book Y, Volume 18, page 572.

(3) Such rights of flowage and water-power as have been, or are about to be, conveyed to the [23579] (page 15) McCall Company, or upon its order or direction by the Columbia & Port Deposit Railway Company, and the Philadelphia, Baltimore & Washington Railroad Company on, near, or by the Susquehanna River between the foot of Cully's Falls and the Pennsylvania and Maryland State Line.

Together with all other property, privileges and rights, real, personal or mixed, of the McCall Company, whether in its own name, or in the name of the Trustee, or in the name of any other person or corporation, situate in the State of Pennsylvania in the Counties of York and Lancaster, lying below the foot of Cully's Falls in the Susquehanna River, that is to say, between said Cully's Falls and the State line between Pennsylvania and Maryland, known as 'Mason & Dixon's Line'," (with an exception not now material) "provided and upon the condition that the Sowego Company shall not flow back upon, encroach upon or interfere with the water-power plant of the McCall Company near McCall Ferry and the tail race thereof extending to the foot of Cully's Falls."

The properties conveyed and released by and particularly described in the aforesaid deed to the Susquehanna Company include, among others:

"all the property, privileges and rights, real, personal or mixed, more particularly referred to and described in paragraphs numbered 'Second' ". (which paragraph Second includes 12 subdivisions, in 9 of which are mentioned [23580] (page 16) deed and patents for sundry pieces or parcels of land in the Counties of Harford and Cecil, in the State of Maryland), " 'Third', 'Fourth', and 'Sixth' of the description of the properties contained in said deed of trust or mortgage, and in a deed from Alexis P. Bartlett, et al, to the Trustee, dated the 7th day of August, 1905, and recorded on the 11th day of August, 1905, in the Land Records of Harford County, Maryland, in Liber W. S. F., No. 115, at folio 336, and in the Land Records of Cecil County, Maryland, in Liber M. D., No. 21, at folio 520, the assignment of the consents and releases described in subdivisions 10, 11 and 12 of said Second paragraph being in so far only as the same relate to the construction, maintenance and operation of a dam or dams and water-power plant or plants and appurtenances upon the Susquehanna River below the Pennsylvania and Maryland State Line, the benefit and advantage of said consents and releases in so far as the same relate to lands, rights and franchises above the Pennsylvania and Maryland State line being expressly reserved and excepted from this conveyance, and the McCall Company does hereby authorize the Susquehanna Company, its successors and assigns, to construct, maintain and operate a dam or dams, water-power plant or plants and appurtenances, at any point or points upon the Susquehanna River below the Pennsylvania and Maryland State line;"

"Together with all other property, privileges and [23581] (page 17) rights, real, personal and mixed, of the McCall Company, whether in its own name or in the name of the Trustee, or in the name of any other person or corporation, and situate in or relating to the

State of Maryland," (with exceptions not now material), "provided and upon the condition that the Susquehanna Company shall not flow back upon, encroach upon, or interfere with the water-power plant of the McCall Company near McCall Ferry, and the tail race thereof extending to the foot of Cully's Falls;"

9. In the decree of foreclosure and sale hereinbefore referred to the enumeration of property subject to the lien of the mortgage or deed of trust and by said decree decreed to be sold includes, among other things:

"All those pieces or parcels of land, and of land under water, and all those rights of flowage and other riparian rights, and all those easements, privileges, interests in real property, and other properties and rights in the Counties of Lancaster and York, in the State of Pennsylvania, particularly described in the following deeds to the McCall Ferry Power Company, viz.:

* * *

j. Quit-claim Deed from Susquehanna Electric Power Company, acknowledged August 7, 1908, and recorded in Lancaster County Records, in Book N, Vol. 19, page 332, and in York County Records in Book 16J, page 647.

[23582] (page 18)

k. Quit-claim Deed from" Susquehanna Company and Sowego Company, "acknowledged August 7, 1908, and recorded in Lancaster County Records, in Book O, Vol. 19, page 286, and in York County Records in Book 16J, page 648.

* * *

All the rights, benefits, properties, privileges, provisions and conditions reserved in, or acquired through or by the execution, delivery and acceptance of, the deeds from the" McCall Company and Knickerbocker

Trust Company to the Sowego Company and the Susquehanna Company "respectively, both dated August 11th, 1908."

In the deed hereinbefore mentioned from Henry P. Brown, as Special Master, to William M. Barnum the enumeration of the property thereby conveyed includes, among other things, the same items expressed in the same words just quoted from the decree of foreclosure and sale.

The deed hereinbefore mentioned from William M. Barnum and wife to William M. Barnum and others contains no particular enumeration of property but conveys "all the property, both real and personal, and the franchises of the" McCall Company "and all the property and franchises conveyed to the said William M. Barnum by the said deed" from Henry P. Brown, as Special Master. The deed from William M. Barnum and others to your orator contains no particular enumeration of property but conveys "all the property", both real and [23583] (page 19) personal, and the franchises of the" McCall Company "and all the property and franchises conveyed to the parties of the first part"

1. All the land on the left bank of the Susquehanna River extending from your orator's dam to the end of the tailrace of said dam at the foot of Cully's Falls is included among those pieces or parcels of land in the Township of Martic, in the County of Lancaster, in the State of Pennsylvania, particularly described in the following deeds (hereinafter designated by the same numbers by which they were designated in the mortgage or deed of trust of the McCall Company, the decree of foreclosure and sale and the deed from Henry P. Brown, as Special Master, and in the case of properties acquired by the McCall Company after the execution of its mortgage or deed of trust by the same letters by which they were designated in said decree of foreclosure and sale and said deed from Henry P. Brown, as Special Master) viz:

"9. Deed from Milton L. Fry and Corina J. Fry, his wife, to Cary T. Hutchinson, dated August 12, 1903, and recorded in the office for recording of deeds in and for York County, in Record Book No. 14F, page 668, on May 25, 1905, and in the office for recording of deeds in and for Lancaster County, in Deed Book G, Volume 17, page 318 &c., on October 28, 1903, conveying six (6) tracts of land in Lower Chanceford Township, York County [23584] (page 20) and Martic Township, Lancaster County, at McCall's Ferry."

The premises, property and rights described in said deed being part of the same premises, property and rights which were conveyed by Cary T. Hutchinson and Susan D. Hutchinson, his wife, to Alexis P. Bartlett and Ross A. Mackey by a certain deed dated June 16, 1905, and recorded in the office for recording of deeds in and for Lancaster County in Deed Book U, Volume 17, page 166, on June 24, 1905, and in the office for recording of deeds in and for York County in Deed Book 14J, page 43, on June 26, 1905; and being part of the same premises, property and rights subsequently conveyed by Alexis P. Bartlett and Georga P. Bartlett, his wife, and Ross A. Mackey to the McCall Company by deed dated August 7, 1905, and recorded in the office for recording of deeds in and for York County in Book 14 J, page 178, and in the office for recording of deeds in and for Lancaster County in Deed Book Z, Volume 17, page 297.

"i. Deed from Cary T. Hutchinson and wife, dated August 6, 1908, and recorded in Lancaster County Records, in Record Book I, Vol. 19, page 327, conveying the same property conveyed to said Hutchinson by Amer Kline and wife by deed dated April 28, 1905, and recorded in Lancaster County Records in Deed Book X, No. 17, page 416, situated in Martic Township, Lancaster County."

So much of the parcel of land conveyed by the deeds mentioned in this paragraph i as lies below the foot of Cully's Falls is subject to the right granted by the McCall

Company and released by Knickerbocker Trust Company, [23585] (page 21) Trustee, to the Sowego Company by the deed hereinbefore mentioned dated August 11, 1908, to flow and flood water over and acquire for water power purposes by the erection and operation of a dam or dams having a crest elevation of not exceeding 100 feet above mean sea level.

The said parcel of land was formerly subject also to the flowage rights which were granted by deed from Thomas Cully to Charles R. McConkey dated May 16, 1900, and recorded in the office for recording of deeds in and for Lancaster County in Deed Book U, Volume 16, page 112, and were successively conveyed by deed from Charles R. McConkey to Martic Water and Power Company by deed dated April 14, 1902, and recorded in the office for recording of deeds in and for Lancaster County in Deed Book U, Volume 16, page 113, deed from Martic Water & Power Company to Susquehanna Falls Power Company, dated September 2, 1902, and recorded in the office for recording of deeds in and for Lancaster County in Deed Book X, Volume 16, page 203, and deed from Susquehanna Falls Power Company to your orator dated February 10, 1925, and recorded in the office for recording of deeds in and for Lancaster County in Deed Book F, Volume 27, page 227.

"q. Deed from Cary T. Hutchinson and wife, dated April 16, 1909, and recorded in Lancaster County Records on April 23, 1909, conveying two certain tracts of land in Martic Township, Lancaster County, viz.: a certain tract containing 25.4 acres, more or less, conveyed by George G. Cully and wife to said Hutchinson by deed [23586] (page 22) dated September 27, 1905, and recorded in Lancaster County Records in Deed Book A, No. 18, page 27, and also that certain tract of land containing 35 acres, 17 perches, more or less, conveyed by Amer Kline and wife to said Hutchinson by deed dated July 27, 1905, and recorded in Lancaster

County Records in Deed Book W, No. 17, page 590, except so much thereof as was conveyed by said Hutchinson and wife to George G. Cully by deed dated November 27, 1905, and recorded in Lancaster County Records on April 10, 1909."

All of Fry Island was included among those pieces or parcels of land or of land under water particularly described in and conveyed by the deeds hereinbefore in this paragraph 10 designated 9.

All of Piney Island, Barclay Island and Grave Island were included among the pieces or parcels of land or of land under water described in and conveyed by the following deeds to the McCall Company (designated by the same letters as in the aforesaid decree of foreclosure and sale and deed from Henry P. Brown, as Special Master) viz:

"f. Deed from John J. Frick and wife, William A. Brown and wife and Louise E. Guion, dated December 17, 1906, and recorded in Lancaster County Records in Deed Book K, No. 18, page 484, conveying a certain island known as Ankrim's Island, Pine Island or Piney Island, [23587] (page 23) in Martic Township, Lancaster County.

g. Deed from Christian F. Quade and wife, dated March 28, 1907, and recorded in Lancaster County Records, in Deed Book Q, No. 18, Page 172, conveying three certain islands in Martic Township, Lancaster County, known respectively as Kilgore Island, Barclay Island and Graves Island."

All the land on the left bank of the Susquehanna River extending from your orator's dam to the end of the tail race of said dam at the foot of Cully's Falls and also all of Fry Island, Piney Island, Barclay Island and Grave Island (including so much of Fry Island as is now flooded by your orator's dam) were conveyed by the deeds hereinbefore mentioned from Henry P. Brown as Special Master, to Wil-

liam M. Barnum, and from William M. Barnum and wife to William M. Barnum and others and from William M. Barnum and others to your orator and by virtue of said conveyances are now owned by your orator in fee simple and have been continuously in the possession and occupancy of your orator ever since the conveyance thereof to your orator on January 13, 1910. So much of that parcel of land on the left bank of the Susquehanna River conveyed by Amer Kline and wife to Cary T. Hutchinson, owned by the McCall Company and mentioned in the aforesaid deed to the Sowego Company, as lies below the foot of Cully's Falls, was conveyed by the [23588] (page 24) same deeds to William M. Barnum, William M. Barnum and others and your orator and by virtue of said conveyance (and of the hereinbefore mentioned deed of flowage rights from Susquehanna Falls Power Company to your orator) is now owned by your orator in fee simple, subject only to the right granted by said deed to the Sowego Company to flow and flood water over and acquire for water-power purposes by the erection and operation of a dam or dams having a crest elevation of not exceeding 100 feet above mean sea level, and has been continuously in the possession and occupancy of your orator ever since the conveyance thereof to your orator on January 13, 1910.

11. The defendant has asserted a claim of a right, and recently announced an intention, to erect and operate near Conowingo in the State of Maryland in and across the Susquehanna River about five and one-half miles below the Pennsylvania state line a dam having a crest elevation of 103 feet above mean sea level. The erection of such a dam or of any dam in and across the Susquehanna River having a crest elevation exceeding 100 feet above mean sea level (or indeed of one having a crest elevation not exceeding 100 feet, especially if specially constructed to that end) necessarily and inevitably would flow back upon, encroach upon and interfere with your orator's water-power plant and

the tailrace thereof extending to the foot of Cully's Falls and would flood and overflow lands now [23589] (page 25) owned in fee simple and possessed by your orator on the left bank of the Susquehanna River extending from your orator's dam to the end of the tailrace thereof at the foot of Cully's Falls and also on Fry Island, Piney Island, Barclay Island and Grave Island in the Susquehanna River; and would likewise flood and overflow lands conveyed by the McCall Company and released by Knickerbocker Trust Company, Trustee, to the Sowego Company and the Susquehanna Company respectively by the deeds hereinbefore mentioned dated August 11, 1908, upon the express condition that the Sowego Company and the Susquehanna Company should not flow back upon, encroach upon or interfere with the water-power plant of the McCall Company near McCall's Ferry and the tailrace thereof extending to the foot of Cully's Falls, and would likewise flood and overflow land on the left bank of the Susquehanna River lying below the foot of Cully's Falls, conveyed by Amer Kline and wife to Cary T. Hutchinson, owned by your orator in fee simple, subject only to the right granted by the aforesaid deed to the Sowego Company to flow and flood water over and acquire for water-power purposes by the erection and operation of a dam or dams having a crest elevation of not exceeding 100 feet above mean sea level. The erection of such a dam or of any dam in and across the Susquehanna River having a crest elevation exceeding 100 feet above mean sea level therefore inevitably would flood and overflow lands owned by your orator in fee simple and would violate the express conditions [23590] (page 26) upon which other lands were conveyed by the McCall Company to the Sowego Company and the Susquehanna Company respectively, the benefit of which conditions is now vested in and owned by your orator. On August 11, 1908, the construction of your orator's dam and the tailrace thereof had not been completed but the location and plan of construction of said dam and the tailrace thereof were open

and visible and well known especially to all the parties to the two deeds dated August 11, 1908, hereinbefore mentioned. Thereafter before October 14, 1910, the construction of your orator's dam and the tailrace thereof was completed at the same location and according to the same plan of construction as was contemplated and known on August 11, 1908. Since the completion of your orator's dam and the tailrace thereof and since October 14, 1910, your orator has made certain excavations in the tailrace of said dam for the purpose of improving the operation of said dam and the tailrace thereof. These excavations represent only a part of projected improvements to said tailrace which were suspended during the war and have not yet been completed. By reason of these excavations and improvements already made the consequences to your orator of any flowing back upon, encroachment upon or interference with the tailrace of your orator's dam would be more serious in loss of power at your orator's dam than they would have been if said excavation and improvements had not been made. These consequences would be still more serious if the projected improvements are completed. The [23591] (page 27) excavations and improvements already made have not however in any way changed, nor will the completion of the projected improvements change, the location of the tailrace of your orator's dam. The fact that the tailrace of your orator's dam would be flowed back upon, encroached upon and interfered with by the erection and operation of any dam or dams having a crest elevation exceeding 100 feet above mean sea level is not due to, dependent upon or in any way affected by the excavations and improvements, made or projected, in the tailrace of your orator's dam. If said excavations and improvements had never been begun the erection of any dam or dams having a crest elevation exceeding 100 feet above mean sea level would flow back upon, encroach upon and interfere with the tailrace of your orator's dam in the same way and at the same place, viz., at and above the foot of Cully's Falls, though not to the

same extent or with the same consequences as to loss of power at the dam, as would now result since said excavations and improvements have been begun. The erection and operation of any such dam would always so flow back upon, encroach upon and interfere with the tailrace of your orator's dam at those seasons of every year when the natural elevation and rate of flow of the waters of the Susquehanna River is not, as compared with other seasons, high.

12. So far as your orator knows or has heard, the only basis asserted by the defendant for its claim of a right to erect a dam having a crest elevation of 103 feet [23592] (page 28) above mean sea level is a certain unrecorded agreement dated February 20, 1908, to which certain stockholders of the McCall Company but neither the McCall Company nor Knickerbocker Trust Company, Trustee, were parties. Your orator is advised that the defendant's construction of this unrecorded agreement is in fact and in law a misconstruction thereof but that the construction and terms of said unrecorded agreement are for obvious reasons wholly irrelevant and immaterial now and cannot change the construction, operation or effect of the two deeds of August 11, 1908, to the Sowego Company and the Susquehanna Company respectively, or of the deeds from Henry P. Brown, as Special Master, to William M. Barnum, from William M. Barnum and wife to William M. Barnum and others, and from William M. Barnum and others to your orator under which your orator now holds and owns its property and rights, including especially its dam and the tailrace thereof.

13. Several months ago the defendant made an application, which is now pending, to the Federal Power Commission for a license to authorize it, among other things, to erect a dam in and across the Susquehanna River near Conowingo having a crest elevation of 103 feet above mean sea level. Later the defendant made an application, which

is now pending, for certain authority from the Public Service Commission of Maryland and in exhibits filed with said application indicated an intention to erect a dam having a crest [23593] (page 29) elevation of 103 feet above mean sea level. Your orator promptly reminded the defendant (What the defendant long before making either of said applications had been told by your orator) that the erection of such a dam would directly interfere with and encroach upon your orator's plant by flowing back the water of the river upon the tailrace of your orator's dam at and above the foot of Cully's Falls, that this would be both an invasion of your orator's property rights and also a breach of express conditions upon which a large part of the property of the defendant and corporations allied with it is now held and that if the defendant did not abandon its apparent intention to erect such a dam your orator would promptly and in due course take appropriate legal steps to protect its rights. A conference was had on February 4, 1925, between representatives of your orator and of the defendant and interests associated with the defendant, including the Philadelphia Electric Company, which through one or more links of stock ownership and through financial and operating contracts or arrangements is to be a dominant factor in the control of the defendant, its properties and operations. At this conference the representatives of the defendant and the interests associated with the defendant stated that the defendant and the interests associated with it would and did abandon any intention (though not a claim of right) to erect a dam having a crest elevation of more than 100 feet. This statement removed all threat of invasion of your orator's rights [23594] (page 30) and all need or opportunity to protect them. After said conference the defendant filed with the Public Service Commission of Maryland a statement, of which it sent your orator a copy, which was an inadequate and, as subsequent events indicate, evasive statement of the understanding reached at said conference. To said statement

your orator made prompt written reply dated February 11, 1925, to the defendant fully setting forth your orator's position and your orator's understanding of the defendant's position as stated at said conference. To your orator's letter of February 11, 1925, the defendant has never made direct reply. More than six weeks later your orator learned of evasive statements made before the Public Service Commission of Pennsylvania on behalf of interests associated with the defendant. Whereupon your orator wrote again to the defendant and also to the Philadelphia Electric Company and to your orator's surprise some days later received a letter dated April 7, 1925, from the Philadelphia Electric Company, undertaking on behalf of the defendant virtually to repudiate the statements made on behalf of the defendant at the conference on February 4, 1925.

14. After said conference on February 4, 1925, the defendant filed with the Public Service Commission of Maryland an amended application and amended exhibits which do not affirmatively indicate an intention to erect a dam having a crest elevation exceeding 100 feet above mean sea level. The defendant made no such amendments to its [23595] (page 31) application pending before the Federal Power Commission. There is also pending before the Public Service Commission of Pennsylvania on behalf of interests associated with the defendant, including the Philadelphia Electric Company, an application in connection with which were filed engineering plans and estimates that contemplated the erection of a dam having a crest elevation of 103 feet above mean sea level. Copies of a letter to the Public Service Commission of Maryland from your orator's counsel dated February 4, 1925, a statement filed by the defendant with the Public Service Commission of Maryland on February 5, 1925, and letters from the defendant to your orator dated February 5, 1925, from your orator to the defendant dated February 11, 1925, and from your orator to the Public Service Commission of Pennsyl-

vania dated April 1, 1925, from your orator to the defendant dated April 1, 1925, from your orator to the Federal Power Commission dated April 1, 1925, from the Secretary of the Federal Power Commission to your orator dated April 4, 1925, and from the Philadelphia Electric Company to your orator dated April 7, 1925, are filed herewith marked respectively "Plaintiff's Exhibits 9, 10, 11, 12, 13, 14, 15, 16 and 17."

15. Since April 7, 1925, communications have been had, both orally and in writing, between representatives of your orator and the defendant. In the course of correspondence the Philadelphia Electric Company has stated an intention to construct a dam "with a permanent crest at [23596] (page 32) about elevation of 86 feet above mean sea level", with movable gates above, to which your orator replied that whether the crest of the dam consist of a permanent structure or movable gates, a crest elevation, permanent or temporary, of more than 100 feet would be an invasion of your orator's rights. Your orator repeatedly asked to be reassured that the defendant has no intention to erect *any* dam having a crest elevation—fixed or movable—of more than 100 feet. To your orator's last letter dated May 22, 1925, asking such reassurance no reply has been received. Copies of a letter from the Philadelphia Electric Company to your orator, dated May 1, 1925, your orator's reply, dated May 11, 1925, a letter from the Philadelphia Electric Company dated May 14, 1925, and your orator's reply, dated May 22, 1925, are filed herewith, marked respectively "Plaintiff's Exhibits Nos. 18, 19, 20 and 21". On June 26, 1925, at a hearing before the Public Service Commission of Pennsylvania, the Vice-President and Chief Engineer of the Philadelphia Electric Company testified that construction plans have been changed and that the defendant now intends to build its dam to a crest elevation, including movable gates, of 108½ feet, and to keep the water at "a fixed level of 108½ feet", with "a possibility" that is "very questionable" of coming down

"a very small amount" at times; that "the pond is now absolutely fixed at 108½" and the dam is being built to carry it at the "full 108½". When so testifying the witness attempted to belittle the [23597] (page 33) extent, but did not pretend to deny the fact, of interference by such a dam, so operated, with your orator's water-power plant and the tailrace thereof. On the contrary the witness asserted that "the maximum interference" with your orator's plant "will be at about one hundred and two feet, but that don't necessarily mean that that is going to make us maintain the pond level at one hundred and two feet". Your orator, therefore, believes and avers as a fact that the defendant intends to erect in and across the Susquehanna River, near Conowingo in the State of Maryland, a dam having a crest elevation of 108½ feet above mean sea level.

16. Your orator's dam and power-plant, including the tailrace of said dam, originally cost and are now worth millions of dollars. The value of the tailrace of your orator's dam, the value of the land owned by your orator in fee simple on the left bank of the Susquehanna River between your orator's dam and the end of the tailrace thereof at the foot of Cully's Falls which would be permanently flooded and overflowed as hereinbefore set forth by the erection by the defendant of a dam having a crest elevation exceeding 100 feet above mean sea level, the value of the land owned by your orator on the left bank of the Susquehanna River below the foot of Cully's Falls which would without right be so flooded and overflowed by such a dam, and the value of the power that would be lost in each year by your orator as a [23598] (page 34) result of flowing back upon, encroaching upon and interfering with the tailrace of its dam by the erection of such a dam each exceeds the sum of three thousand dollars. Ever since the completion of its dam and the first unit of its power plant your orator has been, and now to a greater degree than ever is, continuously utilizing, through the sale of electric energy generated thereby, the water power available to

your orator by the use of its dam and power plant, including the tailrace of its dam, and in this way utilizing and enjoying the full value of its dam and power plant and also all the lands owned by your orator on the left bank of the Susquehanna River between your orator's dam and the end of the tailrace thereof at the foot of Cully's Falls and on the islands hereinbefore mentioned in the Susquehanna River, as well as lands owned by your orator on the left bank of the Susquehanna River below the foot of Cully's Falls. The erection by the defendant of a dam having a crest elevation exceeding 100 feet above mean sea level would therefore permanently deprive your orator of the full use of its dam and power plant and especially of the tailrace of its dam and also of the use and ownership of lands owned by your orator in fee simple and would thereby cause your orator great and irreparable loss, damage and injury.

To the End, Therefore:

1. That the defendant and its officers, [23599] (page 35) agents, servants, employees, contractors, subcontractors and lessees and all persons acting under their authority may be perpetually and also preliminarily pending this suit restrained and enjoined from constructing, erecting, maintaining or operating or beginning the construction or erection of a dam or dams in or across the Susquehanna River below your orator's dam and power plant having a crest elevation, fixed or movable, exceeding 100 feet above mean sea level or any other dam or dams which will flow back upon, encroach upon or interfere with the water-power plant of your orator and the tailrace thereof extending to the foot of Cully's Falls.

2. That the construction, erection, maintenance or operation by the defendant of any dam or dams, in or across the Susquehanna River below your orator's dam and power plant, having a crest elevation, fixed or movable, exceeding

100 feet above mean sea level or any dam or dams which will flow back upon, encroach upon or interfere with the water-power plant of your orator and the tailrace thereof extending to the foot of Cully's Falls may be finally adjudged and decreed to be an unlawful invasion of the lands and vested property rights of your orator as owner of its dam and power plant, including the tailrace of its dam, and all the lands on the left bank of the Susquehanna River between your orator's dam and the end of the tailrace thereof at the foot of Cully's Falls, as well as lands on said left bank [23600] (page 36) below the foot of Cully's Falls, and all the islands hereinbefore mentioned in the Susquehanna River and all the benefit of the conditions upon which lands and flowage rights below the foot of Cully's Falls were conveyed by the two deeds hereinbefore mentioned dated August 11, 1908.

3. And that your orator may have such other and further relief in the premises as its case may require.

May It Please Your Honor to grant unto your orator the writ of subpoena directed to the defendant commanding it to be and appear in this Honorable Court on some certain day to be named therein and to answer the premises and to abide by and perform such order or decree as this Honorable Court may make in the premises.

And as in duty bound your orator will ever pray.

Keech, Deming & Carman
Haman, Cook, Chestnut & Markell
Solicitors for the Plaintiff.

[23601] (page 37)

STATE OF NEW YORK: }
COUNTY OF NEW YORK: } ss:

I HEREBY CERTIFY that on this 10th day of July 1925, before me, the subscriber, a Notary Public of the State of New York, in and for the County of New York aforesaid, personally appeared CHARLES E. F. CLARKE, and made oath in due form of law as follows:

"I am President of Pennsylvania Water and Power Company, a Pennsylvania corporation, plaintiff in the aforegoing bill of complaint. I have read the aforegoing bill of complaint. The matters and facts therein stated are true as so stated to the best of my knowledge, information and belief."

Charles E. F. Clarke

Subscribed and sworn to before me this 10th day of July, 1925.

As witness my hand and Notarial Seal.

Ernest B. Illmer
Notary Public

(Notarial Seal)

Notary Public
Richmond County
New York County No. 23
My Commission Expires
March 30, 1927.

[23602]

UNITED STATES OF AMERICA
DISTRICT OF MARYLAND, TO WIT:

I, CHARLES W. ZIMMERMAN, Clerk of the District Court of the United States for the District of Maryland, do hereby certify that the aforegoing is a true copy of the Bill of Complaint, which was entered and filed on the 11th day of July, 1925, in the therein entitled case of Pennsylvania Water & Power Company, a body corporate, vs. The Susquehanna Power Company, a body corporate, No. 913 Equity Docket in said District Court.

IN TESTIMONY WHEREOF, I hereunto set my hand and affix the seal of the said District Court this 3rd day fo September, 1946.

(Seal) CHAS W. ZIMMERMANN
Clerk of the said District Court.

EXHIBIT NO. 233.

[23603]

IN THE DISTRICT COURT OF THE UNITED STATES FOR THE DISTRICT OF MARYLAND

IN EQUITY.

PENNSYLVANIA WATER AND POWER CO.
VS
THE SUSQUEHANNA POWER COMPANY

TO THE HONORABLE, THE JUDGES OF THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF MARYLAND:

The Answer of the said Defendant, The Susquehanna Power Company, to the Bill of Complaint filed in said Court by the Pennsylvania Water and Power Company, respectfully shows:

I

(a) It denies that the Complainant is a corporation duly organized under the laws of Pennsylvania.

(b) The Complainant was not duly organized under the Act of April 27th, 1909, Pennsylvania Laws, page 175 (amending the Act of May 31st, 1887, which was a supplement to the Act of April 8th, 1861), in that William M. Barnum the purchaser of the property and rights of the said McCall Company did not comply with the provisions of said Act, and title to the said property and rights of the said McCall Company has never legally passed from him.

II

It denies the matters and things set up in paragraph two of said Bill in so far as the same refer to the ownership of said dam and the lawful development of electric current and power, and the transmission thereof to others,

as well as in reference to [23604] (page 2) the ownership of the part of the land therein mentioned, and

(a) Avers that said dam, lands and rights are held

> "subject to the provisions of the decree of the Court of Common Pleas of Dauphin County, Pennsylvania, entered on the 14th of January, 1907, in a suit in equity of the Commonwealth of Pennsylvania against the McCall Ferry Power Company and others"

as will appear from said Complainant's Exhibit No. 2, and that the Commonwealth of Pennsylvania, by its Bill of Complaint in the aforesaid cause, prayed for an injunction against the construction and maintenance of said dam without adequate provision for the future navigation of the River Susquehanna by a canal from Columbia to Havre de Grace and for a declaration that certain consents and releases from the Susquehanna Canal and Power Company and from the Susquehanna and Tidewater Railroad Company to the said McCall Company, bearing dates respectively the 9th and 12th of June, 1905, be declared void, and that the mortgage from the said McCall Company to the Knickerbocker Trust Company, Trustee, be reformed; and thereafter a decree was passed in said cause whereby the construction of said dam was allowed to be continued, but subject to the conditions subsequently set out in said decree whereby, notwithstanding said dam, the navigable character of said River would be maintained and all questions as to the validity of the construction of said dam under the Acts of Assembly aforesaid were reserved; but, notwithstanding the said decree and the determination therein with reference to the navigable character and capacity of said River, the Complainant by its said dam has interfered with and now interferes with the navigable character thereof.

(b) That the Complainant has not complied with the laws of Pennsylvania, Act of June 14, 1923, Pennsylvania

Laws, page 704, and has not thereunder duly procured a limited power permit from the Water and Power Resources Board of said Commonwealth.

[23605] (page 3)

(c) That the Congress of the United States, by its Act of June 10th, 1920, (Volume 41 Stat. L. page 1063) referred to in said bill, has assumed jurisdiction over the development of hydro-electric power in and upon the navigable waters of the United States. That said Act of Congress is remedial and thereby inherently retroactive, and the Complainant was at the time of filing its Bill, and prior thereto, and is now subject to its terms and provisions and to supervision and regulation thereunder, and the Complainant has not procured from the Federal Power Commission created by said Act, the prerequisite permit and license for the maintenance of its said dam and project works on said river erected and operated as required by said Act of Congress and the regulations duly adopted by said Power Commission prior to 1920, and the Complainant has also made new construction at and in connection with its said dam and project works, without procuring from the said Commission the prerequisite permit and license therefor; and

Therefore, the Defendant says that the Complainant is without equity to maintain its said Bill of Complaint, because its said plant and project works are maintained and operated in violation of the laws of the State of Pennsylvania and in violation of the laws of the United States.

III

The Defendant denies the matters set forth in the Third Paragraph of said Bill, and requires strict proof thereof.

IV

Answering the Fourth Paragraph of said Bill, the Defendant admits that the Mortgage or Deed of Trust therein set forth was executed, delivered and recorded.

V.

The Respondent denies the averments of the Fifth Paragraph [23606] (page 4) of said Bill in manner and form as therein stated and shows that the said William M. Barnum, as the said purchaser, was alone constituted a body politic and corporate under the laws of Pennsylvania, and further denies that the Complainant was lawfully organized, and that it succeeded to the property and rights of the said McCall Company referred to in said paragraph.

VI

The Defendant admits the matters set forth in the Sixth Paragraph of said Bill.

And your Respondent avers in connection therewith as follows, that is to say:

(a) On the 27th day of January, 1923, it duly applied to the Federal Power Commission for a Preliminary Permit to construct its water plant development near Conowingo in Maryland, having a dam with a crest elevation not to exceed 110 feet above mean sea level. Due notice thereof was published as required by the Regulations under said Act of Congress of June 18th, 1920, thereby inviting objections to its said development at a public hearing. No objections were filed by said Complainant nor by any other person, and in August of 1923, your Respondent was duly granted its Permit and thereby acquired the priority of right under Federal Law, to utilize the River for its hydro-electric Project, and forthwith filed its application for a License as aforesaid under the terms stated in said Permit. The said Commission has not yet issued a License to your Respondent, and your Respondent cannot proceed with its proposed dam and project until said license is issued.

(b) And your Respondent having in all respects [23607] (page 5) complied with the Federal Law,

though its pending application for license has not yet been granted, and Complainant not having complied with said law, in any respect whatsoever cannot maintain its Bill in a Federal Court.

VII

To the Seventh Paragraph of said Bill, the Defendant admits the delivery and recording of the two deeds therein mentioned, namely to the Sowego Company, a Pennsylvania corporation, and to the Susquehanna Company, then Susquehanna Power Company, a Maryland corporation respectively as set forth in Complainant's Exhibits Nos. 5 and 6, but hereby expressly denies that the conditions inserted in the deed to said Sowego Company (Exhibit No. 5), that is to say:

"the right to flow and flood water over, and acquire for water power purposes by the erection and operation of a dam or dams having a crest elevation of not exceeding 100 feet above mean sea level, so much of the following described parcel of land as lies below the foot of Cully's Falls, that is to say: That parcel in Martic Township conveyed by Amer Kline to Carey T. Hutchinson, dated the 28th of April, 1905, and recorded in Lancaster County Deed Book X, Volume 17, page 416, and a similar condition, set forth under Paragraph Eight (c) of said Bill in respect to the William Sweigart land."

and attempted to be created by the said deed to Sowego Company, have any application to the proposed development, dam and project works of this Respondent, and Respondent shows that its rights are fixed and determined by the deed from the McCall Ferry Power Company and others to the Susquehanna Power Company, predecessor in title to the Respondent, a copy of which is filed with the Bill of Complaint marked "Exhibit No. 6", and by said deed the Respondent is authorized and empowered,

"to construct, maintain and operate a dam or dams, water power plant or plants and appurtenances at any point or points upon the Susquehanna River [23608] (page 6) below the Pennsylvania and Maryland State line . . . upon condition that the Susquehanna Company shall not flow back upon, encroach upon or interfere with the water power plant of the McCall Company near McCalls Ferry, and the tail race thereof extending to the foot of Cully's Falls".

VIII

The Respondent admits the releases of the lands described in the deeds mentioned in Paragraph Eight of said Bill of Complaint, but denies that the alleged limitations as to the height of the dam to be erected by the Respondent and referred to in said deed to said Sowego Company are in any manner binding upon this Respondent and limit its right to construct its dam, provided that it shall not flow back upon, encroach upon, or interfere with the water power plant of the McCall Company, and the tail race thereof extending to the foot of Cully's Falls as said Falls existed on February 20, 1908.

IX

The Respondent denies that the enumeration of property and rights referred to in the Ninth Paragraph of said Bill is material to the issues in this case, and also denies that the deeds enumerated in said Paragraph are effective to convey the property and rights in said Paragraph mentioned, or that said deeds are material to the issues in this case.

X

The Respondent denies that the inferences attempted to be drawn from facts set out in the Tenth Paragraph of said Bill are material to the issues in this case, or that the deeds therein mentioned from Brown and Barnum and others are effective to convey to the Complainant the property and rights therein mentioned.

XI

The Respondent denies the matters and facts alleged [23609] (page 7) in the Eleventh Paragraph of said Bill in manner and form as therein alleged, and it shows and claims as set forth in Paragraph Seven of this Answer the right

> "to construct, maintain and operate a dam or dams, water power plant or plants and appurtenances at any point or points upon the Susquehanna River below the Pennsylvania and Maryland State Line . . . upon condition that the Susquehanna Company shall not flow back upon, encroach upon or interfere with the water power plant of the McCall Company near McCall's Ferry, and the tail race thereof extending to the foot of Cully's Falls".

The Respondent avers that the said tail race at the foot of Cully's Falls was in February 1908, and prior thereto, at elevation 103 feet above mean sea level, and the Respondent claims the right to back the water to the then foot of the said Falls as provided in said deed. The Respondent denies that a dam constructed at a crest elevation of 103 feet above mean sea level would interfere with the operation of the Complainant's plant and works as therein stated.

XII

Answering the Twelfth Paragraph of said Bill, the Respondent asserts and claims that the agreement of February 20th, 1908, referred to in said Paragraph, was made and executed for the purpose of bringing about the consolidation therein set forth and explained, and for the purpose of avoiding further litigation, and that the deed of August 11th, 1908, from the McCall Company and others to Susquehanna Power Company was executed in pursuance of said agreement and in part consideration thereof. It denies that it has misconstrued said agreement and asserts that its terms are relevant and material to the con-

troversy in this case and that all claims of the Complainant to the contrary of and against said agreement are void and immaterial to the issue in this case, as by said agreement, an original of which is in possession of the Complainant, and a copy whereof should have been filed with the Bill of Complaint, will more fully appear. And Respondent files such copy as a part hereof marked "Respondent's Exhibit No. 1".

[23610] (page 8)

XIII

Answering the Thirteenth Paragraph of said Bill, the Respondent denies that it has at any time entered into an agreement with the Complainant or made any statements as set forth in said Paragraph to the effect that it would abandon its right to erect a dam having a crest elevation of more than 100 feet. It admits the memorandum filed with the Public Service Commission of Maryland, but it denies the inferences in said Paragraph attempted to be drawn of an intention of Respondent to abandon in any way its right to back the water to the said foot of Cully's Falls, as it existed February 20, 1908.

XIV

Answering the Fourteenth Paragraph of said Bill, the Respondent denies the inferences thereby attempted to be drawn from the papers therein referred to, and that it has any intention to abandon its right to back water to the foot of Cully's Falls as hereinbefore explained.

XV

Answering the Fifteenth Paragraph of said Bill, the Respondent says that various conferences between the engineers of the Complainant and the engineers of the Defendant have been had beginning in or about the autumn of 1910 or the spring of 1911, for the purpose of determining the exact elevation at the foot of Cully's Falls, to which point it was always conceded your Respondent had the

right to back water. That in view of the controversy over the height above mean sea level at the foot of Cully's Falls and for the purpose of making it possible for the Respondent to secure all of the fall to which it was lawfully entitled, the Respondent determined that instead of erecting a solid concrete dam with a crest elevation of either 103 feet above mean sea level or 100 feet above mean sea level, it would erect a solid concrete dam with a crest elevation of 86 feet above mean sea level with superimposed movable gates to be so [23611] (page 9) constructed that they could be used to maintain the level of the water at all times at an elevation lawfully permissible to the Respondent.

The Respondent denies that the testimony offered by The Philadelphia Electric Company before the Public Service Commission of Pennsylvania on June 26, 1925, or at any other day, could be truthfully paraphrased as set forth in Paragraph 15 of the Bill of Complaint, and avers that the testimony of the Chief Engineer of The Philadelphia Electric Company and the other engineers there testifying for the applicants defined the revised plans for the construction of the said dam by the Respondent as herein set forth. The revised plans, according to the said testimony and as herein asserted, provide as follows:

> "The design of the Conowingo Development in detail and as a whole, is representative of conservative practice and is based on the use of the most modern and efficient hydro-electric equipment which can be furnished by reliable manufacturers.
>
> The dam, of the gravity type, will be of mass concrete, founded on sound solid granite and the spillway section will be equipped with 50 crest gates of the Stoney type to regulate the headwater levels so as to result in non-interference with the water levels at the foot of Cully's Falls just below the Holtwood Development and limit the maximum high water level to Elev. 108.5.

Five traveling gate hoists of ample capacity and good design will be provided to insure reliable and safe operation of the crest gates under all conditions of ice and river flow. Only about half the crest gates will be required to divert the maximum flood of an average year, and about 70% of the time none of these gates will be operated as all the river flow will be required for power generation. The three smaller regulating gates equipped with individual motor operated gate hoists controlled from the power station, will be of adequate capacity to permit accurate regulation of the pond level. The crest gates will be designed to insure water tightness and an emergency gate will be provided to be lowered in front of the crest gates when required for maintenance of the gates."

The Respondent expressly denies the averment in the last sentence of paragraph 15 of said Bill of Complaint, that the Defendant intends to erect in and across the Susquehanna River near Conowingo in the State of Maryland, a dam having a crest elevation of 108.5 feet above mean sea level, if such averment is [23612] (page 10) intended to assert that the dam when erected will have a permanent elevation of 108.5 feet above mean sea level, because, as heretofore stated, the dam when erected according to the aforesaid revised plans, will have a permanent crest elevation of only 86 feet with gates as above set forth, capable of increasing from time to time the elevation of water to an elevation lawfully maintainable by this Respondent.

XVI

Answering the Sixteenth Paragraph of said Bill, the Respondent denies the averments as therein stated and denies that the end of the tail race of the Complainant at the foot of Cully's Falls, as it existed on February 20, 1908, would be flooded and overflowed, as in said Paragraph set forth, by the erection of a dam having a crest elevation of 103 feet above mean sea level.

XVII

Further answering the allegations of said Bill, your Respondent shows that the said agreement of February 20th, 1908, was known and understood by the Complainant at the time of its alleged purchase of the interest of the McCall Company, and that purchase was made subject to said agreement, and at the time said agreement was made and after said deed was executed, it was ratified and approved by the McCall Company and also by the Knickerbocker Company, Trustee, under the mortgage referred to.

Respondent further shows and avers that after the execution of said agreement of February 20th, 1908, and after the execution of said deed of August 11th, 1908, from the McCall Company and others to this Respondent, the said McCall Company without the knowledge or consent of Respondent excavated its tail race at Cully's Falls and thereby removed and obliterated the said land mark and reduced the elevation corresponding to the foot of said Falls above mean sea level as the Falls existed on February 20th, 1908, and changed the boundaries of the rights and properties conveyed by [23613] (page 11) the aforesaid deed.

XVIII

Answering generally the said Bill of Complaint, Respondent shows that the facts therein set forth do not make and constitute irreparable injury to the Complainant and therefore the Complainant is without equity to maintain its said Bill.

XIX

Further answering said Bill of Complaint, this Respondent shows that in view of the present status of the Complainant under the laws of the States of Maryland and Pennsylvania and under the Act of Congress aforesaid, and in view also of the status of this Respondent with reference to the permits and licenses required under said

laws, the said Bill of Complaint was prematurely filed and should be dismissed.

Wherefore Respondent prays that the Complainant's Bill may be dismissed with costs.

THE SUSQUEHANNA POWER COMPANY
by George Bullock
President

S. A. and Fred. R. Williams
Willis & Hudgins
Venable, Baetjer & Howard
Solicitors for Respondent

Exhibit No. 233

[23614]

PENNSYLVANIA WATER AND POWER CO. *vs* THE SUSQUEHANNA POWER COMPANY	IN THE DISTRICT COURT OF THE UNITED STATES FOR THE DISTRICT OF MARYLAND. IN EQUITY

STATE OF NEW YORK, }
COUNTY OF NEW YORK, } *ss.:*

I HEREBY CERTIFY that on this 14th day of September 1925, before me, the subscriber, a Notary Public of the State of New York, in and for the County of New York aforesaid, personally appeared GEORGE BULLOCK, and made oath in due form of law as follows:

"I am President of The Susquehanna Power Company, a corporation of the State of Maryland, Respondent in the above entitled cause. I have read the aforegoing Answer. The matters and facts therein stated are true as so stated, to the best of my knowledge, information and belief".

GEORGE BULLOCK

Subscribed and sworn to before
me this 14th day of September,
1925

L. Otten
Notary Public

(SEAL)

[23615]

UNITED STATES OF AMERICA

DISTRICT OF MARYLAND, TO WIT:

I, CHARLES W. ZIMMERMANN, Clerk of the District Court of the United States for the District of Maryland, do hereby certify that the aforegoing is a true copy of the Answer, which was entered and filed on the 15th day of September, 1925, in the therein entitled case of Pennsylvania Water and Power Company vs The Susquehanna Power Company, No. 913 Equity Docket in said District Court.

IN TESTIMONY WHEREOF, I hereunto set my hand and affix the seal of the said District Court this 3rd day of September, 1946.

(Seal) CHAS. W. ZIMMERMANN
Clerk of the said District Court

EXHIBIT NO. 234.

[23616]

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MARYLAND.

PENNSYLVANIA WATER & POWER COMPANY, a body corporate, vs. THE SUSQUEHANNA POWER COMPANY, a body corporate.	IN EQUITY

TO THE HONORABLE, THE JUDGE OF THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF MARYLAND:

The petition of the plaintiff and the defendant respectfully shows:

1. That the plaintiff on the one part, and the defendant and certain corporations associated with it on the other part, have entered into a certain agreement dated February 20, 1926, a copy of which, marked "Exhibit Agreement", is filed herewith and to which reference is hereby made for a statement of all the terms and provisions thereof. By said agreement it is, among other things, agreed without prejudice to any of the opposing contentions of the plaintiff and the defendant [23617] in this case, or to any of their existing legal rights, that the plaintiff consents to the maintenance and operation by the defendant and its associated corporations of a certain dam and gates in a certain manner so as to flood and overflow land of the Plaintiff, this consent however being expressly conditioned upon performance of certain provisions, covenants and conditions contained in said agreement. Said agreement is to continue in force for a term of fifty years and to be renewable

from time to time forever at the option of the defendant and its associated corporations.

2. Said agreement, by its terms, is subject to the approval of the Public Service Commission of Pennsylvania, so far as required by law, and is to become effective when so approved by said Commission. Said agreement has been so approved by said Commission by a certain report and order and certificate of public convenience, both dated November 22, 1926, a certified copy of which is filed herewith marked "Exhibit Pennsylvania Public Service Commission".

3. By said agreement it is provided that a copy of said agreement shall be filed in this case, and [23618] the plaintiff and the defendant shall unite in asking an order staying further proceedings in this case but retaining jurisdiction in the premises, without prejudice.

WHEREFORE, your petitioners, the plaintiff and the defendant herein, hereby unite in praying the passage of an order staying further proceedings in this cause but retaining jurisdiction in the premises, without prejudice.

And as in duty bound, your petitioners will ever pray.

KEECH, DEMING & CARMAN
HAMAN, COOK, CHESTNUT & MARKELL
Solicitors for the Plaintiff
VENABLE, BAETJER & HOWARD
Solicitors for the Defendant

[23619]

STATE OF MARYLAND,
CITY OF BALTIMORE } *ss.:*

I HEREBY CERTIFY that on this 27th day of December, 1926, before me, the subscriber, a notary public of the State of Maryland, in and for the City of Baltimore aforesaid, personally appeared J. A. Walls, Vice President of Pennsylvania Water and Power Company, Plaintiff, one of the petitioners in the aforegoing petition, and made oath in due form of law that the matters and facts stated in the aforegoing petition are true as so stated to the best of his knowledge, information and belief.

AS WITNESS my hand and notarial seal.

ANNA TEICHMAN
Notary Public
My Commission expires May 2, 1927

[23620]

STATE OF PENNSYLVANIA,
COUNTY OF PHILADELPHIA, } ss.:

I HEREBY CERTIFY that on this 30th day of December, 1926, before me, the subscriber, a notary public of the State of Pennsylvania, in and for the City of Philadelphia aforesaid, personally appeared W. H. Johnson, President of the Susquehanna Power Company, defendant, one of the petitioners in the aforegoing petition, and made oath in due form of law that the matters and facts stated in the aforegoing petition are true as so stated to the best of his knowledge, information and belief.

AS WITNESS my hand and notarial seal.

J. FLORENCE SMITH
Notary Public
(Notarial Seal)
Commission expires April 1, 1927

Exhibit No. 234

[23621]

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MARYLAND

PENNSYLVANIA WATER & POWER COMPANY, a body corporate,

vs.

SUSQUEHANNA POWER COMPANY, a body corporate.

IN EQUITY

Upon the petition, with exhibits and affidavits, of the plaintiff and the defendant in the above entitled cause, it is this 4th day of January, 1927, by the United States District Court for the District of Maryland in equity ORDERED that further proceedings in said cause are hereby stayed but jurisdiction in the premises is hereby retained, without prejudice.

MORRIS A. SOPER
District Judge

UNITED STATES OF AMERICA
DISTRICT OF MARYLAND, TO WIT:

I, CHARLES W. ZIMMERMAN, Clerk of the District Court of the United States for the District of Maryland, do hereby certify that the aforegoing is a true copy [23622] of the Petition of the Plaintiff and the Defendant and Order thereon staying further proceedings which was entered and filed on the 4th day of January, 1927 in the case of PENNSYLVANIA WATER & POWER COMPANY, a body corporate vs. SUSQUEHANNA POWER COMPANY, a body corporate No. 913 Equity in said District Court.

IN TESTIMONY WHEREOF, I hereunto set my hand and affix the seal of the said District Court, this 3rd day of September, 1946.

(Seal)

CHAS. W. ZIMMERMAN.
Clerk of the Said District Court

EXHIBIT NO. 235.

[23624]

AGREEMENT made as of the 20th day of February, 1926, between Pennsylvania Water & Power Company, a Pennsylvania corporation, hereinafter called "Holtwood Company", party of the first part, and The Susquehanna Power Company and The Susquehanna Electric Company, both Maryland corporations, and Philadelphia Electric Power Company, a Pennsylvania corporation, hereinafter sometimes called "Conowingo Companies", parties of the second part.

Each, any and/or all of the parties of the second part are hereinafter referred to jointly and severally as "Conowingo Companies", which term designates the singular as well as the plural number.

Holtwood Company owns and operates a hydro-electric plant on the Susquehanna River at Holtwood, Pennsylvania, the tailrace thereof extending downstream to the foot of Cully's Falls, and in connection with said plant owns certain lands on the Susquehanna River above the foot of Cully's Falls and, subject to limited flowage rights, below the foot of Cully's Falls. Conowingo Companies own certain lands and flowage rights on the Susquehanna River in Maryland and Pennsylvania extending upstream to the foot of Cully's Falls, and one of said Conowingo Companies, to wit, Philadelphia Electric Power Company, claims to own lands and islands above the foot of Cully's Falls, and together said Conowingo Companies propose to construct and operate a hydro-electric plant, known as the Conowingo Development, on said river, near Conowingo, Maryland.

In the interest of overall economy and conservation of natural resources it is desirable to utilize to the maximum the head of water between Holtwood Company's forebay and Conowingo Companies' tailrace. By tailrace improvements or additions Holtwood Company claims that it could

largely utilize the present head of water between Holtwood Company's tailbay and the foot of Cully's Falls. Careful studies by both Holtwood Company and Conowingo Companies, however, have shown that the total head between Holtwood Company's forebay and Conowingo Companies' tailrace can be most economically developed by Conowingo Companies maintaining the Conowingo pond elevation at not to exceed 108.5 feet above mean sea level, thereby backing water into Holtwood Company's tailrace with consequent gain to Conowingo Companies and loss to Holtwood Company. Holtwood Company estimates that its average annual loss in energy output and demand value, with its existing power house and generating units and its tailrace in its present condition, will be seventy-two thousand dollars ($72,000), and there will also be other losses which have not been evaluated. Conowingo Companies estimate that their average annual gain in energy output alone from the operation of seven units of their plant will be one hundred and ninety-five thousand five hundred dollars ($195,500).

Holtwood Company contends that Conowingo Companies without the consent of Holtwood Company have no right either (a) to back water or raise the water level under any condition of flow in the Susquehanna River at the foot of Cully's Falls, or (b) to build a dam, whether fixed or movable, with an elevation exceeding one hundred feet above mean sea level, and (c) that the foot of Cully's Falls is a line across the Susquehanna River located as shown, (designated AB), on the map, marked Exhibit No. 1, attached to and made a part hereof and that this line approximately passes through the point at which was located the "No. 5 Gauge" or "Cully's Falls Gauge" of McCall Ferry Power Company. Conowingo Companies dispute Holtwood Company's contention and contend (a) that, without the consent of Holtwood Company, they have the right to build any dam with or without gates which will not back water upon the tailrace of Holtwood Company at the foot of Cully's Falls and (b) Conowingo Companies

agree with Holtwood Company that the foot of Cully's Falls is a line across the Susquehanna River located as shown by said [23625] line AB on said map, Exhibit No. 1, except as to that part or portions of said line AB which lie between any two successive intersections of the one hundred three feet elevation contour line on the bed of said Susquehanna River when said contour line crosses said line AB and continues upstream and back again to intersect said line AB, which said part or portions of said line AB Conowingo Companies contend do not truly or correctly designate the foot of Cully's Falls, and Conowingo Companies contend that between each of said two successive points of intersection along the line AB the true location of said foot of Cully's Falls is a line which leaves said line AB and continuously follows the meanders, windings and turnings of said one hundred three feet elevation contour line upstream, across-stream and downstream until it again intersects said line AB, and (c) Conowingo Companies contend that Holtwood Company is without right to maintain its tailrace to the foot of Cully's Falls for the reason that by so doing it is unlawfully diverting, changing and diminishing the natural and normal flow of the said Susquehanna River from and with respect to the lands and islands above the foot of Cully's Falls owned by one of said Conowingo Companies, to wit, Philadelphia Electric Power Company. Other opposing contentions of Holtwood Company and Conowingo Companies are stated or referred to in the bill and answer in a case brought by Pennsylvania Water & Power Company against The Susquehanna Power Company and now pending in the United States District Court for the District of Maryland in equity, which case is designated in said Court as Serial No. 913 Equity and is referred to in Equity Docket No. 10 Folio 13 etc.

Holtwood Company and Conowingo Companies, without prejudice to any of their opposing contentions hereinbefore or in the aforesaid equity case stated or referred to, or to any of their existing legal rights, have reached an

agreement upon the terms and conditions hereinafter set forth.

NOW, THEREFORE, THIS AGREEMENT WITNESSETH that in consideration of the premises and of the mutual covenants, agreements and conditions herein contained and of the sum of one dollar ($1) by each party or parties to the other party or parties in hand paid, receipt whereof is hereby acknowledged, the parties hereto do hereby covenant and agree, each for itself, its successors and assigns, with the others, their successors and assigns, Conowingo Companies covenanting jointly and severally, as follows:

1. All elevations mentioned herein are expressed in feet above mean sea level. Mean sea level is agreed to be 187.754 feet below the benchmark of the United States Geological Survey referred to on page 41 of Bulletin 515 of the United States Geological Survey and there described as "McCall Ferry, 400 feet west of station, highway bridge over Kelley's Run, west abutment, north side, top of parapet wall; aluminum tablet stamped '188' ", this being the datum for the gauge heights used in the engineering studies leading up to this agreement.

2. Conowingo pond elevation or pond level means the elevation of the water surface of the pond above Conowingo Companies' dam at a point on the west shore of said pond approximately one thousand feet up-stream from the face of the dam. Conowingo Companies shall install and maintain on the west shore of said pond in the vicinity of said point a pond level recording gauge of a type and in a location satisfactory to both parties so that the gauge will accurately record the above defined Conowingo pond elevation. Conowingo Companies shall furnish Holtwood Company the gauge records of the pond elevations. Holtwood Company shall have the right to inspect such gauge and, jointly with Conowingo Companies, to check the accuracy of the gauge. Conowingo Companies shall also install and maintain all necessary instruments and shall keep the

necessary records, subject to inspection by Holtwood Company, so that all computations required under paragraph 7 hereof may be accurately made.

3. Holtwood Company hereby consents to the building by Conowingo Companies of a dam at any point on the Susquehanna River below Holtwood Company's property with permanent spillway crest at an elevation not exceeding one hundred feet, surmounted by a movable dam or gates capable of maintaining the Conowingo pond elevation at not exceeding 108.5 feet in any event, but [23626] Holtwood Company does not consent that such dam shall or may be maintained or operated except upon the express conditions hereinafter set forth.

4. Holtwood Company hereby consents to the maintenance and operation by Conowingo Companies of said dam and the movable gates thereon so as to maintain the Conowingo pond elevation at not exceeding 108.5 feet, and thereby to flood and overflow land of Holtwood Company. This consent of Holtwood Company, however, is expressly conditioned upon performance by Conowingo Companies, their respective successors and assigns, of all the provisions, covenants and conditions as to payments or otherwise contained in the succeeding paragraphs hereof numbered 6 to 9, both inclusive. Immediately upon default by Conowingo Companies, their respective successors or assigns, in the performance of any of the provisions, covenants and conditions in said paragraphs contained and the continuance of such default for thirty days after written notice from Holtwood Company, its successors or assigns, all consent granted hereunder so to maintain and operate said dam and gates or to flood and overflow Holtwood Company's land shall *ipso facto* be withdrawn, and thereafter Conowingo Companies, their respective successors and assigns, shall have no right whatever to maintain or operate said dam and gates except those rights which Conowingo Companies or any of them would now have if this agreement

had not been executed, as hereinafter in paragraph 5 hereof expressly provided, unless and until any and all such defaults shall be cured by performance of all the provisions, covenants and conditions in said paragraphs 6 to 9 contained, including payment of all sums in default, with interest, and payment of all damages sustained by Holtwood Company, its successors and assigns, by reason of any such default. If and when any and all such defaults shall be so cured, then the consent granted hereunder to maintain and operate said dam and gates and the consent to flood and overflow Holtwood Company's land pursuant to this paragraph 4 shall revive, subject, however, to all the same conditions herein stated. All the provisions, covenants and agreements in this paragraph 4 contained or referred to, including all those contained in paragraphs 6 to 9, both inclusive, are and shall be covenants running with the land, and as such shall bind and inure to the benefit of all present and future owners of any interest in Conowingo Companies' dam or plant, and shall bind and inure to the benefit of all present and future owners of any interest in Holtwood Company's plant or lands.

5. Immediately upon any suspension or termination, by breach of condition, of the consent to maintain and operate said dam and gates pursuant to paragraph 4 hereof or upon the expiration or any other termination of this agreement, Conowingo Companies, their respective successors and assigns, shall have no right, without the consent of Holtwood Company, its successors and assigns, to maintain or operate said dam or gates except such rights (whether admitted or disputed by Holtwood Company) as Conowingo Companies now possess, in law and in fact, independently of any provision of this agreement, and thereupon Holtwood Company, its successors and assigns, shall have all the same rights (whether admitted or disputed by Conowingo Companies) and all the same remedies against Conowingo Companies, their respective successors and assigns, which it would now have if this agreement had never

been executed and said dam and gates had never been built, including the same right, if any, to prevent the continued maintenance and compel the removal of said dam or gates or any part thereof as Holtwood Company would now have in law or in fact to prevent the building of such dam or gates or any part thereof. No breach of condition or consequent suspension or termination of rights under paragraph 4 hereof on the part of Conowingo Companies, their respective successors or assigns, shall release Conowingo Companies, their respective successors or assigns, from the obligation to make any of the payments hereinafter provided for, but all such payments shall be made regardless of any such suspension or termination of rights.

6. In payment for and as an express condition of the consents and privileges granted to Conowingo Companies under this agreement, Conowingo Companies shall pay Holtwood Company the following amounts, to be computed and paid from and after the first day when the Conowingo Development starts operation by the generation of electricity for transmission:

(a) As compensation for Holtwood Company's loss in energy output and demand value of its plant, seventy-two thousand dollars ($72,000) per annum.

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(b) As Holtwood Company's participation in Conowingo Companies' gain, as compensation for other losses by Holtwood Company, the following amounts per annum for the following years, *i. e.*, full years of twelve months each, whether calendar years or not, respectively, viz:

For the first year,	$15,000.
For the second year,	$40,000.
For the third year,	$55,000.
For the fourth year,	$60,000.
For each year thereafter,	$61,750.

The aggregate of the sums mentioned as payments per annum in (a) and (b) shall be the only amount payable hereunder by Conowingo Companies in any one year, excepting, however, such additional payments as may become due for the reason and to the extent provided in paragraph 7 of this Agreement.

All payments hereunder shall be made in equal quarterly instalments on or before the fifteenth day of January, April, July and October for the preceding quarter ending on the last day of December, March, June and September respectively, or in case of the first payment in an instalment proportionate to the portion of the preceding quarter from and after the beginning from which payments are computed. Conowingo Companies shall not raise the Conowingo pond elevation above 100 feet before starting the operation of the Conowingo Development by the generation of electricity for transmission.

(c) In the event that on account of diversion of water from the Susquehanna River for Federal, State or municipal purposes the gross Conowingo gain obtainable from seven or more units operating under this agreement in an average flow year, computed in the same manner as the amount one hundred ninety-five thousand, five hundred dollars ($195,500) mentioned among the recitals hereof (viz., 94,000,000 kilowatt-hours at 2.08 mills per kilowatt-hour), becomes less than one hundred ninety-five thousand, five hundred dollars ($195,500), and that full compensation is not otherwise received by Conowingo Companies for such diversion, then the payments provided in (a) and (b) shall be decreased as follows:

Let "R" represent the ratio of the gross gain, (as decreased by diversion but corrected for partial compensation, if any), to one hundred ninety-five thousand, five hundred dollars ($195,500). If the diversion is made above the Holtwood dam, then the payments for (a) Holtwood loss and (b) Conowingo gain shall both be reduced by the

factor "R". If the diversion is made below the Holtwood dam, then the payment for (a) Holtwood loss shall not be changed, but payment for (b) Conowingo gain shall become

$$\frac{R \times \$195,500 - \$72,000}{2}$$

7. In addition to the aforementioned payments, if for any reason the Conowingo pond elevation exceeds 108.5 feet for an aggregate of more than two hours in any one day or reaches 109 feet at any time during any day, Conowingo Companies shall pay Holtwood Company a sum equal to the product of eight mills and the number of kilowatt hours, computed hour by hour for the duration of the excess pond elevation as the product of the actual Conowingo power house discharge during the hour, in c.f.s. hours, the average excess pond elevation above 108.5 feet during the hour and the factor 0.072 (corresponding to 85% efficiency). Nothing herein contained, however, shall give Conowingo Companies any right to allow the Conowingo pond elevation to exceed 108.5 feet. All payments under this paragraph 7 shall be made at the same time as payments under paragraph 6, viz., on or before the fifteenth day of January, April, July and October respectively for the preceding quarter.

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8. When, and only so long as, any excess of the Conowingo pond elevation above 108.5 feet is due solely to acts of God or of the enemy or unavoidable accident, without negligence on the part of Conowingo Companies, and in spite of all reasonable precautions taken by Conowingo Companies to prevent or abate such excess, then and to that extent, but in no other event whatever, Conowingo Companies shall be excused from making payments required under paragraph 7 hereof, except such part, if any,

of such required payments as may represent actual gain to Conowingo Companies from such unavoidable excess.

9. This agreement and all its provisions, covenants and conditions shall continue in force for a term of fifty years from and after its date, but Conowingo Companies, their respective successors or assigns, shall have the right at any time, not later than one year prior to the expiration of said term, by notice in writing to Holtwood Company, its successors or assigns, to renew this agreement and all its provisions, covenants and conditions for another term of fifty years, to commence on the expiration of the original term, and to be subject to the same provisions, covenants and conditions as this agreement, so that this agreement may thus be renewable from time to time forever. Upon the expiration of this agreement at the end of the original term without renewal or of any renewal term without further renewal, all consent granted to Conowingo Companies under paragraph 4 hereof shall be withdrawn and all liability of Conowingo Companies to make, and all right of Holtwood Company to receive, payments under paragraph 6 hereof shall cease, and thereafter the rights and liabilities of the parties hereto shall be governed by the provisions of paragraph 5 hereof.

10. Any dispute between the parties hereto as to their respective rights hereunder shall be settled by arbitration as follows: Each party shall appoint one arbitrator and a third arbitrator shall be selected by the two so appointed. In case of the failure of either party to appoint an arbitrator within thirty days after request by the other party or in case of the failure of the two arbitrators first appointed to agree within thirty days upon the selection of a third arbitrator, in either event an arbitrator shall be named by the person who is then the Chief Judge of the Supreme Bench of Baltimore City. The decision in writing of any two of said arbitrators shall be final and binding upon the parties hereto.

11. A copy of this agreement shall be filed in the aforesaid equity case in the United States District Court for the District of Maryland and Pennsylvania Water & Power Company and The Susquehanna Power Company shall unite in asking an order staying further proceedings in said case but retaining jurisdiction in the premises, without prejudice.

12. This agreement is subject to the approval of the Public Service Commission of Pennsylvania, so far as required by law, and shall become effective only when so approved by said commission. This agreement is also conditioned upon the right of Conowingo Companies to include the payments herein provided for as part of the operating costs of the Conowingo Project and upon the approval, before or after the beginning of said payments, of said payments as such operating costs, by any governmental regulatory body, if and only so far as such body may lawfully have jurisdiction and such approval may be required by law.

Pennsylvania Water & Power Company does hereby constitute and appoint *Ralph L. Thomas* to be its attorney for it and in its name and as and for its corporate act and deed to acknowledge this instrument before any officer authorized by law to take such acknowledgment, and The Susquehanna Power Company, The Susquehanna Electric Company and Philadelphia Electric Power Company do each hereby constitute and appoint *W. H. Johnson* to be its attorney for it and in its name and as and for its corporate act and deed to acknowledge this instrument before any officer authorized by law to take such acknowledgment.

In Testimony Whereof Pennsylvania Water & Power Company, The Susquehanna Power Company, The Susquehanna Electric Company and Philadelphia Electric Power Company have each caused these presents to be signed in its corporate name by its President or a [23629] Vice-President, and its corporate seal to be hereunto affixed,

duly attested by its Secretary or an Assistant Secretary, all in duplicate as of the day and year first above written.

PENNSYLVANIA WATER & POWER COMPANY,

By *J. A. Walls,*
Vice-President.
[SEAL]

ATTEST:

F. J. Allen,
Secretary.

Signed, sealed and delivered in the presence of:
R. L. Bortner,
Chas. Markell.

THE SUSQUEHANNA POWER COMPANY.

By *W. H. Johnson,*
President.
[SEAL]

ATTEST:

Jos. B. McCall, Jr.,
Secretary.

Signed, sealed and delivered in the presence of:
Edw. H. Braun,
J. Florence Smith.

THE SUSQUEHANNA ELECTRIC COMPANY.

By *W. H. Johnson,*
President.
[SEAL]

ATTEST:

A. V. R. Coe,
Secretary.

Signed, sealed and delivered in the presence of:
G. A. Albany,
Edw. J. Lang.

PHILADELPHIA ELECTRIC POWER COMPANY.

By *W. H. Johnson,*
President.

[SEAL]

ATTEST:

Jos. B. McCall, Jr.,
Secretary.

Signed, sealed and delivered in the presence of:

Edw. H. Braun,
J. Florence Smith.

EXHIBIT NO. 237.

[23635]

May 16, 1945

In Re: Duties of Engineers (Flowage Basin) 1911-1925, incl.

Between the date of commercial operation of the Holtwood plant and the year 1925 there were charged to the 338 account, from time to time, amounts paid as salary or expenses to engineers. The apportionments of monthly salaries represent a distribution of the employees' time as determined by department supervisors.

It is known from reference to our engineering field notebooks, drawing files, the history of flashboard suits, and the recollections of a member of the Engineering Department whose employment started in 1916, that charges to the 338 account prior to the beginning of the job order system were for three principal types of work. These were river observations for the collecting of original basic data regarding flow characteristics, rates of run-off under varying rainfall conditions, etc., backwater observations and surveys required for the defense of lawsuits, and property surveys required for information prior to purchase of property and for marking property boundaries after acquisition.

River observations refer to the establishment of river sections, involving surveys to locate the section and soundings to determine the cross-section of the river; to the development of rating curves and water surface profiles by observation and computation to show relationship between elevation and flow, to observations required to determine the effect of ice conditions upon flow and backwater; to the time in which rainfall in the upper part of the drainage area would affect river flow at Holtwood. The plant at Holtwood was the first major development on the river and there was no available source of information for the basic data required other than the meager and incomplete records com-

piled prior to 1910. It is to be noted also that observations and records were needed over the whole drainage area of the Susquehanna and its tributaries, so that this development work was not limited to the area of the Holtwood pond. The expense of any recurrent readings or reports on gauges or river flow was charged as an operating expense.

To support a bill for injunction or a suit for damages, the plaintiff must make allegations as to flooding. In filing an Answer in such a suit the defendant must admit, deny, or demand proof of such allegations, therefore, in each of our flashboard cases specific information as to backwater elevations was required. The elevation of water surface could be determined within reasonable limits without field work if complete basic information were available, but in the case of lawsuits, theoretical computations do not have as much weight as actual field observations. In addition to field checks of the height of water at certain points under certain flow and dam crest conditions, it was necessary to determine the area of land affected by making a topographic survey and a boundary survey. In nearly every case of an equity suit or an action in trespass for flooding, we ultimately acquired the property involved so that the cost of this engineering work constituted a part of our acquisition expense.

In many other instances where property was acquired by negotiation not resulting from litigation, it was necessary to supply Mr. Bushong with information as to boundaries, topography, areas involved below certain contours, and other pertinent data. Many of our flowage releases are limited to certain specified areas or to certain specified elevations, and these limits had to be surveyed and marked for the benefit of both our agent and the property owner. Also, in the case of each property purchased in fee simple, permanent corner markers had to be set, signs had to be posted, and record drawings made up.

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It is not the intention to indicate that the charges made to the 338 account in the past were solely for work in connection with river observations, backwater observations, and land surveys, as there may have been other types of investigation or development work performed. Bench marks had to be established for reference to elevations; triangulation networks set up for geographical location, the relationship between true and magnetic bearings had to be determined, and very often the engineer had to consult deed records for information as to the boundary lines of property abutting the property being surveyed. It is always advisable to make a plot of deed descriptions before starting a boundary survey, and in the case of a small, poorly defined property, such preliminary work may well be more expensive than the field survey.

The best information as to activities of field and office engineers whose salaries are charged in full or in part to the 338 account may be obtained from field notebooks filed at Holtwood, and the drawing file in Baltimore. Schedule "A" attached hereto is a summary of the field notebooks. Schedule "B," also attached is a list of drawings referring to the subjects discussed herein, and in most cases the title of the drawing is self-explanatory and requires no further comment. It should be noted that Schedules "A" and "B" are not based upon exhaustive studies, but if used in conjunction with the descriptions on expense accounts charged originally to 338-6E, are believed to be sufficient to show the nature of work involved.

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SCHEDULE "A"

Engineering Field Work in the Holtwood Flowage Basin During the Period 1911-1925, as Evidenced by Data Contained in the Field Notebooks.

The following references to engineering field notebook entries were taken from the card index kept with the notebooks in the Holtwood Office. The cards are arranged alphabetically according to location, type of work, etc., and therefore may contain some repetitions in subject matter due to cross-indexing. There is no indication as to where the expense attached to these items was charged, but the work covered is connected with the matters discussed in the preceding memorandum.

Bench Marks

Note: Refers to establishment of permanent reference points.

1916	Along Conestoga Creek
1921	Section 15G to Section 1
1924	Vicinity of Safe Harbor
1924	Safe Harbor to Star Rock
1924	Columbia
1924	Safe Harbor to York County
1924	Star Rock to Creswell
1924	Star Rock to Turkey Hill
1924	Levels, McCalls Ferry to Holtwood
1924	Levels, Safe Harbor to Holtwood
1924	Levels, Vicinity of Holtwood
1924	Pequea (new)
1924	Sections Nos. 2 and 3
1924	Cully's Arch
1924	Minqua
1924	Levels, Mud Run
1913	Canal Survey—Wrightsville
1920	Columbia, High Water Observations

Conestoga Creek

1915	Water Surface Readings
1916	High Water Observations
1920	High Water Observations
1920-21	Ice Observations
1921	High Water Observations
1922-24	Ice Observations

Cross Sections

1913	Pequea Creek Section
1913	Wrightsville Canal Section
1914	Railroad, Holtwood to Pequea
1920	Railroad at Shenks Ferry
1921	Railroad at Pequea
1921	Railroad, Pequea to Shenks Ferry
1921	Railroad, Safe Harbor
1924	Railroad, Holtwood to Columbia

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1913	Current Meter Readings, Section Nos. 4 to 9
1914	Current Meter Readings, Pequea Creek
1920	Current Meter Readings, Forebay

Gauging of River

Note: This classification refers to establishment and rating of river gauging stations.

1916	Columbia—Levels to Gauge
1916	Columbia—Water Surface Readings
1916	Section 42/2—Levels to Gauge
1916	Section 42/2—Water Surface Readings
1924	Boro—Water Surface Readings
1924	Boro—Water Surface Readings
1916	Creswell—Levels to Gauge
1916	Creswell—Water Surface Readings

1916	Turkey—Levels to Gauge
1916	Turkey—Water Surface Readings
1916	Lock 3—Levels to Gauge
1916	Lock 3—Water Surface Readings
1925	Section 12—Levels to Gauge
1925	Section 12—Water Surface Readings
1916	Star—Levels to Gauge
1916	Star—Water Surface Readings
1916	Bridge—Levels to Gauge
1916	Bridge—Water Surface Readings
1921	15 G—Levels to Gauge
1921	15 G—Water Surface Readings
1916	Section 15—Levels to Gauge
1921	Section 15—Levels to Gauge
1916	Section 15—Water Surface Readings
1921	Section A—Levels to Gauge
1924	Section A—Levels to Gauge
1916	Section 1U—Levels to Gauge
1921	Section 1U—Levels to Gauge
1921	Section B—Levels to Gauge
1921	Section B—Water Surface Readings
1921	Section 1L—Levels to Gauge
1921	Section 1-L—Water Surface Readings
1913	Section 1—Levels to Gauge
1921	Section 1—Levels to Gauge
1913	Section 1—Water Surface Readings
1924	Range 34—Levels to Gauge
1924	Range 34—Water Surface Readings
1924	Range 20—Levels to Gauge
1924	Range 20—Water Surface Readings
1924	Range 77—Levels to Gauge
1924	Range 77—Water Surface Readings
1924	Range 11—Levels to Gauge
1924	Range 11—Water Surface Readings
1924	Safe Harbor—Levels to Gauge
1913	Safe Harbor—Water Surface Readings

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1924	Safe—Levels to Gauge
1924	Safe—Water Surface Readings
1924	Conestoga—Water Surface Readings
1924	Conestoga Zero—Water Surface Readings
1924	Section 2—Levels to Gauge.
1924	Section 3—Levels to Gauge
1924	Wise Island—Water Surface Readings
1924	Wise Island—Water Surface Readings
1925	Conestoga Creek—Water Surface Readings
1914	Witmer's Gauge—Levels to Gauge
1920	Witmer's Gauge—Levels to Gauge
1921	Witmer's Gauge—Water Surface Readings
1913	Section 2—Levels to Gauge
1913	Section 2—Water Surface Readings
1913	Section 3—Levels to Gauge
1913	Section 3—Water Surface Readings
1913	Section 4—Levels to Gauge
1913	Section 4—Water Surface Readings
1924	Section 4½—Water Surface Readings
1913	Section 5—Levels to Gauge
1913	Section 5—Water Surface Readings
1914	York Furnace—Levels to Gauge
1914	York Furnace—Water Surface Readings
1913	Section 6—Levels to Gauge
1913	Section 6—Water Surface Readings
1913	Section 7—Levels to Gauge
1913	Section 7—Water Surface Readings
1913	Sections 8 & 9—Levels to Gauge
1913	Sections 8 & 9—Water Surface Readings
1911	Forebay Gauge—Levels to Gauge
1911	Forebay Gauge—Levels to Gauge
1912	Forebay Gauge—Water Surface Readings
1913	Forebay Gauge—Water Surface Readings
1915	Harrisburg High Water Observations
1913	Gorge, Ice—Pequea and Tucquan

High Water Observations

Note: This classification refers to data required to check flow, run-off, etc. under varying river and dam crest conditions, and also to data required for defense of law-suits.

1913	Safe Harbor
1913	Forebay
1913	Holtwood
1914	Safe Harbor
1914	Piney Island
1914	Pequea Creek
1914	Safe Harbor
1914	Pequea Creek
1915	Safe Harbor
1915	Shenk's Ferry
1915	Pequea
1915	Colemanville

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1915	Rock Hill
1915	Tailrace
1915	Harrisburg
1918	Pequea
1918	Shenks Ferry
1916	Conestoga Creek
1919	Pequea
1920	Witmers Mill
1920	Rock Hill
1920	Columbia
1920	Safe Harbor
1921	Section 15G to Section 1
1921	Pequea Creek
1921	Conestoga Creek
1921	Fry Island
1922	Section 15G to Section 1
1922	Pequea Creek

1922	Conestoga Creek
1924	Holtwood to Safe Harbor Traverse
1924	Holtwood, Proposed State Highway at

Ice Observations

Note: Refers to collecting data on movement of ice, conditions leading to grounding, etc.

1918	Holtwood to Safe Harbor
1917	Below York Furnace
1917	Holtwood-Columbia
1919-20	Holtwood-Columbia
1920	Holtwood-Columbia
1920	Pequea Creek
1920-21	Holtwood-Columbia
1921	Pequea Creek
1920-21	Conestoga Creek
1921-22	Holtwood-Columbia
1921-22	Pequea Creek
1923-27	Holtwood-Columbia
1922-24	Conestoga Creek
1922-24	Pequea Creek

Levels

1912	Tucquan Creek Weir
1913	Airville Road
1914	Holtwood to Pequea
1914	Holtwood to McCalls
1915	Binkley Property
1915	Vandersloot Property
1915	H. G. Reist Property
1915	Burkholder Property
1915	Tucquan
1915	Bair Property
1921	Section 15G to Section 1
1922	Shenks Ferry Gauge

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1923 Telephone Crossing—McCalls Ferry
1924 Safe Harbor to Star Rock
1924 Safe Harbor to Columbia
1924 Railroad, Pequea to Columbia

McCalls Ferry

1910 Magnetic Variation
1913 Property Survey
1920 Ferry Landing Topography
1921 Ferry Landing Topography
1923 Ferry Landing Topography
1913 Magnetic Variation—Holtwood

Monuments

1919 Pequea Creek Property Survey
1920 Pequea Creek Property Survey
1922 At McCalls Ferry
1925 Kauffman Property, Safe Harbor
1924 Near Freight Station—Holtwood
1915 Otter Creek Survey

Pequea Creek

1919 Sawmill Tract Survey
1919 Topography Vicinity of Railroad Bridge
1919 Water Surface Readings
1920 Ice Observations
1919 Property Surveys
1919 Property Surveys
1920 Water Surface Readings
1921 Water Surface Readings
1920 Property Surveys at Pequea
1921 Ice Observations
1921 Water Surface Readings
1921 Railroad Sections
1921 Railroad Sections Pequea to Shenks Ferry
1922 Topography Sawmill Tract

1921-22	Ice Observations
1922	Water Surface Readings
1922	Trolley along Creek
1922-24	Ice Observations
1924	New Bench Mark at Pequea
1913	Polaris Observations—Safe Harbor Properties
1924	Polaris Observations—Safe Harbor Properties

Property Surveys

1913	Frances Aston
1924	Agnes T. Ault
1924	Andrew M. Aument
1913	W. W. Bones
1913	D. E. Binkley
1913	W. P. Bolton
1913	Joanna Boyd
1915	D. E. Binkley
1915	Russell Burkholder
1915	John Bair

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1924	M. M. Breneman
1925	Aaron Bleacher
1913	Charles Campbell
1913	Wm. Cully
1916	Cully's Store
1921	Jos. C. Cole
1921	Colemanville
1922	Wm. Cully
1923	Geo. Cully
1924	Cully's Farm
1924	Ray C. Creamer
1924	Emmett A. Creamer
1925	Emmett A. Creamer
1919	Davies, Pequea Creek

1913 T. D. Ellse
1922 Milton Eby
1913 Annie B. Keiser (Phares)
1913 R. T. Fry
1913 Holtwood
1913 P. W. Hiestand
1913 Paul Heine
1913 Christian K. Henry
1914 John W. Hiemenz
1915 Paul Heine
1920 T. A. Halliger (Pequea Creek)
1921 T. A. Halliger (Pequea Creek)
1913 Rosetta Jones
1924 Rosetta Jones
1911 Kelly, McCalls Ferry
1924 D. W. Kendig
1924&25 Reuben Kauffman (Safe Harbor)
1914 Jos. E. Lant
1919 Lancaster & York Furnace Street Railway
1922 Lancaster & York Furnace Street Railway
1925 Little Conestoga Creek
1913 D. Mulligan (Safe Harbor)
1913 Match Factory (Safe Harbor)
1913 McCalls Ferry
1916 Meyers Store
1921 Martic Forge
1923 Martic Forge
1924 Washington Martin
1925 Isaac Miller
1915 Otter Creek
1913 Pennsylvania Railroad Company (Safe Harbor)
1919 Pequea Creek
1920 Pequea Creek
1924 O. C. Patton Topography
1913 C. F. Quade
1921 C. F. Quade

1922	C. F. Quade
1924	C. F. Quade
1913	Sabina Roadaker
1914	H. G. Reist
1915	H. G. Reist

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1924	Newton Rineer
1913	H. M. Stauffer & Co.
1913	E. Shober
1913	H. M. Stauffer
1913	Esther Seiple
1913	Samuel Shank
1914	John Stokes
1917	W. L. Straus
1919	Shoff (Pequea Creek)
1919	Sawmill Tract (Colemanville Water & Power Co.)
1921	John Stokes
1922	Sawmill Tract
1922	Shenks Ferry
1923	Shenks Ferry
1915	Tucquan Creek
1921	Urey Farm
1915	J. E. Vandersloot
1916	J. E. Vandersloot
1913	Elizabeth Walk
1913	George Warfel
1913	D. M. Witmer
1913	York Furnace Farm
1921	York Furnace Farm

Roads

1912	Levels Road at Holtwood
1912	Levels Road in York County
1913	Levels Road at Airville
1916	Location Road York County

1915 Proposed Road at Otter Creek
1917 Road—McCalls Ferry to Hospital
1922 Survey Road—Safe Harbor
1925 Road—Kauffman Property
1925 Proposed Road at Safe Harbor
1924 Proposed State Road at Holtwood
1924 Levels Road at Holtwood

Rock Hill

1915 High Water Observations
1920 High Water Observations
1916 Bench Marks
1916 Levels from Safe Harbor

Safe Harbor

1913 High Water Observations
1913 Water Surface Readings
1913 Property Surveys
1914 High Water Observations
1914 Topography at Conestoga Creek
1914 Topography at Safe Harbor

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1915 High Water Observations
1920 High Water Observations
1921 Road Survey
1925 Road Survey
1924 Bench Marks
1924 Traverse and Levels to Holtwood

Survey

1911 Topographic Survey of Holtwood
1913 Wrightsville Canal Survey
1913 Tucquan Creek Topography
1913 McCall Ferry Survey
1914 Topographic Survey of Holtwood
1915 Otter Creek Survey
1915 Tucquan Creek

1919	Pequea Creek
1919	Pequea Creek
1919	Pequea Creek
1921	Safe Harbor Road Survey
1924	Cully Farm Survey
1923	C-5 Topographic Survey

Tucquan Creek

1912	Levels for Weir
1913	High Water
1913	Topographic Survey
1913	Weir Observations
1914	Soundings
1915	185 Contour Levels
1915	Topographic Survey
1922	Weir Observations
1922	Weir Observations

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SCHEDULE "B"

List of Drawings Made Between 1911 and 1925 in Connection with River Observations, Backwater Data and Property Surveys.

100-A-2154	Mar. 1911	Map of McCall Ferry and Holtwood Showing Roads
100-A-2173	Mar. 1912	Topographic Map of Holtwood, Penna.
100-A-2174	Mar. 1913	Water and Sewer Line Map of Holtwood, Pa.
100-A-2210	Oct. 1912	Topographic Map Below York County Abutment
260-A-2222	Sept. 1912	Tail Water Curve
260-A-2227	Oct. 1912	Tail Water Curve, Holtwood, Pa.
220-A-2234		Topography of North End of Fry Island
260-A-2240	Nov. 1912	Tailwater Curve, Holtwood, Pa.
260-A-2241	Nov. 1912	Tailwater Curve, Holtwood, Pa.
260-A-2242	Nov. 1912	Tailwater Curve, Holtwood, Pa.
100-A-2243	Nov. 1912	Topography along York Co. Shore from Dam to Baltimore Transmission Line
100-A-2261	Sept. 1913	Map and Profile of Susquehanna River, Columbia to Perryville
230-A-2272	Oct. 1912	Topography of Forebay
260-A-2303	Jan. 1913	Location of Cully Gauge
260-A-2322	Apr. 1913	Key Map of Tailrace Sections Showing Gauge Locations
100-A-2324	May 1913	Detail Topography Below York Co. Abutment
100-A-2326	June 1913	Detail Topography Below York Co. Abutment
101-A-2327		General Plan of the Susquehanna Canal—Wrightsville
100-A-2332	Aug. 1913	Tucquan Creek

230-A-2353	Nov. 1913	Topography of Forebay—Fall of 1913
110-A-2355	Jan. 1914	Property at McCalls Ferry, Pa.
230-A-2356	Nov. 1913	Topography—Forebay
110-A-2357	Jan. 1914	Property Acquired by P. W. & P. Co. at Safe Harbor, Pa.
310-A-2359	Sept. 1914	Profile Tucquan Creek
110-A-2360	Mar. 1914	Property Index Map #4-A—Safe Harbor
111-A-2393	Apr. 1914	Cross Sections Along C. & P. D. R. R. Holtwood & Pequea
230-A-2401	Aug. 1914	Topography of Forebay—1914
230-A-2402	Aug. 1914	Topography of Forebay—1914
110-A-2876	June 1915	Topographic Survey York Furnace & Urey Farms
110-A-2893	June 1915	Survey of York Furnace and Urey Farms
110-A-2894	June 1915	Property Released to P. W. & P. Co. by H. G. Reist
310-A-2897	1911	Cross Sections of Susq. River for Backwater Calculations, Sections #3 to #10
310-A-2898	1911	Ditto , Creswell #14
310-A-2899	1911	Ditto , Bridge—#2
310-A-2900	July 1915	River Sect. Safe Harbor to Holtwood, Soundings made Feb. 1913
310-A-2901	July 1915	Current Meter Readings Shenks Ferry to Holtwood, Feb. 1913
310-A-2903	Aug. 1915	Kutter's Diagram
100-A-2904	1911	Diagram for Interpolation of Contours
100-A-2908	Aug. 1915	Proposed Location for Bridge & Road at Otter Creek
100-A-2909	Aug. 1915	Sections for Proposed Road at Otter Creek, Pa.
100-A-2910	Aug. 1915	Sections AB for Proposed Bridge over Otter Creek, Pa.
100-A-2911	Aug. 1915	Sections for Proposed Road & Bridge at Otter Creek, Pa.

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110-A-2914	Sept. 1915	Topographic Map of Portion of J. E. Vandersloot Property in L. Chanceford Twp., York Co., Pa.
310-A-2919	Apr.-May 1916	Computed and Observed Backwater Profiles Above Holtwood Dam, Holtwood to Columbia
110-A-3018	July 1917	Index of Title of Vandersloot's Property
110-A-3019	July-Aug. 1917	Properties in the Vicinity of J. E. Vandersloot
110-A-3020	July-Aug. 1917	Map Showing Discrepancy in Descriptions of Property in Vicinity of Vandersloot's
111-A-3024	May 1919	Profile of Lancaster & York Furnace St. Railway From Pequea to Colemanville
110-A-3029	Nov. 1919	Proposed Location of National Transit Company's Pipe Line, York Furnace, Pa.
110-A-3180	Feb. 1919	Alignment Lanc. & York Furnace St. Railway—Colemanville to Pequea
310-A-3228	July 1920	Current Meter Readings at Forebay Entrance—July 14 to 20, 1920
100-A-3284	Aug. 1920	Plan & Profile for Rd. Reloca.—Vicinity of Holtwood
100-A-3285		ditto
100-A-3286		ditto
100-A-3287		ditto
100-A-3288		ditto
100-A-3289		ditto
100-A-3290		ditto

100-A-3291		Cross Sections of Road Vicinity of Holtwood
100-A-3292		ditto
100-A-3293		ditto
100-A-3294		ditto
100-A-3295		ditto
100-A-3296		ditto
100-A-3297		ditto
100-A-3298		ditto
100-A-3299		ditto
100-A-3300		ditto
100-A-3301		ditto
100-A-3302		ditto
100-A-3303		ditto
100-A-3304		ditto
100-A-3305		ditto
100-A-3306		ditto
100-A-3307		ditto
100-A-3308	Aug. 1920	ditto
100-A-3309	Aug. 1920	ditto
310-A-3329	Feb. 1922	Record of Floods since 1889, Part I
310-A-3330	Feb. 1922	Record of Floods since 1889, Part II
100-A-3368	Dec. 1921	Topography of Shenks Ferry Coal Storage Site
100-A-3376	Jan. 1922	Topography of Quade Property at McCalls Ferry
110-A-3384	Mar. 1922	Property Lines Vicinity McCalls Ferry
111-A-3385	Mar. 1922	Survey Vicinity of McCalls Ferry, Showing Location of Buildings, Railroad, Right of Way, etc.
100-A-3386	Apr. 1922	Topography in Vicinity of Old Mixer Plant
100/110-A-3387	July 1922	Topography at mouth of Pequea Creek
100-A-3389	Nov. 1922	Susquehanna River Holtwood to Shenks Ferry No. 1

100-A-3390	Dec. 1922	Susquehanna River Holtwood to Shenks Ferry No. 2
100-A-3391	Nov. 1922	Susquehanna River Holtwood to Shenks Ferry No. 3

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100-A-3392	Dec. 1922	Cross Section Coal Storage Area Shenks Ferry
100-A-3394	Nov. 1923	Plan of Shenks Ferry Showing Topography of R. R. Right of Way
100-A-3405	June 1922	Road System Between Holtwood, Quarryville and Lancaster
100-A-3446	June 1923	Cross Sections Between Railroad and Tailrace in Vicinity of Mixer Plant
110-A-3457	Apr. 1923	Property of Geo. G. Cully—Holtwood, Pa.
100-A-3460	May 1924	Topography of O. C. Patton Farm—Portion
100-A-3461	May 1924	ditto
100-A-3462	May 1924	ditto
100-A-3463	June 1924	Cross Sections Proposed Road Vicinity of Holtwood
100-A-3464	June 1924	ditto
100-A-3465	June 1924	ditto
100-A-3466	June 1924	Plan & Profile Proposed Road Vicinity of Holtwood
100-A-3467	June 1924	ditto
100-A-3468	June 1924	Topography of Portion of Geo. G. Cully Farm
110-A-3469	Dec. 1925	Bleacher, Creamer, & Miller Properties, Nr. Highville, Pa.
100-A-3470	June 1924	Topography Plant Dist.—Vicinity of Club House
100-A-3478	Oct. 1925	Coordinate Map of Survey Sta. Vicinity of Holtwood
110-A-3481	June 1926	Relocation of Safe Harbor Road

100-A-2942	Feb.	1916	Topography Susquehanna River—Lockport to Turkey Hill
100-A-2960			Drainage Area of the Susq. River above McCalls Ferry
100-A-3000	May	1916	Topographical Map—Holtwood Power Development
110-A-3014	Nov.	1914	Property to be Acquired from J. E. Vandersloot on Lower Chanceford Twp., York Co., Pa.
310-A-3025	July	1919	Water Surface Profile Pequea Creek, Pequea to Colemanville
100-A-3026	July	1914	Plan Susquehanna River Holtwood to Safe Harbor
110-A-3027	Jan.	1920	Properties Bordering Along Pequea Creek from the Susquehanna River to Martic Forge in Martic and Conestoga Twps., Lancaster Co., Pa.
110-A-3028	Nov.	1919	Map Showing Property Vicinity Pequea
100-A-3265	Nov.	1920	Proposed Bridge and Road—Otter Creek
110-A-3458	May	1923	Pequea Creek Property
110-A-3459	May	1923	ditto
100-B-4258	July	1910	Map of McCalls Ferry & Minqua, Showing Railroad Station
100-B-4334	Apr.	1911	Location of Main Road, Holtwood, Pa.
310-B-4531	Nov.	1913	Backwater Curves above Holtwood Dam
110-B-4532	Jan.	1914	Original Property Layout at Safe Harbor
110-B-4533	Feb.	1914	Property at Safe Harbor (A. Tripple)
100-B-4534	Jan.	1914	Cross Sections of Embankment, Conestoga Traction Co., Pequea Creek
100-B-4536	May	1913	ditto
110-B-4620		1913	Prop. Index Map No. 1 Vic. Wrightsville & Washington Boro

110-B-4621		Prop. Index Map No. 2 Vic. Turkey Hill
110-B-4622		Prop. Index Map No. 3 Vic. Walnut Is. & Goose Is.
110-B-4623		Prop. Index Map No. 4 Vic. Conestoga Creek & Safe Harbor
110-B-4624		Prop. Index Map No. 5 Vic. Pequea Creek & Shenks Ferry
110-B-4625		Prop. Index Map No. 6 Vic. Tucquan & McCalls Ferry
110-B-4626		Prop. Index Map No. 7 Vic. Holtwood & Muddy Creek
310-B-4627	1913	Conestoga Creek Sections for Backwater Calculations
310-B-4628	1911	Conestoga Creek Profile Susq. River to Rock Hill Dam
310-B-4629		Discharge Curve of Dam at Holtwood
310-B-4632	July 1912	Profile of Tucquan Creek
310-B-4633	1911	Profile of Susquehanna River—Holtwood to Sauers Ferry
310-B-4635	1912	Sheet #1, Section 1-10 Susquehanna River
310-B-4636	1912	Sheet #2, Section 11-15 Susquehanna River
310-B-4637	1912	Sheet #3, Section 15G to Creswell, Susquehanna River
		[23648] (page 4)
310-B-4638	1912	Sections of Susquehanna River at Columbia
310-B-4639	1911	Backwater Calculations Conestoga Creek—Sections for Perimeter
310-B-4644	1911	Observed and Computed Profile of Water Surface of Conestoga Creek
310-B-4645	1911	Profile of Conestoga Creek Showing Backwater Calculations of 1911 and Observations of Oct. 1910

100-C-5034	Apr. 1910	Map of Pequea Creek and Highway Bridge
310-C-5068	Aug. 1910	Rating Curve of Susquehanna River at Harrisburg
310-C-5069	Aug. 1910	Rating Curve of Susquehanna River Cable Section (Before Dam)
310-C-5079	Sept. 1910	Half monthly Minimum Flow of Susq. River during 1891-1910
310-C-5098	Dec. 1910	Harrisburg Discharge Curve
310-C-5127	Feb. 1911	Pondage Above McCall Ferry Dam
111-C-5132	Mar. 1911	Penna. R. R. Right of Way at Holtwood, Pa.
100-C-5141	May 1911	Map Showing Contour Lines above Railroad Track at Holtwood
257-C-5226	Apr. 1913	Kay Map of Flood Observations
257-C-5230	Apr. 1913	Location of Gauging Sta. Susq. Water Shed Flood of 3/29/13
110-C-5265	May 1913	Map Showing Culleys & Dougherty Property at Holtwood
110-C-5280	Jan. 1914	Hudson Est., Safe Harbor, Conestoga Twp., Lanc. Co., Pa.
110-C-5281	Jan. 1914	Daniel Witmer Property, Safe Harbor, Manor Twp., Lanc. Co., Pa.
110-C-5282	Jan. 1914	Saml. Shank Property, Safe Harbor, Manor Twp., Lanc. Co., Pa.
110-C-5283	Jan. 1914	Milton Eby Property #1, Safe Harbor, Conestoga Twp., Pa.
110-C-5284	Jan. 1914	Safe Harbor Properties, Conestoga Twp., Lanc. Co., Pa.
110-C-5285	Feb. 1914	Shober Est., Conestoga Twp., Lanc. Co., Pa.
111-C-5286	Mar. 1914	Profile Along W. Rail Main Track, C&PD RR. Holtwood to Pequea
110-C-5287	Mar. 1914	Paul Heine Property, Manor Twp., Lanc. Co., Pa.

257-C-5288	May 1914	Key Map of Pequea Creek
310-C-5297	Mar. 1915	Relative Gauge Heights at Holtwood & Safe Harbor
110-C-5298	Mar. 1915	Land Map McCall Ferry Power Co. Vicinity Pequea
110-C-5299		Land Map McCall Ferry Power Co. Vicinity McCall Ferry
110-C-5300	May 1915	Bell Property at Pequea now owned by Paul Heine
110-C-5305	May 1912	School House Front York Furnace Farm
110-C-5332	Apr. 1912	Tucquan Club Property on York Furnace Farm
110-C-5333	May 1912	Map of Southerly End of York Furnace Farm
110-C-5334	May 1912	Map of Southerly End of York Furnace Farm
110-C-5344	May 1912	School House Front York Furnace Farm
310-C-5345	June 1915	Road from Pequea Creek to Colemanville—Peq. Cr. Backwater
310-C-5346	1912	Backwater, Pequea Creek
310-C-5347	June 1915	Lancaster & York Furnace Elec. R. R. Pequea to Colemanville, Pequea Creek Backwater
310-C-5348	June 1915	Gauge Readings, Harrisburg to Holtwood
100-C-5352		Map of Conestoga Twp., Lanc. Co., Pa.
100-C-5353		Map of Lancaster Twp., Lanc. Co., Pa.
100-C-5354		Map of Martic Twp., Lanc. Co., Pa.
310-C-5355		Curves for Backwater Calculations Conestoga Creek
310-C-5356		Sections for Backwater Calculations Conestoga Creek
310-C-5357		Sections for Backwater Calculations Conestoga Creek

110-C-5364		Russell Burkholder Prop. Released to P. W. & P. Co.
110-C-5366	Aug. 1915	Property at Tucquan Creek East of P. R. R. Right of Way
310-C-5368		Study of Flood Waves—Susq. River—Harrisburg to Holtwood
310-C-5369	Apr. 1911	Comparative Gauge Heights at Harrisburg—Columbia to Holtwood
310-C-5370	1911	Susquehanna River. Comparison Water Surface Reading of 1910-11-Flood of 1889-1904 Holtwood to Columbia Gauge

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100-C-5371	Sept. 1915	Proposed Bridge at Muddy Creek
310-C-5373	Oct. 1915	Rating Curve for Buff and Buff Cur. Meter No. 8161
310-C-5374	Oct. 1915	Rating Curve for Buff and Buff Cur. Meter No. 8161
310-C-5378	May 1916	Rating Surves River Sections—Columbia to Holtwood
110-C-5379	May 1916	Property at Tucquan Creek Enclosing 185 ft. Contour East of R. R. Right of Way
100-C-5389		Proposed Relocation of County Rd. in L. Chanceford Twp.
310-C-5404	Feb. 1916	Cross Sections of Pequea Creek for Backwater Calculations
310-C-5405		Cross Sections for Perimeters—Pequea Creek 1912
310-C-5406		Cross Sections of Pequea Creek for Backwater Calculations
310-C-5407		Pequea Creek—Radius and Curves
310-C-5425	Aug. 1916	Profile of Conestoga Creek Showing Backwater Computation with Flashboards on Dam

310-C-5461	Apr. 1917	Profile of Pequea Creek Showing Computed Backwater with Elev. 180-0 at Mouth
310-C-5523	Sept. 1917	Location of Gauging Stations Susq. River Water Shed
310-C-5524	Aug. 1918	Key Map for Backwater Readings—Pequea Creek
310-C-5530	May 1919	Cross Sections Pequea Creek—1919
310-C-5531	May 1919	Cross Sections Mouth of Pequea Creek 1919
110-C-5533	Aug. 1917	Vicinity Vandersloot's Property from McCalls Ferry Power Co. Property Drawings
110-C-5606	June 1919	Pequea Creek Property Survey of 1919
310-C-5607	July 1919	Comparative Gauge Heights Pequea Creek & Forebay, 6/26/19
110-C-5613	Feb. 1920	Topography of Tamer Ann Halliger Tract, Lancaster Co., Pa.
310-C-5615	May 1920	Development of Freshet in Conestoga Creek, March 1920
100-C-5632	July 1920	Topography of C&PD R. R. Co. R. W. Showing Portion of Forebay
310-C-5637	Sept. 1920	Profile Road Safe Harbor to Rock Hill, Conestoga Side
310-C-5665	Dec. 1920	Discharge Curves Susquehanna River, Harrisburg & Holtwood 1920
310-C-5666	Nov. 1921	Rating Curves Section 15G-1
310-C-5667	Dec. 1921	Discharge Curves for Holtwood Dam with Flashboards Remaining on Pipe Bent to Crest
310-C-5668	Mar. 1922	Holtwood and Harrisburg Rating Curves 1921
310-C-5670	Apr. 1922	Forebay & Tailrace Relation Curve with 8 Units Wide Open
100-C-5681	Apr. 1921	Profile of Road in L. Chanceford Twp., Vic. of Otter Creek

310-C-5715	Mar. 1923	Rating Curves
100-C-5716	May 1923	Topography of Susquehanna River Vicinity Shenks Ferry
310-D-6023		Rating Curves for Susquehanna River at Pequea
310-D-6054	Aug. 1910	Rating Curves for Susquehanna River at Safe Harbor
100-D-6073	Nov. 1910	Location of Existing and Submerged Roads in York Co.
100-D-6148		Profile of Roads McCalls Ferry, York Co.
310-D-6208	Apr. 1913	Flood Observations Susq. River—Creswell to Fites Eddy
110-D-6221	Feb. 1914	Heistand & Binkley Properties, Safe Harbor
110-D-6222	Nov. 1913	Key Map of Backwater Observations, Shore Dam
110-D-6223	Feb. 1914	Safe Harbor Properties
110-D-6224	Feb. 1914	Milton Eby Property #2 & #3, Safe Harbor
110-D-6225	Feb. 1914	Milton Eby Property #4, Safe Harbor
110-D-6226	Feb. 1914	Safe Harbor Properties, Safe Harbor
110-D-6227	Mar. 1914	Properties at Safe Harbor, Conestoga Twp., Lanc. Co., Pa.
110-D-6228	June 1914	Flood Observations Susq. River, Section #1 to Fites Eddy
310-D-6280	Feb. 1922	Plan of Susq. River Between Holtwood and Marietta for River Observations
310-D-6295		Ditto

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110-E-8511	Jan. 1922	Profile of Public Rd. at McCalls Ferry —Quade Property
110-E-8517	Sept. 1923	Plat of Portion of Cully Tract
110-E-8538	Jan. 1922	Plat of D. Rowinski Tracts

310-E-7011	Apr. 1910	Rating Curves, Cullys Falls, Harrisburg & Dam, 4/27/10
110-E-7036	June 1910	Property Belonging to Heirs of John Bair
100-E-7012	Apr. 1910	Pequea Highway Bridge
110-E-7784	Oct. 1913	Property Survey Portion York Furnace Farm
110-E-7785	Jan. 1914	Properties at Safe Harbor, Manor Twp., Lanc. Co., Pa.
110-E-7786	Jan. 1914	Anderson Property, Safe Harbor, Conestoga Twp., Lanc. Co., Pa.
110-E-7895	July 1915	Russell Burkholder Property, York Co., Pa.
100-E-8008	June 1916	Index to Fisheries below Dam (Holtwood)
100-E-8009	June 1916	Index to Fisheries above Dam (Holtwood)
110/310-E-8305	Nov. 1920	Cross Section & Profile of Pequea Creek through Halliger Tract
110-E-8430	Dec. 1920	Plat of Davis Property at Safe Harbor
110-E-8507	Sept. 1921	Map of Colemanville Showing Property Lines

EXHIBIT No. 238.

[23651]

March 29, 1945

MEMORANDUM

Re: Lancaster Office Expense

After the Holtwood Development had been in operation for about one year a decision was made to increase the operating elevation of the pond during low flows by the use of flashboards although it was known that flowage basin property and property rights were inadequate for the higher backwater. Thus, additional property purchases were required at various locations, particularly, however, along Conestoga Creek and at other points on the Lancaster County side of the river. At the time, the staff of the Company was very small and it became necessary to hire someone who could devote full time to the work; therefore, Mr. Marvin E. Bushong, a native of Lancaster County, was employed in 1912 for this purpose. Mr. Bushong was familiar with local conditions, had a wide acquaintanceship, and the benefit of experience gained from the purchase of right of way for the 25 cycle transmission line between Holtwood and Lancaster built by Lancaster Edison Company—now merged with Pennsylvania Power & Light Company.

The work of acquiring a large number of properties in fee, or flowage rights, necessarily involved much patient and inconspicuous preparatory laying of groundwork, frequent contacts with attorneys representing the Company or the property owners, and frequent references to land records, so that it was natural to select Lancaster, the county seat, as a location for Mr. Bushong's office. At that time telephone service and highways were considerably better in the vicinity of Lancaster than in the vicinity of Holtwood, so that the work could be carried on more efficiently from the former location. Furthermore, by having the

office in Lancaster, Mr. Bushong was in a position to settle or prevent expensive suits brought or threatened to be brought against the Company for alleged flooding, ice damage, etc., and to gather information, consult witnesses, and otherwise conduct negotiations with the property owners when they visited Lancaster to sell produce in the markets or to make purchases, and such contacts were obviously without the disadvantage of the public knowledge that would have resulted from meetings at Holtwood.

The main function of the Lancaster Office when established, and for many years thereafter, was to acquire property required for and permanently useful to the Holtwood Development. Therefore, all expenses of the office, until 1926, were treated as we would today treat the expense of any field office set up in connection with any other construction job. Beginning in 1912, several owners of riparian property located in the Holtwood basin filed suits in an attempt to prevent the use of flashboards on the Holtwood dam, and this led to long drawn-out negotiations, resulting ultimately in purchase of the properties. Between 1912 and 1926 Mr. Bushong acquired a total of 67 properties, and the use of flashboards on the dam during low flow periods was continuous except during the [23652] (page 2) years 1915 and 1916. In addition to these purchases, however, Mr. Bushong carried on studies, investigations, and negotiations for such matters as the relocation of certain roads and bridges affected by backwater, the construction of fishways in the Holtwood dam, the relocation and improvement of the public road near Holtwood, and made preliminary studies and supervised work in connection with right of way purchases for the Holtwood-York, Holtwood-Coatesville, and Holtwood-Lancaster 60 cycle lines.

In carrying out work assigned to the Lancaster Office, Mr. Bushong from time to time hired capable men available in Lancaster or vicinity, who were not identified with

the Company. These men, both professional and non-professional, were useful in keeping contacts which enabled them to learn when deaths or changes in financial condition, or other factors, affected market conditions for specific properties and in making investigations, examining titles, negotiating for property or property rights, or in other phases of property acquisition work where direct action by the Company would have increased costs or had the effect of making amicable settlements extremely difficult, if not impossible. Because of Mr. Bushong's close contact with local conditions, his recommendations as to employment were usually approved and he was authorized to make employment contracts on a per diem or weekly basis, or a fee basis for the professional men, mainly attorneys, although none of them were considered regular employees. The services performed by these men cannot be set forth in detail as their sole contact with the Company was through Mr. Bushong, who assumed all responsibility for their employment and supervision. In some cases we can trace our present land titles through these agents, but in other cases the name of the agent or attorney does not appear in our records except in connection with the payment of the salary, fee, or expenses.

The work carried on in the Lancaster Office at times called for engineering information, which was supplied to Mr. Bushong by our forces at Holtwood or Baltimore. For many years it has been our policy to survey and permanently mark the boundaries of properties purchased by the Company, and to make maps and other permanent records. Therefore, the operations of the Lancaster Office necessitated field and office engineering work which some times preceded and sometimes followed the actual purchase of property or flowage rights. Thus, charges to the Flowage Basin Account for engineering work were not usually made at the same time, or even in the same year as other charges for the same property or properties.

After the completion of the hydro plant extension, the construction of the York, Coatesville, and Lancaster lines, and the steam plant it was recognized that the function of the Lancaster Office would change, in that it would no longer serve solely as a field construction office. The office was continued as a general office, and a fixed percentage of the expense was charged to operation, beginning in January, 1926. This breakdown between construction and operation continued until January, 1930 when Safe Harbor land purchases required major attention and all charges to P. W. & P. Co. construction costs were discontinued except for charges directly connected with the purchase [23653] (page 3) of right of way for the Safe Harbor Transmission System. Since the completion of the Safe Harbor-Westport transmission line and the purchase of right of way for the Safe Harbor-Riverside line, all expenses of the Lancaster Office allocated to Pennsylvania Water & Power Company have been charged as an operating expense.

April 5, 1945

Real Estate Purchases Made by
Lancaster Office (M. E. Bushong) 1912 to 1925, incl.
Information taken from vouchers and deeds.

1912

Month	Prop. No.	Name	Option Purchased	Deed Acquired	Other Interest Acquired
Apr.	E-91	Frances Aston	$ 5.	$	$
"	E-59	A. J. Zercher	10.		
"	E-107	Harriet Dabler	10.		
May	E-83&89	Samuel Shank	50.		
"	E-99	Elizabeth Walk	10.		
"	E-88	Joanna Boyd	25.		
"	E-101	Benj. E. Kendig	50.		
"	E-81	W. W. Bones	50.		
"	E-86 A&B	David E. Binkley	50.		
"	E-87	B. F. Campbell	50.		
" (	E-56&½int. in	E. Shober Estate	100.		
(	E-111				
June (	E-109	Paul Heine (Grebe)	100.		
" (	E-110				

Month	Prop. No.	Name	Option Purchased	Deed Acquired	Other Interest Acquired
June	E-96	Scott Derridinger	50.		
"	E-60	Franklin Frey	50.		
"	E-104	Annie B. Keiser	100.		
"	E-105	Sabina K. Roadaker	130.		
"	E-108	Mary A. Johnson	50.		
"	E-103	Rosetta Jones	50.		
"	E-106	T. D. Ellse	50.		
"	E-94	Sallie Kendig	50.		
July	E-90	C. K. Henry	150.		
"	E-95	Elizabeth Slough's Heirs	10.		
"	E-98	Mary Fralick	10.		
Aug.	E-61	Caroline Hudson Estate	100.		
"	E-62	Wm. Anderson		725.	
" (	E-109	Paul Heine (Grebe)		4,000.	
" (	E-110				
Oct.	E-95	Elizabeth Slough's Heirs (5 interests)	50.		

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Exhibit No. 238

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Month	Prop. No.	Name	Option Purchased	Deed Acquired	Other Interest Acquired
Dec.	E-90	Christian K. Henry		2,850.	
"	E-94	Sallie Kendig		1,700.	
"	E-101	Benj. E. Kendig		750.	
"	E-106	T. D. Ellse		1,950.	
"	E-105	Sabina K. Roadaker		1,170.	
"	E-63, A,B,C,D	Wm. A. Anderson		6,400.	
		[23655] (page 2)			
		1913			
Jan.	E-57, 58, & ½ int. in E-111	H. M. Stauffer & Co.	$ 500.	$	$
"	E-80	D. M. Witmer	500.		
"	E-108	Mary A. Johnson		550.	
"	E-61	Caroline A. Hudson Estate		5,400.	
"	E-64	Benj. Davis—Acquired Geo. Snyder Mortgage			1,200.
"	E-104	Annie B. Keiser		1,900.	
"	E-83 & 89	Samuel Shank		5,050.	

Month	Prop. No.	Name	Option Purchased	Deed Acquired	Other Interest Acquired
Jan.	E-56 & ½ int. in E-111	E. Shober Estate		5,400.	
Mar.	E-59	A. J. Zercher		1,490.	
"	E-95	Elizabeth Slough's Heirs		230.	
"	E-91	Frances Aston		645.	
"	E-96	Scott Derridinger		1,950.	
"	E-60	Franklin H. Frey		1,450.	
"	E-88	Joanna Boyd		1,490.	
"	E-84	P. W. Heistand		2,500.	
"	E-81	W. W. Bones		1,950.	
"	E-99	Elizabeth Walk		390.	
"	E-86 A&B	David E. Binkley		2,450.	
"	E-87	B. F. Campbell		2,750.	
"	E-80	D. M. Witmer		11,250.	
"	E-57, 58, & ½ int. in E-111	H. M. Stauffer & Co.		19,500.	
Apr.	E-92	H. B. Rhoads Estate		2,228.23	
May	E-93	Esther Seiple (Now Worker)	50.		

Month	Prop. No.	Name	Option Purchased	Deed Acquired	Other Interest Acquired
May	E-103	Rosetta Jones		450.	
June	E-107	Harriet Dabler		940.	
"	E-93	Esther Seiple (Now Worker)		2,750.	
Sept.	E-64	Benj. Davis-Payment to Jos. Kenworthy, Tr.			1,000.
Dec.	E-98	Mary Fralick		390.	
"	E-100	Penna. R. R. Co.		855.42	
		1914			
Apr.	E-48 A&B	Mary E. Harnish	1.		
May	"	" " "		200.	
"	W-15	Russell Burkholder	50.		
June	W-32 & 33	Daniel J. Rowinsky		50.	
"	W-15	Russell Burkholder		1,225.	
July	W-31	Franklin Kline	100.		
Aug.	"	" "		1,000.	

Month	Prop. No.	Name [23656] (page 3)	Option Purchased	Deed Acquired	Other Interest Acquired
		1915			
Mar.	W-28	John W. Hiemenz	$	$ 8,000.	$
"	E-10A	Robert T. Fry		1,500.	
Apr.	W-14	Henry G. Reist		1,500.	
June	W-20	John Bair Estate Fishing Island or Fulton Rock Otter Island (unlocated) Geo. Urey Patent Is. or Grassy Is. (unlocated)		6,200.	
"	R-20				
"	W-30	Minnehaha Club		100.	
July	W-18	Hugh Ross, et al		850.	
		1916			
Mar.	E-19	Woelpper		30,000.	
"	E-19	Woelpper (Mortgage)			5,299.16

Month	Prop. No.	Name	Option Purchased	Deed Acquired	Other Interest Acquired
		1919			
Feb.	E-64	Benj. Davis		3,050.	
		1920			
July	E-52A	John W. Heimenz		3,500.	
Aug.	E-46 A-E	Paul Heine		6,000.	
Nov.	E-48 A-B	Mary E. Harnish		2,150	
		1921			
May	W-17, R-32, 34, 35,) 36 & 3 unlocated) Islands)	J. E. Vandersloot		12,500.	
July	E-14B	Oliver C. Patton Road R/W		1,500.	
Aug.	E-30 A-D	Colemanville Water & Power Co.		25,000.	
Oct.	E-31	Lanc. & York Furnace) St. Rwy. Co.)		11,500.	
"	E-82	Alice M. Tripple)			
		1922			
Mar.	W-36	Rebecca M. Rowinski		500.	
Aug.	E-52B	John W. Hiemenz		1,000.	

[23657] (page 4)

Month	Prop. No.	Name	Option Purchased	Deed Acquired	Other Interest Acquired
		1923			
May		Conestoga Twp. Rd. Reloca. at S. H.	$	$ 7,400	
"	E-49	Newton Rineer		2,000	
June	E-47	Washington Martin		500	
Nov.	W-34 A&B	Jos. E. Lant		18,000	
"	E-14 B	O. C. Patton Farm	1,000		
Dec.	Y-13	Wm. C. Olewiler		7,000	
		1924			
Jan.	Y-26	Jacob W. Kupp		6,000	
"	I-99 A	House Island	50		
Feb.	E-119 A-E	Aaron B. Bleacher	10		
"		John M. Bleacher	10		
Mar.	E-118 A&B	Daniel W. Kendig	10		
"		Andrew M. Aument	10		
"	E-117 A-D	Emmett Creamer	10		
"	E-115 A&B	Ray C. Creamer	10		
"		Aaron Kline	10		

Month	Prop. No.	Name	Option Purchased	Deed Acquired	Other Interest Acquired
Mar.	E-120 A&B	Isaac Miller Estate	5		
"	E-119 A-E	Aaron B. Bleacher		15,000	
"	I-99A	House Island		1,450	
"	E-120 A&B	Isaac Miller Estate		300	
"	E-117 A-D	Emmett Creamer		6,000	
"	E-14 B	O. C. Patton Farm		9,000	
July	E-7	G. G. Cully		1,494.24	
		1925			
July	R-21	McCormick Island (Shoff)	1,000		
Dec.	E-97	DePue Property		3,000	

Prop. No.	Name	Reason for Purchase
		1912
E 91	Frances Aston	Flashboard Operation
E 59	A. J. Zercher	" " , highway relocation effected in 1923
E 107	Harriet Dabler	" " , now also part of Cga. Substation site
E 83 & 89	Samuel Shank	" "
E 99	Elizabeth Walk	" " , now also part of Cga. Substation site
E 88	Joanna Boyd	" "
E 101	Benj. E. Kendig	" " , now also part of Cga. Substation site
E 81	W. W. Bones	" "
E 86 A&B	David E. Binkley	" "
E 87	R. F. Campbell	" "
(E 56&½ int.	E. Shober Estate	" " , now also part of Cga.
(E 111		Substation site
(E 109	Paul Heine (Grebe)	" " , now also part of Cga.
(E 110		Substation site
E 96	Scott Derridinger	" "
E 60	Franklin Frey	" " , highway relocation effected in 1923
E 104	Annie B. Keiser	" " , now also part of Cga. Substation site
E 105	Sabina K. Roadaker	" " , now also part of Cga. Substation site

Prop. No.	Name	Reason for Purchase
E 108	Mary A. Johnson	Flashboard Operation, now also part of Cga. Substation site
E 103	Rosetta Jones	" " , now also part of Cga. Substation site
E 106	T. D. Ellse	" " , now also part of Cga. Substation site
E 94	Sallie Kendig	" "
E 90	C. K. Henry	" "
E 95	Elizabeth Slough's Heirs	" "
E 98	Mary Fralick	" " , now also part of Cga. Substation site
E 61	Caroline Hudson Estate	" " , highway relocation effected in 1923
E 62	Wm. Anderson	" "
E 109 E 110	Paul Heine (Grebe)	" " , now also part of Cga. Substation site
E 95	Elizabeth Slough's Heirs (5 interests)	" "
E 94	Sallie Kendig	" " , flowage right only obtained
E 101	Benj. E. Kendig	" " , now also part of Cga. Substation site
E 106	T. D. Ellse	" " , now also part of Cga. Substation site
E 105	Sabina K. Roadaker	" " , now also part of Cga. Substation site
E 63,A,B,C,D	Wm. A. Anderson	" "

[23659] (page 2)
1913

Prop. No.	Name	Reason for Purchase
E 57,58,&½ int. in E 111	H. M. Stauffer & Co.	Flashboard Operation " " , now also part of Cga. Substation site
E 80	D. M. Witmer	" "
E 108	Mary A. Johnson	" " , now also part of Cga. Substation site
E 61	Caroline A. Hudson Estate	" "
E 64	Benj. Davis—acquired Geo. Snyder mortgage	" " , payments were for mortgagee's int. only; property acquired by foreclosure in 1919
E 104	Annie B. Keiser	Flashboard Operation, now also part of Cga. Substation site
E 83 & 89	Samuel Shank	Flashboard Operation
E 56&½ int. in E 111	E. Shober Estate	" " , now also part of Cga. Substation site
E 59	A. J. Zercher	" "
E 95	Elizabeth Slough's Heirs	" "
E 91	Frances Aston	" "
E 96	Scott Derridinger	" "
E 60	Franklin H. Frey	" " , highway relocation effected in 1923
E 88	Joanna Boyd	" "
E 84	P. W. Heistand	" "
E 81	W. W. Bones	" "

Prop. No.	Name	Reason for Purchase
E 99	Elizabeth Walk	Flashboard Operation now also part of Cga. Substation site
E-86 A&B	David E. Binkley	" "
E 87	B. F. Campbell	" "
E 80	D. M. Witmer	" "
E 57,58,&½ int. in E 111	H. M. Stauffer & Co.	" " , now also part of Cga. Substation site
E 92	H. B. Rhoads Estate	" "
E 93	Esther Seiple (Now Worker)	" " , flowage right only obtained
E 103	Rosetta Jones	" " , now also part of Cga. Substation site
E 107	Harriet Dabler	" " , now also part of Cga. Substation site
E 93	Esther Seiple (Now Worker)	" " , flowage right only obtained
E 64	Benj. Davis—Payment of Jos. Kenworthy, Tr.	" " , payments were for mortgagee's int. only; property acquired by foreclosure in 1919
E 98	Mary Fralick	Flashboard Operation, now also part of Cga. Substation site
E 100	Penna. R. R. Co.	" " , now also part of Cga. Substation site

Exhibit No. 238

3958

[23660] (page 3)

Prop. No.	Name	Reason for Purchase
		1914
E 48 A&B	Mary E. Harnish	Flashboard Operation, flowage right only obtained
W 15	Russell Burkholder	" " , flowage right only obtained
W 32 & 33	Daniel J. Rowinsky	" " , flowage right only obtained
W 31	Franklin Kline	" "
		1915
W 28	John W. Hiemenz	Flashboard Operation
E 10A	Robert T. Fry	Acquired to settle dispute over location of property lines and property ownership
W 14	Henry G. Reist	Flashboard Operation, flowage right only obtained
W 20	John Bair Estate	Flashboard Operation, flowage right only obtained
W 20	Fishing Island, etc.	Required for initial development but existence unknown until brought to our attention
W 30	Minnehaha Club	Flashboard Operation, flowage right only obtained
W 18	Hugh Ross, et al.	Flashboard Operation, flowage right only obtained
		1916
E 19	Woelpper	Flashboard Operation, culmination of lengthy litigation. Property acquired in fee but later sold subject to flowage right

Exhibit No. 238

3959

Prop. No.	Name	Reason for Purchase
		1919
E 64	Benj. Davis	Flashboard Operation, acquired in fee at sheriff's sale under foreclosure proceedings by reason of mortgages purchased in 1913.
		1920
E 52A	John W. Hiemenz	River coal recovery.
E 46 A-E	Paul Heine	River coal recovery.
E 48 A-B	Mary E. Harnish	River coal recovery, later used as transmission line right of way.
		1921
W 17 R 32, 34, 35, 36,&3 unlocated Islands	J. E. Vandersloot	Flashboard Operation, Culmination of lengthy litigation, flowage right only obtained.
E 14 B	Oliver C. Patton Road R/W	To afford more convenient road access to Holtwood.
E 30 A-D	Colemanville Water & Power Co.	Flashboard Operation, culmination of lengthy litigation.
E 31	Lanc. & York Furnace St. Rwy. Co.	Flashboard Operation, culmination of lengthy litigation.
E 82	Alice M. Tripple	Flashboard Operation, litigation settled upon acquisition of flowage right.

Prop. No.	Name	Reason for Purchase
		1922
W 36	Rebecca M. Rowinski	Flashboard Operation
E 52B	John W. Hiemenz	River Coal Recovery
		1923
	Conestoga Twp. Rd. Reloca. at S. H.	Flashboard Operation
E 49	Newton Rineer	River Coal Recovery, later used as transmission line right of way.
E 47	Washington Martin	River Coal Recovery
W 34 A&B	Jos. E. Lant	Primarily for S. H. Development. Lower portion affected by flashboard operation.
E 14B	O. C. Patton Farm	Protection and expansion of Holtwood Village, transmission line construction, site of local school and of recreational facilities for Holtwood employees.
Y 13	Wm. C. Olewiler	Safe Harbor Development.
		1924
Y 26	Jacob W. Kupp	Safe Harbor Development.
I 99 A	House Island	Safe Harbor Development.
E 119 A-E	Aaron B. Bleacher	Manor Substation Site.
	John M. Bleacher	Optioned as part of Manor Substation Site—never purchased.
E 118 A&B	Daniel W. Kendig	Optioned as part of Manor Substation Site—option allowed to expire but property was later purchased upon renegotiation.
	Andrew M. Aument	Optioned as part of Manor Substation Site—never purchased.

3960
Exhibit No. 238
Exhibit No. 238
3961

Prop. No.	Name	Reason for Purchase
E 117 A-D	Emmett Creamer	Manor Substation Site.
E 115 A&B	Ray C. Creamer	Optioned as part of Manor Substation Site—option allowed to expire but property was later purchased after renegotiation.
E 120 A&B	Isaac Miller Estate	Manor Substation Site.
E 119 A-E	O. C. Patton Farm	See 1923, when option was obtained.
E 7	G. G. Cully	Relocation and construction of transmission lines, protection and possible expansion of Holtwood Village.
	1925	
R 21	McCormick Island (Shoff)	River Coal Recovery, also required for initial hydro development but its existence was not known until owner demanded its purchase.
E 97 (incl. 102)	DePue Property	Flashboard Operation, would have been purchased in 1913 & 14 when other Conestoga Creek properties were purchased but owners could not be located. Owner later appeared and entered suit, which was settled by property purchase. Now also part of Conestoga Substation site.

[23662] (page 5)

Of the above listed properties, the following were either wholly or partially covered by flowage releases at the time of their fee acquisition:

E-30 B Colemanville Water & Power Co. (Sawmill Tract)

Acquired in fee in 1921; includes portions of release properties E-29 and E-45 originally obtained in 1900 from Frederick Shoff, et al. However, fee purchase also included much land not covered by release.

E-46 A-E Paul Heine

Acquired in fee in 1920; this property is made up entirely of portions of release properties E-44 and E-45 originally obtained in 1900 from Frederick Shoff, et al.

E-47 Washington Martin

Acquired in fee in 1923; comprised of portion of release property E-44 originally obtained in 1900 from Frederick Shoff.

E-48 A&B Mary E. Harnish

Acquired in fee in 1920; release over same property had been obtained in 1914 from same party.

E-52 A&B John W. Hiemenz

Acquired in fee in two purchases in 1920 and 1922; comprised of major portion of release property E-52 A&B originally obtained in 1901 from John Pontz.

EXHIBIT NO. 239.

[23663]

August 6, 1945

There is set forth below supplemental information as requested by Mr. Newlands in connection with the following vouchers:

Year	Voucher No.	Name	Amount
1915	J-245	Simpson, Thacher & Bartlett	$1,000
1915	6985	Jas. H. Harlow Co.	250
1916	10044	John E. Malone	600
1917	13756	John E. Malone	1,650
1917	13749	Simpson, Thacher & Bartlett	850
1917	11221	Jas. W. Kenworthy	750
1917	12995	John M. Groff	500
1918	2913	John E. Malone	2,500
1918	J-383	Edwin Smith	250
1919	6238	John E. Malone	4,500
1919	3767	J. M. Groff	500
1919	6207	J. M. Groff	500
1919	5383	Jas. Kenworthy	250
1920	9184	John E. Malone	1,500
1920	7883	J. M. Groff	3,500
1920	9011	J. M. Groff	500
1920	9011	Heine, Heimenz & Harnish	1,500
1920	9329	Simpson, Thacher & Bartlett	170
1921	10850	John E. Malone	5,500
1921	12176	John E. Malone	2,500
1921	12541	John E. Malone	2,500
1922	15688	John E. Malone	2,500
1922	15077	J. M. Groff	5,000
1922	14599	J. M. Groff	250
1923	20622	J. M. Groff	2,500
1923	21729	J. M. Groff	1,000
1923	21781	J. E. Malone	1,000

Year	Voucher No.	Name	Amount
1923	18986	J. E. Malone	1,000
1923	16458	John M. Groff	1,000
1923	19542	Gannett, Seelye & Fleming	2,000
1924	23440	John M. Groff	1,000

Vo. 6892 (J-245)—The law firm of Simpson, Thacher & Bartlett, which is located in New York, represented the Company for many years, beginning in 1910, and was frequently consulted by Mr. Chas. E. F. Clarke on all phases of the Company's business. In the case of the $1,000 charge to Account 338 through the above noted voucher, it has been found that the services were rendered in the Woelpper injunction suit, at the request of Mr. Clarke.

[23664] (page 2)

Vo. 6985—Payment for professional engineering services rendered by Jas. H. Harlow & Company in connection with a report on ice conditions on the Susquehanna River between 1872 and 1915.

Vo. 10044—Mr. John E. Malone became counsel for the Company in 1912 and served in that capacity until his death. He was active in all local property matters and litigation from the time of his employment, and after 1920 acted as chief counsel for the Company. The amount charged to Account 338 through voucher 10044 represents the portion of his retainer applied to his work in the flashboard suits and the purchase of properties. These services cannot be identified with any particular property but must be considered in view of information contained in memorandums dated March 29, 1945 and May 23, 1945. To avoid repetition, it is to be noted that the charges made to Account 338 through vouchers 13756, 2913, 6238, 9184, 10850, 12176, 12541, 15688, 21781, and 18986 are all of the same character and represent payment for legal services attached to the defense or preparation for defense of lawsuits and the subsequent acquisition of property in fee, or

other interests in land used and useful for the Holtwood development.

Vo. 13749—Represents portion of Simpson, Thacher & Bartlett fee paid for services in the Vandersloot case.

Vo. 11221—James W. Kenworthy, an attorney, was active in the negotiations for the Ben Davis property. He purchased a mortgage upon which suit was brought to force sale of the property and assisted in the litigation. See also Vo. 5383.

Vo. 129[illegible]—See also vouchers 3767, 6207, 7883, 9011, 15077, 14599, 20622, 21729, 16458, and 23440. John M. Groff was an attorney in Lancaster who had a large practice, knew many people in Lancaster County, and became a judge in the local courts in 1927. He was retained by Mr. Bushong to assist in the purchase of properties, but his value to us was mainly the fact that he was not identified with the Company. Therefore, there are no records available to indicate in detail the services rendered, but it is known that he performed services in connection with the acquisition of the Ben Davis property and the Heine, Heimenz, and Harnish tracts. It is probable that he helped in acquiring the Colemanville Water & Power Company property and the Lancaster and York Furnace Street Railway Company property, as well as other properties acquired during the period of his employment.

Vo. 2441 (J-383)—Edwin F. Smith was a consulting engineer located in Philadelphia. The services rendered were a study and report on floods and low water in connection with the flashboard suit brought by the Lancaster Electric Light Heat & Power Company, which owned several small hydroelectric plants on Conestoga Creek.

Vo. 9329—The amount of $170 charged to Account 338 out of the larger payment of $1,500 made to Simpson, Thacher & Bartleit was set at the time the services were

rendered and we have no additional information at this time.

Vo. 19542—The firm of Gannett, Seelye & Fleming, Consulting Engineers located in Harrisburg, was formed in 1915 by Mr. Farley Gannett, who had previously been Chief Engineer of the Water Supply Commission of Pennsylvania. He was thoroughly familiar with the entire drainage area of the Susquehanna River and with problems connected with the recovery of river coal and other materials from the bed of the river. Although there is no report in our Report File to describe the nature of the services rendered in 1923, it is believed that they were primarily in connection with our proposed construction of a steam plant at Holtwood, and the use of river coal as a fuel.

EXHIBIT NO. 240.

[23665]

HUGH L. COOPER
Consulting Engineer
60 Wall Street
New York

January 30, 1908

McCall Ferry Power Company,
60 Wall Street, New York.

Dear Sirs:—

I have to-day been shown a copy of the resolution adopted at your last Board meeting to the effect that all of my organization at McCall Ferry should be discharged on February 1st.

In view of my contract with the McCall Ferry Power Company, I feel that I should now advise you that if this order is carried out it will largely increase the expense of the final completion of the work and the time necessary therefor, and will, I believe, result in great damage to the interests of the Company. Also I must call your attention to the fact that if this organization is discharged, it practically makes it impossible for me to fulfill the provisions of Clause 4 of our contract with reference to supplying such organization.

Also it discharges Mr. Value and if he is discharged it will probably not be possible to again obtain his services, and I cannot be held responsible for not obtaining him again if he is once discharged.

The organization that we now have at McCall Ferry is one of approved and accepted efficiency and if they are discharged it will be impossible to get together again an organization of equal efficiency, and I wish you to formally know that I personally will [23666] (page 2) be very much damaged by the disbanding of an organization which I have been so long in educating and bringing up to such a state of efficiency and I trust that you will upon further con-

sideration feel that it is desirable and necessary to rescind the resolution which was adopted at your last meeting.

I also notice that the resolution provides that the Hydraulic Department should immediately complete all plans and details for the hydraulic work.

It will not be possible for the Hydraulic Department to complete such plans except as the work progresses, and the above remarks with reference to the McCall Ferry organization apply with equal strength to all of my organization in the City of New York.

It has also seemed to me desirable that I should now refer to our contract of October 18, 1905.

You will remember that I was at first instructed to proceed with the construction of the McCall Ferry dam, the crest of which was to be at Elevation 185.00 above sea level, and that plans were gotten out for this work and a large amount of money spent on the same, and in fact that all of the equipment and a large portion of the construction bridge were designed and installed for the dam at Elevation 185.00.

After the accomplishment of the above work you instructed me to change my plans and that you wished the dam to have an Elevation of 165.00 feet above sea level.

Then in order to increase the head, due to the construction of the dam at Elevation 165.00, you ordered certain excavations at Cully's Cut and the building of various other auxiliary works not contemplated at the time of the execution of the contract of October 18, 1905.

[23667] (page 3)

In accordance with your instructions new plans were made and the work of building the dam at Elevation 165.00 and all the additional works required have proceeded under my direction until November 1, 1907, when in accordance with instructions from you, all work at McCall Ferry was practically stopped.

At the time I received such instructions I was carrying on the work and was prepared to continue it.

I have received no instructions for resuming the work.

At first you made monthly payments to me of $5,000. under the terms of the contract and then you requested that the monthly payments be reduced to $4,000., the request being made and my consent being given upon the specific understanding that such reduction would not prejudice the claims of either party" as stated in Mr. Dimock's letter to Mr. Barnum of October 11, 1906, in which letter it was also stated that "either party can ask for a settlement of the entire question, including past payments, at any time".

It seems to me that the time has now come for adjusting this matter. You continued making payments until I received a total of $100,000. and no payments have been made since that time, the last payment to me being July 31, 1907.

My position with reference to this matter is as follows:

1st. The agreed compensation in Clause 9 of our contract was based upon the estimated cost of building the dam to an Elevation of approximately 180.00 feet and such estimate as made by you required of me the responsibility of building and designing approximately $2,982,000. worth of work. If you had built the work upon [23668] (page 4) the plan of approximately Elevation 155.00 under the contract of October 18, 1905, the amount of work required for me to design and be responsible for the building of would be approximately $1,731,000.

Now instead of either of the plans mentioned in the contract of October 18, 1905, you instructed me to build the dam at Elevation 165.00, with a large amount of other additional work by way of controlling the water, lowering the wheel pits, tail race excavation and ice control, which have brought the cost of the work which I have had to design and be responsible for up to the sum of $3,778,000.

The time that I have been obliged to personally spend on this construction has been much more than would have been required under the original plan of the dam at Elevation 185.00.

My position on this point therefore is that the payments due to me under the contract are at least those specified in Clause 9 of the Agreement and that you now owe me $25,000., which is the difference between the $100,000. that you have already paid and the $125,000. specified in Clause 9 of the contract.

At the time when work was discontinued, the work at McCall Ferry was advanced to a point where the setting of the turbine machinery could begin and in spite of the changes ordered from time to time since I commenced the undertaking, was at the time of cessation of work on November 1st. in reality much in advance of the completion required in Clause 11.

It is further to be said that if the work had not been stopped on November 1st. the progress we were then making would justify the starting up of the plant at least four months ahead of the time required by Clause 11 and my receiving the bonus [23669] (page 5) for time of completion as specified therein.

Accordingly, I now consider that you owe to me the $25,000. above referred to and a $10,000. payment (a part of the bonus) for the months of January and February, 1908, the $50,000. bonus being due in monthly payments under the contract, commencing January 1, 1908.

I request that the foregoing amounts due should now be paid to me or that you should now make some satisfactory provision for future payments of the above sums.

In writing you as above I beg to assure you of my deep interest in the welfare and future of the McCall Ferry Power Company and of my readiness now and always to aid you in whatsoever way I can, and I wish to convey my further assurance that in no way do I wish to interfere with or make more difficult the carrying out of your present plans or any of your future plans for financing this enterprise, but it has seemed to me desirable and necessary that I should now state to you my views.

Yours very truly,

HUGH L. COOPER

HLC/C

EXHIBIT NO. 241.

[23670]

McCALL FERRY POWER COMPANY
Office of the Chief Engineer
Room 2407, Sixty Wall Street
New York City

CARY T. HUTCHINSON
Chief Engineer
WM. BARCLAY PARSONS
Consulting Engineer

March 11th, 1908.

H. F. Dimock, Esq., President,
McCall Ferry Power Company,
#60 Wall Street, N. Y. City.

Dear Sir,—

I am attaching a copy of letter just received from Mr. Cooper.

The status of this matter is that Mr. Cooper has been paid $100,000 in all. The least amount due him will be $135,000. Our agreement with him provides that the payment shall continue after January 1st, 1908. As I have said, I think Mr. Cooper has earned his bonus for early completion. There is, therefore, no reason why Mr. Cooper should not receive the $5,000 he asks for, other than the financial condition of the Company.

Very truly yours,

CARY T. HUTCHINSON
Chief Engineer.

Enc.

EXHIBIT NO. 242.

[23671]

McCALL FERRY POWER COMPANY
Sixty Wall Street
New York

January 18, 1906.

Simpson, Thacher and Bartlett,
Philip G. Bartlett, Esq.,
25 Broad St., New York City.

Dear Sir:—

I enclose two sheets, one showing the distribution of stock held by Messrs. Harvey Fisk and Sons between themselves and myself, the other showing the names in which I wish the stock going to me, divided.

As you suggested, I will send these various agreements to the people to be signed, and have them returned either to you or to Messrs. Harvey Fisk and Sons, as you prefer.

Yours very truly,

CARY T. HUTCHINSON

Enc 2

EXHIBIT NO. 243.

[23672]

January 19th, 1906.

Cary T. Hutchinson, Esq.,
60 Wall Street,
New York City.

Dear Sir:

We have your letter enclosing statement of McCall Ferry Power Company common stock and also of the distribution desired of the common stock going to yourself.

In order to facilitate and hasten the carrying out of this distribution we send you herewith ten copies of the Stock Deposit Agreement, so that you may procure one of these to be signed by each of the distributees. Meanwhile we will forward your list to Harvey Fisk & Sons so that they will have ready the Stock Deposit Receipts to furnish in exchange for these agreements when signed and redelivered.

Yours very truly,

Vol. XI

TRANSCRIPT OF RECORD

(Pages 3975 to 4110)

Supreme Court of the United States

OCTOBER TERM, 1951

No. 428

PENNSYLVANIA WATER AND POWER COMPANY AND SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND, PETITIONERS,

vs.

FEDERAL POWER COMMISSION ET AL.

No. 429

PENNSYLVANIA PUBLIC UTILITY COMMISSION, PETITIONER,

vs.

FEDERAL POWER COMMISSION

ON WRITS OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

PETITIONS FOR CERTIORARI FILED NOVEMBER 16, 1951

CERTIORARI GRANTED FEBRUARY 4, 1952

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TABLE VI

APPLICATION OF UNIT COSTS TO CUSTOMERS' MEASURED LOADS
ASSEMBLY OF CAPACITY, ENERGY AND SPECIAL FACILITY COSTS FOR EACH CUSTOMER
COMPARISON OF TOTAL COST OF SERVICE WITH REVENUES COLLECTED

	Noncoincident Maximum Demands	Energy Sales in Year of Average River Flow	Capacity Costs	Energy Costs	Special Facilities Cost	Energy Supply from Baltimore		Total Cost
						Charge to Customers at 4 Mills	Credit to Baltimore	
	1	2	3	4	5	6	7	8
P.P. & L. Co.	66,000	345,329,221	$1,264,604	$ 438,239	$ 10,973	$ 175,175	$	$ 1,888,
P.E. Co.	24,500	152,292,000	469,436	193,266	58,689	77,254		798,
Ed. Lt. & Pr. Co.	9,560	44,863,535	183,176	56,934	72,668	22,758		335,
R.R. Co. in Pa.	33,900	194,082,000	649,546	246,298	107,201	98,452		1,101,
Baltimore	10,820	376,917,000	207,318	478,325	620,563	127,629	(501,268)	932,
Total	144,780	1,113,483,756	$2,774,080	$1,413,062	$ 870,094	$ 501,268	$ (501,268)	$ 5,057,

RED LOADS
S" FOR EACH CUSTOMER
ES COLLECTED

r from Baltimore Credit to Baltimore	Total Cost	Total Revenue Amount	Total Revenue Percent	Revenue in Excess of Allocated Costs Amount	Revenue in Excess of Allocated Costs %
7	8	9	10	11	12
$	$ 1,888,991	$2,176,256	28.0	$ 287,265	10.6
	798,645	986,360	12.7	187,715	6.9
	335,536	368,904	4.7	33,368	1.2
	1,101,497	1,455,514	18.7	354,017	13.0
(501,268)	932,567	2,790,466	35.9	1,857,899	68.3
$ (501,268)	$ 5,057,236	$7,777,500	100.0	$2,720,264	100.0

TABLE VI

APPLICATION OF UNIT COSTS TO CUSTOMERS' MEASURED LOADS
ASSEMBLY OF CAPACITY, ENERGY AND SPECIAL FACILITY COSTS FOR EACH CUSTOMER
COMPARISON OF TOTAL COST OF SERVICE WITH REVENUES COLLECTED

	Noncoincident Maximum Demands	Energy Sales in Year of Average River Flow	Capacity Costs	Energy Costs	Special Facilities Cost	Energy Supply from Baltimore		Total Cost
						Charge to Customers at 4 Mills	Credit to Baltimore	
	1	2	3	4	5	6	7	8
P.P. & L. Co.	66,000	345,329,221	$1,264,604	$ 438,239	$ 10,973	$ 155,460	$	$ 1,869,;
P.E. Co.	24,500	152,292,000	469,436	193,266	58,689	68,559		789,9
Ed. Lt. & Pr. Co.	9,560	44,863,535	183,176	56,934	72,668	20,197		332,9
R.R. Co. in Pa.	33,900	194,082,000	649,546	246,298	107,201	87,372		1,090,.
Baltimore	10,820	376,917,000	207,318	478,325	620,563	169,680	(501,268)	974,9
Total	144,780	1,113,483,756	$2,774,080	$1,413,062	$ 870,094	$ 501,268	$ (501,268)	$ 5,057,.

RS' MEASURED LOADS
LITY COSTS FOR EACH CUSTOMER
TH REVENUES COLLECTED

gy Supply from Baltimore			Total Revenue		Revenue in Excess of Allocated Costs	
harge to stomers at Mills	Credit to Baltimore	Total Cost	Amount	Percent	Amount	%
6	7	8	9	10	11	12
155,460	$	$ 1,869,276	$2,176,256	28.0	$ 306,980	11.3
68,559		789,950	986,360	12.7	196,410	7.2
20,197		332,975	368,904	4.7	35,929	1.3
87,372		1,090,417	1,455,514	18.7	365,097	13.4
169,680	(501,268)	974,618	2,790,466	35.9	1,815,848	66.8
501,268	$ (501,268)	$ 5,057,236	$7,777,500	100.0	$2,720,264	100.0

EXHIBIT NO. 294.

[23864]

PENNSYLVANIA WATER & POWER CO.

Thirty-Sixth

Annual Report

1945

PENNSYLVANIA WATER & POWER COMPANY

and Susquehanna Transmission Company of Maryland, a wholly-owned subsidiary

Comparative Consolidated Statement of Income

	For Year Ended December 31 1945	1944
Operating Revenues (*Note A*)	$7,051,676.04	$7,148,668.66
Operating Revenue Deductions:		
Maintenance	$ 359,837.84	$ 346,364.78
Power Purchased from Safe Harbor Water Power Corporation	1,231,772.47	1,214,553.53
Interchange Power—Net	*(812,133.77)*	*(628,867.16)*
Other Operating Expenses	1,568,633.78	1,453,211.83
Depreciation (*Note B*)	574,245.15	572,364.86
Federal Income and Excess Profits Taxes	1,211,693.82	1,243,700.49
Other Taxes	317,248.94	334,125.59
Total Operating Revenue Deductions	$4,451,298.23	$4,535,453.92
Operating Income	$2,600,377.81	$2,613,214.74
Other Income:		
Dividends on Stock of Safe Harbor Water Power Corporation (*Note D*)	$ 280,000.00	$ 280,000.00
Other Dividends, Interest and Miscellaneous	162,166.91	144,253.13
Total Other Income	$ 442,166.91	$ 424,253.13
Gross Income	$3,042,544.72	$3,037,467.87
Income Deductions:		
Interest on Long-Term Debt	$ 680,449.37	$ 687,057.08
Amortization of Debt Discount, Premium and Expense—Net (*Note C*)	32,776.02	163,501.84
Interest Charged to Construction—Credit	*(280.29)*	*(140.30)*
Miscellaneous Income Deductions	42,048.35	27,979.28
Total Income Deductions	$ 754,993.45	$ 878,397.90
Net Income (*Note A*)	$2,287,551.27	$2,159,069.97

( ) *Indicates credit.*

Consolidated Statement of Earned Surplus

Earned Surplus—December 31, 1944		$6,146,295.18
Additions:		
Net Income for 1945 (as above)		2,287,551.27
		$8,433,846.45
Deductions:		
Dividends on $5 Cumulative Preferred Stock	$ 107,465.00	
Dividends on Common Stock—$4.00 per share	1,719,392.00	
Payment for increase in past service benefits under revised retirement annuity plan	300,000.00	
Adjustment of prior years' revenues, taxes and expenses, and other items—net	8,660.30	2,135,517.30
Earned Surplus—December 31, 1945 (*Note A*)		$6,298,329.15

See Notes on Pages 18 and 19.

PENNSYLVANIA WATER & PO WATER & POWER COMPANY

and Susquehanna Transmission Company of Maryland, n Company of Maryland, a wholly-owned subsidiary

Consolidated Balance Sheet —Decembe Balance Sheet —December 31, 1945

ASSETS AND OTHER DEBITS

CAPITAL ASSETS:		
Plant, Property and Power Development (*Note A*)		$38,823,789.95
INVESTMENTS:		
Safe Harbor Water Power Corporation Capital Stock, at cost (See explanation under Contingent Liabilities)	$ 3,000,000.00	
Other Stocks, at cost or less (Quoted market value at December 31, 1945, was approximately $2,549,000 of which $424,000 is applicable to securities pledged under the Company's mortgage)	1,865,842.38	
United States Savings Bonds, Series G, at cost	400,000.00	5,265,842.38
CURRENT AND ACCRUED ASSETS:		
Cash in Banks and on Hand	$ 1,707,462.31	
United States Treasury Notes, at cost	4,000,000.00	
Accounts Receivable	627,266.98	
Interest and Dividends Receivable	157,963.51	
Special Deposits for:		
Payment of Dividends—Contra	456,714.25	
Taxes and Other Purposes	93,833.06	
Sinking Fund (Cash deposited with Trustee for redemption of bonds)	110,666.66	
Materials and Supplies, at average cost or less	393,553.28	
Prepayments	61,668.14	7,609,128.19
DEFERRED DEBITS		18,899.17
Total Assets and Other Debits		$51,717,659.69

See Notes on Pages 18 and 19.

Approved,
JAS. L. RINTOUL,
Executive Vice-President.

CAPITAL		
Common St (Auth		$38,823,789.95
$5 Cumulat (Auth plus a		
LONG-TE		
Refunding M to be reti		
3¼% Seri		
3¼% Seri		5,265,842.38
CURREN		
Ac ats Pa		
Dividends D		
Long-Term fund with		
Interest Acc		
Federal Inco		
Other Taxes		
Other Curre		
DEFERRE		
Unamortize		
RESERVE		7,609,128.19
Reserve for		
Reserve for		18,899.17
EARNED SU		
Tot		$51,717,659.69

Contingent L
The C Corpor indem which $19,37 which

LIABILITIES AND OTHER CREDITS

CAPITAL STOCK:		
Common Stock (Without Par Value) (Authorized 540,000 shares—Outstanding 429,848 shares)	$10,868,312.50	
$5 Cumulative Preferred Stock (Without Par Value) (Authorized 100,000 shares—Outstanding 21,493 shares. Redeemable at $110 per share plus accrued dividends; entitled to $100 per share plus accrued dividends in any liquidation)	2,130,895.50	$12,999,208.00
LONG-TERM DEBT:		
Refunding Mortgage and Collateral Trust Bonds (Exclusive of amounts estimated to be retired or provided for through sinking fund within one year):		
3¼% Series due 1964	$10,280,000.00	
3¼% Series due 1970	10,245,000.00	20,525,000.00
CURRENT AND ACCRUED LIABILITIES:		
Accounts Payable	$ 203,793.20	
Dividends Declared (Payable January 2, 1946)—Contra	456,714.25	
Long-Term Debt estimated to be retired or provided for through sinking fund within one year	308,000.00	
Interest Accrued on Long-Term Debt	169,721.77	
Federal Income and Excess Profits Taxes Accrued	1,211,469.32	
Other Taxes Accrued	228,204.84	
Other Current and Accrued Liabilities	18,652.06	2,596,555.44
DEFERRED CREDITS:		
Unamortized Premium on Debt (*Note C*)		243,963.79
RESERVES:		
Reserve for Depreciation	$ 8,976,358.33	
Reserve for Retirement Annuities	78,244.98	9,054,603.31
EARNED SURPLUS (*Note A*)		6,298,329.15
Total Liabilities and Other Credits		$51,717,659.69

Contingent Liabilities:

The Company, which has an investment of $3,000,000 in 100,000 shares of Capital Stock of Safe Harbor Water Power Corporation, representing one-half of the Voting Stock (or one-third of the outstanding Capital Stock) has agreed to indemnify Consolidated Gas Electric Light and Power Company of Baltimore to the extent of one-third of any liability which Consolidated Company may sustain by reason of its unconditional guaranty of principal of and interest on $19,379,000 First Mortgage Sinking Fund Gold Bonds, 4½% Series due 1979 of Safe Harbor Water Power Corporation, which guaranty is endorsed thereon.

NOTES

TO FOREGOING FINANCIAL STATEMENTS

Note A:

At December 31, 1945, the Company and its subsidiary were subject to regulatory action in connection with their rates, the licensing of the Holtwood hydroelectric and other properties and the "original cost" thereof, which matters, if settled on bases unfavorable to the companies, would have an adverse effect on their property, surplus and other accounts and on future earnings. Information regarding these matters, which in some respects are inter-related, is set forth below:

Rate Investigations

On September 1, 1944, the Federal Power Commission issued an order instituting an investigation to determine whether, in connection with any transmission or sale of electrical energy subject to the jurisdiction of that Commission under the Federal Power Act, any rates, charges or classifications demanded, observed, charged or collected by the Company, or any rules, regulations, practices, or contracts affecting such rates, charges or classifications are unjust, unreasonable, unduly discriminatory or preferential; and if, after hearing, it should be found that any of such rates, charges, classifications, rules, regulations, practices or contracts are unjust, unreasonable, unduly discriminatory or preferential, to determine and fix just and reasonable rates, charges, classifications, rules, regulations, practices or contracts to be thereafter observed and in force. Under date of October 3, 1944, the Federal Power Commission enlarged its order of September 1, 1944, to the Company by issuing a supplemental order to include in its investigations the Susquehanna Transmission Company of Maryland, a wholly-owned subsidiary of the Company. The Commission has set March 25, 1946 as the date for commencement of a hearing in this matter.

Under date of December 5, 1944, the Pennsylvania Public Utility Commission issued an order instituting an inquiry and investigation upon its own motion under the provisions of the Pennsylvania Public Utility Law for the purpose of determining the fairness, reasonableness and justness of the rates and charges of the Company. The order states that the inquiry and investigation shall include consideration of the imposition of temporary rates under the provision of Section 310 of the Public Utility Law.

License Proceedings

In compliance with the Federal Power Commission's order of November 3, 1939, from which the Company had unsuccessfuly appealed to the Courts, there was filed, on May 18, 1942, an application for a license under the Federal Power Act to maintain and operate its Holtwood hydroelectric project. Although formal tender of a license has never been made by the Commission, the Commission, under date of November 23, 1943, issued an "Order Authorizing Issuance of License (Major)". Pursuant to the Company's Petition for Rehearing on this order, the Commission, on January 21, 1944, issued another order staying its order of November 23, 1943, and requiring the Company to submit in writing to the Commission certain information. This information was furnished to the Commission under date of February 10, 1944. Since that date there have been no further developments in this matter.

Original Cost

The work of reclassifying the property of the Company and its subsidiary, Susquehanna Transmission Company of Maryland, according to the system of accounts prescribed by the Federal Power Commission, the Pennsylvania Public Utility Commission and the Public Service Commission of Maryland, and of making studies of the original cost of the properties when

first devoted to the public service, was completed and reports were filed with the respective commissions on May 15, 1940.

This system of accounts provides for the use of adjustment accounts to show the difference between such original cost and the amounts shown by the books of account of the "accounting utility", and amounts recorded in such adjustment accounts are to be disposed of as these commissions may approve or direct. The completed reports of the Company and its subsidiary provide for the transfer of $2,106,765.32 to the Electric Plant Adjustments accounts. Pending orders from the commissions no entries have been recorded on the companies' books to give effect to such original cost reclassifications.

Note B:

The amounts charged to income for depreciation are the same as the deductions for depreciation claimed, or to be claimed, for income tax purposes.

Note C:

Amortization of Debt Discount, Premium and Expense-Net, includes for the year 1945 a charge of $43,610.10, and for the year 1944, a charge of $174,440.36 for amortization of the debt discount and expense and the redemption premium applicable to the Series B, 4½% Bonds due 1968, which were redeemed as of March 1, 1940, less credits of $10,834.08 and $10,938.52 for 1945 and 1944, respectively, representing amortization on a straight-line basis of the net premium applicable to the presently outstanding 3¼% bonds.

There was concluded on March 31, 1945, the 61-month period of amortization of debt discount and expense and redemption premium aggregating $886,738.51 and applicable to the Series B, 4½% Bonds due 1968, which were redeemed as of March 1, 1940.

Note D:

The Federal Power Commission issued an order dated September 1, 1944 instituting an investigation of the rates of the Safe Harbor Water Power Corporation. This order was similar to that received by the Company, bearing the same date and referred to in Note A. Hearings in this matter were concluded March 16, 1945, and briefs have been filed by the Corporation and the Commission, but no decision has been rendered by the Commission. As stated in the accompanying balance sheet, the Company owns one-third of the outstanding stock of that Corporation.

DETERMINATION OF COST OF SERVICE
TO
CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY
OF BALTIMORE .

Purpose and Scope of Exhibit

This exhibit sets forth the results of studies made to determine the costs incurred by Pennsylvania Water & Power Company and Susquehanna Transmission Company of Maryland, hereinafter jointly referred to as Penn Water, in serving the Consolidated Gas Electric Light and Power Company of Baltimore, hereinafter referred to as Baltimore.

As used herein cost is defined to include all expenses of operation and maintenance, including the cost of purchased power and energy, depreciation, taxes and return. The beginning point of the studies made is Penn Water's total investment in plant, rate base, and costs. The problem is to determine what portion of the total investment, rate base, and costs are properly assignable to the services rendered by Penn Water to Baltimore.

For purposes of this study two separate and distinct determinations have been made. The first study starts with Penn Water's cost of service for 1944 as set forth in Exhibit 64 introduced by Mr. George Davis in these proceedings. The second study starts with Penn Water's cost of service for 1946 as furnished by Penn Water. Neither the 1944 or 1946 total costs used herein have been verified or investigated as part of this study. Furthermore, the use of the principles or methods followed in arriving at the rate base, the rate of return and depreciation involved in each of the total cost determinations is not to be taken as an indorsement of their reasonableness. As stated at the outset, the purpose of the studies made was to find and apply a method of determining what portion

of these costs are properly assignable to the services rendered by Penn Water to Baltimore. The same method and principles of allocation found to be reasonable have been applied to each set of investment and cost figures.

This study of costs includes no analysis or studies of the revenues of Penn Water.

For convenience in reference, the first study based on Exhibit 64 is herein referred to as the 1944 Cost Study, and the second study, based on Company 1946 costs as the 1946 ~~Cost~~ Study.

Source of Data

The basic data required for this exhibit consists of the two cost studies, 1944 and 1946, already mentioned and discussed. Where further detail was necessary regarding any of these basic figures, it was obtained either from the record in the case or from the records of the Company.

The determination of what would be a reasonable and feasible method of assigning property and costs is based on a study of the services rendered, the operations of the system, and the costs involved. This study included a review of a number of exhibits and some of the transcript of the proceedings in the case, discussions with officers and employees of Penn Water, inspection of the plant and information requested from the records of the Company.

Summary of Results

Based on the total Penn Water costs of service of $3,057,236 for 1944, as taken from Exhibit 64, it has been determined that the portion properly allocable to the services rendered to Baltimore for that

year is no less than $1,855,895.

Based on the total Penn Water costs of service of $7,214,016 for 1946, as supplied by Penn Water, it has been determined that the portion properly allocable to the services rendered to Baltimore for that year is no less than $2,984,826.

A summary of the costs and their allocation to Baltimore is contained in the tables forming a part of Schedule A, for the 1944 Cost Study, and of Schedule B for the 1946 Cost Study. Both of these schedules are attached. An explanation of each of the allocations shown on these tables is set forth in the notes following each Schedule. In addition to these explanations, there follows a brief discussion of the problems and considerations involved respecting some of the major items of plant.

Discussion

This study is concerned with the cost of rendering service to a particular customer - one of a number of customers served by Penn Water. The problem then is that of determining the services actually rendered and the costs relating thereto.

Penn Water is at the hub of a large power supply pool. Physically, this pool is formed by the interconnection and co-ordinated operation of a number of large electric utility systems. Contractually, the pool is made possible by a number of agreements, some joint with one or more of the other suppliers, with varying degrees of responsibilities and obligations on the part of the parties, and some singly with individual customers. Thus, the types of service rendered are many and varied in character. Interconnected electric utility system operations are, of course, not novel. In this case, however, such operations are the sum

total of the company's operations, and not, as is frequently the case, a small part of the total operations. Furthermore, the joint nature of many of the operations serves to very closely knit Penn Water into the whole interconnected system. Lifting Penn Water out of this position and treating it as a self-contained whole, while contrary to its manner of operation, is possible in connection with the determination of Penn Water's cost of service to Baltimore Company.

Viewed alone, Penn Water owns and operates certain facilities for the purpose of delivering and rendering certain services. The same facilities, in some cases, are used to receive services from others which are used or needed in connection with the deliveries made. A review of the facilities of Penn Water reveals that while the operations involved over the facilities may be very complex, particularly contractually, the actual purpose and use of the facilities is comparatively simple with reference to the services to Baltimore.

Over 95% of the total investment in property and plant, exclusive of intangible and general plant, is represented by only 10 items or groups of property; a hydro plant, a steam plant, four major transmission systems and four large substations. Furthermore, as will be shown later, only 5 of these large items are involved in service to Baltimore and of these 5 only 3 have some use other than for service to Baltimore. Thus, from the point of view of facilities and the costs related thereto, the problem of determining the cost of service to Baltimore becomes primarily one of allocating the joint use of only 3 major items of property.

In addition to the costs associated with its own investments, Penn Water has other costs. It receives services from Safe Harbor Water Power Corporation, hereinafter referred to as Safe Harbor, and it engages in interchange transactions with its customers resulting in the receipt as

well as delivery of energy and services. The costs associated with these transactions must also be allocated to the use made of these services. Consideration was given to the character of these services. It was found that some of the costs associated with these services might properly be allocable to Baltimore but that the amount involved would be relatively small. Accordingly, no part of the payments associated with these services has been assigned to Baltimore. Thus, it may be stated that the cost to serve Baltimore is no less than the amount determined herein.

As in the case of practically every cost allocation, it is necessary to exercise judgement with respect to the handling of many joint items of investment and costs. In this case, the zone within which judgement has entered has been reduced as far as possible by the identification of plant and costs whenever such information was available. Judgement has thus been limited to adopting the proper method and reasonable allocation ratios in the handling of items beyond this point.

Production Plant

Penn Water owns and operates both a steam and hydro electric power plant. The steam plant generates 60 cycle current whereas the hydro plant has both 60 and 25 cycle generating facilities. There are two frequency convertors located in the hydro plant which permits a limited amount of conversion from 25 to 60 cycle and reverse.

No portion of the steam plant investment or costs, nor the hydro 60 cycle plant investment or costs, is assigned to Baltimore services. Undoubtedly, at times some small part of the 60 cycle generated energy reaches Baltimore either as 60 cycle energy or through the frequency convertors as 25 cycle energy. The distribution of the loads, other sources of supply and transmission facilities is such, however, that the amount of 60 cycle

generated energy that would be delivered to Baltimore in any one year would be comparatively small.

The steam plant investment and costs are readily obtained from the accounts of the company and requires no allocation. The hydro investment and costs, however, are not all identifiable and an allocation is necessary. The hydro plant contains 8-25 cycle three phase units having a total rated capacity of 87,000 KW and two 60 cycle three phase units totaling 24,000 KW. The rated capacity of each frequency converter is 5,000 KW.

The 25 cycle generation is delivered to two customers, Baltimore and Lancaster (Pennsylvania Power and Light Company). In addition, on a net basis, a small amount of 25 cycle generation is converted from 25 to 60 cycle energy. For the year 1946, out of a net 25 cycle generation of 447 million kwhrs, approximately 10 million kwhrs or less than 2.5% was converted from 25 to 60 cycle on a net basis. This ratio will vary some from year to year. However, the average net 25 cycle delivery to 60 cycle for the five year period 1941-1945 is also approximately 10 million kwhrs. On a capacity basis the frequency converters are used at full capacity for deliveries in either direction. In view of the small amount of net conversion, and the capacity use of the converters, no part of the 25 cycle hydro plant investment or cost is allocated to the 60 cycle generation. The allocated 25 cycle generating cost is divided entirely between Baltimore and Lancaster deliveries. This step is considered reasonable since the possible resulting inaccuracy is well within the limits of accuracy of any cost allocation.

The 25 cycle deliveries to Lancaster are also comparatively small in relation to the total 25 cycle generation or the amount delivered to Baltimore. In 1946, the 25 cycle send out to Lancaster was 31,489,000 kwhrs, or 7.7% of the amount delivered to Baltimore and 7.0% of the net 25 cycle genera-

tion. In view of this fact, no detail allocation of costs between demand and energy components was made of the 25 cycle generation costs to determine the amount to be assigned to Baltimore. The assignment was made on the basis of a study of the relative capacity and energy required for the two loads. This is considered a reasonable basis, under the circumstances, for again the possible resulting inaccuracy is well within the limits of accuracy of the cost allocation.

Riverside and Westport Transmission Lines

These two 220 KV transmission lines and the related Ma or substation together represent the second largest item of property used in rendering service to Baltimore. These lines were built to transmit Safe Harbor energy to Baltimore. This is still the essential purpo e of these lines. On this basis, the entire cost of these lines should be allocated to Baltimore.

These lines are also used, however, to carry backfeed from Baltimore to Safe Harbor. This back feed is comingled at this point and is used in connection with deliveries to other customers. The specific use of this backfeed cannot be determined and will vary from time to time. Furthermore, the amount of this backfeed varies considerably from year to year. For example, in 1942, it was 46,016,000 kwhrs and in 1944, 201,075,000 kwhrs.

The backfeed is in the nature of an incidental use since some, if not all of it, could be replaced by purchases from other available and connected sources. Furthermore, it appears that the amount of backfeed that will be used in the future will decrease materially due to the installations pending or in progress of considerable new and efficient generating capacity by other utilities connected to the network. However, sinc the backfeed does represent a use of the lines, some portion of their costs should be allocated to that use. The amount allocated can only be based on judgement

in the light of the facts available.

Ellicott Line and Switching Station.

The Ellicott line is a tap off the Westport line from Ellicott City to a connection with the system of the Potomac Electric Power Company neer Takoma Park, Maryland. Penn Water renders no service to PEPCO and this tap was constructed as a connection between Baltimore and PEPCO.

As in the case of the Westport and Riverside lines, some backfeed is also carried over this line. However, in this case, only a portion of this backfeed is delivered at Safe Harbor since some of it can and does go to Baltimore. All of the energy carried on this line is accounted for in the transactions between Baltimore and PEPCO.

Under the circumstances, the entire cost of this line and switching station is allocated to Baltimore.

Conestoga Substation and Perryville Line

This substation and transmission line were built by Penn Water in connection with the joint supply to the Pennsylvania Railroad by Penn Water, Baltimore, and Safe Harbor. Subsequently, PEPCO became party to the joint contractual arrangements.

Baltimore has no direct physical connection with the Railroad. Its obligations and deliveries to the Railroad are largely made over these facilities. Penn Water and Safe Harbor also make deliveries over these facilities to the Railroad. Accordingly, a portion of Penn Water's investment in these facilities and their cost of operation and maintenance are properly Baltimore's costs of service to the Railroad. This study is confined to the services rendered by Penn Water to Baltimore. Since in this case the facilities and the costs incurred are for joint

service to the Railroad, no portion of these costs have been allocated to Baltimore.

Holtwood Substation

The Holtwood substation is partly housed in the hydro plant and partly located adjacent thereto. It contains both 25 and 60 cycle transformers and equipment. The 25 cycle transformers are located within the plant and the 60 cycle transformers are outdoors adjacent to the plant.

As in the case of the hydro plant it is necessary to determine the 25 cycle investment in this substation and the operating and maintenance costs of this equipment. The investment and expenses for 25 cycle equipment are then allocated between Baltimore and Lancaster.

SCHEDULE A

1944 COST STUDY

(Total Costs Taken from Federal Power Commission Exhibit 64.
Investment Figures are Averages for the Year 1944.)

SCHEDULE A
Table No. 1

SUMMARY OF
ALLOCATION OF RATE BASE ITEMS AND RETURN
TO BALTIMORE
-1944-

Line No.	Item	Total per Exhibit 64 (1)	Allocated to Baltimore (2)	Percent of Total To Baltimore (3)
	RATE BASE			
	Production Plant			
1	Hydro	$ 15,847,486	$ 10,643,172	67.2
2	Steam	4,527,533	--------	0
3	Total Production	$ 20,375,019	$ 10,643,172	52.2
	Transmission Plant			
4	Holt.-Balt. Line	1,371,281	1,371,281	100.0
5	Highlandtown Sub.	971,877	971,877	100.0
6	Gunpowder Line	171,357	171,357	100.0
7	Westport Line	1,737,450	1,476,833	85.0
8	Riverside Line	1,519,065	1,291,205	85.0
9	Manor Sub.	171,249	145,562	85.0
10	Ellicott Line	316,157	316,157	100.0
11	Ellicott Sw. Sta.	65,384	65,384	100.0
12	Holtwood Sub.	1,188,774	399,321	33.6
13	Perryville Line	1,105,322	--	0
14	Conestoga Sub.	1,180,205	--	0
15	Perryville Sw. Sta.	728	--	0
16	Violet Hill	393,418	--	0
17	York Line	504,918	--	0
18	Coatesville Line	586,725	--	0
19	Newlinville Sub.	9,959	--	0
20	Lancaster Line	17,025	--	0
21	Engleside Sub.	6,635	--	0
22	Donegal Tap	12,609	--	0
23	Manheim Sw.	3,949	--	0
24	Balance of Trans.	200,067	--	0
25	Total Transmission	$ 11,533,354	$ 6,208,977	53.8
26	Total Prod. and Trans.	31,908,373	16,852,149	52.8
27	Intangible Plant	173,070	91,381	52.8
28	General Plant	779,707	411,685	52.8
29	Total Plant	$ 32,861,150	$ 17,355,215	52.8
30	Less: Depreciation Reserve	7,978,118	4,173,653	52.3
31	Net Plant	$ 24,883,032	$ 13,181,562	53.0
32	Plus: Working Capital	590,000	261,651	44.3
33	RATE BASE	$ 25,473,032	$ 13,443,219	52.8
34	Return-5% on Rate Base	$ 1,273,651	$ 672,161	52.8

SCHEDULE A
Table No. 2

SUMMARY OF
ALLOCATION OF COSTS
TO BALTIMORE
-1944-

Line No.	Item	Total Cost per Exhibit 64 (1)	Allocated to Baltimore (2)	Percent of Total to Baltimore (3)
	COST OF SERVICE			
	Operating Expenses			
1	Production - Hydro	$ 357,980	$ 250,300	69.9
2	Production - Steam	586,497	---	0
3	Total Production	944,477	250,300	26.5
4	Transmission	354,506	218,301	61.6
5	Administration & General	490,891	231,700	47.2
6	Payments to Safe Harbor	992,535	---	0
7	Total Oper. Exp.	$2,782,409	$ 700,301	25.2
8	Depreciation	464,212	205,176	44.2
9	Taxes	536,964	278,257	51.8
10	Return - 5%	1,273,651	672,161	52.8
11	TOTAL COSTS	$5,057,236	$1,855,895	36.7

Schedule A - Table No. 1 -
Notes

Line 1 - Of the total hydro plant investment of $15,847,486, $10,643,172, or 67.2% has been found properly allocable to Baltimore. This is based on the conclusion that 73% of the hydro plant investment is allocable to 25 cycle equipment, of which 92.0% is allocated to Baltimore. These percentage allocations are judgement figures based on a careful study and consideration of available information. A brief statement of the information considered follows:

The bulk of the hydro production plant investment is in five accounts:

320 - Land and Land Rights
321 - Structures and Improvements
322 - Reservoirs, Dams and Waterways,
323 - Waterwheels, Turbines and Generators
324 - Accessory Electric Equipment

Only in the case of account 323 and 324 can some of the property be identified as 25 or 60 cycle and its cost determined. Some studies were made of these accounts for purposes of this allocation. Account 321 can, in its greater part, be allocated on the basis of the number of 25 and 60 cycle units, thereby allocating 80% to 25 cycle. Other parts of account 321, principally the Holtwood Village, will have a different allocation ratio, largely due to the fact that the village accomodates steam plant employees as well. For these three accounts the directly identified and allocated 25 cycle investment was found to be approximately 71% of the total.

There is no physical basis for allocating the two remaining large accounts, 320 and 322. In the case of these accounts, consideration was given to the relative number of units, rated capacity, demands, and generation of 25 and 60 cycle energy over a period of years. On these bases, the percent allocable to 25 cycle would be approximately as follows:

Number of Units	80.0%
Rated Capacity	78.5%
Hydro Peak Demand	77.5%
Generation	75.0%

Schedule A
Table No. 1
Notes

As stated above, after considering all the facts available, 73% of the total hydro plant investment was allocated to 25 cycle equipment.

In determining the portion of the allocated 25 cycle hydro plant investment properly chargeable to Baltimore, consideration was given to the relative energy deliveries, peak and non-coincident demands over a period of years. For the year 1946 and the average for the five years 1941-1945, the ratio of 25 cycle for Baltimore to the total for Baltimore and Lancaster for each of these items is as follows:

	1946	Average 1941 - 1945
Energy delivered - - - - -	92.8%	92.5%
Peak Demand, - - - - - - -	96.0%	95.8%
Non-Coincident Demand- - -	91.7%	90.5%

It is clear from the above ratios that any detailed demand and commodity allocation would not result in any material difference from either using a straight energy or demand basis. An overall ratio of 92.0% was adopted as a reasonable estimate of the results that would follow from any more detailed studies.

Line 2 - No part of the steam plant cost has been allocated to Baltimore for the reasons discussed earlier herein.

Lines 4 and 5 - The Holtwood-Baltimore (Highlandtown) line and substation are used exclusively for 25 cycle service to Baltimore. A small amount of backfeed does come over these lines. On a net hourly basis, the amount in 1944 was only 555,000 kwhrs and in 1946, 1,673,000 kwhrs. The gross deliveries to Baltimore over this line are well in excess of 300 million kwhrs per year.

Line 6 - This line has no other use except for Baltimore. It is not directly connected with the interconnected system net work.

Schedule A
Table No. 1
Notes

Lines 7, 8 and 9 - The allocation of the investment in the Westport and Riverside lines and in Manor substation has been discussed at some length earlier herein. After consideration of the available information, the purpose of the lines, and their probable future use, 85% of the investment has been allocated to Baltimore.

On an energy basis over the past six years, the backfeed over these lines has varied from 7.7% of the total sendout plus backfeed to as high as 41.6%. The average for the five year period, 1941 1945, was 19.1%.

If the problem of allocation of these items of investment were approached on the basis of a detailed demand and energy separation of costs, then the energy ratio, 81% to Baltimore and 19% to backfeed, might reasonably be used as a measure for allocating such costs of the lines as are considered variable with the energy transmitted. Only a very small portion of the costs vary with the energy transmitted and most of the costs are fixed and would be designated "demand costs". In this case the backfeed use is not a capacity but an energy use, so that 100% of the demand costs would be allocated to Baltimore. Assuming however, that the total costs of transmission in this case are divided 50-50 between capacity and energy costs, then the assigning of 100% of the capacity costs and 81% of the energy costs to Baltimore would result in an overall allocation of 90.5% of the costs to Baltimore. On this same basis, the overall percentage used of 85% is equivalent to assigning 90% of the capacity costs to Baltimore.

Lines 10 and 11 - The entire cost of the Ellicott line and switching station has been allocated to Baltimore. This line is used by Baltimore as a major connection with the PEPCO system.

Line 12 - Exhibit 64 shows as "Balance of Transmission" $1,560,090. This includes the Holtwood substation. Company records show as cost for the substation $1,188,774 of which $637,561 represents 25 cycle equipment. However, the various

Schedule A
Table No. 1
Notes

adjustments made by Commission examiners have all been reflected in the "Balance of Transmission" item. Without more detailed studies it was considered that a majority of these adjustments were applicable to the substation. Furthermore, for purpose of this study, all the adjustments, totaling $203,516, have been applied to the 25 cycle equipment in the substation. This leaves $434,045 as the 25 cycle substation investment of which 92% or $399,321 is allocated to Baltimore

Lines 13 to 24, inclusive - No part of the investment in these items of transmission plant has been allocated to Baltimore. These lines and facilities are for service to other utility customers and the Pennsylvania Railroad. Some of the interchange energy from these other customers might reach Baltimore but no allowance is made for such instances since the amount would be relatively small.

Lines 27 and 28 - Intangible and general plant has been allocated to Baltimore in proportion to the percent that the allocated total production and transmission is to the total plant.

Line 30 - Depreciation Reserve - The problem of allocating the depreciation reserve divides itself into three parts:

(1) Production plant hydro
(2) Transmission
(3) Holtwood Substation

In Exhibit 64, the reserve applicable to the hydro plant is shown as $4,383,189. Since 73% of the investment in the plant has been found to be 25 cycle equipment, it would follow that the reserve allocable to the 25 cycle equipment would reasonably be 73% of the total reserve. However, the 25 cycle equipment is older than the 60 cycle equipment. In view of the fact that the 60 cycle equipment is only about one fourth of the total, any adjustment in the reserve for the difference in age of the two types of equipment would be comparatively small. In recognition of the fact that age is a factor in the reserve used in Exhibit 64, 75% of the hydro plant reserve, or $3,287,354 has been taken as

applicable to the 25 cycle investment, of which 92%, or $3,024,366 has been allocated to Baltimore.

The depreciation reserve for transmission plant in Exhibit 64 of $2,105,915 is 18.25% of transmission plant. The reserve shown, however, as applicable to the plant directly allocated to Baltimore is 17.3% of the plant. Since the transmission property involved in Exhibit 64 as directly allocable to Baltimore is in a large measure the same transmission property allocated in this study, except for Holtwood substation, the 17.3% ratio is considered as the proper ratio to use for all this directly allocated transmission property except the Holtwood substation. Accordingly, the transmission reserve allocated to Baltimore is 17.3% of $5,809,656, or $1,005,070.

The reserve for depreciation for the Holtwood substation is included in the amount of $668,026 shown for the pool transmission facilities of $3,131,266, of which $1,188,744 is the Holtwood substation, and $1,942,522, other transmission plant. Applying the overall transmission reserve ratio of 18.25% to $1,942,522 results in $354,510 of reserve applicable to this plant and the remainder or $313,516 applicable to the Holtwood substation, which is 26.4% of the investment in the substation. Here again, consideration is given to the fact that the 25 cycle equipment is older than the 60 cycle equipment. In this case, however, the 60 cycle investment is a much larger proportion of the total so that a much greater adjustment appears reasonable in recognition of the nature of the depreciation reserve used in Exhibit 64. Under the circumstances, it is considered reasonable to split the reserve equally between the two types of equipment thereby allocating $156,758 to the 25 cycle investment. This is 36.1% of the 25 cycle investment and the remainder is 20.8% of the 60 cycle investment. There is allocated to Baltimore 92% of $156,758, or $144,217.

Schedule A
Table No. 1
Notes

The total depreciation reserve in Column 2 of line 30 is as follows:

Production-Hydro	$3,024,366
Transmission	1,005,070
Holtwood Substation	144,217
Total	$4,173,653

Line 32 - The total working capital of $590,000 in Exhibit 64 is composed of $224,000 for cash working capital and $366,000 for materials and supplies. In Exhibit 64, cash working capital has been allocated on the basis of operating expenses and materials and supplies on the basis of investment. However, the total amount of working capital is less than 2.5% of the rate base. Accordingly, in this study, the allocations already made are used as far as possible and the further allocations necessary are made on an investment basis.

The working capital allocated in Exhibit 64 to hydro plant is $262,303 or 1.7% of the investment. This percent applied to the hydro investment allocated to Baltimore results in an allowance of $180,934. The working capital allocated in Exhibit 64 to Baltimore directly on transmission facilities is 1.3% of the investment. This percent applied to the transmission investment allocated to Baltimore in this study results in an allowance of $80,717. The two allowances combined total $261,651 as shown in Column 2 of Line 32.

Schedule A - Table No. 2
Notes

Line 1 - The records of Penn Water do not show the amount of operation and maintenance separately for the 25 and 60 cycle generating units and facilities. There are many items of expense which are common to the entire plant. This is particularly true of supervision and maintenance of structures. In addition there are a number of items of accessory equipment such as the exciter system, which are common to both 25 and 60 cycle operations.

After consideration of the various factors involved it appears reasonable to allocate 76% of this item to 25 cycle operations. The relative 25 cycle generation is 75% of the total, the relative rated capacity is 78.5%, and the number of units, 80%. Using 76%, the amount allocated to 25 cycle is $272,065. Of this total, 92%, or $250,300 is allocated to Baltimore in the same manner as the 25 cycle hydro investment was allocated.

Line 4 - The transmission expense for each of the major lines is available from company records. These expenses are allocated to Baltimore on the same basis as the investment allocation. The load dispatching and Holtwood substation expenses are split 50-50 between 25 and 60 cycle service. Baltimore is allocated 92% of the 25 cycle costs. The detail of the allocation follows:

Item	Expense	Percent to Baltimore	Allocated to Baltimore
Westport and Riverside Lines and Manor Substation	$ 65,948	85.0	$ 55,971
Highlandtown Line and Substation and Gunpowder Line	120,135	100.0	120,135
Ellicott City Line and Switching Station	10,483	100.0	10,483
Holtwood Substation	36,318	46.0	16,706
Load Dispatching Expense	32,622	46.0	15,006
Balance	89,099	0	--
Total	$354,506	61.6	$218,301

Schedule A
Table No. 2
Notes

Line 5 - A review of the major items of General and Administrative expenses indicates that some items may properly be apportioned on the basis of investment and others on the basis of other operating expenses. Substantially all of the salaries and expenses of the general executives, legal services, insurance and regulatory commission expenses are incurred on problems dealing with the financial operations and return of the company. Costs of injuries and damages and employee's welfare and pensions are proportional to operating expenses. On the basis of the relative proportion of these two types of expenses, the total General and Administrative expense has been allocated 2/3 on the basis of investment and 1/3 on the basis of operating expenses. The following table shows the derivation of the amount allocated to Baltimore:

	Proportional to Investment	Proportional to Oper. Expenses	Total
General and Admin. Expenses	$327,261	$163,630	$490,891
Allocated to Baltimore	172,793	58,907	231,700
Percent to Baltimore	52.8%	36.0%	47.2%

Line 6 - For the reasons outlined herein, no part of the payments made to Safe Harbor are allocated to Baltimore.

Line 8 - The total depreciation expense of $464,212 as shown in Exhibit 64 can be broken down into the following subdivisions from the various tables in this exhibit:

Production		$311,579
	Hydro	$197,230
	Steam	114,349
Transmission		$152,633
	Baltimore - Direct	$ 65,858
	Balance	86,775

Schedule A
Table No. 2
Notes

The hydro depreciation expense is allocated directly in proportion to the investment allocated to Baltimore. On this basis 67.2% or $122,539, has been allocated to Baltimore. The Baltimore direct depreciation expense for transmission of $65,858 is 1.13% of the investment. These are essentially the same facilities allocated to Baltimore in this study except for the Holtwood substation for which the rate is 1.75%. Accordingly, the depreciation expense allocated herein to Baltimore for transmission facilities is taken at 1.13% of $5,809,656 plus 1.75% of $399,321, making a total for transmission of $72,637. The total depreciation expense allocated to Baltimore is thus $205,176.

Line 9 - The total taxes shown in Exhibit 64 of $536,964 has been subdivided as follows:

		Amount	Proportioned to:
Pennsylvania			
1.	Income, Capital Stk., Property & Misc.	$139,880	Investment in Pa.
2.	Gross Receipts and P.U.C.	25,934	Penn R.R. & Pa. Customers
Maryland			
3.	Income, Capital Stk., Property & Misc.	66,268	Investment in Md.
Federal			
4.	Unemployment and Old Age	23,912	Operating Expenses
5.	Income and Capital Stock	280,970	Return
	Total	$536,964	

For purposes of allocating the Pennsylvania and Maryland taxes, an analysis was made of the investment in each state and the proportion of such investment allocated to Baltimore herein. On the basis of this analysis, 46.2% of the Pennsylvania taxes, exclusive of gross receipts and P.U.C., and 84.4% of the Maryland taxes have been allocated to Baltimore.

Schedule A
Table No. 2
Notes

A summary of the allocations made follows:

Tax	Allocated to Baltimore	Percent to Total
Pa. - Income, Capital Stk, Property & Misc.	$ 64,625	46.2
Md. - Income, Capital Stk, Property & Misc.	55,930	84.4
Federal - Unemployment and Old Age	9,350	39.1
Federal Income and Capital Stk	148,352	52.8
Total	$278,257	51.8

Line 10 - The return allocated is equal to 5% on the allocated investment shown in Table No. 1.

SCHEDULE B
Table No. 1

SUMMARY OF ALLOCATION OF INVESTMENT AND DEPRECIATION TO BALTIMORE
-1946-

Line No.	Item	Total per Company (1)	Allocated to Baltimore (2)	Percent of Total to Baltimore (3)
	Investment			
	Production Plant			
1	Hydro	$ 18,518,534	$12,444,454	67.2
2	Steam	4,690,739	-	0
3	Total Production	$ 23,209,273	$12,444,454	53.6
	Transmission Plant			
4	Holt.-Balto.Line	$ 1,359,506	$ 1,359,506	100.0
5	Highlandtown Sub.	969,165	969,165	100.0
6	Gunpowder Line	191,038	191,038	100.0
7	Westport Line	1,723,422	1,464,909	85.0
8	Riverside Line	1,524,858	1,296,139	85.0
9	Manor Sub.	171,032	145,377	85.0
10	Ellicott Line	320,231	320,231	100.0
11	Ellicott Sub.	66,055	66,055	100.0
12	Holtwood Sub-25 cycle	630,963	580,486	92.0
13	" " -60 cycle	751,954	-	0
14	Perryville Line	1,101,535	-	0
15	Conestoga Sub.	1,182,343	-	0
16	Perryville & Fishing Creek	5,109	-	0
17	Violet Hill Sub.	138,540	-	0
18	York Line	504,251	-	0
19	Coatesville Line	589,578	-	0
20	Newlinville Sub.	9,952	-	0
21	Lancaster Line	16,803	-	0
22	Engleside & Mt. Nebo	8,371	-	0
23	Donegal Tap & Sub.	12,521	-	0
24	Manheim & S. Akron	3,121	-	0
25	Balance of Trans.	333,924	-	0
26	Total Transmission	$ 11,614,272	$ 6,392,896	55.0
27	Total Prod. and Trans.	$ 34,823,545	$18,837,350	54.1
28	Intangible and General Plant	$ 1,617,341	874,981	54.1
29	Total Plant	$ 36,440,886	$19,712,331	54.1
30	Working Capital	$ 977,160	$ 380,342	38.9
31	Total Plant & Working Cap.	$ 37,418,046	$20,092,673	53.7
32	Depreciation Reserve	$ 6,178,657	$ 3,001,118	48.6

SCHEDULE B
Table No. 2

SUMMARY OF ALLOCATION OF COSTS
TO BALTIMORE

Line No.	Item	Total per Company (1)	Allocated to Baltimore (2)	Percent of Total to Baltimore (3)
	COST OF SERVICE			
	Operating Expenses			
1	Production-Hydro	$ 402,895	$ 281,704	69.9
2	" -Steam	683,567	-	0
3	Total Production	$1,086,462	$ 281,704	25.9
4	Transmisaion	408,483	269,048	65.9
5	Administrative & General	906,281	456,463	50.4
6	Payments to Safe Harbor	1,016,501	-	0
7	Purchased Interchange	54,495	-	0
8	Total Operating Exp.	$3,472,222	$1,007,215	29.0
9	Depreciation	400,000	175,090	43.8
10	Taxes	1,094,981	586,531	53.6
11	Operating Income (Return)	2,244,813	1,215,990	54.1
12	TOTAL COSTS	7,214,016	2,984,826	41.4

Schedule B - Table No. 1
Notes

Line 1 - In the 1944 cost study it was found that 73% of the hydro plant investment is in 25 cycle equipment and that 92% of this 25 cycle investment, or 67.2% of the total, is properly allocable to Baltimore. The various factors considered in reaching these conclusions are explained in the notes to Schedule A, Table No. 1 (Line 1). The same factors apply to the 1946 investment allocation, and the same allocation ratios used in the 1944 study are applied in this study.

Line 2 - No [redacted] of the steam plant cost has been allocated to Baltimore for the reasons discussed earlier herein.

Lines 4 and 5 - The Holtwood-Baltimore (Highlandtown) line and substation are used exclusively for 25 cycle service to Baltimore. A small amount of backfeed does come over these lines. On a net hourly basis, the amount in 1944 was only 555,000 kwhrs and in 1946, 1,673,000 kwhrs. The gross deliveries to Baltimore over this line are well in excess of 300 million kwhrs per year.

Line 6 - This line has no other use except for Baltimore. It is not directly connected with the interconnected system network.

Lines 7, 8 and 9 - The allocation of the investment in the Westport and Riverside lines and in Manor substation has been discussed at some length earlier herein. After consideration of the available information, the purpose of the lines, and their probable future use, 85% of the investment has been allocated to Baltimore. Further discussion of this allocation is contained in the notes to Schedule A, Table No. 1, Lines 7, 8 and 9.

Lines 10 and 11 - For the reasons already discussed herein, the entire investment in the Ellicott line and switching station is allocated to Baltimore.

Schedule B
Table No. 1
Notes

Line 12 - The 25 cycle investment in the Holtwood substation has been determined from the records of the company as $630,963. As in the 1944 study, 92% of this substation investment has been allocated to Baltimore.

Lines 13 to 25 - No part of the investment in these items of transmission plant has been allocated to Baltimore. These lines and facilities are for service to other utility customers and the Pennsylvania Railroad. Some of the interchange energy from these other customers might reach Baltimore, but no allowance is made for such instances since the amount would be relatively small.

Line 28 - Intangible and general plant has been allocated to Baltimore in proportion to the percent that the allocated total production and transmission is to the total plant.

Line 30 - The total working capital of $977,160 is composed of the following items (See Exhibit 23):

Materials and Supplies	$325,012
Coal	164,056
Cash	488,092

No part of the coal allowance is allocated to Baltimore. Materials and supplies are allocated in proportion to investment and cash in proportion to operating expenses as follows:

Item	Total	Percent to Baltimore	Amount to Baltimore
Materials and Supplies	$ 325,012	54.1	$ 175,831
Cash	488,092	41.9	204,511
Coal	164,056	0	-
Total	$ 977,160	38.9	$ 380,342

Line 32 - There is no breakdown in the record of the total depreciation reserve of $6,178,657. At transcript page 9899 there is a breakdown of the $6,000,000 reserve, as of 12/31/45.

Schedule B
Table No. 1
Notes

By applying the same ratios as are found in this breakdown, the reserve of $6,178,657 is divided as follows:

	Reserve
Hydro plant	$2,960,600
Steam plant	1,374,750
Transmission plant	1,596,150
General plant	247,157

The depreciation reserve as submitted by the company is not based on any age or service life formula. In fact, approximately $1,500,000 of the total $6,000,000 is an allowance or reserve for contingencies. Under the circumstances, the reserve applicable to the property allocated to Baltimore is apportioned on a per dollar of investment basis as follows:

Item	Total Reserve	Investment Ratio	Reserve Allocated to Baltimore
Hydro plant	$2,960,600	67.2%	$1,989,523
Steam plant	1,374,750	0	-
Transmission	1,596,150	55.0%	877,883
General	247,157	54.1%	133,712
Total	$6,178,657	48.6%	$3,001,118

Schedule B -- Table No. 2
Notes

Line 1 - The records of Penn Water do not show the amount of operation and maintenance separately for 25 and 60 cycle generating units and facilities. There are many items of expense which are common to the entire plant. This is particularly true of supervision and maintenance of structures. In addition there are a number of items of accessory equipment such as the exciter system, which are common to both 25 and 60 cycle operations.

After consideration of the various factors involved, it appears reasonable to allocate 76% of this item to 25 cycle operations. The relative 25 cycle generation is 75% of the total, the relative rated capacity 78.5%, and number of units, 80%. Using 76%, the amount allocated to 25 cycle is $306,200. Of this total, 92% or $281,704, is allocated to Baltimore in the same manner as the 25 cycle hydro investment was allocated.

Line 4 - The transmission expense for each of the major lines is available from company records. These expenses are allocated to Baltimore on the same basis as the investment allocation. The load dispatching and Holtwood substation expenses are split 50-50 between 25 and 60 cycle operations. Baltimore is allocated 92% of the 25 cycle expense. The detail of the allocation follows:

Item	Expense	Percent to Baltimore	Allocated to Baltimore
Westport and Riverside Lines and Manor Substation	$ 81,628	85.0	$ 69,384
Highlandtown Line and Substation and Gunpowder Line	146,705	100.0	146,705
Ellicott Line and Switching Station	13,686	100.0	13,686
Holtwood Substation	47,677	46.0	21,931
Load Dispatching Expense	37,699	46.0	17,342
Balance	81,088	0	
Total	$408,483	65.9	$269,048

Schedule B
Table No. 2
Notes

Line 5 - As outlined in the notes to Schedule A, Table No. 2 it was concluded that Administrative and General Expenses should be allocated 2/3 on the basis of investment and 1/3 on the basis of operating expenses. In 1946, however, the regulatory commission expense alone comprised over 1/3 of the total administrative and general expenses. In view of this fact, this part of the item is allocated separately in proportion to the investment and the balance allocated 2/3 in proportion to investment and 1/3 in proportion to operating expenses, as follows:

	Amount	Percent to Baltimore	Amount to Baltimore
Regulatory Commission Expense	$319,559	54.1	$172,881
Bal. Proportional to Investment	391,148	54.1	211,611
Bal. Proportional to Expenses	195,574	36.8	71,971
Total	$906,281	50.4	$456,463

Lines 6 and 7 - For the reasons previously outlined herein, no part of the payments made to Safe Harbor are allocated to Baltimore. The same reasons are applicable to the cost of purchased interchange.

Line 9 - At transcript page 4463, the total annual depreciation expense has been subdivided by major plant accounts. In the absence of any more detailed breakdown of this expense it has been allocated within each class of property in proportion to investment. The detail of the allocation follows:

Item	Total Depreciation Expense	Percent Allocation	Amount Allocated to Baltimore
Hydro plant	$ 130,000	67.2	$ 87,360
Steam plant	110,000	0	-
Transmission	130,000	55.0	71,500
General plant	30,000	54.1	16,230
Total	$ 400,000	43.8	$175,090

Schedule B
Table No. 2
Notes

Line 10- Taxes have been divided into four groups: (1) Pennsylvania taxes proportional to the investment in Pennsylvania, (2) Maryland taxes proportional to the investment in Maryland, (3) Federal taxes proportional to operating expenses and (4) Federal taxes proportional to the return or operating income. No part of the Pennsylvania gross receipts or PUC taxes are allocable to Baltimore.

For purposes of allocating the Maryland and Pennsylvania taxes, an analysis was made of the investment in each state and the proportion of such investment allocated to Baltimore herein. On the basis of this analysis, 48.4% of the Pennsylvania, and 84.4% of the Maryland taxes have been allocated to Baltimore.

A summary of the allocation made follows:

Item	Total Tax	Percent to Baltimore	Allocated to Baltimore
Pa. - Income, Capital Stk, Prop. & Misc.	$ 169,404	48.4	$ 81,992
Gross Receipts and PUC - Pa.	26,826	0	-
Md. - Income, Capital Stk, Prop. & Misc.	71,343	84.4	60,213
Federal - Unemployment and Old Age	27,060	41.9	11,338
Federal Income and Capital Stock	800,348	54.1	432,988
Total	$1,094,981	53.6	$ 586,531

Line 11 - The allocated return shown in Column 2 of this line is 6½% on the allocated investment plus working capital of $20,092,673, less 3% of the allocated depreciation reserve of $3,001,118.

PENNSYLVANIA WATER & POWER COMPANY
and Susquehanna Transmission Company of Maryland,
A Wholly Owned Subsidiary

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STATEMENT SHOWING RECONCILIATION OF F.P.C. STAFF'S RECOMMENDED DISALLOWANCES FROM COMPANY'S ELECTRIC PLANT ACCOUNTS PURSUANT TO EXHIBIT 51, SCHEDULE 2, AND TESTIMONY AS PRESENTED BY WITNESS NEWLANDS WITH PENN WATER EXHIBIT NO. 25, CONSOLIDATED STATEMENT SHOWING ORIGINAL COST OF ELECTRIC PLANT AS OF DECEMBER 31, 1945

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PENNSYLVANIA WATER & POWER COMPANY
and Susquehanna Transmission Company of Maryland, A Wholly Owned Subsidiary

Summary of Reconciliation of F.P.C. Staff's Recommended Disallowances from Co.'s Electric Plant Accounts Pursuant to Exhibit 51, Schedule 2 and Testimony as Presented by Witness Newlands with Penn Water Exhibit No. 25, Consolidated Statement Showing Original Cost of Electric Plant as of Dec. 31, 1945

Item No.	Explanation		Amount
	Staff Exhibit 51, Schedule 2		
	Electric Plant as Adjusted		
1	In Service		$ 5,241,236.22
2	In Process of Reclassification		27,679,502.01
3	Total Electric Plant as Adjusted (Ex. 51, Sch. 2, Sheets 1 & 4)		$32,920,738.23
4	Plus: Construction Work in Progress (Tr. p.1080)		30,124.49
5	Total Electric Plant Recommended for Allowance by Staff		$32,950,862.72
	F.P.C. Staff Recommended Disallowances for Electric Plant as Per Reconciliation Statement Attached		
6	Electric Plant in Service and In Process of Reclassification (Item 87, Col. (e))	$3,468,688.17	
7	Construction Work in Progress (Item 88, Col. (e))	207,237.30	
8	Property Held for Future Use (Item 89, Col. (e))	77,918.28	
9	Total Recommended for Disallowance (Item 90, Col. (e))		$ 3,753,843.75
10	Total Original Cost of Electric Plant Per Penn Water Exhibit 25 (Items 5 plus 9)		$36,704,706.47
	Less: Disallowed Items Agreed To By Company		
11	Conceded by Penn Water Since Filing Ex. 25, per Reconciliation Statement (Item 90, Col. (f))	$ 89,818.60	
12	Rental received from Gunpowder Line Nov. 16,1924 to Mar. 31, 1925	9,187.79	
13	Total Disallowed Items Agreed To By Company		99,006.39
14	Net Revised Original Cost of Electric Plant As of Dec. 31, 1945 (Items 10 - 13)		$36,605,700.08

PENNSYLVANIA WATER & POWER COMPANY
and Susquehanna Transmission Company of Maryland, a Wholly Owned Subsidiary

Statement Showing Reconciliation of F.P.C. Staff's Disallowances from Company's Books of Account Pursuant To Exhibit 51, Schedule 2 and Penn Water Exhibit 25

Item No.	Ex.51 Entry No.-Sch.8	Explanation		Staff Disallowances Per Adjusting Entries (Ex.51,Sch.8) (a)	Disallowances Conceded By Co. In Exhibit 25 (b)	Net Staff Disallowances From Books Per Adjusting Entries (a-b) (c)	Add'l.Co.Claims Included In Ex.25 But Not Allowed By Staff (d)	Disallowances At Issue In Proceedings (c+d) (e)	Disallowances Agreed To By Company (f)	Disallowances Protested By Company (e-f) (g)
	1, 2 & 3	Interest During Construction Prior to Beginning of Commercial Operation Oct. 1, 1911								
1		McCall Ferry Power Co. - 4/14/05 to 12/31/09	$1,452,027.11							
2		J. E. Aldred, Receiver - 7/17/09 to 12/31/09	4,022.82							
3		Bondholders Committee - 10/14/09 to Dec. 1909	44.32							
4		Total Interest 4/14/05 to 12/31/09 (Sch.A-1)	$1,456,094.25							
5		Less - Allowed by Staff (Ex.51, Sch. 15)	622,150.87	$ 833,943.38	$ -	$ 833,943.38	$ -	$ 833,943.38	$ -	$ 833,943.38(A)
6		Pa. Water & Power Co. 1910 (Schedule A-4)	$ 568,478.38							
7		Less - Allowed by Staff (Ex.51, Sch. 16)	479,232.72	89,245.66	-	89,245.66	-	89,245.66	-	89,245.66(A)
8		Pa. Water & Power Co. 1/1 to 9/30/11(Sch.A-6)	$ 498,845.33							
9		Less - Allowed by Staff (Ex. 51, Sch. 17)	25,978.07	198,632.64	7,395.10	191,237.54	281,629.72	472,867.26	-	472,867.26(A)
10		Less - Interest on Portion of J.E.Aldred compensation for Management Services conceded as improperly included in Original Cost at Transcript pages $222-26 (Schedule A-7)	(Items 5, 7 and 9)	-	-	-	-	-	17,549.62	(17,549.62)
11		Total Interest During Construction Prior to Oct. 1, 1911		$1,121,821.68	$ 7,395.10	$ 1,114,426.58	$ 281,629.72	$ 1,396,056.30	$ 17,549.62	$ 1,378,506.68(A)
		Operating Income During Construction								
12	4	Pa. Capital Stock Tax and Legal Fees 1910, Charged to Operating Expenses in 1911 and 1912		$ (3,450.00)	$ -	$ (3,450.00)	$ -	$ (3,450.00)	$ -	$ (3,450.00)
13		Operating Income Jan. 1 to Sept. 30, 1911 (Schedule B)		-	-	-	(173,688.11)	(173,688.11)	-	(173,688.11)
14		Total Operating Income During Construction (Items 12 and 13)		$ (3,450.00)	$ -	$ (3,450.00)	$ (173,688.11)	$ (177,138.11)	$ -	$ (177,138.11)
15	1	Certain Costs Incurred in Period 11/1/07 to 8/31/09 (Schedule C)		$ 143,981.46	$ -	$ 143,981.46	$ -	$ 143,981.46	$ -	$ 143,981.46
16	1	McCall Co. Stock Issued to Hutchinson as part consideration for land and water power rights - 18,840 shares common stock @ $25 per share (Ex. 51, Sch. 12c)(Ex. 26, pp. 43, 50 and 53)		471,000.00	-	471,000.00	-	471,000.00	-	471,000.00
17	1	McCall Co. Stock issued for Organization Expenses of Company - 10 shares Common @ $25 per share (Ex. 51, Sch. 12c)(Ex. 26, pp. 34, 50 and 53)		250.00	-	250.00	-	250.00	-	250.00
18	1	McCall Co. Stock issued to Harlow-McGaw as part consideration for land and water power rights - 1,000 shs.Common @ $25 per share (Ex.51, Sch.12c) (Ex. 26, pp.31, 50 and 53)		25,000.00	-	25,000.00	-	25,000.00	-	25,000.00
19	1	McCall Co. Stock issued to C. D. Pullen as part consideration for Options on Harlow-McGaw Properties - 150 shs. common @ $25 per sh. (Ex.51,Sch.12c) (Ex. 26, pp.32, 50 and 53)		3,750.00	-	3,750.00	-	3,750.00	-	3,750.00
20	1	McCall Co. Stock issued to Harvey Fisk & Sons for Management Services (Ex. 26, pp. 50 to 53, incl.)		199,570.31	-	199,570.31	-	199,570.31	-	199,570.31
21	1	Penn Water Stock Issued to J.E.Aldred for Management Services for period Nov. 1, 1908 to Oct. 31, 1912 - 5,000 shs. @ $60 per share - $300,000 (Sch.8) Portion applicable to constr.period-11/1/08 to 9/30/11 on a prorated basis		218,750.00	-	218,750.00	-	218,750.00	-	218,750.00

(A) See Schedule A attached.

PENNSYLVANIA WATER & POWER COMPANY
and Susquehanna Transmission Company of Maryland, A Wholly Owned Subsidiary

Statement Showing Reconciliation of F.P.C. Staff's Disallowances from Company's Books of Account Pursuant To Exhibit 51, Schedule 2 with Penn Water Exhibit 25

Item No.	Ex.51 Entry No.-Sch.8	Explanation	Staff Disallowances Per Adjusting Entries (Ex. 51,Sch.8) (a)	Disallowances Conceded by Co. In Exhibit 25 (b)	Net Staff Disallowances From Books Per Adjusting Entries (a-b) (c)	Add'l.Co.Claims Included in Ex.25 But Not Allowed By Staff (d)	Disallowances at Issue In Proceedings (c+d) (e)	Disallowances Agreed To By Company (f)	Disallowances Protested By Company (e-f) (g)
		Stock Issue Expense							
22	1	McCall Co. bond issue expense applicable to Penn Water Stock exchanged for McCall Co. bonds (Schedule D)	$ 331,703.15	$ -	$ 331,703.15	$ -	$ 331,703.15	$ -	$ 331,703.15
23	12	Stock Issue expense (Ex. 51, Schedule 23)	82,963.12	1,056.53	81,906.59	-	81,906.59	-	81,906.59
24	7	Promotion expenses (Ex. 51, Schedule 18)	30,787.34	1,185.75	29,601.59	-	29,601.59	-	29,601.59
25	18	Listing fees for Penn Water stock and bonds	-	-	-	2,487.00	2,487.00	2,487.00	-
26		Total Stock Issue Expense (Items 22, 23, 24 and 25)	$ 445,453.61	$ 2,242.28	$ 443,211.33	$ 2,487.00	$ 445,698.33	$ 2,487.00	$ 443,211.33
27	1	Value in Aug. 1908 of $703,000 Susquehanna Power Co. bonds and 1,500 shares Susquehanna Properties Co. stock issued in exchange for McCall Co. properties and water power rights located below Cully's Falls							
28		Value in Aug. 1908 per Staff Ex. 51, Sch.12c $200,000.00	$ 98,500.00	$ 61,436.02	$ 37,063.98	$ -	$ 37,063.98	$ -	$ 37,063.98
29		Less: Value in Aug. 1908 as determined by Co. by discounting at rate of 6% sale price in 1912 back to Aug. 11, 1908 162,936.02							
30		Profit on certain properties sold to Safe Harbor Corp. (Schedule E)	-	-	-	$ 119,940.20	119,940.20	-	119,940.20
		Land and Water Power Rights acquired by Penn Water since Dec. 31, 1909							
31	9	Flowage Basin Acct. 1910 to 1924, Incl.(Ex.51,Sch.20)(Schedule F)	182,677.81	9,492.37	173,185.44	-	173,185.44	22,838.57	150,346.87(B)
32	9	Flowage Basin Acct. 1925 to 1936, Incl.(Ex.51,Sch.21)(Schedule F)	69,859.72	10,180.71	59,679.01	-	59,679.01	32,395.64	27,283.37(B)
33	8	Survey of Storage reservoir sites (Ex. 51, Sch. 19)	26,920.03	11,045.18(C)	15,874.85	-	15,874.85	3,454.08(C)	12,420.77(C)
34	20	Intercompany profit on land (Ex. 51, Sch. 27)	24,151.83	-	24,151.83	-	24,151.83	-	24,151.83
35		Additional cost of property charged in error to Operating Expense when incurred (Schedule G)	-	-	-	1,427.42	1,427.42	-	1,427.42
36		Totals-Land and Water Power Rights Acquired by Penn Water Since Dec. 31, 1909 (Items 31,32, 33,34 and 35)	$ 303,609.39	$ 30,718.26	$ 272,891.13	$ 1,427.42	$ 274,318.55	$ 58,688.29	$ 215,630.26
	9	Conowingo Backwater Agreement							
37		Lower development study Job C-283-8 (Ex. 51, Sch. 21a)	$ 38,804.95	$ -	$ 38,804.95	$ -	$ 38,804.95	$ -	$ 38,804.95
38		Legal services of Simpson, Thacher & Bartlett in 1923(Ex.51,Sch.20c)	200.00	-	200.00	-	200.00	-	200.00
39		Traveling Expenses of J.A.Walls re:Conowingo Contract(Ex.51,Sch.21b)	296.51	-	296.51	-	296.51	-	296.51
40		Totals - Conowingo Backwater Agreement	$ 39,301.46	$ -	$ 39,301.46	$ -	$ 39,301.46	-	$ 39,301.46
41	8	Costs relating to construction of Holtwood-Lancaster Transmission Line (Ex. 51, Sch. 19)	$ 12,459.23	$ -	$ 12,459.23	$ -	$ 12,459.23	$ -	$ 12,459.23
42	21	Engineering expense relating to construction of Takoma Park Substation (Ex. 51, Sch. 8, Entry 21)	$ 5,668.48	$ -	$ 5,668.48	$ -	$ 5,668.48	$ -	$ 5,668.48

(B) See Schedule F attached

(C) See Schedule F-3 attached

PENNSYLVANIA WATER & POWER COMPANY
and Susquehanna Transmission Company of Maryland, A Wholly Owned Subsidiary

Statement Showing Reconciliation of F.P.C. Staff's Disallowances from Company's Books of Account Pursuant To Exhibit 51, Schedule 2 with Penn Water Exhibit 25

Item No.	Ex.51 Entry No.-Sch.2	Explanation	Staff Disallowances Per Adjusting Entries (Ex. 51, Sch. 6) (a)	Disallowances Conceded by Co. In Exhibit 25 (b)	Net Staff Disallowances From Books Per Adjusting Entries (a-b) (c)	Add'l.Co.Claims Included in Ex.25 But Not Allowed By Staff (d)	Disallowances At Issue In Proceedings (c+d) (e)	Disallowances Agreed To By Company (f)	Disallowances Protested By Company (e-f) (g)
	1	Materials and Supplies (Schedule H)							
43		Loss in materials and supplies to Dec. 31, 1909	$ 4,062.70	$ -	$ 4,062.70	$ -	$ 4,062.70	$ -	$ 4,062.70
44		Loss due to write-down of value of cement by Receiver	8,970.34	-	8,970.34	-	8,970.34	-	8,970.34
45		Total Materials and Supplies (Items 43 and 44)	$ 13,033.04	$ -	$ 13,033.04	$ -	$ 13,033.04	$ -	$ 13,033.04
		Flashboard Development Costs							
46	8	Roller Dam Investigation (Ex. 51, Sch. 19)	$ 4,793.91	$ -	$ 4,793.91	$ -	$ 4,793.91	$ -	$ 4,793.91
47	11	Development Costs of Flashboards (Ex. 51, Sch. 22)	44,961.06	-	44,961.06	-	44,961.06	-	44,961.06
48		Total Flashboard Costs (Items 46 and 47)	$ 49,754.97	$ -	$ 49,754.97	$ -	$ 49,754.97	$ -	$ 49,754.97
49	1	Susquehanna Contracting Co. Expenses (Schedule I)	$ 6,621.85	$ -	$ 6,621.85	$ -	$ 6,621.85	$ -	$ 6,621.85
50	13	Holtwood Power Co. Construction Fee (Ex. 51, page 48)	50,194.73	-	50,194.73	-	50,194.73	-	50,194.73
51	14	Holtwood Power Co. Organization Expense (Ex. 51, Sch.24)(Schedule J)	28,213.34		28,213.34	-	28,213.34	10,338.00	17,875.34
52	22	Riverside Line - Four (4) Unused Tower Foundations (Ex. 51, Sch. 8, Entry 22)	3,595.95	-	3,595.95	-	3,595.95	-	3,595.95
		Physical Items of Property Which Were Originally Charged In Error To Operating Expenses and Depreciation Reserve (Schedule K)							
53	18	Items Originally Charged in Error to Operating Expense	$ (76,915.93)	$ (76,915.93)	$ -	$ 141,275.09	$ 141,275.09	$ 6,558.63	$ 134,716.46
54	23	" " " " " " Deprn. Reserve	(122,488.49)	(122,488.49)	-	59,220.64	59,220.64	(2,797.88)	62,018.52
55	24	Property Physically Retired But Not Credited to Plant Account on Books	343,928.42	343,928.42	-	(109,028.12)	(109,028.12)	(8,409.98)	(100,618.14)
56		Total Claims Based on Corrections of Acct'g. Errors(Items 53,54 & 55)	$ 144,524.00	$ 144,524.00	$ -	$ 91,467.61	$ 91,467.61	$ (4,649.23) (D)	$ 96,116.84(E)
57		Holtwood Church (Schedule L)	$ -	$ -	$ -	$ 1,400.00	$ 1,400.00	$ -	$ 1,400.00
58	1	McCall Ferry Co. - Value of Capital Stock acquired from Hutchinson	(200.00)	-	(200.00)	-	(200.00)	-	(200.00)
59	1	McCall Co. Cash not accounted for by Receiver (Schedule M)	130.99	-	130.99	-	130.99	-	130.99
60	9 & 10	River Coal Investigation Expense (Schedule N)	6,132.41	-	6,132.41	-	6,132.41	-	6,132.41
61		Interest During Construction not previously recorded in Plant Account - Applicable to Period 1912 to 1936, Incl.(Schedule O)	-	-	-	6,884.94	6,884.94	6,884.94	-

(D) See Schedule K-4 attached
(E) See Schedules K and K-1 to K-3, inclusive, attached

PENNSYLVANIA WATER & POWER COMPANY
and Susquehanna Transmission Company of Maryland, A Wholly Owned Subsidiary

Statement Showing Reconciliation of F.P.C. Staff's Disallowances from Company's Books of Account Pursuant To Exhibit 51, Schedule 2 with Penn Water Exhibit 25

Item No.	Ex.51 Entry No.-Sch.8	Explanation	Staff Disallowances Per Adjusting Entries (Ex. 51, Sch. 8) (a)	Disallowances Conceded by Co. In Exhibit 25 (b)	Net Staff Disallowances From Books Per Adjusting Entries (a-b) (c)	Add'l.Co.Claims Included in Ex.25 But Not Allowed By Staff (d)	Disallowances At Issue In Proceedings (c+d) (e)	Disallowances Agreed To By Company (f)	Disallowances Protested By Company (e-f) (g)
	1 & 5	Excess of Penn Water Recorded Book Value Over Original Cost of Plant Acquired From Bondholders Committee As Of Jan. 13, 1910							
62		Amount conceded for purpose of case	$1,903,897.74	$1,903,897.74	$ -	$ -	$ -	$ -	$ -
63		Aldred Management Fee applicable to 10/1/11 to 10/31/12	81,250.00	81,250.00	-	-	-	-	-
64		Excess of Sale Price over 50% of Par Value of 371 shares of Capital Stock sold in 1912	8,061.83	8,061.83	-	-	-	-	-
65		Stocks of Inactive Subsidiaries Revalued in Reclassification	(25,820.00)	(25,820.00)	-	-	-	-	-
66	1	Reversal of entry setting up cement inventory at 12/31/09, (Penn Water Entry J61 Dec. 1911)(Ex. 51, Sch.11)	6,535.01	-	6,535.01	-	6,535.01	6,535.01	-
67		Total - (Items 62, 63, 64 and 65)	$1,973,924.58	$1,967,389.57	$ 6,535.01	$ -	$ 6,535.01	$ 6,535.01	$ -
68	6	Rebate of Railroad Relocation Costs (Ex. 51, Sch. 8)	$ 200,000.00	$ 200,000.00	$ -	$ -	$ -	$ -	$ -
69	15	Spare Machine Parts & Equipment in Electric Plant Prior to 1937 (Ex. 51, Sch. 8)	21,057.74	21,057.74	-	-	-	-	-
70	16	Uncompleted Engineering Studies (Ex. 51, Sch. 8)	922.22	922.22	-	-	-	-	-
71	17	Elimination of Incorrect Charges and Credits from Plant Account (Ex. 51, Sch. 25)	(60,084.19)	(60,084.19)	-	-	-	-	-
72	19	Adjustments to Overhead Costs of Westport Line Due to Change In Date It Was Placed In Service (Ex. 51, Sch. 8)	26,234.97	26,234.97	-	-	-	-	-
73	25	Sundry Expenditures for Associated Companies (Ex. 51, Sch. 8)	1,028.50	1,028.50	-	-	-	-	-
74	26	Real Estate and Rights-of-Way Held for Future Use (Ex. 51, Sch. 8)	78,343.06	-	78,343.06	-	78,343.06	-	78,343.06
75	27	Non-Project Property and Hydraulic Test Laboratory (Ex. 51, Sch. 8)	59,915.65	59,915.65	-	-	-	-	-
	28	Adjustments for Duplicate Retirements and Misc. Sales 1/1/37-12/31/44)(Ex. 51, Sch. 8)							
76		Duplicate Retirements	$ (7,489.71)	(7,489.71)	-	-	-	-	-
77		Other Physical Property	(10,864.50)	(10,864.50)	-	-	-	-	-
78		Electric Plant Held For Future Use	(2,620.81)	-	(2,620.81)	-	(2,620.81)	-	(2,620.81)
79		Receivables from Associated Companies	(1,000.00)	(1,000.00)	-	-	-	-	-
80		Totals - (Items 76, 77, 78 and 79)	$ (21,975.02)	$ (19,354.21)	$ (2,620.81)	$ -	$ (2,620.81)	$ -	$ (2,620.81)

PENNSYLVANIA WATER & POWER COMPANY
and Susquehanna Transmission Company of Maryland, A Wholly Owned Subsidiary

Statement Showing Reconciliation of P.P.C. Staff's Disallowances from Company's Books of Account Pursuant to Exhibit 51, Schedule 2 With Penn Water Exhibit 25

Item No.	Ex.51 Entry No.-Sch.8	Explanation	Staff Disallowances Per Adjusting Entries (Ex. 51, Sch. 8) (a)	Disallowances Conceded by Co. In Exhibit 25 (b)	Net Staff Disallowances From Books Per Adjusting Entries (a-b) (c)	Add'l.Co.Claims Included in Ex.25 But Not Allowed By Staff (d)	Disallowances At Issue In Proceedings (c-d) (e)	Disallowances Agreed To By Company (f)	Disallowances Protested By Company (e-f) (g)
	29	Adjustments for Duplicate Retirements and Miscellaneous Sales 1945 (Ex. 51, Sch.8)							
81		Duplicate Retirements	$ (710.51)	$ (710.51)	$ -	$ -	$ -	$ -	$ -
82		Other Physical Property	(2,830.00)	(2,830.00)	-	-	-	-	-
83		Totals - (Items 81 and 82)	$ (3,540.51)	$ (3,540.51)	$ -	$ -	$ -	$ -	$ -
84		Items Excluded from Company Ex. 25 But Allowed by P.P.C. Staff in Ex. 51. (Schedule P)	$ -	$ 10,746.86	$ (10,746.86)	$ -	$ (10,746.86)	$ (8,015.03)	$ (2,731.83)
85		Total Adjustment of Electric Plant in Service	$5,663,493.90	$2,450,632.26	$ 3,212,861.64	$ 331,548.78	$3,544,410.42	$ 89,818.60	$3,454,591.82
86		Adjustment for Electric Plant Held For Future Use (Ex. 51, Sch. 2, Sheet 1)	(75,722.25)	-	(75,722.25)	-	(75,722.25)	-	(75,722.25)
87		TOTALS - ELECTRIC PLANT IN SERVICE - (Items 85 and 86)	$5,587,771.65	$2,450,632.26	$ 3,137,139.39	$ 331,548.78	$3,468,688.17	$ 89,818.60	$3,378,869.57
88		Construction Work in Progress (Schedule Q)	$ 207,237.30	$ -	$ 207,237.30	$ -	$ 207,237.30	$ -	$ 207,237.30
89		Property Held For Future Use (Ex. 51, Sch. 7)	$ 77,918.28	$ -	$ 77,918.28	$ -	$ 77,918.28	$ -	$ 77,918.28
90		GRAND TOTALS - (Items 87, 88 and 89)	$5,872,927.23	$2,450,632.26	$3,422,294.97	$ 331,548.78	$3,753,843.75	$ 89,818.60	$3,664,025.15

Schedule A

PENNSYLVANIA WATER & POWER COMPANY
and Susquehanna Transmission Company of Maryland, A Wholly-Owned Subsidiary

Interest During Construction

Schedule Showing Basis for Disallowance by F.P.C. Staff

Item No	Explanation		
	Entry 1		
1	Interest Applicable to Period Nov 1, 1907 to Aug. 31, 1909 (Schedule A-2)		$ 701,758.29
2	Interest for period April 14, 1905 to Dec. 31 1909 on Items Disallowed by Staff (Schedule A-3)		205,540.98
3	Total Disallowed		$ 907,299.27
	Less: Interest on Working Capital Allowed by Staff but not Claimed by Company		
4	Exhibit 51 - Schedule 15a	$ 69,549.83	
5	" 51 - " 15b	3,806.06	73,355.89
6	Net Disallowance - Entry 1		$ 833,943.38
	Entry 2		
7	Interest for year 1910 on Items Disallowed by Staff (Schedule A-5)		$ 94,261.10
	Less: Interest on Working Capital Allowed by Staff but not Claimed by Company		
8	Exhibit 51 - Schedule 16a		5,015.44
9	Net Disallowance - Entry 2		$ 89,245.66
	Entry 3		
	Interest for period Jan 1 to Sept. 30, 1911 (Sch A-6)		
10	Charged to Profit & Loss Acct. (Sch A-6a)	$281,629.72	
11	" " Plant Account on Books	12,297.75	
12	Excess of interest @ 6% on Monthly Additions over interest charged to P. & L. and Plant Accounts	204,917.86	
13	Total for Period Jan 1 to Sept. 30, 1911		$ 498,845.33
	Less:		
14	Interest on Books Charged to Plant Account Claimed by Company	$ 12,297.75	
15	Interest on Books Charged to Plant Account Disallowed by Company but Allowed by Staff for 1911	7,395.10	
16	Additional Interest Allowed by Staff (Exhibit 51, Sch 17)	6,285.22	25,978.07
17	Net Disallowance Entry 3		$ 472,867.26
18	TOTAL		$1,396,056.30
	Less:		
19	Adjustment for correction of interest on J. E. Aldred compensation for management services (Sch.A-7)		$ 17,549.62
20	Net difference after adjustment		$1,378,506.68

PENNSYLVANIA WATER & POWER COMPANY
and Susquehanna Transmission Company of Maryland, A Wholly-Owned Subsidiary

Statement Showing Calculation of Interest During Construction for the Period April 14, 1905 to December 31, 1909

Month	1905 Additions (a)	1905 Monthly Balances (b)	1906 Additions (c)	1906 Monthly Balances (d)	1907 Additions (e)	1907 Monthly Balances (f)	1908 Additions (g)	1908 Monthly Balances (h)	1909 Additions (i)	1909 Monthly Balances (j)
January	$		125,924.20	2,196,704.70	243,479.56	4,325,275.00	77,414.53	7,050,939.58	(36.15)	7,261,000.54
February			104,010.73	2,300,715.43	343,646.66	4,668,921.66	26,758.79	7,077,698.37	2,424.84	7,263,425.38
March			111,879.41	2,412,594.84	369,036.13	5,037,957.79	36,865.38	7,114,563.75	2,125.17	7,265,550.55
April	250.00	250.00	96,103.40	2,508,698.24	320,293.38	5,358,251.17	11,708.45	7,126,272.20	(708.84)	7,264,841.71
May	10,022.22	10,272.22	182,306.76	2,691,005.00	319,283.63	5,677,534.80	42,458.29	7,168,730.49	6,948.56	7,271,790.27
June	1,874,552.31	1,884,824.53	168,097.42	2,859,102.42	280,194.65	5,957,729.45	34,498.84	7,203,229.33	5,994.31	7,277,784.58
July	47,307.00	1,932,131.53	126,596.28	2,985,698.70	210,774.15	6,168,503.60	69,045.59	7,272,274.92	23,980.06	7,301,764.64
August	12,581.25	1,944,712.78	105,870.39	3,091,569.09	262,837.66	6,431,341.26	(114,353.84)	7,157,921.08	6,050.88	7,307,815.52
September	44,843.40	1,989,556.18	180,301.88	3,271,870.97	167,753.87	6,599,095.13	47,630.28	7,205,551.36	51,110.12	7,358,925.64
October	18,474.51	2,008,030.69	246,613.83	3,518,484.80	200,842.50	6,799,937.63	24,565.50	7,230,116.86	147,729.90	7,506,655.54
November	25,513.13	2,033,543.82	275,759.33	3,794,244.13	136,903.56	6,936,841.19	24,233.78	7,254,350.64	126,599.71	7,633,255.25
December	37,236.68	2,070,780.50	287,551.31	4,081,795.44	36,683.86	6,973,525.05	6,686.05	7,261,036.69	90,459.57	7,723,714.82
Total	$2,070,780.50	13,878,102.25	2,011,014.94	35,712,483.76	2,891,729.61	70,934,913.73	287,511.64	86,122,685.27	462,678.13	88,436,524.44
Interest Computed on Expenditures at 6%										
1/2% of Total Monthly Balances		$ 69,370.51		$178,562.42		$354,674.55		$430,613.43		$442,182.63
Less 1/4% of Additions during construction period		5,176.95		5,027.54		7,229.32		718.78		1,156.70
Total Interest For Each Year		$ 64,193.56		$173,534.88		$347,445.23		$429,894.65		$441,025.93
Total Interest Accumulated To End of Each Year		$ 64,193.56		$237,728.44		$585,173.67		$1,015,068.32		$1,456,094.25

( ) Denotes credit

General Notes:

The expenditures by Susquehanna Pole Line Companies, predecessors of Susquehanna Transmission Company of Maryland, are included at the date of the expenditure by the Pole Line Company instead of the date of the advance by the McCall Company to the Pole Line Company.

Additions for the month of August 1908 include a credit of $162,936.02 for the transfer of property and riparian rights below the dam in exchange for securities of Susquehanna Power Company and Susquehanna Properties Company.

The above expenditures include the values of McCall Company securities issued for properties, services, etc., in addition to cash expenditures.

Schedule A-1

PENNSYLVANIA WATER & POWER COMPANY
and Susquehanna Transmission Company of Maryland, A Wholly-Owned Subsidiary

Statement Showing Calculation of Interest During Construction Applicable to Period
November 1, 1907 to August 31, 1909

Month	1907 Additions (a)	1907 Monthly Balances (b)	1908 Additions (c)	1908 Monthly Balances (d)	1909 Additions (e)	1909 Monthly Balances (f)
January	-	-	66,974.68	6,320,763.83	(3,397.22)	6,417,464.97
February	-	-	14,592.57	6,335,356.40	474.12	6,417,939.09
March	-	-	26,463.27	6,361,819.67	146.72	6,418,085.81
April	-	-	6,861.80	6,368,681.47	(3,432.35)	6,414,653.46
May	-	-	37,776.12	6,406,457.59	5,287.97	6,419,941.43
June	-	-	28,441.55	6,434,899.14	4,007.75	6,423,949.18
July	-	-	52,750.41	6,487,649.55	1,004.81	6,424,953.99
August	-	-	(153,275.22)	6,334,374.33	1,025.88	6,425,979.87
September	-	-	46,334.88	6,380,709.21	-	-
October	-	(Note)	17,459.13	6,398,168.34	-	-
November	130,032.48	6,230,302.15	19,544.78	6,417,713.12	-	-
December	23,487.00	6,253,789.15	3,149.07	6,420,862.19	-	-
Total	$ 153,519.48	12,484,091.30	167,073.04	76,667,454.84	5,117.68	51,362,967.80
Interest Computed on Expenditures at 6%						
1/2% of Total Monthly Balances	$62,420.45		$383,337.27			$256,814.84
Less 1/4% of Additions during construction period	383.80		417.68			12.79
Total Interest for Each Year	$62,036.65		$382,919.59			$256,802.05
Total Interest Accumulated to End of Period	$62,036.65		$444,956.24			$701,758.29

Note - Accumulated balance of Additions as of October 31, 1907 was $6,100,269.67

( ) Indicate decrease

Schedule A-2

PENNSYLVANIA WATER & POWER COMPANY
and Susquehanna Transmission Company of Maryland, A Wholly-Owned Subsidiary

Statement Showing Calculation of Interest During Construction for Period April 14, 1905 to December 31, 1909
on Items Disallowed by Staff Exhibit 51 (See Schedule A-3a)

Month	1905 Disallowances by Month of Expenditure (a)	1905 Monthly Balances (b)	1906 Disallowances by Month of Expenditure (c)	1906 Monthly Balances (d)	1907 Disallowances by Month of Expenditure (e)	1907 Monthly Balances (f)	1908 Disallowances by Month of Expenditure (g)	1908 Monthly Balances (h)	1909 Disallowances by Month of Expenditure (i)	1909 Monthly Balances (j)
January	$ -	-	-	699,477.76	8.25	699,576.33	10,439.85	730,175.75	3,361.07	843,535.57
February	-	-	3.75	699,481.51	8.25	699,584.58	12,166.22	742,341.97	1,950.72	845,486.29
March	-	-	15.00	699,496.51	8.25	699,592.83	10,402.11	752,744.08	1,978.45	847,464.74
April	250.00	250.00	64.25	699,560.76	8.25	699,601.08	4,846.65	757,590.73	2,723.51	850,188.25
May	-	250.00	-	699,560.76	.63	699,601.71	4,682.17	762,272.90	1,660.59	851,848.84
June	699,120.31	699,370.31	-	699,560.76	16.75	699,618.46	6,057.29	768,330.19	1,986.56	853,835.40
July	-	699,370.31	-	699,560.76	-	699,618.46	16,295.18	784,625.37	22,975.25	876,810.65
August	81.25	699,451.56	-	699,560.76	24.75	699,643.21	38,921.38	823,546.75	5,025.00	881,835.65
September	-	699,451.56	-	699,560.76	24.75	699,667.96	1,295.40	824,842.15	200.00	882,035.65
October	-	699,451.56	7.32	699,568.08	6,871.08	706,539.04	7,106.37	831,948.52	283.56	882,319.21
November	26.20	699,477.76	-	699,568.08	13,196.86	719,735.90	4,689.00	836,637.52	75.00	882,394.21
December	-	699,477.76	-	699,568.08			3,536.98	840,174.50	1,086.74	883,480.95
Total	$699,477.76	4,896,550.82	90.32	8,394,524.58	20,167.82	8,422,398.02	120,438.60	9,455,230.43	43,306.45	10,381,255.41

Interest Computed on Disallowances at 6%					
1/2% on Total Monthly Balances	$ 24,482.75	$ 41,972.62	$ 42,111.99	$ 47,276.15	$ 51,906.18
Less 1/4% on Disallowances By Month of Expenditure	1,748.69	.23	50.42	301.10	108.27
Total Interest For Each Year	$ 22,734.06	$ 41,972.39	$ 42,061.57	$ 46,975.05	$ 51,797.91
Total Interest Accumulated To End of Each Year	$ 22,734.06	$ 64,706.45	$106,768.02	$153,743.07	$205,540.98

Schedul

Schedule A-3a
Page 1 of 2

PENNSYLVANIA WATER & POWER COMPANY
and Susquehanna Transmission Company of Maryland, A Wholly-Owned Subsidiary

Summary of Items Disallowed in Staff Exhibit 51 Applicable to Period April 14, 1905 to December 31, 1910

Item No.	Description	Item	Amount
	I - PERIOD APR. 14, 1905 to DEC. 31, 1909		
	Cessation Expenses		
1	Cessation Account - Exhibit 51, Schedule 12	$ 36,445.21	
2	Overhead Costs - Exhibit 51, Schedule 12a	77,506.67	
3	Salary of Hutchinson after 8/1/09 - Exhibit 51, Schedule 13	5,000.00	$118,951.88
	Based on Value of McCall Co. Stock		
4	Organization Expense - 10 shares at $25	250.00	
5	Hutchinson property - 18,840 shares at $25	471,000.00	
6	Harlow-McGaw property - 1,000 shares at $25	25,000.00	
7	Pullen option - 150 shares at $25	3,750.00	
8	Harvey Fisk & Sons Management Fee	199,570.31	699,570.31
9	Stock Account "J" - Materials & Supplies not used		21,341.94
	Value Assigned to Susquehanna Power Co Bonds		
10	Value assigned by Staff in Exhibit 51	200,000.00	
11	Less value assigned by company	162,936.02	37,063.98
	Susquehanna Contracting Co Expense		
12	Officers Salaries and Expenses	5,499.70	
13	" Printing and Stationery	316.40	
14	Cost of dissolution	805.75	6,621.85
15	McCall Co cash not recorded as received by J.E.A. Receiver		130.99
16	Value of McCall Ferry Power Co. stock obtained with the acquisition of property from Hutchinson		(200.00)
17	Total - 1905 to 1909		$883,480.95
	II - YEAR 1910		
	Materials and Supplies		
18	Old cement used in construction in 1910 not inventoried (See Ex. 51, Sch. 11)(Contra to Item 9)		$ (8,308.90)
	Based on Value of McCall Co. Stock		
19	Stock issue expense applicable to P.W.&P. stock exchanged for McCall Co bonds		331,703.15

Schedule A-3a
Page 2 of 2

Item No.	Description	Item	Amount
	II - YEAR 1910 - (Concl'd)		
	Claims against McCall Ferry Power Company (See Ex. 51, Schedule 14)		
20	Hugh L. Cooper, Balance of Completion Bonus	$15,819.06	
21	Sanderson & Porter, Fee for Period Nov. 1907 to Dec. 1908	9,210.52	$ 25,029.58
	Survey of Storage Reservoir Sites (See Ex. 51, Schedule 19)		
22	Survey Work	$ 818.41	
23	General Office Charges	50.00	
24	Automobile Expenses	132.28	
25	Harrisburg Office Expense	358.92	
26	Salary W. E. Bennett	353.48	
27	W.E. Bennett - Investigation of Reservoir Sites	2,400.00	4,113.09
	Lancaster Transmission Line - (See Ex. 51, Sch. 19)		
28	Right of Way Surveys	$ 2,764.11	
29	Distribution of Salaries and Wages	90.70	
30	Miscellaneous Expenses and Overheads	37.25	2,892.06
	Promotion Expenses - (See Ex. 51, Schedule 18)		
31	Entertainment and Special Trains		591.54
	Based on Value of Penn Water Stock		
32	J. E. Aldred Management Fee - 5,000 shares @ $60		300,000.00
33	J. E. Aldred Management Fee - (Portion Duplicated in error)		89,965.75
34	Total - 1910		$ 745,986.27
35	TOTAL FOR PERIOD APRIL 14, 1905 TO DECEMBER 31, 1910		$1,629,467.22

Schedule A-4

PENNSYLVANIA WATER & POWER COMPANY
and Susquehanna Transmission Company of Maryland, A Wholly-Owned Subsidiary

Statement Showing Calculation of Interest During Construction Applicable to the Year 1910

Month	Additions (a)	Monthly Balances (b)
Balance - December 31, 1909		$ 7,723,714.82
January	$ 777,962.69	$ 8,501,677.51
February	164,583.08	8,666,260.59
March	36,447.60	8,702,708.19
April	62,068.08	8,764,776.27
May	394,250.46	9,159,026.73
June	170,328.28	9,329,355.01
July	517,116.41	9,846,471.42
August	339,608.61	10,186,080.03
September	59,706.21	10,245,786.24
October	232,654.56	10,478,440.80
November	90,219.22	10,568,660.02
December	200,488.65	10,769,148.67
Total	$3,045,433.85	$115,218,391.48

Interest Computed on Expenditures at 6%

1/2% of Total Monthly Balances	$ 576,091.96
Less 1/4% of Additions during construction period	7,613.58
Total Interest for Year	$ 568,478.38

Schedule A-5

PENNSYLVANIA WATER & POWER COMPANY
and Susquehanna Transmission Company of Maryland, A Wholly Owned Subsidiary

Statement Showing Calculation of Interest During Construction for Year 1910 on Items Disallowed by Staff Exhibit 51 (See Schedule A-3a)

Month	1910 Disallowances (a)	Monthly Balances (b)
Balance - December 31, 1909		$ 883,480.35
January	$ 708,913.56	1,592,393.51
February	9,185.70	1,601,579.21
March	(20,458.48)	1,581,120.73
April	(44,948.92)	1,536,171.81
May	73,005.51	1,609,177.32
June	-	1,609,177.32
July	-	1,609,177.32
August	435.07	1,609,612.39
September	7,444.50	1,617,056.89
October	(1,657.89)	1,615,399.00
November	(518.69)	1,614,880.31
December	14,586.91	1,629,467.22
Total	$ 745,986.27	$19,225,213.03

Interest Computed on Disallowances at 6%	
1/2% of Total Monthly Balances	$ 96,126.07
Less 1/4% of Disallowances during construction period	1,864.97
Total Interest For Year	$ 94,261.10

( ) Denotes Credit

Schedule A-6

PENNSYLVANIA WATER & POWER COMPANY
and Susquehanna Transmission Company of Maryland, A Wholly-Owned Subsidiary

Statement Showing Calculation of Interest During Construction
Applicable to the Period January 1, 1911 to September 30, 1911

Month	Additions (a)	Monthly Balances (b)
Balance - December 31, 1910		$ 10,769,148.67
January	$ 75,223.04	$ 10,844,371.71
February	57,077.88	10,901,449.59
March	28,888.76	10,930,338.35
April	146,965.75	11,077,304.10
May	156,743.74	11,234,047.84
June	7,447.43	11,241,495.27
July	29,628.57	11,271,123.84
August	(2,876.53)	11,268,247.31
September	(36,015.72)	11,232,231.59
Total	$463,082.92	$100,000,609.60

Interest Computed on Expenditures at 6%	
1/2% of Total Monthly Balances	$ 500,003.04
Less 1/4% of Additions during construction period	1,157.71
Total Interest For Period	$498,845.33

( ) Denotes credit

Schedule A-6a

PENNSYLVANIA WATER & POWER COMPANY
and Susquehanna Transmission Company of Maryland, A Wholly-Owned Subsidiary

Statement Showing Interest Charged to Profit and Loss Account During Period Jan. 1 to Sept. 30, 1911

Item No	Explanation	Amount
1	Interest on $7,580,000 First Mortgage Five Per Cent Gold Bonds Jan 1 to Sept. 30, 1911	$ 284,250.00
2	Miscellaneous bond interest adjustments	(1,383.92)
3	Interest earned on bank balances	(1,236.36)
4	Total	$ 281,629.72

Schedule A-7

PENNSYLVANIA WATER & POWER COMPANY

Statement Showing Determination of Reduction in Interest During Construction Relating to Fee for J. E. Aldred Management Services
(See Transcript pp. 8222 to 8226)

Item No.	Explanation	Amount
	Schedule Showing Amount of Adjustment In Interest Base	
1	Penn Water Stock Issued to J. E. Aldred for Management Services for period Nov. 1, 1908 to Oct. 31, 1912 - 5,000 shares at $60 per share (See Sched. A-8)	$300,000.00
2	Less: Portion Applicable to Period of Construction Nov. 1, 1908 to Sept. 30, 1911	218,750.00
3	Portion Applicable to Period After Date of Beginning of Commercial Operation - Oct. 1, 1911 to Oct. 31, 1912	$ 81,250.00
4	Amount Applicable to Period Nov. 1, 1908 to Jan. 12, 1910 which was Duplicated in Interest Base in Error	89,965.75
5	Total Adjustment to Interest Base	$ 171,215.75

Schedule Showing Calculation of Reduction in Interest During Construction on Adjustment to Base

Month	1910 Additions	1910 Monthly Balances	1911 Additions	1911 Monthly Balances
January	$171,215.75	$171,215.75	-	$171,215.75
February	-	171,215.75	-	171,215.75
March	-	171,215.75	-	171,215.75
April	-	171,215.75	-	171,215.75
May	-	171,215.75	-	171,215.75
June	-	171,215.75	-	171,215.75
July	-	171,215.75	-	171,215.75
August	-	171,215.75	-	171,215.75
September	-	171,215.75	-	171,215.75
October	-	171,215.75	-	-
November	-	171,215.75	-	-
December	-	171,215.75	-	-
	$171,215.75	$2,054,589.00	-	$1,540,941.75
Interest Computed at 6%				
1/2% of Total Monthly Balances		$ 10,272.95		$ 7,704.71
Less 1/4% of Additions During Period		428.04		-
Total Interest for Each Year		$ 9,844.91		$ 7,704.71
Total Interest Accumulated				$ 17,549.62

Schedule A-8
TELEPHONE
WHITEHALL 4-2400

FOUNDED 1888

FREDERIC H. HATCH & CO.,
INCORPORATED
INVESTMENT SECURITIES
63 WALL STREET
NEW YORK 5, N.Y.

April 1, 1946

The following are all of the Pennsylvania Water & Power Company stock and bond sales shown by the records of Frederic H. Hatch & Company, Inc., prior to July 31, 1911:

Capital Stock - $100 Par Value

Date	Amount	Sale Price
1/20/11	100	38
3/1/11	100	62½
3/3/11	100	63¼
3/3/11	100	63 3/4
3/31/11	75	59 5/8
4/1/11	100	60 3/8
4/12/11	100	60 3/8
4/24/11	100	61
4/25/11	100	61½
5/4/11	114	60 3/4
5/8/11	100	61 1/8
7/26/11	500	56

First Mortgage Five Per Cent Sinking Fund Gold Bonds Due 1940

1/24/11	20M	84½
2/11/11	10M	86
2/20/11	5M	86¼
2/20/11	5M	86 5/8
2/21/11	10M	87
3/3/11	5M	87½
3/3/11	5M	87 3/4
3/3/11	10M	86 7/8
4/12/11	5M	87½
4/25/11	20M	86 7/8
4/25/11	10M	87
4/26/11	10M	88 1/4
4/26/11	10M	88½
4/26/11	10M	88 3/4
4/26/11	10M	88
4/28/11	10M	88 3/4
4/28/11	20M	89
4/28/11	11M	89 1/4
4/29/11	25M	89½
5/3/11	25M	89 1/4
5/4/11	25M	89
5/8/11	1M	89 1/4
5/9/11	1M	89 1/4
5/12/11	25M	89
5/17/11	22M	89
5/17/11	18M	88 7/8
5/18/11	60M	88 7/8
5/22/11	25M	89
6/7/11	10M	89 1/8
7/14/11	11M	88½
7/20/11	25M	88
7/26/11	25M	88½

over.

I, Frederick O'Harbling, Secretary of Frederic H. Hatch & Company, Inc., certify that the foregoing sale prices of Pennsylvania Water & Power Company common stock and bonds are taken from the records of this firm and were transactions of this firm on the dates listed.

(Signature)

Frederick O'Harbling

Schedule B

PENNSYLVANIA WATER & POWER COMPANY
and Susquehanna Transmission Company of Maryland, A Wholly-Owned Subsidiary

Statement Showing Operating Income for the Period
Jan. 1 to Sept. 30, 1911

Item No.	Explanation			Amount
	OPERATING REVENUES			
1	Consolidated Gas Elec.Lt.&Pr.Co.of Balto.(1/1-9/30)			$151,744.43
2	United Railways & Elec.Co. of Balto.(7/15-9/30)			67,132.01
3	Total Operating Revenues			$218,876.44
	OPERATING REVENUE DEDUCTIONS			
	Operating Expenses			
4	Holtwood Hydro		$11,648.75	
5	Highlandtown Substation		4,543.54	
6	Transmission Lines		3,598.46	
	Company Quarters, Camp & Misc. Dwellings			
7	Rentals and Other Income	$(6,221.53)		
8	Maintenance and Repairs	3,505.01	(2,716.52)	$ 17,074.23
	Maintenance and Repairs			
9	Machinery and Power House		163.37	
10	Miscellaneous - Holtwood		90.30	
11	Transmission Lines		252.10	505.77
	General Expenses			
12	Baltimore Office Expense		1,162.27	
13	New York Office Expense		2,288.32	
14	Holtwood Office Expense		1,345.49	
15	Printing and Stationery		853.84	
16	Salaries (Officers, Engineers, etc.)		9,665.59	
17	Auditing		466.00	
18	Traveling Expenses		1,439.91	
19	Directors Fees and Expenses		255.75	
20	Insurance (Fire, Auto, Employers Liability, Etc.)		331.13	
21	Legal Expenses		3,525.93 (a)	
22	Miscellaneous		526.07	21,860.30
	Taxes			
23	Special Federal Excise Tax		147.03	
24	Penna. Real Estate Tax		2,257.15	
25	Penna. Capital Stock Tax		3,220.51 (b)	
26	Maryland Foreign Corporation Tax		18.75	
27	Penna. Corporate Loans		14.63	
28	Maryland Personal Property Taxes		89.96	5,748.03
29	Total Operating Revenue Deductions			$ 45,188.33
30	Operating Income			$173,688.11

(a) Includes $1,700 allowed by Staff in Ex. 51, Entry 4
(b) " $1,750 " " " " " " " "

Schedule C

PENNSYLVANIA WATER & POWER COMPANY

Statement Showing Certain Costs Disallowed by F.P.C. Staff
Which Were Incurred in Period Nov. 1, 1907 to Aug. 31, 1909

Item No.	Explanation			Amount
1	Cessation Account (Ex. 51, Sch.12)(Schedule C-1)			$ 36,445.21
2	Administration and Other Overhead Costs Nov. 1, 1907 to Aug. 31, 1909 (Ex. 51, Sch. 12a)		$ 77,506.67	
	Less:			
3	Hutchinson's salary Nov. 1907 to July 1908	$10,499.94		
4	Portion of Cooper Fee	14,107.21	24,607.15	
5	Net Administration and Other Overhead Costs Nov. 1, 1907 to Aug. 31, 1909 (Sch. C-2)			52,899.52
	Hutchinson's salary			
6	Nov. 1907 to July 1908 incl. (Ex. 51, Sch. 12b)		10,499.94	
7	After July 31, 1908 (Ex. 51, Sch. 13)		5,000.00	
8	Total Hutchinson's salary			15,499.94
	Hugh L. Cooper Fee			
9	Portion of (Ex. 51, Sch. 12b)		14,107.21	
10	" " (Ex. 51, Sch. 14)		15,819.06	
11	Total Cooper Fee			29,926.27
12	Sanderson & Porter Fee (Ex.51, Sch.14)			9,210.52
13	Total			$143,981.46

Schedule C-1

PENNSYLVANIA WATER & POWER COMPANY

Statement Showing Summary of McCall Ferry Power Company Cessation Expense Account (Exhibit 51, Schedule 12)

Item No.	Explanation	Amount
1	Salaries and Wages	$ 28,277.12
2	Payment of Salaries and Wages in Arrears (Note)	4,624.07
3	Materials, Supplies and Tools	2,175.34
4	Freight	750.89
5	Miscellaneous	617.79
	Total	$ 36,445.21

Note - Most of these salaries and wages were paid on the basis of 50% of the employee's regular rate of pay.

Schedule C-2

PENNSYLVANIA WATER & POWER COMPANY

Analysis of McCabl Ferry Power Company Overheads
For the Period Nov. 1, 1907 to Sept. 1, 1909 Disallowed by Staff
(Exhibit 51, Schedule 12a)

Item No.	Explanation		Amount
1	Local Office - Accounting, Salaries, and Expenses		$ 4,977.37
2	General Office Salaries (Ex. 51, Sch. 12b)		$ 10,255.94
	Engineering Experts (Ex. 51, Sch. 12b):		
3	Boyd Ehle, Resident Engineer	$ 2,200.00	
4	R. H. Anderson, Ass't. Resident Engineer	1,100.00	
5	J. W. Young, Ass't. Engineer	5,125.00	
6	Harold Pender, Ass't. to Chief Engineer	2,050.00	
7	R. Beeuwkes, Electrical Inspector	750.00	
8	Total Engineering Experts		$ 11,225.00
9	Insurance (Estimated by F.P.C. Staff) (Includes Fire, Workmen's Compensation, Fidelity Bond, etc.)		$ 7,500.00
10	General Office Supplies and Expenses		$ 13,851.39
11	Engineering Expenses		$ 2,053.27
12	Traveling Expenses		$ 126.39
13	Miscellaneous Expenses		$ 2,910.16
14	Total		$ 52,899.52

Schedule D

PENNSYLVANIA WATER & POWER COMPANY

Statement Showing Determination of Portion of McCall Co. Bond Issue Expense Applicable to Penn Water Stock Exchanged for McCall Co. Bonds

Item No.	Explanation		Amount
	Value of Services of various banking firms which participated in underwriting McCall Co. Bonds		
1	Harvey Fisk & Sons (Ex. 26, p. 53)	$332,617.19	
2	Bertron, Storrs & Griscom (Ex.26, p.54)	186,562.50	
3	Lee, Higginson & Co. (Ex. 26, p. 54)	125,000.00	$644,179.69
	Less:		
4	Amortization for period 6/15/05, the date of issue of the bonds, to 7/1/09, the effective date of the Reorganization plan ($\frac{48.5}{360}$ x $644,179.69)	$ 86,785.32	
5	Amount of balance as of 7/1/09 applicable to 66 McCall Co. bonds not exchanged for P.W. securities ($\frac{66}{8075}$ x $557,394.37)	4,555.79	91,341.11
6	Balance of underwriting cost of 8,259 McCall Co. bonds as of 7/1/09		$552,838.58
	Portions applicable to Penn Water securities issued in exchange for 8,259 McCall Co. Bonds		
7	40% Penn Water Bonds		$221,135.43
8	60% " " Stock		$331,703.15

Schedule E

PENNSYLVANIA WATER & POWER COMPANY

Statement Showing Determination of Profit on Certain Properties Sold to Safe Harbor Corporation

Item No.	Explanation			Amount
	I - Willson Properties			
1	Sale price (fair market value) of properties to Safe Harbor Corporation in June 1930	$35,575.00		
2	Less: Cost to McCall as determined by Original Cost Study	5,537.00		
3	Net Profit to Penn Water			$ 30,038.00
	II - Witmer Properties			
4	Sale price (fair market value) of properties to Safe Harbor Corporation in June 1930		96,230.00	
5	Less: Cost to McCall Co. as determined by Original Cost Study	$40,000.00		
6	Less: Est. value of flowage release retained on Mt. Atlas Tract as of Oct.1,1911	$1,000.00		
7	Est. value of 15 flowage releases in Washingtonboro not used or useful	15.00	1,015.00	38,985.00
8	Net Profit to Penn Water			$ 57,245.00
	III - Part of Harlow-McGaw Properties (Consisting of portion of canal between Safe Harbor dam and Wrightsville, and certain islands)			
9	Sale price (fair market value of properties to Safe Harbor Corporation in June 1930)		$61,740.00	
10	Less: Fair value as of Oct. 1, 1911 based upon discounting at 6% the sale price to Safe Harbor, in June 1930 back to Oct. 1, 1911		29,082.80	
11	Net Profit to Penn Water			$ 32,657.20
12	TOTAL			$ 119,940.20

Note - The above sale prices were approved by representatives of the F.P.C. prior to the sale to Safe Harbor Corporation in 1930 and the full sale price was recorded on the books of P.W.&P.Co. as a credit to Property and Riparian Rights Account. The effect of recording the full sale price as a credit is to understate the Account by the amount of the profit on these sales of $119,940.20 shown above

Schedule F

PENNSYLVANIA WATER & POWER COMPANY

Statement Showing Disallowed Items of Flowage Basin Account

Item No.	Explanation	Staff Disallowances Per Adjusting Entries (Ex.51, Sch.8) (a)	Disallowances Conceded By Company In Exhibit 25 (b)	Net Staff Disallowances From Books Per Adjusting Entries (a-b) (c)	Additional Co. Claims Included In Ex.25 But Not Allowed By Staff (d)	Disallowances At Issue In Proceedings (c+d) (e)	Disallowances Agreed To By Company (f)	Disallowances Protested By Company (e-f) (g)
	I - Flowage Basin Acct. 1910 to 1924, Incl. (Ex. 51, Sch. 20)							
1	Motion Pictures and Panorama - Acct. "C"	$ 4,098.56	2,219.14	1,879.42	-	1,879.42	1,879.42	-
2	River Observations-Acct. "E" (col. 5)	4,988.45	-	4,988.45	-	4,988.45	-	4,988.45
3	Office Engineering (cols. 7-8-9)	45,515.19	189.48	45,325.71	-	45,325.71	-	45,325.71
4	Misc. Office Expense Accts. 6N-O-T (col. 10)	561.65	-	561.65	-	561.65	-	561.65
5	Interest (col. 12)	3,959.15	-	3,959.15	-	3,959.15	3,959.15	-
	Purchasing Property Water Power Rights, Roads, etc. 1912-1924 Acct. "F" (Ex. 51, Sch. 20a)							
	Lancaster Office Expenses							
6	Salary of Bushong (col. 10)	50,423.24	-	50,423.24	-	50,423.24	-	50,423.24
7	Other Expenses (col. 11)	27,127.82	-	27,127.82	-	27,127.82	-	27,127.82
8	Legal Fees (Ex. 51, Sch.20b)	36,920.00	-	36,920.00	-	36,920.00	15,000.00	21,920.00
9	Miscellaneous (Ex. 51, Sch. 20c)	9,083.75(A)	7,083.75	2,000.00	-	2,000.00	2,000.00	-
10	Total Flowage Basin Acct. 1910-1924	$ 182,677.81	9,492.37	173,185.44	-	173,185.44	22,838.57	150,346.87(B)
	II - Flowage Basin Acct. 1925 to 1936, Incl. (Ex. 51, Sch. 21)							
11	Lancaster Office Expense-Job M-387 (Ex. 51, Sch. 21b) (Schedule F-1)	$ 36,959.06	-	36,959.06	-	36,959.06	16,171.65	20,787.41
12	Flowage Basin - Job M-388 (1930) ($11,097.67 less $296.51) (C)	10,801.16	-	10,801.16	-	10,801.16	10,801.16	-
13	Extension of Triangulation System-Job C-791 (1932)	3,338.25	-	3,338.25	-	3,338.25	-	3,338.25
14	Property Ties to Triangulation System - Job C-970 (1935)	3,157.71	-	3,157.71	-	3,157.71	-	3,157.71
15	Survey of Railroad Property North of Holtwood - Job C-283-11 (1925-1926)	1,764.59	-	1,764.59	-	1,764.59	1,764.59	-
16	Phila. Trans. Line Link (never built) Job C-325 (1925-1926)	8,396.10	8,396.10	-	-	-	-	-
17	Susquehanna River Aerial Survey-Job C-370-3 (1925)	1,631.31	1,631.31	-	-	-	-	-
18	Phila.-Safe Harbor Trans. Line (never built) Job C-326 (1926)	153.30	153.30	-	-	-	-	-
19	McCall Ferry Topographical Survey-Job C-613 (1928)	3,658.24	-	3,658.24	-	3,658.24	3,658.24	-
20	Total Flowage Basin Acct. 1925-1936	$ 69,859.72	10,180.71	59,679.01	-	59,679.01	32,395.64	27,283.37(B)

(A) See Schedule F-1 attached

(B) " " F-2 "

(C) The amount of $296.51 representing "Traveling Expenses of J.A. Walls re Conowingo Contract" is included with the other items relating to "Conowingo Backwater Agreement".

Schedule F

Schedule F-1

PENNSYLVANIA WATER & POWER COMPANY

Statement Showing Miscellaneous Expenses in Flowage Basin Account Considered Under Other Subjects

Item No.	Explanation			Amount
1	Total as Shown in Exhibit 51, Schedule 20c			$ 14,075.18
	Less Items Considered Under Other Subjects:			
	Conowingo Backwater Agreement			
2	Legal services of Simpson, Thacher & Bartlett		$ 200.00	
	River Coal Investigation Expense			
3	Carney & Lindemuth "Report on Susquehanna River Coal"	$ 2,500.00		
4	Increase of coal storage area of Anthracite Production Corp.	2,291.43	4,791.43	4,991.43
5	Amount Shown as Flowage Basin Acct. 1910-1924			$ 9,083.75

Schedule F-2

PENNSYLVANIA WATER & POWER COMPANY

Statement Showing Disallowed Items of Flowage Basin Account That Are Protested by Company

Item No.	Explanation			Amount
	I - Flowage Basin Acct. 1910 to 1924, Incl. (Ex. 51, Sch. 20)			
1	River Observations - Account "E" (col. 5)			$ 4,988.45
	Office-Engineering (Ex. 51, Sch. 20, cols. 7,8 & 9)			
	Salaries and Expenses-Acct. 6 (col. 7)		$ 2,436.38	
	Expenses-Acct. 6E (col. 8)		7,129.87	
	Salaries-Acct. 6L (col. 9)		35,948.94	
	Total		$45,515.19	
	Less: Misc. items conceded by Co. in Ex. 25		189.48	
2	Total Office Engineering			45,325.71
3	Miscellaneous Office Expenses-Accts. "6-N"-"D"-"T" (col. 10)			561.65
	Purchasing Property & Water Power Rights, Roads, etc. 1912-1924 - Acct. "F" (Ex. 51, Sch. 20a)			
	Lancaster Office Expenses			
4	Salary of M. E. Bushong (col. 10)			50,423.24
5	Other Expenses (col. 11)			27,127.82
	Legal Fees (Ex. 51, Sch. 20b)		$36,920.00	
	Less: Fees paid John M. Groff		15,000.00	
6	Total Legal Fees			21,920.00
7	Total Flowage Basin Acct. 1910 to 1924			$150,346.87
	II - Flowage Basin Acct. 1925 to 1936, Incl. (Ex. 51, Sch. 21)			
	Lancaster Off. Exp. Job M-387 (Ex. 51, Sch. 21b)		$36,959.06	
	Less Disallowances Agreed to by Company			
	Lancaster Office Expense			
	Year 1926 - 75%	$ 3,865.88		
	" 1927 - 75%	4,191.51		
	" 1928 - 66-2/3%	3,799.35		
	" 1929 - 66-2/3%	3,904.91		
	Total	$15,761.65		
	Services of Sundry Persons			
	Year 1926	$ 70.00		
	" 1927	230.00		
	" 1928	50.00		
	" 1929	60.00		
	Total	$ 410.00		
	Total Disallowance Agreed To		$16,171.65	
8	Total Lancaster Office Expense			$20,787.41
	Extension of Triangulation System -			
9	Job C-791(1932) (Ex. 51, Sch. 21)			3,338.25
10	Property Ties to Triangulation System Job C 970(1935) (Ex. 51, Sch. 21)			3,157.71
11	Total Flowage Basin Acct. 1925 to 1936			$27,283.37

Schedule F-3

PENNSYLVANIA WATER & POWER COMPANY

Statement Showing Disallowed Items Agreed To and Amount Protested by Company of Survey of Storage Reservoir Sites (Exhibit 51, Schedule 19)

Item No.	Explanation	Amount
	(a) Disallowances Conceded by Company in Exhibit 25	
	Water Conservation Association Expense	
1	Year 1912	$ 2,881.82
2	" 1913	8,163.36
3	Total	$11,045.18
	(b) Disallowances Agreed To by Company Since Preparation of Exhibit 25	
4	Olmstead and Stamm - Legal Opinions on Rights of Water Power Companies - 1911	$ 850.00
5	Interest During Construction Applicable to Item 2 Above	204.08
6	W. E. Bennett, 1909 Investigation of Reservoir Sites, which was paid in 1910	2,400.00
7	Total	$ 3,454.08
8	Total Disallowed Items Agreed To (Item 3 plus Item 7)	$14,499.26
	(c) Amount Protested by Company	
9	Cost of establishing and rating of new gauges, rating of existing gauges and determination of time relation data between gauges along the Susquehanna River Above the Holtwood Pond	$12,420.77
10	Grand Total	$26,920.03

Schedule G

PENNSYLVANIA WATER & POWER COMPANY

Statement Showing Legal and Investigation Expenses Incurred as a Result of Ejectment Proceedings Brought Against the Company With Respect to the Boyd Mill Property Boundary Dispute (Job C-973,1932)

Item No.	Explanation	Amount
1	Salary and expenses of witnesses for investigating old titles, preparing drawings and testifying as to proper boundary line	$ 623.78
2	Fee for consulting engineer's services for testifying as to proper boundary line	125.00
3	Legal fee	400.00
4	Court costs	278.64
5	Total	$ 1,427.42

Note: The above expenses were incurred in defending the Company's title to its land adjoing the Boyd Mill property and were erroneously charged to Operating Expenses. The Company lost the suit and subsequently purchased the Boyd Mill property.

Schedule H

PENNSYLVANIA WATER & POWER COMPANY

Loss of Materials and Supplies During the Original Construction Period to September 30, 1911

Item No.	Explanation		Amount
	Loss of Materials and Supplies		
1	McCall Ferry Power Co: Balance as of July 17, 1909 (Exhibit 51, Appendix 2, page 72)	$ 35,019.16	
2	Less: McCall Ferry Power Co. Materials and Supplies inventoried by J.E.Aldred Receiver	22,547.03	
3	Loss as Recorded by Receiver		$ 12,472.13
	Receiver's Materials and Supplies inventoried by P.W.&P.Co. from the following entries as shown in Exhibit 51, Sch. 11, Sheet 1:		
4	Mar.'10 J7 Sundry Stores as at Dec. 31, 1909	8,419.91	
5	'10 Various old cement used in construction during 1910, not previously inventoried	8,308.90	
6	Mar.'10 J7 Cement on hand at Dec. 31, 1909	6,535.01	
7	Total Receiver's Materials and Supplies inventoried by P.W.&P.Co.	23,263.82	
8	Less: J.E. Aldred Receiver Balance as of Dec. 31, 1909 (Ex. 51, Sch. 11)	14,854.39	
9	Total Gain in Materials and Supplies at Dec. 31, 1909 as recorded by P.W.&P.Co.		8,409.43
10	Net Loss in Materials and Supplies as of Dec. 31, 1909 (Item 3 Minus Item 9)		4,062.70
11	Loss Due to Receiver's "Write-down" of Cost of Cement		8,970.34
12	Total Loss		$ 13,033.04

Schedule I

PENNSYLVANIA WATER & POWER COMPANY

Analysis of General Expenses Incurred In Connection With The Use of Susquehanna Contracting Co. as a Separate Corporation

Item No.	Explanation	Amount
1	Fees to Simpson, Thacher & Bartlett	$2,875.38
2	New York City and State Taxes	93.02
3	Referee's Services - H. Odell	250.00
4	Salaries of Officers	3,095.00
5	Printing and Stationery	308.45
6	Total	$6,621.85

Schedule J

PENNSYLVANIA WATER & POWER COMPANY

Statement Showing Analysis of Portion of Holtwood Power Co. Organization Expense Disallowed By Staff and Agreed To By Company (Ex. 51, Sch. 24)

Item No.	Explanation	Total (b+c) (a)	Disallowance Agreed To (b)	Disallowance Protested (c)
	Lancaster Office Expense			
	M. E. Bushong Salary			
1	June 1924 to Aug. 15, 1925	$ 9,124.96	-	9,124.96
2	Aug. 16, 1925 to Dec. 31, 1925	3,000.05	3,000.05	-
3	Totals	$12,125.01	3,000.05	9,124.96
	Office Salaries, Expenses & Traveling			
4	June 1924 to Aug. 15, 1925	$ 5,760.53	-	5,760.53
5	Aug. 16. 1925 to Dec. 31, 1925	2,267.36	2,267.36	-
6	Totals	$ 8,027.89	2,267.36	5,760.53
7	Salaries & Traveling-Feb. 1925	$ 489.85	-	489.85
8	Total Lanc. Off. Exp.	$20,642.75	5,267.41	15,375.34
9	J. M. Groff, Legal Services	$ 2,000.00	2,000.00	-
10	S. R. Zimmerman Legal Services	2,500.00	-	2,500.00
11	Simpson, Thacher & Bartlett Legal Services	3,070.59	3,070.59	-
12	Grand Totals	$28,213.34	10,338.00	17,875.34

Exhibit No. 320 [24054]

Schedule K

PENNSYLVANIA WATER & POWER COMPANY
and Susquehanna Transmission Company of Maryland, A Wholly Owned Subsidiary

Summary of Physical Items of Property
Originally Accounted For Incorrectly

Item No.	Explanation	Amount
1	Betterments arising through minor items (Schedule K-1)	$ 26,153.33
2	Additions (Schedule K-2)	41,541.47
3	Replacements, including betterments in new units (Schedule K-3)	28,422.04
4	Total	$ 96,116.84

PENNSYLVANIA WATER & POWER COMPANY

And Susquehanna Transmission Company of Maryland, A Wholly Owned Subsidiary

Summary of Betterments, Arising Through Minor Items
Charged in Error to Operating Expenses
or to Reserve for Depreciation

Item No.	Year of Expenditure	Job Order	Title of Job Order and Description of Item	Charged in Error to Reserve for Depreciation (a)	Charged in Error to Operating Expenses (b)	Total (a+b) (c)
1	1923	C-193	Replacement of the Property Signs			
			Excess cost of enameled signs over the estimated cost at current prices of varnished and baked signs being replaced.	$ 336.24	$ -	$ 336.24
2	1924	K-300	Cooling Coils for Nos. 2,3,4,&8 Transf. - Hn.			
			Excess cost of copper cooling coils over estimated cost at current prices of brass coils being replaced.	5,331.95	-	5,331.95
3	1925	K-241-1	Repairs to #6 Transformer Cooling Coils - Hn.			
			Excess cost of copper cooling coils over estimated cost at current prices of brass coils being replaced.	952.80	-	952.80
4	1925	K-300-1	Cooling Coils for #7 Transformer - Highlandtown			
			Excess cost of copper cooling coils over estimated cost at current prices of brass coils being replaced.	467.03	-	467.03

[24055]

Exhibit No. 320

4049

Schedule K-1)
Page 1 of 5

Item No.	Year of Expenditure	Job Order	Title of Job Order and Description of Item	Charged in Error to Reserve for Depreciation (a)	Operating Expenses (b)	Total (a+b) (c)
9	1929	K-797	New Rail for Sidings at Holtwood			
			Excess cost of 85# rail over the estimated cost at current prices of 60# rail being replaced.	$ 2,140.40	$ -	$ 2,140.40
10	1929	K-845	Modify #6 Transformer L.T. Oil Circuit Breaker			
			Excess cost of 1,200 amp. O.C.B. parts over the estimated cost at current prices of 800 amp. parts being replaced.	744.81	-	744.81
11	1929	M-1010	Improvements to #5 Turbine			
			Excess cost of lower pedestal bearing (of improved design and material) for operating shaft over the estimated cost at current prices of the old type bearing being replaced.	-	1,121.00	
			Excess cost of rubber guide bearing and split ascoloy sleeve over the estimated cost at current prices of the old lignum vitae bearing and solid sleeve being replaced.	-	2,405.65	3,526.65
12	1929-1930	M-1004	Resplicing Cables - Baltimore Line			
			Excess cost of aluminum compression joints over the estimated cost at current prices of the twisted joints being replaced.	-	709.20	
			Additional cost of 394 repair sleeves applied over the twisted splices to improve joints.	-	275.80	985.00

[240571] Exhibit No. 320 4051

Item No.	Year of Expenditure	Job Order	Title of Job Order and Description of Item	Charged in Error to Reserve for Depreciation (a)	Charged in Error to Operating Expenses (b)	Total (a+b) (c)
5	1928	H-596	Repairs to #6 Transformer - Holtwood			
			Excess cost of copper cooling coils over estimated cost at current prices of brass coils being replaced.	$ 1,364.00	$ -	
			Excess cost of 15,000 Kva. coils over the estimated cost at current prices of 10,000 Kva. coils being replaced. (See also claim under "Additions".)	2,576.11	-	$ 3,940.11
6	1929	K-644	Generator Room Crane - New Controller & Cab			
			Excess cost of improved cab over the estimated cost at current prices of old cab being replaced.	318.00	-	
			Excess cost of new magnetic controller over the current cost of old controller being replaced.	582.00	-	900.00
7	1929	K-772	Install Copper Bus #1 Sect. H.T. Bus Room			
			Excess cost of 3/4" I.P.S. copper (plus cost of tees and couplings) over the estimated cost at current prices of the 1/2" copper tubing being replaced.	-	202.22	202.22
8	1929	K-786	Install Copper Bus #2 Sect. H.T. Bus Room			
			Excess cost of 3/4" I.P.S. copper (plus cost of couplings) over the estimated cost at current prices of 3/4" copper tubing and 1/2" I.P.S. copper being replaced	-	133.35	133.35

Item No.	Year of Expenditure	Job Order	Title of Job Order and Description of Item	Charged in Error to Reserve for Depreciation (a)	Operating Expenses (b)	Total (a+b) (c)
17	1930	M-1032	Coal Preparation Plant - Extension - Improvements			
			Excess cost of a #29 improved exhaust fan with greater capacity over the actual current cost of a #25 fan being replaced.	$ -	$ 267.71	$ 267.71
18	1930	*R-3037	Holtwood Hydro Turbine & Governor Maintenance			
			Excess cost of rubber guide bearing and split ascoloy sleeve for #11 exciter turbine over the estimated cost at current prices of the lignum vitae bearing and solid sleeve being replaced.	-	730.00	730.00
19	1931	M-1041	New Rubber Guide Bearing & Sleeve #7 Unit			
			Excess cost of rubber lined guide bearing and split ascoloy sleeve over the estimated cost at current prices of the lignum vitae bearing and solid sleeve being replaced.	-	2,803.00	2,803.00
			Totals	$14,813.34	$11,339.99	$26,153.33

*Refers to maintenance account number.

[240591]

Exhibit No. 320

4053

Schedule K-1
Page 5 of 5

Item No.	Year of Expenditure	Job Order	Title of Job Order and Description of Item	Charged in Error to Reserve for Depreciation (a)	Operating Expenses (b)	Total (a+b) (c)
13	1929-1930	M-1009	#13 Exciter Rubber Bearing & Flexible Coupling			
			Excess cost of rubber lined guide bearing and split ascoloy sleeve over the estimated cost at current prices of the old lignum vitae bearing and solid sleeve being replaced.	$ -	$ 755.94	$ 755.94
14	1930	M-1022	#3 Turbine - New Lower Pedestal Brg. & Vane Adj.			
			Excess cost of lower pedestal bearing (of improved design and material) for operating shaft over the estimated cost at current prices of the old type bearing being replaced.	-	1,119.00	1,119.00
15	1930	M-1020	Equipment Changes - Nos. 62 & 63 Cables			
			Excess cost of 1" I.P.S. copper over the estimated cost at current prices of the 1" thin wall tubing being replaced.	-	40.69	
			Excess cost of 600 A. parts for disconnecting switch over estimated cost at current prices of 300 A. parts being replaced (plus cost locks purchased for 600 A. switch).	-	220.11	260.80
16	1930	M-1028	Modify Governor Restoring Mechanism - #5 Unit			
			Excess cost of governor restoring mechanism (of improved design and material) over the estimated cost at current prices of the old mechanism being replaced.	-	556.32	556.32

Item No.	Year of Expenditure	Job Order	Title of Job Order and Description of Item	Charged in Error to Reserve for Depreciation (a)	Operating Expenses (b)	Total (a+b) (c)
5	1927	K-583	Turbine #3 - Vanes and Fulcrum Pins			
			Bore vanes and install bronze bushings for fulcrum pins. Also install bronze sleeves on fulcrum pins to suit. (40 fulcrum pins per unit) Counterbore lower end of vanes and lower distributor rings. Fabricate and install ascoloy steel thrust discs. (80 thrust discs per unit).	$ -	$ 4,775.65	$ 4,775.65
6	1927	K-269-2	"A" Low Tension Bus Reactors - Highlandtown			
			Extension of cables and associated equipment incidental to moving reactors to permit the installation of an O.C.B. in the reactor circuit in addition to the disconnect switches (which could not be opened under load).	2,015.98	-	2,015.98
7	1928	H-596	Repairs to #6 Transformer - Holtwood			
			Addition of temperature indicating equipment and insulating oil incidental to rewinding this transformer from 10,000 Kva. to 15,000 Kva. (See also claim under "betterments").	1,452.32	-	1,452.32
8	1928	C-610	Frazil Ice Experiments - Electrically Heated Screens			
			Fabrication of an experimental electrically heated trash screen leading to the permanent installation on Exciter Unit #13 (C-2091-1939).	-	1,831.61	1,831.61

[24061] Exhibit No. 320 4055

PENNSYLVANIA WATER & POWER COMPANY
And Susquehanna Transmission Company of Maryland, A Wholly Owned Subsidiary

Summary of Additions
Charged in Error to Operating Expenses
or to Reserve for Depreciation

Item No.	Year of Expenditure	Job Order	Title of Job Order and Description of Item	Charged in Error to Reserve for Depreciation (a)	Charged in Error to Operating Expenses (b)	Total (a+b) (c)
1	1922	*R-3032	Maintenance of Turbine & Governor Mechanism(#5 Unit) - Bore vanes and install bronze bushings for fulcrum pins. Also install bronze sleeves on fulcrum pins to suit. (40 fulcrum pins per unit) See also J.O. M-1037 below.	$ -	$ 2,887.03	$ 2,887.03
2	1923	C-158	Replacement of Floating Flashboard Equipment			
			Outright addition of scow.	545.64	-	
			Above scow scrapped in 1942.	(545.64)	-	0
3	1926	C-359	New Lead Covered Cable for Exciters			
			Engineering study for exciter cables (See K-646 below).	304.71	-	304.71
4	1927	K-550	Flashboard Improvements - East End of Dam			
			Addition of flashboard sockets in 300' of crest of dam to change from 5'0" centers to 2'6" centers (to make 2'6" centers across full length of dam).	-	1,235.43	1,235.43

Item No.	Year of Expenditure	Job Order	Title of Job Order and Description of Item	Charged in Error to Reserve for Depreciation (a)	Operating Expenses (b)	Total (a+b) (c)
14	1929	K-646	Exciter Cables Replacement			
			Addition of one 1,500 M.C.M. lead covered cable per leg, for exciters #11 and #13, together with the necessary conduit and pull boxes. This addition resulted from engineering studies made under C-359 and C-625 above.	$ 2,553.96	$ -	$ 2,553.96
15	1929	*71.59	Piping, Regulators, Etc.			
			Cost of modernizing 2 type C-16 Bailey flow meters by conversion to type C-6 (to use circular chart instead of strip chart, etc.)	-	240.00	240.00
16	1929-1930	M-1012	No. 11 Exciter - Improvements to Vanes and Pins			
			Bore vanes and install buchings for fulcrum pins. Also install bronze sleeves on fulcrum pins. (14 fulcrum pins per unit).	-	576.55	576.55
17	1929-1930	M-1013	Improvements to No. 6 Turbine Vanes & Fulcrum Pins			
			Bore vanes and install bronze bushings for fulcrum pins. Also install bronze sleeves on fulcrum pins to suit. (40 pins per unit) Counterbore lower end of vanes and lower distributor rings. Fabricate and install rustless iron thrust discs. (80 discs per unit)	-	4,202.78	4,202.78
18	1930	K-792	Lightning Arresters - Nos. 1, 2, 5 & 6 Circuits (Holtwood)			
			Addition of screen enclosure incidental to moving arresters from indoor to outdoor location.	205.00	-	205.00

[24063]
Exhibit No. 320
4057

Item No.	Year of Expenditure	Job Order	Title of Job Order and Description of Item	Charged in Error to Reserve for Depreciation (a)	Charged in Error to Operating Expenses (b)	Total (a+b) (c)
9	1928	M-633	No. 13 Exciter Vanes			
			Bore vanes and install bronze bushings for fulcrum pins. Also install bronze sleeves on fulcrum pins to suit. (14 fulcrum pins per unit).	$ -	$ 816.88	$ 816.88
10	1928	C-759	Turbine No. 1 - Chipping Back Outflow Edge			
			Cost of chipping back outflow edges of turbine runner to increase turbine efficiency.	-	725.50	725.50
11	1928	M-1003	Relocation of Test Laboratory in B.E.A. Bin Bldg.			
			Additions to power, telephone and testing facilities incidental to the relocation of test laboratory at Highlandtown.		1,019.80	1,019.80
12	1928	M-620	Turbine Vanes & Fulcrum Pins #1 Turbine - Repairs			
			Bore vanes and install bronze bushings for fulcrum pins. Also install bronze sleeves on fulcrum pins to suit. (40 pins per unit) Counterbore lower end of vanes and lower distributor rings. Fabricate and install rustless iron thrust discs. (80 discs per unit).	-	3,458.30	3,458.30
13	1928	C-625	Exciter Cables and Switchboard Engineering Study			
			Engineering study for exciter cables (continuation of C-359 above). (Also engineering study for J.O. K-753 - "Exciter Board Ventilation" allowed by staff in Entry 23, Schedule 8, Exhibit 51)	601.83	-	601.83

Item No.	Year of Expenditure	Job Order	Title of Job Order and Description of Item	Charged in Error to Reserve for Depreciation (a)	Charged in Error to Operating Expenses (b)	Total (a+b) (c)
19	1930	K-865	Stoplogs for Ice Chute - Shore End			
			Addition of stoplogs in emergency headgate slot.(Those installed originally were retired in 1938 when timber stoplogs in headgate slot were replaced with steel).	$ 807.97	$ -	$ 807.97
20	1930	K-913	Modification of Pull Boxes Nos. 20 & 21			
			Additions to pull boxes Nos. 20 & 21 (The amount shown here represents charges against this J.O. incurred in 1930 and incorrectly charged to the Depreciation Reserve. Subsequent costs under this J.O. were correctly charged to Electric Plant.)	409.61	--	409.61
21	1930	M-893	Alterations to Rooms 1603 & 1605 Lexington Building			- -
			Addition of Celotex ceiling, walnut paneling, linoleum, etc. - Rooms 1603-05.	-	3,979.90	3,979.90
22	1930	M-1037	Install Vanes & Counterbore Distributor Rings - #5 Unit			
			Counterbore lower distributor rings and vanes and install thrust discs. (80 thrust discs per unit).	-	760.20	760.20
23	1931	M-2039 M-1042	Improvements for #7 Unit Turbine			
			Counterbore lower distributor rings and fabricate and install thrust discs. (80 thrust discs per unit)	-	1,065.99	1,065.99
24	1932	K-967	No. 4 Turbine - Install Spare Set of Vanes			
			Counterbore lower distributor rings and fabricate and install thrust discs. (80 thrust discs per unit).	1,290.45	-	1,290.45

Item No.	Year of Expenditure	Job Order	Title of Job Order and Description of Item	Charged in Error to Reserve for Depreciation (a)	Charged in Error to Operating Expenses (b)	Total (a+b) (c)
25	1935	K-1142 M-1412	Improvements for #2 Unit Turbine			
			Counterbore lower distributor rings and fabricate and install thrust discs. (80 thrust discs per unit)	$ 1,028.94	$ 304.84	$ 1,333.78
26	1912 1913 1914	None	Construction Plant Buildings			
			Balance of Construction Plant Buildings Account	- -	2,990.24	2,990.24
			Totals	$10,670.77	$30,870.70	$41,541.47

* Refers to maintenance account number

PENNSYLVANIA WATER & POWER COMPANY
And Susquehanna Transmission Company of Maryland, A Wholly Owned Subsidiary

Summary of Replacements, including Betterments in New Unit Charged in Error to Operating Expenses or to Reserve for Depreciation

Item No.	Account as Reclassified	Reference to F.P.C. List of Units of Property: Account	Item	Description	Year Replaced	Charge to Depr. Reserve for Original Cost of Property Replaced: Account	Amount (a)	Original Charges in Error to Operating Expenses or to Reserve for Depreciation, Claimed as Electric Plant in Reclassification Study: Job Order	Reserve for Depreciation (b)	Operating Expenses (c)	Total (b+c) (d)	Net Increase in Electric Plant Account Resulting from Correcting Entries Made During Reclassification: From Reserve for Depreciation (b-a) (e)	From Operating Expenses (c-a) (f)	Total (e+f or d-a) (g)
1	343	343	32	Improvements to Low Tension Bus at Highlandtown Substa. 18 Six Sectionalizing Switches installed in 1910 were replaced with switches of greater capacity, heavy duty type equipped with locking and compressing devices.	1923	342	$ 116.00	C-186	$ 1,374.00	$ -	$ 1,374.00	$ 1,258.00	$ -	$ 1,258.00
2	321	322	Re. 21	Paving Tail Bays Nos. 5 and 6 The floors of these bays were paved in 1916 by the Tremie Method, but this paving was unsatisfactory and was replaced in 1927, #5 bay being unwatered and paved and #6 bay being paved by the bag method.	1927-28	336-C-40	15,656.13	(K-542 (M-304	37,212.88) 35,467.44)	72,680.32	(15,656.13)	72,680.32	57,024.19	
3	321	321	12	Roofs - 12 Village Houses New roofing placed over old roofs.	1926	Parr.Bldgs.	2,259.15	K-503	4,102.43	-	4,102.43	1,843.28	-	1,843.28
4	325	325	12	Hill Pump & Motor - Water Service Old reciprocating pump (with 20 Hp. motor) replaced with centrifigal pump (with 25 Hp. motor).	1927	335-48	2,124.96	C-508	-	955.45	955.45	(2,124.96)	955.45	(1,169.51)
5	377	315	Re. 24	10 Test Sets 10 Telephone Test sets, purchased in 1910, worn out and replaced.	1927	340	107.40	K-571	-	414.75	414.75	(107.40)	414.75	307.35
6	322	323	D-2	Bristol Water Level Recorder Replacing Recorder Purchased in 1916.	1928	330-944	67.70	**B-3032	-	71.53	71.53	(67.70)	71.53	3.83
7	372	372	8	Photostat Machine A Rectograph, purchased in 1916 was obsolete and turned out unsatisfactory work. Replaced by a new Photostat Machine.	1928	Furniture	490.00	K-539	-	1,316.91	1,316.91	(490.00)	1,316.91	826.91
8	373	373	36	Current Transformers at Highlandtown Cable compartment breakdowns were traced to the failure of old type C.T.'s. These were replaced with a new type having a greater electrical safety factor. Some Cable was also replaced with new Cable of greater capacity.	1928	342	4,437.60	K-384	6,880.20	467.37	7,347.37	2,442.60	467.37	2,909.97

Schedule K-3
Page 1 of 4

Item No.	Account as Reclassified	Reference to F.P.C. List of Units of Property: Account	Reference to F.P.C. List of Units of Property: Item	Description	Year Replaced	Charge to Depr.Reserve for Original Cost of Property Replaced: Account	Charge to Depr.Reserve for Original Cost of Property Replaced: Amount (a)	Original Charges in Error to Operating Expenses or to Reserve for Depreciation, Claimed as Electric Plant in Reclassification Study: Job Order	Original Charges in Error to Operating Expenses or to Reserve for Depreciation, Claimed as Electric Plant in Reclassification Study: Reserve for Depreciation (b)	Original Charges in Error to Operating Expenses or to Reserve for Depreciation, Claimed as Electric Plant in Reclassification Study: Operating Expenses (c)	Original Charges in Error to Operating Expenses or to Reserve for Depreciation, Claimed as Electric Plant in Reclassification Study: Total (b+c) (d)	Net Increase in Electric Plant Account Resulting from Correcting Entries Made During Reclassification: From Reserve for Depreciation (b-a) (e)	Net Increase in Electric Plant Account Resulting from Correcting Entries Made During Reclassification: From Operating Expenses (c-a) (f)	Net Increase in Electric Plant Account Resulting from Correcting Entries Made During Reclassification: Total (e+f or d-a) (g)
9	343	323	Ba. 52	Under-Voltage Relays for Graphic Voltmeters 2 Type "C" Relays (modified for under-voltage), replaced by modern type "C.V." under-voltage relays.	1928	342	$ 67.53	**R-4131	$ -	$ 115.92	$ 115.92	$ (67.53)	$ 115.92	$ 48.39
10	342	342	2	Furnace at Long Green Pipeless hot air furnace in Patrol Chief's Residence at Long Green replaced by a Steam Heating System.	1928	340	96.24	K-677	-	608.94	608.94	(96.24)	608.94	512.70
11	325	325	1	Hydro Station Compressor Old No. 3 Compressor of 136 cu. ft. at 100# capacity. Worn out. Replaced by New Compressor of 303 cu. ft. at 100# capacity.	1928-29	(335 4B) (336 B)	3,481.04	K-678	9,872.64	-	9,872.64	6,391.60	-	6,391.60
12	322	322	4	Concrete Bulkhead for East Shore Spillway Three spillway openings at shore end of power house were originally fitted with stoplogs for possible use as ice chutes. They were never so used and stoplogs were replaced with permanent concrete bulkheads.	1929	330	1,682.79	K-801	4,802.62	-	4,802.62	3,119.83	-	3,119.83
13	326	326	4	Railroad Track into Hydro Station Old track entered hydro through tunnel under East shore bulkhead. Replaced by permanent track and entrance providing greater vertical clearance.	1929	330-6C	1,585.09	K-784	25,454.77	-	25,454.77	23,869.68	-	23,869.68
14	321	321	6	Drinking Water Cooler The old ammonia system (installed in 1914) became obsolete and was replaced by a modern self-contained unit.	1929	335-4B	1,437.72	K-820	558.71	-	558.71	(879.01)	-	(879.01)
15	324	323	D-2	Frequency Meter Frahm "reed" type frequency indicating meter replaced with G.E. pointer type.	1929	335-3D	69.50	**R-3031	-	130.00	130.00	(69.50)	130.00	60.50
16	377	377	Planer	Motor Driven Planer for Carpenter Shop Planer (Purchased in 1912) Worn Out & Replaced	1929	Tools	282.30	K-808	737.08	-	737.08	454.78	-	454.78

Item No.	Account as Reclassified	Reference to F.P.C. List of Units of Property		Description	Year Replaced	Charge to Depr. Reserve for Original Cost of Property Replaced		Original Charges in Error to Operating Expenses or to Reserve for Depreciation, Claimed as Electric Plant in Reclassification Study				Net Increase in Electric Plant Account Resulting from Correcting Entries Made During Reclassification		
												From Reserve for Depreciation	From Operating Expenses	
		Account	Item			Account	Amount (a)	Job Order	Reserve for Depreciation (b)	Operating Expenses (c)	Total (b+c) (d)	(b-a) (e)	(c-a) (f)	(e+f) or (d-a) (g)
17	346	346	1	3/8" Ground Wire - Twr. #361 to Hn. - T/L #12 Approx. 5 miles of steel ground wire (single run) replaced with 3/8" "Copperweld" wire.	1929	340	$ 684.40	K-841	$ 2,128.01	$ -	$ 2,128.01	$ 1,443.61	$ -	$ 1,443.61
18	346	346	1	3/8" Ground Wire - Twr. #360 to Hn. - T/L #56 Approx. 5 miles of Steel ground wire (double run) replaced with 3/8" "Copperweld" wire.	1930	340	1,106.61	K-908	3,992.89	-	3,992.89	2,886.28	-	2,886.28
19	324	323	D-2	Graphic Voltmeter (2% cycle) Graphic Voltmeter Installed 1910 - Replaced by fast moving type.	1930	335-3D	219.95	**R-3035	-	345.60	345.60	(219.95)	345.60	125.65
20	324	324	19	Reactors for #9 Transformer These reactors were in poor condition due to repeated flashovers and were replaced with insulated reactors of modern construction designed to eliminate flashovers and terminal heating.	1930	335-3D	2,807.80	K-794	3,687.99	-	3,687.99	880.19	-	880.19
21	324	323	D-2	Graphic Voltmeters (60 cycle) Modified Bristol graphic voltmeters with circular chart replaced by standard Esterline-Angus with roll chart.	1930	335-3D	272.35	**R-3035	-	691.20	691.20	(272.35)	691.20	418.85
22	315	315	27-c	Cable -"R" Station Transf. to Hydro 60 Cycle Bus 1/c-4/0 Kerite Cable from "R" Sta. Transf. to Hydro 60 cycle. Bus Burned & Punctured - Replaced by 3/c-4/0 L.C. Cable.	1930	*C-405	1,904.90	M-1018	-	2,319.72	2,319.72	(1,904.90)	2,319.72	414.82
23	311	311	11	Lighting Changes in Coal Preparation Plant Replacement of existing fixtures with shock-proof, dust-proof type. Also extension of lighting system to provide adequate illumination.	1930		2,275.70	M-1032	-	3,782.88	3,782.88	(2,275.70)	3,782.88	1,507.18

Item No.	Account as Reclassified	Reference to F.P.C. List of Units of Property: account	Reference to F.P.C. List of Units of Property: Item	Description	Year Replaced	Charge to Depr. Reserve for Original Cost of Property Replaced: Account	Charge to Depr. Reserve for Original Cost of Property Replaced: Amount (a)	Original Charges in Error to Operating Expenses or to Reserve for Depreciation, Claimed as Electric Plant in Reclassification Study: Job Order	Reserve for Depreciation (b)	Operating Expenses (c)	Total (b+c) (d)	Net Increase in Electric Plant Account Resulting from Correcting Entries Made During Reclassification: From Reserve for Depreciation (b-a) (e)	From Operating Expenses (c-a) (f)	Total (e+f or d-a) (g)
24	321	321	13	Filter Bag Washing House										
				The old house (of rugged wood and masonry construction because of its location in the stoplog gallery) was replaced by one of fire-proof (sheet metal) construction located outside the power house at elev. 151.	1931	332-J2	$ 1,546.42	K-942	$ 368.55	$ -	$ 368.55	$ (1,177.87)	$ -	$ (1,177.87)
25	324	323	D-2	Synchroscope										
				Installed in 1910 and replaced in 1933.	1933	335-3D	66.80	**R-3035	-	90.00	90.00	(66.80)	90.00	23.20
26	378	378	3	Telephone Poles										
				Telephone Poles, purchased or trimmed trees, installed 1910 to 1928 were replaced. Some poles are out right additions.	1929-36	340	5,772.06	**R-4041	-	8,629.68	8,629.68	(5,772.06)	8,629.68	2,857.62
27				Totals			$50,618.14		$ 63,959.89	$92,620.27	$156,580.16	$ 13,341.75	$ 92,620.27	$ 105,962.02
				Less: Overhead Adjustments										
28				FPC Staff Estimated Excessive Overheads on Unrecorded Retirements (Ex. 51, Sch. 8, Entry 24)								$ 50,000.00	$ -	$ 50,000.00
29				Additional Overheads on Retirements Prior to Jan. 1, 1937, Disallowed by Staff								27,425.48	114.50	27,539.98
30				Total Overhead Adjustments								$ 77,425.48	$ 114.50	$ 77,539.98
31				Net Totals								$ (64,083.73)	$ 92,505.77	$ 28,422.04

* Refers to Job Order Number

** Refers to Maintenance Account Number

Schedule E-3
Page 4 of 4

Schedule K-4

PENNSYLVANIA WATER AND POWER COMPANY
and Susquehanna Transmission Company of Maryland, A Wholly Owned Subsidiary

Statement Showing Disallowed Items of Physical Property Originally Charged In Error to Operating Expenses and Depreciation Reserve Which are Agreed to By Company

Item No.	Explanation	Originally Charged in Error to		Property Physically Retired But Not Credited to Plant on Books	Total (a+b+c)
		Operating Exp. (a)	Depr. Res. (b)	(c)	(d)
1	Interest During Construction after 1911	$ 4,921.91	$ (86.84)	$	$ 4,835.07
2	Items Included in Ex. 25 But Since Found to have been Retired	219.60		(61.22)	158.38
3	Tools Lost in Long Green Fire	1,499.74			1,499.74
4	Adjustments in Ex. 25, Item 42	(82.62)	(2,711.04)	(8,348.76)	(11,142.42)
5	Totals	$ 6,558.63	$ (2,797.88)	$ (8,409.98)	$ (4,649.23)

Schedule L

March 6, 1913.

To the Trustees of the
Holtwood Presbyterian Church,
Mr. A. J. Rennex, Chairman,
Holtwood, Pa.

Dear Sir:-

Appreciating the necessity for a suitable church building at Holtwood, as expressed by our employees in contributing and securing one half of the necessary funds for the completed building and furnishings, as shown by your letter and report under date of February 21, 1913 - The Pennsylvania Water & Power Company agrees to contribute the balance required, ($1,400.) - under the following conditions. That is to say, that in accepting this contribution of $1,400., the Trustees of the Holtwood Presbyterian Church agree, -

1st,- That the church will be fully completed and furnished free from debt.

2nd,- That should it become desirable, the basement shall be accessible for general educational purposes.

3rd,- That the property shall be deeded to the Trustees and their successors.

4th,- That should the Society cease to use the building for church purposes, the property shall revert to the Pennsylvania Water & Power Company.

Congratulating you and your associates upon the successful outcome of your efforts and assuring you that a check for $1,400. will be forwarded to your Treasurer, upon your written acceptance of the terms of the contribution, I beg to remain,

Very truly yours,

CEFC/P

VICE-PRESIDENT.

J. E. Aldred
President

Charles E. F. Clarke
Vice-President and Treasurer
J. L. Rintoul
Assistant Treasurer

R. M. Smith
Secretary

PENNSYLVANIA WATER & POWER COMPANY

H o l t w o o d

Pennsylvania

In Reply Please Address

March 12, 1913.

Mr. Chas. E. F. Clarke, Vice President,

Penna. Water & Power Co.,

New York, N. Y.

Dear Sir:-

Your letter of March 6th to hand and contents noted, and in reply would say, that in acceptance of the liberal subscription of Fourteen hundred dollars ($1400.00), to be given by the Pennsylvania Water & Power Company, to further aid in completing and furnishing the Holtwood Presbyterian Church, We the Trustees do hereby accept and agree to the conditions named therein.

Trusting the above will meet with the necessary requirements in securing the sum stated and with many thanks, we beg to remain

Yours very truly,

A. J. Rennex
H. F. Herr Trustees

Schedule L

PENNSYLVANIA WATER & POWER COMPANY

HOLTWOOD CHURCH

Under the section, Form of Government, as set forth in the Constitution of the Presbyterian Church in the U.S.A., Chapter XXVII, Sec. IX, appears the following:

> "Whenever, hereafter, a particular Church is formally dissolved by the Presbytery, or has become extinct by reason of the dispersal of its members, the abandonment of its work, or other cause, such property as it may have, both real and personal, shall be held used, and applied for such uses, purposes and trusts as the Presbytery may direct, limit and appoint in conformity with the Constitution of the Presbyterian Church in the U.S.A."

The land on which Holtwood Church is located was never conveyed to the Trustees because the above quoted provision of the Constitution of the Presbyterian Church, to which Holtwood Church was subject, prevented the Trustees accepting title as limited by the 4th provision set forth in the letter of March 6, 1913 from the Company to the Trustees.

Schedule M

PENNSYLVANIA WATER & POWER COMPANY

Statement Showing Derivation of Cash Not Accounted For
J. E. Aldred, Receiver

Item No.	Explanation	Amount
1	President's Office Petty Cash Fund As Shown On McCall Ferry Power Co. Books as of July 16, 1909	$ 500.00
2	Less: President's Office Petty Cash Fund as Recorded by Receiver July 17, 1909	369.01
3	Net Excess Shown by McCall Co. Books Over Receiver's Books	$ 130.99

Schedule N

PENNSYLVANIA WATER & POWER COMPANY

Statement Showing Summary of River Coal Investigation Expense

Item No.	Explanation	Amount
1	Carney & Lindemuth "Report on Susquehanna River Coal" (Ex. 51, Sch. 20c)	$ 2,500.00
2	Increase of Coal Storage Area of Anthracite Production Corp. (Ex. 51, Sch. 20c)	2,291.43
3	Coal Storage Facilities of Anthracite Production Corp. (Ex. 51, Sch. 8 - Entry 10)	1,340.98
4	Total	$ 6,132.41

Note - Also see Schedule F-1

Schedule O

PENNSYLVANIA WATER & POWER COMPANY
and Susquehanna Transmission Company of Maryland, A Wholly Owned Subsidiary

Statement Showing the Amount of Interest During Construction Claimed As a Part of Original Cost But Not Recorded on Books of Company, Applicable to Period 1912 to 1936, Inclusive
(See Transcript p. 8065)

Year or Period	Calculation @ 6% Per Annum on Monthly Expend.	Actually Paid and Recorded on Books	Net Amount of Addn'l. Claim
1912-15	$ 39,475.27	$ 34,083.86	$ 5,391.41
1916-26	226,390.61	253,435.76	(27,045.15)
1927-29	10,195.54	-	10,195.54
1930	5,604.30	1,359.46	4,244.84
1931	88,161.62	80,709.19	7,452.43
1932	113,521.33	112,653.46	867.87
1933	74,325.39	73,025.54	1,299.85
1934	21,032.82	18,788.07	2,244.75
1935	288.26	48.30	239.96
1936	1,993.44	-	1,993.44
Totals	$ 580,988.58	$ 574,103.64	$ 6,884.94

Schedule P

PENNSYLVANIA WATER & POWER COMPANY

Statement Showing Items Excluded By Company From Exhibit 25 But Allowed By P.P.C. Staff in Exhibit 51

Item No.	Explanation	Staff Disallowances Per Adjusting Entries (Ex.51, Sch.8) (a)	Disallowances Conceded By Company In Exhibit 25 (b)	Net Staff Disallowances From Books Per Adjusting Entries (a-b) (c)	Additional Co. Claims Included In Ex. 25 But Not Allowed By Staff (d)	Disallowances At Issue In Proceedings (c+d) (e)	Disallowances Agreed To By Company (f)	Disallowances Protested By Company (e-f) (g)
	Flowage Basin Account 1910 to 1924, Incl. (Ex. 51, Schedule 20)							
1	Property Improvements - Acct. C (Ex. 51, Schedule 20)	$ -	$ 206.47	$ (206.47)	$ -	$ (206.47)	$ -	$ (206.47)
2	Purchasing Property & Flowage Rights, etc. Other Misc. Expense (Ex. 51, Sch.20a, col. 6)	-	738.22	(738.22)	-	(738.22)	-	(738.22)
	Flowage Basin Account 1925 to 1936, Incl. (Ex. 51, Schedule 21)							
3	Lancaster Office Expense - Job M-387	-	384.46	(384.46)	-	(384.46)	-	(384.46)
4	Capital Stock Tax of Holtwood Power Co.-1924-1925	-	8,015.03	(8,015.03)	-	(8,015.03)	(8,015.03)(A)	-
5	Door Bolt & Latch - Lexington Bldg.-Job C-246	-	15.13	(15.13)	-	(15.13)	-	(15.13)
6	Net Bond Interest Adjustment in 1914	-	587.86	(587.86)	-	(587.86)	-	(587.86)
7	Holtwood Power Co. Organization Expense	-	799.69	(799.69)	-	(799.69)	-	(799.69)
8	Totals	$ -	$ 10,746.86	$ (10,746.86)	$ -	$ (10,746.86)	$ (8,015.03)	$ (2,731.83)

(A) Represents Federal ($87.21) and Pennsylvania ($7,604.17) Capital Stock Taxes of Holtwood Power Co. applicable to period prior to Aug. 16, 1925, the date the Holtwood Steam Plant began commercial operations. These taxes were recommended by the Company for transfer to Account 107 - Electric Plant Adjustments in connection with its Original Cost Determination but were not disallowed by the F.P.C. in these proceedings.

Schedule P

Schedule Q

PENNSYLVANIA WATER & POWER COMPANY
and Susquehanna Transmission Company of Maryland, A Wholly Owned Subsidiary

Statement Showing Construction Work in Progress As Of December 31, 1945

Job No.	Explanation	Total Amount (a)	Date In Service (b)	Amount In Service As Of 12/31/45 (c)	Amount In Service As Of 12/31/46 (d)
	A - PENNSYLVANIA WATER & POWER COMPANY				
C-1187	R/W Study - Safe Harbor to Lancaster	$ 2,122.58	-	-	-
C-1281	Renewals of Options-Lehman Farm-Lancaster R/W	4,090.85	-	-	-
C-1315	Purchase of Flowage Basin Property	52,015.33	-	-	-
C-1400	Engineering and Overhead - General Budget	9,565.78	As Allocated	$ 4,600.10	$ 6,114.65
C-1401	Construction Suspense - General Budget	4,897.45	As Allocated	1,666.96	2,210.51
C-1739	Purchase of Additional Rights - Coatesville Trans. Line	30,124.49	As Expended	30,124.49	30,124.49
C-2031	Renewals of Options-Lehman Farm-Lancaster R/W	10,280.81	-	-	-
C-2280	Lehman Farm - Lancaster Transmission Line R/W	264.00	-	-	-
C-2456	New Drainage Pump Header - Units Nos. 8, 9 and 10	453.07	July 16, 1946	-	a 453.07
C-2462	New Lower Runner for Unit No. 1- Material Purchase-(See Note A)	21,700.00	-	21,700.00	21,700.00
C-2467	Purchase of R/W - Lehman Farm to Lancaster	51,089.82	-	-	-
C-2582	New Intake Screen	559.25	-	-	-
C-2604	Hot Line Equipment for Changing Insulators	956.71	April 16, 1945	956.71	956.71
C-2626	Ramp Unloading Hoist Operating Improvements	3,048.49	March 6, 1946	-	3,048.49
C-2640	Fireless Steam Locomotive	20,615.00	Dec. 10, 1945	20,615.00	20,615.00
C-2642	Extension to Reactor Screens - #3 and #4 Transformers	463.20	Dec. 14, 1945	463.20	463.20
C-2646	Safety Improvements for Engines	243.16	Feb. 20, 1946	-	243.16
C-2650	Add. Neutral Current Relay for #13 and #14 Transformers	376.30	Oct. 19, 1945	376.30	376.30
C-2654	Interior Painting of Machine & Blacksmith Shops	838.08	Mar. 11, 1946	-	838.08
C-2663	Sound Insulation for Vibrating Screens	277.34	Dec. 1, 1945	277.34	277.34
C-2672	Platforms Under #9 and #10 P.T. Compartments	678.75	Dec. 26, 1945	678.75	678.75
C-2678	New Screens Over Draft Tube Sumps (2 Units)	45.34	Oct. 23, 1946	-	45.34
C-2679	Current Balance Relays for Sleet Feeders	661.28	Oct. 22, 1945	661.28	661.28
C-2689	New Dry Type E-21 Potential Transformers	629.21	May 9, 1946	-	629.21
C-2693	Improve Water Supply to Lower Turbine Guide Brg. Units #2 & #9	1,502.48	Aug. 28, 1946	-	1,502.48
C-2696	Purchase of Cook and Kilgore Properties	125.00	-	-	-
C-2699	Install Poles #20 and #20A - Village.	124.14	May 12, 1946	-	124.14
C-2701	Enclosure in Operating Tunnel - Holtwood Hydro	886.51	Dec. 7, 1945	886.51	886.51
C-2704	Sound Insulation for Telephone Switchboard Room	396.57	Dec. 22, 1945	396.57	396.57
C-2707	Purchase of Martin Coal Fleet	800.00	Dec. 1, 1945	800.00	800.00
C-2720	Miscellaneous Construction Jobs - 1946	207.82	As Expended	207.82	207.82
C-2722	Furniture Additions - 1946	1,071.13	As Expended	1,071.13	1,071.13
C-2725	Purchase of T. S. Martin & Pequea Fuel Co. Properties	14,992.75	As Expended	14,992.75	14,992.75
C-2727	Vent Stack - #1 Dryer Cyclone	686.29	Feb. 15, 1946	-	686.29
-	Adjustment from Original Cost Determination	44.47	May 10, 1937	44.47	44.47
	Totals - Pennsylvania Water & Power Company	$236,833.45		$100,519.38	$110,147.74
	B - SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND				
B-2694	Sale of Portion of Rever Property	$ (2,771.27)	Dec. 28, 1945	$ (2,771.27)	$ (2,771.27)
B-2695	String Ground Wire for Riverside Line	1,149.08	Feb. 26, 1946	-	1,149.08
B-2711	Insulation of Patrol Houses - Maryland	2,195.00	As Expended	2,195.00	2,195.00
	Totals - Susquehanna Transmission Co. of Maryland	$ 572.81		$ (576.27)	$ 572.81
	Totals - Penna. Water & Power Co. & S. T. Co. of Md.	$237,406.26		$ 99,943.11	$110,720.55
	Less: Jobs Not Disallowed by F.P.C. Staff				
	Job C-1789 - Purchase of Additional Rights-Coatesville Trans. Line	$ 30,124.49	As Expended	$ 30,124.49	$ 30,124.49
	Adjustment from Original Cost Determination	44.47	May 10, 1937	44.47	44.47
	Totals Allowed	$ 30,168.96		$ 30,168.96	$ 30,168.96
	Totals Disallowed	$207,237.30		$ 69,774.15	$ 80,551.59

Note A - Held as a spare runner for turbines Nos. 1 to 7 -- Transferred to Account 131 "Materials and Supplies" December 1946.

Schedule Q

EXHIBIT NO. 321.

[24079]

CUMULATIVE GROSS INCREMENT TO DEPRECIATION RESERVE

COMPARED WITH

CUMULATIVE ESTIMATED RETIREMENTS

Pennsylvania Water & Power Company

CUMULATIVE GROSS INCREMENT TO THE DEPRECIATION RESERVE* ON THE STRAIGHT LINE, AND THE THREE, FOUR AND ONE QUARTER AND SIX PERCENT INTEREST BASES COMPARED WITH CUMULATIVE ESTIMATED RETIREMENTS

For A Period of One Hundred Years

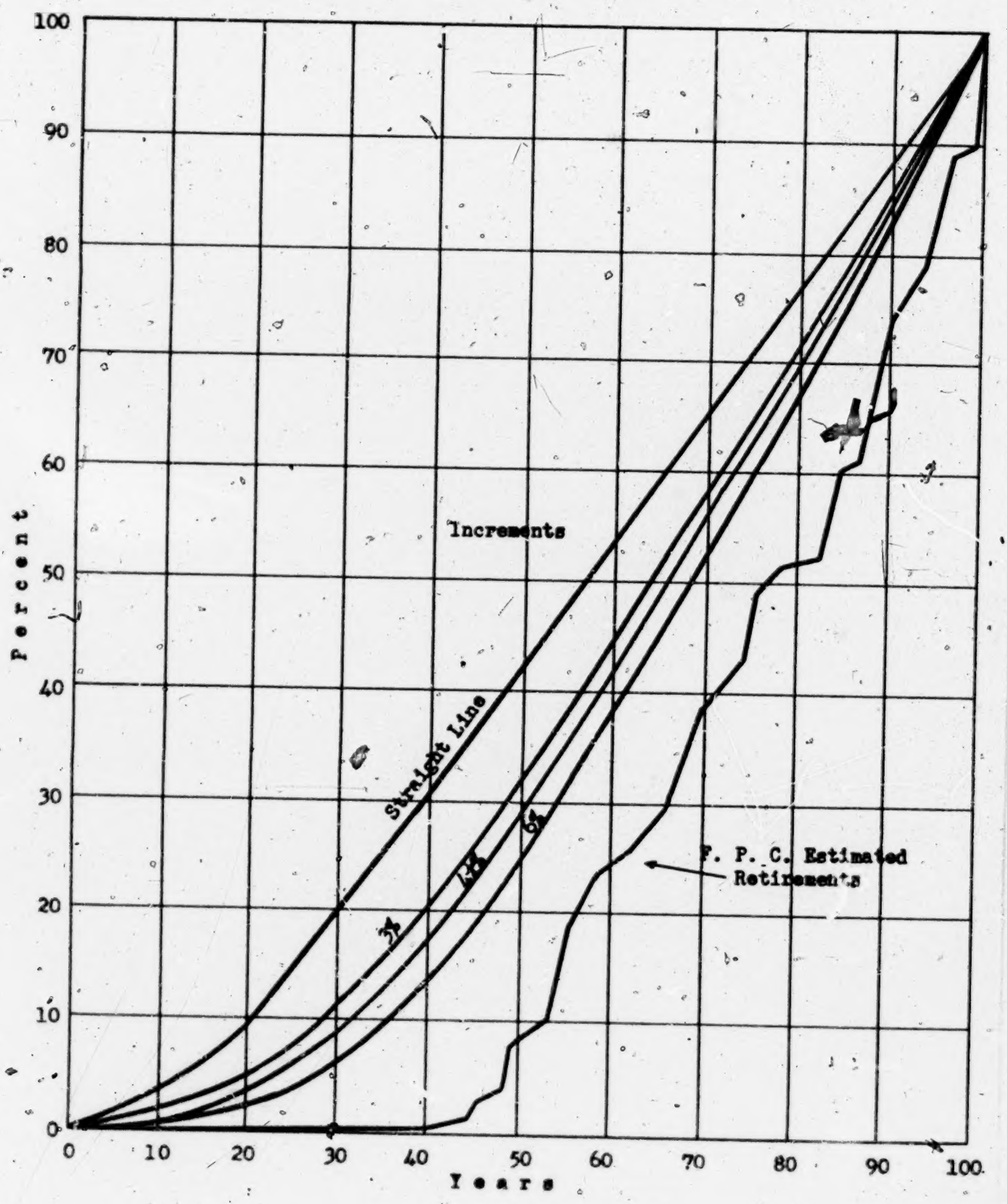
1911-2010

A-1

Year	P. P. C. Estimated Retirements Dollars	Percent	Straight Line Dollars	Percent	Increments on 3½ Basis Dollars	Percent	Increments on 4¼ Basis Dollars	Percent	Increments on 6% Basis Dollars	Percent
1			96,058	.24	30,563	.08	18,614	.0-	9,434	.03
2			205,588	.51	66,767	.18	40,959	.11	20,922	.06
3			330,099	.82	109,965	.29	68,135	.19	35,223	.10
4			469,965	1.16	160,447	.43	100,372	.28	52,499	.15
5			610,032	1.51	212,549	.57	134,061	.37	70,870	.20
6			752,152	1.86	266,772	.71	169,512	.46	90,524	.26
7			898,141	2.22	324,050	.87	207,401	.57	111,859	.32
8			1,046,103	2.59	383,879	1.03	247,466	.68	134,811	.38
9			1,194,790	2.96	445,777	1.19	289,417	.79	159,249	.45
10			1,343,400	3.33	509,640	1.36	333,262	.91	185,245	.52
11			1,492,896	3.70	575,823	1.54	379,255	1.04	212,973	.60
12			1,643,808	4.07	644,667	1.72	427,688	1.17	242,668	.68
13			1,822,420	4.51	726,374	1.94	485,234	1.33	277,988	.78
14			2,035,222	5.04	822,762	2.20	552,877	1.52	319,352	.90
15	21	-	2,329,007	5.77	961,350	2.57	652,168	1.79	381,760	1.08
16	21	-	2,630,281	6.52	1,107,178	2.96	757,836	2.08	449,288	1.27
17	21	-	2,937,959	7.28	1,260,054	3.37	869,854	2.38	522,000	1.47
18	21	-	3,251,734	8.06	1,420,245	3.79	988,570	2.71	600,288	1.69
19	451	-	3,571,144	8.85	1,587,860	4.24	1,114,212	3.05	684,456	1.93
20	451	-	3,897,679	9.66	1,764,382	4.71	1,248,180	3.42	775,734	2.19
21	451	-	4,240,141	10.50	1,952,974	5.22	1,392,471	3.82	875,182	2.47
22	451	-	4,593,187	11.38	2,150,727	5.75	1,544,993	4.23	981,605	2.77
23	451	-	4,950,694	12.26	2,356,163	6.30	1,705,145	4.67	1,095,041	3.09
24	484	-	5,312,366	13.16	2,570,053	6.87	1,873,871	5.14	1,216,510	3.43
25	5,171	.02	5,704,159	14.13	2,803,883	7.49	2,058,338	5.64	1,350,176	3.81
26	5,171	.02	6,099,181	15.11	3,044,395	8.13	2,251,572	6.17	1,492,281	4.21
27	6,488	.02	6,520,617	16.15	3,302,457	8.82	2,459,137	6.74	1,646,340	4.65
28	9,722	.03	6,951,914	17.22	3,572,561	9.55	2,678,470	7.34	1,811,342	5.11
29	11,509	.04	7,387,056	18.30	3,852,616	10.29	2,908,462	7.97	1,987,058	5.61
30	93,565	.31	7,823,990	19.38	4,142,008	11.07	3,148,911	8.63	2,173,731	6.13
31	95,655	.32	8,266,452	20.48	4,440,428	11.86	3,398,185	9.31	2,368,067	6.68
32	109,623	.36	8,727,781	21.62	4,757,803	12.71	3,665,621	10.05	2,579,128	7.28
33	120,711	.40	9,190,774	22.77	5,085,172	13.59	3,944,504	10.81	2,802,468	7.91
34	123,512	.41	9,654,678	23.92	5,422,483	14.49	4,235,099	11.61	3,038,751	8.57
35	125,122	.42	10,120,030	25.07	5,770,545	15.42	4,538,453	12.44	3,289,389	9.28
36	135,081	.45	10,585,382	26.22	6,129,001	16.38	4,854,632	13.30	3,554,969	10.03
37	141,799	.47	11,050,734	27.37	6,497,912	17.36	5,183,825	14.21	3,835,886	10.82
38	147,804	.49	11,516,086	28.53	6,877,688	18.38	5,526,723	15.15	4,133,255	11.66
39	151,850	.50	11,981,438	29.68	7,268,678	19.40	5,883,939	16.13	4,448,106	12.55
40	157,755	.52	12,446,790	30.83	7,671,276	20.50	6,256,165	17.15	4,781,605	13.49
41	165,841	.55	12,912,142	31.99	8,085,775	21.60	6,643,959	18.21	5,134,760	14.49
42	200,862	.67	13,377,494	33.14	8,512,466	22.74	7,047,891	19.32	5,508,619	15.54
43	227,015	.75	13,842,846	34.29	8,950,907	23.92	7,467,502	20.47	5,902,808	16.66
44	315,654	1.05	14,308,198	35.44	9,401,717	25.12	7,903,835	21.66	6,319,080	17.83
45	818,198	2.72	14,773,550	36.60	9,863,392	26.35	8,354,945	22.90	6,755,010	19.06
46	869,010	2.88	15,238,902	37.75	10,323,841	27.58	8,803,869	24.13	7,186,943	20.28
47	971,654	3.22	15,704,254	38.90	10,796,578	28.85	9,269,713	25.41	7,641,743	21.56
48	1,162,332	3.86	16,169,606	40.06	11,280,419	30.14	9,750,993	26.72	8,117,672	22.91
49	2,190,996	7.27	16,634,958	41.21	11,773,055	31.46	10,244,623	28.08	8,610,716	24.30
50	2,505,707	8.32	17,100,310	42.36	12,249,610	32.73	10,715,514	29.37	9,071,623	25.60
51	2,633,019	8.74	17,565,662	43.51	12,731,020	34.02	11,193,043	30.68	9,541,302	26.92
52	2,889,228	9.59	18,031,014	44.67	13,223,053	35.33	11,686,456	32.03	10,031,523	28.31
53	2,986,311	9.91	18,496,366	45.82	13,722,161	36.66	12,187,908	33.40	10,535,785	29.73
54	4,157,817	13.80	18,961,718	46.97	14,233,330	38.03	12,707,588	34.83	11,064,477	31.22
55	5,408,269	17.95	19,427,070	48.12	14,724,688	39.34	13,199,565	36.18	11,554,601	32.61
56	5,876,655	19.50	19,892,422	49.28	15,193,274	40.60	13,659,307	37.44	11,999,105	33.86
57	6,393,568	21.22	20,357,774	50.43	15,661,866	41.85	14,118,682	38.70	12,442,176	35.11
58	6,908,051	22.93	20,823,126	51.58	16,129,008	43.10	14,575,611	39.95	12,880,816	36.35
59	7,058,953	23.43	21,288,478	52.74	16,594,730	44.34	15,030,054	41.19	13,314,906	37.57
60	7,288,823	24.19	21,753,830	53.89	17,069,896	45.61	15,497,479	42.47	13,765,987	38.85
61	7,498,886	24.89	22,219,182	55.04	17,552,421	46.90	15,974,939	43.78	14,230,341	40.16
62	7,793,543	25.87	22,684,534	56.19	18,043,120	48.21	16,463,804	45.12	14,709,952	41.51
63	8,140,820	27.02	23,149,886	57.35	18,539,700	49.54	16,960,902	46.49	15,200,661	42.89
64	8,275,093	27.46	23,615,238	58.50	19,040,759	50.88	17,464,367	47.86	15,699,975	44.30
65	8,672,643	28.78	24,080,590	59.65	19,552,822	52.24	17,983,523	49.29	16,221,192	45.77

[240801]

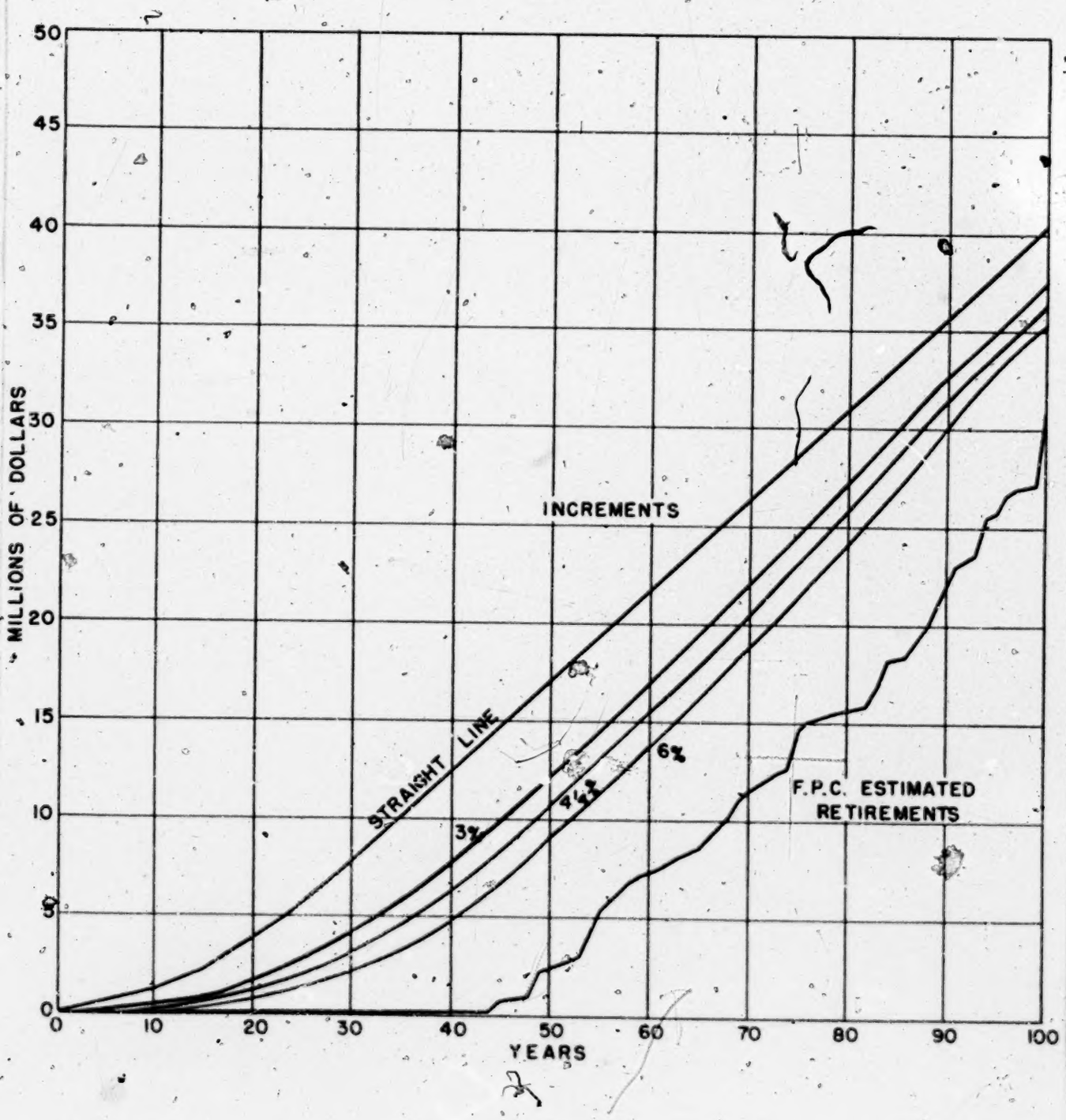
Pennsylvania Water & Power Company
CUMULATIVE PERCENTAGE GROSS INCREMENT TO THE DEPRECIATION RESERVE ON THE STRAIGHT LINE AND THE THREE, FOUR AND ONE QUARTER AND SIX PERCENT INTEREST BASES COMPARED WITH CUMULATIVE ESTIMATED RETIREMENTS
For A Period of One Hundred Years
1911-2010



PENNSYLVANIA WATER & POWER COMPANY

CUMULATIVE GROSS INCREMENT TO THE DEPRECIATION RESERVE IN DOLLARS ON THE STRAIGHT LINE, 3, 4¼, AND 6 PERCENT INTEREST BASES COMPARED WITH CUMULATIVE ESTIMATED RETIREMENTS

1911-2010



[24082] Exhibit No. 321 4077

Pennsylvania Water & Power Company

CUMULATIVE GROSS INCREMENT TO THE DEPRECIATION RESERVE* ON THE STRAIGHT LINE, AND THE THREE, FOUR AND ONE QUARTER AND SIX PERCENT INTEREST BASES COMPARED WITH CUMULATIVE ESTIMATED RETIREMENTS
1946-2010

A-4

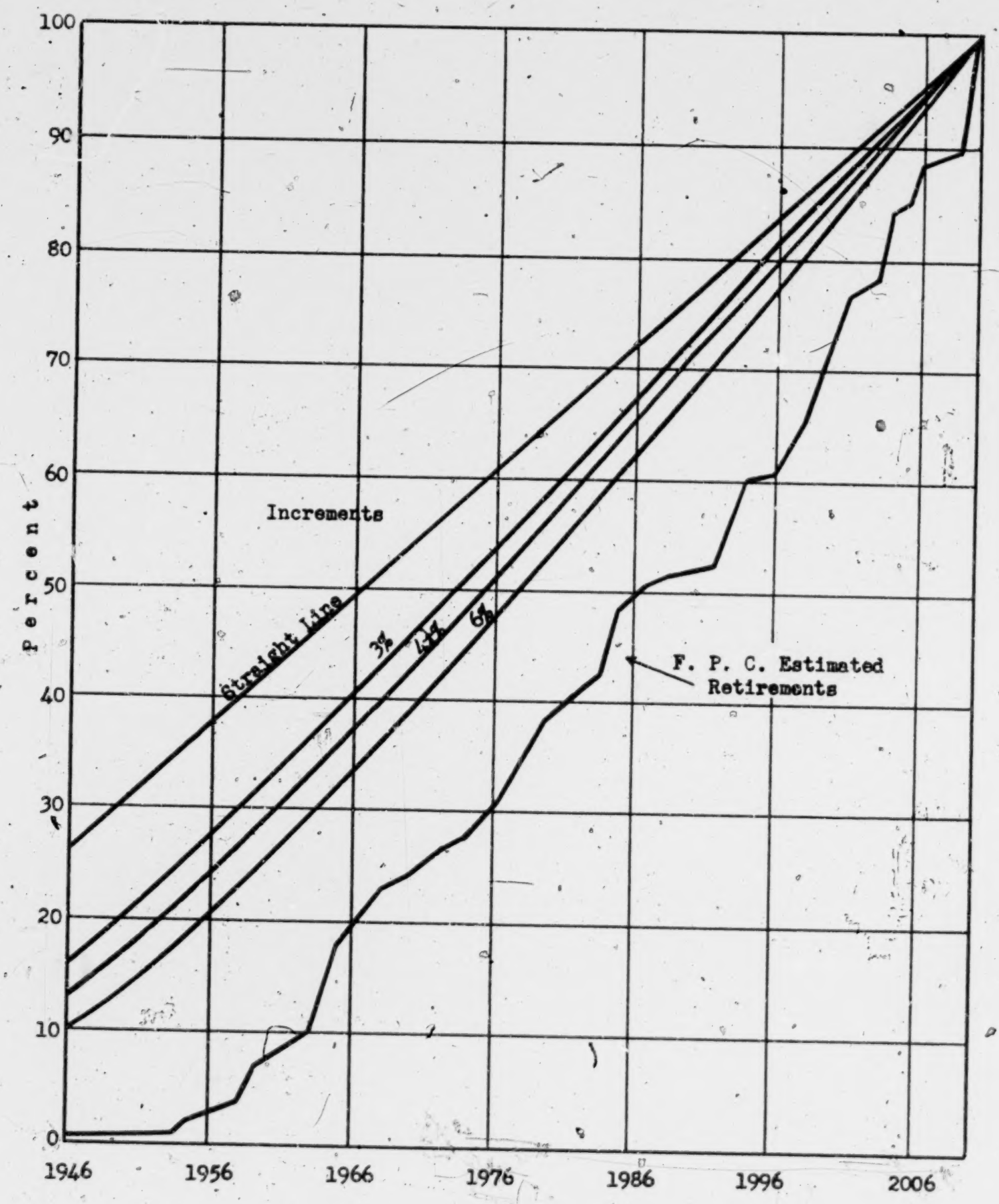
Year	F. P. C. Estimated Retirements		Straight Line		Increments on 3% Basis		Increments on 4¼% Basis		Increments on 6% Basis	
	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent
1946	135,081	.45	10,585,382	26.22	6,129,001	16.38	4,854,632	13.30	3,554,969	10.03
1947	141,799	.47	11,050,734	27.37	6,497,912	17.36	5,183,825	14.21	3,835,886	10.82
1948	147,804	.49	11,516,086	28.53	6,877,688	18.38	5,526,723	15.15	4,133,255	11.66
1949	151,850	.50	11,981,438	29.68	7,268,678	19.40	5,883,939	16.13	4,448,106	12.55
1950	157,755	.52	12,446,790	30.83	7,671,276	20.50	6,256,165	17.15	4,781,605	13.49
1951	165,841	.55	12,912,142	31.99	8,085,775	21.60	6,643,959	18.21	5,134,760	14.49
1952	200,862	.67	13,377,494	33.14	8,512,466	22.74	7,047,891	19.32	5,508,619	15.54
1953	227,015	.75	13,842,846	34.29	8,950,907	23.92	7,467,502	20.47	5,902,808	16.66
1954	315,654	1.05	14,308,198	35.44	9,401,717	25.12	7,903,835	21.66	6,319,080	17.83
1955	818,198	2.72	14,773,550	36.60	9,863,392	26.35	8,354,945	22.90	6,755,010	19.06
1956	869,010	2.88	15,238,902	37.75	10,323,841	27.58	8,803,869	24.13	7,186,943	20.28
1957	971,654	3.22	15,704,254	38.90	10,796,578	28.85	9,269,713	25.41	7,641,743	21.56
1958	1,162,332	3.86	16,169,606	40.06	11,280,419	30.14	9,750,993	26.72	8,117,672	22.91
1959	2,190,996	7.27	16,634,958	41.21	11,773,055	31.46	10,244,623	28.08	8,610,716	24.30
1960	2,505,707	8.32	17,100,310	42.36	12,249,610	32.73	10,715,514	29.37	9,071,623	25.60
1961	2,633,019	8.74	17,565,662	43.51	12,731,020	34.02	11,193,043	30.68	9,541,302	26.92
1962	2,889,228	9.59	18,031,014	44.67	13,223,053	35.33	11,685,456	32.03	10,031,523	28.31
1963	2,986,311	9.91	18,496,366	45.82	13,722,161	36.66	12,187,908	33.40	10,535,785	29.73
1964	4,157,817	13.80	18,961,718	46.97	14,233,330	38.03	12,707,588	34.83	11,064,477	31.22
1965	5,408,269	17.95	19,427,070	48.12	14,724,688	39.34	13,199,565	36.18	11,554,601	32.61
1966	5,876,655	19.50	19,892,422	49.28	15,193,274	40.60	13,659,307	37.44	11,999,105	33.86
1967	6,393,568	21.22	20,357,774	50.43	15,661,866	41.85	14,118,682	38.70	12,442,176	35.11
1968	6,908,051	22.93	20,823,126	51.58	16,129,008	43.10	14,575,611	39.95	12,880,816	36.35
1969	7,058,953	23.43	21,288,478	52.74	16,594,730	44.34	15,030,094	41.19	13,314,906	37.57
1970	7,288,823	24.19	21,753,830	53.89	17,069,896	45.61	15,497,479	42.47	13,765,987	38.85
1971	7,498,886	24.89	22,219,182	55.04	17,552,421	46.90	15,974,959	43.78	14,230,341	40.16
1972	7,793,543	25.87	22,684,534	56.19	18,043,120	48.21	16,463,804	45.12	14,709,952	41.51
1973	8,140,820	27.02	23,149,886	57.35	18,539,700	49.54	16,960,902	46.49	15,200,661	42.89
1974	8,275,093	27.46	23,615,238	58.50	19,040,759	50.88	17,464,367	47.86	15,699,975	44.30
1975	8,672,643	28.78	24,080,590	59.65	19,552,822	52.24	17,983,523	49.29	16,221,192	45.77
1976	9,175,721	30.45	24,545,942	60.81	20,068,320	53.62	18,507,847	50.72	16,749,829	47.26
1977	9,752,809	32.37	25,011,294	61.96	20,584,191	55.00	19,033,074	52.16	17,279,999	48.76
1978	10,203,816	33.87	25,476,646	63.11	21,098,225	56.37	19,556,097	53.60	17,807,354	50.25
1979	11,053,500	36.69	25,941,998	64.26	21,614,150	57.75	20,082,181	55.04	18,399,290	51.92
1980	11,625,094	38.58	26,407,350	65.42	22,120,063	59.10	20,594,512	56.44	18,852,161	53.20
1981	11,966,794	39.72	26,872,702	66.57	22,624,005	60.45	21,104,324	57.84	19,361,509	54.63
1982	12,364,921	41.04	27,338,054	67.72	23,132,814	61.81	21,621,281	59.26	19,880,916	56.10
1983	12,643,662	41.96	27,803,406	68.87	23,644,944	63.18	22,143,288	60.69	20,407,600	57.59
1984	12,776,885	42.41	28,268,758	70.03	24,164,075	64.57	22,675,634	62.15	20,949,160	59.11
1985	14,619,402	48.52	28,734,110	71.18	24,694,784	65.98	23,224,943	63.65	21,515,221	60.71
1986	15,039,448	49.92	29,199,462	72.33	25,186,138	67.30	23,719,290	65.01	22,004,694	62.09
1987	15,322,875	50.86	29,664,814	73.49	25,679,632	68.61	24,216,795	66.37	22,498,333	63.49
1988	15,475,799	51.36	30,130,166	74.64	26,179,428	69.95	24,723,399	67.76	23,004,584	64.91
1989	15,516,004	51.50	30,595,518	75.79	26,689,630	71.31	25,245,034	69.19	23,532,035	66.40
1990	15,600,230	51.78	31,060,870	76.94	27,213,932	72.71	25,787,130	70.68	24,088,721	67.97
1991	15,685,973	52.06	31,526,222	78.10	27,751,436	74.15	26,348,685	72.22	24,673,754	69.63
1992	15,856,761	52.63	31,991,574	79.25	28,302,493	75.62	26,930,462	73.81	25,288,745	71.36
1993	16,812,669	55.80	32,456,926	80.40	28,864,958	77.13	27,529,706	75.45	25,930,388	73.17
1994	18,182,170	60.35	32,922,278	81.56	29,415,620	78.60	28,113,792	77.05	26,553,175	74.93
1995	18,249,396	60.57	33,387,630	82.71	29,941,717	80.00	28,664,498	78.56	27,131,159	76.56
1996	18,346,889	60.89	33,852,982	83.86	30,481,580	81.45	29,235,752	80.13	27,739,789	78.28
1997	19,103,196	63.40	34,318,334	85.01	31,034,714	82.92	29,827,141	81.75	28,379,087	80.08
1998	19,803,549	65.73	34,783,686	86.17	31,581,753	84.38	30,411,521	83.35	29,011,364	81.86
1999	21,093,269	70.01	35,249,038	87.32	32,124,192	85.83	30,990,972	84.94	29,639,557	83.64
2000	22,347,060	74.17	35,714,390	88.47	32,644,213	87.22	31,540,236	86.44	30,228,058	85.30
2001	23,121,199	76.74	36,179,742	89.62	33,142,221	88.55	32,059,558	87.87	30,776,642	86.85
2002	23,409,674	77.70	36,645,094	90.78	33,631,945	89.86	32,568,050	89.26	31,311,693	88.36
2003	23,696,417	78.65	37,110,446	91.93	34,127,706	91.19	33,085,893	90.68	31,861,538	89.91
2004	25,565,321	84.85	37,575,798	93.08	34,629,738	92.53	33,613,558	92.13	32,427,169	91.50
2005	25,764,978	85.51	38,041,150	94.24	35,090,764	93.76	34,084,220	93.42	32,914,604	92.88
2006	26,722,065	88.69	38,506,502	95.39	35,559,631	95.01	34,566,400	94.74	33,419,306	94.30
2007	27,026,298	89.70	38,971,854	96.54	36,013,850	96.23	35,028,395	96.00	33,896,863	95.65
2008	27,091,132	89.91	39,437,206	97.69	36,472,570	97.45	35,497,096	97.29	34,384,821	97.03
2009	27,163,956	90.16	39,902,558	98.85	36,943,106	98.71	35,982,961	98.62	34,898,166	98.48
2010	30,129,460	100.00	40,367,910	100.00	37,423,574	100.00	36,486,381	100.00	35,437,943	100.00

*Interest components based on year end balances in the depreciation reserve.

Pennsylvania Water & Power Company

CUMULATIVE PERCENTAGE GROSS INCREMENT TO THE DEPRECIATION RESERVE ON THE STRAIGHT LINE AND THE THREE, FOUR AND ONE QUARTER AND SIX PERCENT INTEREST BASES COMPARED WITH CUMULATIVE ESTIMATED RETIREMENTS

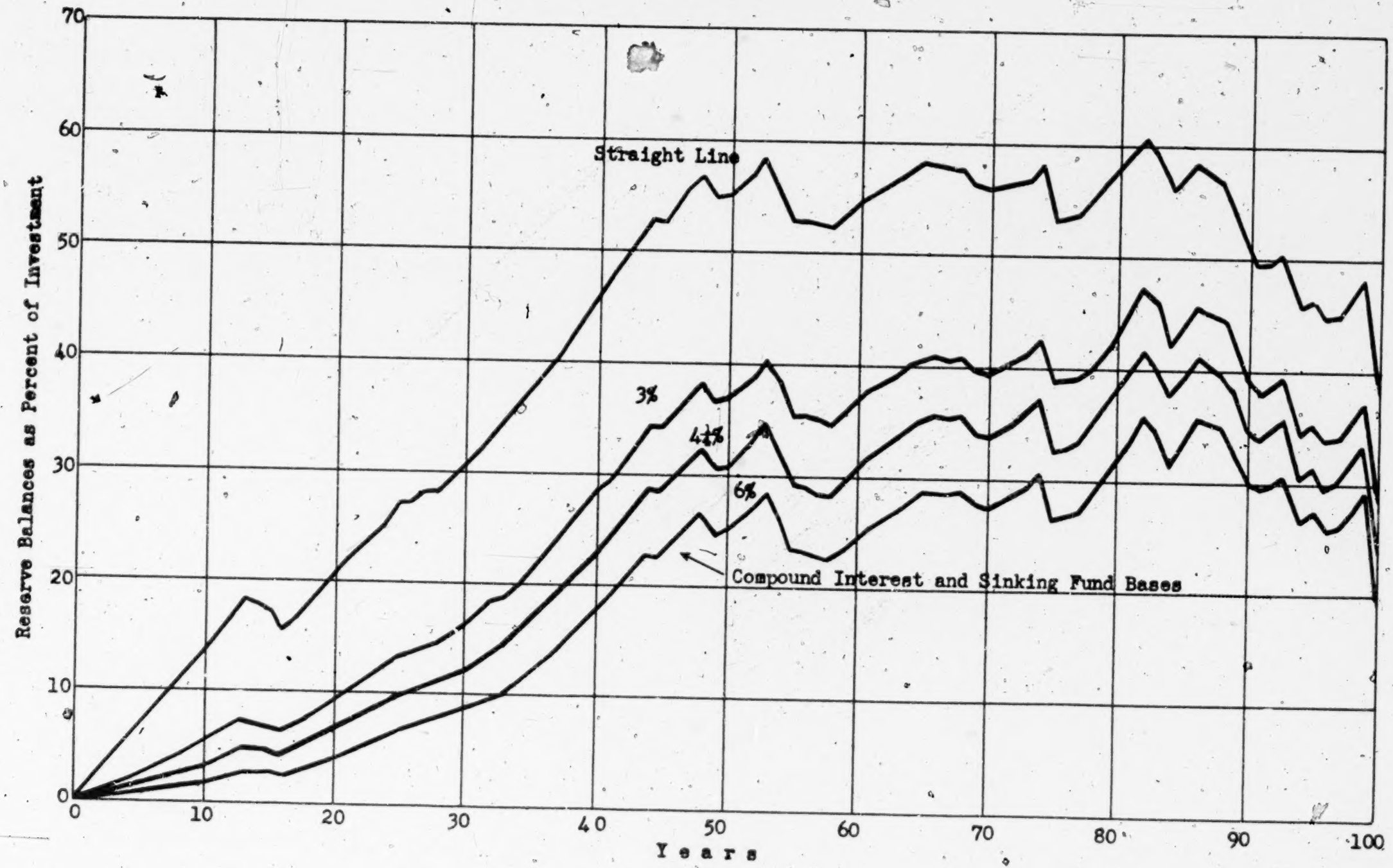
1946-2010



Pennsylvania Water & Power Company
RELATIONSHIP OF RESERVE BALANCES ACCUMULATED ON THE STRAIGHT LINE AND COMPOUND INTEREST AND SINKING FUND BASES AT 3, 4½ AND 6 PERCENT TO TOTAL INVESTMENT IN DEPRECIABLE PROPERTY
1911-2010

Year	Total Investment in Depreciable Property	Reserve Balance at Year End — Straight Line		Compound Interest and Sinking Fund Bases at — 3 Percent		4½ Percent		6 Percent	
		Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent
1	$6,103,544	96,038	1.6	30,563	0.5	18,614	0.3	9,434	0.2
2	6,821,157	205,588	3.0	66,767	1.0	40,959	0.6	20,922	0.3
3	7,690,936	330,099	4.3	109,965	1.4	68,135	0.9	35,223	0.5
4	8,555,656	469,965	5.5	160,447	1.9	100,372	1.2	52,499	0.6
5	9,447,334	610,032	6.5	212,549	2.2	134,061	1.4	70,870	0.8
6	9,455,835	752,152	8.0	266,772	2.8	169,512	1.8	90,514	1.0
7	9,623,082	898,141	9.3	324,050	3.4	207,401	2.2	111,859	1.2
8	9,866,389	1,046,103	10.6	383,879	3.9	247,466	2.5	134,811	1.4
9	9,972,891	1,194,790	12.0	445,777	4.5	289,417	2.9	159,249	1.6
10	10,017,705	1,343,400	13.4	509,640	5.1	333,262	3.3	185,245	1.8
11	9,992,053	1,492,896	14.9	575,823	5.8	379,255	3.8	212,973	2.1
12	10,036,086	1,643,808	16.4	644,667	6.4	427,688	4.3	242,668	2.4
13	10,102,533	1,822,420	18.0	726,374	7.2	485,234	4.8	277,988	2.8
14	11,714,495	2,035,222	17.4	822,762	7.0	552,877	4.7	319,352	2.7
15	13,857,087	2,328,986	16.8	961,329	6.9	652,147	4.7	381,739	2.8
16	17,639,966	2,630,260	14.9	1,107,157	6.3	757,815	4.3	449,267	2.5
17	18,072,065	2,937,938	16.3	1,260,033	7.0	869,833	4.8	521,979	2.9
18	18,436,239	3,251,713	17.6	1,420,224	7.7	988,549	5.4	600,267	3.3
19	18,751,247	3,570,693	19.0	1,587,409	8.5	1,113,761	5.9	684,005	3.6
20	19,029,821	3,897,228	20.5	1,763,931	9.3	1,247,729	6.6	775,283	4.1
21	19,313,255	4,239,690	22.0	1,952,523	10.1	1,392,020	7.2	874,731	4.5
22	20,168,348	4,592,736	22.8	2,150,276	10.7	1,544,542	7.7	981,154	4.9
23	20,871,095	4,950,243	23.7	2,355,712	11.3	1,704,694	8.2	1,094,590	5.2
24	21,128,954	5,311,882	25.1	2,569,569	12.2	1,873,387	8.9	1,216,026	5.8
25	21,291,903	5,698,988	26.8	2,797,842	13.1	2,053,167	9.6	1,345,005	6.3
26	22,921,140	6,094,010	26.6	3,039,224	13.3	2,246,401	9.8	1,487,110	6.5
27	23,061,627	6,514,129	28.2	3,295,969	14.3	2,452,649	10.6	1,639,852	7.1
28	24,783,855	6,942,232	28.0	3,562,839	14.4	2,668,748	10.8	1,801,620	7.3
29	25,295,919	7,375,547	29.2	3,841,107	15.2	2,896,953	11.5	1,975,549	7.8
30	25,459,747	7,630,425	30.0	4,048,443	15.9	3,055,346	12.0	2,080,166	8.2
31	25,533,351	8,170,797	32.0	4,344,773	17.0	3,302,530	12.9	2,272,412	8.9
32	25,775,760	8,618,158	33.4	4,648,180	18.0	3,555,998	13.8	2,469,505	9.6
33	26,545,998	9,070,063	34.2	4,964,461	18.7	3,823,793	14.4	2,681,757	10.1
34	26,612,172	9,531,166	35.8	5,298,971	19.9	4,111,587	15.5	2,915,239	11.0
35	26,652,298	9,994,908	37.5	5,645,423	21.2	4,413,331	16.6	3,164,267	11.9
36	26,718,502	10,450,301	39.1	5,993,920	22.4	4,719,551	17.7	3,419,888	12.8
37	26,718,502	10,908,935	40.8	6,356,113	23.8	5,042,026	18.9	3,694,087	13.8
38	26,718,502	11,368,282	42.5	6,729,884	25.2	5,378,919	20.1	3,985,451	14.9
39	26,718,502	11,829,588	44.3	7,116,828	26.6	5,732,089	21.5	4,296,256	16.1
40	26,718,502	12,289,035	46.0	7,513,521	28.1	6,098,410	22.8	4,623,850	17.3
41	26,718,502	12,746,301	47.7	7,919,934	29.6	6,478,118	24.2	4,968,919	18.6
42	26,718,502	13,176,632	49.3	8,311,604	31.1	6,847,029	25.6	5,307,757	19.9
43	26,718,502	13,615,831	51.0	8,723,892	32.7	7,240,487	27.1	5,675,793	21.2
44	26,718,502	13,992,544	52.4	9,086,063	34.0	7,588,181	28.4	6,003,426	22.5
45	26,718,502	13,955,352	52.2	9,045,194	33.9	7,536,747	28.2	5,936,812	22.2
46	26,718,502	14,369,892	53.8	9,454,831	35.4	7,934,859	29.7	6,317,933	23.6
47	26,718,502	14,732,600	55.1	9,824,924	36.8	8,298,059	31.1	6,670,089	25.0
48	26,718,502	15,007,274	56.2	10,118,087	37.9	8,588,661	32.1	6,955,340	26.0
49	26,718,502	14,443,962	54.1	9,582,059	35.9	8,053,627	30.1	6,419,720	24.0
50	26,718,502	14,594,603	54.6	9,743,903	36.5	8,209,807	30.7	6,565,916	24.6
51	26,718,502	14,932,643	55.9	10,098,001	37.8	8,560,024	32.0	6,908,283	25.9
52	26,718,502	15,141,786	56.7	10,333,825	38.7	8,796,228	32.9	7,142,295	26.7
53	26,718,502	15,510,055	58.0	10,735,850	40.2	9,201,597	34.4	7,549,474	28.3
54	26,718,502	14,803,901	55.4	10,075,513	37.7	8,549,771	32.0	6,906,660	25.8
55	26,718,502	14,018,801	52.5	9,316,419	34.9	7,791,296	29.2	6,146,332	23.0
56	26,718,502	14,015,767	52.5	9,316,619	34.9	7,782,652	29.1	6,122,450	22.9
57	26,718,502	13,964,206	52.3	9,268,298	34.7	7,725,114	28.9	6,048,608	22.6
58	26,718,502	13,915,075	52.1	9,220,957	34.5	7,667,560	28.7	5,972,765	22.4
59	26,718,502	14,229,525	53.3	9,535,777	35.7	7,971,141	29.8	6,255,953	23.4
60	26,718,502	14,465,007	54.1	9,781,073	36.6	8,208,656	30.7	6,477,164	24.2
61	26,718,502	14,720,296	55.1	10,053,535	37.6	8,476,073	31.7	6,731,455	25.2
62	26,718,502	14,890,991	55.7	10,249,577	38.4	8,670,261	32.5	6,916,409	25.9
63	26,718,502	15,009,066	56.2	10,398,880	38.9	8,820,082	33.0	7,059,841	26.4
64	26,718,502	15,340,145	57.4	10,765,666	40.3	9,189,274	34.4	7,424,882	27.8
65	26,718,502	15,407,947	57.7	10,880,179	40.7	9,310,880	34.8	7,548,549	28.3

Pennsylvania Water & Power Company
PERCENTAGE RELATIONSHIP OF RESERVE BALANCES ACCUMULATED ON THE STRAIGHT LINE AND COMPOUND INTEREST AND SINKING FUND BASES AT 3, 4½ AND 6 PERCENT TO TOTAL INVESTMENT IN DEPRECIABLE PROPERTY
1911-2010



A-7

57	[illegible]	21.42	[illegible]	50.43	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
58	6,908,051	22.93	20,823,126	51.58	16,129,008	43.10	14,575,611	39.95	12,880,816	36.35
59	7,058,953	23.43	21,288,478	52.74	16,594,730	44.34	15,030,094	41.19	13,314,906	37.57
60	7,288,823	24.19	21,753,830	53.89	17,069,896	45.61	15,497,479	42.47	13,765,987	38.85
61	7,498,886	24.89	22,219,182	55.04	17,552,421	46.90	15,974,958	43.78	14,230,341	40.16
62	7,7[illegible]543	25.87	22,684,534	56.19	18,043,120	48.21	16,463,804	45.12	14,709,952	41.51
63	8,140,820	27.02	23,149,886	57.35	18,539,700	49.54	16,960,902	46.49	15,200,661	42.89
64	8,275,093	27.46	23,615,238	58.50	19,040,799	50.88	17,464,367	47.86	15,699,975	44.30
65	8,672,643	28.78	24,080,590	59.65	19,552,822	52.24	17,983,523	49.29	16,221,192	45.77
66	9,175,721	30.45	24,545,942	60.81	20,068,320	53.62	18,507,847	50.72	16,749,829	47.26
67	9,752,809	32.37	25,011,294	61.96	20,584,191	55.00	19,033,074	52.16	17,279,999	48.76
68	10,203,816	33.87	25,476,646	63.11	21,098,225	56.37	19,556,097	53.60	17,807,354	50.25
69	11,053,500	36.69	25,941,998	64.26	21,614,150	57.75	20,082,181	55.04	18,399,290	51.92
70	11,625,094	38.58	26,407,350	65.42	22,120,063	59.10	20,594,512	56.44	18,852,161	53.20
71	11,966,794	39.72	26,872,702	66.57	22,624,005	60.45	21,104,324	57.84	19,361,509	54.63
72	12,364,921	41.04	27,338,054	67.72	23,132,814	61.81	21,621,281	59.26	19,880,916	56.10
73	12,643,662	41.96	27,803,406	68.87	23,644,944	63.18	22,143,288	60.69	20,407,600	57.59
74	12,776,885	42.41	28,268,758	70.03	24,164,075	64.57	22,675,634	62.15	20,949,160	59.11
75	14,619,402	48.52	28,734,110	71.18	24,694,784	65.98	23,224,943	63.65	21,515,221	60.71
76	15,039,448	49.92	29,199,462	72.33	25,186,138	67.30	23,719,290	65.01	22,004,694	62.09
77	15,322,875	50.86	29,664,814	73.49	25,679,632	68.61	24,216,795	66.37	22,498,333	63.49
78	15,475,799	51.36	30,130,166	74.64	26,179,428	69.95	24,723,399	67.76	23,004,584	64.91
79	15,516,004	51.50	30,595,518	75.79	26,689,630	71.31	25,245,034	69.19	23,532,035	66.40
80	15,600,230	51.78	31,060,870	76.94	27,213,932	72.71	25,787,130	70.68	24,088,721	67.97
81	15,685,973	52.06	31,526,222	78.10	27,751,436	74.15	26,348,685	72.22	24,673,754	69.63
82	15,856,761	52.63	31,991,574	79.25	28,302,493	75.62	26,930,462	73.81	25,288,745	71.36
83	16,812,669	55.80	32,456,926	80.40	28,864,958	77.13	27,529,706	75.45	25,930,388	73.17
84	18,182,170	60.35	32,922,278	81.56	29,415,620	78.60	28,113,792	77.05	26,553,175	74.93
85	18,249,396	60.57	33,387,630	82.71	29,941,717	80.00	28,664,498	78.56	27,131,159	76.56
86	18,346,889	60.89	33,852,982	83.86	30,481,580	81.45	29,235,752	80.13	27,739,789	78.28
87	19,103,196	63.40	34,318,334	85.01	31,034,714	82.92	29,827,141	81.75	28,379,087	80.08
88	19,803,549	65.73	34,783,686	86.17	31,581,753	84.38	30,411,521	83.35	29,011,364	81.86
89	21,093,269	70.01	35,249,038	87.32	32,124,192	85.83	30,990,972	84.94	29,639,557	83.64
90	22,347,060	74.17	35,714,390	88.47	32,644,213	87.22	31,540,236	86.44	30,228,058	85.30
91	23,121,199	76.74	36,179,742	89.62	33,142,221	88.55	32,059,558	87.87	30,776,642	86.85
92	23,409,674	77.70	36,645,094	90.78	33,631,945	89.86	32,568,050	89.26	31,311,693	88.36
93	23,696,417	78.65	37,110,446	91.93	34,127,706	91.19	33,085,893	90.68	31,861,538	89.91
94	25,565,321	84.85	37,575,798	93.08	34,629,738	92.53	33,613,558	92.13	32,427,169	91.50
95	25,764,978	85.51	38,041,150	94.24	35,090,764	93.76	34,084,220	93.42	32,914,604	92.88
96	26,722,085	88.69	38,506,502	95.39	35,559,631	95.01	34,566,400	94.74	33,419,306	94.30
97	27,026,298	89.70	38,971,854	96.54	36,013,850	96.23	35,028,395	96.00	33,896,863	95.65
98	27,091,132	89.91	39,437,206	97.69	36,472,570	97.45	35,497,096	97.29	34,384,821	97.03
99	27,163,956	90.16	39,902,558	98.85	36,943,106	98.71	35,982,961	98.62	34,898,166	98.48
100	30,129,460	100.00	40,367,910	100.00	37,425,574	100.00	36,486,381	100.00	35,437,943	100.00

*Interest components based on year end balances in the depreciation reserve.

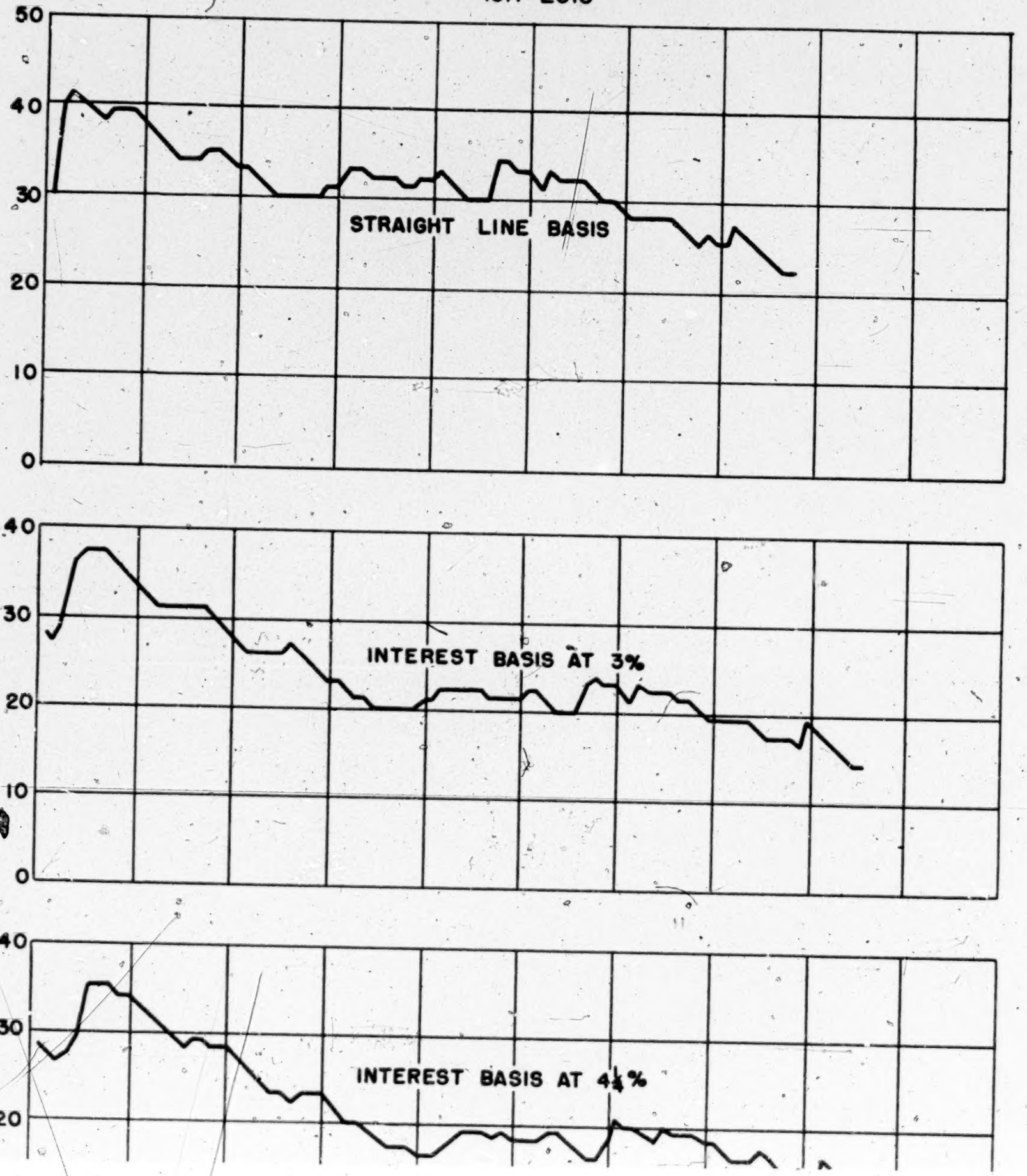
Pennsylvania Water & Power Company
DEPRECIATION RESERVE BALANCES AT END OF EACH YEAR EXPRESSED
IN NUMBER OF SUBSEQUENT YEARS OF ESTIMATED RETIREMENT REQUIREMENTS
1911-2010

Reserve Balance at End of Year	Subsequent Years of Estimated Retirement: Straight Line Basis	Interest Basis at 3 Percent	Interest Basis at 4½ Percent	Interest Basis at 6 Percent
1911	30	28	28	26
1912	40	27	27	27
1913	41	29	26	26
1914	40	36	27	25
1915	39	37	30	24
1916	38	37	35	23
1917	39	37	35	25
1918	39	36	35	27
1919	39	35	34	31
1920	38	34	34	31
1921	37	33	33	31
1922	36	32	32	31
1923	35	31	31	30
1924	34	31	30	30
1925	34	31	29	29
1926	34	31	28	28
1927	35	31	29	27
1928	35	30	29	26
1929	34	29	28	25
1930	33	28	28	24
1931	33	27	27	25
1932	32	26	26	25
1933	31	26	25	24
1934	30	26	24	24
1935	30	26	23	23
1936	30	27	23	22
1937	30	26	22	21
1938	30	25	23	20
1939	31	24	23	19
1940	31	23	23	18
1941	32	23	22	18
1942	33	22	21	18
1943	33	21	20	18
1944	32	21	20	19
1945	32	20	19	18
1946	32	20	18	17
1947	31	20	17	16
1948	31	19	17	15
1949	32	20	17	15
1950	32	21	16	14
1951	33	21	16	13
1952	32	22	16	13
1953	31	22	17	13
1954	30	22	18	12
1955	30	22	19	12
1956	30	22	19	13
1957	34	21	19	14
1958	34	21	18	14
1959	33	21	19	15
1960	33	21	18	15

Reserve Balance at End of Year	Subsequent Years of Estimated Retirements: Straight Line Basis	Interest Basis at 3 Percent	Interest Basis at 4½ Percent	Interest Basis at 6 Percent
1961	32	22	18	15
1962	31	22	18	15
1963	33	21	18	15
1964	32	20	19	15
1965	32	20	19	14
1966	32	20	18	15
1967	31	23	17	15
1968	30	24	16	16
1969	30	23	16	15
1970	29	23	18	14
1971	28	22	21	13
1972	28	21	20	13
1973	28	23	20	13
1974	28	22	19	17
1975	28	22	18	17
1976	27	22	20	16
1977	26	21	19	16
1978	25	21	19	15
1979	26	20	19	16
1980	25	19	18	16
1981	25	19	18	16
1982	27	19	17	16
1983	26	19	16	15
1984	25	19	16	14
1985	24	18	16	14
1986	23	17	17	13
1987	22	17	16	13
1988	22	17	15	12
1989		16	14	13
1990		19	15	13
1991		18	14	12
1992		17	14	11
1993		16	16	12
1994		15	15	11
1995		14	14	13
1996		14	13	13
1997			12	12
1998			12	11
1999				10
2000				10

PENNSYLVANIA WATER & POWER COMPANY

DEPRECIATION RESERVE BALANCES AT END OF EACH YEAR
EXPRESSED IN NUMBER OF SUBSEQUENT YEARS
OF ESTIMATED RETIREMENT REQUIREMENTS
1911 - 2010



Pennsylvania Water & Power Company
ESTIMATED RETIREMENTS OF ELECTRIC PLANT INVESTMENT
FOR MOVING FIVE AND TEN YEAR PERIODS
1911-2010

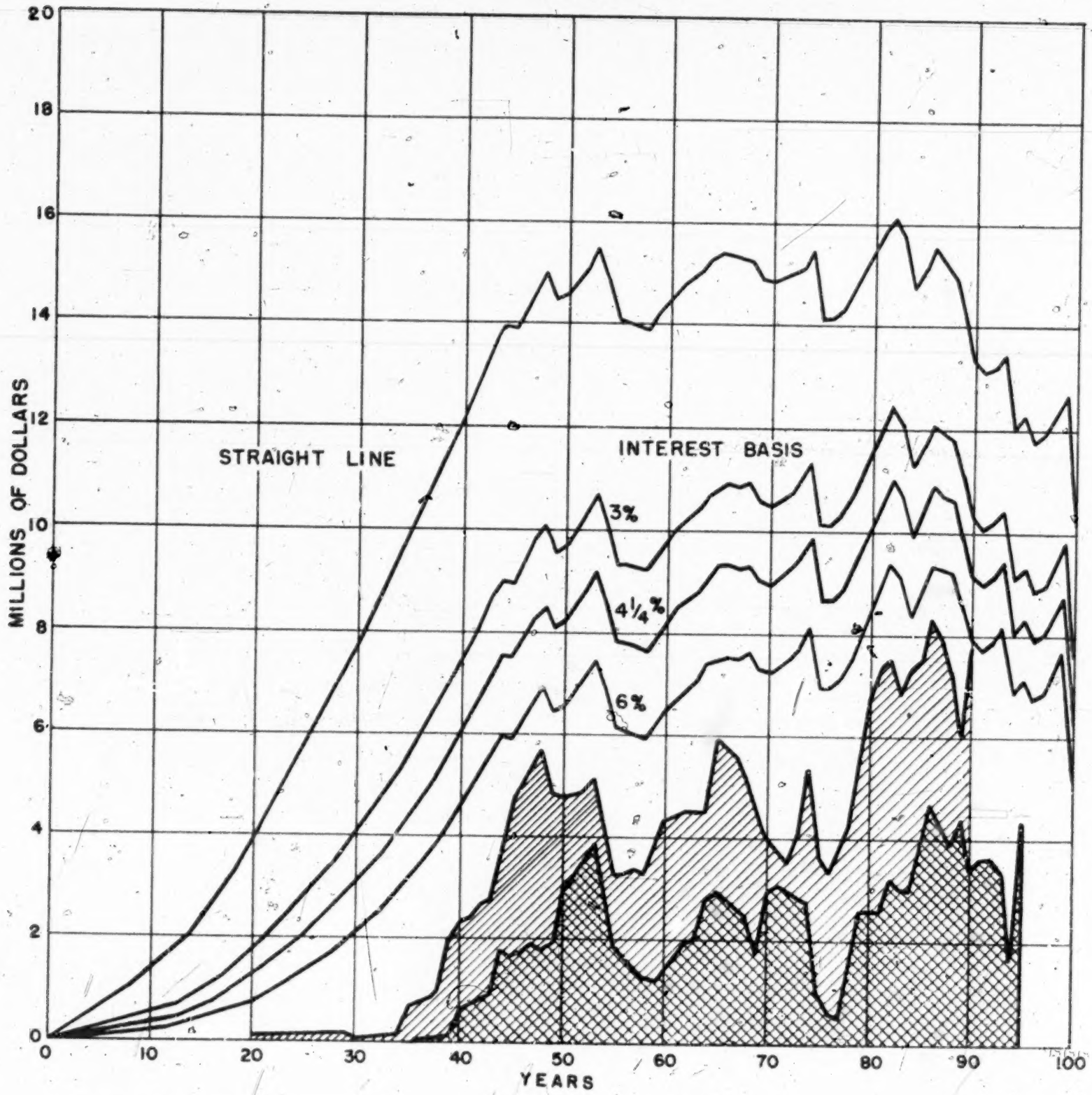
Estimated Retirements							
Five Year Period				Ten Year Period			
Years	Dollars	Years	Dollars	Years	Dollars	Years	Dollars
1911-1916	0	1961-1966	3,243,636	1911-1921	0	1961-1971	4,865,867
1912-1917	0	1962-1967	3,504,340	1912-1922	0	1962-1972	4,904,315
1913-1918	0	1963-1968	3,921,740	1913-1923	0	1963-1973	5,154,509
1914-1919	0	1964-1969	2,901,136	1914-1924	0	1964-1974	4,117,276
1915-1920	0	1965-1970	1,880,554	1915-1925	21	1965-1975	3,284,374
1916-1921	0	1966-1971	1,622,231	1916-1926	21	1966-1976	3,299,066
1917-1922	0	1967-1972	1,399,975	1917-1927	21	1967-1977	3,359,241
1918-1923	0	1968-1973	1,232,769	1918-1928	21	1968-1978	3,295,765
1919-1924	0	1969-1974	1,216,140	1919-1929	451	1969-1979	3,994,547
1920-1925	21	1970-1975	1,383,820	1920-1930	451	1970-1980	4,336,271
1921-1926	21	1971-1976	1,676,835	1921-1931	451	1971-1981	4,467,908
1922-1927	21	1972-1977	1,959,266	1922-1932	451	1972-1982	4,571,378
1923-1928	21	1973-1978	2,062,996	1923-1933	451	1973-1983	4,502,842
1924-1929	451	1974-1979	2,778,407	1924-1934	484	1974-1984	4,501,792
1925-1930	430	1975-1980	2,952,451	1925-1935	5,150	1975-1985	5,946,759
1926-1931	430	1976-1981	2,791,073	1926-1936	5,150	1976-1986	5,863,727
1927-1932	430	1977-1982	2,612,112	1927-1937	6,467	1977-1987	5,570,086
1928-1933	430	1978-1983	2,439,846	1928-1938	9,701	1978-1988	5,271,983
1929-1934	33	1979-1984	1,723,385	1929-1939	11,058	1979-1989	4,462,504
1930-1935	4,720	1980-1985	2,994,308	1930-1940	93,114	1980-1990	3,975,136
1931-1936	4,720	1981-1986	3,072,654	1931-1941	95,204	1981-1991	3,719,179
1932-1937	6,037	1982-1987	2,957,954	1932-1942	109,172	1982-1992	3,491,840
1933-1938	9,271	1983-1988	2,832,137	1933-1943	120,260	1983-1993	4,169,007
1934-1939	11,025	1984-1989	2,739,119	1934-1944	123,028	1984-1994	5,405,285
1935-1940	88,394	1985-1990	900,828	1935-1945	119,951	1985-1995	3,629,994
1936-1941	90,484	1986-1991	646,525	1936-1946	129,910	1986-1996	8,307,441
1937-1942	103,135	1987-1992	533,866	1937-1947	135,311	1987-1997	3,780,301
1938-1943	110,989	1988-1993	1,336,870	1938-1948	138,082	1988-1998	4,327,750
1939-1944	112,003	1989-1994	2,666,166	1939-1949	140,341	1989-1999	5,577,265
1940-1945	31,557	1990-1995	2,649,166	1940-1950	64,190	1990-2000	6,746,830
1941-1946	39,426	1991-1996	2,660,916	1941-1951	70,186	1991-2001	7,435,226
1942-1947	32,176	1992-1997	3,246,435	1942-1952	91,239	1992-2002	7,552,913
1943-1948	27,093	1993-1998	2,990,880	1943-1953	106,304	1993-2003	6,883,748
1944-1949	28,338	1994-1999	2,911,099	1944-1954	192,142	1994-2004	7,383,151
1945-1950	32,633	1995-2000	4,097,664	1945-1955	693,076	1995-2005	7,515,582
1946-1951	30,760	1996-2001	4,774,310	1946-1956	733,929	1996-2006	8,375,196
1947-1952	59,063	1997-2002	4,306,478	1947-1957	829,855	1997-2007	7,923,102
1948-1953	79,211	1998-2003	3,892,868	1948-1958	1,014,528	1998-2008	7,287,583
1949-1954	163,804	1999-2004	4,472,052	1949-1959	2,039,146	1999-2009	6,070,687
1950-1955	660,443	2000-2005	3,417,918	1950-1960	2,347,952	2000-2010	7,782,400
1951-1956	703,169	2001-2006	3,600,886	1951-1961	2,467,178		
1952-1957	770,792	2002-2007	3,616,624	1952-1962	2,688,366		
1953-1958	935,317	2003-2008	3,394,715	1953-1963	2,759,296		
1954-1959	1,875,342	2004-2009	1,598,635	1954-1964	3,842,163		
1955-1960	1,687,509	2005-2010	4,364,482	1955-1965	4,590,071		
1956-1961	1,764,009			1956-1966	5,007,645		
1957-1962	1,917,574			1957-1967	5,421,914		
1958-1963	1,823,979			1958-1968	5,745,719		
1959-1964	1,966,821			1959-1969	4,867,957		
1960-1965	2,902,562			1960-1970	4,783,116		

59	26,718,502	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
60	26,718,502	14,465,007	54.1	9,781,073	36.6	8,208,656	30.7	6,477,164	24.2
61	26,718,502	14,720,296	55.1	10,053,535	37.6	8,476,073	31.7	6,731,455	25.2
62	26,718,502	14,890,991	55.7	10,249,577	38.4	8,670,261	32.5	6,916,409	25.9
63	26,718,502	15,009,066	56.2	10,398,880	38.9	8,820,082	33.0	7,059,841	26.4
64	26,718,502	15,340,145	57.4	10,765,666	40.3	9,189,274	34.4	7,424,882	27.8
65	26,718,502	15,407,947	57.7	10,880,179	40.7	9,310,880	34.8	7,548,549	28.3
66	26,718,502	15,370,221	57.5	10,892,599	40.8	9,332,126	34.9	7,574,108	28.3
67	26,718,502	15,258,485	57.1	10,831,382	40.5	9,280,265	34.7	7,527,190	28.2
68	26,718,502	15,272,830	57.2	10,894,409	40.8	9,352,281	35.0	7,603,538	28.5
69	26,718,502	14,888,498	55.7	10,560,650	39.5	9,028,681	33.8	7,285,790	27.3
70	26,718,502	14,782,256	55.3	10,494,969	39.3	8,969,418	33.6	7,227,067	27.0
71	26,718,502	14,905,908	55.8	10,657,211	39.9	9,137,530	34.2	7,394,715	27.7
72	26,718,502	14,973,133	56.0	10,767,893	40.3	9,256,360	34.6	7,515,995	28.1
73	26,718,502	15,159,744	56.7	11,001,282	41.2	9,499,626	35.6	7,763,938	29.1
74	26,718,502	15,491,873	58.0	11,387,190	42.6	9,898,749	37.0	8,172,275	30.6
75	26,718,502	14,114,708	52.8	10,075,382	37.7	8,605,541	32.2	6,895,819	25.8
76	26,718,502	14,160,014	53.0	10,146,690	38.0	8,679,842	32.5	6,965,246	26.1
77	26,718,502	14,341,939	53.7	10,356,757	38.8	8,893,920	33.3	7,175,458	26.9
78	26,718,502	14,654,367	54.8	10,703,629	40.1	9,247,600	34.6	7,528,785	28.2
79	26,718,502	15,079,514	56.4	11,173,626	41.8	9,729,030	36.4	8,016,031	30.0
80	26,718,502	15,460,640	57.9	11,613,702	43.5	10,186,900	38.1	8,488,491	31.8
81	26,718,502	15,840,249	59.3	12,065,463	45.2	10,662,712	39.9	8,987,781	33.6
82	26,718,502	16,134,813	60.4	12,445,732	46.6	11,073,701	41.4	9,431,984	35.3
83	26,718,502	15,644,257	58.6	12,052,289	45.1	10,717,037	40.1	9,117,719	34.1
84	26,718,502	14,740,108	55.2	11,233,450	42.0	9,931,622	37.2	8,371,005	31.3
85	26,718,502	15,138,234	56.7	11,692,321	43.8	10,415,102	39.0	8,881,763	33.2
86	26,718,502	15,506,093	58.0	12,134,691	45.4	10,888,863	40.8	9,392,900	35.2
87	26,718,502	15,215,138	56.9	11,931,518	44.7	10,723,945	40.1	9,275,891	34.7
88	26,718,502	14,980,137	56.1	11,778,204	44.1	10,607,972	39.7	9,207,815	34.5
89	26,718,502	14,155,769	53.0	11,030,923	41.3	9,897,703	37.0	8,546,288	32.0
90	26,718,502	13,367,330	50.0	10,297,153	38.5	9,193,176	34.4	7,880,998	29.5
91	26,718,502	13,058,543	48.9	10,021,022	37.5	8,938,359	33.5	7,655,443	28.7
92	26,718,502	13,235,420	49.5	10,222,271	38.3	9,158,376	34.3	7,902,019	29.6
93	26,718,502	13,414,029	50.2	10,431,209	39.0	9,389,476	35.1	8,165,121	30.6
94	26,718,502	12,010,477	45.0	9,064,417	33.9	8,048,237	30.1	6,861,848	25.7
95	26,718,502	12,276,172	45.9	9,325,786	34.9	8,319,242	31.1	7,149,626	26.8
96	26,718,502	11,784,417	44.1	8,837,546	33.1	7,844,315	29.4	6,697,221	25.1
97	26,718,502	11,945,556	44.7	8,987,552	33.6	8,002,097	29.9	6,870,565	25.7
98	26,718,502	12,346,074	46.2	9,381,438	35.1	8,405,964	31.5	7,293,689	27.3
99	26,718,502	12,738,602	47.7	9,779,150	36.6	8,819,005	33.0	7,734,210	28.9
100	26,718,502	10,238,450	38.3	7,296,11[illegible]	27.3	6,356,921	23.8	5,308,483	19.9

PENNSYLVANIA WATER & POWER COMPANY

RESERVE BALANCES ACCUMULATED ON THE STRAIGHT LINE AND ON THE INTEREST BASES AT 3, 4¼ AND 6 PERCENT, COMPARED WITH ESTIMATED RETIREMENTS OF ELECTRIC PLANT INVESTMENT FOR MOVING FIVE AND TEN YEAR PERIODS

1911-2010



ESTIMATED RETIREMENTS FOR MOVING: FIVE YEAR PERIOD ▩; TEN YEAR PERIOD ▨

[240901] Exhibit No. 321 4085

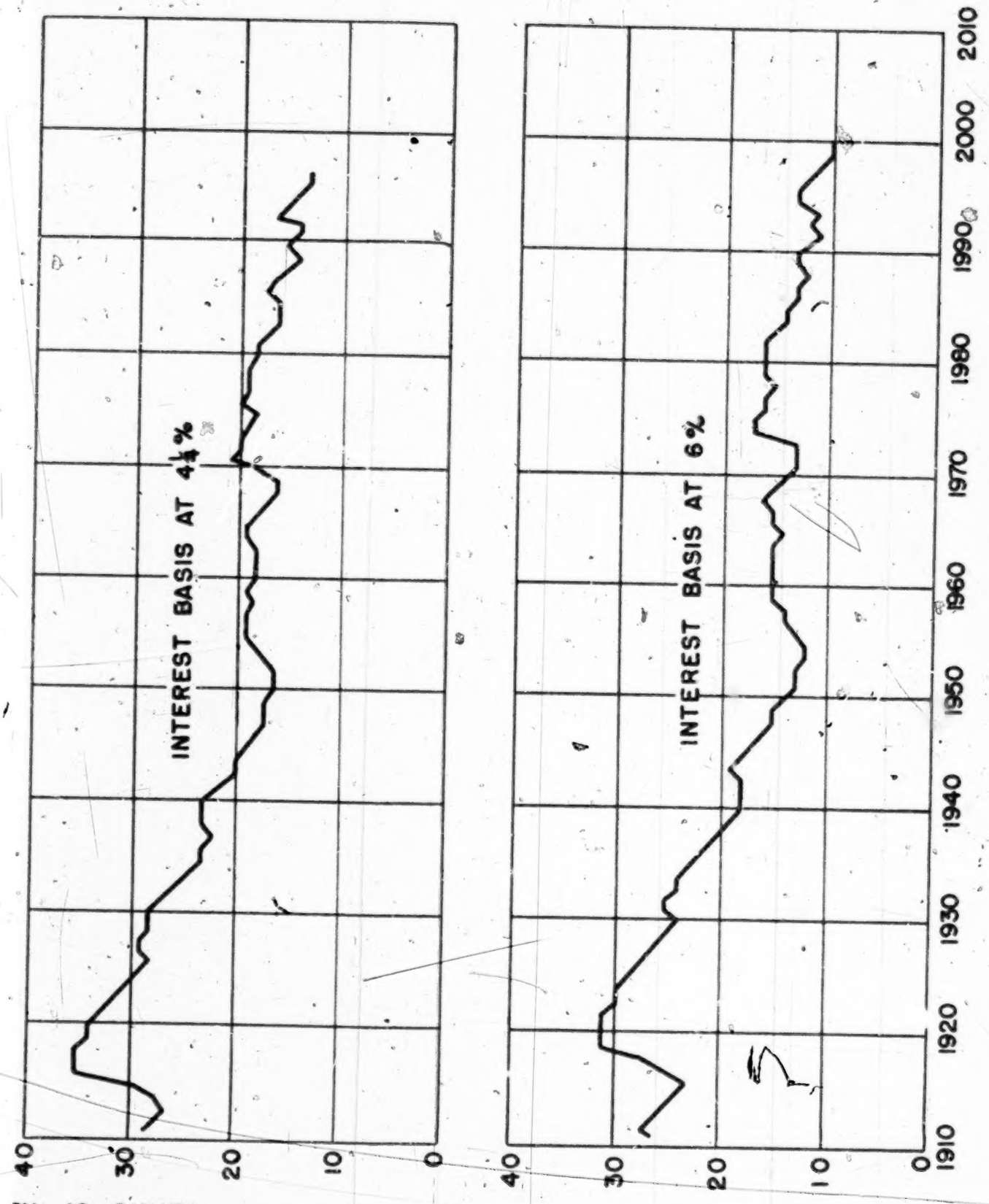

INTEREST BASIS AT 4¼%
INTEREST BASIS AT 6%
YEARS OF RE
0
10
20
30
40
1910
1920
1930
1940
1950
1960
1970
1980
1990
2000
2010

Exhibit No. 321

[24091]

Pennsylvania Water & Power Company

COMPARATIVE RATE BASE STABILITY UNDER ALTERNATIVE TREATMENT OF DEPRECIATION RESERVE BALANCES

Based On Total Plant Investment At Cost Plus $620,000 Working Capital
and Retirements of Property at P. P. C. Life Estimates

1946–2010

Year	Total Investment	Rate Base: Total Investment less Depreciation Reserve Balance under: Straight Line	Compound Interest Basis at 3 Percent	4½ Percent	6 Percent
1946	33,540,738	23,545,830	27,895,315	29,127,407	30,376,471
1947	33,540,738	23,090,437	27,546,818	28,821,187	30,120,850
1948	33,540,738	22,631,803	27,184,625	28,498,712	29,846,651
1949	33,540,738	22,172,456	26,810,854	28,161,819	29,555,287
1950	33,540,738	21,711,150	26,423,910	27,808,649	29,244,482
1951	33,540,738	21,251,703	26,027,217	27,442,328	28,916,888
1952	33,540,738	20,794,437	25,620,804	27,062,620	28,571,819
1953	33,540,738	20,364,106	25,229,134	26,693,709	28,232,981
1954	33,540,738	19,924,907	24,816,846	26,300,251	27,864,945
1955	33,540,738	19,548,194	24,454,675	25,925,557	27,537,312
1956	33,540,738	19,585,386	24,495,544	26,003,991	27,603,928
1957	33,540,738	19,170,846	24,085,907	25,605,879	27,222,805
1958	33,540,738	18,808,138	23,715,814	25,242,679	26,870,649
1959	33,540,738	18,533,464	23,422,651	24,952,077	26,585,398
1960	33,540,738	19,096,776	23,958,679	25,487,111	27,121,018
1961	33,540,738	18,946,135	23,796,835	25,330,931	26,974,822
1962	33,540,738	18,608,095	23,442,737	24,980,714	26,632,455
1963	33,540,738	18,398,952	23,206,913	24,744,510	26,398,443
1964	33,540,738	18,030,683	22,804,888	24,339,141	25,991,264
1965	33,540,738	18,736,837	23,465,225	24,990,967	26,634,078
1966	33,540,738	19,521,937	24,224,319	25,749,442	27,394,406
1967	33,540,738	19,524,971	24,224,119	25,758,086	27,418,288
1968	33,540,738	19,576,532	24,272,440	25,815,624	27,492,130
1969	33,540,738	19,625,663	24,319,781	25,873,178	27,567,973
1970	33,540,738	19,311,213	24,004,961	25,569,597	27,284,785
1971	33,540,738	19,075,731	23,795,665	25,332,082	27,063,574
1972	33,540,738	18,820,442	23,487,203	25,064,665	26,809,283
1973	33,540,738	18,649,747	23,291,161	24,870,477	26,624,329
1974	33,540,738	18,531,672	23,141,858	24,720,656	26,480,897
1975	33,540,738	18,200,593	22,775,072	24,351,464	26,115,856
1976	33,540,738	18,132,791	22,660,559	24,229,858	25,992,189
1977	33,540,738	18,170,517	22,648,139	24,208,612	25,966,630
1978	33,540,738	18,282,253	22,709,356	24,260,473	26,013,548
1979	33,540,738	18,267,908	22,646,329	24,188,457	25,937,200
1980	33,540,738	18,652,240	22,980,088	24,512,057	26,254,948
1981	33,540,738	18,758,482	23,045,769	24,571,320	26,313,671
1982	33,540,738	18,634,830	22,883,527	24,403,208	26,146,023
1983	33,540,738	18,567,605	22,772,845	24,284,378	26,024,743
1984	33,540,738	18,380,994	22,539,456	24,041,112	25,776,800
1985	33,540,738	18,048,865	22,153,548	23,641,989	25,368,463
1986	33,540,738	19,426,030	23,465,356	24,935,197	26,644,919
1987	33,540,738	19,380,724	23,394,048	24,860,896	26,575,492
1988	33,540,738	19,198,799	23,183,981	24,646,818	26,365,280
1989	33,540,738	18,886,371	22,837,109	24,293,138	26,011,953
1990	33,540,738	18,461,224	22,367,112	23,811,708	25,524,707
1991	33,540,738	18,080,098	21,927,036	23,353,838	25,052,247
1992	33,540,738	17,700,489	21,475,275	22,878,026	24,552,957
1993	33,540,738	17,405,925	21,095,006	22,467,037	24,108,754
1994	33,540,738	17,896,481	21,488,449	22,823,701	24,423,019
1995	33,540,738	18,800,630	22,307,288	23,609,116	25,169,733
1996	33,540,738	18,402,504	21,848,417	23,125,636	24,658,975
1997	33,540,738	18,034,645	21,406,049	22,651,875	24,147,838
1998	33,540,738	18,325,600	21,609,220	22,816,793	24,264,847
1999	33,540,738	18,560,601	21,762,534	22,932,766	24,332,923
2000	33,540,738	19,384,969	22,509,815	23,643,035	24,994,450
2001	33,540,738	20,173,408	23,243,585	24,347,562	25,659,740
2002	33,540,738	20,482,195	23,519,716	24,602,379	25,885,295
2003	33,540,738	20,305,318	23,318,467	24,382,362	25,638,719
2004	33,540,738	20,126,709	23,109,449	24,151,262	25,375,617
2005	33,540,738	21,530,261	24,476,321	25,492,501	26,678,890
2006	33,540,738	21,264,566	24,214,952	25,221,496	26,391,112
2007	33,540,738	21,756,321	24,703,192	25,696,423	26,843,517
2008	33,540,738	21,595,182	24,553,186	25,538,641	26,670,173
2009	33,540,738	21,194,664	24,159,300	25,134,774	26,247,049
2010	33,540,738	20,802,136	23,761,588	24,721,733	25,806,528

Pennsylvania Water & Power Company

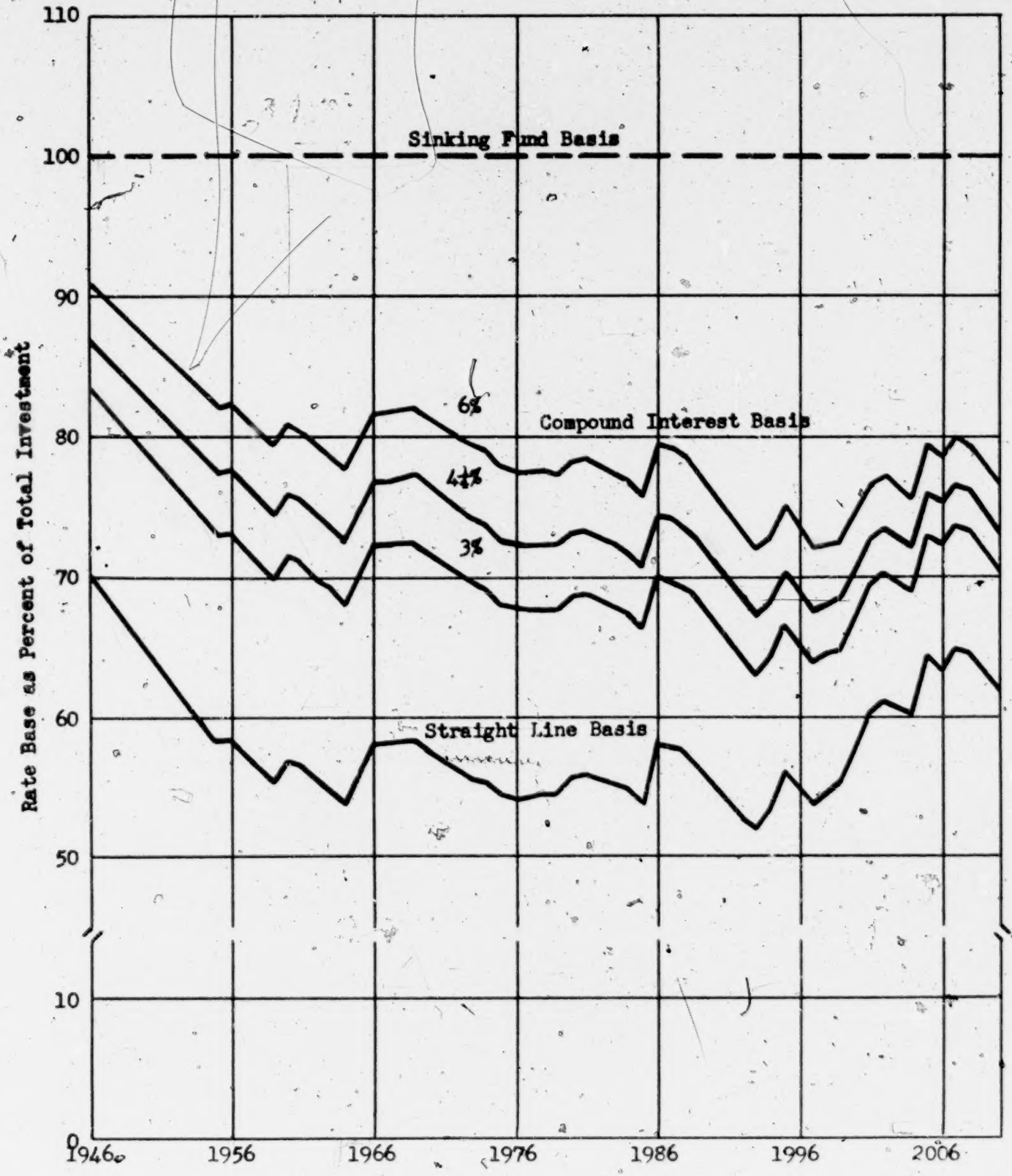
PERCENTAGE FLUCTUATIONS IN RATE BASE ON THE SINKING FUND BASIS COMPARED WITH PERCENTAGE FLUCTUATIONS IN RATE BASE ON THE STRAIGHT LINE AND ON THE COMPOUND INTEREST BASES AT 3, 4½ AND 6 PERCENT
1946-2010

(Total Electric Plant Investment in 1946 equals 100 Percent)

Year	Annual Fluctuations in Rate Base				
	Sinking Fund Basis	Straight Line Basis	Compound Interest Basis at 3%	Compound Interest Basis at 4½%	Compound Interest Basis at 6%
1946	100.0	70.2	83.2	86.8	90.6
1947	100.0	68.8	82.1	85.9	89.8
1948	100.0	67.5	81.1	85.0	89.0
1949	100.0	66.1	79.9	84.0	88.1
1950	100.0	64.7	78.8	82.9	87.2
1951	100.0	63.4	77.6	81.8	86.2
1952	100.0	62.0	76.4	80.7	85.2
1953	100.0	60.7	75.2	79.6	84.2
1954	100.0	59.4	74.0	78.4	83.1
1955	100.0	58.3	72.9	77.3	82.1
1956	100.0	58.4	73.0	77.5	82.3
1957	100.0	57.2	71.8	76.3	81.2
1958	100.0	56.1	70.7	75.3	80.1
1959	100.0	55.3	69.8	74.4	79.3
1960	100.0	56.9	71.4	76.0	80.9
1961	100.0	56.5	71.0	75.5	80.4
1962	100.0	55.5	69.9	74.5	79.4
1963	100.0	54.9	69.2	73.8	78.7
1964	100.0	53.8	68.0	72.6	77.5
1965	100.0	55.9	70.0	74.5	79.4
1966	100.0	58.2	72.2	76.8	81.7
1967	100.0	58.2	72.2	76.8	81.8
1968	100.0	58.4	72.4	77.0	82.0
1969	100.0	58.5	72.5	77.1	82.2
1970	100.0	57.6	71.6	76.2	81.4
1971	100.0	56.9	71.0	75.5	80.7
1972	100.0	56.1	70.0	74.7	80.0
1973	100.0	55.6	69.4	74.2	79.4
1974	100.0	55.3	69.0	73.7	79.0
1975	100.0	54.3	67.9	72.6	77.9
1976	100.0	54.1	67.6	72.2	77.5
1977	100.0	54.2	67.5	72.2	77.4
1978	100.0	54.5	67.7	72.3	77.6
1979	100.0	54.5	67.5	72.1	77.3
1980	100.0	55.6	68.5	73.1	78.3
1981	100.0	55.9	68.7	73.3	78.5
1982	100.0	55.6	68.2	72.8	78.0
1983	100.0	55.4	67.9	72.4	77.6
1984	100.0	54.8	67.2	71.7	76.9
1985	100.0	53.8	66.1	70.5	75.6
1986	100.0	57.9	70.0	74.3	79.4
1987	100.0	57.8	69.8	74.1	79.2
1988	100.0	57.2	69.1	73.5	78.6
1989	100.0	56.3	68.1	72.4	77.6
1990	100.0	55.0	66.7	71.0	76.1
1991	100.0	53.9	65.4	69.6	74.7
1992	100.0	52.8	64.0	68.2	73.2
1993	100.0	51.9	62.9	67.0	71.9
1994	100.0	53.4	64.1	68.1	72.8
1995	100.0	56.1	66.5	70.4	75.0
1996	100.0	54.9	65.1	69.0	73.5
1997	100.0	53.8	63.8	67.5	72.0
1998	100.0	54.6	64.4	68.0	72.3
1999	100.0	55.3	64.9	68.4	72.6
2000	100.0	57.8	67.1	70.5	74.5
2001	100.0	60.2	69.3	72.6	76.5
2002	100.0	61.1	70.1	73.4	77.2
2003	100.0	60.5	69.5	72.7	76.4
2004	100.0	60.0	68.9	72.0	75.7
2005	100.0	64.2	73.0	76.0	79.5
2006	100.0	63.4	72.2	75.2	78.7
2007	100.0	64.9	73.7	76.6	80.0
2008	100.0	64.4	73.2	76.1	79.5
2009	100.0	63.2	72.0	74.9	78.3
2010	100.0	62.0	70.8	73.7	76.9

Pennsylvania Water & Power Company
PERCENTAGE FLUCTUATIONS IN RATE BASE ON THE SINKING FUND BASIS COMPARED WITH PERCENTAGE FLUCTUATIONS IN RATE BASE ON THE STRAIGHT LINE AND ON THE COMPOUND INTEREST BASES AT 3, 4½ AND 6 PERCENT
1946-2010

(Total Electric Plant Investment in 1946 equals 100 Percent)



Pennsylvania Water & Power Company
ANNUAL RATES OF RETURN ACTUALLY EARNABLE AND DEFICIENCY IN RETURN ON THE STRAIGHT LINE BASIS
On Total Investment in Property at Cost Plus $620,000 Working Capital
For Every Tenth Year 1946-2005 and for the Year 2010

Assuming: (1) An intended 6½ percent fair rate of return;
(2) Deduction of straight line accrued depreciation reserve balance;
(3) Retirements of property at F. P. C. life estimates;
(4) No income, two and three percent earnings on reserve investment.

Year	Total Investment in Rate Base	Accumulated Depreciation Reserve on Straight Line Basis	Investment less Depreciation Reserve	6½% Return on Investment	6½% Return on Investment less Reserve	Deficiency in Return	Actually Earnable Rate of Return and Deficiency in Return When the Income from Reserve Investment is: 0 Percent Rate Earned	0 Percent Deficiency (Percent)	2 Percent Rate Earned	2 Percent Deficiency (Percent)	3 Percent Rate Earned	3 Percent Deficiency (Percent)
1946	$33,540,738	$ 9,994,908	$23,545,830	$2,180,148	$1,530,479	$649,669	4.56	1.94	5.16	1.34	5.45	1.05
1955	33,540,738	13,992,544	19,548,194	2,180,148	1,270,633	909,515	3.79	2.71	4.62	1.88	5.04	1.46
1965	33,540,738	14,803,901	18,736,837	2,180,148	1,217,894	962,254	3.63	2.87	4.51	1.99	4.95	1.55
1975	33,540,738	15,340,145	18,200,593	2,180,148	1,183,039	997,109	3.53	2.97	4.44	2.06	4.90	1.60
1985	33,540,738	15,491,873	18,048,865	2,180,148	1,173,176	1,006,972	3.50	3.00	4.42	2.08	4.89	1.61
1995	33,540,738	14,740,108	18,800,630	2,180,148	1,222,041	958,107	3.64	2.86	4.52	1.98	4.96	1.54
2005	33,540,738	12,010,477	21,530,261	2,180,148	1,399,467	780,681	4.17	2.33	4.89	1.61	5.24	1.26
2010	33,540,738	12,738,602	20,802,136	2,180,148	1,352,139	828,009	4.03	2.47	4.79	1.71	5.17	1.33

Pennsylvania Water & Power Company
AVERAGE CUMULATIVE RATES OF RETURN ACTUALLY EARNABLE AND DEFICIENCY IN RETURN ON THE STRAIGHT LINE BASIS
On Total Investment in Property at Cost Plus $620,000 Working Capital
For Periods Ending with Selected Years 1946-2010

Assuming: (1) An intended 6½ percent fair rate of return;
(2) Deduction of straight line accrued depreciation reserve balance;
(3) Retirements of property at F. P. C. life estimates;
(4) No income, two and three percent earnings on reserve investment.

Period	Average Investment in Rate Base	Average Accumulated Depreciation Reserve on Straight Line Basis	Average Investment less Depreciation Reserve	6½% Return on Investment	6½% Return on Investment less Reserve	Deficiency in Return	Actually Earnable Rate of Return and Deficiency in Return When the Income from Reserve Investment is: 0 Percent Rate Earned	0 Percent Deficiency (Percent)	2 Percent Rate Earned	2 Percent Deficiency (Percent)	3 Percent Rate Earned	3 Percent Deficiency (Percent)
1946	$33,540,738	$ 9,994,908	$23,545,830	$2,180,148	$1,530,479	$649,669	4.56	1.94	5.16	1.34	5.45	1.05
1946-1951	33,540,738	11,140,175	22,400,563	2,180,148	1,456,037	724,111	4.34	2.16	5.00	1.50	5.34	1.16
1946-1955	33,540,738	12,037,236	21,503,502	2,180,148	1,397,728	782,420	4.17	2.33	4.89	1.61	5.25	1.25
1946-1959	33,540,738	12,745,534	20,795,204	2,180,148	1,351,688	828,460	4.03	2.47	4.79	1.71	5.17	1.33
1946-1964	33,540,738	13,315,817	20,224,921	2,180,148	1,314,620	865,528	3.92	2.58	4.71	1.79	5.11	1.39
1946-1969	33,540,738	13,490,761	20,049,977	2,180,148	1,303,249	876,899	3.89	2.61	4.69	1.81	5.10	1.40
1946-1974	33,540,738	13,692,868	19,847,870	2,180,148	1,290,112	890,036	3.85	2.65	4.67	1.83	5.07	1.43
1946-1979	33,540,738	13,933,611	19,607,127	2,180,148	1,274,463	905,685	3.80	2.70	4.63	1.87	5.05	1.45
1946-1984	33,540,738	14,062,880	19,477,858	2,180,148	1,266,061	914,087	3.77	2.73	4.61	1.89	5.03	1.47
1946-1989	33,540,738	14,118,528	19,422,210	2,180,148	1,262,444	917,704	3.76	2.74	4.60	1.90	5.02	1.48
1946-1993	33,540,738	14,244,384	19,296,354	2,180,148	1,254,263	925,885	3.74	2.76	4.59	1.91	5.02	1.48
1946-1998	33,540,738	14,339,137	19,201,601	2,180,148	1,248,104	932,044	3.72	2.78	4.58	1.92	5.00	1.50
1946-2004	33,540,738	14,274,331	19,266,407	2,180,148	1,252,316	927,832	3.73	2.77	4.58	1.92	5.01	1.49
1946-2010	33,540,738	14,081,335	19,459,403	2,180,148	1,264,861	915,287	3.77	2.73	4.61	1.89	5.03	1.47

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Pennsylvania Water & Power Company
ANNUAL RATES OF RETURN ACTUALLY EARNABLE AND DEFICIENCY IN RETURN
ON THE COMPOUND INTEREST BASIS AT THREE, FOUR-AND-ONE-QUARTER AND SIX PERCENT
On Total Investment in Property at Cost Plus $620,000 Working Capital
For Every Tenth Year 1946-2005 and for the Year 2010

Assuming: (1) An intended 6½ percent fair rate of return;
(2) Deduction of compound interest accrued depreciation reserve balance;
(3) Retirements of property at F. P. C. life estimates;
(4) No income, two and three percent earnings on reserve investment.

Year	Total Investment in Rate Base	Accumulated Depreciation Reserve on Compound Interest Basis	Investment less Depreciation Reserve	6½% Return on Investment	6½% Return on Investment less Reserve	Deficiency in Return	Actually Earnable Rate of Return and Deficiency in Return When the Income from Reserve Investment is: 0 Percent Rate Earned	0 Percent Deficiency (Percent)	2 Percent Rate Earned	2 Percent Deficiency (Percent)	3 Percent Rate Earned	3 Percent Deficiency (Percent)
Compound Interest at Three Percent												
1946	$33,540,738	$ 5,645,423	$27,895,315	$2,180,148	$1,813,195	$366,953	5.41	1.09	5.75	.75	5.91	.59
1955	33,540,738	9,086,063	24,454,675	2,180,148	1,589,554	590,594	4.74	1.76	5.28	1.22	5.55	.95
1965	33,540,738	10,075,513	23,465,225	2,180,148	1,525,240	654,908	4.55	1.95	5.15	1.35	5.45	1.05
1975	33,540,738	10,765,666	22,775,072	2,180,148	1,480,380	699,768	4.41	2.09	5.05	1.45	5.37	1.13
1985	33,540,738	11,387,190	22,153,548	2,180,148	1,439,981	740,167	4.29	2.21	4.97	1.53	5.31	1.19
1995	33,540,738	11,233,450	22,307,288	2,180,148	1,449,974	730,174	4.32	2.18	4.99	1.51	5.32	1.18
2005	33,540,738	9,064,417	24,476,321	2,180,148	1,590,961	589,187	4.74	1.76	5.28	1.22	5.55	.95
2010	33,540,738	9,779,150	23,761,588	2,180,148	1,544,503	635,645	4.60	1.90	5.18	1.32	5.48	1.02
Compound Interest at Four-and-One-Quarter Percent												
1946	33,540,738	4,413,331	29,127,407	2,180,148	1,893,281	286,867	5.64	.86	5.90	.60	6.04	.46
1955	33,540,738	7,588,181	25,952,557	2,180,148	1,686,916	493,232	5.03	1.47	5.48	1.02	5.71	.79
1965	33,540,738	8,549,771	24,990,967	2,180,148	1,624,413	555,735	4.84	1.66	5.35	1.15	5.61	.89
1975	33,540,738	9,189,274	24,351,464	2,180,148	1,582,845	597,303	4.72	1.78	5.27	1.23	5.54	.96
1985	33,540,738	9,898,749	23,641,989	2,180,148	1,536,729	643,419	4.58	1.92	5.17	1.33	5.47	1.03
1995	33,540,738	9,931,622	23,609,116	2,180,148	1,534,593	645,555	4.58	1.92	5.17	1.33	5.47	1.03
2005	33,540,738	8,048,237	25,492,501	2,180,148	1,657,013	523,135	4.94	1.56	5.42	1.08	5.66	.84
2010	33,540,738	8,819,005	24,721,733	2,180,148	1,606,913	573,235	4.79	1.71	5.32	1.18	5.58	.92
Compound Interest at Six Percent												
1946	33,540,738	3,164,267	30,376,471	2,180,148	1,974,471	205,677	5.89	.61	6.08	.42	6.17	.33
1955	33,540,738	6,003,426	27,537,312	2,180,148	1,789,925	390,223	5.34	1.16	5.70	.80	5.88	.62
1965	33,540,738	6,906,660	26,634,078	2,180,148	1,731,215	448,933	5.16	1.34	5.57	.93	5.78	.72
1975	33,540,738	7,424,882	26,115,856	2,180,148	1,697,531	482,617	5.06	1.44	5.50	1.00	5.72	.78
1985	33,540,738	8,172,275	25,368,463	2,180,148	1,648,950	531,198	4.92	1.58	5.41	1.09	5.65	.85
1995	33,540,738	8,371,005	25,169,733	2,180,148	1,636,033	544,115	4.88	1.62	5.38	1.12	5.63	.87
2005	33,540,738	6,861,848	26,678,890	2,180,148	1,734,128	446,020	5.17	1.33	5.58	.92	5.79	.71
2010	33,540,738	7,734,210	25,806,528	2,180,148	1,677,424	502,724	5.00	1.50	5.46	1.04	5.69	.81

Pennsylvania Water & Power Company
AVERAGE CUMULATIVE RATES OF RETURN ACTUALLY EARNABLE AND DEFICIENCY IN RETURN ON THE COMPOUND INTEREST BASIS AT THREE, FOUR-AND-ONE-QUARTER AND SIX PERCENT
On Total Investment in Property at Cost Plus $620,000 Working Capital
For Periods Ending with Selected Years 1946-2010

Assuming: (1) An intended 6½ percent fair rate of return;
(2) Deduction of compound interest accrued depreciation reserve balance;
(3) Retirements of property at F. P. C. life estimates;
(4) No income, two and three percent earnings on rpeserve investment.

Period	Average Investment in Rate Base	Average Accumulated Depreciation Reserve on Compound Interest Basis	Average Investment less Depreciation Reserve	6½% Return on Investment	6½% Return on Investment less Reserve	Deficiency in Return	Actually Earnable Rate of Return and Deficiency in Return When the Income from Reserve Investment is: 0 Percent Rate Earned	0 Percent Deficiency (Percent)	2 Percent Rate Earned	2 Percent Deficiency (Percent)	3 Percent Rate Earned	3 Percent Deficiency (Percent)
Compound Interest at Three Percent												
1946	$33,540,738	$5,645,423	$27,895,315	$2,180,148	$1,813,195	$366,953	5.41	1.09	5.75	.75	5.91	.59
1946-1951	33,540,738	6,559,282	26,981,456	2,180,148	1,751,795	426,353	5.22	1.28	5.61	.89	5.81	.69
1946-1955	33,540,738	7,339,718	26,201,020	2,180,148	1,703,066	477,082	5.08	1.42	5.52	.98	5.74	.76
1946-1959	33,540,738	7,988,587	25,552,151	2,180,148	1,660,890	519,258	4.95	1.55	5.43	1.07	5.66	.84
1946-1964	33,540,738	8,543,887	24,996,851	2,180,148	1,624,795	555,353	4.84	1.66	5.35	1.15	5.61	.89
1946-1969	33,540,738	8,730,486	24,810,252	2,180,148	1,612,663	567,485	4.81	1.69	5.33	1.17	5.59	.91
1946-1974	33,540,738	8,950,017	24,590,721	2,180,148	1,598,397	581,751	4.77	1.73	5.30	1.20	5.57	.93
1946-1979	33,540,738	9,229,845	24,310,893	2,180,148	1,580,208	599,940	4.71	1.79	5.26	1.24	5.54	.96
1946-1984	33,540,738	9,417,865	24,122,873	2,180,148	1,567,987	612,161	4.67	1.83	5.23	1.27	5.51	.99
1946-1989	33,540,738	9,580,889	23,959,849	2,180,148	1,557,390	622,758	4.64	1.84	5.21	1.29	5.50	1.00
1946-1993	33,540,738	9,734,686	23,806,052	2,180,148	1,547,393	632,755	4.61	1.89	5.19	1.31	5.48	1.02
1946-1998	33,540,738	9,930,362	23,610,376	2,180,148	1,534,674	643,474	4.58	1.92	5.17	1.33	5.47	1.03
1946-2004	33,540,738	10,001,526	23,539,212	2,180,148	1,530,049	650,099	4.56	1.94	5.16	1.34	5.45	1.05
1946-2010	33,540,738	9,930,245	23,610,493	2,180,148	1,534,682	645,466	4.58	1.92	5.17	1.33	5.47	1.03
Compound Interest at Four-and-One-Quarter Percent												
1946	33,540,738	4,413,331	29,127,407	2,180,148	1,893,281	286,867	5.64	.86	5.90	.60	6.04	.46
1946-1951	33,540,738	5,230,721	28,310,017	2,180,148	1,840,151	339,997	5.49	1.01	5.80	.70	5.96	.54
1946-1955	33,540,738	5,953,814	27,586,924	2,180,148	1,793,150	386,998	5.35	1.15	5.71	.79	5.88	.62
1946-1959	33,540,738	6,564,033	26,976,705	2,180,148	1,753,486	426,662	5.23	1.27	5.62	.88	5.82	.68
1946-1964	33,540,738	7,090,408	26,450,330	2,180,148	1,719,271	460,877	5.13	1.37	5.55	.95	5.76	.74
1946-1969	33,540,738	7,259,756	26,280,982	2,180,148	1,708,264	471,884	5.09	1.41	5.52	.98	5.74	.76
1946-1974	33,540,738	7,461,392	26,079,346	2,180,148	1,695,157	484,991	5.05	1.45	5.49	1.01	5.72	.78
1946-1979	33,540,738	7,730,741	25,809,997	2,180,148	1,677,650	502,498	5.00	1.50	5.46	1.04	5.69	.81
1946-1984	33,540,738	7,916,327	25,624,411	2,180,148	1,665,587	514,561	4.97	1.53	5.44	1.06	5.68	.82
1946-1989	33,540,738	8,046,874	25,493,864	2,180,148	1,657,101	523,047	4.94	1.56	5.42	1.08	5.66	.84
1946-1993	33,540,738	8,244,058	25,296,680	2,180,148	1,644,284	535,864	4.90	1.60	5.39	1.11	5.64	.86
1946-1998	33,540,738	8,460,214	25,080,524	2,180,148	1,630,234	549,914	4.86	1.64	5.36	1.14	5.62	.88
1946-2004	33,540,738	8,569,092	24,971,646	2,180,148	1,623,157	556,991	4.84	1.66	5.35	1.15	5.60	.90
1946-2010	33,540,738	8,538,697	25,002,041	2,180,148	1,625,133	555,015	4.84	1.66	5.35	1.15	5.60	.90
Compound Interest at Six Percent												
1946	33,540,738	3,164,267	30,376,471	2,180,148	1,974,471	205,677	5.89	.61	6.08	.42	6.17	.33
1946-1951	33,540,738	3,863,965	29,676,773	2,180,148	1,928,990	251,158	5.75	.75	5.98	.52	6.10	.40
1946-1955	33,540,738	4,513,969	29,026,769	2,180,148	1,886,740	293,408	5.63	.87	5.90	.60	6.04	.46
1946-1959	33,540,738	5,072,848	28,467,890	2,180,148	1,850,413	329,735	5.52	.98	5.82	.68	5.97	.53
1946-1964	33,540,738	5,558,187	27,982,551	2,180,148	1,818,866	361,282	5.42	1.08	5.75	.75	5.92	.58
1946-1969	33,540,738	5,700,010	27,840,728	2,180,148	1,809,647	370,501	5.40	1.10	5.74	.76	5.91	.59
1946-1974	33,540,738	5,870,495	27,670,283	2,180,148	1,798,568	381,580	5.36	1.14	5.71	.79	5.89	.61
1946-1979	33,540,738	6,115,337	27,425,401	2,180,148	1,782,651	397,497	5.31	1.19	5.67	.83	5.86	.64
1946-1984	33,540,738	6,284,845	27,255,893	2,180,148	1,771,633	408,515	5.28	1.22	5.65	.85	5.84	.66
1946-1989	33,540,738	6,405,603	27,135,135	2,180,148	1,763,784	416,364	5.26	1.24	5.64	.86	5.83	.67
1946-1993	33,540,738	6,599,392	26,941,346	2,180,148	1,751,187	428,961	5.22	1.28	5.61	.89	5.81	.69
1946-1998	33,540,738	6,826,606	26,714,132	2,180,148	1,736,419	443,729	5.18	1.32	5.59	.91	5.79	.71
1946-2004	33,540,738	6,968,946	26,571,792	2,180,148	1,727,166	452,982	5.15	1.35	5.56	.94	5.77	.73
1946-2010	33,540,738	6,981,153	26,559,585	2,180,148	1,726,373	453,775	5.15	1.35	5.57	.93	5.77	.73

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Pennsylvania Water & Power Company
ANNUAL RATES OF RETURN ACTUALLY EARNABLE AND DEFICIENCY IN RETURN
ON THE SINKING FUND BASIS AT THREE, FOUR-AND-ONE-QUARTER AND SIX PERCENT
On Total Investment in Property at Cost Plus $620,000 Working Capital
For Every Tenth Year 1946-2005 and for the Year 2010

Assuming: (1) An intended 6½ percent fair rate of return;
(2) Income deduction of sinking fund interest component;
(3) Retirements of property at F. P. C. life estimates;
(4) No income, two and three percent earnings on reserve investment.

Year	Total Investment in Rate Base	Accumulated Sinking Fund Reserve	6½% Return on Investment	Interest Component - Annual Credit to Depreciation Reserve	Return after Deduction of Interest Component	Deficiency in Return	Actually Earnable Rate of Return and Deficiency in Return When the Income from Reserve Investment is: 0 Percent Rate Earned	0 Percent Deficiency (Percent)	2 Percent Rate Earned	2 Percent Deficiency (Percent)	3 Percent Rate Earned	3 Percent Deficiency (Percent)
Sinking Fund at Three Percent												
1946	$33,540,738	$5,645,423	$2,180,148	$169,363	$2,010,785	$169,363	6.00	.50	6.34	.16	6.50	0.00
1955	33,540,738	9,086,063	2,180,148	272,582	1,907,566	272,582	5.69	.81	6.23	.27	6.50	0.00
1965	33,540,738	10,075,513	2,180,148	302,265	1,877,883	302,265	5.60	.90	6.20	.30	6.50	0.00
1975	33,540,738	10,765,666	2,180,148	322,970	1,857,178	322,970	5.54	.96	6.18	.32	6.50	0.00
1985	33,540,738	11,387,190	2,180,148	341,616	1,838,532	341,616	5.48	1.02	6.16	.34	6.50	0.00
1995	33,540,738	11,233,450	2,180,148	337,004	1,843,144	337,004	5.49	1.01	6.16	.34	6.50	0.00
2005	33,540,738	9,064,417	2,180,148	271,933	1,908,215	271,933	5.69	.81	6.23	.27	6.50	0.00
2010	33,540,738	9,779,150	2,180,148	293,375	1,886,773	293,375	5.63	.87	6.21	.29	6.50	0.00
Sinking Fund at Four-and-One-Quarter Percent												
1946	33,540,738	4,413,331	2,180,148	187,567	1,992,581	187,567	5.94	.56	6.20	.30	6.34	.16
1955	33,540,738	7,588,181	2,180,148	322,498	1,857,650	322,498	5.54	.96	5.99	.51	6.22	.28
1965	33,540,738	8,549,771	2,180,148	363,365	1,816,783	363,365	5.42	1.08	5.93	.57	6.18	.32
1975	33,540,738	9,189,274	2,180,148	390,544	1,789,604	390,544	5.33	1.17	5.88	.62	6.15	.35
1985	33,540,738	9,898,749	2,180,148	420,697	1,759,451	420,697	5.24	1.26	5.83	.67	6.13	.37
1995	33,540,738	9,931,622	2,180,148	422,094	1,758,054	422,094	5.24	1.26	5.83	.67	6.13	.37
2005	33,540,738	8,048,237	2,180,148	342,050	1,838,098	342,050	5.48	1.02	5.96	.54	6.20	.30
2010	33,540,738	8,819,005	2,180,148	374,808	1,805,340	374,808	5.38	1.12	5.91	.59	6.17	.33
Sinking Fund at Six Percent												
1946	33,540,738	3,168,267	2,180,148	189,856	1,990,292	189,856	5.93	.57	6.12	.38	6.21	.29
1955	33,540,738	6,003,426	2,180,148	360,206	1,819,942	360,206	5.43	1.07	5.79	.71	5.97	.53
1965	33,540,738	6,906,660	2,180,148	414,400	1,765,748	414,400	5.26	1.24	5.67	.83	5.88	.62
1975	33,540,738	7,424,882	2,180,148	445,493	1,734,655	445,493	5.17	1.33	5.61	.89	5.83	.67
1985	33,540,738	8,172,275	2,180,148	490,337	1,689,811	490,337	5.04	1.46	5.53	.97	5.77	.73
1995	33,540,738	8,371,005	2,180,148	502,260	1,677,888	502,260	5.00	1.50	5.50	1.00	5.75	.75
2005	33,540,738	6,861,848	2,180,148	411,711	1,768,437	411,711	5.27	1.23	5.68	.82	5.89	.61
2010	33,540,738	7,734,210	2,180,148	464,053	1,716,095	464,053	5.12	1.38	5.58	.92	5.81	.69

Pennsylvania Water & Power Company

AVERAGE CUMULATIVE RATES OF RETURN ACTUALLY EARNABLE AND DEFICIENCY IN RETURN ON THE SINKING FUND BASIS AT THREE, FOUR-AND-ONE-QUARTER AND SIX PERCENT
On Total Investment in Property at Cost Plus $620,000 Working Capital
For Periods Ending with Selected Years 1946-2010

Assuming: (1) An intended 6½ percent fair rate of return;
(2) Income deduction of sinking fund interest component;
(3) Retirements of property at F. P. C. life estimates;
(4) No income, two and three percent earnings on reserve investment.

Period	Average Investment in Rate Base	Average Accumulated Sinking Fund Reserve	6½% Return on Investment	Interest Component - Annual Credit to Depreciation Reserve	Return after Deduction of Interest Component	Deficiency in Return	Actually Earnable Rate of Return and Deficiency in Return When the Income from Reserve Investment is: 0 Percent Rate Earned	0 Percent Deficiency (Percent)	2 Percent Rate Earned	2 Percent Deficiency (Percent)	3 Percent Rate Earned	3 Percent Deficiency (Percent)
Sinking Fund at Three Percent												
1946	$33,540,738	$5,645,423	$2,180,148	$169,363	$2,010,785	$169,363	6.00	.50	6.34	.16	6.50	0.00
1946-1951	33,540,738	6,559,282	2,180,148	196,778	1,983,370	196,778	5.91	.59	6.30	.20	6.50	0.00
1946-1955	33,540,738	7,339,718	2,180,148	220,192	1,959,956	220,192	5.84	.66	6.28	.22	6.50	0.00
1946-1959	33,540,738	7,988,587	2,180,148	239,658	1,940,490	239,658	5.79	.71	6.27	.23	6.50	0.00
1946-1964	33,540,738	8,543,887	2,180,148	256,317	1,923,831	256,317	5.74	.76	6.25	.25	6.50	0.00
1946-1969	33,540,738	8,730,486	2,180,148	261,915	1,918,233	261,915	5.72	.78	6.24	.26	6.50	0.00
1946-1974	33,540,738	8,950,017	2,180,148	268,501	1,911,647	268,501	5.70	.80	6.23	.27	6.50	0.00
1946-1979	33,540,738	9,229,845	2,180,148	276,895	1,903,253	276,895	5.67	.83	6.22	.28	6.50	0.00
1946-1984	33,540,738	9,417,865	2,180,148	282,536	1,897,612	282,536	5.66	.84	6.22	.28	6.50	0.00
1946-1989	33,540,738	9,580,889	2,180,148	287,427	1,892,721	287,427	5.64	.86	6.21	.29	6.50	0.00
1946-1993	33,540,738	9,734,686	2,180,148	292,041	1,888,107	292,041	5.63	.87	6.21	.29	6.50	0.00
1946-1998	33,540,738	9,930,362	2,180,148	297,911	1,882,237	297,911	5.61	.89	6.20	.30	6.50	0.00
1946-2002	33,540,738	10,001,526	2,180,148	300,046	1,880,102	300,046	5.61	.89	6.20	.30	6.50	0.00
1946-2010	33,540,738	9,930,245	2,180,148	297,907	1,882,241	297,907	5.61	.89	6.20	.30	6.50	0.00
Sinking Fund at Four-and-One-Quarter Percent												
1946	33,540,738	4,413,331	2,180,148	187,567	1,992,581	187,567	5.94	.56	6.20	.30	6.34	.16
1946-1951	33,540,738	5,230,721	2,180,148	222,306	1,957,842	222,306	5.84	.66	6.15	.35	6.31	.19
1946-1955	33,540,738	5,953,814	2,180,148	253,037	1,927,111	253,037	5.75	.75	6.11	.39	6.28	.22
1946-1959	33,540,738	6,564,033	2,180,148	278,971	1,901,177	278,971	5.67	.83	6.06	.44	6.26	.24
1946-1964	33,540,738	7,090,408	2,180,148	301,342	1,878,806	301,342	5.60	.90	6.02	.48	6.23	.27
1946-1969	33,540,738	7,259,756	2,180,148	308,540	1,871,608	308,540	5.58	.92	6.01	.49	6.23	.27
1946-1974	33,540,738	7,461,392	2,180,148	317,109	1,863,039	317,109	5.55	.95	6.00	.50	6.22	.28
1946-1979	33,540,738	7,730,741	2,180,148	328,556	1,851,592	328,556	5.52	.98	5.98	.52	6.21	.29
1946-1984	33,540,738	7,916,327	2,180,148	336,444	1,843,704	336,444	5.50	1.00	5.97	.53	6.21	.29
1946-1989	33,540,738	8,046,874	2,180,148	341,992	1,838,156	341,992	5.48	1.02	5.96	.54	6.20	.30
1946-1993	33,540,738	8,244,058	2,180,148	350,372	1,829,776	350,372	5.46	1.04	5.95	.55	6.20	.30
1946-1998	33,540,738	8,460,214	2,180,148	359,559	1,820,589	359,559	5.43	1.07	5.93	.57	6.19	.31
1946-2004	33,540,738	8,569,092	2,180,148	364,186	1,815,962	364,186	5.41	1.09	5.92	.58	6.18	.32
1946-2010	33,540,738	8,538,697	2,180,148	362,895	1,817,253	362,895	5.42	1.08	5.93	.57	6.19	.31
Sinking Fund at Six Percent												
1946	33,540,738	3,164,267	2,180,148	189,856	1,990,292	189,856	5.93	.57	6.12	.38	6.21	.29
1946-1951	33,540,738	3,863,965	2,180,148	231,838	1,948,310	231,838	5.81	.69	6.04	.46	6.16	.34
1946-1955	33,540,738	4,513,969	2,180,148	270,838	1,909,310	270,838	5.69	.81	5.96	.54	6.10	.40
1946-1959	33,540,738	5,072,848	2,180,148	304,371	1,875,777	304,371	5.59	.91	5.89	.61	6.04	.46
1946-1964	33,540,738	5,558,187	2,180,148	333,491	1,846,657	333,491	5.51	.99	5.84	.66	6.01	.49
1946-1969	33,540,738	5,700,010	2,180,148	342,001	1,838,147	342,001	5.48	1.02	5.82	.68	5.99	.51
1946-1974	33,540,738	5,870,455	2,180,148	352,227	1,827,921	352,227	5.45	1.05	5.80	.70	5.98	.52
1946-1979	33,540,738	6,115,337	2,180,148	366,920	1,813,228	366,920	5.41	1.09	5.77	.73	5.96	.54
1946-1984	33,540,738	6,284,845	2,180,148	377,091	1,803,057	377,091	5.38	1.12	5.75	.75	5.94	.56
1946-1989	33,540,738	6,405,603	2,180,148	384,336	1,795,812	384,336	5.35	1.15	5.73	.77	5.92	.58
1946-1993	33,540,738	6,599,392	2,180,148	395,964	1,784,184	395,964	5.32	1.18	5.71	.79	5.91	.59
1946-1998	33,540,738	6,826,606	2,180,148	409,596	1,770,552	409,596	5.28	1.22	5.69	.81	5.89	.61
1946-2004	33,540,738	6,968,946	2,180,148	418,137	1,762,011	418,137	5.25	1.25	5.67	.83	5.87	.63
1946-2010	33,540,738	6,981,153	2,180,148	418,869	1,761,279	418,869	5.25	1.25	5.67	.83	5.87	.63

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Pennsylvania Water & Power Company

AVERAGE CUMULATIVE RATES OF RETURN ACTUALLY EARNABLE AND DEFICIENCY IN RETURN UNDER ALTERNATIVE METHODS OF DEPRECIATION RESERVE ACCRUAL

On Total Investment in Property at Cost Plus $620,000 Working Capital

For Periods Ending with Selected Years 1946-2010

Assuming: (1) An intended 6½ percent fair rate of return;
(2) Deduction of straight line and compound interest accrued depreciation reserve balances; and income deduction of sinking fund interest component;
(3) Retirements of property at F. P. C. life estimates;
(4) No income, two and three percent earnings on reserve investment.

	Actually Earnable Rate of Return and Deficiency in Return with:																	
	No Income from Reserve Investment						Two Percent Earned on Reserve Investment						Three Percent Earned on Reserve Investment					
	Straight Line		Compound Interest		Sinking Fund		Straight Line		Compound Interest		Sinking Fund		Straight Line		Compound Interest		Sinking Fund	
Period	Rate Earned	Deficiency (Percent)	Rate Earned	Deficiency (Percent)	Rate Earned	Deficiency (Percent)	Rate Earned	Deficiency (Percent)	Rate Earned	Deficiency (Percent)	Rate Earned	Deficiency (Percent)	Rate Earned	Deficiency (Percent)	Rate Earned	Deficiency (Percent)	Rate Earned	Deficiency (Percent)
Sinking Fund and Compound Interest at Three Percent																		
1946	4.56	1.94	5.41	1.09	6.00	.50	5.16	1.34	5.75	.75	6.34	.16	5.45	1.05	5.91	.59	6.50	0.00
1946-1951	4.34	2.16	5.22	1.28	5.91	.59	5.00	1.50	5.61	.89	6.30	.20	5.34	1.16	5.81	.69	6.50	0.00
1946-1955	4.17	2.33	5.08	1.42	5.84	.66	4.89	1.61	5.52	.98	6.28	.22	5.25	1.25	5.74	.76	6.50	0.00
1946-1959	4.03	2.47	4.95	1.55	5.79	.71	4.79	1.71	5.49	1.07	6.27	.23	5.17	1.33	5.66	.84	6.50	0.00
1946-1964	3.92	2.58	4.84	1.66	5.74	.76	4.71	1.79	5.35	1.15	6.25	.25	5.11	1.39	5.61	.89	6.50	0.00
1946-1969	3.89	2.61	4.81	1.69	5.72	.78	4.69	1.81	5.33	1.17	6.24	.26	5.10	1.40	5.59	.91	6.50	0.00
1946-1974	3.85	2.65	4.77	1.73	5.70	.80	4.67	1.83	5.30	1.20	6.23	.27	5.07	1.43	5.57	.93	6.50	0.00
1946-1979	3.80	2.70	4.71	1.79	5.67	.83	4.63	1.87	5.26	1.24	6.22	.28	5.05	1.45	5.54	.96	6.50	0.00
1946-1984	3.77	2.73	4.67	1.83	5.66	.84	4.61	1.89	5.23	1.27	6.22	.28	5.03	1.47	5.51	.99	6.50	0.00
1946-1989	3.76	2.74	4.64	1.86	5.64	.86	4.60	1.90	5.21	1.29	6.21	.29	5.02	1.48	5.50	1.00	6.50	0.00
1946-1993	3.74	2.76	4.61	1.89	5.63	.87	4.59	1.91	5.19	1.31	6.21	.29	5.02	1.48	5.48	1.02	6.50	0.00
1946-1998	3.72	2.78	4.58	1.92	5.61	.89	4.58	1.92	5.17	1.33	6.20	.30	5.00	1.50	5.47	1.03	6.50	0.00
1946-2004	3.73	2.77	4.56	1.94	5.61	.89	4.58	1.92	5.16	1.34	6.20	.30	5.01	1.49	5.45	1.05	6.50	0.00
1946-2010	3.77	2.73	4.58	1.92	5.61	.89	4.61	1.89	5.17	1.33	6.20	.30	5.03	1.47	5.47	1.03	6.50	0.00
Sinking Fund and Compound Interest at Four-and-One-Quarter Percent																		
1946	4.56	1.94	5.64	.86	5.94	.56	5.16	1.34	5.90	.60	6.20	.30	5.45	1.05	6.04	.46	6.34	.16
1946-1951	4.34	2.16	5.49	1.01	5.84	.66	5.00	1.50	5.80	.70	6.15	.35	5.34	1.16	5.96	.54	6.31	.19
1946-1955	4.17	2.33	5.35	1.15	5.75	.75	4.89	1.61	5.71	.79	6.11	.39	5.25	1.25	5.88	.62	6.28	.22
1946-1959	4.03	2.47	5.23	1.27	5.67	.83	4.79	1.71	5.62	.88	6.06	.44	5.17	1.33	5.82	.68	6.26	.24
1946-1964	3.92	2.58	5.13	1.37	5.60	.90	4.71	1.79	5.55	.95	6.02	.48	5.11	1.39	5.76	.74	6.23	.27
1946-1969	3.89	2.61	5.09	1.41	5.58	.92	4.69	1.81	5.52	.98	6.01	.49	5.10	1.40	5.74	.76	6.23	.27
1946-1974	3.85	2.65	5.05	1.45	5.55	.95	4.67	1.83	5.49	1.01	6.00	.50	5.07	1.43	5.72	.78	6.22	.28
1946-1979	3.80	2.70	5.00	1.50	5.52	.98	4.63	1.87	5.46	1.04	5.98	.52	5.05	1.45	5.69	.81	6.21	.29
1946-1984	3.77	2.73	4.97	1.53	5.50	1.00	4.61	1.89	5.44	1.06	5.97	.53	5.03	1.47	5.68	.82	6.21	.29
1946-1989	3.76	2.74	4.94	1.56	5.48	1.02	4.60	1.90	5.42	1.08	5.96	.54	5.02	1.48	5.66	.84	6.20	.30
1946-1993	3.74	2.76	4.90	1.60	5.46	1.04	4.59	1.91	5.39	1.11	5.95	.55	5.02	1.48	5.64	.86	6.20	.30
1946-1998	3.72	2.78	4.86	1.64	5.43	1.07	4.58	1.92	5.36	1.14	5.93	.57	5.00	1.50	5.62	.88	6.19	.31
1946-2004	3.73	2.77	4.84	1.66	5.41	1.09	4.58	1.92	5.35	1.15	5.92	.58	5.01	1.49	5.60	.90	6.18	.32
1946-2010	3.77	2.73	4.84	1.66	5.42	1.08	4.61	1.89	5.35	1.15	5.93	.57	5.03	1.47	5.60	.90	6.19	.31
Sinking Fund and Compound Interest at Six Percent																		
1946	4.56	1.94	5.89	.61	5.93	.57	5.16	1.34	6.08	.42	6.12	.38	5.45	1.05	6.17	.33	6.21	.29
1946-1951	4.34	2.16	5.75	.75	5.81	.69	5.00	1.50	5.98	.52	6.04	.46	5.34	1.16	6.10	.40	6.16	.34
1946-1955	4.17	2.33	5.63	.87	5.69	.81	4.89	1.61	5.90	.60	5.96	.54	5.25	1.25	6.04	.46	6.10	.40
1946-1959	4.03	2.47	5.52	.98	5.59	.91	4.79	1.71	5.82	.68	5.89	.61	5.17	1.33	5.97	.53	6.04	.46
1946-1964	3.92	2.58	5.42	1.08	5.51	.99	4.71	1.79	5.75	.75	5.84	.66	5.11	1.39	5.92	.58	6.01	.49
1946-1969	3.89	2.61	5.40	1.10	5.48	1.02	4.69	1.81	5.74	.76	5.82	.68	5.10	1.40	5.91	.59	5.99	.51
1946-1974	3.85	2.65	5.36	1.14	5.45	1.05	4.67	1.83	5.71	.79	5.80	.70	5.07	1.43	5.89	.61	5.98	.52
1946-1979	3.80	2.70	5.31	1.19	5.41	1.09	4.63	1.87	5.67	.83	5.77	.73	5.05	1.45	5.86	.64	5.96	.54
1946-1984	3.77	2.73	5.28	1.22	5.38	1.12	4.61	1.89	5.65	.85	5.75	.75	5.03	1.47	5.84	.66	5.94	.56
1946-1989	3.76	2.74	5.26	1.24	5.35	1.15	4.60	1.90	5.64	.86	5.73	.77	5.02	1.48	5.83	.67	5.92	.58
1946-1993	3.74	2.76	5.22	1.28	5.32	1.18	4.59	1.91	5.61	.89	5.71	.79	5.02	1.48	5.81	.69	5.91	.59
1946-1998	3.72	2.78	5.18	1.32	5.28	1.22	4.58	1.92	5.59	.91	5.69	.81	5.00	1.50	5.79	.71	5.89	.61
1946-2004	3.73	2.77	5.15	1.35	5.25	1.25	4.58	1.92	5.56	.94	5.67	.83	5.01	1.49	5.77	.73	5.87	.63
1946-2010	3.77	2.73	5.15	1.35	5.25	1.25	4.61	1.89	5.57	.93	5.67	.83	5.03	1.47	5.77	.73	5.87	.63

E-6

Pennsylvania Water & Power Company:

ANNUAL RATES OF RETURN ACTUALLY EARNABLE UNDER ALTERNATIVE METHODS OF DEPRECIATION RESERVE ACCRUAL
On Total Investment in Property at Cost Plus $620,000 Working Capital

ON THE STRAIGHT LINE BASIS, AND ON THE COMPOUND INTEREST AND SINKING FUND BASES AT THREE PERCENT
1946 - 2010

Assuming: (1) An intended 6½ percent fair rate of return;
(2) Deduction of straight line and compound interest accrued depreciation reserve balances and income deduction of sinking fund interest component;
(3) Retirements of property at F. P. C. life estimates;
(4) No income, two and three percent earnings on reserve investment.

	No Income from Reserve Investment			2% Earned on Reserve Investment			3% Earned on Reserve Investment		
Year	Straight Line	Compound Interest	Sinking Fund	Straight Line	Compound Interest	Sinking Fund	Straight Line	Compound Interest	Sinking Fund
1946	4.56	5.41	6.00	5.16	5.75	6.34	5.45	5.91	6.50
1947	4.47	5.34	5.96	5.09	5.70	6.32	5.41	5.88	6.50
1948	4.39	5.27	5.93	5.04	5.65	6.31	5.37	5.84	6.50
1949	4.30	5.20	5.90	4.98	5.60	6.30	5.32	5.80	6.50
1950	4.21	5.12	5.86	4.92	5.54	6.28	5.27	5.76	6.50
1951	4.12	5.04	5.83	4.85	5.49	6.28	9.22	5.71	6.50
1952	4.03	4.97	5.79	4.79	5.44	6.26	5.17	5.68	6.50
1953	3.95	4.89	5.76	4.74	5.39	6.26	5.13	5.63	6.50
1954	3.86	4.81	5.72	4.67	5.33	6.24	5.08	5.59	6.50
1955	3.79	4.74	5.69	4.62	5.28	6.23	5.04	5.55	6.50
1956	3.80	4.75	5.69	4.63	5.29	6.23	5.05	5.56	6.50
1957	3.72	4.67	5.65	4.58	5.23	6.21	5.00	5.52	6.50
1958	3.64	4.60	5.62	4.52	5.19	6.21	4.96	5.48	6.50
1959	3.59	4.54	5.59	4.48	5.14	6.19	4.93	5.45	6.50
1960	3.70	4.64	5.64	4.56	5.21	6.21	4.99	5.50	6.50
1961	3.67	4.61	5.63	4.54	5.19	6.21	4.98	5.48	6.50
1962	3.61	4.54	5.60	4.50	5.14	6.20	4.95	5.44	6.50
1963	3.57	4.50	5.58	4.47	5.12	6.20	4.92	5.42	6.50
1964	3.49	4.42	5.54	4.41	5.06	6.18	4.88	5.38	6.50
1965	3.63	4.55	5.60	4.51	5.15	6.20	4.95	5.45	6.50
1966	3.78	4.69	5.67	4.62	5.25	6.23	5.03	5.52	6.50
1967	3.78	4.69	5.67	4.62	5.25	6.23	5.03	5.52	6.50
1968	3.79	4.70	5.67	4.62	5.25	6.22	5.04	5.53	6.50
1969	3.80	4.71	5.67	4.63	5.26	6.22	5.05	5.54	6.50
1970	3.74	4.65	5.65	4.59	5.22	6.22	5.01	5.50	6.50
1971	3.70	4.60	5.62	4.56	5.18	6.20	4.99	5.48	6.50
1972	3.65	4.55	5.60	4.53	5.15	6.20	4.97	5.45	6.50
1973	3.61	4.51	5.58	4.50	5.12	6.19	4.94	5.43	6.50
1974	3.59	4.49	5.57	4.48	5.11	6.19	4.93	5.42	6.50
1975	3.53	4.41	5.54	4.44	5.05	6.18	4.90	5.37	6.50
1976	3.51	4.39	5.53	4.43	5.04	6.18	4.89	5.36	6.50
1977	3.52	4.39	5.53	4.44	5.04	6.18	4.89	5.37	6.50
1978	3.54	4.40	5.53	4.45	5.05	6.18	4.91	5.39	6.50
1979	3.54	4.39	5.53	4.45	5.04	6.18	4.91	5.37	6.50
1980	3.61	4.45	5.55	4.50	5.08	6.18	4.94	5.40	6.50
1981	3.64	4.47	5.56	4.52	5.10	6.19	4.96	5.41	6.50
1982	3.61	4.43	5.55	4.50	5.07	6.19	4.95	5.38	6.50
1983	3.60	4.41	5.54	4.49	5.05	6.18	4.94	5.37	6.50
1984	3.56	4.37	5.52	4.46	5.03	6.18	4.92	5.35	6.50
1985	3.50	4.29	5.48	4.42	4.97	6.16	4.89	5.31	6.50
1986	3.76	4.55	5.60	4.60	5.15	6.20	5.02	5.45	6.50
1987	3.76	4.53	5.59	4.60	5.14	6.20	5.03	5.44	6.50
1988	3.72	4.49	5.57	4.58	5.11	6.19	5.00	5.42	6.50
1989	3.66	4.43	5.54	4.53	5.07	6.18	4.97	5.39	6.50
1990	3.58	4.33	5.50	4.48	5.00	6.17	4.93	5.33	6.50
1991	3.50	4.25	5.46	4.42	4.94	6.15	4.88	5.29	6.50
1992	3.43	4.16	5.42	4.37	4.88	6.14	4.85	5.24	6.50
1993	3.37	4.09	5.39	4.33	4.83	6.13	4.81	5.20	6.50
1994	3.47	4.16	5.42	4.40	4.88	6.14	4.87	5.24	6.50
1995	3.64	4.32	5.49	4.52	4.99	6.16	4.96	5.32	6.50
1996	3.57	4.23	5.45	4.47	4.93	6.15	4.92	5.28	6.50
1997	3.50	4.15	5.41	4.42	4.87	6.13	4.89	5.24	6.50
1998	3.55	4.19	5.43	4.46	4.90	6.14	4.91	5.26	6.50
1999	3.60	4.22	5.45	4.49	4.92	6.15	4.94	5.27	6.50
2000	3.76	4.36	5.51	4.60	5.02	6.17	5.03	5.35	6.50
2001	3.91	4.50	5.58	4.71	5.11	6.19	5.11	5.42	6.50
2002	3.97	4.56	5.60	4.75	5.16	6.20	5.14	5.46	6.50
2003	3.94	4.52	5.58	4.73	5.10	6.19	5.13	5.44	6.50
2004	3.90	4.48	5.57	4.70	5.10	6.19	5.10	5.41	6.50
2005	4.17	4.74	5.69	4.89	5.28	6.23	5.24	5.55	6.50
2006	4.12	4.69	5.67	4.85	5.25	6.23	5.22	5.52	6.50
2007	4.22	4.79	5.71	4.92	5.32	6.24	5.27	5.58	6.50
2008	4.19	4.76	5.70	4.90	5.30	6.24	5.26	5.56	6.50
2009	4.11	4.68	5.66	4.85	5.24	6.22	5.21	5.52	6.50
2010	4.03	4.60	5.63	4.79	5.18	6.21	5.17	5.48	6.50

F-1

[24100]

Exhibit No. 321

4095

Pennsylvania Water & Power Company

ANNUAL RATES OF RETURN ACTUALLY EARNABLE ON TOTAL INVESTMENT IN PROPERTY AT COST PLUS $620,
ON THE STRAIGHT LINE BASIS, AND ON THE COMPOUND INTEREST AND SINKING FUND BASES AT T
1946-2010

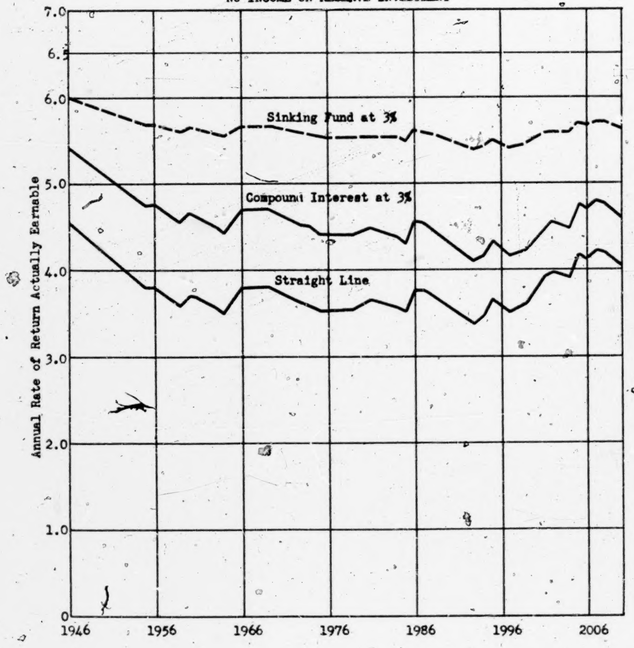
Assuming: (1) An intended 6½ percent fair rate of return;
(2) Deduction of straight line and compound interest accrued deprec
reserve balances and income deduction of sinking fund interest
(3) Retirements of property at F. P. C. life estimates

er Company
N PROPERTY AT COST PLUS $620,000 WORKING CAPITAL
T AND SINKING FUND BASES AT THREE PERCENT

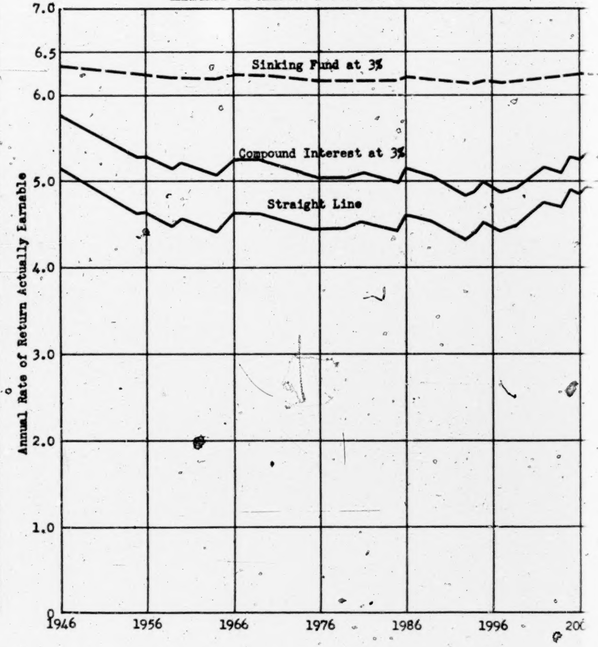
f return;
pound interest accrued depreciation
ion of sinking fund interest component;
. life estimates

F-2

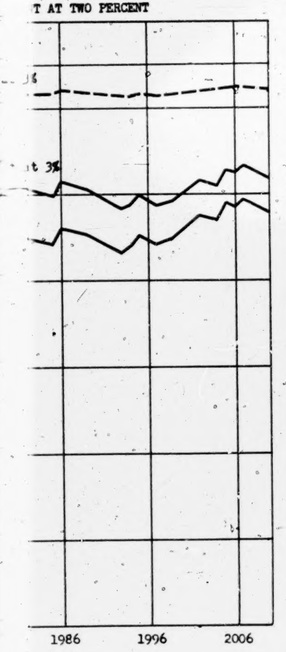
NO INCOME ON RESERVE INVESTMENT



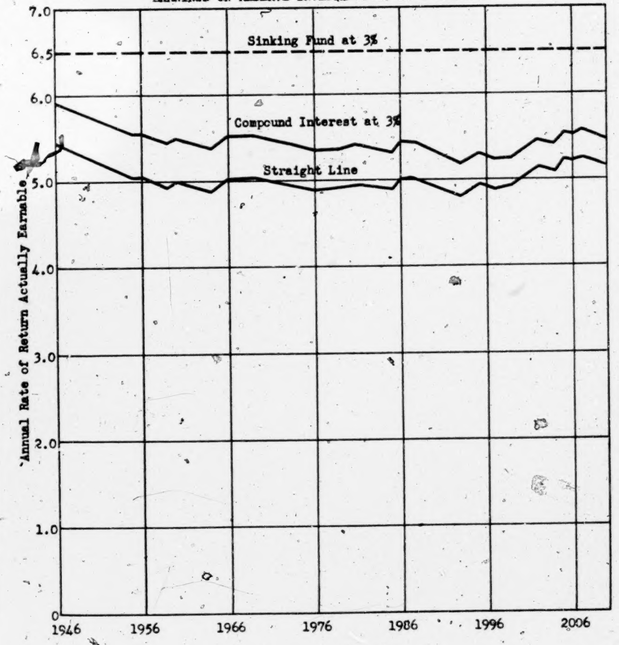
EARNINGS ON RESERVE INVESTMENT AT TWO PERCENT



T AT TWO PERCENT



EARNINGS ON RESERVE INVESTMENT AT THREE PERCENT



ANNUAL RATES OF RETURN ACTUALLY EARNABLE UNDER ALTERNATIVE METHODS OF DEPRECIATION RESERVE ACCRUAL
On Total Investment in Property at Cost Plus $620,000 Working Capital

ON THE STRAIGHT LINE BASIS, AND ON THE COMPOUND INTEREST AND SINKING FUND BASES AT FOUR-AND-ONE-QUARTER PERCENT
1946 - 2010

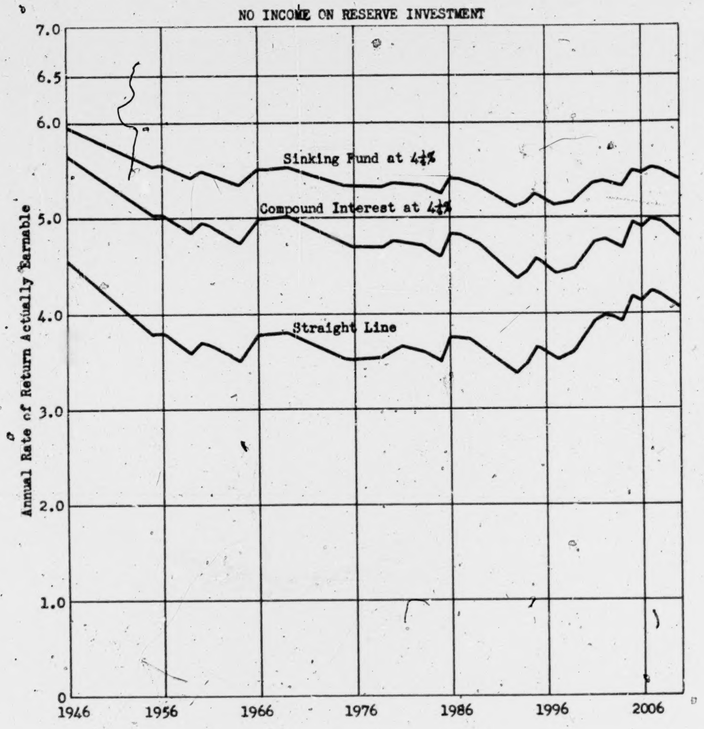
Assuming: (1) An intended 6½ percent fair rate of return;
(2) Deduction of straight line and compound interest accrued depreciation reserve balances and income deduction of sinking fund interest component;
(3) Retirements of property at F. P. C. life estimates;
(4) No income, two and three percent earnings on reserve investment.

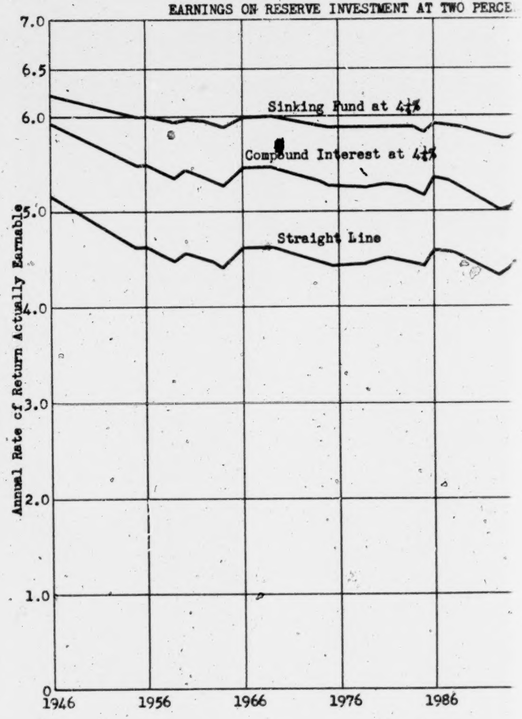
	No Income from Reserve Investment			2% Earned on Reserve Investment			3% Earned on Reserve Investment		
Year	Straight Line	Compound Interest	Sinking Fund	Straight Line	Compound Interest	Sinking Fund	Straight Line	Compound Interest	Sinking Fund
1946	4.56	5.64	5.94	5.16	5.90	6.20	5.45	6.04	6.34
1947	4.47	5.59	5.90	5.09	5.87	6.18	5.41	6.02	6.33
1948	4.39	5.52	5.86	5.04	5.82	6.16	5.37	5.97	6.31
1949	4.30	5.46	5.82	4.98	5.78	6.14	5.32	5.94	6.30
1950	4.21	5.39	5.77	4.92	5.73	6.11	5.27	5.90	6.28
1951	4.12	5.32	5.73	4.85	5.68	6.09	5.22	5.87	6.28
1952	4.03	5.24	5.68	4.79	5.63	6.07	5.17	5.82	6.26
1953	3.95	5.17	5.63	4.74	5.58	6.04	5.13	5.78	6.24
1954	3.86	5.10	5.58	4.67	5.53	6.01	5.08	5.75	6.23
1955	3.79	5.03	5.54	4.62	5.48	5.99	5.04	5.71	6.22
1956	3.80	5.04	5.54	4.63	5.49	5.99	5.05	5.72	6.22
1957	3.72	4.96	5.49	4.58	5.43	5.96	5.00	5.67	6.20
1958	3.64	4.89	5.45	4.52	5.38	5.94	4.96	5.63	6.19
1959	3.59	4.84	5.41	4.48	5.35	5.92	4.93	5.61	6.18
1960	3.70	4.94	5.48	4.56	5.42	5.96	4.99	5.66	6.20
1961	3.67	4.91	5.46	4.54	5.40	5.95	4.98	5.65	6.20
1962	3.61	4.84	5.42	4.50	5.35	5.93	4.95	5.61	6.19
1963	3.57	[illegible]	5.38	4.47	5.32	5.90	4.92	5.59	6.17
1964	3.49	4.72	5.33	4.41	5.27	5.88	4.88	5.54	6.15
1965	3.63	4.84	5.42	4.51	5.35	5.93	4.95	5.61	6.18
1966	3.78	4.99	5.51	4.62	5.45	5.97	5.03	5.69	6.21
1967	3.78	4.99	5.51	4.62	5.45	5.97	5.03	5.69	6.21
1968	3.79	5.00	5.52	4.62	5.46	5.98	5.04	5.69	6.21
1969	3.80	5.01	5.53	4.63	5.47	5.99	5.05	5.70	6.22
1970	3.74	4.96	5.49	4.59	5.44	5.97	5.01	5.67	6.17
1971	3.70	4.91	5.46	4.56	5.40	5.95	4.99	5.65	6.20
1972	3.65	4.86	5.43	4.53	5.37	5.94	4.97	5.62	6.19
1973	3.61	4.82	5.40	4.50	5.34	5.92	4.94	5.59	6.17
1974	3.59	4.79	5.38	4.48	5.32	5.91	4.93	5.58	6.17
1975	3.53	4.72	5.33	4.44	5.27	5.88	4.90	5.54	6.15
1976	3.51	4.70	5.32	4.43	5.26	5.87	4.89	5.53	6.15
1977	3.52	4.69	5.32	4.44	5.25	5.88	4.89	5.52	6.15
1978	3.54	4.70	5.32	4.45	5.25	5.87	4.91	5.53	6.15
1979	3.54	4.69	5.31	4.45	5.25	5.87	4.91	5.53	6.15
1980	3.61	4.75	5.35	4.50	5.29	5.89	4.94	5.56	6.16
1981	3.64	4.76	5.36	4.52	5.29	5.89	4.96	5.56	6.16
1982	3.61	4.73	5.34	4.50	5.27	5.88	4.95	5.55	6.16
1983	3.60	4.71	5.33	4.49	5.26	5.88	4.94	5.54	6.16
1984	3.56	4.66	5.30	4.46	5.23	5.87	4.92	5.51	6.15
1985	3.50	4.58	5.24	4.42	5.17	5.83	4.89	5.47	6.13
1986	3.76	4.83	5.41	4.60	5.34	5.92	5.02	5.60	6.18
1987	3.76	4.82	5.40	4.60	5.34	5.92	5.03	5.60	6.18
1988	3.72	4.78	5.37	4.58	5.31	5.90	5.00	5.58	6.17
1989	3.66	4.71	5.33	4.53	5.26	5.88	4.97	5.54	6.16
1990	3.58	4.61	5.27	4.48	5.19	5.85	4.93	5.48	6.14
1991	3.50	4.53	5.21	4.42	5.14	5.82	4.88	5.44	6.12
1992	3.43	4.43	5.15	4.37	5.07	5.79	4.85	5.38	6.10
1993	3.37	4.35	5.10	4.33	5.01	5.76	4.81	5.34	6.09
1994	3.47	4.42	5.14	4.40	5.06	5.77	4.87	5.36	6.10
1995	3.64	4.58	5.24	4.52	5.17	5.83	4.96	5.47	6.13
1996	3.57	4.48	5.18	4.47	5.10	5.80	4.92	5.41	6.11
1997	3.50	4.39	5.12	4.42	5.04	5.77	4.89	5.37	6.10
1998	3.55	4.42	5.14	4.46	5.06	5.78	4.91	5.38	6.10
1999	3.60	4.44	5.16	4.49	5.07	5.79	4.94	5.39	6.11
2000	3.76	4.58	5.25	4.60	5.17	5.84	5.03	5.47	6.14
2001	3.91	4.72	5.34	4.71	5.27	5.89	5.11	5.54	6.16
2002	3.97	4.77	5.37	4.75	5.30	5.90	5.14	5.57	6.17
2003	3.94	4.73	5.34	4.73	5.28	5.89	5.13	5.55	6.16
2004	3.90	4.68	5.31	4.70	5.24	5.87	5.10	5.52	6.15
2005	4.17	4.94	5.48	4.89	5.42	5.96	5.24	5.66	6.20
2006	4.12	4.89	5.45	4.85	5.39	5.95	5.22	5.63	6.19
2007	4.22	4.98	5.51	4.92	5.45	5.98	5.27	5.68	6.21
2008	4.19	4.95	5.49	4.90	5.43	5.97	5.26	5.67	6.21
2009	4.11	4.87	5.43	4.85	5.37	5.93	5.21	5.62	6.18
2010	4.03	4.79	5.38	4.79	5.32	5.91	5.17	5.58	6.17

Pennsylvania Water & Power Company

ANNUAL RATES OF RETURN ACTUALLY EARNABLE ON TOTAL INVESTMENT IN PROPERTY AT CO
ON THE STRAIGHT LINE BASIS, AND ON THE COMPOUND INTEREST AND SINKING FUND BASE
1946-2010

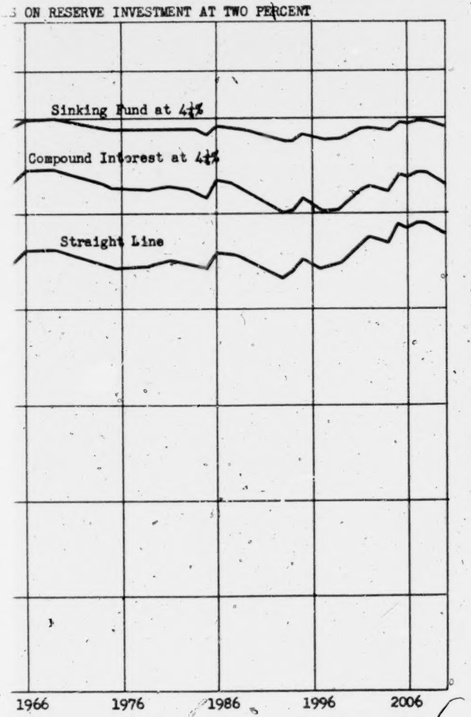
Assuming: (1) An intended 6% percent fair rate of return;
(2) Deduction of straight line and compound interest a
reserve balances and income deduction of sinking f
(3) Retirements of property at F. P. C. life estimates

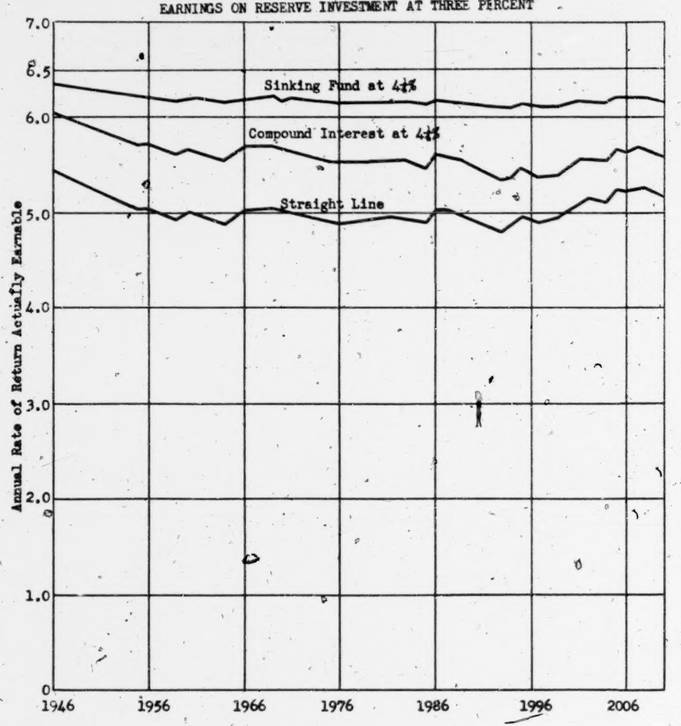




sylvania Water & Power Company
TOTAL INVESTMENT IN PROPERTY AT COST PLUS $620,000 WORKING CAPITAL
OUND INTEREST AND SINKING FUND BASES AT FOUR AND A QUARTER PERCENT
1946-2010

percent fair rate of return;
raight line and compound interest accrued depreciation
s and income deduction of sinking fund interest component;
property at F. P. C. life estimates.





Pennsylvania Water & Power Company

ANNUAL RATES OF RETURN ACTUALLY EARNABLE UNDER ALTERNATIVE METHODS OF DEPRECIATION RESERVE ACCRUAL
On Total Investment in Property at Cost Plus $620,000 Working Capital

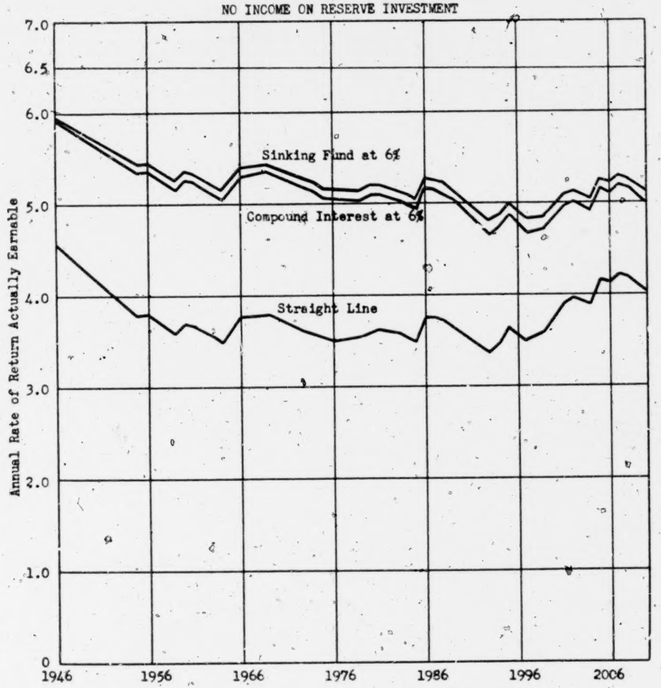
ON THE STRAIGHT LINE BASIS, AND ON THE COMPOUND INTEREST AND SINKING FUND BASES AT SIX PERCENT
1946 - 2010

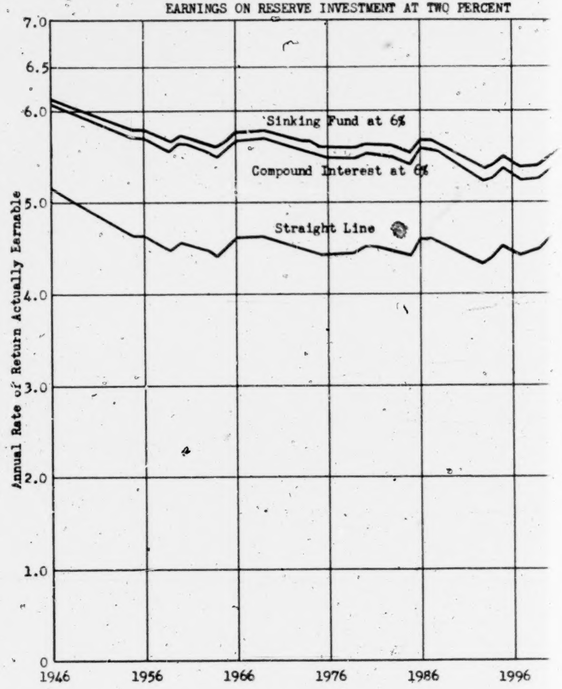
Assuming: (1) An intended 6½ percent fair rate of return;
(2) Deduction of straight line and compound interest accrued depreciation reserve balances and income deduction of sinking fund interest component;
(3) Retirements of property at F. P. C. life estimates;
(4) No income, two and three percent earnings on reserve investment.

	No Income from Reserve Investment			2% Earned on Reserve Investment			3% Earned on Reserve Investment		
Year	Straight Line	Compound Interest	Sinking Fund	Straight Line	Compound Interest	Sinking Fund	Straight Line	Compound Interest	Sinking Fund
1946	4.56	5.89	5.93	5.16	6.08	6.12	5.45	6.17	6.21
1947	4.47	5.84	5.89	5.09	6.04	6.09	5.41	6.15	6.20
1948	4.39	5.78	5.84	5.04	6.00	6.06	5.37	6.11	6.17
1949	4.30	5.73	5.79	4.98	5.96	6.03	5.32	6.09	6.15
1950	4.21	5.67	5.73	4.92	5.93	5.99	5.27	6.05	6.11
1951	4.12	5.60	5.67	4.85	5.88	5.95	5.22	6.01	6.08
1952	4.03	5.54	5.61	4.79	5.84	5.91	5.17	5.98	6.05
1953	3.95	5.47	5.55	4.74	5.79	5.87	5.13	5.94	6.02
1954	3.86	5.40	5.48	4.67	5.74	5.82	5.08	5.91	5.99
1955	3.79	5.34	5.43	4.62	5.70	5.79	5.04	5.88	5.97
1956	3.80	5.35	5.44	4.63	5.70	5.79	5.05	5.88	5.97
1957	3.72	5.28	5.37	4.58	5.66	5.75	5.00	5.84	5.93
1958	3.64	5.21	5.31	4.52	5.61	5.71	4.96	5.81	5.91
1959	3.59	5.15	5.25	4.48	5.56	5.66	4.93	5.77	5.87
1960	3.70	5.26	5.35	4.56	5.64	5.73	4.99	5.83	5.92
1961	3.67	5.23	5.32	4.54	5.62	5.71	4.98	5.82	5.91
1962	3.61	5.16	5.26	4.50	5.57	5.67	4.95	5.78	5.88
1963	3.57	5.12	5.22	4.47	5.55	5.65	4.92	5.76	5.86
1964	3.49	5.04	5.15	4.41	5.49	5.60	4.88	5.72	5.83
1965	3.63	5.16	5.26	4.51	5.57	5.67	4.95	5.78	5.88
1966	3.78	5.31	5.40	4.62	5.68	5.77	5.03	5.86	5.95
1967	3.78	5.31	5.40	4.62	5.68	5.77	5.03	5.86	5.95
1968	3.79	5.33	5.42	4.62	5.69	5.78	5.04	5.87	5.96
1969	3.80	5.34	5.43	4.63	5.70	5.79	5.05	5.87	5.96
1970	3.74	5.29	5.38	4.59	5.66	5.75	5.01	5.85	5.94
1971	3.70	5.24	5.34	4.56	5.63	5.73	4.99	5.82	5.92
1972	3.65	5.20	5.30	4.53	5.60	5.70	4.97	5.80	5.90
1973	3.61	5.16	5.26	4.50	5.57	5.67	4.94	5.78	5.88
1974	3.59	5.13	5.24	4.48	5.55	5.66	4.93	5.76	5.87
1975	3.53	5.06	5.17	4.44	5.50	5.61	4.90	5.72	5.83
1976	3.51	5.04	5.15	4.43	5.49	5.60	4.89	5.72	5.83
1977	3.52	5.03	5.15	4.44	5.48	5.60	4.89	5.71	5.83
1978	3.54	5.04	5.15	4.45	5.49	5.60	4.91	5.71	5.82
1979	3.54	5.03	5.14	4.45	5.48	5.59	4.91	5.71	5.82
1980	3.61	5.09	5.20	4.50	5.52	5.63	4.94	5.74	5.85
1981	3.64	5.10	5.21	4.52	5.53	5.64	4.96	5.75	5.86
1982	3.61	5.07	5.18	4.50	5.51	5.62	4.95	5.73	5.84
1983	3.60	5.04	5.16	4.49	5.49	5.61	4.94	5.71	5.83
1984	3.56	5.00	5.11	4.46	5.46	5.57	4.92	5.69	5.80
1985	3.50	4.92	5.04	4.42	5.41	5.53	4.89	5.65	5.77
1986	3.76	5.16	5.27	4.60	5.57	5.68	5.02	5.78	5.89
1987	3.76	5.15	5.25	4.60	5.57	5.67	5.03	5.77	5.87
1988	3.72	5.11	5.22	4.58	5.54	5.65	5.00	5.75	5.86
1989	3.66	5.04	5.15	4.53	5.49	5.60	4.97	5.71	5.82
1990	3.58	4.95	5.07	4.48	5.43	5.55	4.93	5.67	5.79
1991	3.50	4.85	4.98	4.42	5.36	5.49	4.88	5.61	5.74
1992	3.43	4.76	4.89	4.37	5.30	5.43	4.85	5.56	5.69
1993	3.37	4.67	4.81	4.33	5.23	5.37	4.81	5.51	5.65
1994	3.47	4.73	4.87	4.40	5.27	5.41	4.87	5.55	5.69
1995	3.64	4.88	5.00	4.52	5.38	5.50	4.96	5.63	5.75
1996	3.57	4.78	4.91	4.47	5.31	5.44	4.92	5.58	5.71
1997	3.50	4.68	4.82	4.42	5.24	5.38	4.89	5.52	5.66
1998	3.55	4.70	4.84	4.46	5.25	5.39	4.91	5.53	5.67
1999	3.60	4.72	4.85	4.49	5.27	5.40	4.94	5.55	5.67
2000	3.76	4.84	4.97	4.60	5.35	5.48	5.03	5.61	5.74
2001	3.91	4.97	5.09	4.71	5.44	5.56	5.11	5.68	5.80
2002	3.97	5.02	5.13	4.75	5.48	5.59	5.14	5.70	5.81
2003	3.94	4.97	5.09	4.73	5.44	5.56	5.13	5.68	5.80
2004	3.90	4.92	5.04	4.70	5.41	5.53	5.10	5.65	5.77
2005	4.17	5.17	5.27	4.89	5.58	5.68	5.24	5.79	5.89
2006	4.12	5.11	5.22	4.85	5.54	5.65	5.22	5.75	5.86
2007	4.22	5.20	5.30	4.92	5.60	5.70	5.27	5.80	5.90
2008	4.19	5.17	5.27	4.90	5.58	5.68	5.26	5.79	5.89
2009	4.11	5.09	5.19	4.85	5.52	5.62	5.21	5.74	5.84
2010	4.03	5.00	5.12	4.79	5.46	5.56	5.17	5.69	5.81

Pennsylvania Water & Power Company
ANNUAL RATES OF RETURN ACTUALLY EARNABLE ON TOTAL INVESTMENT IN PROPERTY AT COST PL
ON THE STRAIGHT LINE BASIS, AND ON THE COMPOUND INTEREST AND SINKING FUND B
1946-2010

Assuming: (1) An intended 6½ percent fair rate of return;
(2) Deduction of straight line and compound interest accrue
reserve balances and income deduction of sinking fund i
(3) Retirements of property at F. P. C. life estimates.

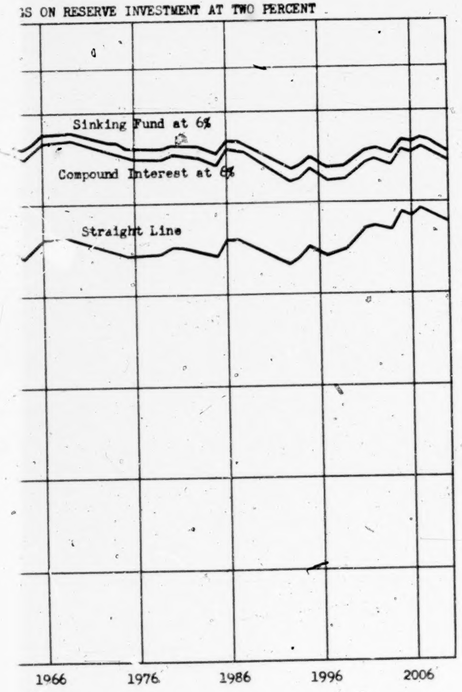


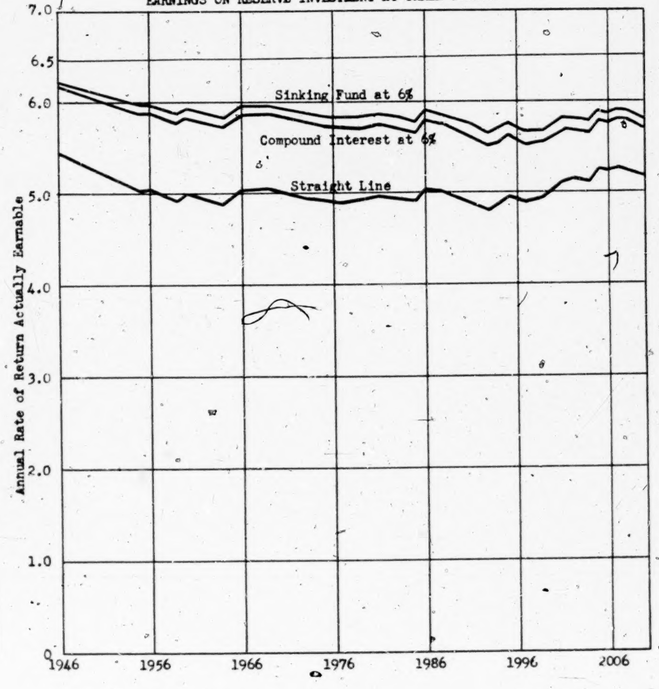


ennsylvania Water & Power Company
ON TOTAL INVESTMENT IN PROPERTY AT COST PLUS $620,000 WORKING CAPITAL
ON THE COMPOUND INTEREST AND SINKING FUND BASES AT SIX PERCENT
1946-2010

6½ percent fair rate of return;
straight line and compound interest accrued depreciation
ances and income deduction of sinking fund interest component;
of property at F. P. C. life estimates.

F-6





G-1

Pennsylvania Water & Power Company
ANNUAL RATES OF RETURN ACTUALLY EARNABLE ON THE STRAIGHT LINE BASIS
OF DEPRECIATION RESERVE ACCRUAL AND RESERVE BALANCE DEDUCTION
Compared with
ANNUAL RATES OF RETURN REQUIRED TO YIELD AN INTENDED FAIR RATE OF RETURN OF 6½%
For Selected Years at Ten-Year Intervals, and the Year 2010,
ASSUMING: NO INCOME, 2% AND 3% EARNINGS ON DEPRECIATION RESERVE BALANCES

	No Income from Reserve Investment Rate of Return		2% Earned on Reserve Investment Rate of Return		3% Earned on Reserve Investment Rate of Return	
Year	Actually Earned	Required to Yield 6½%	Actually Earned	Required to Yield 6½%	Actually Earned	Required to Yield 6½%
1946	4.56	9.27	5.16	8.19	5.45	7.75
1955	3.79	11.15	4.62	9.15	5.04	8.38
1965	3.63	11.64	4.51	9.37	4.95	8.54
1975	3.53	11.97	4.44	9.52	4.90	8.62
1985	3.50	12.07	4.42	9.56	4.89	8.64
1995	3.64	11.61	4.52	9.35	4.96	8.52
2005	4.17	10.13	4.89	8.64	5.24	8.06
2010	4.03	10.48	4.79	8.82	5.17	8.17

Pennsylvania Water & Power Company
AVERAGE CUMULATIVE RATES OF RETURN ACTUALLY EARNABLE ON THE STRAIGHT LINE BASIS
OF DEPRECIATION RESERVE ACCRUAL AND RESERVE BALANCE DEDUCTION
Compared with
AVERAGE CUMULATIVE RATES OF RETURN REQUIRED TO YIELD AN INTENDED FAIR RATE OF RETURN OF 6½%
For Selected Periods, 1946-2010,
ASSUMING: NO INCOME, 2% AND 3% EARNINGS ON DEPRECIATION RESERVE BALANCES

	No Income from Reserve Investment Rate of Return		2% Earned on Reserve Investment Rate of Return		3% Earned on Reserve Investment Rate of Return	
Period	Actually Earned	Required to Yield 6½%	Actually Earned	Required to Yield 6½%	Actually Earned	Required to Yield 6½%
1946	4.56	9.27	5.16	8.19	5.45	7.75
1946-1951	4.34	9.74	5.00	8.45	5.34	7.91
1946-1955	4.17	10.13	4.89	8.64	5.25	8.05
1946-1959	4.03	10.48	4.79	8.82	5.17	8.17
1946-1964	3.92	10.78	4.71	8.97	5.11	8.27
1946-1969	3.89	10.86	4.69	9.01	5.10	8.28
1946-1974	3.85	10.97	4.67	9.05	5.07	8.33
1946-1979	3.80	11.12	4.63	9.13	5.05	8.37
1946-1984	3.77	11.21	4.61	9.16	5.03	8.40
1946-1989	3.76	11.24	4.60	9.18	5.02	8.42
1946-1993	3.74	11.30	4.59	9.20	5.02	8.42
1946-1998	3.72	11.36	4.58	9.22	5.00	8.45
1946-2004	3.73	11.33	4.58	9.22	5.01	8.43
1946-2010	3.77	11.21	4.61	9.16	5.03	[redacted]

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Pennsylvania Water & Power Company

ANNUAL RATES OF RETURN ACTUALLY EARNABLE ON THE 3%, 4½% AND 6% COMPOUND INTEREST BASIS OF DEPRECIATION RESERVE ACCRUAL AND RESERVE BALANCE DEDUCTION

Compared with

ANNUAL RATES OF RETURN REQUIRED TO YIELD AN INTENDED FAIR RATE OF RETURN OF 6½%

For Selected Years at Ten-Year Intervals, and the Year 2010,

ASSUMING: NO INCOME, 2% AND 3% EARNINGS ON DEPRECIATION RESERVE BALANCES

Year	No Income from Reserve Investment — Rate of Return		2% Earned on Reserve Investment — Rate of Return		3% Earned on Reserve Investment — Rate of Return	
	Actually Earned	Required to Yield 6½%	Actually Earned	Required to Yield 6½%	Actually Earned	Required to Yield 6½%
Compound Interest at 3 Percent						
1946	5.41	7.81	5.75	7.35	5.91	7.15
1955	4.74	8.91	5.28	8.00	5.55	7.61
1965	4.55	9.29	5.15	8.20	5.45	7.75
1975	4.41	9.58	5.05	8.37	5.37	7.87
1985	4.29	9.85	4.97	8.50	5.31	7.96
1995	4.32	9.78	4.99	8.47	5.32	7.94
2005	4.74	8.91	5.28	8.00	5.55	7.61
2010	4.60	9.18	5.18	8.15	5.48	7.71
Compound Interest at 4½ Percent						
1946	5.64	7.49	5.90	7.16	6.04	7.00
1955	5.03	8.40	5.48	7.71	5.71	7.40
1965	4.84	8.73	5.35	7.90	5.61	7.53
1975	4.72	8.95	5.27	8.02	5.54	7.63
1985	4.58	9.22	5.17	8.17	5.47	7.72
1995	4.58	9.22	5.17	8.17	5.47	7.72
2005	4.94	8.55	5.42	7.80	5.66	7.46
2010	4.79	8.82	5.32	7.94	5.58	7.57
Compound Interest at 6 Percent						
1946	5.89	7.17	6.08	6.95	6.17	6.85
1955	5.34	7.91	5.70	7.41	5.88	7.19
1965	5.16	8.19	5.57	7.59	5.78	7.31
1975	5.06	8.35	5.50	7.68	5.72	7.39
1985	4.92	8.59	5.41	7.81	5.65	7.48
1995	4.88	8.60	5.38	7.85	5.63	7.50
2005	5.17	8.17	5.58	7.57	5.79	7.30
2010	5.00	8.45	5.46	7.74	5.69	7.43

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Pennsylvania Water & Power Company

AVERAGE CUMULATIVE RATES OF RETURN ACTUALLY EARNABLE ON THE 3%, 4½% AND 6% COMPOUND INTEREST BASIS OF DEPRECIATION RESERVE ACCRUAL AND RESERVE BALANCE DEDUCTION

Compared with

AVERAGE CUMULATIVE RATES OF RETURN REQUIRED TO YIELD AN INTENDED FAIR RATE OF RETURN OF 6½%

For Selected Periods, 1946-2010,

ASSUMING: NO INCOME, 2% AND 3% EARNINGS ON DEPRECIATION RESERVE BALANCES

Period	No Income from Reserve Investment Rate of Return		2% Earned on Reserve Investment Rate of Return		3% Earned on Reserve Investment Rate of Return	
	Actually Earned	Required to Yield 6½%	Actually Earned	Required to Yield 6½%	Actually Earned	Required to Yield 6½%
Compound Interest at 3 Percent						
1946	5.41	7.81	5.75	7.35	5.91	7.15
1946-1951	5.22	8.09	5.61	7.53	5.81	7.27
1946-1955	5.08	8.32	5.52	7.65	5.74	7.36
1946-1959	4.95	8.54	5.43	7.78	5.66	7.46
1946-1964	4.84	8.73	5.35	7.90	5.61	7.53
1946-1969	4.81	8.78	5.33	7.93	5.59	7.56
1946-1974	4.77	8.86	5.30	7.97	5.57	7.59
1946-1979	4.71	8.97	5.26	8.03	5.54	7.63
1946-1984	4.67	9.05	5.23	8.08	5.51	7.67
1946-1989	4.64	9.11	5.21	8.11	5.50	7.68
1946-1993	4.61	9.16	5.19	8.14	5.48	7.71
1946-1998	4.58	9.22	5.17	8.17	5.47	7.72
1946-2004	4.56	9.27	5.16	8.19	5.45	7.75
1946-2010	4.58	9.22	5.17	8.17	5.47	7.72
Compound Interest at 4½ Percent						
1946	5.64	7.49	5.90	7.16	6.04	7.00
1946-1951	5.49	7.70	5.80	7.28	5.96	7.09
1946-1955	5.35	7.90	5.71	7.40	5.88	7.19
1946-1959	5.23	8.08	5.62	7.52	5.82	7.26
1946-1964	5.13	8.24	5.55	7.61	5.76	7.34
1946-1969	5.09	8.30	5.52	7.65	5.74	7.36
1946-1974	5.05	8.37	5.49	7.70	5.72	7.39
1946-1979	5.00	8.45	5.46	7.74	5.69	7.43
1946-1984	4.97	8.50	5.44	7.77	5.68	7.44
1946-1989	4.94	8.55	5.42	7.80	5.66	7.46
1946-1993	4.90	8.62	5.39	7.84	5.64	7.49
1946-1998	4.86	8.69	5.36	7.88	5.62	7.52
1946-2004	4.84	8.73	5.35	7.90	5.60	7.54
1946-2010	4.84	8.73	5.35	7.90	5.60	7.54
Compound Interest at 6 Percent						
1946	5.89	7.17	6.08	6.95	6.17	6.85
1946-1951	5.75	7.35	5.98	7.07	6.10	6.93
1946-1955	5.63	7.50	5.90	7.16	6.04	7.00
1946-1959	5.52	7.65	5.82	7.26	5.97	7.08
1946-1964	5.42	7.80	5.75	7.35	5.92	7.14
1946-1969	5.40	7.82	5.74	7.36	5.91	7.15
1946-1974	5.36	7.88	5.71	7.40	5.89	7.17
1946-1979	5.31	7.96	5.67	7.45	5.86	7.21
1946-1984	5.28	8.00	5.65	7.48	5.84	7.23
1946-1989	5.26	8.03	5.64	7.49	5.83	7.25
1946-1993	5.22	8.09	5.61	7.53	5.81	7.27
1946-1998	5.18	8.16	5.59	7.56	5.79	7.30
1946-2004	5.15	8.20	5.56	7.60	5.77	7.32
1946-2010	5.15	8.20	5.57	7.59	5.77	7.32

4-G-4

Pennsylvania Water & Power Company
ANNUAL RATES OF RETURN ACTUALLY EARNABLE ON THE SINKING FUND BASIS
OF DEPRECIATION RESERVE ACCRUAL AND RESERVE BALANCE DEDUCTION
Compared with
ANNUAL RATES OF RETURN REQUIRED TO YIELD AN INTENDED FAIR RATE OF RETURN OF 6½%
For Selected Years at Ten-Year Intervals, and the Year 2010,
ASSUMING: NO INCOME, 2% AND 3% EARNINGS ON DEPRECIATION RESERVE BALANCES

Year	No Income from Reserve Investment Rate of Return		2% Earned on Reserve Investment Rate of Return		3% Earned on Reserve Investment Rate of Return	
	Actually Earned	Required to Yield 6½%	Actually Earned	Required to Yield 6½%	Actually Earned	Required to Yield 6½%
Sinking Fund at 3 Percent						
1946	6.00	7.04	6.34	6.66	6.50	6.50
1955	5.69	7.43	6.23	6.78	6.50	6.50
1965	5.60	7.54	6.20	6.81	6.50	6.50
1975	5.54	7.63	6.18	6.84	6.50	6.50
1985	5.48	7.71	6.16	6.86	6.50	6.50
1995	5.49	7.70	6.16	6.86	6.50	6.50
2005	5.69	7.43	6.23	6.78	6.50	6.50
2010	5.63	7.50	6.21	6.80	6.50	6.50
Sinking Fund at 4½ Percent						
1946	5.94	7.11	6.20	6.81	6.34	6.66
1955	5.54	7.63	5.99	7.05	6.22	6.79
1965	5.42	7.80	5.93	7.12	6.18	6.84
1975	5.33	7.93	5.88	7.19	6.15	6.87
1985	5.24	8.06	5.83	7.25	6.13	6.89
1995	5.24	8.06	5.83	7.25	6.13	6.89
2005	5.48	7.71	5.96	7.09	6.20	6.81
2010	5.38	7.85	5.91	7.15	6.17	6.85
Sinking Fund at 6 Percent						
1946	5.93	7.12	6.12	6.90	6.21	6.80
1955	5.43	7.78	5.79	7.30	5.97	7.08
1965	5.26	8.03	5.67	7.45	5.88	7.19
1975	5.17	8.17	5.61	7.53	5.83	7.25
1985	5.04	8.38	5.53	7.64	5.77	7.32
1995	5.00	8.45	5.50	7.68	5.75	7.35
2005	5.27	8.02	5.68	7.44	5.89	7.17
2010	5.12	8.25	5.58	7.57	5.69	7.43

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Pennsylvania Water & Power Company
AVERAGE CUMULATIVE RATES OF RETURN ACTUALLY EARNABLE ON THE SINKING FUND BASIS OF DEPRECIATION RESERVE ACCRUAL AND RESERVE BALANCE DEDUCTION
Compared with
AVERAGE CUMULATIVE RATES OF RETURN REQUIRED TO YIELD AN INTENDED FAIR RATE OF RETURN OF 6½%
For Selected Periods, 1946-2010,
ASSUMING: NO INCOME, 2% AND 3% EARNINGS ON DEPRECIATION RESERVE BALANCES

Period	No Income from Reserve Investment — Rate of Return		2% Earned on Reserve Investment — Rate of Return		3% Earned on Reserve Investment — Rate of Return	
	Actually Earned	Required to Yield 6½%	Actually Earned	Required to Yield 6½%	Actually Earned	Required to Yield 6½%
Sinking Fund at 3 Percent						
1946	6.00	7.04	6.34	6.66	6.50	6.50
1946-1951	5.91	7.15	6.30	6.71	6.50	6.50
1946-1955	5.84	7.23	6.28	6.73	6.50	6.50
1946-1959	5.79	7.30	6.27	6.74	6.50	6.50
1946-1964	5.74	7.36	6.25	6.76	6.50	6.50
1946-1969	5.72	7.39	6.24	6.77	6.50	6.50
1946-1974	5.70	7.41	6.23	6.78	6.50	6.50
1946-1979	5.67	7.45	6.22	6.79	6.50	6.50
1946-1984	5.66	7.46	6.22	6.79	6.50	6.50
1946-1989	5.64	7.49	6.21	6.80	6.50	6.50
1946-1993	5.63	7.50	6.21	6.80	6.50	6.50
1946-1998	5.61	7.53	6.20	6.81	6.50	6.50
1946-2004	5.61	7.53	6.20	6.81	6.50	6.50
1946-2010	5.61	7.53	6.20	6.81	6.50	6.50
Sinking Fund at 4½ Percent						
1946	5.94	7.11	6.20	6.81	6.34	6.66
1946-1951	5.84	7.23	6.15	6.87	6.31	6.70
1946-1955	5.75	7.35	6.11	6.91	6.28	6.73
1946-1959	5.67	7.45	6.06	6.97	6.26	6.75
1946-1964	5.60	7.54	6.02	7.02	6.23	6.78
1946-1969	5.58	7.57	6.01	7.03	6.23	6.78
1946-1974	5.55	7.61	6.00	7.04	6.22	6.79
1946-1979	5.52	7.65	5.98	7.07	6.21	6.80
1946-1984	5.50	7.68	5.97	7.08	6.21	6.80
1946-1989	5.48	7.71	5.96	7.09	6.20	6.81
1946-1993	5.46	7.74	5.95	7.10	6.20	6.81
1946-1998	5.43	7.78	5.93	7.12	6.19	6.83
1946-2004	5.41	7.81	5.92	7.14	6.18	6.84
1946-2010	5.42	7.80	5.93	7.12	6.19	6.83
Sinking Fund at 6 Percent						
1946	5.93	7.12	6.12	6.90	6.21	6.80
1946-1951	5.81	7.27	6.04	7.00	6.16	6.86
1946-1955	5.69	7.43	5.96	7.09	6.10	6.93
1946-1959	5.59	7.56	5.89	7.17	6.04	7.00
1946-1964	5.51	7.67	5.84	7.23	6.01	7.03
1946-1969	5.48	7.71	5.82	7.26	5.99	7.05
1946-1974	5.45	7.75	5.80	7.28	5.98	7.07
1946-1979	5.41	7.81	5.77	7.32	5.96	7.09
1946-1984	5.38	7.85	5.75	7.35	5.94	7.11
1946-1989	5.35	7.90	5.73	7.37	5.92	7.14
1946-1993	5.32	7.94	5.71	7.40	5.91	7.15
1946-1998	5.28	8.00	5.69	7.43	5.89	7.17
1946-2004	5.25	8.05	5.67	7.45	5.87	7.20
1946-2010	5.25	8.05	5.67	7.45	5.87	7.20

Pennsylvania Water & Power Company

CUMULATIVE RATES OF RETURN ACTUALLY EARNABLE UNDER ALTERNATIVE METHODS OF DEPRECIATION RESERVE ACCRUAL COMPARED WITH RATES OF RETURN REQUIRED TO YIELD AN INTENDED 6½ PERCENT FAIR RATE OF RETURN

(Arrayed from Lowest to Highest Actually Earnable Rate of Return for the Period 1946-2010)

Method of Depreciation Reserve Accrual	Return on Assets Reflected by Depreciation Reserve Balance							Intended, Actual and Required Rates of Return		
	Straight Line	Compound Interest			Sinking Fund			Intended Return	Return Earnable	Required Return to Yield 6½%
		3%	4¼%	6%	3%	4¼%	6%			
Straight line	0	-	-	-	-	-	-	6.50	3.77	11.21
Compound Interest at 3%	-	0	-	-	-	-	-	6.50	4.58	9.22
Straight line	2%	-	-	-	-	-	-	6.50	4.61	9.16
Compound interest at 4¼%	-	-	0	-	-	-	-	6.50	4.84	8.73
Straight line	3%	-	-	-	-	-	-	6.50	5.03	8.40
Compound interest at 6%	-	-	-	0	-	-	-	6.50	5.15	8.20
Compound interest at 3%	-	2%	-	-	-	-	-	6.50	5.17	8.17
Sinking fund at 6%	-	-	-	-	-	-	0	6.50	5.25	8.05
Compound interest at 4¼%	-	-	2%	-	-	-	-	6.50	5.35	7.90
Sinking fund at 4¼%	-	-	-	-	-	0	-	6.50	5.42	7.80
Compound interest at 3%	-	3%	-	-	-	-	-	6.50	5.47	7.72
Compound interest at 6%	-	-	-	2%	-	-	-	6.50	5.57	7.59
Compound interest at 4¼%	-	-	3%	-	-	-	-	6.50	5.60	7.54
Sinking fund at 3%	-	-	-	-	0	-	-	6.50	5.61	7.53
Sinking fund at 6%	-	-	-	-	-	-	2%	6.50	5.67	7.45
Compound interest at 6%	-	-	-	3%	-	-	-	6.50	5.77	7.32
Sinking fund at 6%	-	-	-	-	-	-	3%	6.50	5.87	7.20
Sinking fund at 4¼%	-	-	-	-	-	2%	-	6.50	5.93	7.12
Sinking fund at 4¼%	-	-	-	-	-	3%	-	6.50	6.19	6.83
Sinking fund at 3%	-	-	-	-	2%	-	-	6.50	6.20	6.81
Sinking fund at 3%	-	-	-	-	3%	-	-	6.50	6.50	6.50

Docket IT-5915

PENNSYLVANIA WATER & POWER COMPANY

CUMULATIVE RATE OF RETURN EARNED ON GROSS INVESTMENT, STRAIGHT LINE DEPRECIATION AND 5% RATE OF RETURN

	1911-1945	1911-1965	1911-1985	1911-2010
1. Gross Investment	$779,433,520	$1,450,248,200	$2,121,063,000	$2,959,581,425
2. Reserve for Depreciation	101,967,804	383,851,030	680,026,711	1,027,493,053
3. Net Investment	677,465,716	1,066,397,230	1,441,036,289	1,932,088,372
4. Return Earned on Net Investment (5% after 1945)	68,575,878	88,022,454	106,754,407	131,307,011
5. 3% Assumed "Income from Reserve Investment"	3,059,034	11,515,531	20,400,801	30,824,792
6. Total of (4) and (5)	$ 71,634,912	$ 99,537,985	$ 127,155,208	$ 162,131,803
7. Rate of Return Earned on Undepreciated Gross Investment	9.2%	6.86%	6.00%	5.48%

Source:

1911 - 1945 Actual investment, depreciation reserve and earnings (Ex. 57).
1946 - 2010 Static investment and cumulative depreciation reserve shown in Dr. Dorau's work papers.

Docket IT-5915

PENNSYLVANIA WATER & POWER COMPANY

ACTUAL RETIREMENTS

Year	Recorded Retirements	Replacements Charged in Lieu of Retirements	Unrecorded Retirements	Duplicate Retirements	Total Retirements
1912			$ 57,900.24		$ 57,900.24
1913			3,315.82		3,315.82
1914			15,122.19		15,122.19
1915			379.57		379.57
1916			440.01		440.01
1917			2,594.28		2,594.28
1918			7,829.73		7,829.73
1919			42,051.28		42,051.28
1920			1,041.68		1,041.68
1921		5,913.42	1,392.42		7,305.84
1922		2,332.36	9,542.31		11,874.67
1923		13,956.86	59,126.89		73,083.75
1924		19,374.86	13,588.29		32,963.15
1925		6,390.74	14,170.59		20,561.33
1926		16,843.57	6,794.71		23,638.28
1927			7,656.04		7,656.04
1928		38,051.46	21,051.90		59,703.36
1929		77,915.74	16,700.38		94,616.12
1930	33,510.00	11,059.53	46,158.64		91,328.17
1931	21,139.00	423.55	1,410.78		22,973.33
1932	44,702.06	1,060.70	2,937.04		48,700.40
1933	51,002.29		3,561.16		54,563.45
1934	55,158.31		4,228.90		59,387.21
1935	56,717.19		(1,330.64)		55,386.55
1936	254,516.97		5,663.61		260,180.58
1937	179,078.84			(375.00)	178,703.84
1938	93,015.16				93,015.16
1939	40,436.95				40,436.95
1940	141,076.41			(617.60)	140,458.81
1941	95,649.97			(2,073.54)	93,576.43
1942	21,699.13			(3,823.25)	17,875.88
1943	12,422.09			(571.07)	11,851.02
1944	31,721.25			(29.25)	31,692.00
1945	61,510.04			(710.51)	60,799.53
Total	$1,193,415.66	$193,922.79	$343,928.42	$(8,210.22)	$1,723,066.65

HOLTWOOD HYDRO ENERGY AND CAPACITY DATA 1941 - 1946

	1941	1942	1943	1944	1945	Avg. 1941-1945	1946
	Mwh.	Mwh.	Mwh.	Mwh.	Mwh.	Mwh.	Mwh.
1. 25 cycle net sendout to Baltimore	278,181	454,340	400,468	347,224	512,247	398,493	405,854
2. 25 cycle net sendout to Lancaster	35,836	34,008	29,038	32,381	29,265	32,106	31,489
3. 25 cycle delivery to freq. changers	10,419	15,574	26,929	21,283	30,277	20,896	16,414
4. 25 cycle received from freq. changers	3,478	2,218	15,545	21,025	9,122	10,278	6,396
5. 25 cycle net hydro generation	320,958	501,704	440,890	379,863	562,667	441,217	447,361
6. 60 cycle net hydro generation	115,546	170,878	146,559	137,583	172,455	148,604	146,919
7. Net Hydro generation	436,504	672,582	587,449	517,446	735,122	589,821(a)	594,280(a)
	Mw.	Mw.	Mw.	Mw.	Mw.	Mw.	Mw.
8. 25 cycle effective hydro capacity	80.3	80.3	80.3	80.3	80.3	80.3	80.3
9. 60 cycle effective hydro capacity	23.7	23.7	23.7	23.7	23.7	23.7	23.7
10. Total effective hydro capacity	104	104	104	104	104	104	104
11. 25 cycle hydro generation on hydro peak hour	84	88	87	84	86	86	85
12. 60 cycle hydro generation on hydro peak hour	25	25	24	26	25	25	25
13. Total hydro generation on hydro peak hour	109	113	111	110	111	111	110
14. 25 cycle delivery to Baltimore (max. hour) (b)	76	76	76	77	77	76	77
15. 25 cycle delivery to Lancaster (max. hour) (b)	9(c)	8	10	7	8(d)	8	7
16. 25 cycle delivery to freq. changers (max. hour)	14	14	14	15	16	15	16
17. 25 cycle received from freq. changers (max. hour)	11	12	13	12	12	12	12
18. 25 cycle delivery to Baltimore (hydro peak hour) (b)	70	64	69	67	69	68	72
19. 25 cycle delivery to Lancaster (hydro peak hour) (b)	4	5	4	2	1	3	3
20. 25 cycle delivery to freq. changers (hydro peak hour)	0	8	2	4	8	5	0
21. 25 cycle sta. uses & transm. losses (hydro peak hour)	10	11	12	11	8	10	10
22. 25 cycle hydro generation (hydro peak hour)	84	88	87	84	86	86	85

Note a - The hydro generations at Holtwood shown for the 5 year average, 1941 to 1945 incl., and for the single year 1946, are approximately equal to the average generation expected from long records of river flow.

Note b - Actual deliveries, which are less than sendouts measured at Holtwood by about 6 to 10%.

Note c - A peak of 17 Mw. was not used due to abnormal conditions. (2 circuits to Baltimore out of service to permit work by Baltimore Company)

Note d - A peak of 9 Mw. was not used due to its occurrence during heat run.

Vol. XII

TRANSCRIPT OF RECORD

(Pages 4111 to 4220)

Supreme Court of the United States

OCTOBER TERM, 1951

No. 428

PENNSYLVANIA WATER AND POWER COMPANY AND SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND, PETITIONERS,

vs.

FEDERAL POWER COMMISSION ET AL.

No. 429

PENNSYLVANIA PUBLIC UTILITY COMMISSION, PETITIONER,

vs.

FEDERAL POWER COMMISSION

ON WRITS OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

PETITIONS FOR CERTIORARI FILED NOVEMBER 16, 1951

CERTIORARI GRANTED FEBRUARY 4, 1952

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Results of Certain Corrections Made to Exhibit 64

Introduction

The allocation of Penn Water's cost made by the Commission Staff and testified to by Mr. G. H. Davis is shown in Exhibit 64.

The effect of the following three corrections to Exhibit 64 was shown by Exhibit 292, consisting of a revised Table VI of Exhibit 64.

1. Revision of the allocation of the Perryville Line between Baltimore Company and the P.R.R.

2. Separation of Manor Substation from "Balance of Transmission" and allocation of this substation in the same manner as the 220 kv. lines.

3. Recognition of the fact that backfeed received from Baltimore Company increased Penn Water's energy resources and thus increased the amount of energy which was supplied by Penn Water to Baltimore Company.

Counsel for the Staff of the Commission supplied photostatic copies of the following revised parts of Exhibit 64: Tables I, II, III, IV, V and V-c. These six revised worksheets are included as part of this report and they are referred to herein as Tables I, II, III, IV, V and V-c.

The results shown in Exhibit 292 also related to changes in Tables V-B and V-d of Exhibit 64 (T-11292-11295 and 11357). These two tables have been revised and are included as part of this report, and they are referred to herein as Tables V-B and V-d.

Purpose of this Report

The purpose of this report is to show the effect of certain corrections made to Exhibit 64 and in the results shown in Exhibit 292. The corrections have been made in several steps; and certain other errors are

listed, but their correction is not carried out in detail.

In this report parts of the data and of the methods of Exhibit 64 are used, but such use in no way indicates agreement with those data or methods. The intent is to show, for illustrative purposes only, by the use of 1944 data and the general methods contained in Exhibit 64, the allocation of the overall amount of rate reduction for Penn Water found in Exhibit 64, with corrections herein made limited by the scope of that exhibit.

Summary of Results

The corrections made all reduce the computed excess of the revenue from Baltimore Company over the allocated cost to Baltimore Company. Starting with Exhibit 292, this excess determined by the Witness Davis was $1,815,848 or 66.8% of the overall reduction shown in that exhibit. Corrections made in this report bring the excess of revenue over costs allocated to Baltimore Company to $1,080,505 or 39.7% of the assumed overall reduction. Additional errors, if corrected, would further reduce the computed excess of revenue over costs allocated to Baltimore Company.

Transmission Losses, Special Facilities, Conowingo Payment (Revision R-1)

This first group of corrections relates to:

(a) Correction of the amount of transmission losses,

(b) Correction for cost of special facilities provided by Safe Harbor for use of the P.R.R. in Maryland, and

(c) Correction in connection with the Conowingo back-water payment.

Revision of Tables

To carry out the correction of these three errors, Tables IV, V, V-A, V-d, VI and VI-a have been revised. The revised sheets are included as part of this report and have been designated by the addition of R-1 to each table number. Wherever necessary, they are referred to as Table IV-R-1, V-A-R-1, etc.

In the preparation of these revised sheets another minor revision has been made in the form thereof, but not in the data or results involved. This has been the addition of the $501,268 (shown in column 6 of Table VI, being there related to the "Energy Supply from Baltimore") as an adjustment to the "Total Cost" for the Pool in line 6, Table IV-R-1 and to the "Total Pool Cost" in column 5 of line 20 of Table V-R-1. This change permits the inclusion of the $501,268 in the energy costs summarized at the bottom of Table V-R-1. The use of this amount, relating to "Energy Supply from Baltimore", in this particular fashion is not an endorsement of its correctness. The change is made to improve the form of presentation.

The revised Table VI-R-1 involves changes in costs allocated to and revenue received from Baltimore Company. The net result of these changes is a reduction of $171,895 in the excess of revenue over costs allocated to Baltimore Company.

Transmission Losses

The witness Davis testified (T-12010) that a change in transmission losses from 23,000 to 18,000 kw. would increase the "Balance available for Baltimore from Holtwood Co.", shown in line 29, Table V-A of Exhibit 64, from 10,820 kw. to 13,760 kw.

Correction in connection with a change in losses from 23,000 kw. to 18,000 kw. has been made beginning with a change in line 10, column 5 of Table V-A-R-1, and continuing in column 1, lines 5 and 6 of Table V-d-R-1 and in column 2, lines 1 to 5 of the same Table. The revised figures in Table V-d-R-1 are then used in making changes in line 26, column 3 of Table V-R-1 and in several of the columns of Table VI-R-1.

Safe Harbor's Special Facilities for P.R.R.

In connection with the excess of cost of 25 cycle, single phase service at Safe Harbor, over the cost of 60 cycle 3 phase service the witness Davis testified (T-11775) "it probably could be said that it is most accurate to segregate this excess cost and assign it proportionately to the railroad service in Pennsylvania and in Maryland on the same basis as the allocation of the Conestoga Substation. If this method were to be followed, it would reduce the pool costs by $46,900, and increase costs allocated to Baltimore by 39 per cent of this amount, or $18,291 and increase costs assigned to the railroad for service in Pennsylvania by 61 per cent, or $28,609."

Corrections have been made to reflect this segregation of this excess cost of 25 cycle facilities at Safe Harbor. In line 2 of Table IV-R-1, which line is entitled "Bill for Safe Harbor Power," the allocation to the Pool, column 6, is reduced and direct allocations are made to the P.R.R. (add $28,609 in col. 4) and to Baltimore (add $18,291 in col. 5). The totals in line 6, columns 4, 5 and 6, are correspondingly changed, and these corrections are carried through Table V-R-1, beginning with line 19 and Table VI-R-1.

- 5 -

Conowingo Backwater Payment

The entire amount of $133,750 paid annually to Penn Water by Susquehanna Electric Company was included in the revenue from Baltimore Company in Table VI of Exhibit 64 and also in Exhibit 292. The inclusion of this amount as revenue from Baltimore Company is incorrect.

The revenue Baltimore Company pays Penn Water is based in part on the amount of net power revenue of Penn Water in the year 1930, with certain adjustments described in Article III(a) of the 1931 Agreement. If the Conowingo backwater agreement had not been made prior to 1930, the amount of net power revenue in that year would have been less and the base figure in the computation of the bill to Baltimore Company would be less. Consequently it is not correct to say that, in the absence of the Conowingo backwater agreement, Baltimore Company would today pay to Penn Water $133,750 or any other amount in excess of what they actually pay.

By the Conowingo agreement, made in 1926, Penn Water gave up certain resources that would otherwise have been available for service to all its customers. It receives in return certain annual payments which are a benefit to Penn Water itself. Either Penn Water should retain this benefit for itself or the payment should serve to reduce the cost to all its customers in proportion to their use of the hydro production facilities at Holtwood.

In Table IV-R-1, the Conowingo payment is shown as a credit against the total cost of service to the Pool and in Table V-R-1 as a credit against the Hydro Production Cost. In Table VI-a-R-1 the payment is omitted from the total of "Revenue shown for Baltimore." The changes carry through to the results shown in Table VI-R-1.

Allocation of Costs Based on Baltimore Company's Use of Capacity in Excess of Dependable Capacity (Revision R-2)

The next change in Exhibits 64 or 292 that is herein considered is the correction of the allocation of costs, shown in Table V, between capacity and energy costs. Mr. Davis allocated 32.5% of the Hydro costs to energy on the basis that 32.5% of the installed capacity was capacity in excess of the dependable capacity and that this excess capacity "can be considered as installed for the primary purpose of producing additional energy during periods of high river flow" (T-1190, line 10). This excess capacity and additional energy produced during periods of high river flow is used by Baltimore Company or is sold as interchange, the revenues from which reduce the payments made by Baltimore Company to Penn Water.

This correction of costs to reflect Baltimore Company's use of the 32.5% of installed capacity in excess of dependable capacity requires revision of Tables V, V-C, and VI. The revised sheets are identified by the addition of R-2 to the table numbers. This revision incorporated changes made previously in this report and shown on sheets designated R-1.

The principal change required to make this correction is that the 32.5% of hydro production costs shown in line 24 of Table V-R-2 should be charged directly to Baltimore Company. The 67.5% of the hydro cost, allocated in Exhibit 64 as capacity cost, must be allocated to all the firm customers on the basis of their use of the dependable hydro capacity. Although this use involves both capacity and energy, and although costs should be allocated in accord with both such uses, Mr. Davis has considered this to be a capacity cost. Consequently it is also considered here to be a capacity cost, avoiding for the present the necessity for allocation of a fixed cost between

capacity and energy.

The variable steam cost and cost of backfeed energy are then the only costs shown in Exhibit 64 that are to be allocated here on the basis of energy.

Since most of the energy that Baltimore Company obtains (376,917,000 kwh. being the revised amount determined by Mr. Davis and shown in Exhibit 292) is not related to its use of the dependable hydro capacity allocated to Baltimore, it is proper to recognize this fact in the allocation of the Holtwood steam cost and the assumed energy cost of backfeed from Baltimore Company. Such recognition might be given by assuming that the energy directly related to Baltimore Company's use of dependable hydro capacity allocated to it is such as to produce a load factor of about 60%, this being somewhere near the average of the other customers. On this basis Baltimore Company would receive, what might be called for purposes of this computation "firm energy," an amount of about 73,000,000 kwh. (8784 hrs. x 13760 kw. x 60%). This amount of "firm energy" is shown on line 5 of Table V-d-R-2. The total firm energy supply, shown in line 6 of the same table, over which we must spread the steam and backfeed cost is then about 810,000,000 kwh. The balance of the energy supplied to Baltimore Company, which amounts to 303,917,000 kwh. and which is, for the present, considered to be associated with Baltimore's use of the excess capacity, is shown in line 7.

Changes can now be made at the bottom of Table V-R 2 in the computation of the unit cost for energy. The unit cost for capacity does not change from that computed for Revision R-1.

In Table VI-R-2, the cost to Baltimore Company for the use of

the capacity in excess of dependable capacity, $781,460, is set forth as a separate item. These services would include considerable capacity that is needed and used by Baltimore Company, energy in the amount of about 303,917,000 kwh., and other electric services. Relating the cost to energy alone results in a rate of 2.6 mills.

As a matter of fact, however, not all of this 303,917,000 kwh., or even all the other services in excess of those supplied from Baltimore Company's allocated portion of the dependable capacity, are supplied from "capacity in excess of dependable capacity." A large part of the services supplied to Baltimore Company is supplied from the dependable capacity allocated to others. In high flow, a considerable part of the energy for Baltimore (including energy used for interchange) is generated by the dependable capacity allocated to the other customers at times when the loads of these other customers are less than their allocated capacities. At other times this dependable capacity allocated to others is used to provide spinning reserve and reactive capacity for Baltimore Company. The cost of these services is not included in the amount of $781,460 directly allocated to Baltimore Company. For this reason the results in Table VI-R-2 are illustrative only of a partial correction on the basis of Baltimore Company's use of facilities. They do not provide a proper allocation of cost, even on the assumption that Baltimore Company does use all the "capacity in excess of dependable capacity," for in fact it uses even more services than this capacity can provide

Redefinition of Use of Pool Facilities (Revision R-3)

Hydro plants such as Holtwood and Safe Harbor are built to provide sources of both capacity and energy as well as other services. They are operated today for those purposes. Mr. Spaulding testified that a 50-50

division of total hydro costs between capacity and energy is reasonable. He also testified that a similar division should be made of the Holtwood steam plant costs and certain transmission plant costs.

An allocation on this basis, without any additional changes, can be made quite simply. The capacity and energy costs at the bottom of Table V-R-1 must be redetermined and corresponding corrections made to VI-R-1. The two revised sheets are designated V-R-3 and VI-R-3. In this revision there are incorporated all the revisions in the R-1 tabulations but none of the revisions in the R-2 tabulations. As compared with Table VI-R-1, Table VI-R-3, shows a reduction in the excess of revenue from Baltimore over the allocated costs amounting to $229,488.

Corrected Statement of Dependable Capacity (Revision R-4)

The next changes that were made relate to dependable capacity: (1) correction of the amount of dependable capacity, and (2) correction of the division of dependable capacity between Holtwood and Safe Harbor. The dependable capacity, resulting from the coordinated operation of Areas 5 and 6, available to the combined Area 6 and Penn Water's and Safe Harbor's firm Pennsylvania customer loads for the condition of most adverse flow at the time of the December peak, and with dependence on drawdown for a relatively small part of this capacity, was 292,000 kw. This results from the deduction of 26,000 kw. made available to Area 5, from the 324,000 kw. shown in Schedule 16 of the Penn Water-Safe Harbor Form 12 Report for 1944. The utilities in Area 5 relied on this 26,000 kw. capacity from Area 6 as their share of the benefits from coordinated operation. The witness Watchorn testified that 100,000 kw. of the Holtwood hydro capacity is dependable and is unrelated to the installed or to the dependable capacity at Safe Harbor.

These corrections in dependable capacity require a complete revision of Table V-A-R-1, revision of lines 5 and 6 of V-d-R-1, and change in the unit cost of capacity on Table V-R-3 (without change in the amount of the capacity and energy costs from those computed previously for the 50-50 split of costs shown on Table V-R-3). These revised tables have been designated by the addition of R-4 to the table numbers. As compared with Table VI-R-3, Table VI-R-4 shows a further increase in costs allocated to Baltimore Company amounting to $333,960.

Up to this point the excess of revenue from Baltimore Company over costs allocated to Baltimore Company has been reduced by about $925,000. This reduction is shown by comparison of the original Table VI of Exhibit 64 with Table VI-R-4 of this report. The approximate difference of $925,000 includes the corrections shown by Exhibit 292 as well as those made herein.

Other Errors

There are other corrections that should be made to Exhibit 64, other than those already discussed in this report. Among these other corrections that should be made are some that depend on information not available from Exhibit 64, Exhibit 292, the worksheets supplied by Commission Counsel in connection with Exhibit 249, or the testimony relating to any of these exhibits. The net result of all the following suggestions is probably not more than $100,000 further reduction in the excess of revenue from Baltimore over costs allocated to Baltimore Company.

The following is not intended to be a complete list of all the corrections that should be made in Exhibit 64.

Table I

Lines 7, 8, 9, 10 (also Manor Substation part of "Balance of

Transmission") - Allocate all 220 kv. facilities 100% to Baltimore.

Lines 11 and 13 - The Perryville line is used for service to the P.R.R.; but when it becomes necessary to make an allocation of its cost to Baltimore Company, then its use for interchange should be considered a use by Baltimore Company and about 95% of the total cost allocated to that Company.

Line 15 - Part of the cost shown in column 6 should be allocated to Baltimore Company on basis of interchange use being a use by Baltimore Company.

Line 22 - Allocate Lehman Farm Substation, included in "Balance of Transmission," to P.P.& L.Co..

Line 22 - The entire amount of disallowance in cost of Transmission Plant as shown in Commission Exhibit 51 has been applied against "Balance of Transmission." In Exhibit 51 not all of these disallowances are applied to the several items of property grouped in Line 22.

Lines 24 and 25 - Intangible and general plant should be distributed among the pool and the special facilities for the several customers in proportion to the sums of lines 3 and 23. This principle of allocation of intangible and general plant was stated by Mr. Davis (T-11781) "In practically every case that I have ever seen, intangible and general plant is spread over the classified items on the ratio of the totals of each classified group."

Table II

The changes to be made in Table I require corresponding changes in all seven lines of Table II.

Table III

The changes in allocation of investment in Table I require cor-

responding changes in lines 8, 9, 11, 14 and 15.

Line 17 - The Administrative and General Expense should be allocated to all customers as well as to the pool, just as in Table V-c it was allocated among Hydro, Steam, and Transmission facilities. The amount of Administrative and General Expense here used is incorrect and does not contain all expenses shown by the Company's reports. The improper deduction of $9,703 from this expense is shown in Table III-a.

Table IV

Line 1 - Show the corrected totals from Table III.

Line 2 - The amount shown is not the actual payment by Penn Water to Safe Harbor in 1944.

Line 3 - The tax allocation (details of which were shown at T-11795) is incorrect. With the data available it is possible and proper to allocate certain taxes between property in Pennsylvania and Maryland.

Table V

The additional corrections to this table are those that result from changes in Tables I, II, III and IV.

Table V-A

Line 1 - Change steam capacity from 26,000 kw. to 28,000 kw.

Lines 16 to 24 - Increase reserve to 15%, but only when dependable capacity is correctly shown as reported in Schedule 16 of FPC Form 12 of Penn Water and Safe Harbor. For the dependable capacity shown in Exhibit 64, no reserve is required.

Line 23 - Show correct P.R.R. load at time of system peak rather than billing demand.

Table V-B

Include daily net backfeed from Baltimore Company and purchased

Pennsylvania interchange among energy resources of Penn Water. Change cost of backfeed energy from Baltimore Company (wherever it may appear in Table VI or revisions of Tables IV and V) to a cost computed on a daily net basis.

Adjust amount of backfeed downward to represent average flow conditions.

Table V-d

Include proper amount of reserve with customers maximum demands; but only when dependable capacity is correctly stated on basis of Penn Water-Safe Harbor Form 12, Schedule 16. Include swing carrying capacity, but only where it is larger than proper reserve.

Use maximum demand of P.R.R. rather than billing demand. Use one hour Coatesville peak.

REVISED WORK SHEETS FOR EXHIBIT 249 (or 292)

Tables	I	Supplied by Commission Counsel
	II	
	III	
	IV	
	V	
	V-c	
	V-B	Corrections based on testimony of Witness Davis
	V-d	

Revised Worksheet
Supplied by
Commission Counsel

Table I

HOLTWOOD AND SUSQUEHANNA AVERAGE PLANT IN SERVICE - 1944
ITEMS ASSIGNED TO INDIVIDUAL CUSTOMERS AND THE POOL

		P.P. & L. Co. 1	P.E. Co. 2	Ed. Lt. & Pr. Co. 3	P.R.R. Co. 4	Baltimore 5	Pool 6	Total Service 7
	Plant In Service							
	Production Plant							
1	Hydro	$	$	$	$	$	$15,847,486	$15,847,486
2	Steam						4,527,533	4,527,533
3	Total Production Plant						$20,375,019	$20,375,019
	Transmission Plant Manor Substation (2/3 Balt., 1/3 Pool)					114,166	57,083	171,249
4	Holtwood - Baltimore Line					$1,371,281		$ 1,371,281
5	Highlandtown Substation					971,877		971,877
6	Baltimore - Gunpowder Line					171,357		171,357
7	Safe Harbor - Westport Line (2/3 Balt., 1/3 Pool)					1,158,300	579,150	1,737,450
8	Safe Harbor - Riverside Line (2/3 Balt., 1/3 Pool)					1,012,710	506,355	1,519,065
9	Washington - Ellicott Line (2/3 Balt., 1/3 Pool)					210,772	105,385	316,157
10	Ellicott Switching Station (2/3 Balt., 1/3 Pool)					43,590	21,794	65,384
11	Safe Harbor - Perryville Line (40% P.R.R., 60% Baltimore)				442,129	663,193		1,105,322
12	Conestoga Substation (61% P.R.R. 39% Baltimore)				719,925	460,280		1,180,205
13	Perryville Switching Station (40% P.R.R., 60% Baltimore)				291	437		728
14	Violet Hill Substation			393,418				393,418
15	Holtwood - York Line (29% Ed. Lt. Pr. Co.)			116,126			388,792	504,918
16	Holtwood - Conestville Line		586,725					586,725
17	Newlinville Switching Station		9,959					9,959
18	Holtwood - Lancaster Line	17,025						17,025
19	Engleside Switching Station	6,635						6,635
20	Donegal and Donegal Twp Switching Stations	12,609						12,609
21	Manheim and South Akron Switching Stations	3,119						3,119
22	Balance of Transmission						1,388,841	1,388,841
23	Total Transmission Plant	$39,418	$596,684	$509,544	1,162,345	6,177,963	3,017,100	$11,533,354
24	Intangible Plant						173,070	173,070
25	General Plant						772,727	772,727
26	Total Plant in Service	$39,418	$596,684	$509,844	1,162,345	6,177,963	24,344,896	$32,861,150
27	Percent of Total	0.1	1.8	1.7	3.5	18.8	74.	100.0

Revised Worksheet
Supplied by
Commission Counsel

Table II

DEVELOPMENT OF RATE BASE
FOR
FACILITIES ASSIGNED TO INDIVIDUAL CUSTOMERS AND THE POOL

		P.P. & L. Co. 1	P.E. Co. 2	Ed. Lt. & Pr. Co. 3	P.R.R. Co. 4	Baltimore 5	Pool 6	Total Service 7
1	Total Plant in Service	$39,418	$596,684	$539,844	1,162,345	6,177,963	$24,344,896	$32,861,150
2	Depreciation Reserve	4,375	106,365	136,034	163,095	1,038,386	6,529,863	7,976,118
3	Net Plant in Service	35,043	490,319	403,810	999,250	5,139,577	17,815,033	24,883,032
	Working Capital							
4	Cash Working Capital	-	2,016	4,032	2,016	23,296	192,640	224,000
5	Materials and Supplies	290	5,224	4,933	10,157	54,556	290,840	366,000
6	Total Working Capital	290	7,240	8,965	12,173	77,852	483,480	590,000
7	Rate Base	$35,333	$497,559	$412,775	1,011,423	5,217,429	18,298,513	$25,473,032

Revised Worksheet
Supplied by
Commission Counsel

Table III

HOLTWOOD AND SUSQUEHANNA OPERATING EXPENSE - 1944
ITEMS ASSIGNED TO INDIVIDUAL CUSTOMERS AND THE POOL

	Holtwood and Susquehanna	P.P. & L. Co. 1	P.E. Co. 2	Ed. Lt. & Pr. Co. 3	P.R.R. Co. 4	Baltimore 5	Pool 6	Total Service 7
	Production Cost Exclusive of Purchased Power							
1	Hydro	$	$	$	$	$	$ 357,980	$ 357,980
2	Steam - Fuel and Water						332,035	332,035
3	Steam - Boiler Plant & Coal Handling Equip. Mt.						53,152	53,152
4	Steam - Other Operating and Maintenance						201,310	201,310
5	Total Production Expenses						944,477	944,477
	Transmission Manor Substation (2/3 Balt., 1/3 Pool)					516	258	774
6	Highlandtown Substation					78,661		78,661
7	Holtwood - Highlandtown & Baltimore - Gunpowder Lines					41,474		41,474
8	Ellicott Switching Station (2/3 Baltimore)					739	369	1,108
9	Safe Harbor - Westport, Safe Harbor - Riverside, and Ellicott - Washington Lines (2/3 Baltimore)					49,633	24,817	74,450
10	Conestoga Substation (61% P.R.R. 39% Balt.)				8,477	5,419		13,896
11	Safe Harbor - Perryville Line (40% P.R.R., 60% Baltimore)				6,830	10,244		17,074
12	Holtwood - Coatesville Line		15,012					15,012
13	Violet Hill Substation			30,195				30,195
14	Holtwood - York Line (29% Ed. Lt. & Pr. Co.)			2,918			6,164	8,682
15	Balance of Transmission Expense	788					73,166	73,954
16	Total Transmission Expense	$ 788	$15,012	$32,713	$15,307	$186,686	$ 104,000	$ 354,506
17	Administrative and General Expenses						490,891	490,891
18	Total Operating Expense Exclusive of Purchased Power	$ 788	$15,012	$32,713	$15,307	$186,686	$1,539,368	$1,789,874
19	Percent of Total	-	0.9	1.8	0.9	10.4	86.0	100.0

Revised Worksheet
Supplied by
Commission Counsel

Table IV

ASSEMBLY OF TOTAL COSTS ASSIGNED DIRECTLY TO CUSTOMERS AND THE POOL

		P.P. & L. Co. 1	P.E. Co. 2	Ed. Lt. & Pr. Co. 3	P.P.P. Co. 4	Baltimore 5	Pool 6	Total Service 7
1	Operating Expense	$ 788	$15,012	$32,713	$ 15,307	186,686	1,539,368	$1,789,874
2	Bill for Safe Harbor ower						992,535	992,535
3	Taxes	7,696	12,251	9,931	22,088	103,480	381,518	536,904
4	Depreciation Expense	723	6,548	9,385	19,235	69,526	358,795	464,212
5	Return 5 Percent	1,766	24,678	20,639	50,571	260,871	914,926	1,273,051
6	Total Cost	$10,973	$58,689	$72,668	107,201	620,563	4,187,142	$5,057,236

Revised Worksheet
Supplied by
Commission Counsel

Table V

ALLOCATION OF POOL COSTS TO CAPACITY AND ENERGY COMPONENTS AND DEVELOPMENT OF UNIT COSTS PER KILOWATT AND PER KILOWATT-HOUR

		Production Facilities			Transmission Facilities	Total Jointly Used Plant
			Steam			
		Hydro	Variable	Fixed		
		1	2	3	4	5
1	Production Plant	$15,847,486		$4,527,533	$	$20,375,019
2	Transmission System				3,017,100	3,017,100
3	Total Jointly Used Plant Directly Classified	15,847,486		4,527,533	3,017,100	23,392,119
4	Percent Total	67.7		19.4	12.9	100.0
5	Intangible and General Allocated	645,030		184,839	122,908	952,777
6	Total Jointly Used Plant in Service	16,492,516		4,712,372	3,140,008	24,344,896
7	Depreciation Reserve	4,383,472		1,489,064	657,327	6,529,863
8	Net Investment	12,109,044		3,223,308	2,482,681	17,815,033
9	Working Capital	65,690		107,686	19,264	192,640
10	Materials and Supplies	196,899		56,423	37,518	290,840
11	Total Working Capital	262,589		164,109	56,782	483,480
12	Rate Base	$12,371,633		3,387,417	$2,539,463	$18,298,513
	Total Cost of Service					
13	Operating Expense exoluding Purchased Power	$ 525,374	$ 565,344	$ 295,561	$ 153,089	$ 1,539,368
14	Taxes					
15	Property and Capital Stock and Income (Plant Ratio)	244,366		70,025	46,563	360,954
16	Retirement and Unemployment and Misc. (Operating Ratio)	7,012	7,547	3,968	2,057	20,564
17	Depreciation Expense	197,272		114,390	47,133	358,795
18	Return - 5% of Rate Base	618,582		169,371	126,973	914,926
19	Purchased Power	992,535				992,535
20	Total Pool Cost	$ 2,585,141	$ 572,891	$ 653,295	$ 375,815	$ 4,187,142
	Classification to Demand and Energy Components		**Total**	**Capacity**	**Energy**	
21	Total Hydro Power Cost, 67.5% Capacity		$ 2,585,141	1,744,970	$ 840,171	
22	Variable Steam Costs		572,891		572,891	
23	Fixed Steam Cost		653,295	653,295		
24	Transmission Cost		375,815	375,815		
25	Total Cost		$ 4,187,142	$ 2,774,080	1,413,062	
26	Unit Costs			$19.16 Kw	1.27 Mills/Kwh	

Revised Worksheet
Supplied by
Commission Counsel

Table V - c

OPERATING EXPENSE

OPERATION AND MAINTENANCE OF JOINTLY USED FACILITIES

		Production				
			Steam		Trans-	
		Hydro	Fixed	Variable	mission	Total
		1	2	3	4	5
1	Total Hydro	*357,980				357,980
	Steam					
2	Fuel and Water			332,035		332,035
3	Boiler and Coal Equip. Mt.			53,152		53,152
4	Other Steam		201,310			201,310
5	Transmission				104,000	104,000
6	Subtotal	357,980	201,310	385,187	104,000	1,048,477
7	Percent Total	34.1	19.2	36.7	10.0	100.0
8	Adminis. and General	167,394	94,251	180,157	49,089	490,891
9	Total	525,374	295,561	565,344	153,089	1,539,368

[24283]

Exhibit No. 351

4130

Revised Worksheet for
Exhibit 292

Revisions based on testimony
of Witness Davis

Table V-B

SYSTEM LOAD DATA NET ENERGY FROM HOLTWOOD PLANT
PLUS ONE-THIRD OF SAFE HARBOR 1944 WITH ADDITION TO ADJUST FOR AN AVERAGE WATER YEAR

		Hydro (1)	Steam (2)	Total Generation (3)	Holtwood Plus 1/3 S.H. (4)	
1	Net Generation					
2	Holtwood	512,765,000	171,091,000		683,856,000	
3	Safe Harbor	772,142,000			257,381,000	
4	Total	1,284,907,000	171,091,000	1,165,998,000	941,237,000	
5	Transmission Loss				57,252,300	
6	Net delivered				883,984,700	
7	Delivery to Firm Loads				125,317,000	
8	Pennsylvania RR Co. in Pennsylvania	194,082,000				1,009,301,700
9	Wholesale Sales to Utility Companies in Penna.	542,484,756				
10	Total				736,566,756	
11	Balance available to Baltimore Co.				[illegible]	272,734,944
12	Net Sales of Baltimore's energy in interchange 2/				120,600,000	
13	Net delivery to Baltimore				[illegible]	152,134,944
15	Total delivered from generating stations - 1944				[illegible]	1,009,301,700
16	Additional delivery in average water year 1/				104,182,056	
17	Total available in average water year				[illegible]	1,113,483,756
18	Total available to Baltimore - 1944				[illegible]	272,734,944
19	Additional available in average water year 1/				104,182,056	
20	Total available to Baltimore average water year				[illegible]	376,917,000

1/ Actual Delivery to Baltimore 1944 152,134,944
Actual Received from Baltimore 1944 125,317,000
Actual Net Sale to Baltimore 1944 26,817,944
Company's Estimate of Sales to Baltimore in Avg. Year 131,000,000
Additional Sales in Average Year over 1944 104,182,056

2/ Energy to which Baltimore is entitled but chooses to sell in interchange in Pa.

Company	Purchased	Sold	Net Sales	Net Bill
M. E. Co.	6,133,000	65,166,000	59,323,000	$296,993
P. E. Co.	21,771,000	40,901,000	19,130,000	91,739
P.P. & L. Co.	11,805,000	53,952,000	42,147,000	240,136
Total	39,709,000	160,309,000	120,600,000	$628,868

Revised Worksheet for
Exhibit 292

Revisions based on testimony
of Witness Davis

Table V - d

NONCOINCIDENT MAXIMUM DEMANDS

ENERGY SALES IN PENNSYLVANIA AND AVAILABLE FOR
BALTIMORE IN A YEAR OF AVERAGE RIVER FLOW

		Annual Maximum Demand Kw (1)	Percent Total (2)	Holtwood Energy Sales in a Year of Average Flow: Kwh (3)	Percent Total (4)	Load Factor (5)
1	P. P. & L. Co.	66,000	45.6	345,329,221	~~65.0~~ 31.0	60
2	P. E. Co.	24,500	16.9	152,292,000	~~15.1~~ 13.7	71
3	Ed. Lt. & Pr. Co.	9,560	6.6	44,863,535	~~4.5~~ 4.0	53
4	P. R. R. in Pa.	33,900	23.4	194,082,000	~~19.0~~ 17.4	65
5	Baltimore	10,820	7.5	~~251,600,000~~	~~26.6~~	~~265~~
6	Total Noncoincident Demand	144,780	100.0	~~946,166,756~~	100.0	
5	Baltimore			376,917,000	33.9	397
6	Total			1,113,483,756		

REVISIONS RELATING TO
TRANSMISSION LOSSES, SPECIAL FACILITIES,
AND CONOWINGO PAYMENT

Tables IV, V, V-A, V-d, VI, VI-a -R-1

TABLE IV-R-1

Table IV - R-1

ASSEMBLY OF TOTAL COSTS ASSIGNED DIRECTLY TO CUSTOMERS AND THE POOL

		P.P. & L. Co. 1	P.E. Co. 2	Ed. Lt. & Pr. Co. 3	P.R.P. Co. 4	Baltimore 5	Pool 6	Total Service 7
1	Operating Expense	$ 788	$15,012	$32,713	$ 15,307	186,686	1,539,368	$1,789,874
2	Bill for Safe Harbor Power				28,609	18,291	945,635 ~~996,535~~	992,535
3	Taxes	7,696	12,251	9,931	22,088	103,480	381,518	536,964
4	Depreciation Expense	723	6,548	9,385	19,235	69,526	358,795	464,212
5	Return 5 Percent	1,766	24,678	20,639	50,571	260,871	914,926	1,273,051
6	Total Cost	$10,973	$58,689	$72,668	~~$97,201~~ $135,810	~~$638,963~~ $638,854	~~4,107,242~~ $4,140,242	$5,057,236
	Add: "Energy Supply from Baltimore" (per cost shown in Col. 5, Table VI, Exhibit 64)						501,268	
	Deduct: Conowingo Backwater Payment						(133,750)	
	Balance=Pool Cost Allocated in Tables V and VI (R-1, R-2, R-3 and R-4)						$4,507,760	

TABLE V-R-1

Table V-R-1

ALLOCATION OF POOL COSTS TO CAPACITY AND ENERGY COMPONENTS AND DEVELOPMENT OF UNIT COSTS PER KILOWATT AND PER KILOWATT-HOUR

		Production Facilities			Transmission Facilities	Total Jointly Used Plant
			Steam			
		Hydro	Variable	Fixed		
		1	2	3	4	5
1	Production Plant	$15,847,486		$4,527,533	$	$20,375,019
2	Transmission System				3,017,100	3,017,100
3	Total Jointly Used Plant Directly Classified	15,847,486		4,527,533	3,017,100	23,392,119
4	Percent Total	67.7		19.4	12.9	100.0
5	Intangible and General Allocated	645,030		184,839	122,908	952,777
6	Total Jointly Used Plant in Service	16,492,516		4,712,372	3,140,008	24,344,896
7	Depreciation Reserve	4,383,472		1,489,064	657,327	6,529,863
8	Net Investment	12,109,044		3,223,308	2,482,681	17,815,033
9	Working Capital	65,690		107,686	19,264	192,640
10	Materials and Supplies	196,899		56,423	37,518	290,840
11	Total Working Capital	262,589		164,109	56,782	483,480
12	Rate Base	$12,371,633		3,387,417	$2,539,463	$18,298,513
	Total Cost of Service					
13	Operating Expense exoluding Purchased Power	$ 525,374	$ 565,344	$ 295,561	$ 153,089	$ 1,539,368
14	Taxes					
15	Property and Capital Stock and Income (Plant Ratio)	244,366		70,025	46,563	360,954
16	Retirement and Unemployment and Misc. (Operating Ratio)	7,012	7,547	3,948	2.057	20.564
17	Depreciation Expense	197,272		114,390	47,133	358,795
18	Return - 5% of Rate Base	618,582		169,371	126,973	914,926
~~19~~	~~Purchased Power~~	~~992,535~~				~~992,535~~
~~20~~	~~Total Pool Cost~~	~~$ 2,585,141~~	~~$ 572,891~~	~~$ 653,295~~	~~$ 375,815~~	~~$ 4,187,142~~

		Energy Supply from Baltimore Variable					
19	Purchased Power		945,635				945,635
20	"Energy Supply from Baltimore"	$ 501,268					501,268
21	Conowingo Backwater Payment (Credit)		(133,750)				(133,750)
22	Total Pool Cost	$ 501,268	$ 2,404,491	$ 572,891	$ 653,295	$ 375,815	$ 4,507,760
	Classification to Demand and Energy Components			~~Total~~	~~Capacity~~	~~Energy~~	Total / Capacity / Energy
23	Energy Supply from Baltimore						$ 501,268
24	~~21~~ Total Hydro Power Cost, 67.5% Capacity			~~$ 2,585,141~~	~~1,744,970~~	~~$ 840,171~~	2,404,491 / $ 1,623,031 / 781,460
25	~~22~~ Variable Steam Costs			~~572,891~~		~~572,891~~	572,891 / 572,891
26	~~23~~ Fixed Steam Cost			~~653,295~~	~~653,295~~		653,295 / 653,295
27	~~24~~ Transmission Cost			~~375,815~~	~~375,815~~		375,815 / 375,815
28	~~25~~ Total Cost			~~4,187,142~~	~~2,774,080~~	~~1,413,062~~	$ 4,507,760 / $ 2,652,141 / $ 1,855,619
29	~~26~~ Unit Costs				~~$19.16/Kw~~	~~1.27 Mills/Kwh~~	$17.95/kw / 1.67 mills/kwh.

Table V-A-R-1

TABLE V-A-R-1

BALANCE OF DEPENDABLE CAPACITY AVAILABLE FOR BALTIMORE CO.
INCLUDING ONE-HALF OF ADDITIONAL CAPACITY FROM S.H. PONDAGE

		Holtwood Steam (1)	Holtwood Hydro (2)	Safe Harbor (3)	Total Hydro (4)	Total Hydro and Steam (5)
1	Installed Capacity	26,000 kw	104,000 kw	230,000 kw	334,000 kw	360,000 kw
2	Holtwood and Safe Harbor - % of total hydro		31.14	68.86	100.0	
3						
4	Dependable Capacity on regular weekly cycle of draw and refill				197,000 kw	
5	Plus one-half of additional capacity from use of S.H. pondage				28,500 kw	
6	Total dependable capacity allocated on basis of installed capacity	26,000 kw	70,221 kw	155,279 kw	225,500 kw	251,500 kw
7	Percent of total	10.3	27.9	61.8	89.7	100.00
8	Percent of Installed Capacity	100.0			67.5%	
9						
10	Reported station use and trans. loss allocated to dependable capacity	1,854 kw	5,022 kw	11,124 kw	16,146 kw	18,000 kw
11						
12	Net Dependable Capacity available for load	24,146 kw	65,199 kw	144,155 kw	209,354 kw	233,500 kw
13						
14	Demands of Pa. Customers on System Peak Form 12 - Pool					

		Non Firm	Firm	Firm Loads Plus 10% Reserve		
15						
16	P.P. & L. Co.	2,000 kw	52,000 kw	57,200 kw		
17	P.E. Co.	10,000 kw	23,000 kw	25,300 kw		
18	Ed. L. & P. Co.		9,000 kw	9,900 kw		
19	M.E. Co.	12,000 kw				
20	Total for Resale	24,000 kw	84,000 kw	92,400 kw	92,400 kw	
21	Balance for Baltimore					
22	and P.R.R.					141,100
23	P.R.R. Co. in Pa. Dec. billing		28,397 kw	31,237 kw	31,237 kw	
24	Total coincident firm demand		112,397 kw	123,637 kw		
25	Balance available for Baltimore from Holtwood and Safe Harbor					109,863
26						
27	Less Baltimore's two-third share of S.H.					96,103
28						
29	Balance available for Baltimore from Holtwood Co.					13,760

TABLE V-d-R-1

Table V - d -R-1

NONCOINCIDENT MAXIMUM DEMANDS

ENERGY SALES IN PENNSYLVANIA AND AVAILABLE FOR BALTIMORE IN A YEAR OF AVERAGE RIVER FLOW

		Annual Maximum Demand Kw	Percent Total	Holtwood Energy Sales in a Year of Average Flow Kwh	Percent Total	Load Factor
		1	2	3	4	5
1	P. P. & L. Co.	66,000	44.6 ~~45.0~~	345,329,221	~~35.0~~ 31.0	60
2	P. E. Co.	24,500	16.6 ~~16.9~~	152,292,000	~~15.4~~ 13.7	71
3	Ed. Lt. & Pr. Co.	9,560	6.5 ~~6.6~~	44,863,535	~~4.5~~ 4.0	53
4	P. R. R. in Pa.	33,900	23.0 ~~23.4~~	194,082,000	~~19.5~~ 17.4	65
~~5~~	~~Baltimore~~	~~10,000~~	~~6.5~~	~~361,000,000~~	~~35.5~~	~~265~~
~~6~~	~~Total Noncoincident Demand~~	~~144,700~~	~~100.0~~	~~990,166,756~~	~~100.0~~	
5	Baltimore	13,760	9.3	376,917,000	33.9	311
6	Total	147,720	100.0	1,113,483,756	100.0	

Table VI - R-1

APPLICATION OF UNIT COSTS TO CUSTOMERS' MEASURED LOADS
ASSEMBLY OF CAPACITY, ENERGY AND SPECIAL FACILITY COSTS FOR EACH CUSTOMER
COMPARISON OF TOTAL COST OF SERVICE WITH REVENUES COLLECTED

		Noncoincident Maximum Demands 1	Energy Sales in Year of Average River Flow 2	Capacity Costs 3	Energy Costs 4	Special Facilities Cost 5	Energy Supply from Baltimore: Charge to Customers at 4 Mill. 6	Energy Supply from Baltimore: Credit to Baltimore 7	Total Cost 8	Total Revenue: Amount 9	Total Revenue: Percent 10	Revenue in Excess of Allocated Costs: Amount 11	Revenue in Excess of Allocated Costs: Percent 12
1	P. P. & L. Co.	66,000	315,329,221	$1,184,953	$ 575,491	$ 10,973	Included in Col. 4	$	$1,771,417	$2,176,256	28.5	$ 404,839	14.9
2	P. E. Co.	21,500	152,292,000	439,869	253,794	58,689			752,352	986,360	12.9	234,008	8.6
3	Ed. Lt. & Pr. Co.	9,560	44,863,535	171,639	74,765	72,668			319,072	368,904	4.8	49,832	1.8
4	R. R. Co. in Pa.	33,900	194,082,000	608,635	323,437	135,810			1,067,882	1,455,514	19.1	387,632	14.2
5	Baltimore	13,760	376,917,000	247,045	628,132	638,854		(501,268)	1,012,763	2,656,716	34.7	1,643,953	60.5
6	Total	147,720	1,113,483,756	$2,652,141	$1,855,619	$916,994		$(501,268)	$4,923,486	$7,643,750	100.0	2,720,264	100.0

Note: The totals in Cols. 8 and 9 exclude an amount of $135,750 for the Conowingo Backwater Payment.

TABLE VI-a-R-1

Table VI - a-R-1

RECONCILIATION OF REVENUE SHOWN FOR BALTIMORE WITH HOLTWOOD BILL TO BALTIMORE FOR 1944

Holtwood bill as rendered	$2,027,849
Net interchange sales	628,867
~~Conowingo backwater payment~~	~~-153,750~~
Total	~~$2,790,466~~ $2,656,716

REVISION OF ALLOCATION BASED ON
BALTIMORE COMPANY'S USE OF CAPACITY
IN EXCESS OF DEPENDABLE CAPACITY

Tables V)
)
V-d) R-2
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TABLE V-R-2

Table V-R-2

ALLOCATION OF POOL COSTS TO CAPACITY AND ENERGY COMPONENTS AND DEVELOPMENT OF UNIT COSTS PER KILOWATT AND PER KILOWATT-HOUR

		Production Facilities			Transmission Facilities	Total Jointly Used Plant
			Steam			
		Hydro	Variable	Fixed		
		1	2	3	4	5
1	Production Plant	$15,847,486		$4,527,533	$	$20,375,019
2	Transmission System				3,017,100	3,017,100
3	Total Jointly Used Plant Directly Classified	15,847,486		4,527,533	3,017,100	23,392,119
4	Percent Total	67.7		19.4	12.9	100.0
5	Intangible and General Allocated	645,030		184,839	122,908	952,777
6	Total Jointly Used Plant in Service	16,492,516		4,712,372	3,140,008	24,344,896
7	Depreciation Reserve	4,383,472		1,489,064	657,327	6,529,863
8	Net Investment	12,109,044		3,223,308	2,482,681	17,815,033
9	Working Capital	65,690		107,686	19,264	192,640
10	Materials and Supplies	196,899		56,423	37,518	290,840
11	Total Working Capital	262,589		164,109	56,782	483,480
12	Rate Base	$12,371,633		3,387,417	$2,539,463	$18,298,513
	Total Cost of Service					
13	Operating Expense excluding Purchased Power	$ 525,374	$ 565,344	$ 295,561	$ 153,089	$ 1,539,368
14	Taxes					
15	Property and Capital Stock and Income (Plant Ratio)	244,366		70,025	46,563	360,954
16	Retirement and Unemployment and Misc. (Operating Ratio)	7,012	7,547	3,948	2,057	20,564
17	Depreciation Expense	197,272		114,390	47,133	358,795
18	Return - 5% of Rate Base	618,582		169,371	126,973	914,926
~~19~~	~~Purchased Power~~	~~990,535~~				~~990,535~~
~~20~~	~~Total Pool Cost~~	~~$ 2,383,141~~	~~$ 572,891~~	~~$ 653,295~~	~~$ 375,815~~	~~$ 4,109,142~~

		Energy Supply from Baltimore Variable						
19	Purchased Power		945,635				945,635	
20	Energy Supply from Baltimore	$ 501,268					501,268	
21	Conowingo Backwater Payment (Credit)		(133,750)				(133,750)	
22	Total Pool Cost	$ 501,268	$ 2,404,491	$ 572,891	$ 653,295	$ 375,815	$ 4,507,760	

Classification to Demand and Energy Components

		Total	Capacity	Energy	Total	Capacity	Energy	Direct to Baltimore
3	Energy Supply from Baltimore				$ 501,268		$ 501,268	
4	~~21~~ Total Hydro Power Cost, 67.5% Capacity, 32.5% to Baltimore	~~$ 2,383,141~~	~~1,744,970~~	~~$ 840,171~~	2,404,491	$1,623,031		$ 781,460
5	~~22~~ Variable Steam Costs	~~572,891~~		~~572,891~~	572,891		572,891	
6	~~23~~ Fixed Steam Cost	~~653,295~~	~~653,295~~		653,295	653,295		
7	~~24~~ Transmission Cost	~~375,815~~	~~375,815~~		375,815	375,815		
8	~~25~~ Total Cost	~~4,109,142~~	~~2,774,080~~	~~1,413,061~~	$ 4,507,760	$2,652,141	$1,074,199	$ 781,460
9	~~26~~ Unit Costs		~~$19.16/Kw.~~	~~1.17 Mills/Kwh.~~		$17.95/kw.	1.33 mills/kwh.	

TABLE V-d-R-2

Table V - d-R-2

NONCOINCIDENT MAXIMUM DEMANDS

ENERGY SALES IN PENNSYLVANIA AND AVAILABLE FOR BALTIMORE IN A YEAR OF AVERAGE RIVER FLOW

		Annual Maximum Demand Kw	Percent Total	Holtwood Energy Sales in a Year of Average Flow Kwh	Percent Total	Load Factor
		1	2	3	4	5
1	P. P. & L. Co.	66,000	44.6 ~~45.6~~	345,329,221	~~35.0~~ 42.6	60
2	P. E. Co.	24,500	16.6 ~~16.9~~	152,292,000	~~15.4~~ 18.8	71
3	Ed. Lt. & Pr. Co.	9,560	6.5 ~~6.6~~	44,863,535	~~4.5~~ 5.6	53
4	P. R. R. in Pa.	33,900	23.0 ~~23.4~~	194,082,000	~~19.6~~ 24.0	65
~~5~~	~~Baltimore~~	~~10,820~~	~~7.5~~	~~251,600,000~~	~~25.5~~	~~265~~
~~6~~	~~Total Noncoincident Demand~~	~~144,780~~	~~100.0~~	~~988,166,756~~	~~100.0~~	
5	Baltimore ("Firm")	13,760	9.3	73,000,000	9.0	60
6	Total ("Firm")	147,720	100.0	809,566,756	100.0	
7	Baltimore (additional energy, not related to use of dependable capacity shown in line 5, col. 1)			303,917,000		
				1,113,483,756		

TABLE VI-R-2

Table VI - R-2

APPLICATION OF UNIT COSTS TO CUSTOMERS' MEASURED LOADS
ASSEMBLY OF CAPACITY, ENERGY AND SPECIAL FACILITY COSTS FOR EACH CUSTOMER
COMPARISON OF TOTAL COST OF SERVICE WITH REVENUES COLLECTED

		Noncoincident Maximum Demands	Energy Sales in Year of Average River Flow	Capacity Costs	Energy Costs	Special Facilities Cost	Energy Supply from Baltimore: Charge to Customers at 4 Mill.	Energy Supply from Baltimore: Credit to Baltimore	Total Cost	Total Revenue: Amount	Total Revenue: Percent	Revenue in Excess of Allocated Costs: Amount	Revenue in Excess of Allocated Costs: Percent
		1	2	3	4	5	6	7	8	9	10	11	12
1	P. P. & L. Co.	66,000	345,329,221	$1,184,953	$ 458,194	$ 10,973		$	$1,654,120	$2,176,256	28.5	$ 522,136	19.2
2	P. E. Co.	21,500	152,292,000	439,869	202,066	58,689	Included		700,624	986,360	12.9	285,736	10.5
3	Bd. Lt. & Pr. Co.	9,560	44,863,535	171,639	59,526	72,668	in		303,833	368,904	4.8	65,071	2.4
4	R. R. Co. in Pa.	33,900	194,082,000	608,635	257,514	135,810	Col. 4		1,001,959	1,455,514	19.1	453,555	16.7
5	Baltimore	13,760	73,000,000	247,045	96,859	638,854		(501,268)	1,262,950***	2,656,716	34.7	1,393,766	51.2
6	Total	147,720	809,566,756	$2,652,141	$1,074,159	$916,994		$(501,268)	$4,923,486	$7,643,750	100.0	$2,720,264	100.0
7	Baltimore		303,917,000*		781,460**								

Notes: * Additional energy not related to use of dependable capacity allocated to Baltimore
** Cost of capacity in excess of dependable capacity
*** Includes cost shown in line 7
The totals in Cols. 8 and 9 exclude an amount of $133,750 for the Conowingo Backwater Payment.

REVISION BASED ON REDEFINITION
OF USE OF POOL FACILITIES
(50-50 DIVISION OF FIXED COSTS BETWEEN
CAPACITY AND ENERGY)

Tables V)
) -R-3
VI)

TABLE V-R-3

Table V-R-3

ALLOCATION OF POOL COSTS TO CAPACITY AND ENERGY COMPONENTS AND DEVELOPMENT OF UNIT COSTS PER KILOWATT AND PER KILOWATT-HOUR

		Production Facilities			Transmission Facilities	Total Jointly Used Plant
			Steam			
		Hydro	Variable	Fixed		
		1	2	3	4	5
1	Production Plant	$15,847,486		$4,527,533	$	$20,375,019
2	Transmission System				3,017,100	3,017,100
3	Total Jointly Used Plant Directly Classified	15,847,486		4,527,533	3,017,100	23,392,119
4	Percent Total	67.7		19.4	12.9	100.0
5	Intangible and General Allocated	645,030		184,839	122,908	952,777
6	Total Jointly Used Plant in Service	16,492,516		4,712,372	3,140,008	24,344,896
7	Depreciation Reserve	4,383,472		1,489,064	657,327	6,529,863
8	Net Investment	12,109,044		3,223,308	2,482,681	17,815,033
9	Working Capital	65,690		107,686	19,264	192,640
10	Materials and Supplies	196,899		56,423	37,518	290,840
11	Total Working Capital	262,589		164,109	56,782	483,480
12	Rate Base	$12,371,633		3,387,417	$2,539,463	$18,298,513
	Total Cost of Service					
13	Operating Expense excluding Purchased Power	$ 525,374	$ 565,344	$ 295,561	$ 153,089	$ 1,539,368
14	Taxes					
15	Property and Capital Stock and Income (Plant Ratio)	244,366		70,025	46,563	360,954
16	Retirement and Unemployment and Misc. (Operating Ratio)	7,012	7.547	3.968	2.057	20.564
17	Depreciation Expense	197,272		114,390	47,133	358,795
18	Return - 5% of Rate Base	618,582		169,371	126,973	914,926
~~19~~	~~Purchased Power~~	~~990,535~~				~~990,535~~
~~20~~	~~Total Pool Cost~~	~~$ 2,383,141~~	~~$ 572,891~~	~~$ 653,295~~	~~$ 375,815~~	~~$ 4,107,142~~

		Energy Supply from Baltimore Variable					
19	Purchased Power		945,635				945,635
20	Energy Supply from Baltimore	$ 501,268					501,268
21	Conowingo Backwater Payment (Credit)		(133,750)				(133,750)
22	Total Pool Cost	$ 501,268	$ 2,404,491	$ 572,891	$ 653,295	$ 375,815	$ 4,507,760
	Classification to Demand and Energy Components						
			~~Total~~	~~Capacity~~	~~Energy~~	Total	Capacity / Energy
23	Energy Supply from Baltimore					$ 501,268	$ 501,268
24	~~21~~ Total Hydro Power Cost, ~~67.5% Capacity~~ 50-50 allocation		~~$ 2,383,141~~	~~1,191,570~~	~~$ 840,171~~	2,404,491	$ 1,202,246 / 1,202,245
25	~~22~~ Variable Steam Costs		~~572,891~~		~~572,891~~	572,891	572,891
26	~~23~~ Fixed Steam Cost } 50-50 allocation to capacity and energy		~~653,295~~	653,295		653,295	326,647 / 326,648
27	~~24~~ Transmission Cost }		~~375,815~~	375,815		375,815	187,908 / 187,907
28	~~25~~ Total Cost		~~4,107,142~~	~~2,774,080~~	~~1,413,062~~	$4,507,760	$ 1,716,801 / $2,790,959
29	~~26~~ Unit Costs			~~$19.16/kw.~~	~~1.27 Mills/kwh.~~		$11.62/kw. / 2.30 mills/kwh.

TABLE VI-R-3

Table VI -R-3

APPLICATION OF UNIT COSTS TO CUSTOMERS' MEASURED LOADS
ASSEMBLY OF CAPACITY, ENERGY AND SPECIAL FACILITY COSTS FOR EACH CUSTOMER
COMPARISON OF TOTAL COST OF SERVICE WITH REVENUES COLLECTED

		Noncoincident Maximum Demands	Energy Sales in Year of Average River Flow	Capacity Costs	Energy Costs	Special Facilities Cost	Energy Supply from Baltimore Charge to Customers at 4 Mills	Energy Supply from Baltimore Credit to Baltimore	Total Cost	Total Revenue Amount	Total Revenue Percent	Revenue in Excess of Allocated Costs Amount	Revenue in Excess of Allocated Costs Percent
		1	2	3	4	5	6	7	8	9	10	11	12
1	P. P. & L. Co.	65,000	345,329,221	$ 767,052	$ 865,571	$ 10,973		$	$ 1,643,596	$2,176,256	28.5	$ 532,660	19.6
2	P. E. Co.	21,500	152,292,000	284,739	381,722	58,689	Included		725,150	986,360	12.9	261,210	9.6
3	Bd. Le. & Pr. Co.	9,560	44,863,535	111,106	112,451	72,668	in		296,225	368,904	4.8	72,679	2.7
4	R. R. Co. in Pa.	33,900	194,082,000	393,985	486,469	135,810	Col. 4		1,016,264	1,455,514	19.1	439,250	16.1
5	Baltimore	13,760	376,917,000	159,919	944,746	638,854		(501,268)	1,242,251	2,656,716	34.7	1,414,465	52.0
6	Total	147,720	1,113,483,756	$ 1,716,801	$ 2,790,959	$ 916,994		$(501,268)	$ 4,923,486	$ 7,643,750	100.0	$ 2,720,264	100.0

Note: The totals in cols. 8 and 9 exclude an amount of $133,750 for the Conowingo Backwater Payment

REVISION BASED ON CORRECTED DEPENDABLE CAPACITIES

Tables V)
V-A)
V-d) -R-4
VI)

TABLE V-R-4

Table V-R-4

ALLOCATION OF POOL COSTS TO CAPACITY AND ENERGY COMPONENTS AND DEVELOPMENT OF UNIT COSTS PER KILOWATT AND PER KILOWATT-HOUR

		Production Facilities			Transmission Facilities	Total Jointly Used Plant
			Steam			
		Hydro	Variable	Fixed		
		1	2	3	4	5
1	Production Plant	$15,847,486		$4,527,533	$	$20,375,019
2	Transmission System				3,017,100	3,017,100
3	Total Jointly Used Plant Directly Classified	15,847,486		4,527,533	3,017,100	23,392,119
4	Percent Total	67.7		19.4	12.9	100.0
5	Intangible and General Allocated	645,030		184,839	122,908	952,777
6	Total Jointly Used Plant in Service	16,492,516		4,712,372	3,140,008	24,344,896
7	Depreciation Reserve	4,383,472		1,489,064	657,327	6,529,863
8	Net Investment	12,109,044		3,223,308	2,482,681	17,815,033
9	Working Capital	65,690		107,686	19,264	192,640
10	Materials and Supplies	196,899		56,423	37,518	290,840
11	Total Working Capital	262,589		164,109	56,782	483,480
12	Rate Base	$11,371,633		3,387,417	$2,539,463	$18,298,513
	Total Cost of Service					
13	Operating Expense excluding Purchased Power	$ 525,374	$ 565,344	$ 295,561	$ 153,089	$ 1,539,368
14	Taxes					
15	Property and Capital Stock and Income (Plant Ratio)	244,366		70,025	46,563	360,954
16	Retirement and Unemployment and Misc. (Operating Ratio)	7,012	7.547	3.968	2.057	20.564
17	Depreciation Expense	197,272		114,390	47,133	358,795
18	Return - 5% of Rate Base	618,582		169,371	126,973	914,926
~~19~~	~~Purchased Power~~	~~992,535~~				~~992,535~~
~~20~~	~~Total Pool Cost~~	~~$ 2,585,141~~	~~$ 572,891~~	~~$ 653,295~~	~~$ 375,815~~	~~$ 4,187,142~~

		Energy Supply from Baltimore Variable					
19	Purchased Power		945,635				945,635
20	"Energy Supply from Baltimore"	$ 501,268					501,268
21	Conowingo Backwater Payment (Credit)		(133,750)				(133,750)
22	Total Pool Cost	$ 501,268	$ 2,404,491	$ 572,891	$ 653,295	$ 375,815	$ 4,507,760

Classification to Demand and Energy Components

		~~Total~~	~~Capacity~~	~~Energy~~	Total	Capacity	Energy
23	Energy Supply from Baltimore				$ 501,268		$ 501,268
24	~~21~~ Total Hydro Power Cost, ~~67.5% Capacity~~ 50-50 allocation	~~$ 2,585,141~~	~~1,744,970~~	~~$ 840,171~~	2,404,491	$ 1,202,246	1,202,245
25	~~22~~ Variable Steam Costs	~~572,891~~		~~572,891~~	572,891		572,891
26	~~23~~ Fixed Steam Cost } 50-50 allocation to capacity and energy	~~653,295~~	~~653,295~~		653,295	326,647	326,648
27	~~24~~ Transmission Cost }	~~375,815~~	~~375,815~~		375,815	187,908	187,907
28	~~25~~ Total Cost	~~4,187,142~~	~~2,774,080~~	~~1,413,062~~	$4,507,760	$ 1,716,801	$ 2,790,959
29	~~26~~ Unit Costs		~~$19.16/Kw.~~	~~1.27 Mills/Kwh.~~		$ 9.12/kw.	2.50 mills/kwh.

Table V-A-R-4

TABLE V-A-R-4

BALANCE OF DEPENDABLE CAPACITY AVAILABLE FOR BALTIMORE CO.
INCLUDING ONE-HALF OF ADDITIONAL CAPACITY FROM S.H. PONDAGE

		Holtwood Steam (1)	Holtwood Hydro (2)	Safe Harbor (3)	Total Hydro (4)	Total Hydro and Steam (5)
1	Installed Capacity	26,000 kw	104,000 kw	230,000 kw	334,000 kw	360,000 kw
2	Holtwood and Safe Harbor - % of total hydro		31.14	68.86	100.0	
3						
4	Dependable Capacity on regular weekly cycle of draw and refill				~~197,000 kw~~	298,000
5	Plus one-half of additional capacity from use of S.H. pondage		100,000	198,000	~~28,500 kw~~	324,000
6	Total dependable capacity allocated on basis of installed capacity	26,000 kw	~~70,221~~ kw	~~155,279~~ kw	~~225,500~~ kw	~~251,500~~ kw
7	Percent of total	~~10.3~~	~~27.9~~	~~61.8~~	~~89.7~~	~~100.00~~
8	Percent of Installed Capacity	~~100.0~~			~~67.5%~~	
9		3,000	9,000	7,000	16,000	19,000
10	Reported station use and trans. loss allocated to dependable capacity	~~2,370~~ kw	~~6,116~~ kw	~~11,21~~ kw	~~20,6~~ kw	~~23,~~ kw
11		23,000	91,000	191,000	282,000	305,000
12	Net Dependable Capacity available for load	~~23,630~~ kw	~~63,805~~ kw	~~144,065~~ kw	~~201,870~~ kw	~~226,~~ kw
13						
14	Demands of Pa. Customers on System Peak Form 12 - Pool					

		Non Firm	Firm	Firm Loads Plus 10% Reserve
15				
16	P.P. & L. Co.	~~2,000~~ kw	~~52,000~~ kw	57,200 kw
17	P.E. Co.	10,000 kw	23,000 kw	25,300 kw
18	Ed. L. & P. Co.		9,000 kw	9,900 kw
19	M.E. Co.	~~12,000~~ kw		
20	Total for Resale	~~24,000~~ kw	~~84,000~~ kw	~~92,~~400 kw
21	Balance for Baltimore			
22	and P.R.R.			212,600 ~~136,160~~ kw
23	P.R.R. Co. in Pa. Dec. billing		~~28,397~~ kw	~~31,277~~ kw 31,200 ~~31,237~~ kw
24	Total coincident firm demand		~~112,397~~ kw	~~123,~~ kw
25	Balance available for Baltimore from Holtwood and Safe Harbor			181,400 ~~104,~~ kw
26				
27	Less Baltimore's two-third share of S.H.			127,300 ~~~~ kw
28				
29	Balance available for Baltimore from Holtwood Co.			54,100 ~~~~ kw

TABLE V-d-R-4

Table V - d-R-4

NONCOINCIDENT MAXIMUM DEMANDS

ENERGY SALES IN PENNSYLVANIA AND AVAILABLE FOR BALTIMORE IN A YEAR OF AVERAGE RIVER FLOW

		Annual Maximum Demand Kw	Percent Total	Holtwood Energy Sales in a Year of Average Flow Kwh	Percent Total	Load Factor
		1	2	3	4	5
1	P. P. & L. Co.	66,000	35.1 ~~45.6~~	345,329,221	~~86.0~~ 31.0	60
2	P. E. Co.	24,500	13.0 ~~10.9~~	152,292,000	~~15.4~~ 13.7	71
3	Ed. Lt. & Pr. Co.	9,560	5.1 ~~6.6~~	44,863,535	~~1.6~~ 4.0	53
4	P. R. R. in Pa.	33,900	18.0 ~~25.4~~	194,082,000	~~10.6~~ 17.4	65
~~5~~	~~Baltimore~~	~~10,080~~	~~7.6~~	~~861,600,000~~	~~86.5~~	~~263~~
~~6~~	~~Total Noncoincident Demand~~	~~144,780~~	~~100.0~~	~~980,166,756~~	~~100.0~~	
5	Baltimore	54,100	28.8	376,917,000	33.9	79
6	Total	188,060	100.0	1,113,483,756	100.0	

TABLE VI-R-4

Table VI -R-4

APPLICATION OF UNIT COSTS TO CUSTOMERS' MEASURED LOADS
ASSEMBLY OF CAPACITY, ENERGY AND SPECIAL FACILITY COSTS FOR EACH CUSTOMER
COMPARISON OF TOTAL COST OF SERVICE WITH REVENUES COLLECTED

		Noncoincident Maximum Demands	Energy Sales in Year of Average River Flow	Capacity Costs	Energy Costs	Special Facilities Cost	Energy Supply from Baltimore Charge to Customers at 4 Mill.	Energy Supply from Baltimore Credit to Baltimore	Total Cost	Total Revenue Amount	Total Revenue Percent	Revenue in Excess of Allocated Costs Amount	Revenue in Excess of Allocated Costs Percent
		1	2	3	4	5	6	7	8	9	10	11	12
1	P. P. & L. Co.	66,000	315,329,221	$ 602,515	$ 865,571	$ 10,973		$	$1,479,059	$2,176,256	28.5	$ 697,197	25.6
2	P. E. Co.	24,500	152,292,000	223,661	381,722	58,689	Included		664,072	986,360	12.9	322,288	11.8
3	Bl. Lt. & Pr. Co.	9,560	44,863,535	87,273	112,451	72,668	in		272,392	368,904	4.8	96,512	3.6
4	R. R. Co. in Pa.	33,900	194,082,000	309,473	486,469	135,810	Col. 4		931,752	1,455,514	19.1	523,762	19.3
5	Baltimore	54,100	376,917,000	493,879	944,746	638,854		(501,268)	1,576,211	2,656,716	34.7	1,080,505	39.7
6	Total	188,060	1,113,483,756	$1,716,801	$2,790,959	$916,994		$(501,268)	$4,923,486	$7,643,750	100.0	$2,720,264	100.0

Note: The totals in cols. 8 and 9 exclude an amount of $133,750 for the Conowingo Backwater Payment.

DEMAND, ENERGY AND SPECIAL FACILITY CHARGES INCLUDED IN REVENUE RECEIVED FROM PENNSYLVANIA FIRM CUSTOMERS FOR YEARS 1944 TO 1946, INCL.

Pennsylvania Power & Light Company

	Total Revenue Received	Charges for Energy	Charges for Special Facilities
1944	$2,176,255.95	$2,174,835.03	$1,420.92
1945	2,064,927.35	2,063,506.43	1,420.92
1946	1,958,355.65	1,956,934.73	1,420.92

Philadelphia Electric Company (Coatesville Division)

	Total Revenue Received	Charges for Energy	Charges for Demand	Charges for Special Facilities
1944	$ 986,360.03	$ 617,138.78	$309,221.25	$60,000.00
1945	939,107.73	564,898.98	314,208.75	60,000.00
1946	948,860.95	574,862.20	313,998.75	60,000.00

Edison Light and Power Company (York)

	Total Revenue Received	Charges for Energy	Charges for Demand	Charges for Special Facilities
1944	$ 368,904.43	$ 254,178.91	$114,000.00	$ 725.52
1945	397,325.85	273,420.41	123,640.00	265.44

Metropolitan Edison Company

	Total Revenue Received	Charges for Energy	Charges for Demand	Charges for Spinning Capacity	Charges for Special Facilities
1946	$657,123.11	$308,042.66	$327,500.00	$18,351.00	$16,867.20

SR-00

ENOLA
HARRISBURG
LEMOYNE
Penna. R.R.
P.P.&L.Co.
P.R.R.Co.
M.E.Co.
MIDDLETOWN
MANHEIM
AKRON
YORK HAVEN
MARIETTA
COLUMBIA
SUSQUEHANNA
SAFE HARBOR
LANCASTER
TRANSF. 4-20,000KVA.
TRANSF. 3-20,000KVA.
OWNED BY P.R.R.
1 STEEL TOWER 66 KV. 3Φ 60~ 2 CIR.
45000 KVA./CIR. 1.82 MI. 4/0 CU. 1-⅜ CU. WELD GRD. WIRE
30000 KVA./CIR. 7.68 MI. 2/0 CU. 1-⅜ STEEL GRD. WIRE
YORK
TRANSF. 2- 45,000 KVA. 2-126,000 KVA.
7 HYDRO UNITS 230,000 KW. EFF. CAP.
P.W.&P.Co.
1 STEEL TOWER 66 KV. 3Φ 60~
12 CIR. 30000 KVA./CIR.
23.01 MI. 2/0 CU.
2-⅜ STEEL GRD. WIRE
66 KV. TIE - 40,000 KVA.
YORK TRANSF. 15,800 KVA.
HOLTWOOD
60~ TRANSF. 168,900 KVA.
25~ TRANSF. 140,000 KVA.
HYDRO 10 UNITS 104,000KW. EFF. CAP.
STEAM 2 UNITS 28,000 KW.
1 STEEL TOWER 132 KV. 3Φ 25~
4 CIR. 50,000 KVA./CIR.
31.50 MI. 397,500 A.C.S.R.
2-159,000 A.C.S.R. GRD. WIRES
C.G.&P.D. RIVER
132 KV.
Susq. Transm. Co. of Md.
220 KV.
HANOVER
Pennsylvania
Maryland
PARKTON
1 STEEL TOWER 66 KV. 3Φ 25~
2 CIR. 30,000 KVA./CIR.
40.08 MI. 300,000 C.M.A.L.
2-⅜ STEEL GRD. WIRES
1 STEEL TOWER 66 KV. 3Φ 25~
2 CIR. 30,000 KVA./CIR.
40.08 MI. 300,000 C.M.A.L.
1-⅜ STEEL GRD. WIRE
CONOWINGO
1 STEEL TOWER 220 KV. 3Φ 60~
1 CIR. 250,000 KVA./CIR.
50.55 MI. (.28 MI. S.H.W.P. CORP.)
795,000 A.C.S.R.
2-⅞ CU. WELD GRD. WIRES
TOWER 220 KV. 3Φ 60~
50,000 KVA./CIR.
(.28 MI. S.H.W.P. CORP.)
A.C.S.R.
WELD GRD. WIRES
3 PARTIAL CIR. ON 2 CIR. TOWER
9.83 MI. 110 KV. 3Φ 60~
USED BY C.G.E.L.&P. CO.
1 CIR. 2/0 CU. 9.55 MI. 75000 KVA.
1 CIR. 2/0 CU. 5.78 MI.
1 CIR. 4/0 CU. 3.74 MI. 100000 KVA.
WESTMINSTER
BEL AIR
HAVRE DE GRACE
PERRYVILLE
COATESVILLE
THORNDALE
TRANSF. 41,100 KVA.
PARKESBURG
1 STEEL TOWER 66 KV. 3Φ 60~
2 CIR. 30,000 KVA./CIR.
29.38 MI. 2/0 CU.
1-⅜ CU. WELD GRD. WIRE
TO PHILADELPHIA AND NEW YORK
P.E.Co.

Kilowatthours Supplied to and Revenues Received from Pennsylvania Firm Customers (Excluding Pennsylvania Railroad) during Hours of Net Baltimore Backfeed and during Hours of No Net Backfeed

Year	Total Firm Kilowatthours Supplied to Pa.Customers(a)	Kilowatthours Supplied during Hours of Baltimore Backfeed	% of Total Firm Kilowatthours Supplied	Kilowatthours Supplied during Hours of No Baltimore Backfeed	% of Total Firm Kilowatthours Supplied
1944	542,485,000	180,675,000	33.3	361,810,000	66.7
1945	517,585,000	35,763,000	6.9	481,822,000	93.1
1946	532,804,000	115,962,000	21.8	416,842,000	78.2

Year	Total Firm Rev. Rec'd. for Electric Services from Pa.Customers(b)	Revenue Received for Energy Only	Revenue Received for Energy only during Hours of Baltimore Backfeed	% of Total Firm Revenue Received	Total Rev. Rec'd. for Electric Services Exclusive of Rev. Rec'd. for Energy Only during Hours of Baltimore Backfeed	% of Total Firm Revenue Received
1944	$ 3,531,520	$ 3,046,153	$ 1,014,523	28.7	$ 2,516,997	71.3
1945	3,401,361	2,901,826	200,504	5.9	3,200,857	94.1
1946	3,564,340	2,839,840	618,076	17.3	2,946,264	82.7

(a) Includes kilowatthours supplied jointly with Safe Harbor Water Power Corporation to Pennsylvania Power & Light Company, Philadelphia Electric Company and Edison Light and Power Company in 1944 and 1945, and to the first two companies in 1946.

(b) Includes revenues received by Penn Water acting for itself and as agent for Safe Harbor Water Power Corporation.

SR-3

Kilowatthours of Net Baltimore Backfeed Used in Connection with Electric Services Supplied to Pennsylvania Firm Customers (Excluding Pennsylvania Railroad)

Year	Kilowatthours(a) (1)	Dollars (b) Received for Amounts of Energy shown in Col. (1) (2)	Col. (1) in % of Total Firm Kilowatthours Supplied to Pa. Customers (3)	Col. (2) in % of Total Firm Revenues Received from Pa. Customers (4)
1944	59,622,000	$ 334,791	11.0	9.5
1945	10,037,000	56,272	1.9	1.7
1946	29,384,000	156,617	5.5	4.4

(a) Includes kilowatthours supplied jointly with Safe Harbor Water Power Corporation to Pennsylvania Power & Light Company, Philadelphia Electric Company and Edison Light and Power Company in 1944 and 1945, and to the first two companies in 1946.

(b) Dollars based on average energy rates billed, and includes dollars received by Penn Water acting for itself and as agent for Safe Harbor Water Power Corporation.

Interchange Supplied to Pennsylvania Customers during Hours of Net Baltimore Backfeed and during Hours of No Net Backfeed

Year	Total Interchange Kilowatthours Supplied to Pa. Customers (a)	Kilowatthours Supplied during Hours of Baltimore Backfeed	% of Total Interchange Kilowatthours Supplied	Kilowatthours Supplied during Hours of No Baltimore Backfeed	% of Total Interchange Kilowatthours Supplied
1944	154,896,000	9,384,000	6.1	145,512,000	93.9
1945	198,175,000	2,687,000	1.4	195,488,000	98.6
1946	198,003,000	35,028,000	17.7	162,975,000	82.3

Year	Total Interchange Revenue Rec'd. for Electric Services from Pa. Customers (b)	Revenue Received for Interchange during Hours of Baltimore Backfeed	% of Total Interchange Revenue Received	Revenue Received for Interchange during Hours of No Baltimore Backfeed	% of Total Interchange Revenue Received
1944	$ 809,412	$ 49,266	6.1	$ 760,146	93.9
1945	873,312	9,781	1.1	863,531	98.9
1946	1,182,194	200,710	17.0	981,484	83.0

(a) Includes kilowatthours supplied jointly with Safe Harbor Water Power Corporation to Pennsylvania Power & Light Company.

(b) Includes revenue received by Penn Water acting for itself and as agent for Safe Harbor Water Power Corporation.

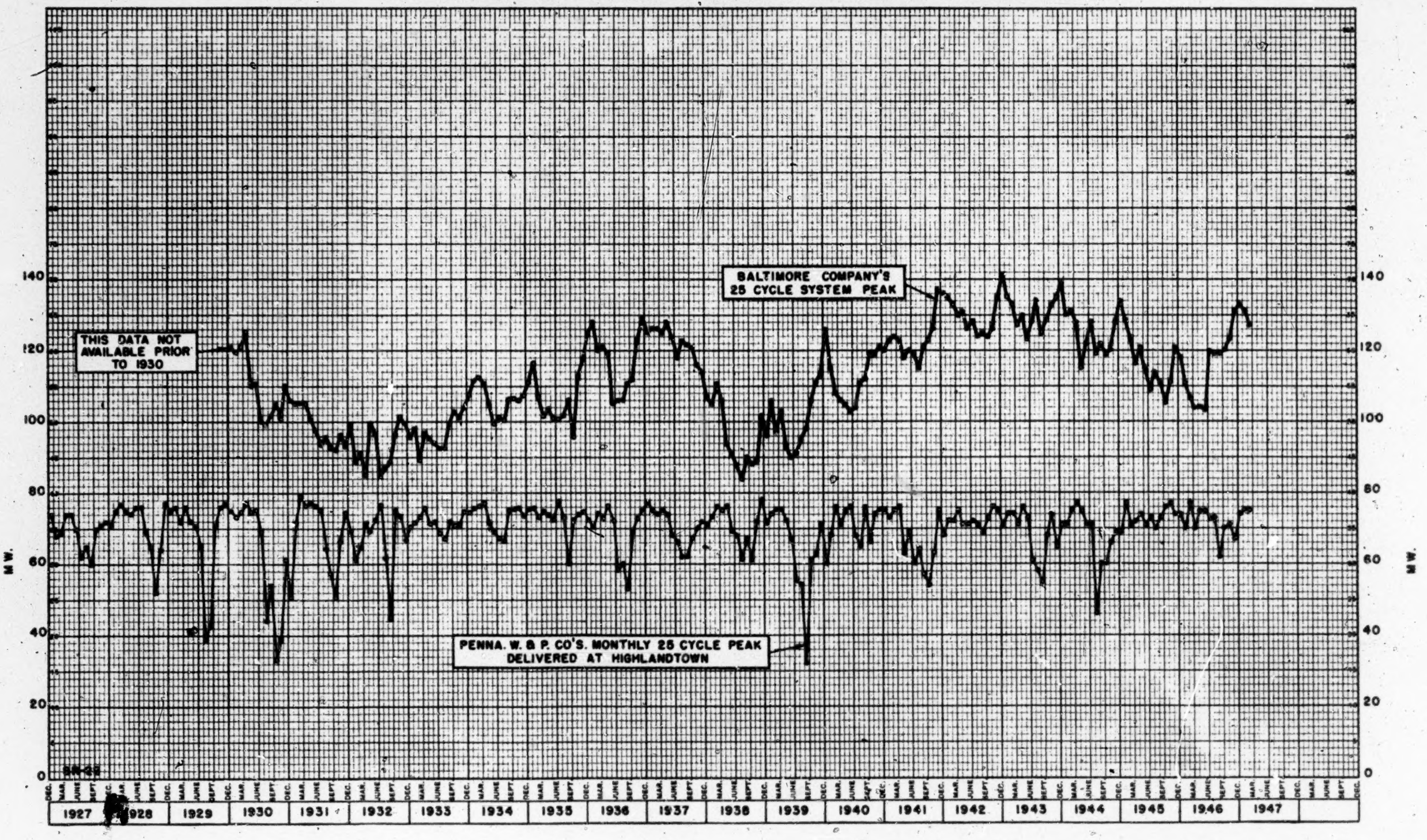
Kilowatthours of Net Baltimore Backfeed Used in Connection with the Supply of Interchange Services to Pennsylvania Customers

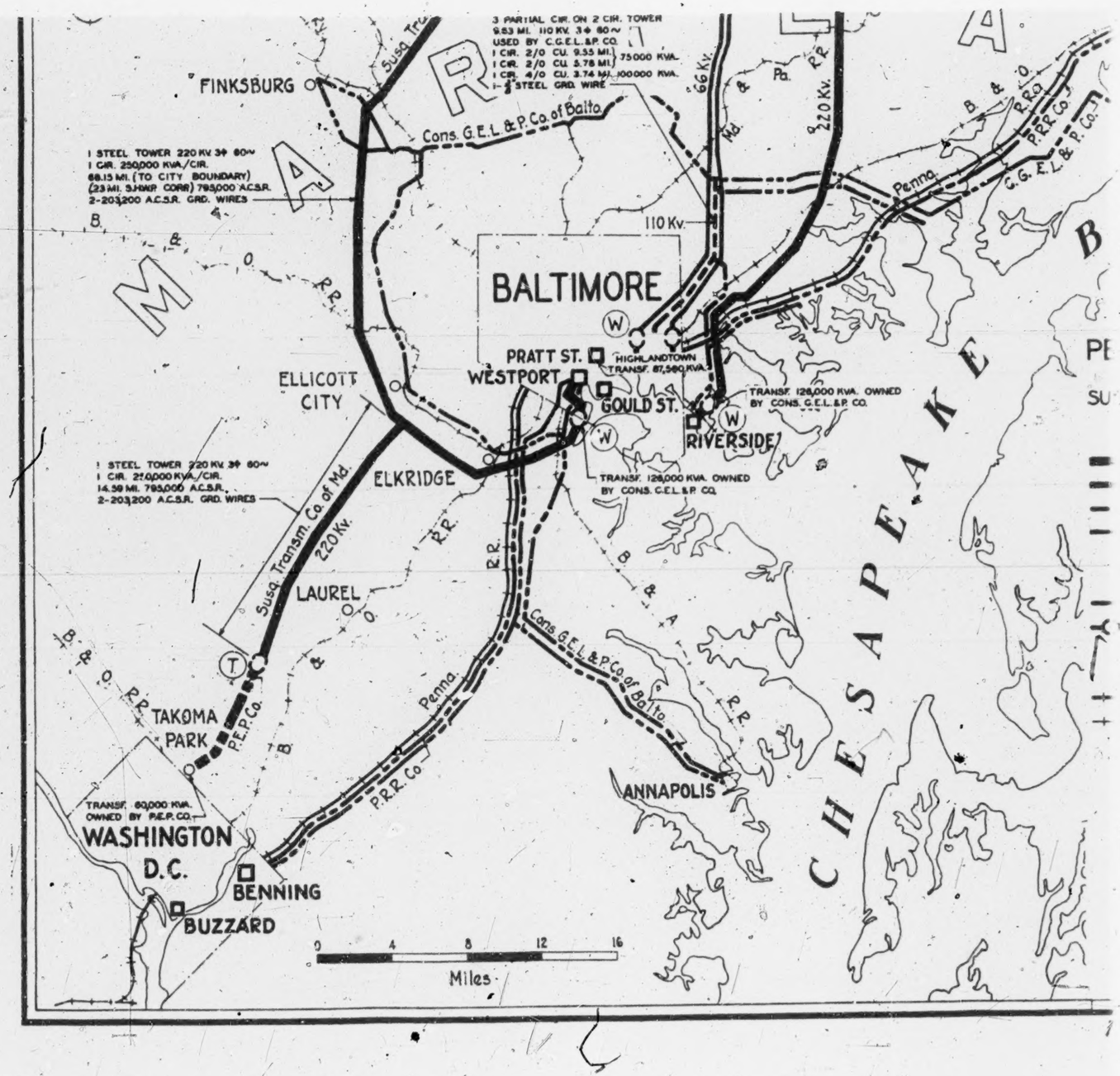
Year	Kilowatthours(a) (1)	Dollars (b) Received for Amounts of Energy shown in Col. (1) (2)	Col. 1 in % of Total Interchange Kilowatthours Supplied to Penna. Cust. (3)	Col. 2 in % of Total Interchange Revenues Rec'd. from Penna. Cust. (4)
1944	6,638,000	$ 34,850	4.3	4.3
1945	2,116,000	7,702	1.1	0.9
1946	23,019,000	131,899	11.6	11.2

(a) Includes kilowatthours supplied jointly with Safe Harbor Water Power Corporation to Pennsylvania Power & Light Company.

(b) Includes dollars received by Penn Water acting for itself and as agent for Safe Harbor Water Power Corporation.

BALTIMORE COMPANY'S MONTHLY 25 CYCLE SYSTEM PEAK AND
PENNA. W. & P. CO'S. MONTHLY 25 CYCLE PEAK DELIVERIES AT HIGHLANDTOWN





TRANSMISSION LINES
AND
INTERCONNECTIONS
OF THE
PENNSYLVANIA WATER & POWER CO.
AND
SUSQUEHANNA TRANSMISSION CO. OF MARYLAND
(A SUBSIDIARY COMPANY)

P.W. & P. Co and Subsidiary
- 220,000 V. Lines
- 132,000 V. Single Phase Line
- 110,000 V. Line
- 66,000 V. Lines
- Hydro-Electric Plant
- Steam-Electric Plant

- Lines of Other Companies
- Interconnections with Other Companies
- Hydro-Electric Plants of Other Companies
- Steam-Electric Plants of Other Companies
- Electrified Trackage of The Pennsylvania Railroad Co.
- Other Railroads
- (T) Interconnection with Potomac Electric Power Co.
- (V) Interconnection with The Pennsylvania Railroad Co.
- (W) Interconnection with Consolidated Gas Electric Light & Power Co. of Baltimore.
- (X) Interconnection with Philadelphia Electric Co.
- (Y) Interconnection with Metropolitan Edison Co.
- (Z) Interconnection with Pennsylvania Power & Light Co.

January 15, 1947.

This Map Supersedes all previous issues

410/424 -A-130463

Supersedes drawing of same number dated 10-1-38

[24316] Exhibit No. 353 4153

UNITED STATES OF AMERICA

FEDERAL POWER COMMISSION

Commissioners: Clyde L. Seavey, Acting Chairman; Claude L. Draper, Basil Manly. John W. Scott, not participating.

June 30, 1939

In the matter

Safe Harbor Water Power Corporation

ORDER ALLOWING SUPPLEMENTAL RATE SCHEDULE TO TAKE EFFECT PRIOR TO DATE OF FILING

It appearing to the Commission that:

(a) On April 12, 1939, the Safe Harbor Water Power Corporation filed with the Federal Power Commission its supplemental agreement, dated December 13, 1938, to its agreement of August 1, 1933, the said agreement of August 1, 1933, being designated in the files of the Commission as Safe Harbor Water Power Corporation Rate Schedule FPC No. 4, with the Pennsylvania Water & Power Company and the Philadelphia Electric Company, said supplemental agreement providing, among other things, for an extension for a period of three years from March 31, 1939, of the term of the said Safe Harbor Water Power Corporation Rate Schedule FPC No. 4 whereby said Safe Harbor Water Power Corporation and Pennsylvania Water & Power Company sell electric power and energy to said Philadelphia Electric Company, also making certain changes in the provisions relating to emergency and interchange service and the territory to be served by Philadelphia Electric Company with energy so purchased, as set forth in said supplemental agreement;

(b) By the terms of said supplemental agreement it is to take effect as of April 1, 1939;

(c) Good cause has been shown for, and the public interest will be served by, allowing the supplemental agreement of December 13, 1938, to Safe Harbor Water Power Corporation Rate Schedule FPC No. 4 to take effect as of April 1, 1939;

The Commission orders that:

(A) The rate schedule contained in said supplemental agreement of December 13, 1938, to Safe Harbor Water Power Corporation Rate Schedule FPC No. 4, between the Safe Harbor Water Power Corporation, Pennsylvania Water & Power Company and Philadelphia Electric Company, as filed with the Commission on April 12, 1939, be and it is hereby allowed to take effect as of April 1, 1939;

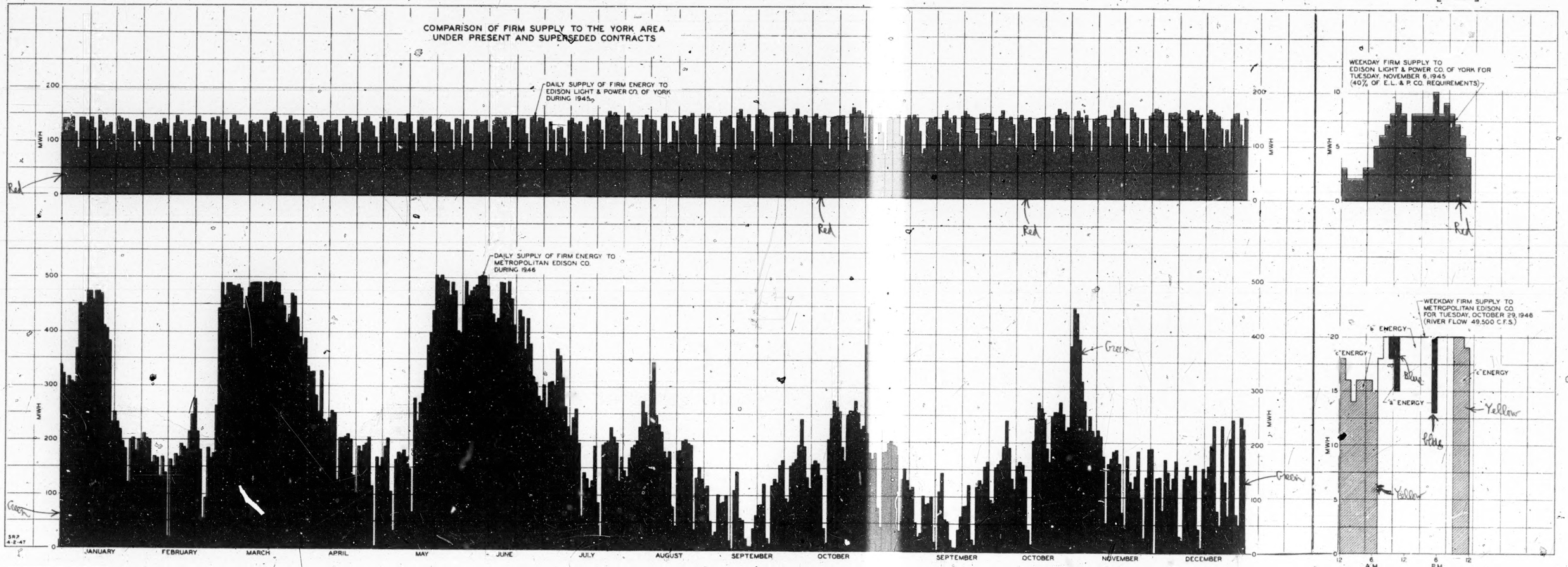
(B) Said rate schedule contained in said supplemental agreement shall be deemed to have been filed and published in compliance with the Federal Power Act.

By the Commission.

(Seal)

(signed) Leon M. Fuquay

Leon M. Fuquay,
Secretary.


COMPARISON OF FIRM SUPPLY TO THE YORK AREA
UNDER PRESENT AND SUPERSEDED CONTRACTS
DAILY SUPPLY OF FIRM ENERGY TO EDISON LIGHT & POWER CO. OF YORK DURING 1945
DAILY SUPPLY OF FIRM ENERGY TO METROPOLITAN EDISON CO. DURING 1946
MWH
Red
Green
SRP 4-2-47
JANUARY
FEBRUARY
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
SEPTEMBER
OCTOBER
NOVEMBER
DECEMBER
WEEKDAY FIRM SUPPLY TO EDISON LIGHT & POWER CO. OF YORK FOR TUESDAY, NOVEMBER 6, 1945 (40% OF E.L. & P. CO. REQUIREMENTS)
WEEKDAY FIRM SUPPLY TO METROPOLITAN EDISON CO. FOR TUESDAY, OCTOBER 29, 1946 (RIVER FLOW 49,500 C.F.S.)
a ENERGY
b ENERGY
c ENERGY
Blue
Yellow
12
6 A.M.
12
6 P.M.
12

UNITED STATES OF AMERICA

FEDERAL POWER COMMISSION

Commissioners) Clyde L. Seavey, Chairman; Claude L. Draper, Basil Manly, Leland Olds, John W. Scott.

September 22, 1939

In the Matter of)
) Project No. 1025
Safe Harbor Water Power Corporation)

ORDER AUTHORIZING INSTALLATION OF ADDITIONAL GENERATING UNIT

Upon application filed September 22, 1939, by Safe Harbor Water Power Corporation, licensee for Project No. 1025, Pennsylvania, for approval by the Commission of the installation of an additional generating unit in the Safe Harbor project on the Susquehanna River, and it appearing to the Commission that:

(a) There are at present six generating units installed in the project with a rated capacity of 42,500 horsepower or 28,000 kilowatts each and penstock and foundation openings have been provided for the installation of the proposed additional unit;

(b) The additional generating unit proposed will occupy plant position No. 1 and provide 25 cycle single phase energy to supply the Pennsylvania Railroad which purchases electric energy from the licensee for the operation of its trains;

Upon consideration of the application and record of the project, the Commission finds that:

Installation of the additional generating unit proposed is desirable in the public interest to supply the future needs of the market served by the licensee;

It is ordered that:

Approval is hereby given for the installation of said additional generating unit; provided, the licensee file within fifteen days of the date of receipt of this order, in accordance with the Rules of Practice and Regulations of the Commission, a supplemental Exhibit M showing the location and design of the unit as proposed.

By the Commission.

(Signed) LEON M. FUQUAY
Leon M. Fuquay,
Secretary.

(SEAL)

Exhibit No. 367

(2123)—D-215—23856—7-31 Accounting Dept.

BILL NUMBER

*Ledger*_____

Dept. Accounting

*Folio*_____

Baltimore, Md. December 17, 1931

C 22288

Name Penna. Water and Power Co.,

Address Mr. J. L. Rintoul, Treasurer,
16th floor - Lexington Bldg., Balto., Md.

5051 -

TO CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE, INC.
LEXINGTON and LIBERTY STREETS Order 80790

	DEBIT	CREDIT
To charge you with an amount of $8,383.16 representing electric energy supplied you during the month of November 1931.		
2,021,500 K.W.H. @ .4147¢ per K.W.H.	$8,383.16	

The cost of steam generated energy supplied you during the month of November 1931 is based on our Westport Production Cost for that month (.3770¢ per K.W.H. plus 10% (.0377¢ per K.W.H.) or a total of (.4147¢ per K.W.H.), This is in accordance with agreement between your Mr. R. L. Thomas and our Mr. F. E. Ricketts)

CUSTOMER'S COPY

M. R. ok
FX. RD. epe
Electricity Purchased
Acct.

C.V.M.
12/1/31

SR-13

January 13, 1932

HOLTWOOD COMPANY'S BILL TO BALTIMORE COMPANY FOR DECEMBER, 1931

The reference letters used below correspondend to the paragraph letters under Article III of the Supplemental Agreement of June 1, 1931.

(a)	NET POWER REVENUE OF HOLTWOOD COMPANY:			
	1. 1930 Rev. Adjusted to Avg. River Flow		$2,832,259.75	
	2. Decr. in Rev. from Cust. other than Balto.		70,080.06	
	3. 1931 Net Power Revenue			$2,762,179.69
(b)	PAYMENTS ON NET ADDITIONS @ 10.25%			$ 13,365.15
(c)	EXPENSES:			
	1. *Operating Expenses excl. Power Purchased	$ 563,282.24		
	2. Maintenance	361,639.46		
	3. General Expense	244,677.21		
	4. General Taxes	139,237.55		
	5. Federal Inc. Tax (excl. inc. tax on non-opr. rev.)	229,172.84		
	6. Normal Tax	6,375.00		
	7. Renewals and Replacements	355,146.73		
	8. Total			$1,899,531.03
	*Power Purchased shown in item (d)			
(d)	HOLTWOOD CO'S PAYMENTS FOR POWER PURCHASED:			
	1. Paid to Metropolitan Edison Co.	$ 37.25		
	2. Paid to Balto. Co. for back-feed (excl'g. $475.85 paid in Ja... for Dec, 1930)	14,452.47		
	3. Total			$ 14,489.72
	SUM OF (a), (b), (c) and (d)			$4,689,565.59
(e)	HOLTWOOD CO.'S REV. FROM PARTIES OTHER THAN BALTO.			
	1. P.P.& L.Co., Lancaster	$1,060,213.53		
	2. Chester Valley Elec. Co., Coatesville	345,381.46		
	3. Edison Lt. & Pwr. Co., York	288,710.98		
	4. Arundel Corp. Safe Harbor	36,464.00		
	5. Pioneer Elec. Light Co.	6,291.00		
	6. Metropolitan Edison Co.	20.00		
	7. Conowingo Backwater Payment	131,166.67		
	8. Safe Harbor Water Pr.Corp. for Filling Pond	14,406.00		
	9. Rentals received from Power Devel. Property	28,814.11		
	10. Total			$1,911,467.75
	BALANCE			$2,778,097.84
(f)	INT. ON INCREASE IN RES. FOR RENEWALS AND REPLACEMENTS			$ 5,282.72
(g)	NET DEBIT OR CREDIT UNDER PARAGRAPH (g)			NONE
	NET BILL FOR YEAR 1931			$2,772,815.12
	GROSS AMT. BILLED FOR FIRST 11 MONTHS (without deduc. for $14,452.47 back-feed steam)			$2,611,614.88
	NET BALANCE DUE FOR DECEMBER			$ 161,200.24

OPERATING COMMITTEE:

(Signed) F. E. Ricketts
F.E.Ricketts for Con.Gas Elec. Lt. & Pwr. Company

(Signed) R. L. Thomas
R.L.Thomas for P.W.& P.Co.and S.H.Water Pwr. Corp.

FER/RLT/MCF

SR-14

Exhibit No. 4166

Exhibit No. 369

[24333]

Annual Backfeed Energy Supplied by Baltimore Company

Year	Kwh. Received on Hourly Net Basis	Kwh. Received on Daily Net Basis	Baltimore Co. Average Monthly Production Cost Plus 10% (Mills/kwh.)	Baltimore Co. Bill to Penn Water under Article 6 of 1927 Contract
1944	125,840,000	81,147,000	4.42	$ 358,641
1945*	24,681,000	1,704,000	4.87	8,291
1946	99,439,000	48,277,000	5.10	246,112

Wm. Schmidt, Jr.
Chairman of the Board and
President

COPY

Charles P. Crane
Executive Vice-President

CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY
OF BALTIMORE

Baltimore-3, Md.
April
Twenty-eighth
1 9 4 7

Mr. J. A. Walls, President
Pennsylvania Water and Power Company
Lexington Building
Baltimore 3, Maryland

Dear Mr. Walls:

Mr. Spaulding gave to us today the attached draft of a letter to Mr. Harry Ferguson, Operating Manager of the Pennsylvania Power and Light Company, proposing terms for the "Extension and Modification of Lancaster Power Supply Contract." Mr. Greer has advised Mr. Spaulding that the terms of this letter are unacceptable to this Company.

In my letter to you of January 24, 1947 the following statement was made with respect to this power contract:

> "This Agreement will terminate on October 31, 1948, and the eighteen months' notice to that effect should be given the Pennsylvania Power and Light Company by your Company, as provided in the Agreement. In our letter of April 26, 1945 to your Company regarding the then proposed renewal of the Lancaster power supply contract, we said:
>
> > 'It is our belief that the rates now charged to Pennsylvania Power and Light Company are too low and that it would be reasonable to increase the rates, particularly because the contract does not contain a fuel rate adjustment clause.
>
> We still hold to this belief. However, in view of the fact that your Company's rates are now being investigated by the regulatory authorities and the uncertainty and difficulty of carrying on contract negotiations under these conditions, we would be willing to approve a renewal Agreement for one year from October 31, 1948, provided such renewal Agreement shall contain a limitation on the load supplied by Holtwood Company."

The time for giving the notice to the Pennsylvania Power and Light Company expires on April 30, 1947 and we must insist that this notice be given by your com

CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE

Sheet No. 2 To Mr. J.A. Wails, President Date April 28, 1947

pany and the Safe Harbor Water Power Corporation.

The suggested extension of the agreement for a period of one year with a limitation on the load supplied by your company should afford ample time in which to negotiate a new agreement for the Lancaster load.

If the year extension is not made and your company should fail to give the 18 months' notice to the Pennsylvania Power and Light Company, as Mr. Spaulding indicated might be the case, we shall be under the necessity of holding your company liable for all damages which this Company sustains in consequence thereof.

Yours very truly,

(Sgd.) Wm. Schmidt, Jr.
President

Wm. Schmidt, Jr.
Chairman of the Board
and President

COPY

Charles P. Crane
Executive Vice-President

CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY
OF BALTIMORE

Baltimore-3, Md.

February 28, 1947.

Mr. G. W. Spaulding
Member of Operating Committee
Pennsylvania Water & Power Co.
Lexington Building
Baltimore-3, Maryland

Dear Mr. Spaulding:

Referring to our telephone conversation regarding the operation under your Pennsylvania Power and Light Co, contract, I discussed this matter with Mr. Brunner and he advised me in a recent letter, copy of which was sent to you, that Lancaster is operating under Option "A" on a 100% basis, which, as he reports, does not make available the maximum income that could be derived from the P.P.&L. agreement.

During our telephone conversation you advised that although you realized that present operation on the 100% basis would not obtain the maximum dollar advantage to us, nevertheless you intend to continue to operate on a 100% basis unless an emergency develops.

I herewith advise that this position is not satisfactory to our Company and that we are therefore requesting that steps be taken as promptly as possible to obtain the full advantage of the P.P.&L. contract, or, in other words, supply only 80% of the Lancaster load as firm energy whenever it is economical to so operate.

Your cooperation in this matter will be appreciated.

Very truly yours,

(Sgd.) R. T. Greer

R. T. Greer
Member of Operating Committee

RTG:JC

(SR-16)

Wm. Schmidt, Jr.
Chairman of the Board
and President

COPY

Charles P. Cran
Executive Vice-P

CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY
OF BALTIMORE

Baltimore-3, Md.

February 28, 1947.

Mr. J. A. Walls, President,
Pennsylvania Water & Power Company,
Lexington Building,
Baltimore - 3, Maryland.

Dear Mr. Walls:

Mr. Greer has shown to me the copy of the letter from Mr. Rankin, Chief Engineer of the Metropolitan Edison Company to Mr. Von Eiff, of your Company, dated February 21, 1947, and Mr. Von Eiff's reply of February 25, 1947, in which he states that your Company will increase the firm power to be supplied to the Metropolitan Edison Company from 23 mw. to 24 mw. effective March 1, 1947.

I desire to repeat what I said in my letter to you of February 18, 1947, regarding this matter, namely, that such increase would have a definite effect on this Company's "steam line" and we therefore are unwilling to approve this proposed increase. Nothing contained in your letter to me of February 20th changes our views in this respect.

Yours very truly,

(Sgd.) Wm. Schmidt, Jr.

President

Jas.L.Rintoul,Exec.Vice-Pres.
G.W.Spaulding,Vice-President

J.U.Diehl,Treasurer
Wm.H.Eichhorn, Jr.
Secretary

COPY

J.A.Walls,President

PENNSYLVANIA WATER & POWER COMPANY

LEXINGTON BUILDING

BALTIMORE 3, MARYLAND

February 20, 1947

Mr. Wm. Schmidt, Jr., President
Consolidated Gas Electric Light and Power Company
Lexington Building
Baltimore-3, Maryland

Dear Mr. Schmidt:

This will acknowledge your letter of February 18th in which you advise that it would not be proper for the Company to assume any additional firm power obligations to the Metropolitan Edison Company under its power contract of November 15, 1945, in connection with our available option to increase such amount of firm power from 23 Mw. to 24 Mw.

The exercise by us of the option to increase this supply to Metropolitan Edison Company on January 14, July 11, and September 14, 1946, was made only after our Operating Committee had very properly considered the matter, but no formal request for approval by your Company appeared necessary in that connection.

In addition to the reasons given by our Mr. Spaulding in his letter of February 11th, in supporting our intentions for further increasing this supply to Metropolitan Edison by 1,000 Kw., we had recognized that the operating reserves of the companies in Area 6 may be found inadequate should we experience a coincidence of minimum river flow with maximum system requirements and the outage of steam capacity. However, the coordinated scheduling of maintenance and operations of the systems in F.P.C. Area 6 and those in F.P.C. Area 5 minimize such probability. Further, the effect on the system "steam line" from such further increase in Metropolitan Edison's supply would appear to be of the order of 250 Kw. which if true, I believe you will agree with me, is negligible on the combined interconnected systems, especially if it be your current intention to remove from your Westport plant a steam generating unit with an effective rating of 5,000 Kw., but which could readily be increased to 10,000 Kw.

We are not convinced that your concern for adequate system reserves has been based upon sufficient appraisal of the situation

Mr. Wm. Schmidt, Jr., President
February 20, 1947

to warrant us in not exercising this Company's option under the M.E. contract to increase the amount of firm power in the light of the advantages and benefits both to this Company and to yours and, incidentally, to M.E.

Yours very truly,

(Sgd.) J.A. Walls
President

Wm. Schmidt, Jr.
Chairman of the Board
and President

COPY

Charles P. Crane
Executive Vice-President

CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY
OF BALTIMORE

Baltimore-3, Md.

February 18, 1947.

Mr. J. A. Walls, President
Pennsylvania Water & Power Company,
Lexington Building,
Baltimore - 3, Maryland.

Dear Mr. Walls:

Mr. Creer has brought to my attention Mr. Spaulding's letter to him of February 11, regarding a proposed increase in the amount of firm power supplied the Metropolitan Edison Company under the contract of November 15, 1945.

We approved increases in the supply to that Company from 20 to 21 mw on January 14, 1946; from 21 to 22 mw on July 11, 1946; and from 22 to 23 mw on September 14, 1946, pursuant to Article IV of the 1931 Supplemental Agreement between our companies. While we appreciate the reasons Mr. Spaulding assigns in support of his opinion that a further increase of 1,000 kw should be made, we desire to point out that this Company is now short in capacity and the proposed increase would have a definite effect on this Company's "steam line." In times of minimum river flow and system peak load requirements it would be impossible to supply this additional 1,000 kw to Metropolitan Edison Company with adequate reserve and, therefore, it would not be proper to assume this obligation.

In my letter to you of January 24, 1947, regarding the Lancaster and Coatesville power contracts, the statement was made that a limitation should be placed on the load supplied Pennsylvania Power and Light Company and Philadelphia Electric Company. Such a limitation should also be placed on the Metropolitan Edison Company's load and we, therefore, find it necessary to disapprove the proposed increase of 1,000 kw.

Your cooperation in handling this matter with the Metropolitan Edison Company will be appreciated.

Yours very truly,

(Sgd.) Wm. Schmidt, Jr.

President

Charles M. Cohn
Chairman of the Board

Wm. Schmidt, Jr.
President

Charles P. Crane
Executive Vice-Pres.

COPY

CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY
OF BALTIMORE

Baltimore-3, Md.

February 14, 1947.

Mr. G. W. Spaulding
Member of Operating Committee
Pennsylvania Water & Power Company
Lexington Building
Baltimore-3, Maryland

Re: Requested Waiver of 18 Months' Notice Period on Change of Option under the Pennsylvania Power and Light Company Contract.

Dear Mr. Spaulding:

Paragraph (9), entitled "Flexibility Provisions," of the Letter-Agreement dated April 28, 1939 between your Company and the Pennsylvania Power and Light Company gives the Pennsylvania Power and Light Company certain options with respect to the power supply. By letters dated February 8, 1944, February 23, 1945 and February 19, 1946 it was agreed that Pennsylvania Power and Light Company would change from Option "C" to Option "A" on February 15, 1947. On Tuesday, February 11, 1947 you advised me by telephone that Pennsylvania Power and Light Company desired to postpone the effective date of this change to February 15, 1948.

This is to confirm my conversation with you in which I advised that Baltimore Company could not agree to such postponement and must insist upon the contractual requirement of at least 18 months' written notice to change from Option "A" to Option "C". You will recall that Mr. Schmidt, in a letter of January 24, 1947 to Mr. Walls, made the statement that a limitation should be placed on the load supplied to Pennsylvania Power and Light Company and Philadelphia Electric Company. My position in this matter is in furtherance of this policy stated by Mr. Schmidt.

Very truly yours,

(Sgd.) R. T. Greer

R. T. Greer
Member of Operating Committee

RTG:JC

COPY

Jas.L.Rintoul,Exec.Vice-President J.U.Diehl,Treasurer
W.Spaulding,Vice-President J.A.Walls,President Wm.H.Eichhorn,Jr.,Secretary

PENNSYLVANIA WATER & POWER COMPANY

LEXINGTON BUILDING

BALTIMORE 3, MD.

February 11, 1947

Mr. R. T. Greer, Member of Operating Committee,
Consolidated Gas Electric Light and Power Company.
Baltimore-3, Maryland

Dear Mr. Greer:

Confirming my advice to you a few days ago, the "total requirements" of Metropolitan Edison Company, on February 4, 1947, were 317 Mw. Under the provisions of Article IV, Section 1(b)2 of Penn Water's power supply contract with that Company dated November 15, 1945, Penn Water has the election to increase the "amount of firm power" to be supplied thereunder from 23 Mw. to 24 Mw.

It is Penn Water's considered opinion that it should elect to increase the "amount of firm power" in accordance with the terms of the contract for the following reasons:

(a) Such increase will provide a greater utilization of the hydro resources of Penn Water and Safe Harbor;

(b) Such an increase in the firm power obligation of Penn Water will have a negligible effect on Baltimore Company's "steam line";

(c) There will be a material advantage to Baltimore Company by the exercise of such option by Penn Water; and

(d) Penn Water believes that is is in accord with the intent of Article VIII of the Supplemental Agreement between our two companies to exercise this option.

It is the intention of Penn Water to exercise its option to increase the "amount of firm power" to be supplied under its Metropolitan Edison Contract to 24 Mw. and wishes to advise Baltimore Company in advance of such action.

Yours very truly,

(Sgd.) G. W. Spaulding
Member, Operating Committee

Charles M. Cohn
Chairman of the Board

COPY

Charles P. Crane
Executive Vice-President

Wm. Schmidt, Jr.
President.

CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY
OF BALTIMORE

Baltimore-3, Md.
January
Twenty-fourth
1947

Mr. J. A. Walls, President,
Pennsylvania Water & Power Company,
Lexington Building,
Baltimore-3, Maryland.

Dear Mr. Walls:

Referring to our correspondence regarding the Lancaster Power Supply Agreement with the Pennsylvania Power and Light Company and the Coatesville Power Supply Agreement with the Philadelphia Electric Company, our views are as follows:

1. Lancaster Power Agreement

This Agreement will terminate on October 31, 1948, and the eighteen months' notice to that effect should be given the Pennsylvania Power and Light Company by your Company, as provided in the Agreement. In our letter of April 26, 1945 to your Company regarding the then proposed renewal of the Lancaster power supply contract, we said:

> "It is our belief that the rates now charged to Pennsylvania Power and Light Company are too low and that it would be reasonable to increase the rates, particularly because the contract does not contain a fuel rate adjustment clause."

We still hold to this belief. However, in view of the fact that your Company's rates are now being investigated by the regulatory authorities and the uncertainty and difficulty of carrying on contract negotiations under these conditions, we would be willing to approve a renewal Agreement for one year from October 31, 1948, provided such renewal Agreement shall contain a limitation on the load supplied by Holtwood Company. We will also approve the construction of the Manor Substation.

Mr. J. A. Walls January 24, 1947

2. Coatesville Power Agreement

This Agreement will terminate on March 31, 1948, pursuant to the notice contained in the letter of Mr. N. E. Funk, Vice President of the Philadelphia Electric Company, dated September 26, 1946.

Although we feel that the present rates are now too low, we are willing to approve a renewal Agreement for one year from March 31, 1948, with the following modifications:

(a) That the load supplied from the Downington Substation be transferred to the main supply of the Philadelphia Electric Company and the load area supplied from the Newlinville Substation be enlarged to include the load to the south of the present Coatesville area, as proposed by the Philadelphia Electric Company.

(b) That a limitation be placed on the load to be supplied by Holtwood Company under this renewal Agreement.

Yours very truly,

(Sgd.) Wm. Schmidt, Jr.

President

COPY

Charles M. Cohn
Chairman of the Board

Wm. Schmidt, Jr.
President

Charles P. Crane
Executive Vice-President

CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY
OF BALTIMORE

Baltimore -3, Md. November 29, 1946

Mr. J. A. Walls, President,
Pennsylvania Water & Power Company,
Lexington Building,
Baltimore-3, Maryland.

Dear Mr. Walls:

Receipt is acknowledged of your letter of November 26th regarding the Manor Substation.

In view of the fact that it will be necessary before long to give consideration to your Company's power supply to the Pennsylvania Power and Light Company, inasmuch as the power contract with that Company will expire on October 31, 1948, we think it is desirable that the Operating Committee make an engineering study of the need for this installation and that pending the completion of such study no commitments be made as to the construction of the substation and related transmission line.

We believe that the operation of the present system and equipment has been satisfactory and there is therefore no need for any immediate steps toward providing for this installation, especially as with presently quoted deliveries of equipment and materials the substation could not be completed before the expiration of the power contract.

Yours very truly,

(Sgd.) Wm. Schmidt, Jr.

President

Jas.L.Rintoul,Exec.Vice-President
G.W.Spaulding,Vice-President

C O P Y

J.A.Walls,President

J.U.Diehl,Treasurer
Wm.H.Eichhorn,Jr.Secretary

PENNSYLVANIA WATER & POWER COMPANY

LEXINGTON BUILDING

BALTIMORE 3, MD.

November 26, 1946

Mr. Wm. Schmidt, Jr., President,
Consolidated Gas Elec. Light and Power Company,
Baltimore, Maryland

Re: Installation of 66 Kv. Manor Substation at Safe Harbor, Pennsylvania

Dear Mr. Schmidt:

A Letter Agreement of April 28, 1939, between Pennsylvania Water & Power Company, Safe Harbor Water Power Corporation and Pennsylvania Power & Light Company, provided that Generating Companies would construct, operate and maintain an enlarged 66 Kv. switching station at Safe Harbor together with an additional double circuit steel tower transmission line from Manor Substation to Lehman Farm Switching Station, not later than May 1, 1943. By letter agreement the construction of this substation was subsequently deferred, subject to the changing requirements or needs of either party. During the war years, certain temporary changes and additions were made to accommodate the increased load requirements of Pennsylvania Power & Light Company in its Lancaster area. With the continuing growth of this customer's load, Pennsylvania Power & Light Company has recently brought to our attention its need for Manor Substation, and it is our judgment that reliability of service to this customer warrants its early completion.

With the changes and enlargement of the existing 66 Kv switching facilities at Manor Substation at Safe Harbor, there will also be provided the contemplated construction of a double circuit steel tower transmission line from Manor Substation to Lehman Farm, and certain necessary and related changes at Lehman Farm and Holtwood. In connection with this Manor Substation, Safe Harbor will provide certain additional control equipment connecting the substation with its control room.

The cost for completing the above facilities, other than the necessary investment by Safe Harbor Company, has been estimated to be $550,000. There will be a net charge to retirement reserve of $20,000 and a net increase in fixed capital of $530,000.

The facilities to be provided by Safe Harbor Company are estimated to cost about $37,000 in connection with which there will be a net charge to retirement reserve of that company of about $3,000 and a net increase in fixed capital of $34,000.

Mr. Wm. Schmidt, Jr.
November 26, 19[illegible]

The present estimates of Power and of Safe Harbor Company are necessarily subject to modification in the light of unsettled quotations on equipment and uncertain labor costs for construction.

Generating Companies' commitment for this investment was recognized at the time your Company approved the execution of this Letter Agreement of April 28, 1939, being specifically referred to in an Operating Committee memorandum dated June 1, 1939 relating thereto. While the approval of your Company at this time, of the investment necessary for these extensions, may not be required under the provisions of Article V of the Supplemental Agreement dated June 1, 1931, we wish to advise you at this time of our intentions to proceed, particularly in the light of the increased costs of construction.

We are hoping to place orders for the more critical equipment before the end of this year.

Yours very truly,

(Sgd.) J. A. Walls
President

COPY

Charles M. Cohn
Chairman of the Board

Wm. Schmidt, Jr.
President

Charles P. Crane
Executive Vice-President

CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY
OF BALTIMORE

Baltimore-3, Md.

November 1, 1946

Mr. John A. Walls, President,
Pennsylvania Water & Power Company,
Lexington Building,
Baltimore-3, Maryland.

Dear Mr. Walls:

On October 8, 1946 Mr. G. W. Spaulding, Vice-President of your Company, at our request furnished us with a copy of the letter of Mr. N. E. Funk, Vice-President of the Philadelphia Electric Company, dated September 26, 1946, addressed to Pennsylvania Water & Power Company and Safe Harbor Water Power Corporation, giving notice of a desire to terminate on March 31, 1948 the Coatesville power supply agreement dated August 1, 1933 and the supplements thereto, unless certain changes and modifications, necessitated by conditions in the area supplied, can be made in the agreement.

In Mr. Spaulding's reply letter, dated September 30, 1946, he states:

> "We will be pleased to discuss the changes and modifications to these agreements which you may have in mind at an early date. I believe I may be in Philadelphia within the next two weeks and will try to arrange a talk with you and Mr. Irwin on that occasion if it is convenient."

In order that there may be no misunderstanding as to our position in this matter, we desire to confirm the request transmitted orally to Mr. Spaulding by Mr. Greer, our member of the Operating Committee, on October 11, viz., that representatives of your Company have no further discussion with representatives of the Philadelphia Electric Company regarding any changes to, or extension or renewal of, the existing contract, which will terminate on March 31, 1948, or the making of a new contract, before receiving further advice from Consolidated Company.

Yours very truly,

(Sgd.) Wm. Schmidt, Jr.

President.

ACTUAL CAPACITY AVAILABLE FROM SAFE HARBOR-HOLTWOOD POWER DEVELOPMENTS AT TIME OF ANNUAL PEAKS - KW.

F.P.C. Area 6 Annual System Peak (Incl. Penna. Firm Cust.)	1944	1945	1946
Time	Dec.11-6 p.m.	Dec. 5-6 p.m.	Dec.19-6 p.m.
Capacity available from Safe Harbor and Holtwood Power Developments	321,000 kw.	364,000 kw.	355,000 kw.
Holtwood Hydro	98,000 kw.	102,000 kw.	102,000 kw.
Holtwood Steam	28,000 kw.	28,000 kw.	28,000 kw.
Safe Harbor Hydro	195,000 kw.*	234,000 kw.	225,000 kw.
Safe Harbor - Holtwood Power Developments System Peak			
Time	Apr.19-8 a.m.	May 2-5 p.m.	May 25-1 p.m.
Capacity available from Safe Harbor and Holtwood Power Developments	370,000 kw.	371,000 kw.	368,000 kw.
Holtwood Hydro	105,000 kw.	109,000 kw.	109,000 kw.
Holtwood Steam	28,000 kw.	28,000 kw.	26,000 kw.
Safe Harbor Hydro	237,000 kw.	234,000 kw.	233,000 kw.
Holtwood Power Development Peak			
Time	Apr.14-1 a.m.	Apr.28-3 p.m.	May 22-5 p.m.
Capacity available from Holtwood Power Development	137,000 kw.	138,000 kw.	137,000 kw.
Holtwood Hydro	109,000 kw.	110,000 kw.	110,000 kw.
Holtwood Steam	28,000 kw.	28,000 kw.	27,000 kw.
Safe Harbor Power Development Peak			
Time	May 15-5 a.m.	Mar.30-11 p.m.	June 9-7 a.m.
Safe Harbor Hydro (Max. 1-hr. output)	239,000 kw.	230,000 kw.	238,000 kw.

*No. 2 Unit (31,000 kw.) was out for maintenance. (There was sufficient spare capacity available to permit this maintenance in December).

SR 20

FIRM POWER DEMANDS OF PENNSYLVANIA CUSTOMERS ON PENN WATER-SAFE HARBOR SYSTEM AT TIME OF ANNUAL PEAKS - KW.

F.P.C. Area 6 Annual System Peak	1944	1945	1946
Time	Dec.11-6 p.m.	Dec. 5-6 p.m.	Dec.19-6 p.m.
Penna.Power & Light Co.	52,000	52,000	55,000
Philadelphia Electric Co.	23,000	24,000	27,000
Edison Light & Power Co.	9,000	10,000	-
Metropolitan Edison Co.	-	-	21,000
Pennsylvania Railroad (Total Demand on "Electric Companies")	52,000	58,000	65,000
Pennsylvania Railroad (Requirements in Pennsylvania)	*	25,000	24,000
Pennsylvania Railroad (Requirements in Maryland)	*	33,000	41,000
Safe Harbor-Holtwood Power Developments System Peak			
Time	Apr.19-8 a.m.	May 2-5 p.m.	May 25-1 p.m.
Penna.Power & Light Co.	49,000	49,000	26,000
Philadelphia Electric Co.	16,000	18,000	11,000
Edison Light & Power Co.	6,000	7,000	-
Metropolitan Edison Co.	-	-	22,000
Pennsylvania Railroad (Total Demand on "Electric Companies")	73,000	55,000	8,000
Pennsylvania Railroad (Requirements in Pennsylvania)	*	*	3,000
Pennsylvania Railroad (Requirements in Maryland)	*	*	5,000
Holtwood Power Development Peak			
Time	Apr.14-1 a.m.	Apr.28-3 p.m.	May 22-5 p.m.
Penna.Power & Light Co.	28,000	42,000	36,000
Philadelphia Electric Co.	18,000	12,000	19,000
Edison Light & Power Co.	3,000	4,000	-
Metropolitan Edison Co.			21,000
Pennsylvania Railroad (Total Demand on "Electric Companies")	44,000	50,000	58,000
Pennsylvania Railroad (Requirements in Pennsylvania)		*	23,000
Pennsylvania Railroad (Requirements in Maryland)		*	35,000

Non-Coincident Maximum Demands of Pennsylvania Firm Customers

	1944		1945		1946	
	Date	Kw.	Date	Kw.	Date	Kw.
Penna.Power & Light Co.	Nov.21-10 a.m.	66,000	Apr.25-11 a.m.	67,000	Sept.24-10 a.m.	67,000
Philadelphia Electric Co.	Jan.21-11 a.m.	25,000	Jan.12-10 a.m.	25,000	Dec. 19- 6 p.m.	27,000
Edison Light & Power Co.	June19-12 Noon	10,000	Oct. 2-11 a.m.	11,000		
Metropolitan Edison Co.					Dec. 20- 6 p.m.	23,000
Penna.RR (Total Demand on "Elec.Cos.")	Feb.29- 7 p.m.	81,000	Dec.10- 9 p.m.	82,000	Feb. 14- 6 p.m.	81,000
Penna.RR (Requirements in Penna.)	*		*		Feb. 13- 7 p.m.	45,000
Penna.RR (Requirements in Md.)	*		*		Apr. 19- 6 p.m.	52,000

*Not measured

J. A. WALLS, PRESIDENT
JAS. L. RINTOUL, EXEC. VICE-PRESIDENT
G. W. SPAULDING, VICE-PRESIDENT
J. U. DIEHL, TREASURER
WM. H. EICHHORN, JR., SECRETARY

Pennsylvania Water & Power Company
Lexington Building
Baltimore 1, Md.

May 28, 1946

Mr. R. T. Greer,
Member - Operating Committee,
Consolidated Gas Electric Light and Power Company
Baltimore-3, Maryland

Dear Mr. Greer:

Please find enclosed the data prepared by this Company for Schedules 2 and 16 of F.P.C. Form 12 for the year 1945. The attached schedules and accompanying notes are being filed by Pennsylvania Water & Power Company and Safe Harbor Water Power Corporation in their power system report to the Federal Power Commission, and the same data are applicable to the combined system report for Penn Water, Safe Harbor, Baltimore, Washington and Bethlehem Steel companies, being compiled by your Company from data submitted by the several operating companies.

Yours very truly,

(s) G. W. Spaulding

G. W. Spaulding
Member - Operating Committee

GWS:F
Encl.

SR-17

COPY

arles M. Cohn
airman of the Board
Wm. Schmidt, Jr.
President
Charles P. Crane
Executive Vice-President

CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY
OF BALTIMORE

Baltimore-3, Md.

June 3, 1946

Mr. G. W. Spaulding
Member, Operating Committee
Pennsylvania Water & Power Co.
Lexington Building
Baltimore-1, Maryland

Dear Mr. Spaulding:

Attached are copies of Schedules 2 and 16 of F.P.C. Form 12 which we have prepared for the pool report for the year 1945.

You will note that we are following the same method of stating hydro capacity as was used in the pool report for the several previous years. We have, however, included notes (last paragraph in notes to Schedule 2 and note 1-b to Schedule 16) which indicate that your Company desires to state the dependable hydro capacities on a different basis and that your Company in its report is submitting different figures.

Very truly yours,

(s) R. T. Greer

R. T. Greer
Member, Operating Committee

RTG:JC
Enc.

J. A. WALLS, PRESIDENT
JAS. L. RINTOUL, EXEC. VICE-PRESIDENT
G. W. SPAULDING, VICE-PRESIDENT
J. U. DIEHL, TREASURER
WM. H. EICHHORN, JR. SECRETARY

Pennsylvania Water & Power Company
Lexington Building
Baltimore 1, Md.

June 5, 1946

Mr. R. T. Greer,
Member - Operating Committee,
Consolidated Gas Electric Light and Power Company
Baltimore-3, Maryland

Dear Mr. Greer:

This will acknowledge your note of June 3, 1946, enclosing the data and notes which your company has prepared for inclusion in F.P.C. Form No. 12 for the year 1945, applicable to the combined system report for Penn Water, Safe Harbor, Baltimore, Washington and Bethlehem Steel companies.

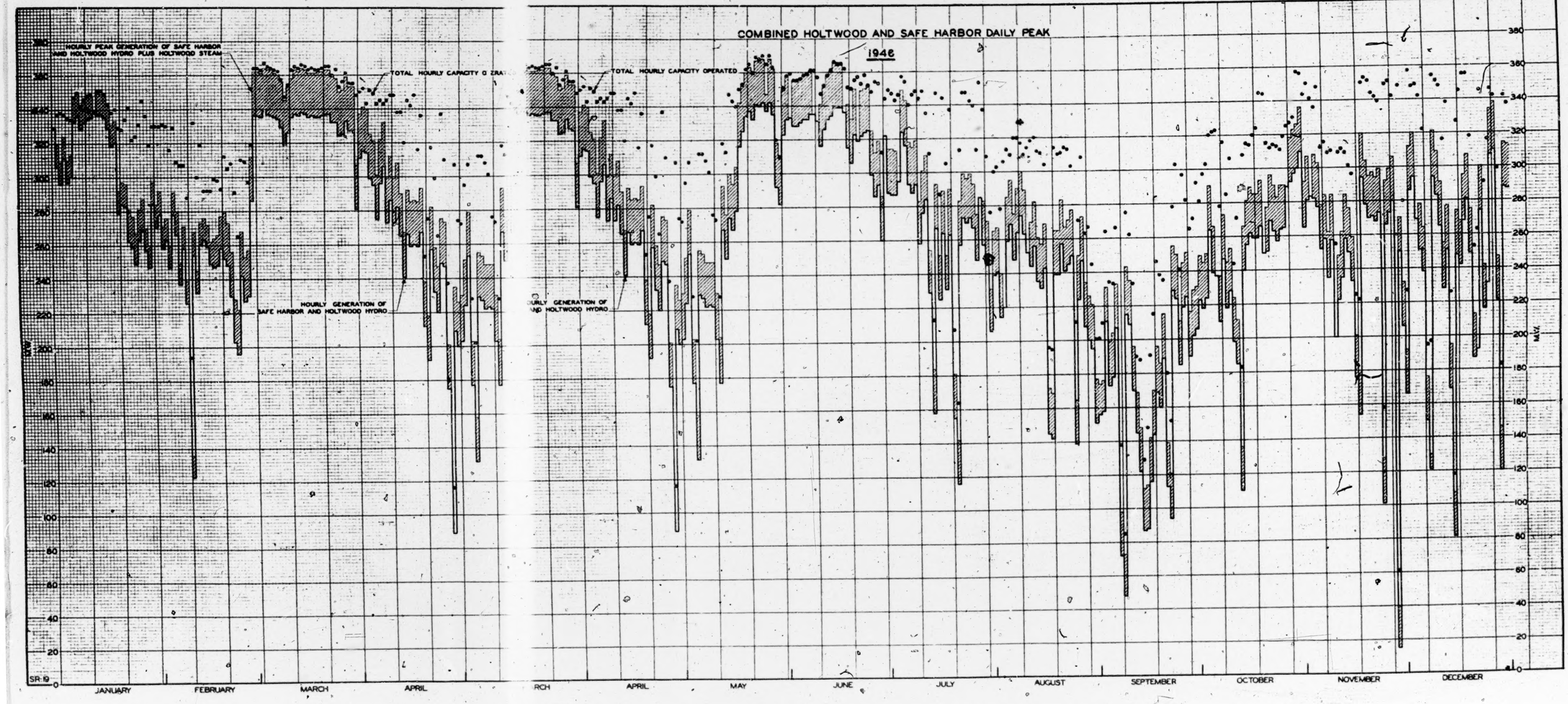
We wish to refer you to our letter of May 28, 1946 and the statements attached thereto, as we believe such statements are the only correct data for submission to the Federal Power Commission as respects the capacities of this Company and of Safe Harbor Company in connection with F.P.C. Form No. 12, Annual Report.

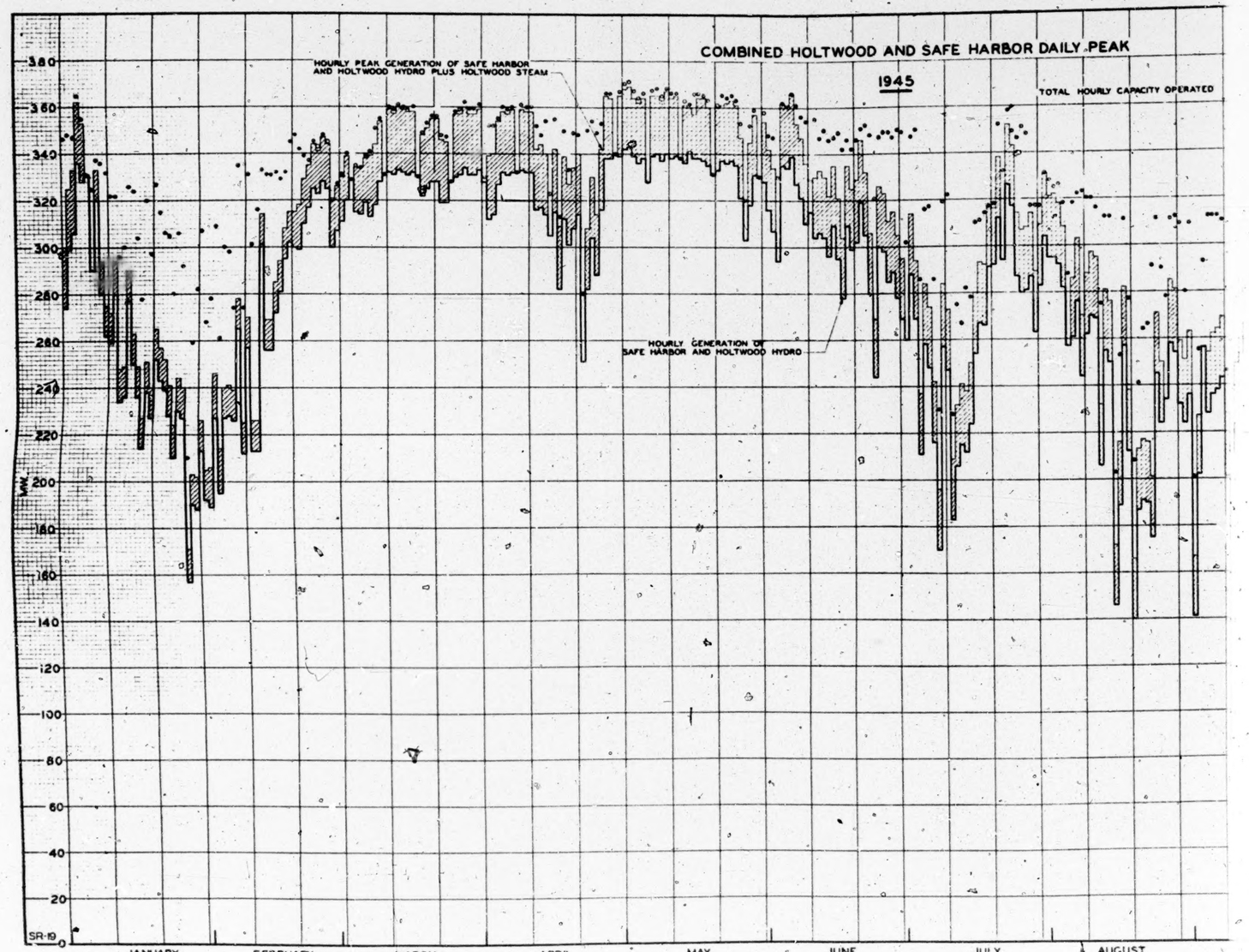
Yours very truly,

(s) G. W. Spaulding

G. W. Spaulding
Member - Operating Committee

GWS:F


COMBINED HOLTWOOD AND SAFE HARBOR DAILY PEAK
1946
HOURLY PEAK GENERATION OF SAFE HARBOR AND HOLTWOOD HYDRO PLUS HOLTWOOD STEAM
TOTAL HOURLY CAPACITY OPERATED
HOURLY GENERATION OF SAFE HARBOR AND HOLTWOOD HYDRO
MW
JANUARY
FEBRUARY
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER
DECEMBER
SR-19


COMBINED HOLTWOOD AND SAFE HARBOR DAILY PEAK
1945
HOURLY PEAK GENERATION OF SAFE HARBOR AND HOLTWOOD HYDRO PLUS HOLTWOOD STEAM
TOTAL HOURLY CAPACITY OPERATED
HOURLY GENERATION OF SAFE HARBOR AND HOLTWOOD HYDRO
MW
380
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JANUARY
FEBRUARY
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
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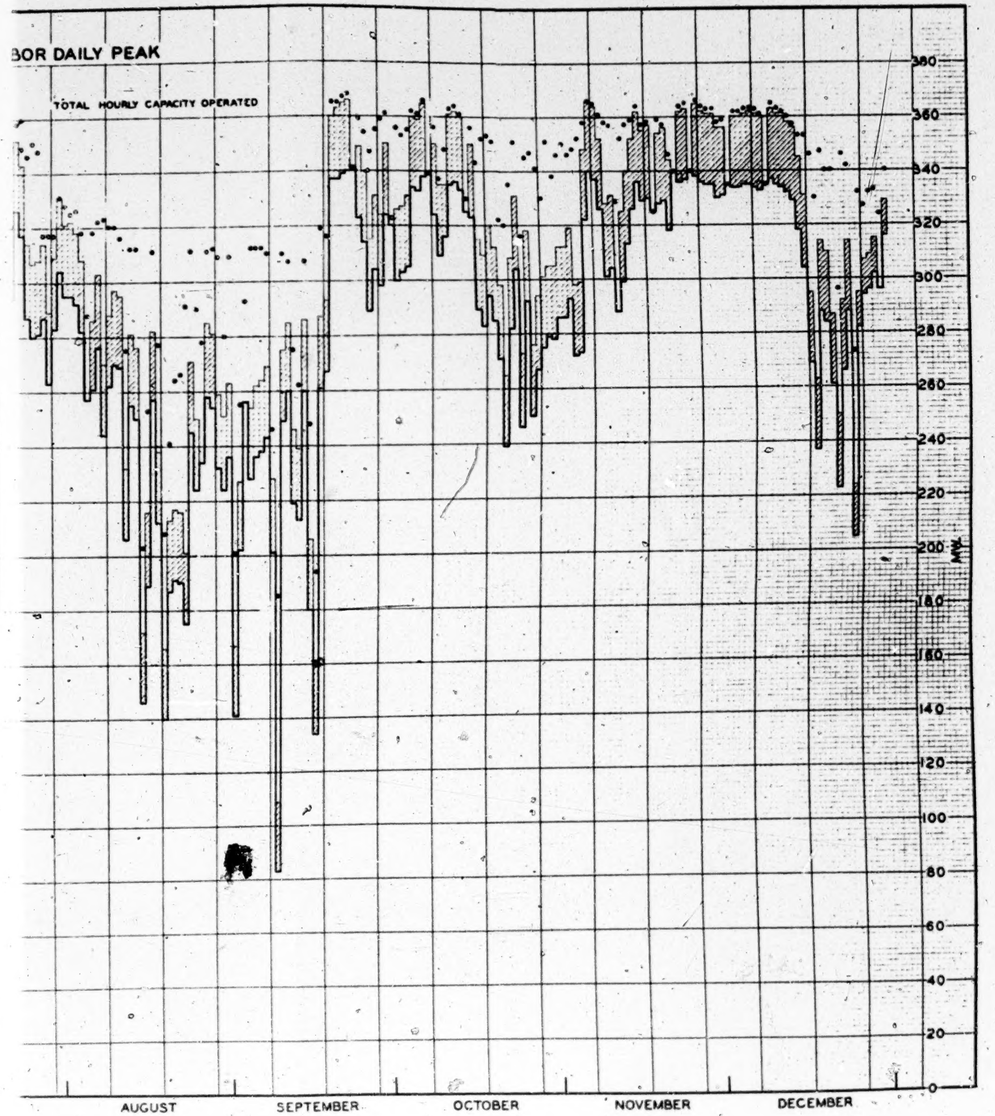
BOR DAILY PEAK
TOTAL HOURLY CAPACITY OPERATED
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20
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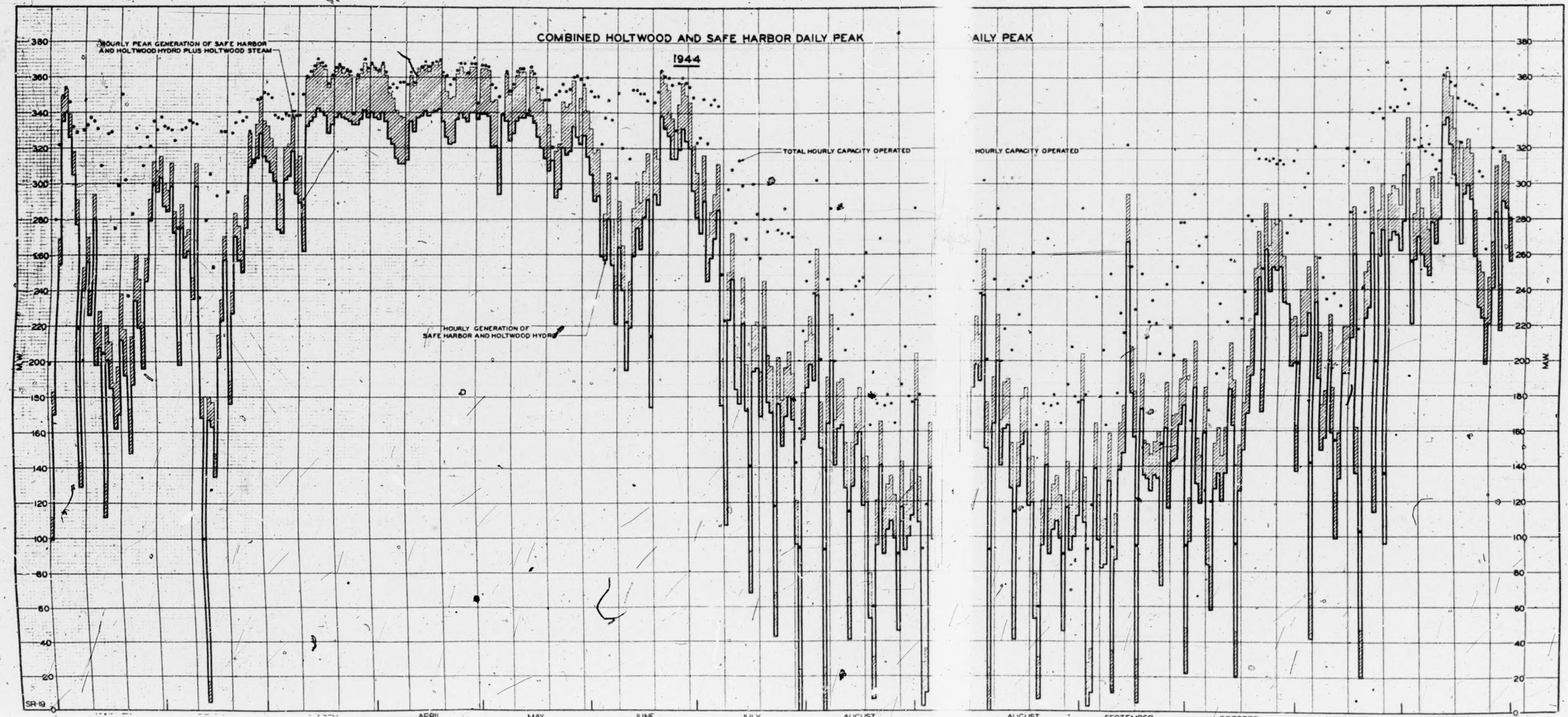
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER
DECEMBER


COMBINED HOLTWOOD AND SAFE HARBOR DAILY PEAK
1944
HOURLY PEAK GENERATION OF SAFE HARBOR AND HOLTWOOD HYDRO PLUS HOLTWOOD STEAM
TOTAL HOURLY CAPACITY OPERATED
HOURLY GENERATION OF SAFE HARBOR AND HOLTWOOD HYDRO
AILY PEAK
HOURLY CAPACITY OPERATED
MW
380
360
340
320
300
280
260
240
220
200
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160
140
120
100
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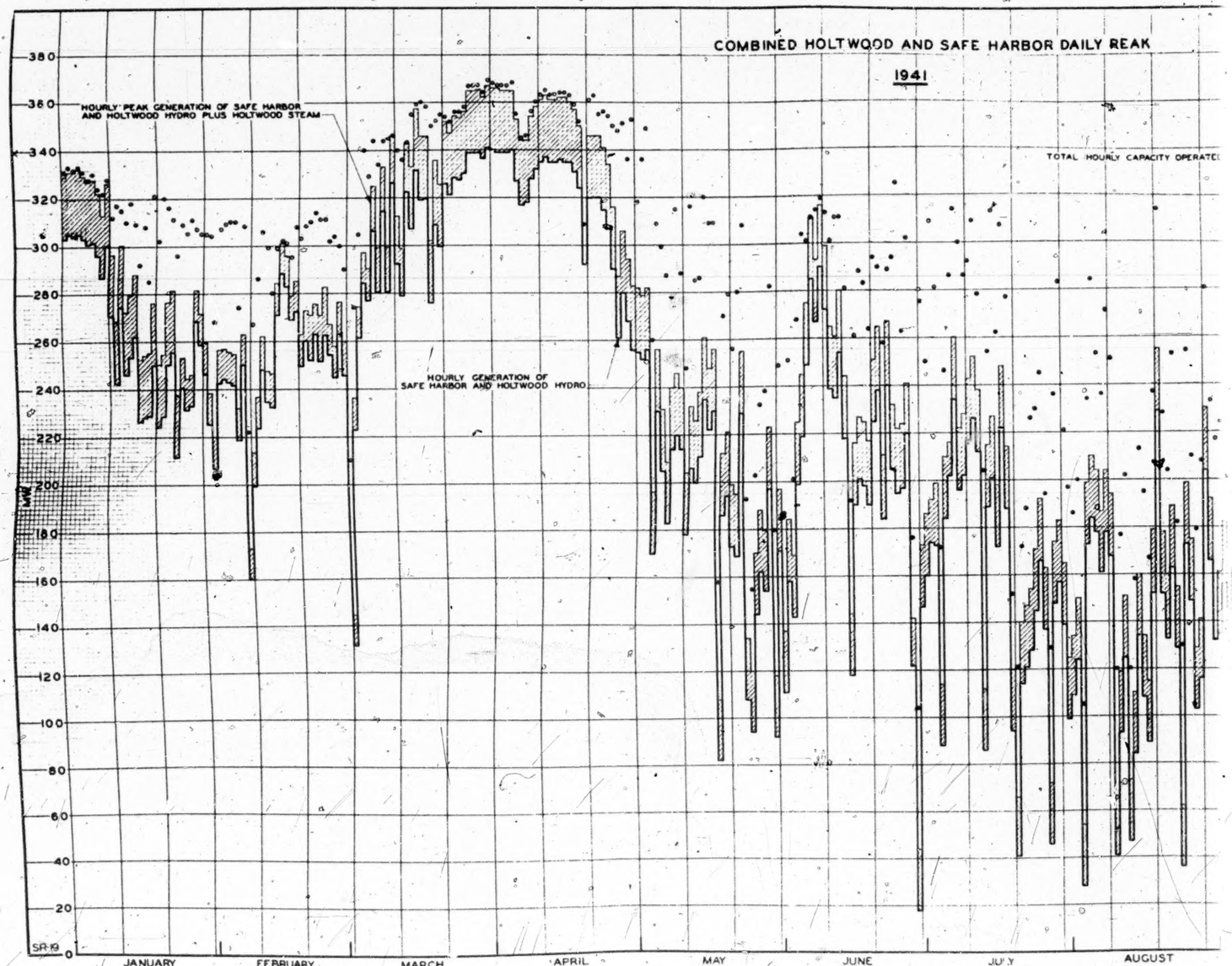
SR-19
APRIL
MAY
JUNE
JULY
AUGUST
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER
DECEMBER


COMBINED HOLTWOOD AND SAFE HARBOR DAILY PEAK
1941
HOURLY PEAK GENERATION OF SAFE HARBOR AND HOLTWOOD HYDRO PLUS HOLTWOOD STEAM
HOURLY GENERATION OF SAFE HARBOR AND HOLTWOOD HYDRO
TOTAL HOURLY CAPACITY OPERATED
MW
380
360
340
320
300
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240
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JANUARY
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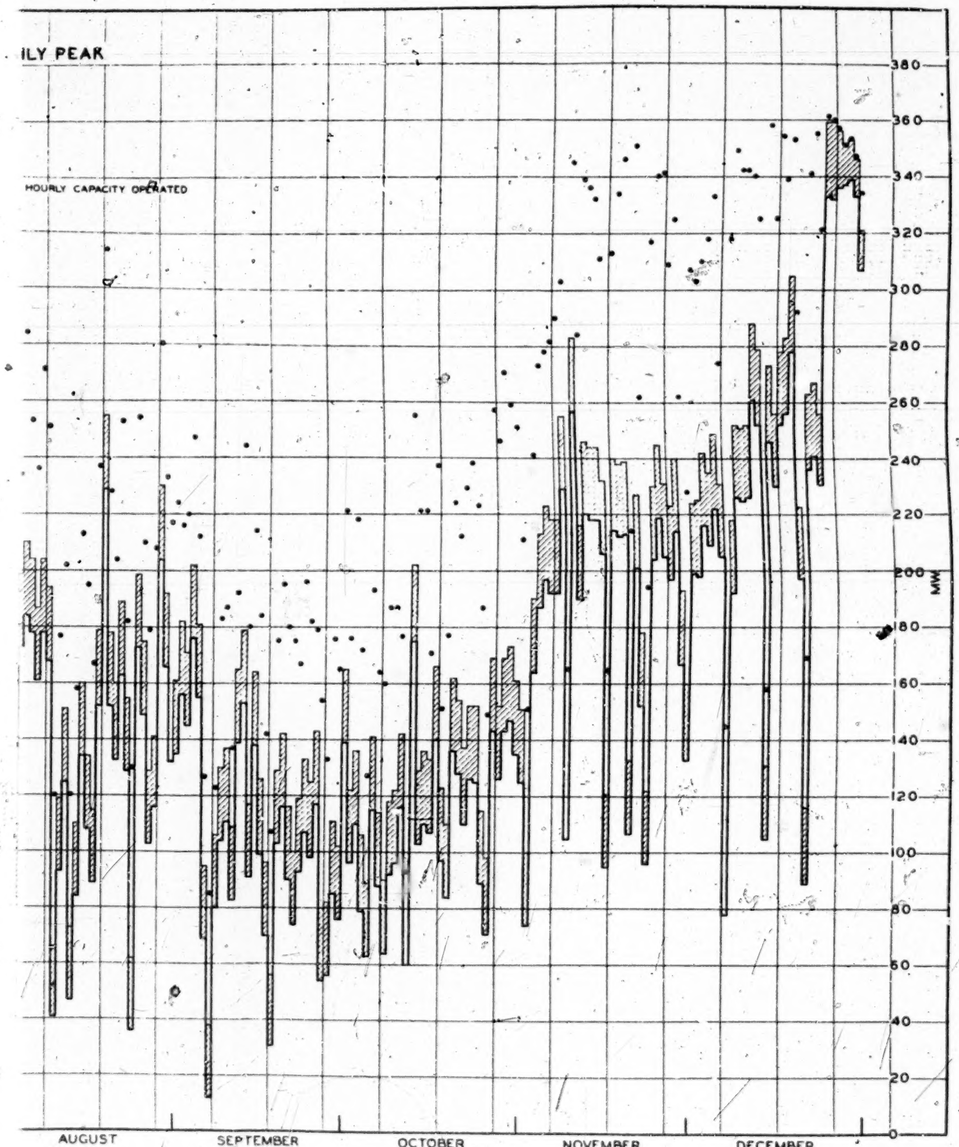
ILY PEAK
HOURLY CAPACITY OPERATED
MW
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AUGUST
SEPTEMBER
OCTOBER
NOVEMBER
DECEMBER

ACTUAL CAPACITY SERVICE FURNISHED AND AVAILABLE TO BALTIMORE FROM PENN WATER AND SAFE HARBOR

(All data in Kilowatts)

Date	Actual Delivery to Baltimore* at Time of Area 6 System Peak	Actual Delivery to Baltimore Adjusted for Interchange Transactions	Capacity Service Available to Baltimore At Time of Area 6 System Peak
1944 Dec. 11 -6 p.m.	140,000	161,000	181,000**
1945 Dec. 5 -6 p.m.	137,000	195,000	205,000
1946 Dec. 19 -6 p.m.	61,000	130,000	174,000

Date	Actual Delivery to Baltimore* at Time of Safe Harbor-Penn Water System Peak	Actual Delivery to Baltimore Adjusted for Interchange Transactions	Capacity Service Available to Baltimore at Time of Safe Harbor-Penn Water System Peak
1944 Apr. 19-8 a.m.	165,000	194,000	195,000
1945 May 2-5 p.m.	149,000	202,000	209,000
1946 May 25-1 p.m.	236,000	246,000	246,000

Date	Actual Delivery to Baltimore* at Time of Holtwood Power Development Peak	Actual Delivery to Baltimore Adjusted for Interchange Transactions	Capacity Service Available to Baltimore At Time of Holtwood Power Development Peak
1944 Apr. 14-1 a.m.	228,000	245,000	246,000
1945 Apr. 28-3 p.m.	166,000	234,000	235,000
1946 May 22-5 p.m.	162,000	189,000	189,000

Date	Maximum Annual Delivery to Baltimore*	Maximum Annual Delivery to Baltimore Adjusted for Interchange Transactions	Maximum Capacity Service Available to Baltimore
1944 Mar. 16-1 a.m.	245,000	262,000	264,000
1945 Sept.22-4 p.m.	230,000	250,000	251,000
1946 May 25-5 p.m.	242,000	246,000	246,000

* Net hourly deliveries at Highlandtown, Westport, Riverside and Takoma.

** A 31,000 kw. unit at Safe Harbor was out for maintenance.

Costs of
Penn Water's and Safe Harbor's
Firm Power Services
Rendered to Baltimore Company

1946 - Actual and Adjusted

General Statement

This cost of service study consists of 13 schedules, each schedule consisting generally of two parts. The first parts provide certain data in tabular form and the second parts consist of notes regarding the sources of the data and the methods of computation.

Schedules 1 and 2 provide basic data with respect to investments of Penn Water and Safe Harbor, shown separately for general production plant and for the special facilities provided for the various customers. These data are derived from the cost records of the companies, supplemented by the estimated costs of major authorized additions now in progress.

Schedules 3, 4 and 5 provide the basis for the determination of the capacity and energy service components of Penn Water's and Safe Harbor's combined firm power services to Baltimore Company. These data were derived from the operating records of the companies.

Schedules 6 through 13 show the computations of Penn Water's and Safe Harbor's costs for firm power services to Baltimore Company. These computations are based on the preceding schedules and on additional data obtained from the accounting records of the companies. In addition to the actual costs shown for 1946, a determination has been made of costs typical of conditions in the immediate future. These typical costs are based on actual 1946 costs adjusted for increases in plant investment, increases in operating expenses as estimated for the current year, and the elimination of the tax credit arising from the refunding of Safe Harbor's bonds.

The following summary of results is produced by a combination of costs and returns determined for firm power services rendered to Baltimore Company and shown in Schedules 9a, 10a, and 13a.

Costs of
Penn Water's and Safe Harbor's
Firm Power Services
Rendered to Baltimore Company

1946 - Actual and Adjusted

Summary of Results

Total Costs Incurred in Rendering Firm Power Services to Baltimore Company

	Services Rendered Directly to Baltimore Co. (Sch. 9a and 10a)	Services Rendered to PRR in Maryland (Sch. 13 a)	Total
Actual			
Penn Water			
Costs (excl. return)	$ 2,307,000	$ 87,000	$ 2,394,000
Return	1,146,000	66,000	1,212,000
Total	$ 3,453,000	$ 153,000	$ 3,606,000
Safe Harbor			
Costs (excl. return)	$ 473,000	$ 35,000	$ 508,000
Return	950,000	60,000	1,010,000
Total	$ 1,423,000	$ 95,000	$ 1,518,000
Combined Penn Water and Safe Harbor - 1946 Actual	$4,876,000	$ 248,000	$ 5,124,000
Adjusted			
Penn Water			
Costs (excl. return)	$ 2,406,000	$ 90,000	$ 2,496,000
Return	1,161,000	67,000	1,228,000
Total	$ 3,567,000	$ 157,000	$ 3,724,000
Safe Harbor			
Costs (excl. return)	$ 867,000	$ 62,000	$ 929,000
Return	950,000	60,000	1,010,000
Total	$ 1,817,000	$ 122,000	$ 1,939,000
Combined Penn Water and Safe Harbor, 1946 Adjusted	$ 5,384,000	$ 279,000	$ 5,663,000

Schedule 1a

Cost of Service Study

1946-Actual and Adjusted

Statement of Penn Water's Investments in General Production Plant and in Special Facilities, and Statement of Depreciation Reserve

	as of Jan. 1, 1946			as of Dec. 31, 1946		
	in Pa.	in Md.	Total	in Pa.	in Md.	Total
	(units of $1,000)			(units of $1,000)		
1. General Production Plant	25,940.6	21.3	25,961.9	26,094.0	21.5	26,115.5
2. Special Facilities for Baltimore Co.	1,345.4	5,243.7	6,589.1	1,353.3	5,249.9	6,603.2
3. Special Facilities for P.R.R.	1,842.9	504.3	2,347.2	1,850.0	504.8	2,354.8
4. Special Facilities for Others	1,447.7	-	1,447.7	1,462.4	-	1,462.4
5. Total Electric Plant (1+2+3+4)	30,576.6	5,769.3	36,345.9	30,759.7	5,776.2	36,535.9
6. Excess of Book Cost over Revised Original Cost						2,218.1
7. Plant, Property and Power Development (per books) (5+6)						38,754.0
8. Depreciation Reserve (per books)						9,453.9
9. Depreciation Reserve (per D. Gunn)			6,000.0			6,357.3

Schedule 1a

Schedule 1b

Cost of Service Study

1946 - Actual and Adjusted

Notes to Schedule 1a

All data on Schedule 1a have been obtained from revised original cost data.

For the purpose of this study the investment as of January 1, 1946 has been adjusted to eliminate the cost of Violet Hill Substation, sold in March 1946.

1. General Production Plant includes hydro station, steam station, coal production and preparation plants, service buildings, 25 and 60 cycle step-up substations, tie between circuits 13 and 14 and circuits 15 and 16, Holtwood-Safe Harbor transmission lines, load dispatching facilities, and village.

2. Special Facilities for Baltimore include Holtwood-Baltimore, Safe Harbor-Baltimore, Gunpowder-Baltimore, and Ellicott-Washington transmission lines and Highlandtown, Ellicott and Manor Substations.

3. Special Facilities for P.R.R. include Conestoga Substation and Safe Harbor-Perryville transmission lines.

4. Special Facilities for Others include Holtwood-York, Holtwood-Coatesville, and Holtwood-Lancaster (part of circuits 3 and 18 owned by Penn Water) transmission lines, facilities for Pioneer service, Lehman Farm and Donegal Tap switching stations and Violet Hill Substation.

5. Depreciation Reserve of $6,000,000 as of January 1, 1946 (after adjustment resulting from sale of Violet Hill) is in accordance with testimony of D. Gunn (T-288). The balance in the reserve as of December 31, 1946 is computed as follows:

Depreciation Reserve, Jan. 1, 1946	$6,000,000
Add: Depreciation Expense (T-288)	400,000
Deduct: Charges to Reserve (excl. Violet Hill)	-42,686
Balance - Dec. 31, 1946	$6,357,314

To reflect expected conditions in the immediate future, the plant investment as of Dec. 31, 1946 has been adjusted by the addition thereto of the estimated cost of major authorized additions now in progress. The estimated costs of these additions and the total adjusted plant investments are as follows:

Schedule 1b (Continued)

	Estimated Cost of Major Additions $1,000	Adjusted Plant $1,000
1. General Production Plant	380	26,495.5
2. Special Facilities for Baltimore Co.	30	6,633.2
3. " " " P.R.R.	0	2,354.8
4. " " " Others	340	1,802.4
5. Total Electric Plant	750	37,285.9

The largest addition included above is the 66 kv. Manor Substation; one third of the cost of this substation has been allocated to General Production Plant and two thirds to Special Facilities for Others.

Schedule 2a

Cost of Service Study

1946-Actual and Adjusted

Statement of Safe Harbor's Investments in Genera. Production Plant and in Special Facilities, and Statement of Depreciation Reserve

	as of Jan. 1, 1946 (units of $1,000)	as of Dec. 31, 1946 (units of $1,000)
1. General Production Plant	28,254.4	28,306.2
2. Special Facilities for P.R.R.	1,934.3	1,934.3
3. Total Electric Plant	30,188.7	30,240.5
4. Depreciation Reserve	2,142.0	2,399.0

Note: All Safe Harbor property located within the project boundaries in the Commonwealth of Pennsylvania.

Schedule 2b

Cost of Service Study

1946 - Actual and Adjusted

Notes to Schedule 2a

All data in Schedule 2a are from S.H. original cost records.

1. General Production Plant includes hydro station (excluding certain items listed below as special facilities), step-up transformer facilities, and village.

2. Special Facilities for P.R.R. includes tunnel to Conestoga Substation, control facilities for Conestoga Substation (located in S.H. powerhouse) frequency changer including site improvement, excess costs of 25 cycle generators over cost of 60 cycle generators including structures.

To reflect expected conditions in the immediate future, the plant investment as of December 31, 1946 has been adjusted by the addition thereto of the estimated cost of major authorized additions now in progress. The estimated costs of these additions and the total adjusted plant investments are as follows:

	Estimated Cost of Major Additions (units of $1,000)	Adjusted Plant (units of $1,000)
1. General Production Plant	120	28,426.2
2. Special Facilities for PRR	0	1,934.3
3. Total Electric Plant	120	30,360.5

Schedule 3a

Cost of Service Study

1946 Actual

Summary of Interchange Purchases and Sales and of Backfeed Used in Connection with Firm Supply

	$1,000	million kwh.	mills per kwh.
Interchange (as accounted for in actual billing records)			
1. P.W.'s purchases from Pennsylvania Ties	54.5	12.8	4.27
2. P.W.'s purchases from Baltimore Co. (see Item 7)	(not accounted for in "net" billing)		
3. P.W. & S.H. Hydro & P.W. Steam Energy Sold as Interchange to Pennsylvania Customers	32.8	14.5	2.27
4. Backfeed and Diverted Energy Sold as Interchange to Pennsylvania Customers	1,149.4	~~189.9~~	6.05
5. Total Interchange Sales in Pennsylvania (3+4)	1,182.2	204.4	
Backfeed used in connection with firm supply in Pennsylvania (per accounting necessary to show services to Baltimore Co. on a firm power basis)			
6. Purchases from Pennsylvania Customers	16.9	4.0	4.27
7. Purchases from Baltimore Company	313.3	76.4	4.10
8. Total backfeed or interchange purchases used in connection with firm supply in Pennsylvania (6+7)	330.2	80.4	

Schedule 3a

Schedule 3b

Cost of Service Study

1946 - Actual

Notes to Schedule 3a

Line 1 to 5 - All dollar and energy amounts are from Company's interchange billing records.

Line 6 - Total interchange purchases from Pennsylvania Customers (Line 1) minus interchange sales to Baltimore Company as shown in Item (e) 11 of Firm Power Bill. Energy amounts from analysis of 1946 records. Rate (mills/kwh.) used is same as in line 1.

Line 7 - Dollar amounts are same as Item (d) 5a of Firm Power Bill. Energy amounts and rate (mills/kwh.) used are based on analysis of 1946 records.

Schedule 4a

Cost of Service Study

1946 Actual

Penn Water's and Safe Harbor's Energy Services to Baltimore Company

		million kwh.
1.	P.W. and S.H. hydro generation	1,506
2.	P.W. steam generation	181
3.	Total backfeed used in connection with firm supply in Pennsylvania	80
4.	Total Available energy (1+2+3)	1,767
5.	Deduct: Trans. losses and station uses	123
6.	Deduct: P.W. and S.H. hydro and P.W. steam energy sold as interchange	14
7.	Balance = Firm energy service (4-5-6)	1,630
8.	Deduct: Firm energy supplied to Pennsylvania Customers (incl. P.R.R. in Pa.)	749
9.	Balance = Firm energy service rendered to Baltimore Company (7-8)	881
10.	Ratio of firm energy service to Baltimore Company to total firm energy (9/7)	54.0%

Schedule 4b

Cost of Service Study

1946 - Actual

Notes to Schedule 4a

Line 1 - 1946 gross generation at Holtwood and Safe Harbor hydro stations.

Line 2 - 1946 gross generation at Holtwood Steam Station.

Line 3 - From Schedule 3a, line 8.

Line 5 - 1946 system transmission losses and Hd.-SH station uses.

Line 6 - From Schedule 3a, line 3.

Line 8 - 1946 supplies to firm customers of Penn Water and of Penn Water and Safe Harbor in Pennsylvania. All peak transfer energy is included with energy supplied to P.R.R. in Pennsylvania.

Line 9 - The amount shown includes energy service rendered to P.R.R. in Maryland.

Schedule

Cost of Service Study

1946 Actual

Penn Water's and Safe Harbor's Capacity Services to Baltimore Company

(All Capacities in Megawatts and on 1 Hour Integrated Basis)

1.	Hydro Capacity (P.W. + S.H.)		295
2.	Capacity of Holtwood Steam Plant		28
3.	Deduct: Station Uses & Transmission Losses		18
4.	Capacity Services at time of Combined System (Area 6 plus Pennsylvania Customers) Peak (1+2-3)		305
5.	Total of Pennsylvania Customers (incl. P.R.R. in Pa.) Loads at time of Combined System Peak	134	
6.	P.W. and S.H. Share of Combined System Reserve Requirement (Reserve Applicable to Assured Capacity Obligations in Pennsylvania)	20	
7.	Total Capacity Obligation to Pennsylvania Customers (incl. P.R.R. in Pa.) at time of Combined System Peak (5+6)		154
8.	Capacity Services Available to Baltimore Company at time of Combined System Peak (4-7)		151
9.	Total of Pennsylvania Customers' (incl. P.R.R. in Pa.) Non-coincident Peak Loads	155	
10.	P.W. and S.H. Share of Combined System Reserve Requirement (Reserve Applicable to Assured Capacity Obligations in Pennsylvania)	20	
11.	Total Capacity Services to Pennsylvania Customers (incl. P.R.R. in Pa.) (9+10)		175
12.	Total (8+11)		326
13.	Ratio of Capacity Services to Baltimore Company to Total (8/12)		46.3%

Schedule 5a

[24377] Exhibit No. 378 4203

Exhibit No. 378

Schedule 5b

Cost of Service Study

1946 - Actual

Notes to Schedule 5a

Line 1 - Determination of Holtwood and Safe Harbor hydro capacity service available and used in connection with the combined system loads (Area 6 plus Pennsylvania Customers).

Line 2 - Winter rating of the peak capacity available from Holtwood Steam Station.

Line 3 - Experienced losses with total P.W. and S.H. generation as shown in Lines 1 and 2.

Line 5 - From hourly load data for 1946.

Line 6 - The Pennsylvania Customers' loads (incl. P.R.R. in Pa. but excl. M.E. Co.) are included in the combined system load. System capacity must be planned to cover this combined load with an adequate margin of reserve. P.W. and S.H. are responsible for the provision from their own capacity of such part of the total system reserve capacity. The reserve capacity responsibility here assigned to P.W. and S.H., to be provided from their capacity, is 15% of the sum of the non-coincident peaks of the Pennsylvania Customers (incl. P.R.R. in Pa. but excl. M.E. Co.).

Line 7 - Sum of Pennsylvania Customers' loads at time of combined system peak and reserve provided for these loads.

Line 8 - Capacity services available to Baltimore Company at time of combined system peak (which coincides with Baltimore Company's peak).

Line 9 - From hourly load data for 1946.

Line 10 - See Line 6

Schedule 6a

Cost of Service Study

1946 Actual and Adjusted

Statement of Penn Water's and Safe Harbor's Electric Plant, Working Capital, and Depreciation Reserve

		P.W. & P. Co. (units of $1,000)		S.H.W.P.Corp. (units of $1,000)	
	Total Electric Plant (from Schedules 1 and 2)	Actual	Adjusted	Actual	Adjusted
1.	At beginning of year	36,346		30,189	
2.	At end of year	36,536		30,240	
3.	Average of 1 and 2*	36,441	37,286	30,215	30,360
	Working Capital (from Ex. 23 for P.W. and from testimony in IT 5914 for SH)				
4.	Materials and Supplies Component	489	489	143	143
5.	Cash Component	488	488	77	77
6.	Total (4+5)	977	977	220	220
	Depreciation Reserve (from Schedules 1 and 2)				
7.	At beginning of year	6,000		2,142	
8.	At end of year	6,357	6,357	2,399	2,399
9.	Average of 7 and 8	6,178	6,357	2,270	2,399

* The amounts in "Adjusted" columns, line 3, are for 12-31-46 plus additions.

Schedule 6a

Schedule 7a

Cost of Service Study

1946 Actual and Adjusted

Allocation of Penn Water's Investment, Working Capital, Depreciation Reserve, Return and Income Taxes to Baltimore Company

	Actual factor	Actual $1,000	Adjusted factor	Adjusted $1,000
Investment in General Production Plant (from Schedule 1)				
1. At beginning of year		25,962		
2. At end of year		26,116		
3. Average of 1 and 2		26,039		26,496
Allocation to Baltimore Company of Line 3				
4. On basis of capacity service	.5x.463	6,028	.5x.463	6,134
5. On basis of energy service	.5x.540	7,031	.5x.540	7,154
Investment in Special Facilities for Baltimore Co. (from Schedule 1)				
6. At beginning of year		6,589		
7. At end of year		6,603		
8. Average of 6 and 7		6,596		6,633
9. Total Investment Allocated to Baltimore Company (4+5+8)		19,655		19,921
10. Ratio of Line 9 to Total Electric Plant from Schedule 6a	.539		.534	
Working Capital Allocated to Baltimore Company				
11. Materials and Supplies (on basis of investment)	.539	264	.534	261
12. Cash (on basis of operating expenses)	.557	272	.557	272
13. Undepreciated Rate Base Allocated to Baltimore Company (9+11+12)		20,191		20,454
14. Depreciation Reserve Allocated to Baltimore Company	.539	3,330	.534	3,395
15. Return on Allocated Rate Base (Rate x 13)	6.5%	1,312	6.5%	1,330
16. Credit on Allocated Depr. Reserve (Rate x 14)	3.0%	99	3.0%	102
17. Allocated Operating Income (15-16)		1,213		1,228
18. Allocated Federal Income Tax		432		440
19. Allocated Pennsylvania Income Tax		20		21
20. Total Income Taxes		452		461

Schedule 7b

Cost of Service Study

1946 - Actual and Adjusted

Notes to Schedule 7a

Lines 4 and 5 - The investment in general production plant, shown in line 3, is allocated one-half to capacity service and one-half to energy service. Of the one-half which is allocated to capacity service, the percentage shown in line 13 of Schedule 5a is allocated to Baltimore Company. Of the one-half which is allocated to energy service, the percentage shown in line 10 of Schedule 4a is allocated to Baltimore Company.

Line 10 - The total investment allocated to Baltimore Company shown in Line 9, has been divided by the total electric plant, shown in Line 3 of Schedule 6a. The ratio shown here is the portion of Penn Water's total investment in electric plant which is allocated to service to Baltimore Company.

Line 11 - The materials and supplies component of working capital, shown in Line 4 of Schedule 6a, has been allocated to Baltimore Company in proportion to investment.

Line 12 - The cash component of working capital, shown in Line 5 of Schedule 6a, has been allocated to Baltimore Company in proportion to operating expenses.

Line 14 - The depreciation reserve, shown in Line 9 of Schedule 6a, has been allocated to Baltimore Company in proportion to investment.

Line 15 - A return of 6-1/2% has been computed on the undepreciated rate base allocated to Baltimore Company.

Line 16 - A credit at 3% has been allowed on the allocated portion of the depreciation reserve.

Lines 18, 19 and 20 - Federal and State Income Taxes have been computed by the tentative tax method used in Penn Water's usual tax computation. In this computation income deductions have been allocated in proportion to total investment and working capital. The Pennsylvania State Income Tax has been allocated in the ratio of the investment in Pennsylvania, included in Line 9, to the total investment in Pennsylvania in Line 5 of Schedule 1a.

Schedule 8a

Cost of Service Study

1946 Actual and Adjusted

Allocation of Safe Harbor's Investment, Working Capital, Depreciation Reserve, Return and Income Taxes to Baltimore Company

		Actual factor	Actual $1,000	Adjusted factor	Adjusted $1,000
	Investment in General Production Plant (from Schedule 2)				
1.	At beginning of year		28,254		
2.	At end of year		28,306		
3.	Average of 1 and 2		28,280		28,426
	Allocation to Baltimore Company of line 3				
4.	On basis of capacity service	.5x.463	6,547	.5x.463	6,581
5.	On basis of energy service	.5x.540	7,636	.5x.540	7,675
6.	Total Investment Allocated to Baltimore Company (4+5)		14,183		14,256
7.	Ratio of line 6 to Total Electric Plant from Schedule 8a	.469		.469	
8.	Working Capital		103		103
9.	Depreciation Reserve Allocated to Baltimore Company (at beginning of year)	.469	1,005	.469	1,125
10.	Return on Allocated Rate Base (Rate x 6)	7.0%	993	7.0%	998
11.	Deduct: Interest Comp. of Depr. Exp. (Rate x 9)	4.25%	43	4.25%	48
12.	Allocated Operating Income (10-11)		950		950
13.	Allocated Federal Income Tax		0		320
14.	Allocated Pa. State Income Tax		0		18
15.	Total Income Taxes		0		338

Schedule 8b

Cost of Service Study

1946 - Actual and Adjusted

Notes to Schedule 8a

Lines 4 and 5 - The investment in general production plant, shown in Line 3, is allocated one-half to capacity service and one-half to energy service. Of the one-half which is allocated to capacity service, the percentage shown in Line 13 of Schedule 5a is allocated to Baltimore Company. Of the one-half which is allocated to energy service, the percentage shown in Line 10 of Schedule 4a is allocated to Baltimore Company.

Line 7 - The total investment allocated to Baltimore Company, shown in Line 6, has been divided by the total electric plant, shown in Line 3 of Schedule 6a. The ratio shown here is the portion of Safe Harbor's total investment in electric plant which is allocated to service to Baltimore Company.

Line 9 - Depreciation reserve at the beginning of the year, shown in Line 5 of Schedule 6a, has been allocated to Baltimore Company in proportion to total investment.

Line 10 - Return has been computed at 7% on the investment allocated to Baltimore Company.

Line 11 - Interest component of depreciation expense has been computed at 4-1/4% on the allocated portion of the depreciation reserve.

Lines 13, 14 and 15 - Federal and State Income Taxes have been computed by the tentative tax method used in Safe Harbor's usual tax computation. In this computation income deductions have been allocated in proportion to investment. As a result of the refunding of Safe Harbor's bonds in 1946, the actual taxes accrued were zero. In the "Adjusted" column the taxes are based on income deductions applicable in the first year after the issuance of Safe Harbor's new bonds and notes.

Schedule 9a

Cost of Service Study

1946 Actual and Adjusted

Allocation of Penn Water's Expenses to Baltimore Company and Determination of Total Cost to Penn Water for Service to Baltimore Company

Expenses	Actual: Totals to be Allocated $1,000	Actual: Allocation to Baltimore Co. Ratio	Actual: Allocation to Baltimore Co. $1,000	Adjusted: Totals to be Allocated $1,000	Adjusted: Allocation to Baltimore Co. Ratio	Adjusted: Allocation to Baltimore Co. $1,000
1. Operation and Maintenance	1,495	.567	847	1,686	.567	956
2. Net Interchange	297	.540	160	297	.540	160
3. General Expenses	906	.544	493	878	.540	475
4. General Taxes (excl. of Pa. Income Tax)	251	.553	139	253	.553	140
5. Federal Income Tax	-	-	432	-	-	440
6. Pennsylvania Income Tax	-	-	20	-	-	21
7. Depreciation	400	.539	216	400	.534	214
8. Total Expenses			2,307			2,406
Return						
9. Allocated Operating Income (from Schedule 7a)	-	-	1,213			1,228
10. Credit for Revenues other than from Firm Power Services (Miscellaneous Electric Revenues)	134	.501	(67)	134	.501	(67)
11. Total Expenses and Return Allocated to Baltimore			3,453			3,567

Schedule 9a

Schedule 9b

Cost of Service Study

1946 - Actual and Adjusted

Notes to Schedule 9a

Line 1 - The ratio of the total operation and maintenance expense which has been allocated to Baltimore Company is a composite figure. From the accounting records of the Company, an allocation of operation and maintenance expense was made among the general production plant, fuel cost for Holtwood Steam Station, and special facilities provided for Baltimore Company, P.R.R. and others. The expense allocated to general production plant was in turn allocated 50% to capacity and 50% to energy; these two portions were then allocated to Baltimore Company in proportion ~~to capacity~~ and energy services. Fuel cost for Holtwood Steam Station was allocated to Baltimore Company in proportion to energy service. Expense allocated to special facilities for Baltimore Company was directly included in the allocated total. Part of the load dispatching expense accumulated on the books of Penn Water is charged to Safe Harbor; another credit arises from village revenue. Both credits were considered as applying to general production plant and were allocated through capacity and energy services.

Line 2 - Net interchange is the excess of the estimated cost of backfeed energy used in connection with firm supply over the sales as interchange of Penn Water and Safe Harbor excess hydro and Holtwood steam energy. The dollar amount can be derived, on this basis, as the difference between Line 8 and Line 3 of Schedule 3a.

The amount of net interchange expense can also be derived directly from Penn Water's firm power bill to Baltimore Company. The sum of Items (d) 1,2,3 and 5, all representing interchange purchases, minus the sum of Items (e) 5,6,7 and 11, all representing interchange sales, is equal to the dollar amount of net interchange.

Net interchange has been allocated to Baltimore Company in the ratios of energy service as shown on Schedule 4a.

Line 3 - General expense has been allocated to Baltimore Company on the basis of investment allocated to Baltimore Company (to the extent of about 75% of the expense) and on the basis of operating expense allocated to Baltimore Company (for the remaining 25% of the expense).

Line 4 - The general taxes here allocated are as shown in the Company records, after deducting therefrom the Pennsylvania income tax, which tax has been considered in relation to return.

General taxes were considered individually. Capital Stock and Property Taxes for Pennsylvania and Maryland were allocated to Baltimore Company in proportion to its allocated portion of investment in each state. Federal taxes other than income were allocated to Balti-

Schedule 9b
(Continued)

more Company by the ratio determined by the allocation of operation and maintenance expense before the credits mentioned in notes for Line 1 above. The Pennsylvania Gross Receipts Tax and Pennsylvania PUC assessment have not been considered allocable to Baltimore Company.

Lines 5 and 6 - Income taxes allocated to Baltimore Company have been copied from Schedule 7a. No total or allocation ratio has been shown since these taxes are unrelated to the total income taxes paid by Penn Water.

Line 7 - Depreciation expense allocated is that shown by the testimony of D. Gunn (T.288).

The allocation ratio is the ratio of investment allocated to service to Baltimore Company as found in Schedule 7a.

Line 10 -It is not possible to allocate against Miscellaneous Electric Revenue any investments or expenses. Consequently, an allocated portion of these revenues must be considered as a credit against the total expenses and return allocated to Baltimore Company.

These revenues have been considered as applying to general production plant and have been allocated to Baltimore Company through energy and capacity services.

The "Adjusted Totals to be Allocated" shown in lines 1, 3 and 4 are based on the Operating Committee's estimated Holtwood Company bill to Baltimore Company for 1947.

Schedule 10a

Cost of Service Study

1946 Actual and Adjusted

Allocation of Safe Harbor's Expenses to Baltimore Company and Determination of Total Cost to Safe Harbor for Service to Baltimore Company

	Actual			Adjusted		
	Totals to be Allocated	Allocation to Baltimore Co.		Totals to be Allocated	Allocation to Baltimore Co.	
Expenses	$1,000	Ratio	$1,000	$1,000	Ratio	$1,000
1. Operation and Maintenance	436	.461	201	513	.461	237
2. General Expenses	226	.465	105	262	.465	122
3. General Taxes (exc. Pa. Income Tax)	99	.425	42	94	.425	40
4. Federal Income Tax			0	-	-	320
5. Pennsylvania Income Tax			0			18
6. Depreciation (annuity plus interest)	266	.469	125	278	.469	130
7. Total Expenses			473			867
Return						
8. Allocated Operating Income (from Schedule 8a)			950			950
9. Total Expenses and Return Allocated to Baltimore Company			1,423			1,817

Schedule 10a

Schedule 10b

Cost of Service Study

1946 - Actual and Adjusted

Notes to Schedule 10a

Line 1 - The ratio of the total operation and maintenance which has been allocated to Baltimore Company is a composite figure. From the accounting records of the company allocation of operation and maintenance expense was made between the general production plant and special facilities provided for P.R.R. The expense allocated to general production plant was in turn allocated 50% to capacity and 50% to energy; these two portions were then allocated to Baltimore Company in proportion to capacity and energy services. Part of the load dispatching expense accumulated on the books of Penn Water is charged to Safe Harbor and the allocated portion of this expense was added in the total expense allocated to Baltimore Company. A credit arises from village revenue, which was considered applicable to general production plant and was allocated to Baltimore Company through capacity and energy services.

Line 2 - General expense has been allocated to Baltimore Company in part on the basis of investment allocated to Baltimore and in part on the basis of operating expense.

Line 3 - The general taxes here allocated are as shown in Company records after deducting therefrom the Pennsylvania income tax, which tax has been considered in relation to return.

The ratio allocated to Baltimore Company is a composite figure. Regulatory Commission charges were allocated to general production plant, and in turn allocated through capacity and energy service to Baltimore Company. Other general taxes are related to investment or to operation and maintenance expense and were allocated to Baltimore Company in the same ratios that investment or operation and maintenance respectively were allocated to Baltimore Company. The gross receipts tax was not considered allocable to Baltimore Company.

Lines 4 and 5 - Income taxes allocated to Baltimore Company have been copied from Schedule 8a.

Line 6 - Depreciation expense allocated is the sum of the annuity and interest components. The allocation ratio is the ratio of investment allocated to service to Baltimore Company as found in Schedule 8a.

Line 8 - Because the interest component of depreciation expense is included in Line 6, it has been deducted in the computation of allocated operating income.

The "Adjusted Totals to be Allocated" shown in lines 1, 2 and 3 are based on the Operating Committee's estimated Safe Harbor bill to Holtwood and Baltimore Companies for 1947. The adjusted amount in line 6 includes 4.25% interest on the depreciation reserve balance as of 12-31-46.

Schedule 11a

Cost of Service Study

1946 Actual and Adjusted

Allocation to P.R.R. of Penn Water's Investment, Working Capital, Return and Expenses for Special Facilities Provided for Service to P.R.R.

	Actual			Adjusted		
	Totals to be Allocated	Allocation to P.R.R.		Totals to be Allocated	Allocation to P.R.R.	
Investment in Special Facilities for P.R.R. and Allocated Working Capital	$1,000	Ratio	$1,000	$1,000	Ratio	$1,000
1. Special Facilities at beginning of year (Schedule 1)			2,347			
2. Special Facilities at end of year (Schedule 1)			2,355			
3. Average of 1 and 2			2,351			2,355
4. Ratio of Line 3 to Total Electric Plant		.065			.063	
5. Materials and Supplies (on basis of investment)	489	.065	32		.063	31
6. Cash Working Capital (on basis of operating expenses)	488	.038	19		.038	19
7. Undepreciated Rate Base Allocated to Special Facilities for P.R.R. (3+5+6)			2,402			2,405
8. Depreciation Reserve Allocated to Special Facilities for P.R.R.	6,178	.065	401	6,357	.063	401
Return						
9. Return on Allocated Rate Base (Rate x 7)		6.5%	156		6.5%	156
10. Credit on Allocated Depr. Reserve (Rate x 8)		3.0%	12		3.0%	12
11. Allocated Operating Income (9-10)			144			144
Expenses						
12. Operation and Maintenance	1,495	.029	43	1,686	.029	49
13. General Expenses	906	.057	52	878	.055	48
14. General Taxes (excl. Pa. Income Tax)	251	.060	15	253	.060	15
15. Federal Income Tax			51	-		52
16. Pennsylvania Income Tax			3	-		3
17. Depreciation	400	.065	26	400	.063	25
18. Total Expenses			190			192
19. Total Return and Expenses Allocated to Special Facilities Provided for Service to P.R.R. (11+18)			334			336

Schedule 11b

Cost of Service Study

1946 - Actual and Adjusted

Notes to Schedule 11a

Line 4 - The total investment in special facilities provided for service to P.R.R., shown in Line 3, has been divided by the total electric plant, shown in Line 3 of Schedule 6a.

Lines 5 and 6 - Working Capital (from Ex.23) has been allocated to special facilities for service to P.R.R. in the manner explained in notes to Lines 11 and 12, Schedule 7b.

Line 11 -Operating Income allocated to special facilities for service to P.R.R. has been determined in the manner explained in notes to Lines 14 to 16, Schedule 7b.

Line 12 -The only Operation and Maintenance Expense allocated to special facilities for service to P.R.R. results from a direct allocation from accounting records. The ratio determined from this direct allocation of 1946 expense has been applied to the adjusted expenses.

Line 13 -General Expense has been allocated to special facilities for service to P.R.R. in the manner explained in notes to Line 3, Schedule 9b.

Line 14 -The General Taxes here allocated are as shown in Company records after deducting therefrom the Pennsylvania Income Tax. The ratio allocated to special facilities for service to the P.R.R. is a composite figure. Property and Capital Stock Taxes for Pennsylvania and Maryland were allocated in proportion to allocated investment in each state. Federal taxes other than income were allocated in proportion to Operation and Maintenance Expense. The Pennsylvania PUC assessment was allocated in proportion to the ratio of P.R.R. revenue to total revenues received from Pennsylvania business.

Lines 15 and 16 - Income taxes allocated to special facilities for services to P.R.R. have been computed on the allocated return shown in Line 11. The Pennsylvania tax has in turn been proportioned to investment in Pennsylvania. No totals or allocation ratios have been shown, since these taxes are unrelated to the total income taxes paid by Penn Water.

Line 17 -Depreciation Expense allocated is the amount proposed in the testimony of D. Gunn (T.288). The allocation ratio is that shown in Line 4.

Schedule 12a

Cost of Service Study

1946 Actual and Adjusted

Allocation to P.R.R. of Safe Harbor's Investment, Return and Expenses for Special Facilities Provided for Service to P.R.R.

	Actual			Adjusted		
	Totals to be Allocated	Allocation to P. R. R.		Totals to be Allocated	Allocation to P. R. R.	
	$1,000	Ratio	$1,000	$1,000	Ratio	$1,000
Investment in Special Facilities for P.R.R.						
1. Special Facilities at beginning of year (Schedule 2)			1,934			
2. Special Facilities at end of year (Schedule 2)			1,934			
3. Average of 1 and 2			1,934			1,934
4. Ratio of Line 3 to Total Electric Plant		.064			.064	
Expenses						
5. Operation and Maintenance	436	.085	37	513	.085	44
6. General Expenses	226	.075	17	262	.075	20
7. General Taxes	99	.051	5	94	.051	5
8. Federal Income Tax	-	-	0	-	-	44
9. Pennsylvania Income Tax	-	-	0	-	-	2
10. Depreciation	266	.064	17	278	.064	18
11. Total Expenses			76			133
Return						
12. Operating Income	-	-	129	-	-	129
13. Total Expenses and Return Allocated to Special Facilities Provided for Service to P.R.R.			205			262

[24391]

Exhibit No. 378

4217

Schedule 12a

Schedule 12b

Cost of Service Study

1946 - Actual and Adjusted

Notes to Schedule 12a

Line 4 - The total investment in special facilities for service to P.R.R. shown in Line 3 has been divided by the total electric plant, shown in Line 3 of Schedule 6a.

Line 5 - The only Operation and Maintenance Expense allocated to special facilities for service to P.R.R. results from a direct allocation from accounting records. The ratio determined from this direct allocation of 1946 expense has been applied to the adjusted expenses.

Line 6 - General Expense has been allocated to special facilities for service to P.R.R. in the manner explained in note for Line 2, Schedule 10b.

Line 7 - The general taxes here allocated are as shown in Company records after deducting therefrom the Pennsylvania Income Tax. The ratio allocated to special facilities for service to the P.R.R. is a composite figure. Capital Stock and Property taxes were allocated on the basis of investment. Federal taxes other than income are related to Operation and Maintenance Expense and were allocated in the same ratios that Operation and Maintenance were allocated. Regulatory commission charges and Gross Receipts tax were not considered allocable to P.R.R.

Lines 8 and 9 - Income taxes allocated to special facilities for services to P.R.R. have been determined by reference to Schedule 8a. Taxes there shown in Lines 13 and 14 were reduced in the ratio of the respective investments in special facilities for service to P.R.R. and in plant allocated to Baltimore Company (as shown in Line 6 of Schedule 8a).

Line 10 - Depreciation expense allocated is the sum of the interest and annuity components. The allocation ratio is that shown in Line 4.

Line 12 - Operating income allocated to special facilities for service to P.R.R. has been determined by reference to Line 12 of Schedule 8a. The amount there shown was reduced in the ratio of the respective investments in special facilities for service to the P.R.R. and in plant allocated to Baltimore Company (as shown in Line 6 of Schedule 8a).

Cost of Service Study

1946 Actual and Adjusted

Determination of Baltimore Company's Share of Penn Water's and Safe Harbor's Total Costs for Special Facilities Provided for Service to P.R.R.

	Actual $1000 (1)	Adjusted $1000 (2)	Proportional Distribution of Item 13 Among Items 1,2,4, and 5: Actual $1000 (3)	Adjusted $1000 (4)
Penn Water's Costs for Special Facilities Provided for Service to P.R.R. (from Schedule 11a)				
1. Expenses	190	192	87	90
2. Return	144	144	66	67
3. Total	334	336	153	157
Safe Harbor's Costs for Special Facilities Provided for Service to P.R.R. (from Schedule 12a)				
4. Expenses	76	133	35	62
5. Return	129	129	60	60
6. Total	205	262	95	122
7. Total Penn Water and Safe Harbor Cost of Special Facilities for P.R.R.(3+6)	539	598	248	279
8. Cost to Baltimore Company for Benning Frequency Changer	78	78		
9. Total Cost of Special Facilities for P.R.R.(7+8)	617	676		
10. Ratio of Energy Delivered to P.R.R. in Maryland to Total Energy Delivered to P.R.R.	.528	.528		
11. Allocated Cost of Special Facilities Provided for P.R.R. Service in Maryland (9x10)	326	357		
12. Deduct: Cost of Special Facilities Paid Directly by Baltimore Company (Line 8)	78	78		
13. Balance = Baltimore Company's Share of Penn Water's and Safe Harbor's Total Costs for Special Facilities Provided for Service to P.R.R.	248	279		

Schedule 13b

Cost of Service Study

1946 - Actual and Adjusted

Notes to Schedule 13a

Lines 1 to 6 - The data in columns 1 and 2 have been taken directly from Schedules 11a and 12a. The data in the columns 3 and 4 are discussed later in these notes.

Line 8 - Baltimore Company pays to Potomac Electric Power Company specified charges in connection with the use of the Benning Frequency Changer for supply to P.R.R.

Line 10 - The ratio of energy delivered to P.R.R. in Maryland to total energy delivered to P.R.R. is based on the division of energy in 1946. In accordance with the memorandum received as Exhibit 11, Baltimore Company's share of the revenues received from P.R.R. is based on this same ratio.

Line 13 - Of the total cost of special facilities provided for service to P.R.R. in Maryland, Line 11, Baltimore Company pays directly to Potomac Electric Power Company the amount shown in Line 12. The balance is Penn Water's and Safe Harbor's cost for special facilities for service to P.R.R. in Maryland, or Baltimore Company's share of Penn Water's and Safe Harbor's total costs for special facilities provided for service to P.R.R. These costs must be added to Penn Water's and Safe Harbor's other costs for services to Baltimore Company.

Lines 1 to 6 - In columns 3 and 4, the total shown in Line 13 has been broken down proportionately among the expenses and returns of the two companies.

Vol. XIII

TRANSCRIPT OF RECORD

(Pages 4221 to 4404)

Supreme Court of the United States

OCTOBER TERM, 1951

No. 428

PENNSYLVANIA WATER AND POWER COMPANY AND SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND, PETITIONERS,

vs.

FEDERAL POWER COMMISSION ET AL.

No. 429

PENNSYLVANIA PUBLIC UTILITY COMMISSION, PETITIONER,

vs.

FEDERAL POWER COMMISSION

ON WRITS OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT.

PETITIONS FOR CERTIORARI FILED NOVEMBER 16, 1951

CERTIORARI GRANTED FEBRUARY 4, 1952

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Schedule A

Comparison of
Bills for and Costs of
Penn Water's and Safe Harbor's
Firm Power Services
Rendered to Baltimore Company

1946 - Actual and Adjusted

	Actual	Adjusted (see note)
Total Costs Incurred in Rendering Firm Power Services to Baltimore Company (including PRR in Maryland)		
Penn Water	$ 3,606,000	$ 3,724,000
Safe Harbor	1,518,000	1,939,000
Combined Costs	$ 5,124,000	$ 5,663,000
Bills Applicable to Firm Power Services Rendered to Baltimore Company (see attached Schedules B and D)		
Penn Water*	$ 2,824,420	
Safe Harbor**	2,033,002	
Combined Bills (Applicable to Firm Power Services)	$ 4,857,422	
Excess of Costs over Amounts Billed (Applicable to Firm Power Services)	$ 266,578	

* The revenues received by Penn Water from Baltimore Company were less than the amounts billed (net bill basis) by $294,379.

** The revenues received by Safe Harbor from Baltimore Company were less than the amounts billed by $7,768.

The adjustments made to actual 1946 costs include the effects of authorized increases in plant investment, increases in expenses as estimated for the current year, and the elimination of the tax credit arising from the refunding of Safe Harbor's bonds.

Schedule B

January 8, 1947

MEMORANDUM TO: Mr. A. E. Penn, Sec'y., Consolidated Gas Electric Light and Power Company of Baltimore
Mr. Jas. L. Rintoul, Vice Pres., Pennsylvania Water & Power Company
Mr. C. A. Lappe, Treas., Safe Harbor Water Power Corporation

SAFE HARBOR COMPANY'S BILL TO BALTIMORE COMPANY AND HOLTWOOD COMPANY FOR THE YEAR 1946

(a)	7% on Accumulated Actual Investment of $30,169,472.88 as of Dec. 31, 1945		$ 2,111,863.10
(b)	Payment on net additions during 1946 at rate of 7% per annum		2,145.96
(c)	Expenses		
	1. Operating Expense	$ 290,126.86	
	2. Maintenance	146,262.40	
	3. General Expense	226,168.71	
	4. General Taxes	98,820.08	
	5. Federal Normal Tax and Surtax	None	
	6. Depreciation (Annuity only)	174,677.87	
	Total Expenses		936,055.92
(d)	Sum of (a) + (b) + (c)		$ 3,050,064.98
(e)	Rent from Electric Property		562.60
(f)	Net Bill for Year 1946 (d) - (e)		$ 3,049,502.38
(g)	Net Bill to Baltimore Company 2/3 of (f)		$ 2,033,001.59
(h)	Gross Amount billed to Baltimore Company for first eleven months of 1946		1,864,114.79
(i)	Net Balance due from Baltimore Company for December 1946		$ 168,886.80
(j)	Net Bill to Holtwood Company 1/3 of (f)		$ 1,016,500.79
(k)	Gross Amount billed to Holtwood Company for first eleven months of 1946		932,057.40
(l)	Net Balance due from Holtwood Company for December 1946		$ 84,443.39

This statement includes expenses and taxes with respect to rate proceedings referred to in a letter to Mr. N. B. Higgins from Mr. Wm. Schmidt, Jr., dated June 18, 1946.

R. T. Greer

R T Greer

G. W. Spaulding

RTG
GWS: DEL

Schedule C
Page 1

January 15, 1947

MEMORANDUM TO MR. A. E. PENN
MR. JAS. L. RINTOUL

HOLTWOOD COMPANY'S BILL TO BALTIMORE COMPANY FOR DECEMBER 1946

The reference letters used below correspond to the Paragraph letters under Article III of the Supplemental Agreement of June 1, 1931, as amended by Supplemental Agreement of September 29, 1939.

(a)	NET POWER REVENUE OF HOLTWOOD COMPANY			
	1. 1930 Revenue Adjusted to Avg. River Flow		$ 2,832,259 75	
	2. Decrease in Revenue from Cust. other than Balto 1931 compared with 1930		70,080.06	
	3. Base Net Revenue			$ 2 762,179 69
(b)	PAYMENTS ON NET ADDITIONS AT 10.25% & 9.5%			895,3E3 47
(c)	EXPENSES			
	1. *Operating Exp (Excl. Power Purchased)		1,092,382.98	
	2. Maintenance		402,556.51	
	3. General Expense		906,281.37	
	4. General Taxes		304,170 26	
	5. Federal Normal Tax and Surtax		983,846.27	
	6. Depreciation	$ 355,146.73		
	Less: Adj. for Auto Depreciation	2,025 89	353,120.84	
	7 Total			4,042,364 23
	*Power Purchased shown in Item (d)			
(d)	HOLTWOOD COMPANY'S PAYMENTS FOR POWER PURCHASED			
	1. Metropolitan Edison Co.		1,598.10	
	2 Philadelphia Electric Co.		40,865 39	
	3 Pennsylvania Power & Light Co.		12,031 66	
	4 Safe Harbor Water Power Corporation		1,016,500.79	
	5 Total			1,070,995.94
	SUM OF (a), (b), (c) and (d)			8,770,925.33
(e)	HOLTWOOD COMPANY'S REVENUE FROM PARTIES OTHER THAN BALTO.			
	1. Pennsylvania Power & Light Co. (Firm Power)		1,944,484.32	
	2. Philadelphia Electric Co., (Firm Power)		948,860.95	
	3. Metropolitan Edison Co.(Firm Power)(Incl. Y.E.)		667,454.73	
	4 Pioneer Electric Light Co. (Firm Power)		13,871.33	
	5 Metropolitan Edison Co. (Interchange)		372,726.74	
	6. Philadelphia Electric Co. (Interchange)		489,438.93	
	7 Pennsylvania Power & Light Co. (Interchange)		320,028.21	
	8 Pennsylvania Railroad Company		1,625,575.45	
	9 Conowingo Backwater Payment		133,750.00	
	10. Rent from Electric Property		34.65	
	11 Total			6,516,225 31
(f)	INTEREST ON INCREASE IN RESERVE FOR DEPRECIATION			240,075.64
(h)	REDUCTION AS PER SUPPLEMENTAL AGREEMENT OF SEPT 29, 1939			600,000.00
(x)	MISCELLANEOUS CREDITS			15,293.28
	TOTAL DEDUCTIONS - SUM OF (e), (f), (h) and (x)			7,371,594 23

Schedule C
Page 2

(i)	NET BILL FOR YEAR 1946	$ 1,399,331.10
(j)	TOTAL AMOUNT BILLED FOR FIRST ELEVEN MONTHS OF 1946	1,489,826.96
(k)	CREDIT BALANCE TO BALTIMORE COMPANY FOR DECEMBER 1946	$ 90,495.86

NOTES:

Item (c)-3 includes all regulatory expenses incurred by Power in 1946, including certain regulatory expenses which are considered not to be "reasonable operating expenses" in the letters to Mr. J.A. Walls from Mr. Wm. Schmidt, Jr., dated June 18, 1946 and December 26, 1946.

Item (x) includes certain operating expenses of Power which it has absorbed for special reasons and credited to the bill payable by Electric.

G.W. Spaulding for Pennsylvania Water & Power Company

Schedule D

HOLTWOOD COMPANY'S FIRM POWER BILL TO BALTIMORE COMPANY FOR THE YEAR 1946

(a)	NET POWER REVENUE OF HOLTWOOD COMPANY			
	1. 1930 Revenue Adjusted to Avg. River Flow		$ 2,832,259.75	
	2. Decrease in Revenue from Quat. other than Balto. 1931 compared with 1930		70,080.06	
	3. Base Net Revenue			$2,762,179.69
(b)	PAYMENTS ON NET ADDITIONS AT 10.25% & 9.5%			895,385.47
(c)	EXPENSES			
	1. *Operating Exp. (Excl. Power Purchased)		$ 1,092,388.98	
	2. Maintenance		402,556.51	
	3. General Expense		906,281.37	
	4. General Taxes		304,170.26	
	5. Federal Normal Tax and Surtax		983,846.27	
	6. Depreciation	$355,146.73		
	Less Adj. for Auto Depreciation	2,025.89	353,120.84	
	7. Total			4,042,364.23
	*Power Purchased shown in Item (d)			
(d)	HOLTWOOD COMPANY'S PAYMENTS FOR POWER PURCHASED			
	1. Metropolitan Edison Co. (Interchange)		$ 1,598.10	
	2. Philadelphia Electric Co. (Interchange)		40,865.39	
	3. Pennsylvania Power & Light Co. (Interchange)		12,031.66	
	4. Safe Harbor Water Power Corp. (Firm Power)		1,018,500.79	
	5a. Backfeed used for Firm Supply in Pa.	$313,322.00		
	b. Backfeed and Diverted Energy Sold as Interchange	1,149,369.96		
	Baltimore Co. (Interchange)		1,462,691.96	
	6. Total			$2,533,687.90
	SUM OF (a), (b), (c) and (d)			$10,233,617.29
(e)	HOLTWOOD COMPANY'S REVENUE FOR SERVICES OTHER THAN FOR BALTO. FIRM SUPPLY			
	1. Pennsylvania Power & Light Co. (Firm Power)		$ 1,944,484.32	
	2. Philadelphia Electric Co. (Firm Power)		948,860.95	
	3. Metropolitan Edison Co. (Firm Power) (Incl. Y.E.)		667,454.73	
	4. Pioneer Electric Light Co. (Firm Power)		13,871.33	
	5. Metropolitan Edison Co. (Interchange)		372,725.74	
	6. Philadelphia Electric Co. (Interchange)		489,438.93	
	7. Pennsylvania Power & Light Co. (Interchange)		320,028.21	
	8. Pennsylvania Railroad Company (Firm Power)		1,625,575.45	
	9. Conowingo Backwater Payment		133,750.00	
	10. Rent from Electric Property		34.65	
	11. Baltimore Co. (Interchange)		37,603.03	
	12. Total			$6,553,828.34
(f)	INTEREST ON INCREASE IN RESERVE FOR DEPRECIATION			240,075.64
(h)	REDUCTION AS PER SUPPLEMENTAL AGREEMENT OF SEPT. 29, 1939			600,000.00
(x)	MISCELLANEOUS CREDITS			15,293.28
	TOTAL DEDUCTIONS - SUM OF (e), (f), (h) and (x)			$7,409,197.26
	FIRM POWER BILL FOR YEAR 1946			$2,824,420.03

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EXHIBIT No. 380.

[24401]

F. M. Gunby
W. F. Uhl
A. W. Benoit
Marcus K. Bryan
R. A. Moncrieff
W. M. Hall

Industrial Plants
Textile Mills
Paper Mills
Steam Power
Water Power
Foundations
Valuations

Cable Address
Chasmain, Boston

CHAS. T. MAIN, INC.
ARCHITECTS — ENGINEERS
201 Devonshire Street
Boston, 10, Mass.

March 18, 1946

ESTIMATE OF FAIR MARKET VALUE AS OF MARCH 1, 1905 OF THE LANDS AND WATER RIGHTS REQUIRED TO CARRY OUT THE HOLTWOOD HYDRO-ELECTRIC DEVELOPMENT OF THE McCALL FERRY POWER COMPANY AND NOW OWNED BY THE PENNSYLVANIA WATER AND POWER COMPANY.

* * *

[24405] (page 5)

In arriving at the foregoing conclusions covering the fair market value of the lands and water rights required for the Holtwood hydro-electric development the following principal points were considered.

1. Market for power output; its extent and distance from the site of the development.

2. Competitive sources of power.

3. Extent of engineering information available regarding the site.

4. Natural advantages and disadvantages of the site.

5. Probable cost of construction.

6. Pondage and storage possibilities.

7. Stream flow characteristics.

8. Time when development may be carried out.

9. Possibilities of financing.

10. Yearly cost of producing the estimated output.

In the following the principal points enumerated above are covered in some detail.

1. Market for power output, its extent and distance from the site.

* * *

[24406] (page 6)

(a) With the Consolidated Gas Electric Light and Power Company of Baltimore, June 4, 1907, which provided for the sale of 4000 kw for an annual demand charge of $80,000. a year plus an energy charge of two mills per kw hr subject to various other minor provisions. This contract called originally for the supply of energy September 1, 1908, but provided for renewal.

(b) With the United Railways and Electric Company of Baltimore, dated June 28, 1907, which provided for sale of 10,000 kw for an annual demand charge of $200,000. and with an energy charge of two mills per kw hr, subject to other customary provisions. This contract also provided for extension. Both contracts provided for some increase in the amount of energy which could be taken.

On July 17, 1909 John E. Aldred had been appointed receiver of the McCall Ferry Power Company and the property had been purchased from the Bondholders Committee by the newly formed Pennsylvania Water and Power

Company on January 13, 1910. Mr. Aldred immediately initiated negotiations to secure new contracts at Baltimore.

(c) On August 29, 1910 a contract was executed between Pennsylvania Water and Power Company and the Consolidated Gas Electric Light and Power Company of Baltimore providing for purchase by the latter of not less than 70,000,000 kwh per year at four mills per kwh, with a maximum demand of 13,333 kw with provisions for the purchase of 50% more energy, with a maximum demand of 20,000 kw, bringing the total provided for up to 105,000,000 kwh per year at the same price.

(d) On February 8, 1911 a contract was executed between Pennsylvania Water and Power Company and the United Railways and Electric Company of Baltimore providing for the purchase by the latter of 12,000 kw "flat power" 24 hours per day but not to exceed 230,400 kwh during any 24 hour day based on a load factor of 80%. "Flat power" to be supplied at the rate of $24. per kw per annum. During low flow the Power Company had the right to reduce to 25% the amount of "flat power" supplied. "Surplus power" in excess of "flat power" to be taken week ends at the rate of 3 mills per kwh. used. At the option of the Railway Company an additional block of "flat power" could be taken not exceeding 6000 kw at the rate of 3.425 mills per kwh. Provisions were also made for the payment of 4 mills per kwh by the Power Company to the Railway Company for the generation by the Railway Company for its own use during periods when the Power Company was unable to supply the full amount of "flat power."

* * *

[24409] (page 9)

* * *

5. Probable cost of construction.

* * *

By the end of 1907 the Company had exhausted practically all of its available cash. At that time construction, exclusive of equipment, was about 80% complete. An additional [24410] (page 10) $3,753,000 in cash to carry on the construction was raised by the sale of additional securities in 1909.

By January 13, 1910, when the Pennsylvania Water and Power Company was organized, actual expenditures, exclusive of transmission lines but including land and water rights, amounted to $9,157,457.

During 1910 additional expenditures amounted to:

(a) Power Plant	$2,350,622
(b) Transmission lines	1,128,381
Total	$3,479,003

As of December 13, 1910 the total cost of land, plant and transmission lines amounted to:

(a) Power Plant	$11,508,079
(b) Transmission lines	1,128,381
Total	$12,636,460

At the end of 1910 one 13500 horse power unit was in operation and four 13,500 H.P. units were partly installed. This installation was completed by the latter part of 1911.

Actual commercial operation began October 1, 1911. Operation before this date was not continuous due to difficulties with turbines, generators and transformers. Actual generation during 1910 and 1911 was:

1910 — 8,979,500 kwh
1911 — 124,431,100 kwh

Total investment including land and transmission lines on September 30, 1911 was	$13,609,191
As of the same date the investment in power plant alone exclusive of land and transmission lines was about	$10,670,000

Net 1911 operating revenue before deduction for depreciation amounted to	$ 323,058
Total installed capacity Sept. 30, 1911 was	67,500 H.P.
Cost per H.P. of installed capacity, plant only	158
Cost per H.P. of installed capacity, land, plant, transmission lines and substations	202
By the end of 1914 two additional units of 17,000 H.P. each and one of 16,500 H.P. were in operation, 50,500 H.P. additional, or a total by December 31, 1914 of 118,000 H.P.	
Total investment on December 31, 1914 was	$15,582,829
As of the same date the investment in power plant alone, exclusive of land and transmission lines, was about	$11,659,000
Net 1914 operating revenue before deduction for depreciation amounted to	734,415

[24411] (page 11)

Cost per H.P. of installed capacity, plant only	$ 99
Cost per H.P. of installed capacity, land, plant transmission lines and substations	$ 132
During the early part of 1924 the installation of two more hydro units was completed, each of 20,000 H.P. capacity or 40,000 H.P. additional	
The total capacity of the plant during the latter part of 1924 and since that time was, therefore,	158,000 H.P.
Total investment on December 31, 1924 was	$20,706,078
As of the same date the investment in the power plant alone, exclusive of land and transmission lines was about	$15,530,000

Net 1924 operating revenue before deduction for depreciation amounted to	$ 1,756,535
Cost per H.P. of installed capacity, plant only	$ 98
Cost per H.P. of installed capacity, land, plant transmission lines and substations	$ 131
Name plate generating capacity:	
Original plant	42,500 kw
At present and since 1924	111,000 kw

* * *

[24415] (page 15)

* * *

10. Yearly cost of producing the estimated output.

By the end of 1910 conditions under which the property would be operated were fairly well established.

A contract for furnishing power had been made, the investment for the initial installation was well in hand and the project was fast approaching the going concern stage.

The following table shows the actual accumulated investment, annual cost exclusive of interest and depreciation, net operating revenue and return on the investment for the first ten years of operation.

Year	Output in Thousands of kw hrs.	Accumulated Investment December 31	Annual cost Exclusive of Depreciation	Net operating revenue before Depreciation	Return on Investment in %
1911	124,431.1	$13,609,191	$ 68,959	$ 323,058	2.37
1912	233,002.7	13,934,802	101,975	618,738	4.44
1913	252,772.3	14,668,273	117,048	664,433	4.53
1914	280,933.0	15,582,829	153,821	734,415	4.71
1915	345,771.1	15,620,830	176,408	943,431	6.04
1916	417,837.6	15,854,933	217,919	1,080,091	6.81
1917	516,891.0	16,126,658	445,051	1,246,641	7.73
1918	500,641.1	16,242,384	473,850	1,172,641	7.22
1919	512,138.8	16,303.435	558,810	1,269,681	7.79
1920	494,624.4	16,394,117	523,911	1,328,990	8.11

MPW 114

PENNSYLVANIA WATER & POWER CO.,

Lexington Building, Baltimore-3, Md.

Sold To Pennsylvania Power & Light Company.
Allentown, Pennsylvania

Invoice No.

Invoice Date, May 1, 1944

Energy furnished during the month of April, 1944:			
25 Cycle supply Engleside	1,995,000 KWH		
60 " " "	16,635,000 "		
60 " " Donegal	1,962,000 "		
60 " " Manheim	912,000 "		
60 " " Akron	1,524,000 "		
60 " " Big Inch	2,622,000 "		
60 " " Little Inch	1,244,000 "		
	26,894,000 "		
Deductions			
Back Feed #18	28,000 "		
" " Donegal	8,000 "		
" " Manheim	6,000 "		
" " Akron	5,000 "		
	26,855,000 " @ 6.6 mills		$177,243.00
	13,500,000 "		
Credit	13,355,000 " @ 0.6 "		8,013.00
			$169,230.00
Fixed Charges on Generating Companies investment in Safe Harbor Donegal connection. 1% of $13,669.92			136.70
			$169,366.70
Credit for metering equipment at South Manheim Substation.	$10.92		
Credit for metering equipment at Donegal Substation.	7.37		18.29
			$169,348.41

Form MPW 114

PENNSYLVANIA WATER & POWER CO.,

Lexington Building, Baltimore-3, Md.

Sold To Pennsylvania Power & Light Company
Allentown, Pennsylvania

Invoice No.

Invoice Date May 1, 1944

Energy furnished at Holtwood, Pa., during the month of April, 1944:			
Total supply	48,000 KWH		
Back Feed Athletic Field	0 "		
	48,000 " @ 15.0 mills		$720.00
Meter Reading 4/30/44	5210		
" " 3/31/44	4730		
	480		

Form MPW 114

PENNSYLVANIA WATER & POWER CO.,

Lexington Building, Baltimore-3, Md.

Sold To: Pennsylvania Power & Light Company
Allentown, Pennsylvania

Invoice No.

Invoice Date May 5, 1944

Interchange Energy supplied to or received from the Pennsylvania Power & Light Company of Allentown during the month of April, 1944:		
Supplied to Penna. Power & Light Co. 9,119,000 KWH	$36,376.53	
Received from Penna. Power & Light Co. 7,000 "	21.64	
Net amount due Pennsylvania Water & Power Co.		$36,354.89

IT-5915

PENNSYLVANIA WATER & POWER COMPANY

CUMULATIVE RATE OF RETURN EARNED ON GROSS INVESTMENT, STRAIGHT LINE DEPRECIATION AND 5% RATE OF RETURN

	1911-1945	1911-1965	1911-1985	1911-2010	Cumulative Totals - Per Dorau Work Papers 1946-1965 Inclusive	1946-1985 Inclusive	1946-2010 Inclusive
1. Gross Investment	$779,433,520	$1,450,248,200	$2,121,063,000	$2,959,581,425	$670,814,740	$1,341,629,480	$2,180,147,905
2. Reserve for Depreciation	101,967,804	383,851,030	680,026,711	1,027,493,053	281,883,226	578,058,907	925,525,249
3. Net Investment	677,465,716	1,066,397,230	1,441,036,289	1,932,088,372	388,931,514	763,570,573	1,254,622,656
4. Return Earned on Net Investment (5% after 1945)	68,575,878	88,022,454	106,754,407	131,307,011	19,446,576	38,178,529	62,731,133
5. 3% Assumed "Income from Reserve Investment"	3,059,034	11,515,531	20,400,801	30,824,792			27,765,757
6. Total of (4) and (5)	$ 71,634,912	$ 99,537,985	$ 127,155,208	$ 162,131,803			$ 90,496,890
8. Rate of Return Earned on Undepreciated Gross Investment	9.2%	6.80%	6.00%	5.48%			

Source:

1911-1945 Actual investment, depreciation reserve and earnings (Ex. 57)
1946-2010 Static investment and cumulative depreciation reserve shown in " Dr. Dorau's work papers.

Docket IT-5915 Schedule 1

PENNSYLVANIA WATER & POWER COMPANY

CONSOLIDATED INCOME STATEMENT - PER BOOKS
CALENDAR YEARS 1945 AND 1946

Particulars	Year Ended December 31 1945	1946
OPERATING REVENUES	$7,051,676.04	$6,438,983.28
OPERATING REVENUE DEDUCTIONS:		
Operating expenses -		
Purchased power:		
Safe Harbor Water Power Corporation	1,231,772.47	1,016,500.79
Interchange power	(812,133.77)	(1,127,698.73)
Electric generation-steam power	584,044.44	683,566.82
Electric generation-hydraulic power	352,518.26	402,895.08
Transmission	366,367.37	408,483.59
Administrative and general	625,541.55	906,281.37
Total	2,348,110.32	2,290,028.92
Depreciation	574,245.15	573,876.79
Taxes-Federal income	1,211,693.82	892,070.76
Taxes-other than Federal income	317,248.94	297,970.26
Total Operating Revenue Deductions	4,451,298.23	4,053,946.73
OPERATING INCOME	2,600,377.81	2,385,036.55
OTHER INCOME:		
Income from non-utility operations	(362.33)	(328.21)
Dividend revenues	385,264.00	385,264.00
Interest on securities owned	57,265.24	54,153.14
Other interest revenues	-	-
Miscellaneous non-operating revenues	-	748.21
Total Other Income	442,166.91	439,837.14
GROSS INCOME	3,042,544.72	2,824,873.69
INCOME DEDUCTIONS:		
Interest on long term debt	680,449.37	669,335.79
Amortization of premium on debt	(10,834.08)	(10,686.84)
Taxes assumed on interest	-	-
Other interest charges	36.35	8.72
Interest charged to construction	(280.29)	(1,635.24)
Miscellaneous income deductions	42,012.00	26,978.68
Total Income Deductions	711,383.35	684,001.11
NET INCOME	$2,331,161.37	$2,140,872.58

Docket IT-5915 Schedule 2

PENNSYLVANIA WATER & POWER COMPANY

OPERATING REVENUES - PER BOOKS
CALENDAR YEARS 1945 AND 1946

Particulars	Year Ended December 31 1945	1946
SALES OF ELECTRIC ENERGY:		
Sales to other electric utilities		
Consolidated Gas Electric Light and Power Company		
Net-Bill for year	$2,084,216.67	$1,399,331.10
Portion of regulatory expenses and applicable taxes not paid		(294,379.25)
Total	2,084,216.67	1,104,951.85
Pennsylvania Power & Light Company -		
Lancaster, Pa.	2,053,740.12	1,944,484.32
Holtwood, Pa.	11,187.23	13,871.33
Total	2,064,927.35	1,958,355.65
Philadelphia Electric Company -		
Coatesville, Pa.	939,107.73	948,860.95
Edison Light & Power Company -		
York, Pa.	397,325.85	10,331.62
Metropolitan Edison Company -		
York, Pa.	-	657,123.11
Total sales to other electric utilities	5,485,577.60	4,679,623.18
Sales to railroads and railways -		
Pennsylvania Railroad Company	1,432,348.44	1,625,575.45
Total Sales of Electric Energy	6,917,926.04	6,305,198.63
OTHER ELECTRIC REVENUES:		
Rent from electric property	-	34.65
Miscellaneous electric revenues -		
Conowingo backwater payment	133,750.00	133,750.00
Other	-	-
Total	133,750.00	133,750.00
Total Other Electric Revenues	133,750.00	133,784.65
Total Operating Revenues	$7,051,676.04	$6,438,983.28

Docket No. IT-5915 Schedule 3

PENNSYLVANIA WATER & POWER COMPANY

SALES OF ELECTRIC ENERGY
CALENDAR YEAR 1946

Particulars	Year Ended December 31, 1946 KWH	Amount	Mills Per KWH
Consolidated Gas Electric Light and Power Company of Baltimore - Paid	56,017,000	$1,104,951.85	19.72
Memo - Per power bill		1,399,331.10	24.98
Pennsylvania Power & Light Company			
Lancaster, Pa.	307,643,900	1,944,484.32	6.32
Holtwood, Pa.	924,755	13,871.33	15.00
Total	308,568,655	1,958,355.65	6.35
Philadelphia Electric Company - Coatesville, Pa.	135,629,000	948,860.95	7.00
Edison Light & Power Company - York, Pa.	88,606,000	667,454.73 1/	7.54
Total Sales to Other Electric Utilities	588,820,655	4,679,623.18	7.95
Pennsylvania Railroad Company	213,482,000	1,625,575.45	7.61
Total Sales of Electric Energy	802,302,655	$6,305,198.63	7.86

1/ Sales in 1946 were made to Metropolitan Edison Company except for $10,331.62 to Edison Light and Power Company during the first three months of that year.

Docket IT-5915 Schedule 4

PENNSYLVANIA WATER & POWER COMPANY

HOLTWOOD COMPANY'S BILL TO BALTIMORE COMPANY
CALENDAR YEAR 1946

The reference letters used below correspond to the paragraph letters under Article III of the Supplemental Agreement of June 1, 1931, as amended by Supplemental Agreement of September 29, 1939.

Reference		Particulars	1946
(a)		Net Power Revenue of Holtwood Company	$
	1	1930 Revenue Adjusted to Average River Flow	2,832,259.75
	2	Decrease in Revenue from Customers Other than Baltimore, 1931 Compared with 1930	70,080.06
	3	Base Net Revenue	2,762,179.69
(b)		Payments on Net Additions at 10.25% and 9.5%	895,385.47
(c)		Expenses	
	1	Operating Expense (Excluding Power Purchased)	1,092,388.98
	2	Maintenance	402,556.51
	3	General Expense	906,281.37
	4	General Taxes	304,170.26
	5	Federal Normal and Surtax	983,846.27
	6	Federal Excess Profits Tax	
	7	Depreciation	355,146.73
		Less: Adjustment for Auto Depreciation	(2,025.89)
	8	Total	4,042,364.23
(d)		Holtwood Company's Payments for Power Purchased	
	1	Metropolitan Edison Co. (Interchange)	1,598.10
	2	Philadelphia Electric Co. "	40,865.39
	3	Pennsylvania Power & Light Co."	12,031.66
	4	Safe Harbor Water Power Corporation	1,016,500.79
	5	Total	1,070,995.94
		Sum of (a), (b), (c), and (d)	8,770,925.33
(e)		Holtwood Company's Revenue from Parties Other than Baltimore	
	1	Pennsylvania Power & Light Co. (Firm Power)	1,944,484.32
	2	Philadelphia Electric Co. - Coatesville, Pa.	948,860.95
	3	Metropolitan Edison Co. (Firm Power) (Including Y.P.)	667,454.73
	4	Pioneer Electric Light Co.	13,871.33
	5	Metropolitan Edison Company (Interchange)	372,726.74
	6	Philadelphia Electric Co. (Via P.R.R.) (Interchange)	489,438.93
	7	Pennsylvania Power & Light Company (Interchange)	320,028.21
	8	Pennsylvania Railroad Company	1,625,575.45
	9	Conowingo Backwater Payment	133,750.00
	10	Rent from Electric Property, etc.	34.65
	11	Total	6,516,225.31
(f)		Interest at 4% On Increase in Reserve for Depreciation	240,075.64
(h)		Reduction as Per Supplemental Agreement of September 29, 1939	600,000.00
(x)		Miscellaneous Credits	15,293.28
		Total Deductions-Sum of (e), (f), (h), and (x)	7,371,594.23
(i)		Net Bill for Year	$1,399,331.10

Docket IT-5915 Schedule 4A

PENNSYLVANIA WATER & POWER COMPANY

RECONCILIATION OF REVENUE FROM BALTIMORE COMPANY POWER BILL WITH BOOKS
CALENDAR YEAR 1946

Particulars	1946
Net power bill for year	$1,399,331.10
Deduct -	
Portion of regulatory commission expense ($205,641.28) and applicable taxes ($ 88,737.97) included in power bill but disputed by Consolidated Gas Electric Light and Power Company as not reasonable, and treated by Pennsylvania Water & Power Company on its books as a deferred credit	294,379.25
Balance, being revenue from Baltimore Company, per books	$1,104,951.85

Rate case expenses - P.W.& P.Co.	$201,757.00
Rate case expenses - Safe Harbor (Included in power purchased)	3,884.28
Federal Income Taxes	83,367.28
Penna. Income Tax	5,370.69
Total	$294,379.25

Docket IT-5915

Schedule 5
Sheet 1 of 2

PENNSYLVANIA WATER & POWER COMPANY

PURCHASED POWER
SAFE HARBOR COMPANY'S POWER BILL.
FOR 1946 AND ESTIMATED FOR 1947

Particulars	Power Bill As Rendered 1946	Power Bill As Estimated 1947	Power Bill Pro Forma 1946
Return on Investment	$2,114,009.06	$1,400,208.00	$1,400,208
Expenses:			
Operating Expense	290,126.86	337,900.00	290,127
Maintenance	146,262.40	175,400.00	146,262
General Expense	226,168.71	261,880.00	214,516
General Taxes	98,820.08	121,106.25	121,106
Federal Normal and Surtax	-	481,604.45	481,604
Depreciation	174,677.87	507,370.00	507,370
Total Expenses	936,055.92	1,885,260.70	1,760,985
Operating Revenues	3,050,064.98	3,285,468.70	3,161,193
Rent from Electric Property	562.60	500.00	500
Net Bill for Year	$3,049,502.38	$3,284,968.70	$3,160,693
Net Bill to Baltimore Co. (2/3)	$2,033,001.59	$2,189,979.13	$2,107,129
Net Bill to Holtwood Co. (1/3)	1,016,500.79	1,094,989.57	1,053,564

Notes:

The pro-forma power bill for 1946 is based upon the actual operating expenses for 1946 and the estimated depreciation, taxes, and return for 1947 in order to reflect the effect of Opinion No. 146 and the refinancing in 1946.

An amount of $11,652.83 for rate case expenses has been excluded from general expenses of 1946 in the pro-forma power bill.

An estimated Safe Harbor Company power bill for 1947 based upon the agreements of June 1, 1931 and November 22, 1939 as prepared by Safe Harbor $3,889,850.35

The estimated Safe Harbor Company power bill for 1947 prepared in accordance with F.P.C. order of Nov. 4, 1946 3,284,968.70

Safe-Harbor Company's estimated rate reduction for 1947 $ 604,881.65

Docket IT-5915

Schedule 5
Sheet 2 of 2

PENNSYLVANIA WATER & POWER COMPANY

COMPUTATION OF INCOME TAXES
INCLUDIBLE IN SAFE HARBOR'S POWER BILL

Particulars	Power Bill As Rendered 1946	Power Bill As Estimated 1947	Power Bill Pro Forma 1946
Return on Investment	$2,114,009.06	$1,400,208.00	$1,400,208.00
Expenses:			
Operating Expense	290,126.86	237,900.00	290,127.00
Maintenance	146,262.40	175,400.00	146,262.00
General Expense	226,168.71	261,880.00	214,516.00
General Taxes	98,820.08	121,106.25	121,106.00
Depreciation	174,677.87	507,370.00	507,370.00
Total expenses	936,055.92	1,403,656.25	1,279,381.00
Sum of Return and Expenses	3,050,064.98	2,803,864.25	2,679,589.00
Deductions:			
Expenses	936,055.92	1,403,656.25	1,279,381.00
Depreciation (Excess of straight-line)	330,253.40	-	-
Interest on Bonds	903,558.52	420,000.00	420,000.00
Interest on Notes	-	84,437.50	84,438.00
Premium on Bonds Redeemed	6,815.00	-	-
Debt Discount and Expense	41,233.32	-	-
Amort. of Debt Premium	(2,262.09)	(22,620.89)	(22,621.00)
Penn. Corporate Loans Tax	11,534.22	-	-
Decrease in Reserve for Ret. Ann.	1,255.36	-	-
Excess of Non-Operating Deductions Over Non-Operating Income	1,405,636.36	-	-
Total Deductions	3,634,080.01	1,885,472.86	1,761,198.00
Tentative Taxable Net Income	$ (584,015.03)	$ 918,391.39	$ 918,391.00
Tentative Normal and Surtax (38%)	-	348,988.73	348,989.00
Normal and Surtax:			
Tentative Taxable Net Income	-	918,391.39	918,391.00
Tentative Tax	-	348,988.73	348,989.00
Taxable Net Income	-	1,267,330.12	1,267,380.00
Normal and Surtax at 38%	-	$ 481,604.45	$ 481,604.00
Pennsylvania Taxable Net Income	-	$1,267,380.12	$1,267,380.00
Penn. Income Tax at 2.124% (53.11% of 4%)		$ 26,900.00	$ 26,900.00

Docket IT-5915 Schedule 6

PENNSYLVANIA WATER & POWER COMPANY

INTERCHANGE POWER - PER BOOKS
CALENDAR YEAR 1946

Particulars	Year Ended December 31, 1946 Delivered To	Received From	Net
Philadelphia Electric Company			
Perryville, Md.	$ 196,927.67	$ 17,329.32	$ 179,598.35
Thorndale, Pa.	292,511.26	23,536.07	268,975.19
Total	489,438.93	40,865.39	448,573.54
Pennsylvania Power & Light Company			
Harrisburg, Pa.	320,028.21	12,031.66	307,996.55
Metropolitan Edison Company			
Violet Hill, Pa.	372,726.74	1,598.10	371,128.64
Total Interchange	$1,182,193.88	$ 54,495.15	$1,127,698.73
Philadelphia Electric Company			
Perryville, Md.	32,786,000	3,968,000	28,818,000
Thorndale, Pa.	48,018,000	5,425,000	42,593,000
Total	80,804,000	9,393,000	71,411,000
Mills Per K.W.H.	6.06	4.35	
Pennsylvania Power & Light Company (Harrisburg, Pa.)	51,192,000	2,919,000	48,273,000
Mills Per K.W.H.	6.25	4.12	
Metropolitan Edison Company (Violet Hill, Pa.)	72,428,000	448,000	71,980,000
Mills Per K.W.H.	5.15	3.57	

Docket IT-5915 Schedule 7

PENNSYLVANIA WATER & POWER COMPANY

K.W.H. STATISTICS
CALENDAR YEARS 1945 AND 1946

Particulars	Year Ended December 31, 1945	1946
Energy Generated and Purchased		
Energy Generated (Net) -		
Steam	142,864,000	166,112,000
Hydro	730,216,000	592,689,000
Total Energy Generated	873,080,000	758,801,000
Energy Purchased -		
Safe Harbor Water Power Corporation	412,514,000	292,322,000
Interchange Energy Received	16,051,000	12,760,000
Total Energy Generated and Purchased	1,301,645,000	1,063,883,000
Disposition of Energy		
Sold -		
Consolidated Gas Electric Light and Power Company of Baltimore	321,493,000	56,017,000
Other Companies	712,521,700	746,285,600
	1,034,014,700	802,302,600
Interchange Energy Delivered	201,259,000	204,424,000
Total Energy Delivered	1,235,273,700	1,006,726,600
Transmission and Substation Losses	66,371,300	57,156,400
Total Disposition of Energy	1,301,645,000	1,063,883,000
Percentage of Transmission Loss	5.10	5.37

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Schedule 8
Sheet 1 of 3

PENNSYLVANIA WATER & POWER COMPANY

OPERATING EXPENSES, PER BOOKS
CALENDAR YEARS 1945 AND 1946

F.P.C. Acct. No.	Particulars	Year Ended December 31 1945	1946
	ELECTRIC GENERATION - STEAM POWER:		
	Operation -		
701	Supervision and engineering	$ 34,026.82	$ 41,440.99
702.1	Boiler labor	62,739.24	71,237.94
702.2	Prime mover and generator labor	18,232.74	20,581.05
702.4	Miscellaneous station labor	7,642.07	10,769.08
703	Fuel	295,385.42	372,678.37
704	Water	10,659.76	12,543.15
705.1	Lubricants	870.81	876.89
705.2	Station supplies	15,395.48	21,822.41
705.3	Station expenses	17,271.23	19,439.94
502.11	Total operation	462,223.57	571,389.82
	Maintenance -		
706	Supervision and engineering	27,755.90	33,206.51
707	Structures and improvements	9,694.39	12,275.64
708.1	Coal storage, handling, and weighing equipment	44,712.03	40,239.73
708.2	Furnaces and boilers	19,230.68	9,990.04
708.3	Boiler apparatus	7,100.06	5,098.54
708.4	Steam piping and accessories	1,284.86	1,113.12
709.1	Prime movers and generators	9,874.96	7,973.61
709.2	Accessory electric equipment	704.56	963.13
709.3	Miscellaneous power plant equipment	1,463.43	1,316.68
	Total maintenance	121,820.87	112,177.00
	Total Electric Generation - Steam Power	$584,044.44	$683,566.82
	ELECTRIC GENERATION - HYDRAULIC POWER:		
	Operation -		
715	Supervision and engineering	$ 52,551.78	$ 64,614.42
716.1	Hydraulic labor	21,365.86	20,381.64
716.2	Prime mover and generator labor	43,643.10	46,449.09
716.3	Electric labor	39,573.40	42,393.47
716.4	Miscellaneous station labor	25,429.22	29,084.13
718.1	Lubricants	432.25	658.59
718.2	Station supplies	9,587.74	13,871.91
718.3	Station expenses	30,937.08	34,268.80
502.31	Total operation	223,520.43	251,722.05
	Maintenance		
719	Supervision and engineering	40,364.15	49,270.70
720	Structures and improvements	19,026.09	21,774.77
721	Reservoirs, dams, and waterways	965.24	3,903.88
722.1	Prime movers and generators	37,496.98	47,688.35
722.2	Accessory electric equipment	22,132.62	21,392.38
722.3	Miscellaneous power plant equipment	6,263.37	5,463.58
723	Roads, railroads, and bridges	2,749.38	1,679.37
502.32	Total maintenance	$128,997.83	$151,173.03
	Total Electric Generation - Hydraulic Power	$352,518.26	$402,895.08

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Schedule 8
Sheet 2 of 3

PENNSYLVANIA WATER & POWER COMPANY

OPERATING EXPENSES - PER BOOKS
CALENDAR YEARS 1945 AND 1946

F.P.C. Acct. No.	Particulars	Year Ended December 31 1945	1946
	TRANSMISSION:		
	Substations--Operation -		
743	Supervision and engineering	$ 22,121.73	$ 23,147.56
745.1	Station labor	77,728.50	72,159.57
745.2	Station supplies and expense	5,303.95	5,240.19
502.511	Total operation	105,154.18	100,547.32
	Substations--Maintenance -		
747	Supervision and engineering	12,785.38	14,460.76
748	Structures and improvements	8,324.89	5,006.29
749	Station equipment	41,904.14	46,991.97
502.512	Total maintenance	63,014.41	66,459.02
	Total substations	168,168.59	167,006.34
	Lines--Operation -		
743	Supervision and engineering	21,057.89	27,364.40
746.1	Transmission labor	65,435.19	57,325.29
746.1	Clearing land and rights-of-way	40,542.06	43,128.15
746.1	Transmission supplies and expenses	3,454.50	3,213.18
502.521	Total operations	130,489.64	131,031.02
	Lines--Maintenance -		
747	Supervision and engineering	5,511.95	6,830.60
748	Structures and improvements	2,936.56	4,510.42
750.1	Towers and fixtures	9,982.94	43,336.21
750.2	Poles and fixtures	6.88	14.45
750.3	Conductors and devices	8,872.84	11,881.99
752	Roads and trails	5,590.51	6,173.79
502.522	Total maintenance	32,901.68	72,747.46
	Total lines	163,391.32	203,778.48
	Load Dispatching -		
743	Supervision and engineering		3.40
744	Labor	44,316.86	47,149.86
744	Supplies and expenses	24,091.73	26,954.43
744	Maintenance	1,206.32	1,289.82
755	Charged to others - credit	(34,807.45)	(37,698.74)
	Total load dispatching	34,807.46	37,698.77
	Total Transmission	$366,367.37	$408,483.59

( ) Denotes red figures.

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Schedule 8
Sheet 3 of 3

PENNSYLVANIA WATER & POWER COMPANY

OPERATING EXPENSES - PER BOOKS
CALENDAR YEARS 1945 AND 1946

F.P.C. Acct. No.	Particulars	Year Ended December 31 1945	1946
	ADMINISTRATIVE AND GENERAL EXPENSES:		
	Operation -		
790	Salaries of general officers and executives	$ 115,086.74	$ 123,073.40
791	Other general office salaries	174,112.00	192,470.41
792.1	Expenses of general officers	2,551.96	2,516.12
792.2	Expenses of general office employees	4,326.51	3,950.10
793	General office supplies and expenses	19,878.79	25,172.61
795	Special services	3,754.27	4,032.33
796	Legal services	16,305.00	19,350.00
797	Regulatory commission expenses	75,567.17	319,558.81
798	Insurance	18,174.70	13,499.60
799	Injuries and damages	9,226.36	6,983.19
800.1	Employees welfare expenses	22,842.30	29,020.84
800.2	Retirement annuit expense and pensions	62,488.50	61,071.58
801	Miscellaneous general expenses	53,498.20	58,201.60
803	Rents	34,626.00	35,763.00
	Total operation	612,438.50	894,663.59
	Maintenance -		
802.1	Structures and improvements	3,001.35	2,597.16
802.2	Office furniture and equipment	3,583.39	4,108.28
802.3	Communication equipment	6,518.31	4,912.34
	Total maintenance	13,103.05	11,617.78
502.7	Total Administrative and General Expenses	$ 625,541.55	$ 906,281.37

Docket IT-5915 Schedule 9

PENNSYLVANIA WATER & POWER COMPANY

SUMMARY OF TAXES FOR YEAR 1946

Acct. No.	Particulars	Per Books	Per Power Bill
	Federal Income		
228.111	Normal and Surtax	$ 892,070.76	$ 983,846.27
	Other		
228.141	Unemployment Compensation (Including States)	15,090.92	15,090.92
228.1421	Old Age and Survivors Insurance	11,969.94	11,969.94
	Pennsylvania		
228.211	Income	46,800.00	53,000.00
228.212	Capital Stock	120,000.00	120,000.00
228.215	Gross Receipts	22,758.54	22,758.54
228.216	General Assessment - P.U.C.	4,067.27	4,067.27
228.217	Water and Power Resources Board	30.50	30.50
	Property	5,910.22	5,910.22
	Maryland		
228.311	Income	3,646.68	3,646.68
228.312	Capital Stock - State	370.80	370.80
228.316	Foreign Corporation	25.00	25.00
228.331	Capital Stock - Baltimore City	10,979.46	10,979.46
	Property	56,320.93	56,320.93
	Total	297,970.26	304,170.26
507	Total Taxes	$1,190,041.02	$1,288,016.53

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PENNSYLVANIA WATER & POWER COMPANY

INCOME TAX PER BOOKS
CALENDAR YEAR 1946

Reconciliation of Net Income, Per Books to Taxable Net Income:	1946
Net income per books	$2,140,873
Add:	
Federal income tax per books	892,071
Federal excess profits tax per books	
Tentative Federal normal and surtax	712,932
Amortization of premium on debt	755
Reserve for retirement annuities	(4,590)
Surplus credits	13,752
Miscellaneous income deductions	
Sub total	3,755,793
Deduct:	
Final Federal taxes (eliminate)	983,846
Dividend revenues (85%)	327,474
Interest capitalized	1,618
Surplus debits	55,708
Sub total	1,368,646
Taxable net income	$2,387,147

Tax Computation:	
Normal tax net income	$2,387,147 01
Normal tax at 24%	572,915 28
Normal tax net income	2,387,147 01
Less preferred stock dividends	107,465 00
Surtax net income	2,279,682 01
Surtax at 14%	319,155 48
Total normal and surtax	$ 892,070 76

Penn Income Tax	
Taxable net income	$2,387,147 01
Less 15% of dividends received not taxable in Penn.	57,789 60
Penn. taxable net income	2,329,357 41
Penn. income tax at 2.0255% (50.637% of 4%)	47,181 13
Used	$ 46,800 00

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PENNSYLVANIA WATER & POWER COMPANY

COMPUTATION OF FEDERAL NORMAL TAX AND SURTAX
CALENDAR YEAR 1946 ON NON OPERATING INCOME

	Particulars			Amount
TAXABLE NON OPERATING REVENUES:				
521	Income from Non Utility Operations		$(328.21)	$
523	Dividend Revenues (15% of $385,264)		57 789 60	
524.1	Interest on Securities Owned		54 153 14	
524.2	Other Interest Revenues		17 53	
526	Miscellaneous Non-Operating Revenues		748.21	
401	Miscellaneous Credits to Surplus		none	
	Total Non Operating Revenues			112,380.27
NON OPERATING DEDUCTIONS:				
Item X	Directors Fees	$12,290.00		
	Use and Occupancy Insurance	537.73		
	A. W. Hawks	2,417.55		
	Binding J. E. Aldred Papers	48.00	15,293.28	
	Rate Case Expenses Adjustment		294,379.25	
507.9	Penna. Corporate Net Income Tax on Non Operating Income		(6,200.00)	
535	Other Interest Charges		8.72	
538	Miscellaneous Income Deductions		26,978.68	
	Amortization of Pension Payment for Past Services		23,434.82	
414	Miscellaneous Debits to Surplus		none	
	Total Non Operating Deductions			353,894.75
	Taxable Non-Operating Income			$(241,514.48)
	Federal Normal Tax and Surtax on Non-Operating Income at 38%			(91,775.51)
	Federal Normal Tax and Surtax on Operating Income (Power Bill)			983,846.27
	Total Federal Normal Tax and Surtax			$ 892,070.76
	Pennsylvania Corporate Net Income Tax			
	Taxable Non-Operating Income (as above)			$(241,514.48)
	Less: 15% of Dividend Revenues (not taxable in Penna.)			57,789.60
	Penna. Taxable Non-Operating Income			$(299,304.08)
	Penna. Corporate Net Income Tax on Non Operating Income at 2.0255%			$(6,062.40)
	Penna. Corporate Net Income Tax on Operating Income (Power Bill)			53,000.00
	Total Pennsylvania Corporate Net Income Tax			$ 46,937.60
			Use	$ 46,800.00

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PENNSYLVANIA WATER & POWER COMPANY

DIVIDEND AND INTEREST REVENUES
CALENDAR YEARS 1945 AND 1946

Particulars	Year Ended December 31 1945	1946
Dividend Revenues		
Safe Harbor Water Power Corporation 1/		
100,000 shares common stock ($3,000,000)	$ 280,000.00	$ 280,000.00
Consolidated Gas Electric Light and Power Co. 2/		
29,240 shares common stock ($1,864,341.38)	105,264.00	105,264.00
Total Dividend Revenues	$ 385,264.00	$ 385,264.00
Interest Revenues		
U. S. Savings Bonds and Treasury Notes 3/	$ 57,265.24	$ 54,153.14

1/ Dividend Rate $2.80 per share.

2/ Dividend Rate $3.60 per share.

3/ Book and Principal Value of U.S. Securities

2 1/2% U.S. Savings Bonds Series G	$ 400,000.00	$ 400,000.00
1.07% U.S. Treasury Savings Notes Series C	3,200,000.00	1,400,000.00
1 1/4% U.S. Treasury Notes Series B	500,000.00	500,000.00
1 1/4% U.S. Treasury Notes Series C	300,000.00	300,000.00
7/8% U.S. Treasury Certificates of Indebtedness		2,000,475.59
Total	$4,400,000.00	$4,600,475.59

Docket IT-5915

(Corrected Copy)
Exhibit No. 393
Schedule 1

PENNSYLVANIA WATER & POWER COMPANY
EXCESS REVENUES COMPUTED ON THE BASES
OF 5% RATE OF RETURN
CALENDAR YEAR 1946

Particulars	Per Books	Power Bill As Rendered	Power Bill At 5% Return	Power Bill As Paid 1/
Operating Revenues:				
Sales of Electric Energy	$6,305,198.63	$6,599,577.88	$6,599,577.88	$6,305,198
Other Electric Revenues	133,784.65	133,784.65	133,784.65	133,784
Total	$6,438,983.28	$6,733,362.53	$6,733,362.53	$6,438,983
Operating Revenue Deductions:				
Purchased Power-Safe Harbor	1,016,500.79	1,016,500.79	1,016,500.79	1,012,616
Interchange Power-Net	(1,127,698.73)	(1,127,698.73)	(1,127,698.73)	(1,127,698)
Electric Generation-Steam	683,566.82	683,566.82	683,566.82	683,566
Electric Generation-Hydro	402,895.08	402,895.08	402,895.08	402,895
Transmission	408,483.59	408,483.59	408,483.59	408,483
Administrative and General	571,429.28	571,429.28	571,429.28	571,429
Rate case expenses	319,558.81	319,558.81		117,801
Non-Operating Items	15,293.28			
Depreciation	573,876.79	573,876.79	465,413.00	573,876
Taxes, except Federal Income	297,970.26	304,170.26	262,970.26	293,799
Federal Normal and Surtax	892,070.76	983,846.27	211,216.62	900,478
Total Deductions	4,053,246.73	4,136,628.96	2,894,976.71	3,842,219
Net Operating Revenue	$2,385,036.55	$2,596,733.57	$3,838,385.82	$2,596,733
Return			1,229,377.00	
Excess Revenues			$2,609,008.82	

1/ Items considered unreasonable by Consolidated and not paid:

Rate case expenses	$201,757.00
Power purchases-Safe Harbor rate case expenses	3,884.28
Federal Income tax	83,367.28
Penna. Income tax	5,370.69
Total	$294,379.25

Docket IT 5915. Schedule 2

PENNSYLVANIA WATER & POWER COMPANY
COMPUTATION OF AVERAGE INVESTMENT RATE BASE
CALENDAR YEAR 1946

Particulars	Amount
Average Plant in Service (Note 1)	$32,939,420
Average Depreciation Reserve (Note 2)	9,001,873
Average Net Investment	23,937,547
Working Capital (Note 3)	650,000
Net Investment Rate Base	$24,587,547
Return at 5%	$ 1,229,377
1. Adjusted Plant 12/31/45	$32,920,738
Work in Progress in 1945 Power Bill	32,119
Adjusted Plant 12/31/46	32,861,630
Work in Progress in 1946 Power Bill	64,353
Total	65,878,840
Average for 1946	$32,939,420
2. Depreciation Reserve, per Books 12/31/46	$ 9,453,867
Adjustments:	
Unrecorded retirements ($343,928.42)	
Duplicate retirements 8,200.22	
Plant Additions 122,488.49	213,240
Depr. Reserve per books 12/31/46, Adjusted	9,240,627
Depr. Reserve per books 12/31/45, Adjusted	8,763,119
Total	18,003,746
Average Depreciation Reserve - 1946	$ 9,001,873
3. Cash Working Capital:	
Electric generation - Steam	$ 683,567
Electric generation - Hydro	402,895
Transmission	408,484
Administrative and General	906,281
Less rate case expense	(319,559)
Total cash operating expenses	2,081,668
Allowance for 45 days	256,644
Materials and Supplies:	
Average monthly balance	396,421
Total Working Capital	$ 650,000

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Schedule 3

PENNSYLVANIA WATER & POWER COMPANY
COMPUTATION OF DEPRECIATION EXPENSE
CALENDAR YEAR 1946

Particulars	Original Cost Dec. 31 1945	Original Cost Dec. 31 1946	Average Depreciable Investment	Depr. Rate	1946 Depreciation Expense
Intangible Plant	$ 173,070	$ 173,070			
Steam Plant:					
Non-Depr.	2,000	2,000			
Depreciable	4,564,336	4,654,661	$ 4,609,499	2.38%	$ 109,706
Total Steam	4,566,336	4,656,661			
Hydro Plant:					
Non-Depr.	3,033,552	3,033,914			
Depreciable	12,826,387	12,881,774	12,854,081	1.45	186,384
Total Hydro	15,859,939	15,915,688			
Transmission Plant:					
Non Depre.	2,940,025	2,937,816			
Depreciable	8,597,518	8,372,912	8,485,215	1.75	148,491
Total Transmission	11,537,543	11,310,728			
General Plant:					
Non Depr.	55,590	68,944			
Depreciable	728,262	742,539	735,401	2.86	21,032
	783,852	805,483			
Total Plant	$32,920,738	$32,861,630	$26,813,406	1.74	$ 465,613

Docket IT 5915

Schedule 4
Sheet 1 of 2

PENNSYLVANIA WATER & POWER COMPANY
INCOME TAX COMPUTATION
CALENDAR YEAR 1946

Particulars	Power Bill As Rendered	Power Bill At 5% Return
RETURN:		
Base Net Power Revenue	$2,762,179.69	
Net Additions at 10.25% and 9.5%	895,385.47	
Depreciation at 2-1/2% on Net Additions	(220,755.95)	
Interest at 4% on increase in Depreciation Reserve	(240,075.64)	
Reduction per 1939 agreement	(600,000.00)	
RETURN ON INVESTMENT	$2,596,733.57	$1,229,377.00
Operating Expenses		
Power purchased - Safe Harbor	1,016,500.79	1,016,500.79
Power purchased - other	54,495.15	54,495.15
Operation	1,092,388.98	1,092,388.98
Maintenance	402,556.51	402,556.51
General Expense	571,429.28	571,429.28
Rate case expense	319,558.81	
General taxes	304,170.26	304,170.26
Depreciation	573,876.79	465,413.00
TOTAL OPERATING EXPENSES	4,334,976.57	
OPERATING REVENUE (EXCLUSIVE OF FEDERAL INCOME TAX)	6,931,710.14	5,138,791.97
Tax Deductions:		
Operating Expenses	4,334,976.57	3,909,414.97
Additional depreciation		108,268.79
Interest on Long Term Debt	669,335.79	669,335.79
Premium on Bonds Retired	28,050.00	28,050.00
Amort. of Debt Premium and Expense	(17,096.16)	(17,096.16)
Decrease in Reserve for Retirement Annuities	4,589.48	4,589.48
Income Adjustment prior years	(3,874.95)	(3,874.95)
Excess of Non-Operating deductions over Non-Operating income		
Total tax deductions	5,015,980.73	
Tentative taxable net income	$1,915,729.41	$ 442,370.00

Docket IT 5915

Schedule 4
Sheet 2 of 2

PENNSYLVANIA WATER & POWER COMPANY
INCOME TAX COMPUTATIONS
CALENDAR YEAR 1946

Particulars	Power Bill As Rendered	Power Bill At 5% Return
FEDERAL INCOME TAXES		
Tentative Taxable Net Income	$1,915,729.41	$442,370.05
Tentative Normal tax at 24%	459,775.06	106,168.81
Tentative Surtax		
Tentative taxable net income	1,915,729.41	442,370.05
Less preferred stock dividends	107,465.00	107,465.00
Tentative surtax net income	1,808,264.41	334,905.05
Tentative surtax at 14%	253,157.02	46,886.71
Normal Tax		
Tentative taxable net income	1,915,729.41	442,370.05
Tentative Normal Tax	459,775.06	106,168.81
Tentative Surtax	253,157.02	46,886.71
Taxable net income	2,628,661.49	595,425.57
Normal tax at 24%	630,878.76	142,902.14
Surtax		
Taxable net income	2,628,661.49	595,425.57
Less preferred stock dividends	107,465.00	107,465.00
Surtax net income	2,521,196.49	487,960.57
Surtax at 14%	352,967.51	68,314.48
Total Normal Tax and Surtax	$ 983,846.27	$211,216.62
PENNSYLVANIA INCOME TAX		
Taxable net income	$2,628,661.49	$595,425.57
Non operating income taxable	46,992.98	46,992.98
Less 15% of dividends received	(57,789.60)	(57,789.60)
Basis for power bill - Penn. tax	2,617,864.87	584,628.95
Penn. income tax at 2.0255% (50.637% of 4%)	$ 53,000.00	$ 11,800.00

Page 4258 is blank.

EXHIBIT No. 394.

[24463]

EXHIBITS ATTACHED TO HUTCHINSON'S PARTICIPATION

Exhibit No. 1—Morison's report to Hutchinson dated September 18, 1901; also Morison's supplemental report dated October 4, 1901 to Hutchinson.

Exhibit No. 2 — Same as agreement introduced in evidence as Exhibit No. 206.

Exhibit No. 3 — Morison's report to Hutchinson dated December 21, 1901 re McCall Ferry site.

Exhibit No. 4 — Two agreements, both dated February 26, 1902, one of which was entered into between Cary T. Hutchinson and Milton L. Fry and the other between Cary T. Hutchinson and Samuel D. Fry for the acquisition by Hutchinson of the Fry properties.

Exhibit No. 5 — Report prepared by Cary T. Hutchinson dated May 5, 1902, recommending higher dam, i.e., elevation 155 instead of 150.

Exhibit No. 6 — Same as agreement comprising Part 2 of Exhibit No. 27 except that last three pages of Part 2 of Exhibit No. 27 are not included.

Exhibit No. 7 — Same as agreement introduced in evidence as Exhibit No. 207.

Exhibit No. 8 — Same as Part 3 of Exhibit No. 27.

Exhibit No. 9 — Same as Part 4 of Exhibit No. 27.

Exhibit No. 10 — Same as Part 5 of Exhibit No. 27.

Exhibit No. 11 — Same as Part 6 of Exhibit No. 27.

Exhibit No. 12 — Same as Part 10 of Exhibit No. 27.

Exhibit No. 13 — Same as Part 14 of Exhibit No. 27.

Exhibit No. 14 — Letter dated May 24, 1905, written by P. G. Bartlett to Messrs. McGaw, Harlow and Houseman, Baltimore, Maryland, and reading as follows:

[24464] (page 2)

"We enclose copies of the two agreements of the 27th day of April last with a clause added putting formally in writing the extension of time already arranged by telegram. If you will severally sign these papers, Mr. McGaw alone signing the clause added to the McGaw Bertron agreement, and return them to us so signed, we will have the same signed by Messrs. Harvey Fisk & Sons and Mr. Bertron.

"We would be glad to have Mr. Houseman call up Mr. Bartlett on the telephone, if possible, some time tomorrow (Thursday)."

[Balance of Exhibit 14 same as Part 15 of Exhibit 27]

Exhibit No. 15 — Same as Part 18 of Exhibit No. 27.

Exhibit No. 16 — Same as Part 19 of Exhibit No. 27.

Exhibit No. 17 — Letter dated June 19, 1905, written by Lorenzo Semple to Philip G. Bartlett, reading as follows:

"I send you herewith agreement between Cary T. Hutchinson and Susquehanna Contracting Company, duly signed by Mr. Hutchinson. I am also sending at the same time for Mr. Eddy's use, old deeds to Stony Island and Hartman Island.

Will you please have the checks drawn for the $750,000 to the order of Cary T. Hutchinson, making two checks, one for the sum of $155,000, which he will endorse to Beyer and Willson, and the other for the sum of $594,500."

"P.S. Page 3 agreement contracting co with Power co — Art I 'thirty-five' — should be 'thirty'. L.S."

Exhibit No. 18 — McCall Ferry common stock certificates (No. 11 for 150 shares; No. 12 for 1,000 shares; No. 13 for 18,840 shares; No. 30 for 1,000 shares; No. 32 for 17,840 shares; No. 43 for 1,000 shares).

Exhibit No. 19 — Cary T. Hutchinson's letter to Lorenzo Semple dated June 26, 1905, which is included as part of Part 24, Exhibit No. 27.

Exhibit No. 20 — Agreement dated May 28, 1909 between members of bondholders' committee and holders of bonds and preferred stock. Included as part of Part 49, Exhibit No. 27.

[24465]

SUMMARY OF CARY T. HUTCHINSON'S PARTICIPATION IN McCALL FERRY POWER COMPANY

In the spring of 1899, Charles Fairchild, a private banker of New York, seems to have become interested in financing the Susquehanna Electric Power Company hydroelectric project to the extent of obtaining an option to acquire the company. Fairchild engaged John Bogart, a consulting engineer, to make a study of the plans James H. Harlow had prepared for the development. Cary T. Hutchinson, a consulting electrical engineer, assisted in the study of this proposed development. The option appears to have expired on July 31, 1899, without further consideration of the project by Fairchild.

Sometime following Hutchinson's work on Bogart's report, a man named Coho, whom Hutchinson had known while working for General Electric Company, brought some Lancaster men to him for advice on the electric method of iron ore reduction. Two of these men were William F. Beyer and George B. Willson who, in addition to having an interest in iron ore deposits on Conestoga Creek, had promoted the development of two small hydroelectric plants on the same creek for supplying power to Lancaster.

Apparently successful on the Conestoga, Beyer and Willson formed a co-partnership with three others on September 28, 1899, naming it The York Furnace Power Company. The purpose of this company was to acquire property and rights near York Furnace on the Susquehanna incident to the development of hydroelectric power.

[24466] (page 2)

From July to October, 1900, a field party under the direction of H. W. Crawford was engaged in surveys and

flow observations for this group. Two reports and an estimate of cost for a power development near York Furnace were submitted that fall by Crawford. It was about this time that Hutchinson apparently became interested in Beyer and Willson's efforts to develop power on the Susquehanna.

Hutchinson, an electrical engineering consultant, apparently wanted some expert civil engineering advice before becoming too deeply involved in power development. Consequently, he arranged with George S. Morison, a member of the Panama Canal Commission and an outstanding civil engineer of his time, to make a detailed study of the York Furnace project. Hutchinson has stated that he and Morison first undertook the investigation and development of the river as partners, but that later he bought out Morison's interest and retained him as a consultant. Morison, apparently, continued in this latter capacity until his death in July, 1903. Morison engaged Boyd Ehle as resident engineer in charge of the field work. Ehle spent July and August, 1901, in the vicinity of York Furnace and then went to New York to work up the results of the surveys. Concurrently, Hutchinson was attempting to obtain power contracts with the idea of developing the York Furnace site.

On September 18, 1901, Morison submitted his report to Hutchinson, stating that while the project was much less attractive than Crawford had presented it, there were possibilities [24467] (page 3) of developing about a 30 ft. head without relocating the Columbia and Port Deposit Railroad tracks. Two weeks later, Morison submitted a supplementary report for a 40 ft. head which would involve relocation of the tracks. (See Exhibit #1)

About the first of October, 1901, Hutchinson made a payment of $3,500. to the partners of the York Furnace Power Company. For this, he presumably received some sort of an option on their property because later, in formally granting an option, acknowledgment of this payment is made as one of the considerations. (See Exhibit #2)

Meanwhile, the results of these studies did not appear sufficiently favorable to warrant further investigation at that location. At Hutchinson's request, they were continued downstream to a point about a mile below McCall Ferry. Ehle was in charge of the field work through October and most of November, 1901. On December 21, 1901, Morison submitted his report on the McCall site to Hutchinson. (See Exhibit #3) Two estimates were made: One, based on a dam crest at elevation 150 involving raising the railroad tracks for about a mile with little relocating; the other, for crest elevation 155 involving five miles of railroad relocation.

A dam at the McCall Ferry site with crest elevation of 150 would, of course, flood all the land which would have been flooded by a dam with the same crest elevation at the York Furnace location, so the change in location did not alter Hutchinson's need of keeping the York Furnace option in effect. [24468] (page 4) He, therefore, paid the partners an additional $2,000. on January 9, 1902. (See Exhibit #2) About this time, he interested his father-in-law, Henry F. Dimock, in the enterprise, and received financial assistance from him. On February 21, 1902, Hutchinson made an additional payment of $30,000. and had a formal option signed by all parties involved, which was later recorded in York County.

This option provided for an additional payment of $109,500. if exercised by January 1, 1903 and could be extended for another year by an additional payment of $10,000. (See Exhibit #2)

Lorenzo Semple of the firm of Coudert Brothers was one of the witnesses present at the signing of this agreement and was the attorney who represented Hutchinson. Semple represented Hutchinson's interests from this time until after the formation of the McCall Ferry Power Company.

About the same time that Hutchinson made the $30,000. payment on the York Furnace properties, he was negoti-

ating for the very important Fry properties. These included tracts on both sides of the river, islands, and the stock of the McCall's Ferry Company. There were two agreements executed. Samuel D. Fry's called for a consideration of $20,000. and Milton L. Fry's $50,000. (See Exhibit #4)

In the meantime, George K. McGaw, James H. Harlow and their associates, who had been active in forming township companies for water power developments along the Susquehanna, [24469] (page 5) continued their studies and the acquisition of land and water rights. There was considerable rivalry between this group and the Hutchinson-Dimock group, each trying to acquire property necessary for their own development and enough other property to interfere with their opponents. Each group also attempted to secure sufficient financial backing to purchase all the property and rights necessary for one development and begin construction.

Harlow-McGaw finally succeeded in purchasing the old Susquehanna and Tidewater Canals at Receiver's sale and took title to these canals in April, 1902. Title to the Tidewater Canal in Maryland was retained by Harlow and McGaw as individuals but that of the Susquehanna Canal in Pennsylvania was vested in the newly formed Susquehanna Canal and Power Company. The Hutchinson group, through Beyer, protested to the Secretary of the Commonwealth the reorganization of the Susquehanna Canal as the Susquehanna Canal & Power Company. A hearing was held, but the protest was of no avail.

Hutchinson and his associates having already paid $35,500. for the York Furnace option and having spent considerable for field work, engineering advice and acquisition of additional land and water rights were faced with the problem of securing rights from the Harlow-McGaw interests in order to abut their proposed dam on the York County side of the river and flood a portion of the canal.

[24470] (page 6)

Rights of eminent domain had not then been established for water power companies in Pennsylvania. On May 17, 1902, Hutchinson and Dimock engaged John G. Johnson of Philadelphia, an eminent authority on corporation law.

Under date of May 28, 1902, Johnson expressed the following opinions:

1. The Susquehanna Canal and Power Company could probably secure an injunction to prevent other interests flooding their canals.
2. It would be well to take steps without delay, for the organization of the proposed water power company, unless a compromise (with the Harlow-McGaw interests) within a short time is probable.
3. The difficulties which will be encountered at the hands of the opponents are of sufficient importance to justify purchasing all their rights at a price larger than the one which represents the intrinsic worth of the things to be purchased.

The Harlow-McGaw interests made further attempts to strengthen their position on the river in Pennsylvania by forming on May 23, 1902, township water power companies on both sides of the river from the Maryland-Pennsylvania state line to Columbia, Pa.

As previously stated, in December 1901, Morison had recommended the McCall Ferry site for a dam instead of the York Furnace site. On May 5, 1902, Hutchinson strongly recommended the higher dam (Elev. 155 instead of 150), and made an estimate of cost and earnings. (See Exhibit #5)

[24471] (page 7)

About this time Hutchinson and Dimock made an attempt to get control of the whole river and buy out the

Harlow-McGaw interests. They also attempted to get contracts for the sale of power in Baltimore and Lancaster.

On July 17, 1902, applications were made on behalf of the Hutchinson interests for charters for The Hillside Water and Power Company and Susquehanna Water and Power Company, the former in Lower Chanceford Township, York County, and the latter in Martic Township, Lancaster County. A protest against the formation of these companies was filed by Harlow-McGaw and although a hearing was held on August 28th, letters patent were issued for both companies on September 2nd. Subsequently, Beyer was elected president of both companies and Willson secretary.

As early as August, 1902, Semple had suggested that Hutchinson offer his Peach Bottom properties below McCall Ferry to the Harlow-McGaw interests in exchange for complete release by the latter of all holdings necessary for the development at McCall Ferry. In November, 1902, Johnson mentioned the possibilities of a compromise and gave as an alternative, getting a bill through the coming Legislature for the forfeiture of the canal charter on the grounds of "nonuser and misuser". Semple wanted Beyer to sound out the Harlow-McGaw group as to the price they would demand for flowage rights on the canal above McCall Ferry. Hutchinson [24472] (page 8) evidently received some terms for such a release but these terms are not known. Judging from Johnson's reaction when hearing them, they must have been quite unfavorable to the Hutchinson-Dimock interests.

Having been unsuccessful in their attempt to block recognition of the validity of the Susquehanna Canal and Power Company as a reorganization of the old Susquehanna Canal Company, the Hutchinson interests apparently attempted to have the canal charter rescinded by the Pennsylvania Legislature which convened on January 6, 1903.

Just before the close of the legislature the bill seemed assured of passage but the Hutchinson interests believed

the governor would veto it. The uncertainty on one hand of this group as to the final result and the apparent successful passage which the Harlow-McGaw group recognized, seemed to make both interests willing to compromise. This action resulted in an agreement whereby Hutchinson-Dimock obtained the rights to construct their dam across the canal conditioned on the installation and operation of canal navigation facilities. (See Exhibit #6)

Although this agreement called for execution of its terms within six months, it was subsequently extended to May 15, 1905.

By the middle of 1903 industrial conditions and the financial markets were unfavorable for attempting to [24473] (page 9) finance the development and it was necessary to extend existing options to avoid heavy cash expenditures in exercising them.

Holman, one of the York Furnace Power Company partners, refused to renew the option and it expired on January 1, 1904. It then became necessary for Beyer and Willson to buy out their opposing partner. This was done and a new option signed on April 14, 1904. The consideration stated in the new option was about $46,000. more than had been specified in the original one. It is not clear why this increase was made other than perhaps by $10,000. charged for renewal privileges in the old option.

The new option provided for the payment of $155,500. by January 1, 1906 with a privilege of annual renewals to January 1, 1909 by the payment of $5,000. on each renewal date. (See Exhibit #7) To guarantee faithful performance on the part of Beyer and Willson, they executed deeds of conveyance of all their properties to Hutchinson and placed them in escrow.

There had been but little activity in the prosecution of the McCall Development since the spring of 1904, but that the plans had not been entirely suspended was evidenced by the fact that on January 13, 1905, William Barclay Parsons, a prominent New York engineer, submitted to Cary T.

Hutchinson a plan for the proposed hydro power plant. (See Exhibit #8) [24474] (page 10) It may be well to review here briefly the engineers who are known to have worked on the project for the Hutchinson interests up to this time.

George S. Morison had been consulted in regard to the site for the McCall Ferry development and had submitted three reports to Hutchinson in the latter part of 1901. Boyd Ehle, who was engaged in the field work for Morison, continued to report to him until the end of 1902. It is presumed Morison continued interested in the development, if not active, until his death July 1, 1903. Major Josiah Pierce, Jr., had practically completed his study and report at the time of his death. Some time subsequent to Morison's death, William Barclay Parsons was asked to check over Morison's figures and submit a report to Hutchinson. His recommendation for the McCall dam was elevation 155 and his estimate of cost for the dam, power house, hydraulic and electrical equipment, substations and three transmission lines to Philadelphia was $4,041,000. Everything was included in this figure except land, water rights, etc. The plant could deliver 37,500 Kw. in Philadelphia during an average year on all but thirty days and during a dry year on all but one hundred days. An additional investment of not more than $1,000,000. in steam auxiliary would have been required to have enabled the plant to deliver 37,500 Kw. at all times in Philadelphia. (See Exhibit #8)

About the same time, Semple who was attorney for the [24475] (page 11) Hutchinson interests, was arranging to consolidate the Susquehanna and Hillside Water & Power Companies which had been incorporated in 1902 in townships on opposite sides of the river. The proposed dam and power house would lie within these townships.

Hutchinson-Dimock either owned in fee or had water power rights sufficient to construct a dam at McCall's Ferry. Harlow-McGaw, who owned the bed of the old

Susquehanna Canal, had also organized water power companies on each side of the river and projected a line of railroad upon one side of the river. All of these properties would have been affected by the proposed development of Hutchinson-Dimock; therefore, as previously mentioned, an agreement had been made in 1903 with Harlow-McGaw by which all opposition upon their part was to be removed.

The contemplated Hutchinson-Dimock plan called for a company with an authorized capital stock of $8,000,000., one-half in preferred and one-half in common, and an authorized issue of bonds of $8,000,000. The proposed company was to be called the Pennsylvania Power Company. A chain of township electric power companies was to be formed to effect the transmission of power to Lancaster and Philadelphia. Under the terms of a contract, Hutchinson was to receive $3,000,000. in preferred, a like amount in common stock and $6,000,000. of bonds. In return, Hutchinson was to convey all his real estate, [24476] (page 12) riparian rights, releases of damages, etc., owned by him along the Susquehanna River near McCall's Ferry. He would further agree to construct a dam, buildings, machinery, reservoirs, etc., for a complete electric water power plant and to erect transmission facilities for carrying power to Philadelphia, Lancaster and Baltimore or such places as might be necessary. The remaining securities were to be used to acquire all the other water power rights along the Susquehanna River to tide-water. (See Exhibit #9)

This plan was submitted to John G. Johnson, who, in his opinion on the proposal, agreed that the plan was substantially possible. (See Exhibit #9)

At the same time, Hutchinson prepared a form of underwriting agreement which, with minor changes, appeared in printed form under date of March 1, 1905. (See Exhibit #10) Although the Prospectus and Underwriting Agreement was dated March 1st there are indications that

it was not completed in its final printed form until after March 9th.

This underwriting agreement provided that Henry F. Dimock, S. R. Bertron, and Charles T. Barney were to be the Managers, with Knickerbocker Trust Company as the proposed "Trust Company," and Susquehanna Securities Company (to be incorporated later) as the proposed "Securities Company." It was intended to secure underwritings for $8,000,000. of First Mortgage Bonds at ninety per cent of par of a corporation to [24477] (page 13) be organized and to be called McCalls Ferry Power Company and to arrange whereby the Knickerbocker Trust Company would advance on the bonds so underwritten, seventy-five per cent of par. The subscribers were to receive a bonus of 50% in preferred stock. 40,000 shares of preferred stock and a like amount of common with a par value of $100. per share were to be issued. It was provided that subscriptions to $6,000,000. of bonds were needed before the agreement was to become effective. (See Exhibit #10)

The fundamental differences between the original Hutchinson-Dimock plan, as submitted to Johnson, and that as presented in the Underwriting Agreement of March 1st are: (1) that Hutchinson, as an individual, has been replaced by the "Susquehanna Securities Company" and (2) Charles T. Barney appears as the third member of the Syndicate Manager group.

While the Susquehanna Securities Company was never incorporated, the draft of its proposed charter discloses that Hutchinson was to own thirteen of the fifteen shares. (See Exhibit #11) Thus the substitution indicated as (1) in the preceding paragraph was not a change in control but merely the substitution of a corporation controlled by an individual for that individual personally.

Some subscriptions under the March 1st underwriting seem to have been obtained in the early part of March, principally from Lee, Higginson & Company's customers. Other subscriptions probably came in through other sources, but

it appears that the total received by the middle of March was [24478] (page 14) less than 50% of the required underwriting. We surmise that the response from solicitations indicated either extreme difficulty or complete failure in disposing of the bonds necessary to make the Underwriting Agreement effective.

Hutchinson has stated that Bertron became convinced that the Underwriting was more than his firm should have undertaken and approached Harvey Fisk & Sons to obtain their aid in financing. This apparently occurred some time between the tenth and the twenty-fifth of March 1905. If the financing could not be completed, the Hutchinson interests were confronted with the prospects of an indefinite delay in securing release of funds expended on the enterprise during the previous four years, as well as the possibility of the interests on the lower river securing sufficient financing to construct their plant, and gaining the desirable markets for power. They apparently chose the safer course of securing immediate financing even though it entailed relinquishing control of the enterprise.

The result of the negotiations was the March 25, 1905 Bond and Stock Purchase Agreement in which Harvey Fisk & Sons as "Bankers" undertook to complete the financing unsuccessfully started by the Hutchinson-Dimock group. Under Harvey Fisk & Sons' plan $8,000,000. par value of bonds of the McCall Ferry Power Co. (then called the Susquehanna Power Co.) were to be sold on the basis of each $1,000. bond and $450. of preferred stock yielding $900. cash. (See Exhibit #12) This plan also provided loans for the underwriters to approximately [24479] (page 15) the same extent as the Dimock-Bertron-Barney plan. It should be noted that these loans were actually made by the Knickerbocker Trust Company which was the bank designated to make the loans under the Dimock-Bertron-Barney underwriting. The terms upon which Harvey Fisk & Sons undertook the financing are not disclosed in our records, nor their arrangements with Bertron, Storrs and Griscom,

who seem to have become silent co-bankers in the new set-up.

From an analysis of the material in our possession, it appears that the Hutchinson group not only gave up their syndicate plans but also had to surrender control to Harvey Fisk & Sons. We have been unable to determine how this control was actually exercised.

It seems proper, at this point, to comment generally on the changes in the predominant interests that had taken place. Coudert Brothers who had been attorneys for Hutchinson in all of his preliminary work, had dropped into the background by June, 1905. Simpson, Thacher and Bartlett became the attorneys for McCall Ferry Power Company beginning in March, 1905. Harvey Fisk & Sons became the dominant interest as Bankers or Syndicate Managers and placed Wm. M. Barnum with the Company in important positions. Charles A. Coffin became prominent in the executive offices. S. R. Bertron took up some of the important negotiations and became a director. Lee, Higginson & Company took a large portion of the underwriting and became [24480] (page 16) active in the Company affairs. Hutchinson and Dimock, who had previously been in absolute control of the development, seem to have relinquished this control and held only a minority interest in the project. All of these changes came about at the time of the execution of the Underwriting Agreement of March 25, 1905, or shortly thereafter.

The Agreement of Merger and Consolidation between The Hillside Water and Power Company and Susquehanna Water and Power Company to form the McCall Ferry Power Company was executed under the date of April 1, 1905, and letters patent were issued on April 14th. This work was being carried out by Beyer under the direction of Semple, who in turn, was then keeping Simpson, Thacher and Bartlett informed of all legal matters previously under his control.

The capital stock of the McCall Company was to consist of ten shares of $100. par value each. The stock of the merging companies was to be exchanged on a share for share basis for stock in the new or McCall Company.

Directors and Stockholders

W. F. Beyer	2 Shares
Geo. B. Willson	2 "
Jacob Hill Byrne	2 "
W. Frank Jack	2 "
Walter M. Franklin	2 "

Officers

President — W. F. Beyer
Secretary and Treasurer — Geo. B. Willson

While the foregoing events were transpiring in regard to the McCall Ferry development financing, a promoter [24481] (page 17) named Charles D. Pullen had been active on the lower river below McCall's Ferry. On February 28, 1905, he obtained an option on all the Harlow-McGaw interests with the proviso that he must also secure both the Hutchinson-Dimock interests and those of the Susquehanna Power Company—another competing interest. All property and rights were to be placed in one corporation for a systematic development of the river. On March 21st, Pullen obtained an option on the Susquehanna Power Company rights. Apparently, unable to interest the Hutchinson-Dimock group in his proposition, he secured a new option from Harlow-McGaw not predicated on securing the McCall Ferry participation.

Apparently, Harlow-McGaw felt that the Hutchinson-Dimock group's success in obtaining financing for their McCall development had jeopardized any chance for immediate progress under the Pullen option. Accordingly, on April 18, Houseman presented a plan to Harvey Fisk & Sons for consolidation of all interests. The plan called for

enlarging the canal from tide-water to Wrightsville and Columbia, Pa., where a large reservoir was to be located. Here also were to be docks and landings and direct connections with the Pennsylvania and the Reading Railroad systems. The 200 ft. fall in the river was to be utilized by the development, under the supervision of James H. Harlow, of five hydro power plants capable of a combined output of 250,000 h.p. (See Exhibit #13) The McCall group, however, evidently did not desire to consider a consolidated [24482] (page 18) project. We have no papers in our file which indicate any change in this attitude, but on April 27, 1905, Harlow-McGaw disposed of all their properties, rights and other assets associated with their interest on the Susquehanna to Harvey Fisk & Sons. On the same date, McGaw executed an agreement with Bertron, transferring to him all his stocks in certain companies. These two agreements were deemed to be parts of the same transaction whereby Harlow-McGaw, in exchange for all their property, rights, and other stock, interests on the river were to receive from Harvey Fisk & Sons:

1. $200,000. in cash
2. $250,000. par in McCall Ferry Bonds
3. $100,000. par in McCall Ferry Common Stock (See Exhibit #14)

The agreement of April 27th, whereby Harlow-McGaw disposed of their holdings to Harvey Fisk & Sons for cash, bonds and stock, was made subject to the prior agreements of Harlow-McGaw with Pullen and, therefore, could be carried out only if Harvey Fisk & Sons purchased the Pullen option or waited for it to expire. Therefore, Bertron purchased Pullen's options on April 29th for $10,000. cash and 150 shares of McCall Ferry Power Company common stock.

In accordance with the provisions of the Bond and Stock Purchase Agreement, Harvey Fisk & Sons, on May 15, made arrangements for loans from the Knickerbocker

Trust Company totaling $4,424,400., the amount of the unpaid deferred subscriptions. The Trust Company was to make installment advances as called for from time to time from June 1, 1905. [24483] (page 19) Subsequent switching of class of subscriptions by certain underwriters reduced the total loan to $4,337,600.

Presumably, the necessary legal work for the execution of the major agreements of the McCall Company had been completed by the middle of June, 1905, for most of the important contracts were made about this time. The first event of significance was the incorporation of the Susquehanna Contracting Company which took place on June 12th, and was to the firm of Harvey Fisk & Sons substantially what the proposed Susquehanna Securities Company would have been to Dimock-Bertron-Barney under the March 1st underwriting. We assume that it provided the mechanics for legally issuing the McCall Ferry Power Company securities and relieved Harvey Fisk & Sons, as a partnership, from any possible future liability which might result from the financing.

On June 13th, the day following the incorporation of the Contracting Company, an agreement was executed between the McCall Company and the Contracting Company. It provided for the transfer to the McCall Company of all the property and flowage rights of both the Hutchinson-Dimock and the Harlow-McGaw interests, stock in the river companies which Harvey Fisk & Sons had purchased from Harlow-McGaw, and $6,400,000. in cash for plant construction and additional property acquisition. In return, the McCall Ferry Power Company agreed to issue to the Susquehanna Contracting Company $8,483,000. bonds, $4,116,500. preferred stock and $4,999,000. common stock. (See Exhibit #15)

[24484] (page 20)

On the next day, June 14th, the Contracting Company made an agreement for the purchase of all the property,

rights and interests of Cary T. Hutchinson. In return, it provided for the conveyance of the following consideration to Hutchinson:

1.	Cash	$ 750,000.
2.	Common Stock	4,884,000.
3.	Preferred Stock	400,000.
	Total	$6,034,000. (See Exhibit #16)

The $750,000. was paid in two checks. (See Exhibit #17) One check for $155,500. was endorsed to Beyer and Willson to exercise the York Furnace option. The other for $594,500. was, according to Hutchinson's statement, used by him to reimburse with interest, those who had made advances for the acquisition of lands and water power rights, and for engineering and legal services, traveling and office expenses and other necessary preliminary development costs. Hutchinson has told us that he has not retained records of these transactions, and does not remember the amounts of the various items of cost. We have found only fragmentary evidence concerning these expenditures and therefore they cannot be definitely classified.

As will be shown later, a voting committee was formed and voting trust certificates issued. We have been unsuccessful in locating any record of the voting trust certificates and have, therefore, been unable to trace the actual ownership of much of the common stock which, during the life of the voting trust, continued to stand in the name of the Contracting Company. The original ten shares of common stock, resulting from the consolidation of the Hillside and Susquehanna [24485] (page 21) Water and Power Companies, were issued to the original five incorporators. Subsequently, these seem to have been endorsed in blank, and held by Dimock and Hutchinson. Executed contracts and agreements account for the common stock, as follows:

Date	Certificate Number	Issued to	Shares
6/1/05	1–5	Two shares each to original incorporators—Held by Dimock and Hutchinson	10
	6–10	Cancelled (Not used on account of change in name of Company)	—
8/8/05	11	Susquehanna Contracitng Co.—(For Pullen)	150
"	12	Susquehanna Contracting Co.—(For McGaw, et al.)	1,000
"	13	Susquehanna Contracting Co.—(For Hutchinson Agreement)	18,840
"	14	Susquehanna Contracting Co.—(For Hutchinson Agreement)	30,000
		Total	50,000

It will be noted that Nos. 13 and 14 total the 48,840 shares mentioned in the agreement between the Contracting Company and Hutchinson. The fact that two certificates were issued to cover this transaction indicates that at least one certificate was probably intended to be assigned to someone other than Hutchinson. The stock book in our possession does not show that Certificate No. 14 for 30,000 shares was ever turned in for subdivision or cancellation. Certificate No. 13 for 18,840 shares was turned in for reissue according to the stock certificate book as follows:

Date	Certificate Number	Name	Shares
5/25/09	30	Thomas Newhall	1,000
7/14/09	43	Lorenzo Semple	1,000
7/14/09	45	Susquehanna Contracting Co.	16,840
		Total (See Exhibit #18).	18,840

[24486] (page 22)

Hutchinson has informed us that Newhall was an engineer who rendered services in connection with the relocation of the railroad tracks to permit the construction of

the dam. He also stated that his (Hutchinson's) stock was used as a common fund for certain payments of this kind. The shares which went to Semple were part of his compensation for services rendered to the promoters prior to Harvey Fisk & Sons first connection with the project. (See Exhibit #19) The fact that these shares came from the 18,840 block is the basis for the deduction that this block of stock was owned by the Hutchinson interests. It would, therefore, appear that the certificate for 30,000 shares representing 60% of the common stock probably went to the Bankers. A search of the McCall Company and Contracting Company books of account fails to reveal any payments to Harvey Fisk & Sons. The entire proceeds obtained from the underwriting were passed on for the use of the McCall development, no cash commission being retained by Harvey Fisk & Sons for disposing of the bonds. The Banking group certainly was paid in some manner, for it is inconceivable that such services were rendered gratis. It appears to have been the general practice of Bankers to accept stock as their compensation for securing underwriting in enterprises of this character. Certain others, whom we assume were associated with Harvey Fisk & Sons in the McCall Ferry enterprise, received common stock for their services; namely, Lee, Higginson & Company and Bertron, Storrs & Griscom. Being unable to find any other means of remuneration [24487] (page 23) for the Bankers except a small amount of preferred stock mentioned hereinafter and in consideration of their general practice under similar circumstances, we have concluded that Harvey Fisk & Sons and their associates must have accepted common stock as their chief compensation for the services they rendered the McCall Company.

On November 21, 1906, Bertron, Storrs and Griscom recorded the receipt of 12,462½ shares of common stock which is exactly one-quarter of the total issue after Pullen's 150 shares have been deducted. Since the common stock certificate book does not show the issuance of this

block, we assume it must have been in the form of voting trust certificates. As Bertron, Storrs and Griscom were associated with Harvey Fisk & Sons as Bankers in this underwriting, this block was probably part of the 30,000 shares we believe the Bankers received. Bertron, Storrs & Griscom subsequently furnished Lee, Higginson & Company 5,000 shares of common stock out of the 12,462½ shares they had received.

In addition to the common stock, there were 4,000 shares of preferred stock which were made a part of the Hutchinson contract consideration. Preferred Stock Certificate No. 1 was issued in the name of the Susquehanna Contracting Company, but it went, eventually, to persons other than Hutchinson. There is no other preferred stock certificate for 4,000 shares, so we feel certain that this Certificate No. 1 represents the 4,000 shares stated in the Hutchinson Agreement.

[24488] (page 24)

It has previously been stated that Harvey Fisk & Sons had signed an agreement with Harlow, McGaw and Houseman on April 27, 1905, whereby Harvey Fisk & Sons would acquire the canals and all other river property and interests of the Harlow-McGaw group upon the payment of $200,000. cash, $250,000. in bonds and $100,000. in common stock of the McCall Company. On June 14th, Harvey Fisk & Sons assigned this agreement to the Susquehanna Contracting Company, the latter assuming the payment obligations and receiving the property stipulated.

The following day (June 15th) an agreement was signed by the Contracting Company and Harlow, McGaw and Houseman, verifying the above assignment and arranging for the delivery of the McCall bonds and stock. This was countersigned by Harvey Fisk & Sons who guaranteed performance by the Susquehanna Contracting Company.

By an agreement dated June 15, 1905, the Knickerbocker Trust Company was made trustee under the mortgage securing the issue of McCall Ferry Power Company bonds.

On June 16th, Bertron, Storrs and Griscom assigned to the Contracting Company the option which they had acquired from Pullen on April 29th. On this day also, title to the property obtained from Harlow-McGaw was vested in A. P. Bartlett and Ross A. Mackey, who, in turn, executed a declaration of trust, naming the Susquehanna Contracting Company as beneficiary. Similar transactions were made June 20th regarding the property acquired from Hutchinson.

[24489] (page 25)

The following were elected directors of the McCall Ferry Power Company at the stockholders' meeting, August 8, 1905:

W. F. Beyer	Geo. B. Willson
Henry F. Dimock	A. C. Bedford
Charles A. Coffin	Wm. M. Barnum
Gardiner M. Lane	Rodman E. Griscom
William Barclay Parsons	W. Marriott Canby
E. J. Berwind	J. J. Hope
Cary T. Hutchinson	Pliny Fisk

S. R. Bertron

The directors then appointed an executive committee consisting of the following:

Henry F. Dimock
Charles A. Coffin
Wm. Barclay Parsons
Wm. M. Barnum

(Gardiner M. Lane) who was soon replaced by S. R. Bertron.

The officers were:

President	—H. F. Dimock
Vice President	—J. A. Keppleman
Secretary-Treasurer	—Wm. H. Barnum
Chief Engineer	—C. T. Hutchinson

In an agreement dated January 20, 1906, a Voting Committee was named consisting of H. F. Dimock, Wm. M. Barnum and S. R. Bertron. Other main provisions of the agreement were:

1. Stockholders were to deposit their stock with Harvey Fisk & Sons.
2. Certificates were to be assigned for transfer to Harvey Fisk & Sons who would hold the stock until November 1, 1908.
3. Harvey Fisk & Sons were to vote each share of stock deposited as directed in writing, signed by any two of the Voting Committee.
4. Harvey Fisk & Sons or any of the Voting Committee "may be depositors of stock hereunder."

[24490] (page 26)

Harvey Fisk & Sons kept the records of the stock deposited under this agreement and we believe these records were destroyed in 1924.

After the original financing, a change in plans for the development to materially increase the capacity, required more money than was originally provided. By the time the additional funds were needed, the financial market appears to have become unfavorable for financing. The Knickerbocker Trust Company went into receivership in the fall of 1907, but arrangements were made for it to complete the loan provided for in 1905. By mid-summer of 1908, the cash available to the McCall Company was practically exhausted.

In July 1908, the question was raised as to the possibility of using the unissued bonds to secure loans from the directors or others financially interested in keeping the company intact. It was apparently contemplated to obtain loans of $100,000. from each of the following:

1. Harvey Fisk & Sons
2. Lee, Higginson & Company
3. Bertron, Storrs and Griscom
4. C. A. Coffin
5. H. F. Dimock

However, for some reason not now known, Dimock failed to make his loan, although on October 28, 1908 loans of $100,000. each were made by the other four.

Construction had been started toward the close of 1905 and progressed uninterruptedly until the end of 1907, when failure of the Knickerbocker Trust Company, temporarily [24491] (page 27) interrupted the loans being made by that institution. When arrangements were made with the Receivers of the Trust Company for completion of the loan, work was resumed in the spring of 1908. As previously stated, the additional financing for the increased capacity of the plant had been postponed until the condition of the financial market precluded doing it successfully. Therefore, the 1908 work was curtailed commensurate with the available cash. This being exhausted by the fall of 1908, the work again closed down.

The McCall Ferry Power Company defaulted on its bond interest due December 15, 1908. Anticipating the inability of the company to meet its obligations, the holders of a large portion of the bonds outstanding asked the following to act as a Committee in the interests of holders of bonds and preferred stock:

Wm. M. Barnum
A. C. Bedford
S. R. Bertron
C. A. Coffin
G. M. Lane

Public announcement of the formation of this committee and the impending default was made to all bondholders on December 7, 1908 over the names of

Harvey Fisk & Sons
Lee, Higginson & Company
Bertron, Storrs and Griscom
H. F. Dimock
C. A. Coffin

With the announcement also went a request and agreement for the deposit with the committee of bonds and preferred stock.

[24492] (page 28)

William M. Barnum was elected Chairman of the Committee and a plan was presented to the Bondholders under date of May 28, 1909. (See Exhibit No. 20) Hutchinson, Sanderson and Porter and others attempted to prevent the deposit of bonds with this Committee, but, nevertheless, practically all of the Bondholders eventually agreed to this plan which resulted in a reorganization of the McCall Ferry Power Company to form the Pennsylvania Water & Power Company on January 13, 1910.

EXHIBIT No. 395.

[24493]

EXHIBITS ATTACHED TO FISK PARTICIPATION

Exhibit No. 1 — Same as Part 3 of Exhibit No. 27.

Exhibit No. 2 — Same as Part 4 of Exhibit No. 27.

Exhibit No. 3 — Same as Part 5 of Exhibit No. 27.

Exhibit No. 4 — Same as Part 6 of Exhibit No. 27.

Exhibit No. 5 — Same as Part 10 of Exhibit No. 27.

Exhibit No. 6 — Same as Part 14 of Exhibit No. 27.

Exhibit No. 7 — Letter dated May 27, 1905, written by P. G. Bartlett to Messrs. McGaw, Harlow and Houseman, Baltimore, Maryland, and reading as follows:

"We enclose copies of the two agreements of the 27th day of April last with a clause added putting formally in writing the extension of time already arranged by telegram. If you will severally sign these papers, Mr. McGaw alone signing the clause added to the McGaw Bertron agreement, and return them to us so signed, we will have the same signed by Messrs. Harvey Fisk & Sons and Mr. Bertron.

"We would be glad to have Mr. Houseman call up Mr. Bartlett on the telephone, if possible, some time tomorrow (Thursday)."

[Balance of Exhibit 7 same as Part 15 of Exhibit 27.]

Exhibit No. 8 — Includes (1) two form letters of Harvey Fisk & Sons dated May 3, 1905 and May 4, 1905, respectively, used in making allotment of McCall Ferry bonds to subscribers; (2) form letter of Harvey Fisk & Sons dated April 12, 1906 calling for third installment of 10% on or before May 3, 1906 from non-deferred subscribers; (3) three copies of forms used

by Harvey Fisk & Sons for the purpose of acknowledging receipt of installment payments.

Exhibit No. 9 — Photostat of record of Harvey Fisk & Sons recording receipt of $1,440,000 from McCall Ferry bond subscribers—first 20% payment—to the credit of Susquehanna Contracting Company on May 15, 1905. Record shows disbursements made by Susquehanna Contracting Company through Harvey Fisk & Sons totaling $1,007,716.22 (Bertron, Storrs & Griscom $10,022.12; Geo. K. McGaw and others $195,432.00; M. H. Houseman $5,000; Cary T. Hutchinson $594,500, $155,500; Simpson, Thacher & Bartlett $47,307).

[24494] (page 2)

Exhibit No. 10 — Same as Part 16 of Exhibit No. 27.

Exhibit No. 11 — Same as Part 18 of Exhibit No. 27.

Exhibit No. 12 — Same as Part 19 of Exhibit No. 27.

Exhibit No. 13 — McCall Ferry common stock certificates (No. 12 for 1,000 shares issued to Susquehanna Contracting Company, dated August 8, 1905; No. 13 for 18,840 shares issued to Susquehanna Contracting Company, dated August 8, 1905; No. 30 for 1000 shares issued to Thomas Newhall, dated May 25, 1909—part of 18,840 shares; No. 32 issued to Susquehanna Contracting Company for 17,840 shares, dated May 25, 1909).

Exhibit No. 14 — Letter dated May 27, 1938, written by J. O. Adams of Bertron, Griscom & Co., Inc., to James L. Rintoul, Penn Water. This letter is included as a part of Part 22 of Exhibit 27.

Exhibit No. 15 — Same as Part 11 of Exhibit No. 27.

Exhibit No. 16 — Includes photostats of three McCall Ferry preferred stock certificates (No. 1 for 4,000

shares, dated August 8, 1905, issued to Susquehanna Contracting Company; No. 216 for 200, dated November 7, 1908, issued to Electrical Securities Corporation; No. 217, dated November 7, 1908, issued to Susquehanna Contracting Company for 3,800 shares). Also embraces two letters, one dated November 12, 1908, written by Harvey Fisk & Sons to J. W. Young, Vice President of McCall Ferry, and the other dated November 18, 1908, written by Harvey Fisk & Sons to C. H. Keep, President, Knickerbocker Trust Company, New York City (See description of Exhibit No. 8 attached to Lee, Higginson participation).

Exhibit No. 17 — Same as Part 20 of Exhibit No. 27.

Exhibit No. 18 — Same as Part 44 of Exhibit No. 27.

Exhibit No. 19 — Agreement dated May 28, 1909 between members of bondholders' committee and holders of bonds and preferred stock. Included as a part of Part 49 of Exhibit No. 27.

* * *

[24495]

HARVEY FISK & SONS' PARTICIPATION IN McCALL FERRY POWER COMPANY

About 1895, a group of individuals became interested in the development of the lower reaches of the Susquehanna River for hydroelectric power. Those who became the most active in the engineering and promotion work were George K. McGaw, a Baltimore business man, James H. Harlow, a civil engineer, and M. H. Houseman, an attorney. We will refer to this group as "Harlow-McGaw". Five or six years later, Cary T. Hutchinson, an electrical engineer, also became interested in a hydroelectric development at about the same location. He engaged Beyer and Willson of Lancaster as his agents, sought legal advice from Lorenzo Semple of New York and obtained financial aid from his father-in-law, Henry F. Dimock. This group we will call the "Hutchinson-Dimock" interests.

Both groups made surveys, and engineering studies and began the acquisition of property and rights necessary for water power development. The Harlow-McGaw group planned a series of five developments between Wrightsville, Pa., and tide-water. Their principal holdings were in Maryland but by 1902, they were in possession of the old canals between tide-water and Wrightsville. The Hutchinson-Dimock group concentrated its acquisition efforts in Pennsylvania but also obtained enough parcels in Maryland to interfere with Harlow-McGaw.

Each group attempted to interest capital for further property acquisition and construction. Harlow-McGaw were advocates of low head developments while Hutchinson-Dimock favored relatively [24496] (page 2) high heads. Attempts had been made to consolidate their respective holdings, to sell to each other and to finance each plan of development. By the latter part of 1904, conditions had

improved sufficiently to warrant Hutchinson-Dimock making further efforts to finance their development.

Preparatory to financing, William Barclay Parsons, a prominent New York engineer, submitted a report on the proposed development at McCall's Ferry. His recommendation called for a dam of 155.0 elevation which was capable of delivering 37,500 kw. in Philadelphia during an average year on all but thirty days. The estimated cost of the dam, power house, hydraulic and electrical equipment, substations and three transmission lines to Philadelphia was $4,041,000. This figure did not include the cost of land, water rights, etc. (See Exhibit #1)

About the same time, Semple, who was attorney for the Hutchinson interests, was arranging to consolidate the Susquehanna and Hillside Water & Power Companies which had been incorporated in 1902 in townships on opposite sides of the river. The proposed dam and power house would lie within these townships.

Hutchinson-Dimock either owned in fee or had water power rights sufficient to construct a dam at McCall's Ferry. Harlow-McGaw owned the bed of the old Susquehanna Canal, had also organized water power companies on each side of the river and projected a line of railroad upon one side of the river. All of these properties would have been affected by the proposed development of Hutchinson-Dimock; therefore, an agreement was made with Harlow-McGaw by which [24497] (page 3) all opposition upon their part was to be removed.

The contemplated Hutchinson-Dimock plan called for a company with an authorized capital stock of $8,000,000., one-half in preferred and one-half in common, and an authorized issue of bonds of $8,000,000. The proposed company was to be called the Pennsylvania Power Company. A chain of township electric power companies was to be formed to effect the transmission of power to Lancaster and Philadelphia. Under the terms of a contract, Hutchinson was to receive $3,000,000. in preferred, a like amount

in common stock and $6,000,000. of bonds. In return, Hutchinson was to convey all his real estate, riparian rights, releases of damages, etc., owned by him along the Susquehanna River near McCall's Ferry. He would further agree to construct a dam, buildings, machinery, reservoirs, etc., for a complete electric water power plant and to erect transmission facilities for carrying power to Philadelphia, Lancaster and Baltimore or such places as might be necessary. The remaining securities were to be used to acquire all the other water power rights along the Susquehanna River to tide-water. (See Exhibit #2)

This plan was submitted to John G. Johnson, an outstanding corporation lawyer of Philadelphia for approval. Johnson, in his opinion on the proposal, agreed that the plan was substantially possible. (See Exhibit #2)

At the same time, Hutchinson prepared a form of underwriting agreement which, with minor changes, appeared in printed form under date of March 1, 1905. Although the Prospectus and [24498] (page 4) Underwriting Agreement was dated March 1st, there are indications that it was not completed in its final printed form until after March 9th.

This underwriting agreement provided that Henry F. Dimock, S. R. Bertron, and Charles T. Barney were to be the Managers, with Knickerbocker Trust Company as the proposed "Trust Company", and Susquehanna Securities Company (to be incorporated later) as the proposed "Securities Company". It was intended to secure underwritings for $8,000,000. of First Mortgage Bonds of a corporation to be organized and to be called McCalls Ferry Power Company, at ninety per cent of par, and to arrange whereby the Knickerbocker Trust Company would advance on the bonds so underwritten seventy-five per cent of par. The subscribers were to receive a bonus of 50% in preferred stock. It was provided that subscriptions to $[illegible],000,000. of bonds were needed before the agreement was to become effective. (See Exhibit #3)

The fundamental differences between the original Hutchinson-Dimock plan, as submitted to Johnson, and that as presented in the Underwriting Agreement of March 1st are: (1) that Hutchinson, as an individual, has been replaced by the "Susquehanna Securities Company" and (2) Charles T. Barney appears as the third member of the Syndicate Manager group.

While the Susquehanna Securities Company was never incorporated, the draft of its proposed charter discloses that Hutchinson was to own thirteen of the fifteen shares. (See Exhibit #4) Thus the substitution indicated as (1) in the preceding paragraph was not a change in control but merely the substitution of a corporation controlled by an individual for that individual himself.

[24499] (page 5)

Some subscriptions under the March 1st underwriting seem to have been obtained in the early part of March, principally from Lee, Higginson & Company's customers. Other subscriptions probably came in through other sources, but it appears that the total received by the middle of March was less than 50% of the required underwriting. We surmise that the response from solicitations indicated either extreme difficulty or complete failure in disposing of the bonds necessary to make the Underwriting Agreement effective.

Hutchinson has stated that Bertron became convinced that the Underwriting was more than his firm should have undertaken and approached Harvey Fisk & Sons to obtain their aid in financing. This apparently occurred some time between the tenth and the twenty-fifth of March, 1905. If the financing could not be completed, the Hutchinson interests were confronted with the prospects of an indefinite delay in securing release of funds expended on the enterprise during the previous four years, as well as the possibility of the interests on the lower river securing sufficient

financing to construct their plant, and gaining the desirable markets for power. They apparently chose the safer course of securing immediate financing even though it entailed relinquishing control of the enterprise.

The result of the negotiations was the March 25, 1905, Bond and Stock Purchase Agreement in which Harvey Fisk & Sons as "Bankers" undertook to complete the financing unsuccessfully started by the Hutchinson-Dimock group. Under the Harvey Fisk & Sons' plan, $8,000,000 par value of bonds were to be sold on [24500] (page 6) the basis of each $1000.00 bond and $450.00 of preferred stock yielding $900.00 cash. At the time of this underwriting agreement this Company's proposed name was Susquehanna Power Co. This plan also provided loans for the underwriters to approximately the same extent as the Dimock-Bertron-Barney plan. (See Exhibit #5). It should be noted that these loans were actually made by the Knickerbocker Trust Company which was the bank designated to make the loans under the Dimock-Bertron-Barney underwriting. The terms upon which Harvey Fisk & Sons undertook the financing are not disclosed in our records nor their arrangements known with Bertron, Storrs and Griscom who seem to have become silent co-bankers in the new set-up.

We have evidence that some of the subscribers who were customers of Lee, Higginson & Company received the 50% bonus of the March 1st agreement while others received only the 45% provided for in the March 25th agreement. There were also other subscribers who were not Lee, Higginson & Company customers but who also received a 50% bonus. This suggests the probability that some subscriptions were obtained by the Syndicate Managers prior to Harvey Fisk & Sons' entrance into the project. On the date of the final Bond and Stock Purchase Agreement, Bertron Storrs and Griscom wrote Lee, Higginson & Company, stating that they would receive the 50% bonus on their $2,000,000. subscription. These facts indicate that the

Dimock-Bertron-Barney Syndicate obtained the right from Harvey Fisk to fulfill obligations already made.

[24501] (page 7)

From an analysis of the material in our possession, it appears that the Hutchinson group not only gave up their syndicate plans but also had to surrender control to Harvey Fisk & Sons. We have been unable to determine how this control was actually exercised.

Among the firm members of Harvey Fisk & Sons was Wm. M. Barnum who became a prominent figure in the McCall Ferry Power Company, being a director and member of the executive committee, and later was Chairman of the Reorganization Committee. He remained a partner of Harvey Fisk & Sons until July 1, 1908, when he resigned.

It seems proper, at this point, to comment generally on the changes in the predominant interests that had taken place. Coudert Brothers who had been attorneys for Hutchinson in all of his preliminary work, had dropped into the background by June, 1905. Simpson, Thacher and Bartlett became the attorneys for McCall Ferry Power Company beginning in March, 1905. Harvey Fisk and Sons became the dominant interest as Bankers or Syndicate Managers and placed Wm. M. Barnum with the Company in important positions. Charles A. Coffin became prominent in the executive offices. S. R. Bertron took up some of the important negotiations and became a director. Lee, Higginson & Company took a large portion of the underwriting and became active in the Company affairs. Hutchinson and Dimock, who had previously been in absolute control of the development seemed to have [24502] (page 8) relinquished their control and to have retained only a minority interest in the project. All of these changes took place about the time of the execution of the Underwriting Agreement of March 25, 1905, or shortly thereafter.

The Agreement of Merger and Consolidation between the Hillside Water and Power Company and Susquehanna Water and Power Company to form the McCall Ferry Power Company was executed under the date of April 1, 1905, and letters patent were issued on April 14. This work was being carried out by Beyer under the direction of Semple, who, in turn, was then keeping Simpson, Thacher and Bartlett informed of all legal matters previously under his control.

While the foregoing events were transpiring in regard to the McCall Ferry development financing, a promoter named Charles D. Pullen had been active on the lower river below McCall's Ferry. On February 28, 1905, he obtained an option on all the Harlow-McGaw interests with the proviso that he must also secure both the Hutchinson-Dimock interests and those of the Susquehanna Power Company, another competing interest. All property and rights were to be placed in one corporation for a systematic development of the river. On March 21, Pullen obtained an option on the Susquehanna Power Company rights. Apparently, unable to interest the Hutchinson-Dimock group in his proposition, he secured a new option from Harlow-McGaw not predicated on securing the McCall Ferry participation.

[24503] (page 9)

Apparently Harlow-McGaw felt that the Hutchinson-Dimock group's success in obtaining financing for their McCall development had jeopardized any chance for immediate progress under the Pullen option. Accordingly on April 18, Houseman presented a plan to Harvey Fisk & Sons for consolidation of all interests. The plan called for enlarging the canal from tidewater to Wrightsville and Columbia, Pa., where a large reservoir was to be located. Here also were to be docks and landings and direct connections with the Pennsylvania and the Reading railroad systems. The 200 ft. fall in the river was to be utilized by the

development under the supervision of James H. Harlow of five hydro power plants capable of a combined output of 250,000 h.p. (See Exhibit #6) The McCall group, however, evidently did not desire to consider a consolidated project. We have no papers in our file which indicate any change in this attitude, but on April 27, 1905, Harlow-McGaw disposed of all their properties, rights and other assets associated with their interest on the Susquehanna to Harvey Fisk & Sons. On the same date, McGaw executed an agreement with Bertron, transferring to him all his stocks in certain companies. These two agreements were deemed to be parts of the same transaction whereby Harlow-McGaw, in exchange for all their property, rights, stock, and other interests on the river were to receive from Harvey Fisk & Sons:

1. $200,000. in cash
2. $250,000. par of McCall Ferry Bonds
3. $100,000. par of McCall Ferry Common Stock (See Exhibit #7)

[24504] (page 10)

The agreement of April 27th, whereby Harlow-McGaw disposed of their holdings to Harvey Fisk & Sons for cash, bonds and stock, was made subject to the prior agreements of Harlow-McGaw with Pullen and, therefore, could be carried out only if Harvey Fisk & Sons purchased the Pullen options or waited for it to expire. Therefore Bertron purchased Pullen's options on April 29 for $10,000. cash and 150 shares of McCall Ferry Power Company common stock.

Those subscribers who elected to defer payment were, like the non-deferred subscribers, required to make a first payment of twenty per cent based on the net amount of the price of the bonds at ninety. All of the first 20 per cent payments were evidently made promptly for on May 15, there was recorded the amount of $1,440,000. to the credit

of the proposed Susquehanna Contracting Company. (See Exhibit #9) Calls were subsequently made periodically upon the non-deferred subscribers in amounts of ten per cent each. (See Exhibit #8) Interest at the rate of five per cent per annum was to be credited upon the amounts paid until the delivery of the bonds and stock after final payment had been made. The deferred subscribers were granted until Nov. 1, 1908 to make their final payment of eighty per cent.

In accordance with the provisions of the Bond and Stock Purchase Agreement, Harvey Fisk & Sons, on May 15, made arrangements for loans from the Knickerbocker Trust Company [24505] (page 11) totaling $4,424,400., the amount of the unpaid deferred subscriptions. The Trust Company was to make installment advances as called for from time to time from June 1, 1905. The terms of this arrangement, as contracted for between Harvey Fisk & Sons and Knickerbocker Trust Company provided for an interest rate of six per cent per annum on the amount of the loan outstanding plus an annual commission of one-half of one per cent for each year the agreement was to be in force. The loan arrangement was to continue for three years and the loans were to be made to the Susquehanna Contracting Company, then in the formative stage. (See Exhibit #10) This company was created and controlled by Harvey Fisk & Sons.

Presumably, the necessary legal work for the execution of the major agreements of the McCall Company had been completed by the middle of June, 1905, for most of the important contracts were made about this time. The first event of significance was the incorporation of the Susquehanna Contracting Company which took place on June 12, and was to the firm of Harvey Fisk & Sons substantially what the proposed Susquehanna Securities Company would have been to Dimock-Bertron-Barney under the March first underwriting. We assume that it provided the mechanics for legally issuing the McCall Ferry Power Com-

pany securities and relieved Harvey Fisk & Sons, as a partnership, from any possible future liability which might result from the financing.

[24506] (page 12)

On June 13th, the day following the incorporation of the Contracting Company, an agreement was executed between the McCall Company and the Contracting Company. It provided for the transfer to the McCall Company of all the property and flowage rights of both the Hutchinson-Dimock and the Harlow-McGaw interests, stock in the river companies which Harvey Fisk & Sons had purchased from Harlow-McGaw, and $6,400,000. in cash for plant construction and additional property acquisition. In return the McCall Ferry Power Company agreed to issue to the Susquehanna Contracting Company $8,483,000. bonds, $4,116,500. preferred stock and $4,999,000. common stock. (See Exhibit #11)

On the next day, June 14th, the Contracting Company made an agreement for the purchase of all the property, rights and interests of Cary T. Hutchinson. In return it provided for the conveyance of the following consideration to Hutchinson.

Cash	$ 750,000.
Common Stock	4,884,000.
Preferred Stock	400,000.
Total	$6,034,000. (See Exhibit #12)

The $750,000, was paid in two checks. (See Exhibit #9) One check for $155,500. was endorsed to Beyer and Willson to exercise the York Furnace option. The other for $594,500. was, according to Hutchinson's statement, used by him to reimburse with interest, those who had made advances for the acquisition of lands and water power rights, and for engineering and legal services, traveling and

office expenses [24507] (page 13) and other necessary preliminary development costs. Hutchinson has told us that he has not retained records of these transactions, and does not remember the amounts of the various items of cost. We have found only fragmentary evidence concerning these expenditures and therefore they cannot be definitely classified.

As will be later shown, a voting committee was formed and voting trust certificates issued. We have been unsuccessful in locating any record of the voting trust certificates and have, therefore, been unable to trace the actual ownership of much of the common stock which, during the life of the voting trust, continued to stand in the name of the Contracting Company. The original ten shares of common stock, resulting from the consolidation of the Hillside and Susquehanna Water and Power Companies, were issued to the original five incorporators. Subsequently, these seem to have been endorsed in blank, and held by Dimock and Hutchinson. Executed contracts and agreements account for the common stock, as follows:

Date	Certificate Number	Issued To	Shares
6-1-1905	1-5	Two shares each to original incorporators—Held by Dimock and Hutchinson	10
	6-10	Cancelled (Not used on account of change in name of company)	—
8-8-1905	11	Susquehanna Contracting Company (For Pullen)	150
8-8-1905	12	Susquehanna Contracting Company (For McGaw, et al.)	1,000
8-8-1905	13	Susquehanna Contracting Company (For Hutchinson Agreement)	18,840
8-8-1905	14	Susquehanna Contracting Company (For Hutchinson Agreement)	30,000
		Total	50,000

[24508] (page 14)

It will be noted that Nos. 13 and 14 total the 48,840 shares called for by the agreement between the Contracting Company and Hutchinson. The fact that two certificates were issued to cover this transaction indicates that at least

one certificate was probably intended to be assigned to someone other than Hutchinson. The stock book in our possession does not show that Certificate No. 14 for 30,000 shares was ever turned in for subdivision or cancellation. Certificate No. 13 for 18,840 shares was turned in for re-issue according to the stock certificate book as follows:

Date	Certificate No.	Name	Shares
5-25-1909	30	Thomas Newhall	1,000
7-14-1909	43	Lorenzo Semple	1,000
7-14-1909	45	Susquehanna Contracting Co.	16,840
		Total	18,840

(See Exhibit #13)

Hutchinson has informed us that Newhall was an engineer who rendered services in connection with the relocation of the railroad tracks to permit the construction of the dam. He also stated that his (Hutchinson's) stock was used as a common fund for certain payments of this kind. The shares which went to Semple were part of his compensation for services rendered to the promoters prior to Harvey Fisk & Sons first connection with the project. The fact that these shares came from the 18,840 block is the basis for the deduction that this block of stock was owned by the Hutchinson interests. It would therefore appear that the certificate for 30,000 shares [24509] (page 15) representing 60% of the common stock probably went to the Bankers. A search of the McCall Company and Contracting Company books of account fails to reveal any payments to Harvey Fisk & Sons. The entire proceeds obtained from the underwriters were passed on for the use of the McCall development, no cash commission being retained by Harvey Fisk & Sons for disposing of the bonds. The Banking group certainly was paid in some manner for to say that such services were rendered gratis is inconceiv-

able. It appears to have been the general practice of Bankers to accept stock as their compensation for securing underwriting in undertakings of this kind. Certain others whom we assume were associated with Harvey Fisk & Sons in the McCall Ferry enterprise received common stock for their services; namely, Lee, Higginson & Company and Bertron, Storrs & Griscom. Being unable to find any other means of remuneration for the Bankers, except a small amount of preferred stock mentioned hereinafter, and in consideration of their general practice under similar circumstances, we have concluded that Harvey Fisk & Sons and their associates must have accepted common stock as their chief compensation for the services they rendered the McCall Company. (See Exhibit #13)

On November 21, 1906, Bertron, Storrs and Griscom recorded the receipt of 12,462½ shares of common stock. (See Exhibit #14) which is exactly one quarter of the total issue [24510] (page 16) after Pullen's 150 shares have been deducted. Since the common stock certificate book does not show the issuance of this block, we assume it must have been in the form of voting trust certificates. Bertron, Storrs and Griscom was one of the banking firms associated with Harvey Fisk & Sons in this underwriting and we therefore assume that this block of stock came from the 30,000 shares assigned to the Bankers. On March 25, 1905, Bertron, Storrs and Griscom promised Lee, Higginson & Company 5,000 shares of common stock, representing a 25% commission on the $2,000,000. subscriptions Lee, Higginson & Company agreed to underwrite. (See Exhibit #15) In fulfillment of this promise Bertron, Storrs and Griscom gave Lee, Higginson & Company 5,000 shares of common stock out of the 12,462½ shares they had received. (See Exhibit #14).

In addition to the common stock, there were 4,000 shares of preferred stock which were made a part of the Hutchinson contract consideration. Preferred Stock Certificate No. 1 was issued in the name of the Susquehanna

Contracting Company, but it went, eventually, to persons other than Hutchinson. There is no other preferred stock certificate for 4,000 shares, so we feel certain that this Certificate No. 1 represents the 4,000 shares stated in the Hutchinson Agreement. The persons who finally received the shares represented by this certificate are here set [24511] (page 17) forth:

Date	*Ctf. No.*	*Transferee*	*No. Shares*
11-7-08	216	Electrical Securities Corporation	200
	243	Bertron, Storrs and Griscom	1,100
	244	Estate — Eugene Griffin	25
	245	C. A. Coffin	100
	246	Essex Trust Company	12½
	247	Electrical Association	50
	248	E. W. Rice, Jr.	10
	249	M. A. Viele	12½
	250	I. S. Keeler	2½
	251	Estate — E. R. Coffin	12½
	252	S. Z. Mitchell	7½
	253	Hinsdill Parsons	12½
	254	A. E. Burchard	5
	255	Union Trust Company	50
	256	H. C. Frick	100
	257	Charles Pratt & Company	125
	258	J. F. Shaw	25
	259	S. M. Hamill	25
	260	C. A. Coffin	125
	261	Lee, Higginson & Company	125
	262	Harvey Fisk & Sons	1,875
		Total	4,000

From certain papers in our files, we have made the assumption that a large portion of the above shares of preferred stock was issued to these subscribers to increase their bonus from 45% to 50%. Those who, we have assumed

would receive the 50%, were the persons who had subscribed to the Dimock-Bertron-Barney Underwriting Agreement of March 1, 1905. The majority of these appear to have been Lee, Higginson & Company, Bertron, Storrs and Griscom, or C. A. Coffin subscribers. All of those who received these 4,000 shares were associated with the above three firms or individuals except Chas. Pratt & Company, H. C. Frick, Estate of Eugene Griffin, and Harvey Fisk & Sons. If we give consideration to the number of bonds subscribed [24512] (page 18) for by Harvey Fisk & Sons as a firm, the necessary bonus to bring their preferred stock to the 50% amount would not exceed 50 shares. It, therefore, appears that 1,875 shares of preferred stock went to Harvey Fisk & Sons, a like amount went to the subscribers who had become committed under the March 1st underwriting plan and the remainder went to other persons already mentioned. (See Exhibit #16).

On June 14, 1905, Harvey Fisk & Sons assigned to the Susquehanna Contracting Company their loan arrangement of May 15th with the Knickerbocker Trust Company. This assignment provided that Harvey Fisk & Sons would assign to the Contracting Company all their rights under the McCall Company bond and stock purchase agreements and the loan arrangement with the Knickerbocker Trust Company. They reserved, however, the right to repurchase the McCall bonds at ninety. The Contracting Company then agreed to discharge all obligations of Harvey Fisk & Sons under these agreements and appointed Harvey Fisk & Sons its agents for the performance of these assumed obligations. (See Exhibit #10).

It has previously been stated that Harvey Fisk & Sons had signed an agreement with Harlow, McGaw and Houseman on April 27, 1905, whereby Harvey Fisk & Sons would acquire the canals and all other river property and interests of the Harlow-McGaw group upon the payment of $200,000. cash, $250,000. in bonds and $100,000. in common stock of the McCall [24513] (page 19) Company. On

June 14th, Harvey Fisk & Sons assigned this agreement to the Susquehanna Contracting Company, the latter assuming the payment obligations and receiving the property stipulated in the agreement.

The following day (June 15th) an agreement was signed by the Contracting Company and Harlow, McGaw and Houseman, verifying the above assignment and arranging for the delivery of the McCall bonds and stock. This was countersigned by Harvey Fisk & Sons who guaranteed performance by the Susquehanna Contracting Company.

By an agreement dated June 15, 1905, the Knickerbocker Trust Company was made trustee under the mortgage securing the issue of McCall Ferry Power Company bonds.

On June 16th, Bertron, Storrs and Griscom assigned to the Contracting Company the option which they had acquired from Pullen on April 29th. On this day also, title to the property obtained from Harlow-McGaw was vested in A. P. Bartlett and Ross A. Mackey, who, in turn, executed a declaration of trust, naming the Susquehanna Contracting Company as beneficiary. Similar transactions were made June 20th regarding the property acquired from Hutchinson.

The following were elected directors of the McCall Ferry Power Company at the stockholders' meeting, August 8, 1905:

[24514] (page 20)

W. F. Beyer	Geo. B. Willson
Henry F. Dimock	A. C. Bedford
Charles A. Coffin	Wm. M. Barnum
Gardiner M. Lane	Rodman E. Griscom
William Barclay Parsons	W. Marriott Canby
E. J. Berwind	J. J. Hope
Cary T. Hutchinson	Pliny Fisk

S. R. Bertron

The directors then appointed an executive committee consisting of the following:

Henry F. Dimock
Charles A. Coffin
Wm. Barclay Parsons
Wm. M. Barnum
(Gardiner M. Lane) who was soon replaced by S. R. Bertron.

The officers were:

President	— H. F. Dimock
Vice-President	— J. A. Keppleman
Secretary-Treasurer	— Wm. H. Barnum
Chief Engineer	— C. T. Hutchinson

Arrangements had been made by Harvey Fisk & Sons for the Knickerbocker Trust Company to make loans on the uncalled balances of the stock and bond purchase agreements as previously outlined. The actual loan agreement was signed by the Susquehanna Contracting Company and the Knickerbocker Trust Company on November 1, 1905.

In an agreement dated January 20, 1906, a Voting Committee was named as consisting of H. F. Dimock, W. M. Barnum and S. R. Bertron. Other main provisions of the agreement were:

1. Stockholders were to deposit their stock with Harvey Fisk & Sons.
2. Certificates were to be assigned for transfer to Harvey Fisk & Sons who would hold the stock until November 1, 1908.

[24515] (page 21)

3. Harvey Fisk & Sons were to vote each share of stock deposited as directed in writing, signed by any two of the Voting Committee.

4. Harvey Fisk & Sons or any of the Voting Committee "may be depositors of stock hereunder."

(See Exhibit #17)

Harvey Fisk & Sons kept the records of the stock deposited under this agreement and we believe these records were destroyed in 1924.

Harvey Fisk & Sons appear to have acted as transfer agents for the McCall Company securities until November, 1908. At the end of this period, Knickerbocker Trust Company became transfer agent.

After the original financing a change in plans for the development to materially increase the capacity required more money than was originally provided. By the time the additional funds were needed the financial market appears to have become unfavorable for financing. The Knickerbocker Trust Company went into receivership in the fall of 1907, but arrangements were made for it to complete the loan provided for in 1905. By mid-summer of 1908, the cash available to the McCall Company was practically exhausted.

In July, 1908, the question was raised as to the possibility of using the unissued bonds to secure loans from the directors or others financially interested in keeping the company intact. It was apparently contemplated to obtain loans of $100,000. from each of the following:

[24516] (page 22)

1. Harvey Fisk & Sons
2. Lee, Higginson & Company
3. Bertron, Storrs and Griscom
4. C. A. Coffin
5. H. F. Dimock

However, for some reason not now known, Dimock failed to make his loan, although on October 28, 1908 loans of $100,000. each were made by the other four.

The McCall Ferry Power Company defaulted on its bond interest due December 15, 1908. Anticipating the inability of the company to meet its obligations, the holders of a large portion of the bonds outstanding asked the following to act as a Committee in the interests of holders of bonds and preferred stock:

Wm. M. Barnum
A. C. Bedford
S. R. Bertron
C. A. Coffin
G. M. Lane

Public announcement of the formation of this committee and the impending default was made to all bondholders on December 7, 1908 over the names of:

Harvey Fisk & Sons.
Lee, Higginson & Company
Bertron, Storrs and Griscom
H. F. Dimock
C. A. Coffin

With the announcement also went a request and agreement for the deposit with the committee of bonds and preferred stock. (See Exhibit #18) Sufficient bonds were deposited for the proposed committee to proceed with its reorganization plans. Wm. M. Barnum was elected chairman of the Committee and a plan was presented to the bondholders under date of May 28, [24517] (page 23) 1909. (See Exhibit #19). Hutchinson, Sanderson and Porter, and others attempted to prevent the deposit of bonds with this committee but, nevertheless, practically all of the bondholders deposited under the May 28th plan. All of the $8,325,000. of bonds outstanding except $66,000. principal amount were deposited with the Committee. The plan successfully culminated in the formation of the Pennsylvania Water & Power Company on January 13, 1910.

I believe the above is a fair statement of the deal and my firms position in it. It is wholly consistent with my recollection of the facts.

Pliny Fisk

Witness: January 25, 1939
Wilton D. Cole

EXHIBIT No. 396.

[24518]

EXHIBITS ATTACHED TO LEE, HIGGINSON & COMPANY PARTICIPATION

Exhibit No. 1 — Letter dated March 11, 1898, written by Stone & Webster to Messrs. Lee, Higginson & Company, setting forth results of independent investigation made of plans prepared by James H. Harlow for the development of the water power of the Susquehanna River between Peach Bottom and tide water.

Exhibit No. 2 — Same as Part 5 of Exhibit No. 27.

Exhibit No. 3 — Same as Part 7 of Exhibit No. 27.

Exhibit No. 4 — Same as Part 10 of Exhibit No. 27, with one additional page reading as follows:

> "Agreement of Subscribers to Bonds and Preferred Stock.
>
> "Lee, Higginson & Co. hereby assign and transfer to each person signing below all rights belonging to them by reason of their subscription under the Subscription Agreement, a copy of which is attached hereto, for the number of bonds and preferred shares opposite his signature.
>
> "And in consideration thereof each person signing below agrees with Lee, Higginson & Co. that with respect to the number of bonds and preferred shares set opposite his signature he will pay them the amounts of the subscription installments when and as they become due under said Subscription Agreement, and will save them harmless from liability under said Subscription Agreement."

Exhibit No. 5 — Same as Part 11 of Exhibit No. 27.

Exhibit No. 6 — Letter dated January 11, 1939, written by Lee, Higginson & Company to Pennsylvania Water & Power Company, "Attention Mr. James L. Rintoul, Vice-President", reading as follows:

"We duly receive your letter of December 27, 1938, asking us to make a search in the records we still have for any compensation in cash received by us in connection with the issue of McCall Ferry Power Company securities.

"This we have done and have been unable to find any such payments."

[24519] (page 2)

Exhibit No. 7 — Same as Part 20 of Exhibit No. 27.

Exhibit No. 8 — Includes (1) three photostats of McCall Ferry preferred stock certificates (No. 1, dated August 8, 1905, for 4,000 shares issued to Susquehanna Contracting Company; No. 216, dated November 7, 1908, for 200 shares issued to Electrical Securities Corporation; No. 217, dated November 7, 1908, for 3,800 shares issued to Susquehanna Contracting Company); (2) letter dated November 12, 1908, written by Harvey Fisk & Sons to J. W. Young, Vice President of McCall Ferry, transmitting "certificate #217 for 3,800 shares McCall Ferry Power Company Preferred Stock, n/o Susquehanna Contracting Company, properly endorsed in blank" and listing names of individuals and firms entitled to receive the 3,800 shares; (3) letter dated November 18, 1908, written by Harvey Fisk & Sons to C. H. Keep, President, Knickerbocker Trust Company, New York City, reading as follows:

"In connection with the certificates for 3,800 shares McCall Ferry Power Company preferred stock, standing in name of Susquehanna Contracting Com-

pany, which was recently sent you with the request that it be split up and issued in other names, we beg to assure you that this stock is part of an original issue and has since been held for account of those who have had a beneficial interest therein.

"We guarantee that no sale of this stock has ever been made."

Exhibit No. 9 — Letter dated February 27, 1908, written by Lee, Higginson & Company, stating, among other things; "We have asked Messrs. Stone & Webster to discontinue the examination of the property of the McCall Ferry Power Co. which was undertaken at our suggestion."

Exhibit No. 10 — Letter dated July 5, 1907, written by Bertron, Storrs & Griscom to Messrs. Lee, Higginson & Co., re additional financing required to complete the project. (Ex. No. 398)

Exhibit No. 11 — Note of Susquehanna Contracting Company to Lee, Higginson & Company covering $100,000 loan. Note included as a part of Part 40 of Exhibit No. 27.

Exhibit No. 12 — Schedule showing McCall Ferry deferred bond subscribers, etc.

* * *

[24521]

DRAFT OF
LEE, HIGGINSON & COMPANY PARTICIPATION
IN
McCALL FERRY POWER COMPANY

May 9, 1939

In August 1899, William F. Beyer, Geo. B. Willson and several others from Lancaster, Pennsylvania, formed the York Furnace Power Company, a partnership, and began acquiring land and water power rights for a low-head hydroelectric development near York Furnace on the Susquehanna River. According to Cary T. Hutchinson and Boyd Ehle, the original purpose for this hydroelectric power was the reduction of iron ore in that vicinity. However, one year later, the partnership group incorporated York Furnace Electric Company which immediately acquired pole line rights of way to Lancaster. Prior to the summer of 1901, Hutchinson was approached by the York Furnace partnership for consulting advice in connection with the reduction of local iron ore. He concluded that electrical reduction of this ore was not feasible.

During the summer of 1901, Hutchinson explored in his own interest, the hydroelectric power possibilities of the river and power markets, and finally concluded that a higher head development at McCall Ferry was most feasible. In October 1901, Hutchinson obtained an option on the property of the York Furnace partnership, which was successively extended until it was finally exercised by Hutchinson at the formation of McCall Ferry Power Company in 1905. The option was recorded and resulted in total payments by Hutchinson of $201,000. for the York Furnace properties. In February 1902, [24522] (page 2) Henry F. Dimock, Hutchinson's father-in-law, advanced funds to

Hutchinson for renewal of the option. Prior to this time, Hutchinson had used his own funds for the enterprise. After Hutchinson obtained the York Furnace option, Beyer appears to have acted in some respects as his agent.

James H. Harlow, George K. McGaw and others hereinafter referred to as Harlow-McGaw, principal competitors of Hutchinson for control of the river, first became interested in its hydroelectric possibilities in 1894. In July 1896, they made arrangements for the purchase of the Susquehanna and Tidewater Canals below Wrightsville, Pennsylvania. They made final payment and took title to the canals in March 1902. Between 1894 and 1902, Harlow-McGaw had been buying property and attempting to finance and to develop power from the river. One of those whom they attempted to interest in the financing was Lee, Higginson & Company. That firm employed Stone & Webster to make an independent investigation in 1898. Lee, Higginson & Company concluded that the proposition was not worth taking up at that time. Through ownership of the canals, Harlow-McGaw were able to effectively interfere with Hutchinson's plans. Bitter rivalry developed between Harlow-McGaw and Hutchinson, which adversely affected the prices each paid for property.

In April 1902, Harlow-McGaw attempted to perpetuate the canal rights by forming the Susquehanna Canal and Power Company. Hutchinson unsuccessfully opposed the formation of this company and bought property below his McCall Ferry site to interfere with the Harlow-McGaw plans for a development at Peach Bottom. In August 1902, Harlow-McGaw unsuccessfully opposed the formation by Hutchinson of two [24523] (page 3) water power companies.

In March 1903, Hutchinson caused a bill to be introduced in the Pennsylvania Legislature to revoke the canal charter. The bill seemed certain enough of passing that Harlow-McGaw, fearing the loss of all canal rights in Pennsylvania, entered into an agreement giving Hutchinson the

right to flood the canal above the McCall Ferry site. In consideration, Hutchinson agreed to furnish locks and navigation facilities. The bill in the legislature was then defeated. This agreement remained in force until the canals were purchased by McCall Company interests in 1905.

The right to flood the canal completed Hutchinson's control of substantially all the property required to develop power at McCall Ferry. Apparently, Hutchinson did not consider the spring of 1903 a favorable time to finance, and the enterprise seems to have remained dormant until late 1904 or early 1905. During 1903, Harlow-McGaw made an unsuccessful attempt to finance a development below the McCall Ferry site.

On January 13, 1905, Wm. Barclay Parsons submitted a favorable engineering report on the proposed McCall Ferry development. Bertron, Storrs & Griscom undertook to finance the development and issued a prospectus and underwriting agreement, dated March 1, 1905, naming Henry F. Dimock, S. Reading Bertron and Charles T. Barney syndicate managers. Under this plan of financing there were to be issued $8,000,000. par value bonds, and $4,000,000. par value each of preferred and common stock. Each $1,000. par value bond together with $500. par value preferred stock, was to yield $900. in cash. [24524] (page 4) The 40,000 shares of $100. par value common stock were to be divided equally between the Hutchinson interests and the bankers.

It appears that Lee, Higginson & Company participated in this underwriting as is evidenced by a letter from Gardiner M. Lane, a partner in that firm, dated March 10, 1905, to Robert Fleming, which contained the following points:

1. C. A. Coffin, President of General Electric Company, had brought the proposed development to the attention of Lee, Higginson & Company some time prior to the date of the letter.

2. Lee, Higginson & Company had given considerable time and attention to studying the proposed development and thought well of it, although a study of a water power project at a lower point on the river ten years previous, had been considered by them as not worth taking up at that time. (This had been a Harlow-McGaw project.)

3. Lee, Higginson & Company believed that there was no question whatever of there being a sufficient demand for the McCall power within a satisfactory distance at a profitable price.

4. The figures of the estimates were considered most conservative by Coffin and others. Coffin had given a good deal of attention to the figures.

5. Five per cent cumulative preferred stock in the amount of $4,000,000. was to go with the $8,000,000. of bonds to be underwritten and was to be profit to the Underwriters. The Syndicate Managers believed that they would be able to sell the bonds at the proper time without giving any of the preferred stock.

6. In addition to the issue of preferred stock, there would be an issue of common stock, all of which would be used in acquiring the rights from the promoters, who had been out a large sum of money for several years.

7. Lee, Higginson & Company proposed to take a block of the underwriting and hoped that Fleming would also take some.

8. Mr. Higginson thought highly of the undertaking.

[24525] (page 5)

Apparently about one-half of the necessary subscrip-

tions had been obtained under the Dimock-Bertron-Barney underwriting plan, when Bertron concluded that the proposition was more than his firm could complete. Of these subscriptions approximately $2,000,000. were secured by Lee, Higginson & Company, the remainder being evidently obtained by Coffin and Bertron, Storrs & Griscom. The latter, therefore, suggested that the matter be placed before Harvey Fisk & Sons and that that firm be asked to head a new syndicate. This probably occurred between March 10th and 25th, 1905. If the financing could not be completed, the Hutchinson interests were confronted with the prospects of an indefinite delay in securing release of funds expended on the enterprise during the previous four years, as well as the possibility of the interests on the lower river securing sufficient financing to construct their plant, and gaining the desirable markets for power. They chose the apparently safer course of securing immediate financing even though it entailed relinquishing control of the enterprise.

About March 15, 1905, Bertron approached Harvey Fisk & Sons to obtain their assistance in completing the financing. Harvey Fisk & Sons headed a new syndicate, with Bertron's firm as silent joint bankers. The new syndicate underwriting agreement of March 25, 1905 offered a 45% bonus of preferred stock to bond subscribers, but arrangements were made for subscribers under the March 1st agreement to receive the 50% bonus promised them. The issue of common stock was increased to 50,000 shares, of which the bankers were to receive 30,000 and the Hutchinson interests 20,000. This arrangement gave Harvey Fisk & Sons [24526] (page 6) control, and they subsequently managed the enterprise. The underwriting was obtained in the name of Susquehanna Power Company but this was later changed to McCall Ferry Power Company.

The 30,000 shares of common stock designated for the bankers were divided as follows:

Harvey Fisk & Sons	17,537½	shares
Bertron, Storrs & Griscom	7,462½	shares
Lee, Higginson & Company	5,000	shares
Total	30,000	shares.

The 20,000 shares of common stock designated for Hutchinson interests were divided beneficially as follows:

To Hutchinson and his associates	18,840	shares.
To Harlow-McGaw, et al	1,000	shares
To Chas. D. Pullen	150	shares
To Original Incorporators	10	shares
Total	20,000	shares

The subscriptions which Lee, Higginson & Company had obtained under the March 1st underwriting agreement had provided for a 50% bonus of preferred stock. On March 25th, a letter from Bertron, Storrs & Griscom to Lee, Higginson & Company, advising them of their commission in common stock for participating in the Harvey Fisk & Sons' underwriting, contained a proviso that Lee, Higginson & Company would receive an additional 5% of preferred stock over the 45% provided by the Underwriting Agreement of March 25th. That the 50% bonus was given Lee, Higginson & Company subscribers is further substantiated by the Stock Certificate Books and the stock lists later prepared from bonds turned in to the Reorganization Committee. It is assumed that Lee, Higginson & Company, having committed themselves to some subscribers on the basis of the March 1st plan, were given this means of keeping [24527] (page 7) those promises without incurring any additional expense on their part.

This letter of Bertron, Storrs & Griscom to Lee, Higginson & Company, dated March 25, 1905, contained the following language which related to the commission to be earned by the latter for securing underwritings:

"We agree that you shall receive through us or the Bankers, Messrs. Harvey Fisk & Sons, 25% of common stock on the Susquehanna Water Power Underwriting on $2,000,000. subscriptions to be furnished by you or $500,000. par value of the same, together with 5% of preferred stock, making the total amount of preferred stock 50% of the subscriptions instead of 45% as called for in this subscription. The same to be transferred to you as soon as issued."

This letter established the full compensation of Lee, Higginson & Company from the McCall underwritings, as subsequent events show that in spite of an additional allotment of bonds, their commission was never increased.

In a letter dated January 11, 1939, Lee, Higginson & Company stated that an examination of their records does not show that they received any cash compensation in connection with the issue of the McCall Ferry Power Company securities. In order to properly determine the cost of property and services acquired by the issuance of McCall Company common stock, it is necessary to establish the value of the stock. This must be done by some means other than market values as McCall Company failed before its stock reached the open market.

The McCall Ferry Power Company was incorporated on April 14, 1905, as a consolidation of Hillside and Susquehanna Water & Power Companies, which had been formed by Hutchinson on September 2, 1902. [24528] (page 8) The initial capital stock of the McCall Company consisted of ten shares of $100. par value each and was subsequently increased to 50,000 shares of common and a like number of shares of preferred stock of a par value of $100. each, resulting in a total capital stock of $10,000,000. Of this amount, the entire issue of common and $4,043,750. of the preferred were later issued to the public. A bond issue in the amount of $10,000,000. was authorized of which $8,325,000. were sold.

On April 18, 1905, Harlow-McGaw offered to sell to Harvey Fisk & Sons their holdings on the river. On April 27, 1905, an agreement of sale was executed between these parties which would convey all Harlow-McGaw holdings to Harvey Fisk & Sons for a consideration of $200,000. in cash, 250 McCall Ferry Power Company bonds, and 1,000 shares of common stock. The conveyance of property was subject to options held by Charles D. Pullen, which were subsequently acquired by Harvey Fisk & Sons for $10,000. in cash and 150 shares of common stock. The acquisition from Harlow-McGaw eliminated the necessity for carrying out the prior agreement for installation of canal locks and navigation facilities.

On June 12, 1905, the Susquehanna Contracting Company was incorporated by Harvey Fisk & Sons. On June 13, 1905, the Contracting Company entered into an agreement with the McCall Company, whereby the Contracting Company would convey all the properties, rights, etc., to be obtained from Harlow-McGaw, Hutchinson and others and furnish $6,400,000. in cash. In consideration, McCall Company was to issue $8,483,000. par value bonds; $4,116,500. par value preferred stock, and $4,999,000. par value common stock.

[24529] (page 9)

On June 14, 1905, Harvey Fisk & Sons assigned to the Contracting Company the agreement of April 27th with Harlow-McGaw for the acquisition of their property. On this date, Hutchinson executed an agreement with the Contracting Company, providing for the conveyance of all his property, rights, etc. In consideration, Hutchinson was to receive $750,000. in cash, 4,000 shares of McCall Company preferred stock, and 48,840 shares of common stock. This was the means of effecting the distribution of common stock already mentioned and providing the additional 5% preferred stock bonus for bond subscribers under the Dimock-Bertron-Barney underwriting agreement.

A substantial portion of those who received the additional bonus of 5% in preferred stock were Lee, Higginson & Company subscribers, as shown by the following list.

[24530]. (page 10)

Ctf. No.	Name	Address	No. of Shares
	Assumed to be Lee, Higginson & Co. Subscribers		
338	Charles C. Walker	53 State St., Boston, Mass. (Through Bertron, Storrs & Griscom)	500
339	Est.—Charles Perkins	Burlington, Iowa (" " " " ")	250
340	Alex. Agassiz	Newport, R. I. (" " " " ")	250
341	Arthur D. Veasey	Haverhill, Mass. (" " " " ")	25
246	Essex Trust Company	Lynn, Mass.	12½
247	Electrical Association Std.	Boston, Mass.	50
255	Union Trust Company	Providence, R. I.	50
258	J. F. Shaw	8 Congress St., Boston, Mass.	25
344	Chas. P. Curtis	Ames Bldg., Boston, Mass. (Through Lee, Higginson & Co.)	50
345	Frederick Ayer	141 Milk St., Boston, Mass. (Through Lee, Higginson & Co.)	75
	Total Assumed Lee, Higginson & Co. Subscribers.....		1,287½
	Assumed to be C. A. Coffin Subscribers		
218-19	Electric Bond & Share Company	62 Cedar St., N. Y. (Through Elect. Sec. Corp.)	200
245	C. A. Coffin	30 Church Street, N. Y.	100
249	M. A. Viele	49 Wall Street, N. Y.	12½
250	I. S. Keeler	30 Church Street, N. Y.	2½
251	Est. of E. R. Coffin	30 Church Street, N. Y.	12½
252	S. L. Mitchell	62 Cedar Street, N. Y.	7½
253	Hinsdill Parsons	Schenectady, N. Y.	12½
254	A. E. Burchard	30 Church Street, N. Y.	5
259	S. M. Hamill	Schenectady, N. Y.	25
387	E. W. Rice, Jr.	Schenectady, N. Y.	5
388-9	J. R. Lovejoy	Schenectady, N. Y. (Thru Rice)	2½
390-1	A. V. V. Raymond, Jr.	Buffalo, N. Y. (" ")	2½
335	Est.—Erastus Jones	Worcester, Mass. (Thru Coffin)	50
336	Homer Gage	Worcester, Mass. (" ")	50
337	N. Penrose Hallowell	44 State St., Boston (" ")	25
	Total Assumed Coffin Interests.....		512½
	Assumed to be Bertron, Storrs & Griscom Subscribers		
321	Bertron, Storrs & Griscom		75
	Total Subscriptions through Coffin—Lee, Higginson & Co., and Bertron, Storrs & Griscom.....		1,875
	Others Receiving Extra Preferred Stock		
262	Harvey Fisk & Sons	62 Cedar Street, N. Y.	1,875
244	Est.—Eugene Griffin		25
256	H. C. Frick	Frick Bldg., Pittsburgh, Pa.	100
257	Charles Pratt & Company	26 Broadway, N. Y.	125
	Total Others		2,125
	GRAND TOTAL		4,000

[24531] (page 11)

It has been stated heretofore that the Hutchinson Agreement was apparently used for the purpose of paying those who had promoted the undertaking and the Bankers and their Associates for financing and managing the Company. The preferred stock specified in the agreement appears to have been a partial exception.

When Fisk and Bertron were arranging the respective remuneration to go to each in the form of common stock, Bertron had required an additional five per cent in preferred stock for those who had previously subscribed under the Dimock-Bertron-Barney underwriting agreement of March 1, 1905. This was needed because of the decrease in the preferred bonus from 50%, as stated in the Bertron agreement, to the 45% stated in the Fisk agreement. The purpose was to retain the March 1st subscribers. Fisk was agreeable to this, provided his firm received a like amount of the preferred. Thus, the arrangement was made whereby each was to get 1,875 shares of preferred, Bertron's to maintain prior commitments, and Fisk's to serve as additional compensation.

Of the total consideration to Hutchinson, $750,000. cash and 18,840 shares of common stock went beneficially to Hutchinson interests. Hutchinson stated that he used the cash to reimburse, with interest, those who advanced funds to him, and about one-half of the 18,840 shares of common stock to meet other obligations he had created in furthering the project.

In addition to the Hutchinson agreement, Harvey Fisk & Sons also executed, on June 14, 1905, an agreement with the Contracting Company which provided that Harvey Fisk & Sons assign a [24532] (page 12) loan arrangement with Knickerbocker Trust Company and their rights and obligations under the bond and stock purchase agreements, except the right to repurchase the bonds. In consideration, the Contracting Company appointed Harvey Fisk & Sons its

agents to carry out its obligations under the bond and stock purchase agreements.

A loan arrangement with Knickerbocker Trust Company had been provided for in the Dimock-Bertron-Barney underwriting agreement. The Harvey Fisk & Sons' underwriting also provided for a loan arrangement which was made with the Knickerbocker Trust Company about May 15, 1905. Knickerbocker Trust Company was also trustee under the mortgage executed by McCall Company as of June 15, 1905.

On October 18, 1905, McCall Company entered into an agreement with Hugh L. Cooper for the management of hydraulic engineering and construction. Cooper actually began construction on October 24th. On October 25th, McCall Company entered into an agreement with Sanderson and Porter to superintend electrical construction and manage accounts.

A stock deposit plan, dated January 20, 1906, was put into effect with Bertron, Dimock, and Wm. M. Barnum of Harvey Fisk & Sons comprising the voting committee. Harvey Fisk & Sons controlled the McCall Company through this committee. The records of stock deposits were kept by Harvey Fisk & Sons and we believe they have been destroyed.

The plan of financing the McCall development provided that each subscriber would receive a 45 or 50 per cent bonus of preferred stock on the par value of bonds. There was a provision in the underwriting agreement whereby Harvey Fisk & Sons could repurchase [24533] (page 13) the bonds at 90 per cent of par, thus leaving the preferred stock bonus as a potential profit to the original subscribers.

Gardiner M. Lane actively represented Lee, Higginson & Company in the McCall enterprise. He was a director from August 8, 1905 to March 2, 1909 and a member of the Executive Committee from August 8 to September 20, 1905. It may be assumed that the inconvenience of Lane's attend-

ing weekly meetings in New York was the cause of his being replaced on this committee by Bertron, which would help insure a quorum being present to transact routine business. When matters of importance were passed on by this Committee, Lane was frequently present at the meetings which had been scheduled for his convenience. His resignation from the Committee, therefore, did not reduce his influence in matters of policy of the McCall Company. He was one of the five members of the Bondholders' Committee formed on December 7, 1908.

After the original financing, a change in plans for the development, to materially increase the capacity, required more money than was originally provided. Therefore, in June 1907, the question of disposing of the unissued bonds, amounting to a par value of $1,675,000. was considered with the idea of obtaining enough additional cash to complete the project. By early July, it seems to have been decided to sell $500,000. par of the bonds immediately, reserving the balance for sale about six months later. Lee, Higginson & Company, as one of the five largest stockholders, agreed to underwrite $100,000. of the half million and made plans to secure subscribers. By the time their plans were ready, the financial market appears to have [24534] (page 14) become unfavorable for raising money and the additional underwriting was suspended. The Knickerbocker Trust Company went into receivership in the fall of 1907, but arrangements were made for it to complete the loan to the Contracting Company, provided for in 1905. By midsummer of 1908, the cash available to the McCall Company was practically exhausted.

A resolution was passed by the Executive Committee of McCall Company in January 1908, at the request of Lane, authorizing the firm of Stone & Webster to make an investigation of the cost of completing the McCall project and the earnings which might be expected. After some work had been done, it became apparent that the investigation would be more expensive than had been anticipated

and the firm of Stone & Webster was asked to suspend its investigation. The expense of this investigation was presumably paid by Lee, Higginson & Company.

In July 1908, Lee, Higginson & Company, Harvey Fisk & Sons and General Electric Company authorized Electric Bond and Share Company to make an investigation of the cost to complete the McCall development. It was stipulated by the parties that the cost of this investigation should not exceed $10,000. and would be shared equally by each of the parties. The report was prepared by Albert S. Crane and J. D. Mortimer but Electric Bond & Share Company apparently did not think well of the proposition and no further action was taken by them.

The question was raised in July 1908 as to the possibility of using the unsold bonds to secure loans from directors or [24535] (page 15) others financially interested in keeping the company intact. It was contemplated that five $100,000. loans would be obtained, but for some unknown reason, the Hutchinson interests failed to make their loan. On October 28, 1908, loans of $100,000. were made by each of the following:

Harvey Fisk & Sons
Lee, Higginson & Company
Bertron, Storrs & Griscom
C. A. Coffin

These loans were secured by 702 McCall bonds, the Conowingo Land Company $25,000. mortgage, and the equity of the McCall Company in the $250,000. indemnity deposit with the Knickerbocker Trust Company for completion of the railroad relocation.

When the bond issue of McCall Company was originally offered, Lee, Higginson & Company apparently subscribed to $2,620,000. of bonds, of which the firm retained $500,000. The subscription was not made in the capacity of Bankers or Syndicate Managers but in the capacity of independent subscribers. Lee, Higginson & Company then,

in turn, obtained sub-underwriters on their own form of Underwriting Agreement. Thereby, the Lee, Higginson & Company subscribers were not responsible to Harvey Fisk & Sons but to Lee, Higginson & Company and the latter, in turn, was responsible to Harvey Fisk & Sons.

In November 1908, the Susquehanna Contracting Company was unable to repay its loans from the Knickerbocker Trust Company and the individual underwriters became personally liable for the Susquehanna Contracting Company loans on a prorated basis in accordance with the provisions of the Harvey Fisk & Sons' Underwriting Agreement of March 25, 1905. [24536] (page 16) By reason of this default by the Contracting Company, Lee, Higginson & Company became liable on account of $2,425,000. of bonds for which they had subscribed on the deferred plan, whereas Bertron, Storrs & Griscom, who were joint bankers with Harvey Fisk & Sons in the underwriting, were liable only for the subscription of their own firm. This indicates that, although Lee, Higginson & Company assisted in the sale of the bonds, they did not occupy the same status as the bankers and actually became guarantors for the subscriptions that they sold to others.

Arrangements were made for the Knickerbocker Trust Company to accept an additional 20% payment from all deferred subscribers and accept notes for the balance due for one year. In a list of these deferred subscribers, Lee, Higginson & Company is shown as liable for a balance due on $2,350,000. of bonds and as being guarantor on an additional amount of $75,000. The $195,000. other bonds subscribed by them were taken by non-deferred subscribers and had been paid for in full. It may be presumed that Lee, Higginson & Company, in turn, secured notes for the balance due them from their sub-underwriters to whom they had sold these bonds.

The McCall Company defaulted on its bond interest due December 15, 1908. Anticipating the inability of the company to meet its obligations, the holders of a large por-

tion of the bonds outstanding asked the following to act as a Committee in the interests of holders of bonds and preferred stock:

Wm. M. Barnum
A. C. Bedford
S. R. Bertron
C. A. Coffin
G. M. Lane

[24537] (page 17)

Public announcement of the formation of this committee and the impending default was made to all bondholders on December 7, 1908 over the names of:

Harvey Fisk & Sons — Bertron, Storrs & Griscom
Lee, Higginson & Company — H. F. Dimock
C. A. Coffin

With the announcement also went a request and agreement for the deposit with the committee of bonds and preferred stock. Sufficient bonds were deposited for the proposed committee to proceed with its reorganization plans.

The Bondholders' Committee immediately entered into a provisional agreement with J. E. Aldred for the new financing necessary to complete construction. On April 24, 1909, the Committee accepted a plan which Aldred had submitted for refinancing the enterprise. The McCall Company bonds were to be exchanged for securities in the reorganized company on a par basis of 40% bonds and 60% stock. The reorganized company was to use $4,170,000. of its bonds and $3,500,000. of its stock to raise $3,753,000. in cash. All except 66 of the 8,325 bonds of the McCall Company then outstanding, were exchanged for securities in the reorganized company.

On July 17, 1909, Aldred was appointed Receiver and continued in this capacity until after the formation of the Pennsylvania Water & Power Company. While acting as

Receiver, he also made expenditures on behalf of the Bondholders' Committee to further construction of the plant, the funds having been advanced by the syndicate furnishing the new money. Among the expenditures made by Aldred for the Committee were the purchases of the four $100,000. notes of the Susquehanna Contracting Company with interest at 6%. Three of the notes were purchased [24538] (page 18) on October 11, 1909 and the fourth which was made to Lee, Higginson & Company was purchased on October 15th.

Aldred had permitted the old McCall Company bondholders to subscribe to $500,000. par value of the new Pennsylvania Water & Power Company bonds in addition to those exchanged for McCall securities. Of this amount, Lee, Higginson & Company customers subscribed to $20,000., Frederick Ayer taking $19,000. and Robert Grant, $1,000.

On December 7, 1909, the Bondholders' Committee purchased the property of the McCall Company at foreclosure sale for $2,000,000. and on January 13, 1910 transferred this property to the Pennsylvania Company in exchange for that company's securities. The Pennsylvania Water & Power Company was formed on the same date, as a reorganization of McCall Ferry Power Company. Aldred was subsequently discharged as Receiver on March 18, 1910.

EXHIBIT No. 397.

[24539]

(Copied from Co. file #3222.48 — 9)

FILE P
September 9, 1912.

Mr. R. S. Kelsch, Consulting Engineer,
Power Building,
Montreal, Canada.

Dear Sir:—

* * *

We have gotten very satisfactory results from the flash boards which we installed on our dam.

We drilled a line of vertical holes 18" deep, spaced 2'—6" center to center along the crest of the dam, the dam having a length just short of one-half mile. In these holes were cemented pipe bushings to fit the flash board pins.

[24540] (page 2)

The flash board pins are of wrought iron, 6'—3" long, and project 4'—9" above the crest of the dam. The pins are 2-5/16" and 2-1/8" in diameter and are grooved circumferentially 1½" above the top of the pipe bushing in the dam crest. The diameter of the pins at the bottom of the groove is 2-1/8" for 1864 feet of the length of the dam, and 1-3/4" over the remaining 500 feet of the length of the dam. That is, there are 500 feet of pins which are weaker than the remainder.

The flash boards are of 1" undressed yellow pine timber, 12' long and over-cap 24" at each end. The boards are fastened together in sections 4'—6" high, and provided with wrought iron lifting handles.

The layout is so designed as to store water up to 4'6" above the crest of the dam. When the water rises to 5'3"

above the crest of the dam, the first section of weak pins falls and the water passes through the gap so formed. The diversion of the water through this gap, will, under ordinary conditions, draw down the pond and allow us to remove the remaining flash boards and pins.

In case the water rises so rapidly as to prevent this latter operation, the remainder of the pins will fall when the water elevation is 6′—0″ above the crest of the dam.

In case we want to work below the dam as we are doing just now, we reverse the pins bringing the grooved ends up, thus ensuring that the section along which the pins are reversed, will not fail until after all other pins have failed.

In order not to flood out certain properties about 8 miles up the river from us, we had to so design the flash board arrangement that flooding out of that property would not occur with a river stage represented by the quantity of water which would flow through the weak flash board pin gap section, plus the amount flowing through the power house, plus the amount flowing over the remaining flash boards up to a height at which the latter flash boards also would fall. We had, of course, to take into consideration the slope of the river at such a stage, and we had to be very particular in view of the fact that an injunction and lawsuit had been brought against us in connection with the flooding of the property up the river.

We made pretty exhaustive tests in connection with these flash boards, since we found that there were many things which entered into the problem, which made a priori calculation difficult. For instance, we found that if we did not notch the pins they would bend over very slowly and the slow bending would increase the bending strength of the pins and this, together with the variation in the water pressure on the pins, caused by the inclined position of the pins, and by leakage occasioned by cracks opening up between the boards during pin failure, resulted in requiring a considerably higher elevation of water to cause the boards to lie down flat; also, we found it necessary to test

samples of pins taken at random owing to the difficulty in obtaining a uniform grade of wrought iron. We experimented with cast iron pins, but the sudden giving way of such pins might cause trouble down river to men in row boats, owing to the flood wave.

[24541] (page 3)

We found it advisable to have the pins so arranged that they would give away slowly when the water reached a critical height, bending first about 9″ at the top. After having passed through this small angle slowly, we wanted the pins to then fall rapidly so as to insure that all of them would be forced down flat along the crest of the dam before the water level would drop too much and tne water level against the remaining pins be insufficient to force them also down flat.

When the water reaches the critical height above the dam crest, the wave action due to wind, causes a pounding against the flash boards so that the pins under such circumstances will start to bend before the critical water height is reached. We wanted the bending to be slight at first under such conditions, so as to avoid the unnecessary failure of the pins due to wave action and before the water has reached a critical height.

12″ upstream from the line of flash board pins we have placed pipe socket bushings in the concrete for a line of heavy pins, which might be called guard pins; these guard pins are used only in erecting or removing the flash boards. The guard pins are spaced 5′ center to center, and are of wrought iron 6′—3″ long and 2-5/16″ in diameter.

The flash boards are erected and removed from a scow, the scow resting against the guard pins, and when necessary the scow is anchored back to a series of cribs which we have placed upstream from the dam. The scow is moved along the dam, guard pins being removed at the stern as the scow passes along and jumped ahead and placed in

position at the bow. The scow is fitted up with a steam winch and is, in fact, especially arranged for this flash board work. Unless there is considerable water flowing over the dam crest, the guard pins are not used.

The men have been drilled so that it is not a long job for them to erect or remove the flash boards. Thirty men in five hours can set up the half mile of flash boards if the water is not more than one foot deep over the dam crest.

These flash boards have been of very great assistance to us during the low water season. We draw down the water behind the flash boards during the day and fill up the pond at night and on Sunday. Without these flash boards we would have been compelled to run considerable steam this Summer and so far we have not yet had to drop a bit of our load. We have telegraphic reports every day from up river, so that we can estimate the river flow. If too much water comes down we open up our #10 Headgates and by-pass the water until the freshet is passed. Several times we have had our pondage exhausted above the dam but we managed to hang on over Saturday and Sunday until a freshet of which we had advice could reach us.

It is very interesting to note the difference in time required for a large and a small freshet to travel down the river. The river is very wide and shallow so that a small freshet spends considerable of its volume in the long reaches of the river above us and sometimes the river will be actually falling North of us before we get the previous freshet.

[24542] (page 4)

* * *

Yours very truly,

CHIEF ENGINEER.

EXHIBIT No. 398.

[24543]

(Copied from McCall Ferry Power Co. file # 112)

Office of
LEE, HIGGINSON & CO.
44 State Street
Boston.

New York,
July 5, 1907

Messrs. Lee, Higginson & Co.
44 State St., Boston, Mass.

Gentlemen:

As you know, when we financed the McCall Ferry Power Company, it was financed for 50,000 Horse Power development. Subsequently it was found that a minimum of 75,000 H.P. could be developed with a small proportionate increase in cost, and this was approved by the Directors.

This decision necessitates therefore the sale of the remaining Treasury Bonds of the Company, namely, about $1,600,000. The Company has in its Treasury also the necessary amount of Preferred Stock to go with these Bonds, so that we can give the same amount as given on the original Underwriting, as a bonus. The Company will require these additional funds to begin to be paid in the next Fall. It will therefore be necessary to finance the Company to the extent of about $1,600,000 to complete the development. Probably half a million dollars will be all that they will need on this account until toward the close of the year.

With a view of putting the Company in funds in the Fall, it has been suggested by the President of the company that those of us interested in the Common Stock, should underwrite half a million of the Bonds on the old basis,

provided a Syndicate Loan were made on the original basis for six months or twelve months. I believe the five largest interests have agreed each to underwrite $100,000 on this basis, with the exception of yourselves. This will leave us about six months, or nearly so, to arrange for the last million.

We wanted very much to go over these matters with Mr. Lane and get his approval. Will you be kind enough to let us know your views in this matter. We will be glad to discuss it over the 'phone with you tomorrow forenoon, if you care to call us up tomorrow or Monday.

This Underwriting would not be pledged probably until Fall but it was thought wise to arrange for half a million speedily so that the company would know that it was available.

We hand you copy of data prepared by the Chief Engineer on the probable earnings from the McCall Ferry Power Company.

Very truly yours,

(S.) Bertron, Storrs & Griscom

Enclosure.
A. Data.

EXHIBIT No. 399.

[24544]

(Susquehanna Contracting Co. File #30)

(COPY)

June 22nd, 1905.

Cary T. Hutchinson, Esq.
No. 60 Wall Street,
Manhattan, New York.

My dear Hutchinson:

I send you herewith original agreement Cary T. Hutchinson and Susquehanna Contracting Company dated the 14th day of June, 1905. Under the terms of this agreement you have already received the $750,000. therein provided, and you are still to receive $400,000. of the preferred stock and 48,840 shares of the par value of $4,884,000 of the common stock of McCall Ferry Power Company. The stock will probably be delivered to you about the first or second week of July.

I also send you receipt for $155,500. signed by Beyer, Willson and the Lancaster Trust Company and Franklin and Marshall College. Also certificates numbers 1, 2, 3, 4 and 5, each for two (2) shares of the capital stock of the McCall Ferry Power Company endorsed in blank. These represent the $1,000. in capital stock which you have received from Beyer and Willson.

Yours very truly,

(S) Lorenzo Semple

Enclosures.

EXHIBIT NO. 404.

[24549]

Witness Dale E. Goubleman

FEDERAL POWER COMMISSION

Docket No. IT-5915

Pennsylvania Water & Power Company

SUPPLEMENTAL
RATE OF RETURN STUDY

May 9, 1947

2a

MOODY'S BOND YIELD AVERAGES

BASED ON BONDS OF 120 DOMESTIC CORPORATIONS - ACCORDING TO GROUPS

40 INDUSTRIALS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
1946	2.57	2.54	2.54	2.57	2.60	2.59	2.58	2.58	2.64	2.65	2.66	2.66	2.60
1947	2.63	2.61	2.61										

MOODY'S BOND YIELD AVERAGES

BASED ON BONDS OF 120 DOMESTIC CORPORATIONS - ACCORDING TO GROUPS

40 RAILROADS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
1946	2.89	2.83	2.80	2.78	2.84	2.85	2.86	2.89	2.98	3.05	3.05	3.04	2.91
1947	3.00	3.00	3.02										

MOODY'S BOND YIELD AVERAGES

BASED ON BONDS OF 120 DOMESTIC CORPORATIONS - ACCORDING TO GROUPS

40 UTILITIES

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
1946	2.71	2.65	2.64	2.65	2.69	2.70	2.69	2.70	2.75	2.76	2.77	2.77	2.71
1947	2.73	2.72	2.73										

6a

MOODY'S BOND YIELD AVERAGES

BASED ON BONDS OF 120 DOMESTIC CORPORATIONS-COMPOSITE AND ACCORDING TO RATINGS

COMPOSITE

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
1946	2.73	2.68	2.66	2.67	2.71	2.71	2.71	2.73	2.79	2.82	2.82	2.83	2.74
1947	2.79	2.78	2.79										

MOODY'S BOND YIELD AVERAGES

BASED ON BONDS OF 120 DOMESTIC CORPORATIONS-COMPOSITE AND ACCORDING TO RATINGS

30 DOMESTIC CORPORATIONS - RATING AAA

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
1946	2.54	2.48	2.47	2.46	2.51	2.49	2.48	2.51	2.58	2.60	2.59	2.61	2.53
1947	2.57	2.55	2.55										

8a

MOODY'S BOND YIELD AVERAGES

BASED ON BONDS OF 120 DOMESTIC CORPORATIONS-COMPOSITE AND 30 EACH ARRANGED ACCORDING TO RATINGS

30 DOMESTIC CORPORATIONS - RATING AA

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
1946	2.62	2.56	2.54	2.56	2.58	2.59	2.59	2.62	2.68	2.70	2.69	2.69	2.62
1947	2.65	2.64	2.64										

MOODY'S BOND YIELD AVERAGES

BASED ON BONDS OF 120 DOMESTIC CORPORATIONS-COMPOSITE AND ACCORDING TO RATINGS

30 DOMESTIC CORPORATIONS - RATING A

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
1946	2.73	2.70	2.69	2.69	2.73	2.73	2.72	2.74	2.80	2.84	2.84	2.83	2.75
1947	2.79	2.79	2.80										

10n

MOODY'S BOND YIELD AVERAGES

BASED ON BONDS OF 120 DOMESTIC CORPORATIONS—COMPOSITE AND ACCORDING TO RATINGS

30 DOMESTIC CORPORATIONS - RATING BAA

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
1946	3.01	2.95	2.94	2.96	3.02	3.03	3.03	3.03	3.10	3.15	3.17	3.17	3.05
1947	3.13	3.12	3.15										

BONDS USED IN MOODY'S CORPORATE BOND YIELD AVERAGES

PUBLIC UTILITIES

Aaa

Boston Edison 2-3/4s, 1970
Cincinnati Gas & El. 2-3/4s, 1975
Cleveland Elec. Illum. 3s, 1970
Commonwealth Edison 3s, 1977
Connecticut Lt. & Pr. 3s, 1974
Cons. Gas E. L. & P. Balt. 2-3/4s, 1976
Illinois Bell Tel. 2-3/4s, 1981
Phila. Elec. Co. 2-3/4s, 1971
Public Serv. El. & Gas 3s, 1972
Southwest'n Bell Tel. 2-3/4s, 1985

Aa

Am. Tel. & Tel. 2-3/4s, 1980
Delaware Pr. & Lt. 3s, 1973
Houston Ltg. & Pr. 2-7/8s, 1974
Metropolitan Ed. 2-7/8s, 1974
New York Pr. & Lt. 2-3/4s, 1975
Ohio Power 3s, 1971
Pacific Gas & Elec. 3s, 1979
Union Elec. Co. of Mo. 2-3/4s, 1975
Virginia El. & Pr. 2-3/4s, 1975
Pub. Serv. of Okla. 2-3/4s, 1975

A

Appalachian El. Pr. 3-1/4s, 1970
Arkansas Pr. & Lt. 3-1/8s, 1974
Central N. Y. Pr. 3s, 1974
Indianapolis P. & L. 3-1/4s, 1970
Louisiana Pr. & Lt. 3s, 1974
Ohio Edison 2-3/4s, 1975
Oklahoma Gas & El. 2-3/4s, 1975
Potomac Edison 3s, 1974
Southwestern Gas & El. 3-1/4s, 1970
Wisconsin Pub. Serv. 3-1/4s, 1971

Baa

Central Ohio Lt. & Pr. 3-1/2s, 1974
Alabama Pr. 3-1/2s, 1972
Central Ill. El. & Gas 3s, 1975
Empire Dist. El. 3-1/2s, 1969
Kentucky Utilities 4s, 1970
Mississippi Pr. 3-1/8s, 1971
Portland Gen. El. 3-1/8s, 1975
South Carolina Pr. 3s, 1975
Central Pr. & Lt. 3-1/8s, 1973
Puget Sound P. & L. 4-1/4s, 1972

RAILROADS

Aaa

Chesapeake & Ohio 4-1/2s, 1992
Cincinnati Union Term. 2-3/4s, 1974
Kansas City Term. 2-3/4s, 1974
Norfolk & Western 4s, 1996
Terminal R.R. of St. L. 2-7/8s, 1985
Union Pacific 2-1/2s, 1991

Aa

Ala. Gt. So. 3-1/4s, 1967
Atch., Top. & S. Fe gen. 4s, 1995
Monongahela Ry. 3-1/4s, 1966
Union Pacific 2-7/8s, 1976
Virginian Ry. 3s, 1995
Wheeling & Lake Erie, 2-3/4s, 1992

14-A

BONDS USED IN MOODY'S CORPORATE BOND YIELD AVERAGES

RAILROADS (Cont'd.)

A

Chicago & Erie 5s, 1982
Chicago & Nor. West 3s, 1989
Erie R. R. Ohio Div. 3-1/4s, 1971
Great Northern 2-3/4s, 1992
Louisv. & Nashv. 2-7/8s, 2003
Nashv., Chatt. & St. L. 3s, 1986
N. Y. Connecting R.R. 2-7/8s, 1975
Pennsylvania 4-1/4s, 1981
Reading 3-1/8s, 1995

Baa

Chicago, Burl. & Quincy 3-1/8s, 1985
Clev., Cin., Chi. & St. L. 4s, 1993
Erie 3-1/8s, 2000
N. Y. Cent. & Hud. Riv. 3-1/2s, 1997
N. Y., Chicago & St. L. 3-1/4s, 1980
Northern Pacific 4s, 1997
Pere Marquette 3-3/8s, 1990
Southern Rwy. 5s, 1994
Texas & Pacific 1st 5s, 2000
Wabash R.R. 3-1/4s, 1971

INDUSTRIALS

Aaa

Atlantic Ref. 2-5/8s, 1966
Socony-Vacuum Oil 2-1/2s, 1976
Standard Oil of N.J. 2-3/8s, 1971
Standard Oil Calif. 2-3/4s, 1966
Swift & Co. 2-3/4s, 1966

Aa

Bethlehem Steel 2-3/4s, 1970
Deere & Co. 2-3/4s, 1965
National Steel 3s, 1965
Phillips Petrol. 2-3/4s, 1964
Quaker Oats 2-5/8s, 1964
Shell Union Oil 2-1/2s, 1971

A

American Tobacco 3s, 1969
Celanese Corp. 3s, 1965
Goodrich Co. (B.F.) 2-3/4s, 1965
Koppers Co. 3s, 1964
Lorillard (P.) Co. 3s, 1963
National Dairy Prod. 2-3/4s, 1970
Skelly Oil 2-3/4s, 1965
Union Oil of Cal. 2-3/4s, 1970
U. S. Rubber 2-5/8s, 1976

Baa

Celotex Corp. 3-1/4s, 1960
Champion Paper & Fiber 3s, 1965
City Ice & Fuel 2-3/4s, 1966
Continental Baking Co. 3s, 1965
Cudahy Packing 3s, 1964
Eastern Gas & Fuel Asso. 3-1/2s, 1965
Houdaille-Hershey Corp. 3s, 1960
Jones & Laughlin 3-1/4s, 1961
Mead Corp. 3s, 1966
Wheeling Steel 3-1/4s, C, 1970

Source: Moody's Bond Survey, August 19, 1946

16a

MOODY'S WEIGHTED AVERAGES OF YIELDS ON NEWLY ISSUED DOMESTIC BONDS

UNIT : PER CENT

Year	Industrial Bonds	Utility Bonds	Railroad Bonds
1945	2.98	2.85	3.22

Note: The above table shows the movement of the average Price of Capital for Industrial, Utility and Railroad Bonds. By "Price of Capital" is meant the average yield to maturity on newly issued bonds. The figures are weighted by the amounts of all new issues floated in any period.

Source of data: Moody's Bond Survey, February 18, 1946, page 630.

MOODY'S BOND YIELD AVERAGES

BASED ON BONDS OF 40 PUBLIC UTILITIES - ACCORDING TO RATINGS

10 PUBLIC UTILITIES - RATING AAA

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
1946	2.51	2.44	2.44	2.45	2.49	2.48	2.48	2.50	2.55	2.58	2.58	2.60	2.51
1947	2.54	2.54	2.55										

10 PUBLIC UTILITIES - RATING AA

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
1946	2.57	2.51	2.49	2.51	2.56	2.56	2.55	2.57	2.62	2.65	2.66	2.66	2.58
1947	2.60	2.60	2.61										

19a.

MOODY'S BOND YIELD AVERAGES

BASED ON BONDS OF 40 PUBLIC UTILITIES - ACCORDING TO RATINGS

10 PUBLIC UTILITIES - RATING A

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
1946	2.69	2.67	2.66	2.65	2.69	2.70	2.69	2.71	2.75	2.76	2.76	2.76	2.7
1947	2.72	2.72	2.72										

10 PUBLIC UTILITIES - RATING BA

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
1946	3.07	3.00	2.96	2.98	3.02	3.04	3.03	3.02	3.06	3.06	3.07	3.07	3.03
1947	3.05	3.03	3.04										

YIELDS AT OFFERING TO DATE OF MATURITY ON ELECTRIC OPERATING UTILITY BONDS ISSUED DURING THE YEAR 1946

Name of Issue		Approx. Offering Date	Principal Amount	Price to Public	Approx. Yield Percent
RATING Aaa					
Cons.Gas Electric Light & Power Co.of Balto.	First & Ref. S.F., 2-3/4%, R, 1981	May	$ 44,660,000	$104.50	2.55
Kansas City Power & Light Co.	First Mtge. 2-3/4%, 1976	Dec.	36,000,000	101.43	2.68
Philadelphia Electric Co.	First & Ref. 2-3/4%, 1981	Dec.	30,000,000	101.35	2.69
Total - Rating Aaa			110,660,000		2.63
RATING Aa					
Madison Gas & Electric Co.	First Mtge. 2-1/2%, 1976	Feb.	4,500,000	102.25	2.40
Gulf States Utilities Co.	First Mtge. 2-5/8%, 1976	June	27,000,000	101.49	2.55
Philadelphia Electric Power Co.	First Mtge. 2-5/8%, 1975	June	30,000,000	102.57	2.50
Wisconsin Electric Power Co.	First Mtge. 2-5/8%, 1976	June	50,000,000	101.56	2.55
Tampa Electric Co.	First Mtge. 2-5/8%, 1976	Sept.	7,500,000	99.48	2.65
Pacific Gas & Electric Co.	First & Ref. 2-3/4%, P, 1981	Oct.	25,000,000	100.50	2.73
Total - Rating Aa			144,000,000		2.57
RATING A					
St. Joseph Light & Power Co.	First Mtge. 2-5/8%, 1976	Apr.	3,750,000	102.63	2.50
Utah Power & Light Co.	First Mtge. 2-3/4%, 1976	May	32,000,000	101.50	2.68
Central Maine Power Co.	First & Gen. 2-3/4%, N, 1976	May	13,000,000	102.00	2.65
Illinois Power Co.	First Mtge. 2-7/8%, 1976	May	45,000,000	102.54	2.75
Jersey Central Power & Light Co.	First Mtge. 2-7/8%, 1976	May	34,500,000	103.00	2.73
Ohio Public Service Co.	First Mtge. 2-3/4%, 1976	June	32,000,000	101.00	2.70
Iowa Public Service Co.	First Mtge. 2-3/4%, 1976	June	13,750,000	101.75	2.67
Pennsylvania Electric Co.	First Mtge. 2-3/4%, 1976	June	23,500,000	102.47	2.63
California Electric Power Co.	First Mtge. 3%, 1976	July	16,000,000	104.50	2.78
Missouri Power & Light Co.	First Mtge. 2-3/4%, 1976	July	7,500,000	102.06	2.65
Northwestern Public Service Co.	First Mtge. 3%, 1973	Oct.	5,275,000	101.63	2.91
El Paso Electric Co.	First Mtge. 2-3/4%, 1976	Oct.	6,000,000	100.97	2.79
Safe Harbor Power Corp.	First Mtge. 3%, 1981	Nov.	14,000,000	106.76	2.70
Total - Rating A			246,275,000		2.71
RATING Baa					
NONE					

Source: Moody's Public Utilities Cumulative Supplements - 1946.

[245631]

Exhibit No. 404

4348

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SHORT TERM INTEREST RATES

4-6 MONTHS COMMERCIAL PAPER AND 60-90 DAY TIME LOANS

4-6 MONTHS COMMERCIAL PAPER

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
1946	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.81	0.81	0.88	0.95	1.00	0.81
1947	1.00	1.00											

60-90 DAY TIME LOANS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
1946	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.45	1.50	1.50	1.50	1.50	1.35
1947	1.50	1.50											

Source of data: Standard & Poor's Trade and Securities-Statistics, Current Statistics Section. (Published by Standard & Poor's Corporation)

COMMERCIAL LOAN RATES

AVERAGES OF RATES CHARGED CUSTOMERS BY BANKS IN PRINCIPAL CITIES

NEW YORK CITY

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
1945												1.71	1.99
1946			1.75			1.84			1.83			1.85	1.82

SEVEN NORTHERN AND EASTERN CITIES (EXCLUDING NEW YORK CITY)

1945												2.23	2.51
1946			2.34			2.51			2.43			2.43	2.43

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COMMERCIAL LOAN RATES

AVERAGES OF RATES CHARGED CUSTOMERS BY BANKS IN PRINCIPAL CITIES

ELEVEN SOUTHERN AND WESTERN CITIES

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
1945												2.38	2.73
1946			2.93			2.97			2.75			2.76	2.85

Source of Data: Federal Reserve Bulletins

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(Supplement 4/23/47)

EARNINGS-PRICE RATIOS ON OUTSTANDING COMMON STOCKS OF FOURTEEN ELECTRIC OPERATING UTILITIES - JANUARY 1940 to MARCH 1947, INCLUSIVE

	1946	1947
January		6.55%
February		6.66
March		6.89
April	4.95 %	
May	5.47	
June	5.46	
July	5.65	
August	6.12	
September	6.59	
October	6.62	
November	6.63	
December	6.47	

The above data is based on the closing market quotations at the end of the month and the latest available earnings for a twelve months' period immediately preceding the particular month. The earnings-price ratios are based on weighted figures.

Source of data: Moody's Public Utility Cumulative Index
Standard & Poor's Stock Guide
Bank & Quotation Record

EARNINGS-PRICE RATIOS OF OUTSTANDING COMMON STOCKS OF FOURTEEN ELECTRIC OPERATING COMPANIES

FEBRUARY 28, 1947

Company	Common Shares Outstanding(C)	Market Price Feb.28,1947(A)	Total Market Price	Latest Earnings(C) Amount	12 Months Ended	Earnings-Price Ratio
Bangor Hydro-Electric Co.	217,216	30-1/2 (B)	$ 6,625,089	$ 664,672	12-31-46	10.03 %
Boston Edison Co.	2,468,656	46-5/8	115,113,428	6,248,026	12-31-46	5.42
Cleveland Electric Illuminating Co.	2,324,564	42-1/8	97,922,258	5,943,656	12-31-46	6.07
Commonwealth Edison Co.	13,732,000	31-1/2	432,558,000	26,370,007	9-30-46	6.10
Consolidated Edison Co. of N.Y.	11,476,527	28-3/8	325,646,453	25,258,092	12-31-46	7.76
Cons. Gas Elec. Lt. & Pr. of Balto.	1,167,397	79-3/4	93,099,911	6,371,122	12-31-46	6.84
Detroit Edison Co.	6,361,300	26-3/4	170,164,775	10,654,541	1-31-47	6.26
Houston Lighting & Power Co.	517,299	90-5/8	46,946,249	3,582,667	11-30-46	7.63
Idaho Power Co.	450,000	36-1/2	16,425,000	1,232,108	12-31-46	7.50
Indianapolis Power & Light Co.	857,802	28	24,018,456	2,375,806	9-30-46	9.89
Pacific Gas & Electric Co.	6,261,357	42	262,976,994	16,992,974	9-30-46	6.46
Pennsylvania Water & Power Co.	429,848	65	27,940,120	2,033,408	12-31-46	7.28
Philadelphia Electric Co.	9,726,240	25	243,156,000	16,927,976	9-30-46	6.96
Southern California Edison Co.,Ltd.	3,182,805	34	108,215,370	6,544,245	9-30-46	6.05
Total			$1,970,808,104	$131,191,130		6.66 %

(A) Source of Data: Bank & Quotation Record, March 10, 1947
(B) Bid Price
(C) Source of Data: Moody's Public Utilities Cumulative Index

Note: Philadelphia Electric Co. $1.00 Dividend Preference Common Stock omitted from above since preference feature places this stock in a distinctive category.

At December 31, 1946, the Common Stock and Surplus represented approximately 43% of the total capitalization of the above fourteen companies.

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38bb

YIELDS ON OUTSTANDING PREFERRED STOCKS OF FOURTEEN ELECTRIC OPERATING UTILITIES JANUARY 1940 TO MARCH 1947, INCLUSIVE

	1946	1947
January		4.16%
February		4.14
March		4.17
April	4.09%	
May	4.06	
June	4.04	
July	4.00	
August	4.07	
September	4.24	
October	4.22	
November	4.24	
December	4.23	

Note:
The above yields are based on the closing quotations at the end of the month, the dividend rate and the number of shares outstanding in order to reflect weighted averages.

Source of data: Standard & Poor's Stock Guide
Bank & Quotation Record
Moody's Public Utility Cumulative Index

YIELDS ON OUTSTANDING PREFERRED STOCKS OF FOURTEEN ELECTRIC OPERATING UTILITIES

FEBRUARY 28, 1947

Company	Preferred Shares Outstanding(G)	Call Price(F)	Market Price 2/28/47(A)	Total Market Price	Dividends	Yield
Bangor Hydro-Electric Co., 7%, $100	25,000	N.C.	170(B)	$ 4,250,000	$ 175,000	4.12%
Cleveland Elec. Illuminating Co., $4.50, No Par	254,989	107	111-1/2(B)	28,431,274	1,147,451	4.04
Consolidated Edison Co. of N.Y., $5.00, No Par	2,188,890	105	107-1/2	235,305,675	10,944,450	4.65
Consol. Gas Elec.Lt. & Pr. Balto., B, 4½%,$100	222,921	113(C)	116	25,858,836	1,003,145	3.88
Consol. Gas Elec.Lt. & Pr. Balto., C, 4%, $100	68,928	106	109-1/2(B)	7,547,616	275,712	3.65
Houston Lighting & Power Co., $4, No Par	97,397	107	110-1/2(B)	10,762,369	389,588	3.62
Idaho Power Co., 4%, $100	100,000	106	107(B)	10,700,000	400,000	3.74
Indianapolis Power & Light Co., 4%, $100	100,000	118	108(E)	10,800,000	400,000	3.7
Pacific Gas & Electric Co., 5½%, $25	1,173,163	N.C.	37-7/8(B)	44,433,549	1,613,099	3.63
Pacific Gas & Electric Co., 6%, $25	4,211,662	N.C.	41	172,678,142	6,317,49	3.66
Pacific Gas & Electric Co., 5%, $25	400,000	N.C.	33-1/4(B)	13,300,000	500,000	3.76
Pennsylvania Water & Power Co., $5, No Par	21,493	110	110(B)	2,364,200	107,465	4.55
Philadelphia Electric Co., 4.40%, $100	274,720	114-1/2(D)	117-1/2	32,279,600	1,208,768	3.74
Philadelphia Electric Co., 3.80%, $100	300,000	108	106	31,800,000	1,140,000	3.58
Southern Calif. Edison Co., Ltd., B, 6%, $25	1,907,256	28-3/4	31-5/8	60,316,971	2,860,884	4.74
Southern Calif. Edison Co.,Ltd., C, 5½%, $25	1,399,601	28-3/4	31	43,387,631	1,924,202	4.43
Total				$734,215,863	$30,407,257	4.14%

Footnotes:

(A) Source of Data: Bank & Quotation Record, March 10, 1947.
(B) Bid price.
(C) Callable at 110 from June 30, 1950 to June 30, 1953.
(D) Callable at 114 from December 31, 1948 to December 31, 1950.
(E) Sale price Feb. 1, 1947 - no bid price available Feb. 28, 1947. Ask price on Feb. 28, 1947 was 109.
(F) Source of Data: Standard & Poor's Stock Guide, March 1947.
(G) Source of Data: Moody's Public Utilities Cumulative Index.

Where shares were outstanding but no quotations were available, the stock was eliminated from the schedule.

Southern California Edison Co., Ltd., 5%, original Cumulative Participating Preferred, $25 par value, was omitted from above since participating feature places this stock in a distinctive category.

ELECTRIC OPERATING UTILITY PREFERRED STOCKS ISSUED DURING THE PERIOD 1935 - 1946, INCLUSIVE, WITH EFFECTIVE DIVIDEND RATE TO COMPANIES AND YIELDS TO PUBLIC AT DATE OF OFFERING

1946

Company and Issue(4)		No. of Shares Offered to Public	Approx. Offering Date (1946)	Net Proceeds to Companies Per Share	Net Proceeds to Companies Total	Effective Dividend Rate to Company	Price to Public Per Share	Price to Public Total	Yield to Public (Percent)
Buffalo Niagara Electric Corp.	3.60%, $100 par	350,000 (1)	Jan.	(2)	(2)	(2)	$102.85	$ (2)	3.50
Potomac Edison Co.	3.60%, $100 par	63,784 (1)	Jan.	(2)	(2)	(2)	101.75	(2)	3.54
Iowa Power & Light Co.	3.30%, $100 par	50,000 (1)	Feb.	(2)	(2)	(2)	101.50	(2)	3.25
Central New York Power Corp.	3.40%, $100 par	200,000	Mar.	(2)	(2)	(2)	101.50	20,300,000	3.35
Central Ohio Light & Power Co.	3.60%, $100 par	12,000	Apr.	(2)	(2)	(2)	102.49	1,229,880	3.51
Public Service Co. of New Hampshire	3.35%, $100 par	102,000 (1)	Apr.	(2)	(2)	(2)	100.00	(2)	3.35
Public Service Co. of Indiana, Inc.	3.50%, $100 par	150,000 (1)	May	(2)	(2)	(2)	100.00	(2)	3.50
Scranton Electric Co.	3.35%, $100 par	53,248	May	(3)	(3)	(3)	101.50	5,404,672	3.30
Central Maine Power Co.	3.50%, $100 par	220,000 (1)	May	(2)	(2)	(2)	101.50	(2)	3.45
Indianapolis Power & Light Co.	4.00%, $100 par	42,814	May	(2)	(2)	(2)	115.00	4,923,610	3.48
Union Electric Co. of Missouri	$3.50, No par	130,000 (1)	May	(2)	(2)	(2)	107.00	(2)	3.27
Jersey Central Power & Light Co.	4.00%, $100 par	125,000	May	(2)	(2)	(2)	103.50	12,937,500	3.86
Ohio Public Service Co.	3.90%, $100 par	156,300	June	(2)	(2)	(2)	102.63	16,041,069	3.80
Iowa Public Service Co.	3.75%, $100 par	42,500	June	(2)	(2)	(2)	101.75	4,324,375	3.69
Pennsylvania Electric Co.	3.70%, $100 par	101,000	June	(2)	(2)	(2)	102.50	10,352,500	3.61
Wisconsin Electric Power Co.	3.60%, $100 par	260,000 (1)	June	(2)	(2)	(2)	101.00	(2)	3.56
Missouri Power & Light Co.	3.90%, $100 par	40,000	July	(2)	(2)	(2)	104.00	4,160,000	3.75
Black Hills Power & Light Co.	4.20%, $100 par	13,500 (1)	July	(2)	(2)	(2)	110.00	(2)	3.82
Newport Electric Corp.	3.75%, $100 par	7,186	July	(2)	(2)	(2)	102.50	736,565	3.66
Northern States Power Co.	$3.60, No par	275,000 (1)	Aug.	(2)	(2)	(2)	102.75	(2)	3.50
Otter Tail Power Co.	$3.60, No par	17,286	Aug.	(2)	(2)	(2)	99.25	1,715,635	3.63
Central Illinois Public Service Co.	4.00%, $100 par	150,000 (1)	Nov.	(2)	(2)	(2)	100.00	(2)	4.00
Philadelphia Electric Co.	3.80%, $100 par	300,000	Dec.	(2)	(2)	(2)	104.11	31,233,000	3.65
Kansas City Power & Light Co.	3.80%, $100 par	100,000	Dec.	(2)	(2)	(2)	102.70	10,270,000	3.70

Source: Moody's Public Utilities Cumulative Supplements - 1946.

Footnotes:

(1) Subject to prior rights of Preferred Stockholders.
(2) Data not available.
(3) This does not represent new financing as stock was formerly held by an affiliate.
(4) Cumulative unless otherwise noted.

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ELECTRIC OPERATING UTILITY COMMON STOCKS OFFERED TO THE PUBLIC DURING 1946, WITH EARNINGS-OFFERING PRICE RATIOS

Line No.	Name of Issue (A)	Approx. Offering Date (B)	No. of Shares Offered (C)	Price to Public: Total (D)	Price to Public: Per Share (E)	Price Per Share to Underwriter (F)	Net Proceeds Per Share To Company (3) (G)	Cost of Flotation Per Share (3): Amount (H)	Cost of Flotation Per Share (3): % of Price To Public (I)	Line No.	Earnings-Offering Price Ratios: Based on Actual Earnings: Earnings Per Share 12 Months Ended (J)	Earnings-Offering Price Ratios: Based on Actual Earnings: Earnings Per Share Amount (K)	Earnings-Offering Price Ratios: Based on Actual Earnings: Earnings-Offering Price Ratio (Percent) (L)	Earnings-Offering Price Ratios: Based on Pro-Forma Earnings: Earnings Per Share 12 Months Ended (M)	Earnings-Offering Price Ratios: Based on Pro-Forma Earnings: Earnings Per Share Amount (N)	Earnings-Offering Price Ratios: Based on Pro-Forma Earnings: Earnings-Offering Price Ratio (Percent) (O)	Line No.
1	Colorado Central Power Co., $10 Par	Mar. 1946	43,750 (1)	$ 1,487,500	$34.00	$32.43	$31.97	$2.03	5.97	1	12/31/45	$2.54	7.48	10/31/45	$1.78	5.24	1
2	Central Maine Power Co., $10 Par	May 1946	371,645 (7)	10,406,060	28.00	26.75	26.63	1.37	4.89	2	3/31/46	1.43	5.01	12/31/45	1.56	5.57	2
3	Indianapolis Power & Light Co., No Par	May 1946	88,564 (4)	2,745,484	31.00	(2)	(2)	(2)	(2)	3	3/31/46	2.64	8.52	(2)			3
4	Pacific Gas & Electric Co., $25 Par	May 1946	177,000 (1)	7,788,000	44.00	(2)	(2)	(2)	(2)	4	12/31/45	2.16	4.91	(2)			4
5	Public Service Co. of N. H., $10 Par	May 1946	133,142	5,192,538	39.00	37.55	37.36	1.64	4.21	5	3/31/46	2.36	6.05	12/31/45	2.06	5.31	5
6	Scranton Electric Co., $5 Par	May 1946	1,214,000 (1)	27,315,000	22.50	21.32	21.27	1.23	5.47	6	12/31/45	1.03	4.58	12/31/45	1.14	5.07	6
7	Columbus and Southern Ohio Elec. Co., $10 Par	May 1946	744,455 (1)	39,828,342	53.50	51.19	51.01	2.49	4.65	7	3/31/46	4.75	8.86	3/31/46	3.06	5.73	7
8	Arkansas-Missouri Power Corp., $5 Par	May 1946	40,000 (1)	720,000	18.00	16.50	16.23	1.77	9.83	8	3/31/46	1.72	9.56	(2)			8
9	Tucson Gas, Electric Light & Power Co., No Par	June 1946	147,000 (1)	5,880,000	40.00	37.81	37.27	2.73	6.82	9	12/31/45	2.55	6.39	(2)			9
10	Dayton Power and Light Co., $7 Par	June 1946	1,530,000 (1)	54,697,500	35.75	33.64	33.56	2.19	6.13	10	3/31/46	1.90	5.32	(2)			10
11	California Electric Power Co., $1 Par	June 1946	169,636	2,247,677	13.25	12.60	12.26	0.99	7.47	11	4/30/46	0.99	7.47	(2)			11
12	Ohio Edison Co., $8 Par	June 1946	204,153	8,421,311	41.25	39.29	39.00	2.25	5.45	12	5/31/46	2.24	5.42	(2)			12
13	Central Ohio Light & Power Co., $10 Par	July 1946	12,135 (8)	394,387	32.50	30.25	29.64	2.86	8.80	13	3/31/46	2.67	8.02	4/30/46	2.07	6.37	13
14	Otter Tail Power Co., $10 Par	Aug. 1946	28,815 (5)	1,476,768	51.25	48.80	(2)	(2)	(2)	14	12/31/45	3.34	6.51	(2)			14
15	Cincinnati Gas & Electric Co., $8.50 Par	Sept. 1946	1,447,525 (1)(6)	37,635,650	26.00	(2)	(2)	(2)	(2)	15	6/30/46	1.66	6.38	5/31/46	1.64	6.31	15
16	Consumers Power Co., No Par	Nov. 1946	500,000	18,000,000	36.00	33.54	33.22	2.78	7.72	16	9/30/46	2.69	7.47	(2)			16

Footnotes: (1) This offering does not represent new financing.
(2) Data not available.
(3) Based on estimates as reflected by Prospectus.
(4) Total offering was 142,967 shares which were subject to pre-emptive rights.
(5) Total offering was 51,216 shares which were subject to pre-emptive rights.
(6) Total offering was 2,040,000 shares which were subject to pre-emptive rights.
(7) Total offering was 373,832 shares which were subject to pre-emptive rights.
(8) Total offering was 30,000 shares which were subject to pre-emptive rights.

Source of Data: Moody's Public Utilities Manuals and Weekly Cumulative Index; Prospectuses and Registration Statements; and Standard & Poor's "Standard Corporati & Poor's "Standard Corporation Descriptions."

43-A

NATIONAL INCOME PAYMENTS

(MILLIONS OF DOLLARS)

Year or Period	Total Income Payments	Compensation of Employees(1)	Entrepreneurial Income and Net Rents and Royalties	Dividends and Interest	Direct and Other Relief	Social Security Benefits and Other Labor Income(2)
Twelve Months Ended						
Oct. 31	161,071	112,278	29,336	11,968	972	6,516
Nov. 30	160,892	111,313	29,529	11,994	980	7,076
Dec. 31	160,759	110,185	29,732	12,223	988	7,631
1946						
Jan. 31	160,449	108,848	29,972	12,409	998	8,222
Feb. 28	159,774	107,363	30,197	12,444	1,010	8,760
Mar. 31	159,287	106,138	30,387	12,486	1,024	9,252
Apr. 30	159,060	105,120	30,620	12,580	1,030	9,710
May 31	158,960	104,210	30,950	12,640	1,040	10,120
June 30	159,040	103,430	31,175	13,025	1,054	10,356
July 31	159,480	102,820	31,751	13,143	1,069	10,697
Aug. 31	160,280	102,790	32,260	13,200	1,080	10,950
Sept.30	161,170	103,220	32,540	13,260	1,090	11,060
Oct. 31	162,400	103,790	33,250	13,290	1,110	10,960
Nov. 30	163,520	104,460	33,890	13,342	1,133	10,695
Dec. 31	165,080	105,240	34,590	13,718	1,181	10,351

Source of Data: Standard & Poor's Trade and Securities-Statistics, Current Statistics Section, Page 8.

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NATIONAL INCOME PAYMENTS AND COST OF LIVING INDEXES

1929 to 1947

Year or Period	National Income Payments 1935-39= 100 (A)	Cost of Living 1935-1939=100(B)	National Income Payments at 1935-39 Prices
(1)	(2)	(3)	(4)
1945	239.1	128.3	186.2
1946	245.0	139.3	175.9
1947			
Jan.	263.3	153.1	172.0.

(A) Data taken from Standard & Poor's Trade & Security Statistics, page 8.

(B) Data taken from Standard & Poor's Trade & Security Statistics, page 12.

46a

INDEXES OF INDUSTRIAL PRODUCTION AND CARLOADINGS

1935 - 1939 = 100

INDUSTRIAL PRODUCTION - COMPOSITE

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
1945	234	236	235	230	225	220	210	186	167	162	168	163	203
1946	160	152	168	165	159	170	172	177	180	181	182	181	170
1947	188	188											

Above figures are adjusted for seasonal variation.

Source of data: Federal Reserve Board Index of Industrial Production as reproduced in Standard & Poor's Trade and Securities Statistics, page 7.

47a

INDEXES OF INDUSTRIAL PRODUCTION AND CARLOADINGS

1935 - 1939 = 100

CARLOADINGS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
1945	144	139	145	141	141	140	139	128	127	118	133	127	135
1946	133	126	139	109	106	133	139	141	138	139	137	140	132

Above figures are adjusted for seasonal variation.

Source of data: Statistics computed by the Board of Governors of the Federal Reserve System from weekly data compiled by the Association of American Railroads, and published in the Federal Reserve Bulletin. The above data for the years 1920-40, inclusive, were taken from Federal Reserve Bulletin for June 1941 (pp. 530-533); and for subsequent months from various issues of the Federal Reserve Bulletin.

49a

WHOLESALE COMMODITY PRICE INDEXES

ALL COMMODITIES, FARM PRODUCTS, FOODS AND INDUSTRIAL PRODUCTS

1926 = 100

ALL COMMODITIES

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
1945	104.9	105.2	105.3	105.7	106.0	106.1	105.9	105.7	105.2	105.9	105.8	107.1	105.8
1946	107.1	107.7	108.9	110.2	111.0	112.9	124.7	129.1	124.8	134.1	139.7	140.9	120.9
1947	141.5	144.6											

Source of Data: Standard & Poor's Trade and Securities Statistics, pages 12 and 13.

50a

WHOLESALE COMMODITY PRICE INDEXES

ALL COMMODITIES, FARM PRODUCTS, FOODS AND INDUSTRIAL PRODUCTS

1926 = 100

FARM PRODUCTS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
1945	126.2	127.0	127.2	129.0	129.9	130.4	129.0	126.9	124.3	127.3	131.1	131.5	128.2
1946	129.9	130.8	133.4	135.4	137.5	140.1	157.0	161.0	154.3	165.3	169.8	168.1	148.6
1947	165.0	170.4											

Source of Data: Standard & Poor's Trade & Securities Statistics, page 12.

51a

WHOLESALE COMMODITY PRICE INDEXES

ALL COMMODITIES, FARM PRODUCTS, FOODS AND INDUSTRIAL PRODUCTS

1926 = 100

FOODS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
1945	104.7	104.7	104.6	105.8	107.0	107.5	106.9	106.4	104.9	105.7	107.9	108.8	106.2
1946	107.3	107.8	109.4	110.8	111.5	112.9	140.2	149.0	131.9	157.9	165.4	160.1	130.4
1947	156.2	162.0											

Source of Data: Standard & Poor's Trade and Securities Statistics, pages 12 and 13.

52a

WHOLESALE COMMODITY PRICE INDEXES

ALL COMMODITIES, FARM PRODUCTS, FOODS AND INDUSTRIAL PRODUCTS

1926 = 100

INDUSTRIAL PRODUCTS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
1945	99.1	99.2	99.2	99.3	99.4	99.6	99.7	99.9	99.8	100.1	100.2	100.5	99.7
1946	100.8	101.3	102.2	103.3	103.9	105.6	109.5	111.6	112.2	115.8	120.7	124.7	109.3
1947	127.6	128.6											

Source of Data: The Wholesale Commodity Price Indexes were computed by the United States Bureau of Labor Statistics and are contained in their publications. The Price Indexes are reproduced in Standard & Poor's Trade and Securities (Published by Standard & Poor's Corporation) Volume 3, Pages D-8 and D-9, dated April 29, 1938, and Current Statistics Section. The above figures were taken from Standard & Poor's Trade and Securities, page 12.

53 a

ESTIMATED LIQUID ASSET HOLDINGS OF BUSINESS AND INDIVIDUALS

1939 - 1946

(In Billions of Dollars)

	Dec. 1939	Dec. 1940	Dec. 1941	Dec. 1942	Dec. 1943	Dec. 1944	Dec. 1945	June 1946
Financial Corporations (3)							$ 4.8	$ 4.9
Non-Financial Corporations							41.3	38.4
Unincorporated Business							27.8	27.2
Total Business Holdings							73.9	70.5
Trust Funds (4)							16.5	17.0
Other Personal Holdings							130.8	135.0
Total Personal Holdings							147.3	152.0
Grand Total (1)							221.2	222.5
Made up as Follows:								
Currency							25.5	25.6
Demand Deposits (2)							60.3	62.9
Time Deposits							47.7	50.9
U.S. Gov't. Securities							87.7	83.1
Grand Total (1)							$221.2	$222.5

(1) Figures for banks, insurance companies, building and loan associations, nonprofit associations, and governmental bodies and agencies are not included in the totals shown.

(2) These figures are estimates of demand deposit balances as they would appear on the records of depositors. They differ from figures based on bank records such as given in regular banking statistics or in the Federal Reserve Survey of Ownership of Demand Deposits presented elsewhere in the Federal Reserve Bulletin. Depositor-record estimates are lower than bank-record estimates; for example, total demand deposits as of June 30, 1946, on a holder-record basis amount to 62.9 billion dollars while on a bank-record basis these deposits amount to 72.8 billion. This is because checks are constantly in the mail, i.e., deducted on payor's records and not yet added on payee's records, and because checks are constantly in the process of collection, i.e., added to payee's deposits as per bank records and not yet deducted from payor's deposits as per bank records.

(3) Includes real estate companies, finance and credit companies, insurance agencies (not carriers), investment trusts, security brokers and dealers, holding companies not otherwise classified, etc.

(4) Includes only amounts administered by corporate trustees.

Source: Federal Reserve Bulletin, November 1946.

FEDERAL POWER COMMISSION
DOCKET NO. IT-5915
PENNSYLVANIA WATER & POWER COMPANY

COST ALLOCATION

Nature of Study

This is a cost allocation based on data for the year 1946. The same principles employed in the allocation based on the data and costs for the year 1944 are employed.

Sources of Data

In this allocation, as in the 1944 allocation, the basic figures used for investment, rate base, fixed costs and operating costs were obtained from the commission Staff's accounting examiners. The engineering and operating data are from reports by Holtwood Company to the Commission. Additional information was furnished by Holtwood Company at the request of the staff.

Explanation of Study

This allocation, based on 1946 data and costs, involves the same six principle steps as did the allocation based on 1944 data and costs. The results are shown in the attached Tables I to VI as more fully explained herein.

(1) Table I

In this table, plant in service is classified according to items assigned directly to individual customers and items of jointly used facilities assigned to the pool for later allocation to all customers on the basis of use.

In this 1946 study, the assignment of facilities used for interchange service is made to Baltimore to accord with the assignment of the net revenue from such service. The Manor Switching Station is assigned 1/3 to the pool and 2/3 to Baltimore to accord with the assignment of the 220 kv lines.

(2) Table II

This table shows the derivation of the rate base, using the results of Table

Cost Allocation

(3) Table III

Table III shows the assignment of operating expense incurred in connection with the property items allocated in Table I to individual customers and the pool.

(4) Table IV

In this table, the total costs are assembled in conformity with the allocations in the preceding tables, Tables I to III.

(5) Table V

In this table, the costs of the jointly used property are classified into fixed and variable groups and finally into capacity and energy components. From the totals of the capacity and energy components, unit capacity and energy costs are developed. These unit costs are to be applied respectively to all of the capacity and energy supplied by Holtwood Company from its own resources.

The total cost of hydro production is classified at 75 percent to the capacity component and 25 percent to the energy component. The method of deriving these percentages for the 1946 study is the same as that used on the 1944 study.

(6) Table V-A

Table V-A is an analysis of Holtwood Company's generating capacity for 1946, made in a similar manner to that for 1944. The basic figure for load carrying capability of the hydro plants, based on minimum river flow and the actual loads during the peak week of 1946, is computed to be 167,000 kilowatts with weekly recovery of pondage. To this is added a total amount of 83,000 kilowatts, representing the estimated additional capacity value of the hydro plants, which it would appear reasonable for a company carrying the responsibility for maintaining continuous service to depend on as a reduction of its steam capacity requirements.

In estimating this additional capacity value, consideration has been given to its use for scheduled maintenance and to the use of Safe Harbor pondage for both sustained load and short period emergencies. To the total hydro capacity thus determined

Cost Allocation

is added the short time peak capacity of the Holtwood steam plant of 28,000 kilowatts giving a total dependable capacity of 278,000 kilowatts. After deduction for losses and station use, adjusted to the 278,000 kilowatt load, the net dependable capacity becomes 256,000 kilowatts.

The total dependable hydro capacity as determined in this 1946 study is divided between Holtwood and Safe Harbor on the same basis as it was divided in the 1944 study.

The determination of the balance of dependable capacity available for Baltimore in 1946 by the same method as was used in the 1944 study results in a deficit of 3,200 kilowatts to be supplied either by backfeed from Baltimore or from Baltimore's portion of Safe Harbor capacity.

(7) Table V-B

Table V-B is an analysis of the energy at Holtwood's disposal, both from its own resources and that supplied by Baltimore through backfeed and by diversion from Safe Harbor. In column 4, the amounts available for sale in Pennsylvania from these two sources are shown and column 5 shows the percent of each to the total. From these two sources the total firm and interchange power sales in Pennsylvania are supplied. Based upon the proportion of the available supply which each source contributes, firm power sales of 489,835,000 kilowatt hours and net interchange sales of 125,801,000 kilowatt hours are supplied from Holtwood's resources and firm power sales of 256,451,000 kilowatt hours from energy supplied by Baltimore.

This 256,451,000 kilowatt hours is the supply from Baltimore for which no costs are included in the amounts which have been allocated. Its cost, therefore, at Baltimore's average production cost of 4.7 mills is added to the cost of serving the Pennsylvania firm loads and allocated to each customer on the basis of energy use.

The delivery to Baltimore at Highlandtown of 376,684,000 kilowatt hours, plus the net interchange sales of 125,801,000 kilowatt hours supplied from Holtwood's resources, or a total of 502,485,000 kilowatt hours is charged to Baltimore at Holtwood's

Cost Allocation

average energy cost.

(8) Table VI

In Table VI, the costs previously allocated are assembled for each customer and for Baltimore in the same manner as in the 1944 study. Baltimore is then credited with the energy supplied through backfeed from its steam generation and by diversion from its share of the Safe Harbor output at its average production cost of 4.7 mills. Baltimore is also credited with the dependable capacity which it must stand ready to supply at a rate of $12.00 per kilowatt. This rate is not determined by any analysis of Baltimore's capacity cost or by any mathematical process, but is used as a reasonable component of the cost of supplying the firm power requirements in Pennsylvania.

The increase in the credit to Baltimore over that shown in Exhibit 64 is due in a small part to this credit for capacity, but mostly from the credit for energy delivered to Holtwood from Baltimore's portion of Safe Harbor.

This results in reducing the net cost of service supplied to Baltimore and correspondingly increases the amount of revenue in excess of allocated cost applicable to Baltimore.

TABLE I

PLANT IN SERVICE - 1946

HOLTWOOD AND SUSQUEHANNA AVERAGE PLANT ASSIGNED TO INDIVIDUAL CUSTOMERS AND THE POOL

		P.P.& L.Co.	P. E. Co.	M. E. Co.	P.R.R. Co.	Baltimore	Pool	Total Service
	Production Plant							
1	Hydro	$	$	$	$	$	$15,899,063	$15,899,063
2	Steam						4,611,716	4,611,716
3	Total Production Plant						$20,510,779	$20,510,779
	Transmission Plant							
4	Holtwood - Highlandtown Line					1,371,025		1,371,025
5	Highlandtown Substation					973,878		973,878
6	Baltimore - Gunpowder Line					199,158		199,158
7	Safe Harbor - Westport Line (1/3 Pool, 2/3 Baltimore)					1,158,802	579,401	1,738,203
8	Safe Harbor - Riverside Line (1/3 Pool, 2/3 Baltimore)					1,015,958	507,979	1,523,937
9	Manor Switching Station (1/3 Pool, 2/3 Baltimore)					114,028	57,014	171,042
10	Ellicott City - Takoma Line (1/3 Pool, 2/3 Baltimore)					210,989	105,494	316,483
11	Ellicott City Switching Station (1/3 Pool, 2/3 Baltimore)					43,966	21,983	65,949
12	Safe Harbor Perryville Line (91% to Baltimore, 9% to R.R. in Pa.)				99,310	1,004,129		1,103,439
13	Fishing Creek Substation				3,162			3,162
14	Conestoga Substation (47% to Baltimore, 53% to R.R. in Pa.)				627,195	556,191		1,183,386
15	Perryville Switching Station (91% to Baltimore, 9% to R.R. in Pa.)				175	1,772		1,947
16	Violet Hill Substation (55% to M. E., 45% to Baltimore)			101,486		83,034		184,520
17	Holtwood - York Line (55% to M. E., 45% to Baltimore)			277,539		227,077		504,616
18	Holtwood - Coatesville Line		593,009					593,009
19	Newlinville Switching Station		9,959					9,959
20	Holtwood - Lancaster Line	17,025						17,025
21	Engleside Switching Station	7,051						7,051
22	Donegal Tap Switch and Substation	12,603						12,603
23	S. Manheim and S. Akron Switching Stations	3,121						3,121
24	Mt. Nebo Substation	774						774
25	Balance of Transmission System						1,473,544	1,473,544
26	Total Transmission Plant	$40,574	$602,968	$379,025	$729,842	$6,960,007	$ 2,745,415	$11,457,830
27	Intangible Plant						173,070	173,070
28	General Plant						$ 797,740	797,740
29	Total Plant in Service	$40,574	$602,968	$379,025	$729,842	$6,960,007	$24,227,004	$32,939,420
30	Percent of Total	0.1	1.8	1.2	2.2	21.1	73.6	100.0

Table II

Development of Rate Base
For
Facilities Assigned to Individual Customers and The Pool

		P.P. & L. Co.	P. E. Co.	~~Ed. Light Co.~~ M.E. Co	P.R.R. Co.	Baltimore	Pool	Total Service
		1	2	3	4	5	6	7
1	Total Plant in Service	$40,574	$602,968	$379,025	$729,842	$6,960,007	$24,227,004	$32,939,420
2	Depreciation Reserve	5,401	116,266	84,771	136,570	1,251,664	7,407,201	9,001,873
3	Net Plant in Service	35,173	486,702	294,254	593,272	5,708,343	16,819,803	23,937,547
	Working Capital							
4	Cash Working Capital	-	2,282	1,015	1,521	32,461	216,321	253,600
5	Materials & Supplies	321	5,785	3,857	7,071	67,817	311,549	396,400
6	Total Working Capital	321	8,067	4,872	8,592	100,278	527,870	650,000
7	Rate Base	$35,494	$494,769	$299,126	$601,864	$5,808,621	$17,347,673	$24,587,547

Table III

HOLTWOOD AND SUSQUEHANNA OPERATING EXPENSE - 1946
ITEMS ASSIGNED TO INDIVIDUAL CUSTOMERS AND THE POOL

		P.P. & L. Co.	P.E. Co.	M.E. Co.	P.R.R. Co.	Baltimore	Pool	Total Service
	Production Cost Exclusive of Purchased Power							
1	Hydro	$	$	$	$	$	$ 269,145	$ 269,145
2	Steam - Fuel and water						385,221	385,221
3	Steam - Boiler Plant & Coal Handling Equip. Mt.						55,328	55,328
4	Steam - Other Operating and Maintenance						243,018	243,018
5	Total Production Expenses						$ 952,712	$ 952,712
	Transmission							
6	Highlandtown Substation					95,385		95,385
7	Holtwood, Highlandtown & Baltimore - Gunpowder Lines					51,320		51,320
8	Ellicott Switching Station (1/3 Pool, 2/3 Balt.)					541	270	811
9	Safe Harbor - Westport, S. H. - Riverside, and Ellicott - Washington Lines (1/3 Pool, 2/3 Balt.)					62,250	31,125	93,375
10	Conestoga Substation (47% Balt., 53% to R. R. in Pa.)				9,342	8,285		17,627
11	Safe Harbor - Perryville Line (91% Balt., 9% to R. R. in Pa.)				2,251	22,764		25,015
12	Holtwood - Coatesville Line		17,557					17,557
13	Violet Hill Substation (55% to ME, 45% to Balt.)			2,407		1,970		4,377
14	Holtwood - York Line			5,508		4,507		10,015
15	Manor Substation (1/3 Pool, 2/3 Balt.)					376	753	1,129
16	Balance of Transmission Expense	811					91,062	91,873
17	Total Transmission Expense	$811	$ 17,557	$ 7,915	$ 11,593	$247,398	$ 123,210	$ 408,484
18	Administrative and General Expenses						571,429	571,429
19	Total Operating Expense Exclusive of Purchased Power	$811	$ 17,557	$ 7,915	$ 11,593	$247,398	$1,647,351	$1,932,625
20	Percent of Total	-	0.9	0.4	0.6	12.8	85.3	100.0

TABLE III-A

RECONCILIATION OF OPERATING EXPENSE ALLOCATED IN TABLE III WITH EXPENSE REPORTED BY HOLTWOOD IN F.P.C. FORM 1

Operating Expense Reported for 1946		$2,486,219
Net Revenue from Interchange Sales in Pennsylvania which are Reported as a Credit Expense		1,127,699
		$3,613,918
Susquehanna Capital Stock and Property Taxes	$ 66,585	
Susquehanna Depreciation Expense	129,605	
Items Included in Transmission Expense		196,190
		$3,417,728
Less Safe Harbor Bill as Rendered		1,016,501
		$2,401,227
Less Credit to Administrative and General Expense:		
Credit in Holtwood's Bill to Baltimore	$ 15,293	
Regulatory Commission Expenses	319,559	
Less Credit Misc. Revenue	133,750	
		468,602
Balance of Operating Expense Allocated in Table III		$1,932,625

Table IV

ASSEMBLY OF TOTAL COSTS ASSIGNED DIRECTLY TO CUSTOMERS AND THE POOL

		P.P. & L. Co. 1	P.E. Co. 2	Ed. Lt. & Pr. Co. 3	P.R.R. Co. 4	Baltimore 5	Pool 6	Total Service 7
1	Operating Expense	$ 811	$17,557	$ 7,915	$11,593	$247,398	$1,647,351	$1,932,625
2	Bill for Safe Harbor				24,581	21,798	1,007,185	1,053,564
3	Taxes	7,427	10,244	6,900	13,846	133,584	302,186	474,187
4	Depreciation Expense	766	6,704	4,744	13,925	79,329	362,406	467,874
5	Return 5 Percent	1,775	24,738	14,956	30,093	290,431	867,384	1,229,377
6	Total Cost	$10,779	$59,243	$34,515	$94,038	$772,540	$4,186,512	$5,157,627

Table V

ALLOCATION OF POOL COSTS TO CAPACITY AND ENERGY COMPONENTS AND DEVELOPMENT OF UNIT COSTS PER KILOWATT AND PER KILOWATT-HOUR

		Production Facilities			Transmission Facilities	Total Jointly Used Plant
			Steam			
		Hydro	Variable	Fixed		
		1	2	3	4	5
1	Production Plant	$15,899,063	$	$4,611,716	$	$20,510,779
2	Transmission System				2,745,415	2,745,415
3	Total Jointly Used Plant Directly Classified	15,899,063		4,611,716	2,745,415	23,256,194
4	Percent Total	68.4		19.8	11.8	100.0
5	Intangible and General Plant Allocated	664,034		192,220	114,556	970,810
6	Total Jointly Used Plant in Service	16,563,097		4,803,936	2,859,971	24,227,004
7	Depreciation Reserve	4,887,434		1,707,542	812,225	7,407,201
8	Net Investment	11,675,663		3,096,394	2,047,746	16,819,803
9	Working Capital					
10	Material and Supplies	162,224		121,339	27,986	311,549
11	Cash	54,080		137,364	24,877	216,321
12	Total Working Capital	216,304		258,703	52,863	527,870
13	Rate Base	$11,891,967	$	$3,355,097	$2,100,609	$17,347,673
	Total Cost of Service					
14	Operating Expense Excluding Purchased Power	$ 412,002	$ 674,264	$ 372,161	$ 188,924	$ 1,647,351
15	Taxes					
16	Property and Capital Stock and Income (Plant Ratio)	190,907		55,262	32,934	279,103
17	Retirement and Unemployment and Misc. (Operating Ratio)	5,771	9,441	5,217	2,654	23,083
18	Depreciation Expense	197,868		116,457	48,081	362,406
19	Return - 5% of Rate Base	594,598		167,755	105,031	867,384
20	Purchased Power	1,007,185				1,007,185
21	Total Pool Cost	$ 2,408,331	$ 683,705	$ 716,852	$ 377,624	$ 4,186,512
	Classification to Demand and Energy Components		Total	Capacity	Energy	
22	Total Hydro Power Cost, 74.85% Capacity		$2,408,331	$1,802,636	$ 605,695	
23	Variable Steam Costs		683,705		683,705	
24	Fixed Steam Cost		716,852	716,852		
25	Transmission Cost		377,624	377,624		
26	Total Cost		$4,186,512	$2,897,112	$1,289,400	
27	Unit Cost (154,000 Kw Capacity) (992,320 Kwh Energy)			$18.81/Kw	1.30 Mills/Kwh	

TABLE V-A

DEPENDABLE CAPACITY AVAILABLE TO BALTIMORE

1946

		Holtwood Steam (1)	Holtwood Hydro (2)	Safe Harbor (3)	Total Hydro (4)	Total Hydro and Steam (5)
1	Installed Capacity	26,000 kw	104,000 kw	230,000 kw	334,000 kw	360,000 kw
2	Holtwood and Safe Harbor - % of total hydro		31.14	68.86	100.00	
3	Dependable Capacity on weekly recovery cycle under Min. flow & peak load conditions				167,000 kw	
4	Additional Capacity value for maintenance, short period loads, from use of pondage, etc.				83,000 kw	
5	Total Dependable Capacity allocated on basis of installed capacity	28,000 kw	77,844 kw	172,156 kw	250,000 kw	278,000 kw
6	Percent of Total Capacity	10.1	28.0	61.9	89.9	100.0
7	Hydro Dependable Capacity in Percent of Total Installed Hydro Capacity				74.85	
8	Reported Station Use and Transmission Loss Prorated to Dependable Capacity	2,216 kw	6,160 kw	13,624 kw	19,784 kw	22,000 kw
9	Net Dependable Capacity available for Load	25,784 kw	71,684 kw	158,532 kw	230,216 kw	256,000 kw

Demands of Pennsylvania Customers on System Peak

		Firm Loads	Firm Loads Plus 10% Reserve
10	P.P. & L. Co.	55,000 kw	60,500 kw
11	P.E. Co.	27,000 kw	29,700 kw
12	M.E. Co.	21,000 kw	23,100 kw
13	Total wholesale	103,000 kw	113,300 kw
14	P.R.R. Co. Dec. Billing demand allocated to Pa.	36,557 kw	40,212 kw
15	Total	139,557 kw	153,512 kw

16	Balance available to Baltimore from Holtwood and Safe Harbor	153,512 kw
17	Less Baltimore's two-thirds share of Safe Harbor	102,488 kw
18	Balance available to Baltimore from Holtwood	105,688 kw
		(3,200) kw

TABLE V-B

SYSTEM LOAD DATA - 1000's KWH - 1946

ENERGY AVAILABLE FROM HOLTWOOD RESOURCES PLUS BACKFEED AND DIVERSION SUPPLIED BY BALTIMORE

		Holtwood Resources			Available for Firm & Intg. Sale in Pa.		Energy Sales in Pennsylvania					Delivery to Baltimore & Interchange From Holtwood Resources	Baltimore Energy for Firm Power in Pa.
								From Holtwood Resources		From Baltimore Supply			
		Steam (1)	Hydro (2)	Total (3)	Amount (4)	% (5)	Total (6)	% (7)	Amount (8)	% (9)	Amount (10)	(11)	(12)
1	Net Generation	166,112	592,689	758,801									
2	Holtwood entitlement from Safe Harbor			292,323									
3	Total Holtwood resources			1,051,124									
4	Transmission loss - 66 Kv lines			58,804									
5	Net delivery			992,320									
6	Delivery to Baltimore at Highlandtown			376,684								376,684	
7	Balance of Holtwood Resources				615,636	65.6%							
	Supply by Baltimore												
8	Backfeed on 220 Kv lines	157,961											
9	Backfeed on Highlandtown line	1,676											
10	Diversion from Balt's 2/3 of Safe Harbor	162,677											
11	Total supply by Baltimore				322,314	34.4%							
12	Total available supply for firm and interchange sales in Pa.				937,950	100.0%							
13	Total firm load requirements in Pa.						746,286	65.6%	489,835	34.4%	256,451		256,451
14	Net interchange sales in Pa.						191,664	65.6%	125,801	34.4%	65,863	125,801	
15	Totals						937,950		615,636		322,314	502,485	256,451

TABLE V-C

OPERATING EXPENSE
OPERATION AND MAINTENANCE OF JOINTLY USED FACILITIES

		Production				
				Steam		
		Hydro	Fixed	Variable	Transmission	Total
		1	2	3	4	5
1.	Total Hydro	$269,145				$ 269,145
	STEAM					
2.	Fuel and Water			$385,221		385,221
3.	Boiler and Coal Equip. Mt.			55,328		55,328
4.	Other Steam		$243,018			243,018
5.	Transmission				$123,210	123,210
6.	Subtotal	$269,145	$243,018	$440,549	$123,210	$1,075,922
7.	Percent Total	25.0	22.6	40.9	11.5	100.0
8.	Administrative and General	$142,857	$129,143	$233,715	$ 65,714	$ 571,429
9.	Total	$412,002	$372,161	$674,264	$188,924	$1,647,351

Table VI

APPLICATION OF UNIT COSTS TO CUSTOMER'S MEASURED LOADS
ASSEMBLY OF CAPACITY, ENERGY AND SPECIAL FACILITY COSTS FOR EACH CUSTOMER
COMPARISON OF TOTAL COST OF SERVICE WITH REVENUES COLLECTED

		Noncoincident Maximum Demands - kw	Firm Energy Sales 1000 kwh	Capacity Cost	Firm Energy[1] Cost	Special Facility Cost	Capacity Supply from Baltimore	Total Cost	Total Revenue	Excess Revenue Amount	Excess Revenue %
		1	2	3	4	5	6	7	8	9	10
1	P.P. & L. Co.	67,000	308,569	$1,260,432	$ 761,536	$ 10,779	$16,707	$2,049,454	$1,958,356	$ (91,098)	(4.00)
2	P.E. Co.	26,000	135,629	$ 489,123	$ 334,726	$ 59,243	$ 6,483	889,575	948,861	59,286	2.60
3	M.E. Co.	23,000	88,606	$ 432,685	$ 218,675	$ 34,515	$ 5,735	691,610	667,455	(24,155)	(1.06)
4	P.R.R. in Pa.	38,000	213,482	$ 714,872	$ 526,864	$ 94,038	$ 9,475	1,345,249	1,483,798	138,549	6.09
5	Baltimore	-			($ 552,401)[3]	$772,540	($38,400)[2]	181,739	2,374,428	2,192,689	96.37
6	Total	154,000	746,286	$2,897,112	$1,289,400	$971,115	0	$5,157,627	$7,432,898	$2,275,271	100.00

1/ Firm energy supplied: 65.6% from Holtwood resources at a cost of 1.3 mills
34.4% from Diversion and Backfeed at a cost of 4.7 mills
Cost of firm energy computed at the weighted average cost of 2.47 mills

2/ Capacity supply 3,200 kw at $12.00 per kw - 38,400

3/ Delivery to Baltimore and interchange sales from Holtwood resources 502,485,000 kwh at 1.3 mills $ 652,919
Baltimore supply for firm power sales in Pennsylvania 256,451,000 kwh at 4.7 mills $1,205,320
Net credit to Baltimore. $ 552,401

TABLE VI-A

RECONCILIATION OF REVENUE SHOWN IN TABLE VI WITH REPORTED REVENUE FROM BALTIMORE AND PENNSYLVANIA RAILROAD IN PENNSYLVANIA

	Baltimore	PRR in Penna.
Revenue as reported	$1,104,952	$1,625,575
Revenue from net interchange in Pa.	1,127,699	
Adjustment of revenue received for special facilities from PRR in accordance with allocation of costs of special facilities	141,777	(141,777)
	$2,374,428	$1,483,798

ALLOCATION

Table I

PLANT IN SERVICE 1944
HOLTWOOD AND SUSQUEHANNA AVERAGE PLANT ASSIGNED TO INDIVIDUAL CUSTOMERS AND THE POOL

		P.P. & L. Co. 1	P.E. Co. 2	Ed. Lt. & Pr. Co. 3	P.R.R. Co. 4	Baltimore 5	Pool 6	Total Service 7
	Plant in Service							
	Production Plant							
1	Hydro	$	$	$	$	$	$15,847,486	$15,847,486
2	Steam						4,527,533	4,527,533
3	Total Production Plant						20,375,019	$20,375,019
	Transmission Plant							
4	Holtwood Highlandtown Line					1,371,281		1,371,281
5	Highlandtown Substation					971,877		971,877
6	Baltimore-Gunpowder Line					171,357		171,357
7	Safe Harbor-Westport Line (1/3 Pool, 2/3 Baltimore)					1,158,300	579,150	1,737,450
8	Safe Harbor - Riverside Line " "					1,012,710	506,355	1,519,065
9	Manor Switching Station " "					114,166	57,083	171,249
10	Ellicott City - Takoma Line " "					210,772	105,385	316,157
11	Ellicott City Switching Station " "					43,590	21,794	65,384
12	Safe Harbor Perryville Line (91% Balt., 9% R.R. in Pa.)				99,479	1,005,843		1,105,322
13	Connestoga Substation (45.1% Balt., 54.9% R.R. in Pa.)				647,933	532,272		1,180,205
14	Perryville Switching Station (91% Balt., 9% R.R. in Pa.)				66	662		728
15	Violet Hill Substation			393,418				393,418
16	Holtwood-York Line (29% Ed. Lt. Pr. Co., 71% Balt.)			146,426		358,492		504,918
17	Holtwood-Coatsville Line		586,725					586,725
18	Newlinville Switching Station		9,959					9,959
19	Holtwood-Lancaster Line	17,025						17,025
20	Engleside Switching Station	6,635						6,635
21	Donegal Tap Switching and Substation	12,609						12,609
22	S. Manheim and S. Akron Switching Sta.	3,149						3,149
23	Balance of Transmission System						1,388,841	1,388,841
24	Total Transmission Plant	39,418	596,684	539,844	747,478	6,951,322	2,658,608	11,533,354
25	Intangible Plant						173,070	173,070
26	General Plant						779,707	779,707
27	Total Plant in Service	$39,418	$596,684	$539,844	$747,478	$6,951,322	$23,986,404	$32,861,150
28	Percent of Total	0.1	1.8	1.6	2.3	21.2	73.0	100.0

TABLE II

DEVELOPMENT OF RATE BASE 1944
FOR
FACILITIES ASSIGNED TO INDIVIDUAL CUSTOMERS AND THE POOL

		P.P. & L. Co. 1	P.E. Co. 2	Ed. Lt. & Pr. Co. 3	P.R.R. Co. 4	Baltimore 5	Pool 6	Total Service 7
1	Total Plant in Service	$ 39,418	$596,684	$539,844	$747,478	$6,951,322	$23,986,404	$32,861,150
2	Depreciation Reserve	4,375	106,365	136,034	119,781	1,146,512	6,465,051	7,978,118
3	Net Plant in Service	$ 35,043	$490,319	$403,810	$627,697	$5,804,810	$17,521,353	$24,883,032
	Working Capital							
4	Cash Working Capital	-	2,016	4,480	1,344	26,880	189,280	224,000
5	Material and Supplies	290	5,223	4,643	6,675	61,521	287,648	366,000
6	Total Working Capital	$ 290	$ 7,239	$ 9,123	$ 8,019	$ 88,401	$ 476,928	$ 590,000
7	Rate Base	$ 35,333	$497,558	$412,933	$635,716	$5,893,211	$17,998,281	$25,473,032

TABLE III

HOLTWOOD AND SUSQUEHANNA OPERATING EXPENSE - 1944
ITEMS ASSIGNED TO INDIVIDUAL CUSTOMERS AND THE POOL

	Holtwood and Susquehanna	P.P. & L. Co. 1	P.E. Co. 2	Ed. Lt. & Pr. Co. 3	P.R.R. Co. 4	Baltimore 5	Pool 6	Total Service 7
	Production Cost Exclusive Of Purchased Power							
1	Hydro						$ 224,230	$ 224,230
2	Steam - Fuel And Water						332,035	332,035
3	Steam - Boiler Plant and Coal Handling Equipment Mt.						53,152	53,152
4	Steam - Other Operating and Maintenance						201,310	201,310
5	Total Production Expenses						$ 810,727	$ 810,727
	Transmission							
6	Highlandtown Substation					$ 78,661		$ 78,661
7	Manor Substation (2/3 Baltimore, 1/3 Pool)					516	$ 258	774
8	Holtwood-Highlandtown and Baltimore-Gunpowder Lines					41,474		41,474
9	Elliott Switching Station (2/3 Baltimore, 1/3 Pool)					739	369	1,108
10	Safe Harbor - Westport, Safe Harbor - Riverside and Elliott-Washington Lines (2/3 Baltimore, 1/3 Pool)					49,633	24,817	74,450
11	Conestoga Substation (45.1% Baltimore, 54.9% to R.R. in Pa.)				$7,629	6,267		13,896
12	Safe Harbor - Perryville Line (91% Baltimore, 9% R.R. in Pa.)				1,537	15,537		17,074
13	Holtwood-Coatesville Line		$15,012					15,012
14	Violet Hill Substation			30,195				30,195
15	Holtwood-York Line (29% to Ed. Lt. Pr. Co., 71% to Baltimore)			$2,518		6,164		8,682
16	Balance of Transmission Expense	$788					72,392	73,180
17	Total Transmission Expense	$788	$15,012	$32,713	$9,166	$198,991	$ 97,836	$ 354,506
18	Administrative And General Expense						100,891	100,891
19	Total Operating Expense Exclusive of Purchased Power	$788	$15,012	$32,713	$9,166	$198,991	$1,009,454	$1,656,124
20	Percent of Total	-	0.9	2.0	0.6	12.0	84.5	100.0

Table III - a

RECONCILIATION OF OPERATING EXPENSE ALLOCATED IN TABLE III WITH EXPENSE REPORTED BY HOLTWOOD IN F.P.C. FORM 1

Operating Expense, 1944, as reported		$2,579,099
Revenue from Interchange Sales in Pennsylvania 1/		628,867
		$3,207,966
Susquehanna Capital Stock and Property Taxes	$ 65,060	
Susquehanna Depreciation	128,776	
		193,836 2/
		$3,014,130
Less Safe Harbor Bill as rendered		1,214,553
		1,799,577
Less Adjustment Credit to Admin. and Gen. Exp.		9,703
Less Credit Misc. Revenue		133,750
Balance of Operating Exp. Allocated on Table III		$1,656,124

1/ Revenue from interchange sales to customers in Pennsylvania is shown in the company's report as a credit to Operating Expenses. In this study the amount of these sales has been transferred to Revenue.

2/ Operating Expenses as reported contain the total costs of Susquehanna Transmission Company of Maryland, which include Taxes and Depreciation. These are taken out for separate handling and are combined with Taxes and Depreciation of Holtwood.

TABLE IV

ASSEMBLY OF TOTAL COSTS ASSIGNED DIRECTLY TO CUSTOMERS AND THE POOL

		P.P. & L. Co. 1	P.E. Co. 2	Ed. Lt. & Pr. Co. 3	P. R. R. Co. 4	Baltimore 5	Pool 6	Total Service 7
1	Operating Expense	$ 788	$15,012	$32,713	$ 9,166	$198,991	$1,399,454	$1,656,124
2	Bill for Safe Harbor Power				25,748	21,152	945,635	992,535
3	Taxes	7,915	11,425	8,838	14,958	147,083	346,745	536,964
4	Depreciation Expense	723	6,548	9,385	14,315	78,482	354,759	464,212
5	Return 5 Percent	1,767	24,878	20,647	31,786	294,660	899,914	1,273,652
6	Total Cost	$11,193	$57,863	$71,583	$95,973	$740,368	$3,946,507	$4,923,487

Table V

ALLOCATION OF POOL COSTS TO CAPACITY AND ENERGY COMPONENTS AND DEVELOPMENT OF UNIT COSTS PER KILOWATT AND PER KILOWATT-HOUR

		Production Facilities			Transmission Facilities	Total Jointly Used Plant
		Hydro	Steam Variable	Steam Fixed		
		1	2	3	4	5
1.	Production Plant	$15,847,486		$4,527,533		$20,375,019
2.	Transmission System				$2,658,608	2,658,608
3.	Total Jointly Used Plant Directly Classified	15,847,486		4,527,533	2,658,608	23,033,627
4.	Percent of Total	68.80		19.66	11.54	100.00
5.	Intangible and General Allocated	655,511		187,316	109,950	952,777
6.	Total Jointly Used Plant in Service	16,502,997		4,714,849	2,768,558	23,986,404
7.	Depreciation Reserve	4,385,808		1,490,064	589,179	6,465,051
8.	Net Investment	12,117,189		3,224,785	2,179,379	17,521,353
	Working Capital					
9.	Cash	46,714		122,180	20,386	189,280
10.	Materials and Supplies	146,087		117,057	24,504	287,648
11.	Total	192,801		239,237	44,890	476,928
12.	Rate Base	$12,309,990		$3,464,022	$2,224,269	$17,998,281
	Total Cost of Service					
13.	Operating Expense excluding Purchased Power	$ 345,382	$ 593,276	$ 310,091	$ 150,705	$ 1,399,454
	Taxes					
14.	Property, Capital Stock and Income (Plant Ratio)	224,659		64,197	37,683	326,539
15.	Retirement, Unemployment and Misc. (Operating Ratio)	4,987	8,565	4,478	2,176	20,206
16.	Depreciation Expense	197,405		114,467	42,887	354,759
17.	Return - 5% of Rate Base	615,500		173,201	111,213	899,914
18.	Purchased Power	945,635				945,635
19.	Total Pool Cost	$ 2,333,568	$ 601,841	$ 666,434	$ 344,664	$ 3,946,507
	Classification to Demand and Energy Components			Total Capacity	Energy	
20.	Total Hydro Power Cost, 67.5% Capacity			$2,333,568	$1,575,158	$ 758,410
21.	Variable Steam Costs			601,841		601,841
22.	Fixed Steam Costs			666,434	666,434	
23.	Transmission Cost			344,664	344,664	
24.	Total Cost			$3,946,507	$2,586,256	$1,360,251
25.	Unit Costs (146,469 kw) (988,818,000 kwh)				$17.66 per kw	1.38 mills/ kwh

Table V-A

BALANCE OF DEPENDABLE CAPACITY AVAILABLE FOR BALTIMORE CO. INCLUDING ONE-HALF OF ADDITIONAL CAPACITY FROM S.H. PONDAGE

		Holtwood Steam (1)	Holtwood Hydro (2)	Safe Harbor (3)	Total Hydro (4)	Total Hydro and Steam (5)
1	Installed Capacity	26,000 kw	104,000 kw	230,000 kw	334,000 kw	360,000 kw
2	Holtwood and Safe Harbor - % of total hydro		31.14	68.86	100.0	
3						
4	Dependable Capacity on regular weekly cycle of draw and refill				197,000 kw	
5	Plus one-half of additional capacity from use of S.H. pondage				28,500 kw	
6	Total dependable capacity allocated on basis of installed capacity	26,000 kw	70,221 kw	155,279 kw	225,500 kw	251,500 kw
7	Percent of total	10.3	27.9	61.8	89.7	100.00
8	Percent of Installed Capacity	100.0			67.5%	
9						
10	Reported station use and trans. loss allocated to dependable capacity	1.854 kw	5,022 kw	11,124 kw	16,146 kw	18,000 kw
11						
12	Net Dependable Capacity available for load	24,146 kw	65,199 kw	144,155 kw	209,354 kw	233,500 kw
13						
14	Demands of Pa. Customers on System Peak Form 12 - Pool					

		Non Firm	Firm	Firm Loads Plus 10% Reserve	
15					
16	P.P. & L. Co.	2,000 kw	52,000 kw	57,200 kw	
17	P.E. Co.	10,000 kw	23,000 kw	25,300 kw	
18	Ed. L. & P. Co.		9,000 kw	9,900 kw	
19	M.E. Co.	12,000 kw			
20	Total for Resale	24,000 kw	84,000 kw	92,400 kw	92,400 kw
21	Balance for Baltimore				
22	and P.R.R.				141,100 kw
23	P.R.R. Co. in Pa. Dec. billing		28,397 kw	31,237 kw	31,237 kw
24	Total		112,397 kw	123,637 kw	
25	Balance available for Baltimore from Holtwood and Safe Harbor				109,863 kw
26					
27	Less Baltimore's two-third share of S.H.				96,103 kw
28					
29	Balance available for Baltimore from Holtwood Co.				13,760 kw
30	Peak Load To Be Carried by Dependable Capacity with 10% Reserve				12,509 kw

TABLE V-B

SYSTEM LOAD DATA - 1000 KWH 1944

ENERGY AVAILABLE FROM HOLTWOOD RESOURCES PLUS BACKFEED AND DIVERSION SUPPLIED BY BALTIMORE

		Holtwood Resources			Available For Firm and Interchange Sales in Pa.		Energy Sales in Pa.					Delivery to Balto. and Interchange From Hd. Resources	Baltimore Energy For Firm Power in Pa.
								From Holtwood Resources		From Baltimore Supply			
		Steam	Hydro	Total	Amount	%	Total	%	Amount	%	Amount		
		1	2	3	4	5	6	7	8	9	10	11	12
1	Net Generation	171,091	512,765	683,856									
2	Holtwood Entitlement from Safe Harbor			257,381									
3	Total Holtwood Resources			941,237									
4	Transmission losses			56,601									
5	Net Delivery			884,636									
6	Delivery to Baltimore at Highlandtown			321,761								321,761	
7	Balance of Holtwood Resources				562,875	65.67							
8	Backfeed on 220 Kv lines	201,073											
9	Backfeed on Highlandtown Line	555											
10	Diversion from Balto. 2/3 Safe Harbor	92,662											
11	Total Supply by Baltimore				294,892	34.33							
12	Total Available Supply for Firm and Interchange sales in Pa.				857,167	100.00							
13	Total Firm load Requirements in Pa.						736,567	65.67	183,681	34.33	252,886		252,886
14	Net Interchange Sales in Pa.						120,600	65.67	79,194	34.33	41,406	79,194	
15	Additional energy available to Baltimore from Holtwood in average year											104,182	
16	Totals						857,167		382,875		294,292	505,137	252,886

TABLE V - c

OPERATING EXPENSE - 1944

OPERATION AND MAINTENANCE OF JOINTLY USED FACILITIES.

	PRODUCTION				
		Steam			
	Hydro	Fixed	Variable	Transmission	Total
	1	2	3	4	5
1. Total Hydro	$224,230				$ 224,230
Steam					
2. Fuel & Water			$332,035		332,035
3. Boiler & Coal Equip. Maint.			53,152		53,152
4. Other Steam		$201,310			201,310
5. Transmission				97,836	97,836
6. Subtotal	$224,230	$201,310	$385,187	97,836	$ 908,563
7. Percent total	24.68	22.16	42.39	10.77	100.00
8. Adminis. and Gen. Exp.	121,152	108,781	208,089	52,869	490,891
9. Total	$345,382	$310,091	$593,276	$150,705	$1,399,454

TABLE VI

APPLICATION OF UNIT COSTS TO CUSTOMERS' MEASURED LOADS
ASSEMBLY OF CAPACITY, ENERGY AND SPECIAL FACILITY COSTS FOR EACH CUSTOMER
COMPARISON OF TOTAL COSTS OF SERVICE WITH REVENUE COLLECTED

		Noncoincident Maximum Demands - Kw (1)	Firm Energy Sale 1,000 - Kwh (2)	Capacity Cost (3)	Firm Energy Cost 1/ (4)	Special Facility Costs (5)	Total Costs (6)	Total Revenue (7)	Excess Revenue Amount (8)	Excess Revenue % (9)
1	P.P. & L. Co.	66,000	345,329	$1,165,386	$ 817,023	$ 11,193	$1,993,602	$2,176,256	$ 182,654	6.7
2	P.E. Co.	24,500	152,292	432,605	360,311	57,863	850,779	986,360	135,581	5.0
3	Ed.Lt. & Pr. Co.	9,560	44,864	168,804	106,145	71,583	346,932	368,904	22,372	0.8
4	R.R. Co. in Pennsylvania	33,900	194,082	598,585	459,184	95,973	1,153,742	1,340,467	186,725	6.9
5	Baltimore	12,509		220,876	(382,412) 2/	740,368	578,832	2,771,763	2,192,931	80.6
6	Total	146,469	736,567	$2,586,256	$1,360,251	$976,980	$4,923,487	$7,643,750	$2,720,263	100.0

1/ Firm Energy Supplied: 65.7% From Holtwood Resources At A Cost Of 1.4 Mills
34.3% From Diversion And Backfeed At A Cost Of 4.3 Mills
Cost Of Firm Energy Computed At The Weighted Average Cost Of 2.37 Mills

2/ Delivery To Baltimore And Interchange Sales From Holtwood Resources 505,137 Kwh @ 1.4 Mills $ 694,882
Baltimore Supply For Firm Power Sales in Pennsylvania 252,886 Kwh @ 4.3 Mills $1,077,294
Net Credit To Baltimore $ 382,412

TABLE VI - A

RECONCILIATION OF REVENUE SHOWN IN TABLE VI WITH REPORTED REVENUE FROM BALTIMORE AND P.R.R. CO.

	Baltimore	PRR in Pa.
Revenue as Reported	$2,027,849	$1,455,514
Revenue from Net Interchange in Pa.	628,867	
Adjustment of Revenue Received for Special Facilities from PRR in Accordance with Allocation of Costs of Special Facilities	115,047	(115,047)
TOTAL	$2,771,763	$1,340,467

February 14, 1946

PENNSYLVANIA WATER AND POWER COMPANY MONTHLY REVENUES AND PAYMENTS FOR INTERCHANGE POWER OVER NORTHERN TIES

	Metropolitan Edison Company				Philadelphia Electric Company*				Pennsylvania Power & Light Company**			
	Purchases		Sales		Purchases		Sales		Purchases		Sales	
	Kwh.	Dollars	Kwh.	Dollars	Kwh.	Dollars	Kwh.	Dollars	Kwh.	Dollars	Kwh.	Dollars
1946												
Jan.	69,000	$ 189.69	6,949,000	$29,765.13	823,000	$ 2,650.21	6,209,000	$26,433.06	194,000	$ 569.88	4,086,000	$16,465.30
Feb.	18,000	69.23	5,591,000	27,648.15	1,163,000	4,254.09	3,607,000	17,366.73	443,000	1,468.49	2,093,000	9,730.76
Mar.	34,000	90.52	7,512,000	27,847.34	37,000	107.77	10,539,000	39,362.83	20,000	56.00	8,956,000	31,564.10
Apr.	11,000	42.04	4,404,000	20,462.87	232,000	1,068.96	4,506,000	20,657.49	272,000	1,149.68	1,470,000	7,318.25
May	2,000	5.79	9,277,000	47,726.69	1,985,000	9,732.14	2,889,000	13,638.91	179,000	777.90	1,032,000	2,385.52
June	56,000	177.68	4,445,000	17,501.13	166,000	511.08	7,755,000	35,440.20	68,000	218.41	7,113,000	32,578.78
July	101,000	387.97	2,871,000	17,860.71	773,000	3,305.10	4,722,000	35,892.97	381,000	1,763.56	3,925,000	34,275.18
Aug.	33,000	122.69	4,076,000	22,864.91	884,000	3,445.58	5,261,000	37,885.76	250,000	931.78	4,998,000	41,279.18
Sept.	66,000	299.04	5,503,000	31,440.60	1,049,000	4,930.65	5,338,000	40,333.59	222,000	988.14	5,087,000	43,071.78
Oct.	35,000	128.00	7,347,000	40,832.05	334,000	1,322.12	12,595,000	80,151.45	133,000	486.23	7,218,000	55,231.62
Nov.	16,000	53.45	8,024,000	48,145.40	1,018,000	4,838.49	9,860,000	75,261.44	244,000	1,023.86	3,330,000	28,865.36
Dec.	7,000	32.00	6,429,000	40,631.76	929,000	4,699.20	7,523,000	67,014.50	513,000	2,597.73	1,884,000	17,262.38
Total	448,000	1,598.10	72,428,000	372,726.74	9,393,000	40,865.39	80,804,000	489,438.93	2,919,000	12,031.66	51,192,000	320,028.21

* All energy "purchases" are actually delivered to P.R.R. by P.E. for P.R.R. use; all energy "sales" are actually delivered to P.R.R. by P.W.& P. Co. for P.R.R. use.

** Purchases and Sales shown are made by Pennsylvania Water & Power Company on behalf of itself and as agent for Safe Harbor Water Power Corporation.

JVS:J

February 13, 1947

MONTHLY CHARGES TO PENNSYLVANIA POWER & LIGHT COMPANY
(LANCASTER AND PIONEER)

	LANCASTER					PIONEER	
	Total Bill	Energy		Spec. Fac.	Demand Kw.	Total Bill	Kwh.
		Kwh.	Dollars				
1946							
Jan.	$ 163,883.41	25,945,000	$ 163,770.00	118.41	58,000	$ 1,065.00	71,000
Feb.	146,509.41	23,048,500	146,391.00	118.41	57,000	915.00	61,000
Mar.	155,368.41	24,525,000	155,250.00	118.41	56,000	1,020.00	68,000
Apr.	153,946.41	24,288,000	153,828.00	118.41	58,000	1,020.00	68,000
May	154,984.41	24,461,000	154,866.00	118.41	56,000	1,125.00	75,000
June	144,220.41	22,667,000	144,102.00	118.41	57,000	1,125.00	75,000
July	154,498.41	24,380,000	154,380.00	118.41	62,000	1,228.80	81,920
Aug.	171,118.41	27,150,000	171,000.00	118.41	64,000	1,213.49	80,899
Sept.	164,010.81	25,965,400	163,892.40	118.41	67,000	1,199.79	79,986
Oct.	180,274.41	28,676,000	180,156.00	118.41	63,000	1,229.25	81,950
Nov.	175,024.41	27,801,000	174,906.00	118.41	64,000	1,305.00	87,000
Dec.	180,640.41	28,737,000	180,522.00	118.41	64,000	1,425.00	95,000
Total	1,944,484.32	307,643,900	1,943,063.40	1,420.92		13,871.33	924,755

JVS:J
CC: F.P.C.

[24716] Exhibit No. 423 4396

February 14, 1946

MONTHLY CHARGES TO PHILADELPHIA ELECTRIC COMPANY (COATESVILLE)

1946	Total Bill	Energy			Demand		Fuel Rate Adj.	Spec. Fac.
		Kwh.	Blocking Kw.	Dollars	Kw.	Dollars		
Jan.	$ 77,403.01	11,296,000	25,100	$ 40,790.50	25,100	$ 27,105.00	$ 4,567.51	$ 5,000.00
Feb.	53,734.33	6,306,000	15,500	23,054.29	20,300	22,065.00	3,615.04	5,000.00
Mar.	70,720.73	12,192,000	22,350	42,722.25	23,725	25,661.25	3,343.23	5,000.00
Apr.	81,743.70	12,439,000	23,400	43,752.00	24,250	26,212.50	6,779.20	5,000.00
May	75,700.88	11,247,000	22,300	39,873.50	23,700	25,635.00	5,252.38	5,000.00
June	68,199.60	9,471,000	21,700	34,380.50	23,400	25,320.00	3,499.10	5,000.00
July	80,714.17	11,507,000	23,700	41,038.50	24,400	26,370.00	8,305.67	5,000.00
Aug.	83,128.10	11,972,000	23,800	42,406.00	24,350	26,317.50	9,404.60	5,000.00
Sept.	85,325.26	11,703,000	24,100	41,730.50	24,600	26,580.00	12,008.76	5,000.00
Oct.	88,383.48	13,137,000	25,100	46,313.50	25,100	27,105.00	9,904.98	5,000.00
Nov.	84,944.93	11,828,000	25,250	42,427.75	25,250	27,262.50	10,254.68	5,000.00
Dec.	92,736.70	12,531,000	26,300	44,825.50	26,300	28,365.00	14,546.26	5,000.00
Total	948,800.95	135,629,000	278,400	483,320.79	290,475	313,998.75	91,541.41	60,000.00

JVS:J
CC: F.P.C.

February 14, 1947

MONTHLY CHARGES TO PENNSYLVANIA RAILROAD COMPANY

	Total Bill	Total Energy Kwh. (a)	Total Energy Dollars (b)	Total Demand Kw.	Total Demand Dollars	Fuel Rate Adj.	Transm. Loss Cred.	Specified Equipment & Facil.	Pk.Trans. Energy Kwh. (c)	Kwh. Delivered to P.R.R. in Pennsylvania	PW Division of Total Bill	Max. Demand in Md.Area Kw.	Max. Demand in Pa.Area Kw.
1946													
Jan.	$ 275,717.28	38,435,000	$ 132,663.58	71,333.3	$ 82,389.96	$18,627.28	$ 1,256.00	$43,292.46	398,000	17,295,000	$124,067.40	44,000	42,000
Feb.	282,204.74	36,147,000	125,018.34	78,666.7	90,860.04	24,096.90	1,063.00	43,292.46	396,000	16,894,000	131,893.85	49,000	45,000
Mar.	279,481.75	39,993,000	137,877.26	74,666.7	86,240.04	14,221.99	2,150.00	43,292.46	404,000	17,886,000	124,992.14	46,000	41,000
Apr.	284,632.34	38,110,000	131,549.86	75,333.3	87,009.96	24,111.06	1,331.00	43,292.46	381,000	16,534,000	123,487.57	52,000	40,000
May	269,724.60	35,842,000	124,007.94	73,333.3	84,699.96	19,167.24	1,443.00	43,292.46	401,000	16,544,000	124,499.85	44,000	41,000
June	271,241.32	37,463,000	129,370.62	72,333.3	83,544.96	16,958.28	1,925.00	43,292.46	370,000	17,158,000	124,228.13	44,000	42,000
July	279,081.21	36,988,000	127,792.42	68,000.0	78,540.00	30,442.33	986.00	43,292.46	375,000	17,412,000	131,376.72	43,000	41,000
Aug.	292,209.40	37,459,000	129,335.68	75,333.3	87,009.96	33,245.30	674.00	43,292.46	357,000	18,958,000	147,887.18	43,000	45,000
Sept.	289,751.28	35,535,000	122,793.32	72,000.0	83,160.00	41,154.50	649.00	43,292.46	287,000	18,112,000	147,684.68	41,000	44,000
Oct.	289,501.88	37,472,000	129,233.02	73,333.3	84,699.96	33,163.44	887.00	43,292.46	269,000	18,761,000	144,944.09	45,000	41,000
Nov.	307,268.92	38,834,000	133,979.64	76,666.7	88,550.04	42,318.78	872.00	43,292.46	388,000	18,980,000	150,176.75	45,000	45,000
Dec.	313,916.35	39,565,000	136,394.62	76,333.3	88,164.96	47,018.31	954.00	43,292.46	372,000	18,948,000	150,337.09	45,000	45,000
Total	3,434,731.07	451,843,000	1,560,016.30	887,333.2	1,024,869.84	344,525.41	14,190.00	519,509.52	4,398,000	213,482,000	1,625,575.45	-	-

(a) Includes peak transfer energy under (c)
(b) Includes surcharge for peak transfer energy under (c) at 1.66 mills per kwh.

JVS:K
CC: F.P.C.

February 14, 1947

MONTHLY CHARGES TO METROPOLITAN EDISON CO.

1946	Total Bill	Total Energy Kwh.	Total Energy Dollars	Total Demand Kw.	Total Demand Dollars	Fuel Rate Adj.	Spec. Fac.	Spinning Reserve Capacity Hours' Use of 1,000 Kw.	Spinning Reserve Capacity Dollars	Adj. Based on Taxes (cr.)
Jan.	$60,901.58	10,002,000	$30,681.50	21,000	$26,250.00	$2,761.34	$ 1,405.60	2,550	$1,275.00	$ 1,471.86
Feb.	45,758.41	4,849,000	15,696.50	21,000	26,250.00	1,412.69	1,405.60	4,199	2,099.50	1,105.88
Mar.	73,690.23	14,522,000	43,784.00	21,000	26,250.00	3,940.56	1,405.60	182	91.00	1,780.93
Apr.	50,817.19	6,611,000	21,152.50	21,000	26,250.00	1,903.73	1,405.60	2,667	1,333.50	1,228.14
May	59,237.43	9,570,000	29,583.00	21,000	26,250.00	2,662.47	1,405.60	1,536	768.00	1,431.64
June	68,889.38	12,850,000	39,041.00	21,000	26,250.00	3,513.69	1,405.60	688	344.00	1,664.91
July	51,358.18	6,294,000	20,435.00	22,000	27,500.00	1,634.80	1,405.60	3,248	1,624.00	1,241.22
Aug.	49,975.99	5,639,000	18,547.00	22,000	27,500.00	1,854.70	1,405.60	3,753	1,876.50	1,207.81
Sept.	40,787.96	2,347,000	8,135.50	23,000	28,750.00	1,057.62	1,405.60	4,850	2,425.00	985.76
Oct.	56,331.86	6,901,000	22,264.50	23,000	28,750.00	3,339.68	1,405.60	3,867	1,933.50	1,361.42
Nov.	49,550.89	4,853,000	15,925.50	23,000	28,750.00	2,388.83	1,405.60	4,557	2,278.50	1,197.54
Dec.	49,824.01	4,168,000	14,197.00	23,000	28,750.00	2,129.55	1,405.60	4,605	2,302.50	- 1,039.36
Total	657,123.11	88,606,000	279,443.00	262,000	327,500.00	28,599.66	16,867.20	36,702	18,351.00	13,637.75

JVS:K
CC: F.P.C.

S.H. FACILITIES

	1946		
Special Facilities for R.R. Service furnished by Safe Harbor			
Conestoga Tunnel & Cables	390,000		
Control eqp. for 25 cy. facilities	73,000		
Freq. Changer & Structures	852,500		
Excess Cost of 25 cy. generators	608,100		
Allocated intang. & gen'l.	9,900		
Total Gross Invest. for R.R. Service	1,934,300		
Total S.H. Gross Investment	30,240,547		
R.R. facilities % of total S.H. Plant	6.4%		
		Total S.H.	R.R. Facilities
Return 5%	1,400,208	6.4%	89,613
Deprec. Exp.	507,370	6.4%	32,472
Oper.& Mt. of Freq. Conv. - 2% of Inv.			17,053
Total Cost of R.R. Facilities			139,138
1/3 paid by Holtwood			46,379
47% $21,798 to Baltimore 53% $24,581 to R.R. in Pa.			
Total Cost of S.H. Power			1,053,564
Balanced S.H. Bill in Pool			1,007,185

ADJUSTMENT OF BILL TO R.R. IN PA.

	Total Charge to R.R.	Cost Collected by Holtwood	Cost Allocated to R.R. in Pa.	Excess Collected Over Cost Allocated to R.R. in Pa.
Benning Frequency Changer and 110 KV Line Rental Credit	$ 84,480	$ 36,326	$ 0	$ 36,326
R.R. Facilities at Safe Harbor	211,271	90,847	38,662	52,185
Conestoga Substation & Other Equipment	93,474	40,194	51,317	(11,123)
Perryville Line	122,100	52,503	10,989	41,514
Additional Switching for R.R. Transformers	8,184	3,519	7,374	(3,855)
Total	$519,509	$223,389	$108,342	$115,047

The Revenue from the R.R. in Pennsylvania is Decreased $115,047 and the Revenue from Baltimore is Increased by $115,047 in Table VI

	Baltimore	R.R. in Pa.
Revenue as Reported	$2,027,849	$1,455,514
Revenue from Net Intg. in Pa.	628,867	
Adjustment for Special Facilities	115,047	(115,047)
Total	$2,771,763	$1,340,467

BACKFEED AND DIVERTED ENERGY SUPPLIED BY BALTIMORE
FOR
FIRM AND INTERCHANGE SALES IN PA.

		1000 KWH
Net generation at S.H.		876,968
Delivery to Baltimore		
220 KV	300,340	
For RR in Md.	121,628	
		421,968
Bal. to Hd. for service in Pa.		455,000
Hd. entitlement from S.H.		292,323
Bal. Balt. energy from S.H. diversion		162,677
Backfeed from Balt.		
220 KV	157,961	
From Hgtn.	1,676	
		159,637
Total Balt. energy for firm and intg. supply in Pa.		322,314

HD. COST & REV. COLLECTED FOR SPCL. R.R. FACILITIES

	Total Chg. to P.R.R.	Collected by Hd.	Cost Allocated to R.R. in Pa.	Exc. Collected Over Cost Allocated to Pa.
Banning F.C. & Line Cr.	84,480	39,917	0	39,917
S.H. Facility for R.R.	211,271	99,825	36,973	62,852
Cga. Substation Eqp.	93,474	44,166	49,074	(4,908)
Perryville Line	122,100	57,692	10,989	46,703
Switch for R.R. Transf.	8,184	3,867	6,654	(2,787)
Total	519,509	245,467	103,690	141,777

Total excess of Hd. collection over cost allocated to R.R. in Pa. transferred from R.R. Revenue to Baltimore Rev. in Table VI

	Baltimore	RR in Pa.
Revenue as Reported	1,104,952	1,625,575
Rev. from net intg. in Pa.	1,127,699	
Adjustment for spcl. facil.	141,777	(141,777)
Total	2,374,428	1,483,798

P.R.R. SERVICE - COST ALLOCATION
S.H. FACILITIES

	1944	1945
Special facilities for R.R. Service furnished by Safe Harbor		
Conestoga Tunnel & Cables	390,000	
Control eqp. for 25 cy. facilities	73,000	
Freq. Changer & Structures	852,500	
Excess cost of 25 cy. generators	608,100	
Allocated intang. & gen'l.	9,900	
1/ Total gross invest. for R.R. Service	$1,934,300	$ 1,934,300
Total S.H. gross investment	$30,139,590	$30,140,199
R.R. facilities % of total S.H. Plant	6.4%	6.4%

	1944			1945		
	Total S.H.		R.R.Facilities	Total S.H.		R.R.Facilities
Rate Base Sch. 3.32	28,563,376	6.4%	$1,828,000	28,333,806	6.4%	$1,813,684
Return 5%	1,428,169		91,400	1,416,940		90,684
Deprec. Expense	503,866		32,247	503,720		32,238
Oper.& Mt. of F.C.-2% of Inv.			17,053			17,053
Total Cost of R.R. Facilities			140,700			139,972
1/3 paid by Holtwood			$ 46,900			$ 46,657
Total cost of S.H. power Exh.60,pg.27			992,535			1,001,190
Balance S.H. Bill in Pool			945,635			954,533

1/ . As per Memo. of 6-25-46 Signed GWS:F

501 A-130702

BIG INCH
LITTLE INCH
PUMPING STA. NO. 24
66KV 60~
Normally open
HARRISBURG
11 KV 60~
S. MANHEIM
DONEGAL S.S.
S. AKRON S.S.
11KV 60~
MANOR S.S.
220 KV.
LEHMAN FARM
66KV 60~
STA SERVICE
13KV 60~
SAFE HARBOR HYDRO STATION
12KV 25~1Ø
FISHING CREEK
CONOWINGO
YORK ED.
VIOLET HILL S.S.
MET. EDISON
SMITH ST. S.S.
66KV 60~
13KV 60~
66KV 25~
11KV 25~
HOLTWOOD HYDRO AND STEAM STATIONS
110 KV Ring
ELLICOTT S.S.
220KV 60~
PRR
13KV 60~
BENNING
TAKOMA
WESTPORT
4Gen
7Gen
MONUMENT ST.
McCLELLAN
CUSTOM HOUSE
PRATT ST.
16Gen
GOULD ST.
13KV 60~
2Gen
110KV 60~
4KV 60~
13KV 60~
PHILA. RD.
NEWGATE
33KV 60~
RIVERSIDE
25Gen
CANTON
SOUTH BALTO.
ENGLESIDE S.S.
SLACKWATER HYDRO STA.
66KV 25~
11KV 25~
2.3KV 25~
COLUMBIA NO.1 NO.2
12KV 25~1Ø
132KV 25~1Ø
13KV 25~1Ø
CONESTOGA SS
HBG.
PKG.
THORNDALE
P.E.
FISHING CREEK
CONOWINGO
WASH. P.E.
PERRYVILLE
DOWNINGTOWN
NEWLINVILLE S.S.
COATESVILLE
HIGHLANDTOWN S.S.
RIVERSIDE
2Gen
13KV 25~
86KV 60~

Symbols
- Station Buses
- 25 Cycle Transmission Lines
- 60 Cycle Transmission Lines
- Generator
- Frequency Converter
- Synchronous Condenser
- Reactor
- Transformer
- Air Break Switch, OCB and/or Disc Switch
- Connecting Link

Notes
1. No radial feeders shown.
2. Capacity ratings are given in Kva

Reference Drawings
115-A-130588 E.E. Load Dispatcher's Office Front View of System Board.

NO	REVISIONS	CHK'D	APPR.	DATE
11	Added L.T. Connection at Conestoga, Fishing Creek, Conowingo and Perryville Sub-Stations.	B.S.W.	WMG	9-23-46
10	Drawing brought up to date.	M.J.C.	WMG	5-20-46
9	Added Pumping Stn. No. 24	M.J.C.	WMG	10-23-45
8	Added Generator at Riverside & Pratt St and No. 1 69 Kv Tie at S.H.	M.J.C.	WMG	4-5-45
7	Chgd. Transf. at S. Akron & S. Manheim S.S. Added Transf. & Gen. at Riverside.	M.J.C.	WMG	3-27-45
6	No. 13, 14, 15 & 16 Circ. & Transf. Numbers (13, 14, 15 & 16) Transposed at Holtwood	M.J.C.	WMG	12-22-44
5	Traced and Minor Changes	M.J.C.	WMG	4-27-44
4	Added No. 1 Gen. (3 MW, V.H. * 44 Fdr. S. Akron 33 KV) & changed Newlinville S.S.	M.J.C.	WMG	8-9-43
3	Added S. Manheim S.S. & Cir. 110519	M.J.C.	WMG	7-16-43
2	Drawing brought up to date.	M.J.C.	WMG	6-25-43

PENNSYLVANIA WATER & POWER CO.
BALTIMORE, MD.
FOR: System and Interconnections
SUBJECT: Interconnecting Lines
PW&P Co., S.H.W.P.Co., & C.G.E.L. & P.Co.
DRAWN M.J.C. 5-20-46
TRACED M.J.C. 5-20-46
CHECKED J.Q.W. 6-28-46
SCALE None
501 A-130702

INSPECTED

RC 3484

3851

Note
(This page is from Card 69)

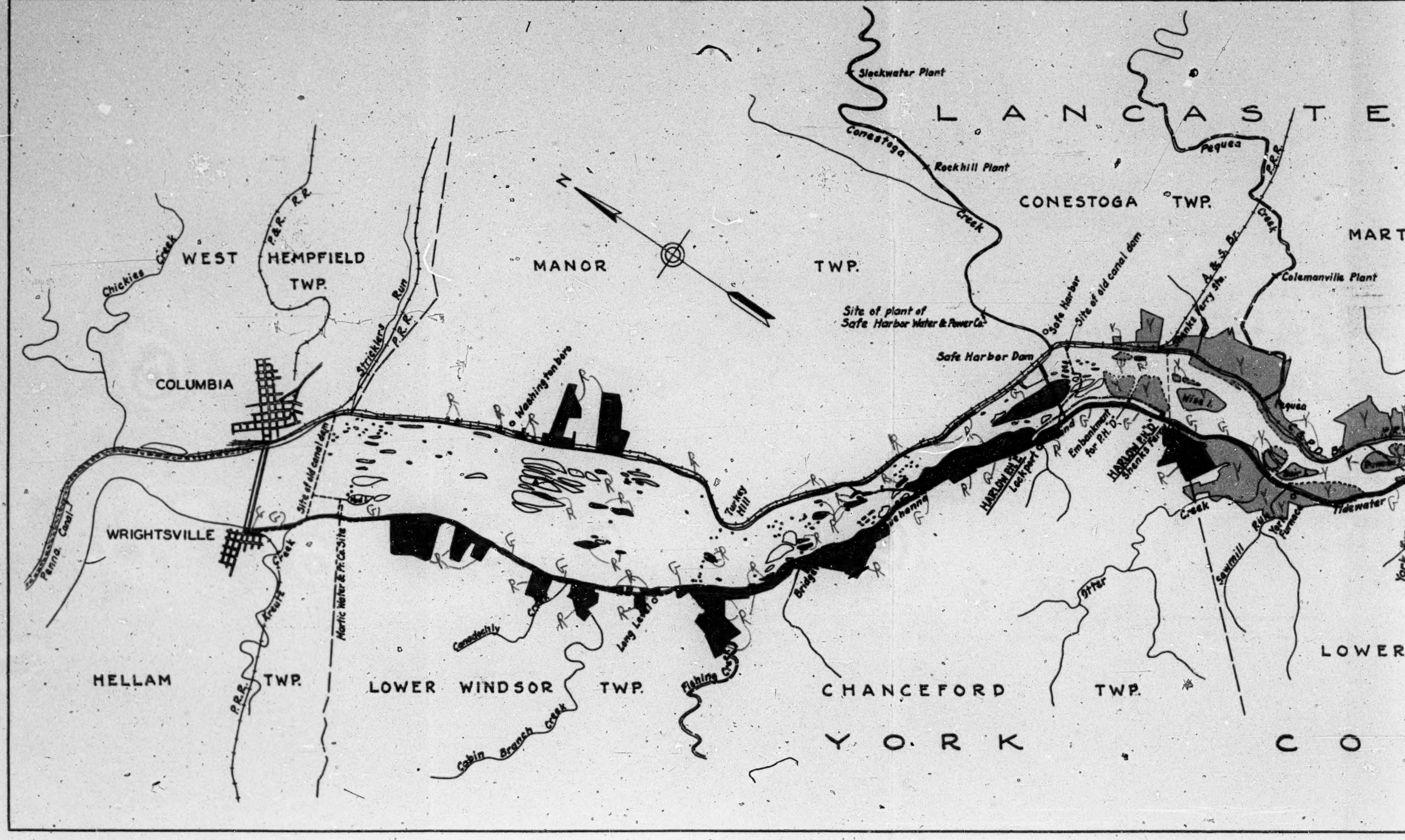
69 B 33 46

ELECTRIC ENERGY TRANSFERS ACROSS MARYLAND-PENNSYLVANIA BOUNDARY OVER FACILITIES OF PENNSYLVANIA WATER AND POWER COMPANY AND SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND*
BY MONTHS
VALUES IN MEGAWATTHOURS

	From Pennsylvania to Maryland					From Maryland to Pennsylvania				
	220 Kv - 60 Cycle Circuits			66 Kv - 25 Cycle	Total	220 Kv - 60 Cycle Circuits			66 Kv - 25 Cycle	Total
	Meter 5	Meter 6	Subtotal	Meter 34 1/		Meter 5	Meter 6	Subtotal	Meter 34 1/	
1945										
January	12,690	6,622	19,312	29,282	48,594	3,470	5,917	9,387	-	9,387
February	16,118	10,232	26,350	29,634	55,984	4,301	4,867	9,168	-	9,168
March	43,601	36,637	80,238	46,357	126,595	0	0	0	-	0
April	29,437	28,052	57,489	44,464	101,953	937	218	1,155	-	1,155
May	39,829	35,026	74,855	48,152	123,007	2	22	24	-	24
June	19,912	13,712	33,624	42,377	76,001	1,443	1,414	2,857	-	2,857
July	16,475	7,618	24,093	35,071	59,164	2,647	5,623	8,270	-	8,270
August	11,600	5,012	16,612	31,757	48,369	3,524	6,448	9,972	-	9,972
September	19,014	12,453	31,467	30,962	62,429	2,757	5,380	8,137	-	8,137
October	23,231	17,230	40,461	44,083	84,544	758	1,400	2,158	-	2,158
November	32,840	24,228	57,068	47,184	104,252	83	150	233	-	233
December	29,355	22,596	51,951	42,372	94,323	623	1,050	1,673	-	1,673
Total	294,102	219,418	513,520	471,695	985,215	20,545	32,489	53,034	0	53,034
1946										
January	25,250	17,695	42,945	41,373	84,318	706	2,219	2,925	-	2,925
February	8,229	3,852	12,081	25,934	38,015	5,416	6,260	11,676	-	11,676
March	39,383	31,151	70,534	48,992	119,526	1	3	4	-	4
April	10,673	7,533	18,206	32,273	50,479	3,657	4,548	8,205	-	8,205
May	23,731	19,685	43,416	38,710	82,126	2,288	3,397	5,685	-	5,685
June	35,508	28,633	64,141	47,524	111,665	253	252	505	-	505
July	11,195	8,030	19,225	30,204	49,429	5,298	5,114	10,412	-	10,412
August	7,515	4,710	12,255	28,742	40,997	6,201	7,899	14,100	-	14,100
September	761	156	917	12,174	13,091	18,613	16,150	34,763	-	34,763
October	5,721	3,384	9,105	30,233	39,338	9,626	10,217	19,843	-	19,843
November	3,274	821	4,095	21,731	25,826	11,491	14,674	26,165	-	26,165
December	2,507	913	3,420	17,118	20,538	10,231	13,447	23,678	-	23,678
Total	173,777	126,563	300,340	375,008	675,348	73,781	84,180	157,961	0	157,961

* Does not include transfers across Pennsylvania-Maryland boundary over Conestoga-Perryville Line.

1/ Net Delivery metered at Highlandtown Substation.


Slackwater Plant
Conestoga
Rockhill Plant
Creek
LANCASTE
Pequea
P.R.R.
CONESTOGA TWP.
Creek
MART
Chickies Creek
WEST HEMPFIELD TWP.
P.R.R. R.R.
Strickler's Run
P.R.R.
MANOR
TWP.
Site of plant of Safe Harbor Water & Power Co.
Safe Harbor
Site of old canal dam
A. & S. Br.
Shanks Ferry Sta.
Colemanville Plant
Safe Harbor Dam
COLUMBIA
Washington boro
Embankment for P.H. "D"
HARRISBURG
Shenks Ferry
Wiker I.
Pequea
Creek
Tidewater
Pitt
York Furnace
Turkey Hill
Susquehanna
HARRISBURG
Lock part of
Site of old canal dam
WRIGHTSVILLE
Penna. Canal
Kreutz Creek
Martic Water & Pr. Co. Site
Conejocheig Creek
Long Level
Bridge
Otter
Sawmill
LOWER
HELLAM TWP.
P.R.R.
LOWER WINDSOR TWP.
Fishing Creek
CHANCEFORD TWP.
Cabin Branch Creek
YORK
CO

Rawlinsville

T E R C O U N T Y

MARTIC TWP.

DRUMORE TWP.

FULTON TWP.

PENNSYLVANIA

MARYLAND

ville Plant

Tucquan Creek

Muddy Run

Kelly's Run

Tucquan

Ferry

Holtwood

Fishing Cr.

Fites Eddy

Quarry

Peters Creek

Dam for P.H. "B"

Peach Bottom

HARLOW P.H. "B"

Ark Haven

Bald Eagle

Octoraro

Conowingo

Conowingo Dam

Tidewater

York Furnace Site

Canal

Oakland Run

Holtwood Dam

Dam for P.H. "C"

Cully's Falls Site

HARLOW P.H. "C"

Muddy Creek

Embankment for P.H. "A"

Susquehanna

HARLOW P.H. "A"

Conowingo Bridge (Destroyed)

Octoraro and Conowingo Tide

Riddler Run

Susq. Water & Power Co.

Broad Creek

PEACH BOTTOM TWP.

LOWER CHANCEFORD TWP.

O U N T Y

H A R F O R

2667

Note
(This page is from Card 38)

Exhibit No. 26 2667
[21532]

CECIL COUNTY

Octoraro Creek

Conowingo Dam

Susq. Water Pr. & Paper Co. Bridge (Road)

Proprietors of Susquehanna Canal

Rock Run

Rock Run

Port Deposit

Tidewater

Tidewater Canal

Shures Landing (Shuresville)

Robert I.

Shures I.

B. & O. R.R.

Penna. R.R.

Perryville

Garrett I.

Chesapeake Bay

HAVRE DE GRACE

Darlington

Deer Creek

Rock Run

HARFORD COUNTY

Note.
This key map is intended to show approximately the extent of river front controlled by the McCall Ferry Power Co. prior to 1908.

Legend

Y-(Yellow)
G-(Green)
R-(Red)

- Hutchinson Properties
- Harlow-McGaw Properties
- McCall Ferry Power Co. other Acquisitions

PENNSYLVANIA WATER & POWER CO.

FOR: Baltimore Office

SUBJECT: General Plan of the Susquehanna River Wrightsville to Havre de Grace

DRAWN R.P. 3-8-09 | CHECK | INSP. R.L.A. 3-9-09

TRACED R.P. 3-8-09 | INSP. | APPR.

Vol. XIV

TRANSCRIPT OF RECORD

(Pages 4405 to 4536)

Supreme Court of the United States

OCTOBER TERM, 1951

No. 428

PENNSYLVANIA WATER AND POWER COMPANY AND SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND, PETITIONERS,

vs.

FEDERAL POWER COMMISSION ET AL.

No. 429

PENNSYLVANIA PUBLIC UTILITY COMMISSION, PETITIONER,

vs.

FEDERAL POWER COMMISSION

ON WRITS OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

PETITIONS FOR CERTIORARI FILED NOVEMBER 16, 1951

CERTIORARI GRANTED FEBRUARY 4, 1952

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Exhibit No. 438

(P.4405)

GENERATION AND TRANSMISSION OF ELECTRIC ENERGY ON HOLTWOOD - SAFE HARBOR SYSTEM AND TRANSMISSION FROM MARYLAND TO HOLTWOOD'S RESALE CUSTOMERS IN PENNSYLVANIA

By Hours For 30 Days In 1946

GENERATION AND TRANSMISSION OF ELECTRIC ENERGY ON HOLTWOOD - SAFE HARBOR SYSTEM AND TRANSMISSION FROM MARYLAND TO HOLTWOOD'S RESALE CUSTOMERS IN PENNSYLVANIA

Values Are In Megawatthours

Hour	Energy supplied to 13 kv 60 cycle bus at Safe Harbor from -						Send-out from 13 kv 60 cycle bus at Safe Harbor to -					Deliveries to P P & L Co. via Donegal				Deliveries to P P & L Co. via Lehman Farm			Deliveries to 13 kv 60 cycle bus at Holtwood via Lehman F.			Energy supplied to 13 kv 60 cycle bus at Holtwood from -										Send-out from 13 kv 60 cycle bus at Holtwood to -								Energy supplied to 11 kv 25 cycle bus at Holtwood from -				Send-out from 11 kv 25 cycle bus at Holtwood to -			
	60 Cycle Gen. at S.H.	Freq. Chg'r.	69 kv Cir's.	Maryland	Total	% From Maryland	Maryland	Freq. Chg'r.	69 kv circuits Total	69 kv circuits From Md.	69 kv circuits % From Md.	Firm	Other	Total From Maryland	% From Maryland	Total	From Maryland	% From Maryland	Total	From Maryland	% From Maryland	60 cy. generators at Holt'd. Steam	Hydro	Freq. Chg'r.	Total	Lehman F.	Wat. Ed. PP & L Co	Total	From Maryland	% From Maryland	Lehman Farm	Wat. Ed. Firm	Wat. Ed. Other	PP & L	Phil. Elec	Freq. Chg'r.	Total	Freq. Chg'r.	25 Cycle Generators	Highland from Maryland	Total	PP & L Co.	Highland to Md.	Freq. Chg'r.	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(12a)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(31a)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)	(43)
1				31	31	100		18	12	12	100					11	11	100				13	8		21	1	5	27			1			.1	8	8	18	9	14		23	3	17		20
2				43	43	100		18	22	22	100	1		1	100	13	13	100	10	10	100	13			13	10		23	10	43			4	1	9	8	22	9			9	3	3		6
3				38	38	100		15	21	21	100					11	11	100	9	9	100	13			13	9		22	9	41			4		7	8	19	6			6	3	3		6
4				48	48	100		24	21	21	100					11	11	100	9	9	100	13			13	9		22	9	41			4	1	8	8	21	8			8	3	3		6
5				46	46	100		29	16	16	100		-1			10	9	94	7	7	94	13			13	7		20	7	35			3		7	9	19	6			6	3	3		6
6				49	49	100		25	22	22	100					12	12	100	9	9	100	13			13	9	1	23	9	39			2	1	8	8	19	8			8	3	4		7
7				69	69	100		22	46	46	100	12	1	13	100	19	19	100	15	15	100	13			13	15		28	15	54		1	8	1	9	11	29	10			10	4	4		8
P																																													
8	4			62	66	94		23	39	37	94	10		9	94	21	20	94	3	3	94	13	17		30	3		33	3	9		3	7	4	10	4	28	4	41		45	4	38		42
9	52			17	69	25	5	11	55	14	25	17	4	5	25	26	7	25	9	2	25	13	21		34	9		43	2	5		10	12	3	11	3	40	2	57		59	6	50		56
10	89	5		4	98	4	16		84	3	4	18	18	1	4	27	1	4	17	1	4	13	20		33	17		50	1	2		13	18	3	12	2	48	2	64		66	5	53		58
11	88	2		6	96	6	16	1	81	5	6	17	18	2	6	28	2	6	16	1	6	13	21	1	35	16		51	1	2		13	21	3	11		48		65		65	5	52	2	59
12	69			16	85	19	6	2	78	15	19	16	18	6	19	28	5	19	15	3	19	13	20	2	35	15		50	3	6		11	22	2	11		46		65		65	4	52	2	58
P																																													
1	31			40	71	56		20	51	29	56	13	10	13	56	22	12	56	4	2	56	13	21	2	36	4		40	2	5		7	19	4	10		40		63		63	5	51	4	60
2	63			14	77	18	6	2	69	12	18	15	17	6	18	25	5	18	12	2	18	13	20		33	12		45	2	4		11	20	3	10		43		65		65	4	52	2	58
3	66	1		17	84	20	3	7	73	15	20	16	16	6	20	24	5	20	14	3	20	13	22	3	38	14		52	3	6		12	20	3	10		45		72		72	6	57	2	65
4	47			25	72	35		8	67	23	35	15	16	11	35	26	9	35	12	4	35	13	21	2	36	12		48	4	8		10	24	3	11		48		70		70	4	56	3	63
5	35			44	79	56		13	66	37	56	14	14	16	56	23	13	56	11	6	56	13	22	3	38	11		49	6	12		19	22	3	10		44		71		71	5	57	2	64
P																																													
6	78			19	97	20	10	15	72	14	20	16	17	7	20	25	5	20	15	3	20	13	21		34	15		49	3	8		13	19	2	11	1	46		68		68	4	59		63
7	117				117		29	12	79			16	18			27			16			13	21		34	16		50				15	18	2	12		47		71		71	4	60	2	66
8	93			6	99	6	11	15	72	4	6	15	16	2	6	26	2	6	14	1	6	13	23	2	38	14		52	1	2		13	19	3	11		46		70		70	4	57	2	63
9	69	1		3	73	4	14	13	48	2	4	14	5	1	4	23	1	4	4	-	4	13	22		35	6		41			2	11	11	3	11		38		65		65	3	55		58
10	37			3	40	8	13	8	20	2	8	6		-	8	17	1	8	-5			13	22		35			35			5	8	6	6	10		35		64		64	4	56	2	62
11	13			12	25	48	2	14	9	4	48	4		2	48	15	2	13	-9			13	22	2	37			37			9	6	4	4	10		33		68		68	3	56	2	61
12				36	36	100		28	6	6	100	3		3	100	12	3	25	-7			12	21		33			33			7	3	7	5	9		31		61		61	3	50	1	54
P																																													
Tot.	951	9		648	1608		131	343	1129			238	187			482			220 N			311	365	17	693	224	6	923			24	168	294	61	236	70	853	64	1114		1178	95	948	26	1069

↓ 16/17 of 10

↓ 16/17 of 7

Date: Friday February 8 1946

17-17700-46

GENERATION AND TRANSMISSION OF ELECTRIC ENERGY ON HOLTWOOD - SAFE HARBOR SYSTEM AND TRANSMISSION FROM MARYLAND TO HOLTWOOD'S RESALE CUSTOMERS IN PENNSYLVANIA

Values Are In Megawatthours

HOUR	ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT SAFE HARBOR FROM -						SEND-OUT FROM 13 KV 60 CYCLE BUS AT SAFE HARBOR TO -					DELIVERIES TO P P & L CO. VIA DONEGAL				DELIVERIES TO P P & L CO. VIA LEHMAN FARM			DELIVERIES TO 13 KV 60 CYCLE BUS AT HOLTWOOD VIA LEHMAN F.			ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT HOLTWOOD FROM -										SEND-OUT FROM 13 KV 60 CYCLE BUS AT HOLTWOOD TO -									ENERGY SUPPLIED TO 11 KV 25 CYCLE BUS AT HOLTWOOD FROM -				SEND-OUT FROM 11 KV 25 CYCLE BUS AT HOLTWOOD TO -			
	60 Cycle Gen. at S.H. (1)	Freq. Chg'r. (2)	69 Kv Cir's. (3)	Maryland (4)	Total (5)	% From Maryland (6)	Maryland (7)	Freq. Chg'r. (8)	69 KV CIRCUITS TOTAL (9)	From Md. (10)	% From Md. (11)	Fire (12)	Other (12a)	Total(from Maryland (13)	% From Maryland (14)	Total (15)	From Maryland (16)	% From Maryland (17)	Total (18)	From Maryland (19)	% From Maryland (20)	60 CY. GENERATORS AT HOLT'D. Steam (21)	Hydro (22)	Freq. Chg'r. (23)	Total (24)	Lehman F. (25)	Md. Ed. PP & L Co. (26)	Total (27)	From Maryland (28)	% From Maryland (29)	Lehman Farm (30)	Md. Ed. Fire (31)	Md. Ed. Other (31a)	PP & L (32)	Phil. Elec (33)	Freq. Chg'r. (34)	Total (35)	Freq. Chg'r. (36)	25 Cycle Generators (37)	Highland from Maryland (38)	Total (39)	PP & L Co. (40)	Highland from Md. (41)	Freq. Chg'r. (42)	Total (43)
1				47	47	100		24	22	22	100	4		4	100	10	10	100	9	9	100		12		12	9		21	9	43			8		9	2	19	2	9		11		8		10
2				56	56	100		26	28	28	100	4		4	100	9	9	100	14	14	100		4		4	14	1	19	14	74			6		7	4	17	4			4	2	1		3
3				53	53	100		21	33	33	100	6		6	100	8	8	100	17	17	100					17	2	19	17	89			6		7	4	17	2			2	2	1		3
4				60	60	100		19	39	39	100	5	4	9	100	12	12	100	20	20	100					20	2	22	20	91			12		7	2	21	3			3	2			2
5				53	53	100		20	33	33	100	5		5	100	12	12	100	16	16	100					16	1	17	16	94			6		7	4	17	3			3	2			2
6				52	52	100		21	30	30	100	6		6	100	10	10	100	16	16	100					16	2	18	16	89			6		6	6	18	4			4	2	1		3
7				61	61	100		20	39	39	100	5	2	7	100	13	13	100	19	19	100					19	2	21	19	90			8		7	4	19	4			4	3	2		5
P																																															
8				69	69	100		25	43	43	100	8	3	11	100	12	12	100	21	21	100					21	1	22	21	95			16		6	4	21	5			5	2	2		4
9		1		54	55	98		24	31	30	98	4		4	98	12	12	98	15	15	98					15	2	17	15	88					6	6	18	4			4	2	2		4
10				47	47	100		16	29	29	100	4		4	100	11	11	100	16	16	100					16	1	17	16	94					7	6	13	4			4	2	2		4
11	5			48	53	91		28	21	19	91	3		3	91	12	11	91	9	8	91		8		8	9	1	18	8	44			4	1	7	6	18	6			6	3	2		5
12				46	46	100		13	32	32	100	2		2	100	13	13	100	15	15	100					15	1	16	15	94			1		7	6	14	6			6	2	3		5
P																																														
1				54	54	100		20	33	33	100	2		2	100	12	12	100	15	15	100					15	1	16	15	94			2		7	5	14	4			4	2	2		4
2				60	60	100		22	36	36	100	6	1	7	100	13	13	100	17	17	100					17	1	18	17	94			4		7	7	18	6			6	2	2		4
3				54	54	100		20	33	33	100	4		4	100	11	11	100	17	17	100					17	1	18	17	94			4		6	6	16	6			6	3	2		5
4				61	61	100		27	34	34	100	4		4	100	11	11	100	19	19	100					19	2	21	19	90			6		7	7	20	6			6	2	2		4
5				47	47	100		27	18	18	100					11	11	100	9	9	100		8		8	9		17	9	53			4		6	5	15	4	4		8	2	6		8
P																																														
6				26	26	100		14	10	10	100	2		2	100	11	8	73	-3			1	22		23			23			3	1	5	4	8	4	25	4	28		32	2	25		27
7	12			18	30	60	8	14	9	5	60	6		4	60	13	1	8	-9			13	22	4	39			39			9	6	6	5	8		34		63		63	3	53	4	60
8	19			19	38	50	5	21	11	6	50	7		4	50	13	2	15	-9			13	21	2	36			36			9	6	8	4	9		36		64		64	2	53	2	57
9	20			19	39	49	4	21	13	6	49	5		2	49	12	4	33	-7			14	22	2	38			38			7	6	9	5	8		35		51		51	2	43	2	47
10	11			26	37	70	2	15	18	13	70	6	3	6	70	12	7	58	-4			13	23		36			36			4	3	13	3	7	1	31	3	22		25	2	21		23
11				45	45	100		18	25	25	100	6	2	8	100	14	14	100	5	5	100	14	8		22	5		27	5	19			10	2	7	6	25	4	4		8	3	5		8
12		1		36	37	97		15	21	20	97	3		3	97	10	10	97	7	7	97	12			12	7		19	7	37			5	1	7	8	21	5			5	2	3		5
P																																														
Tot.	67	2		1111	1180		19	491	641			107	15			277			244			80	150	8	238	276	21	535			32	22	150	25	170	103	502	89	245		334	53	241	8	302

Date: Sunday February 10, 1946

17-17790-46

GENERATION AND TRANSMISSION OF ELECTRIC ENERGY ON HOLTWOOD - SAFE HARBOR SYSTEM AND TRANSMISSION FROM MARYLAND TO HOLTWOOD'S R"SALE CUSTOMERS IN PENNSYLVANIA

Values Are In Megawatthours

HOUR	ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT SAFE HARBOR FROM -						SEND-OUT FROM 13 KV 60 CYCLE BUS AT SAFE HARBOR TO -					DELIVERIES TO P P & L CO. VIA DONEGAL				DELIVERIES TO P P & L CO. VIA LEHMAN FARM			DELIVERIES TO 13 KV 60 CYCLE BUS AT HOLTWOOD VIA LEHMAN F.			ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT HOLTWOOD FROM -									SEND-OUT FROM 13 KV 60 CYCLE BUS AT HOLTWOOD TO -							ENERGY SUPPLIED TO 11 KV 25 CYCLE BUS AT HOLTWOOD FROM -				SEND-OUT FROM 11 KV 25 CYCLE BUS AT HOLTWOOD TO -			
	60 Cycle Gen. at S.H.	Freq. Chg'r.	69 Kv Cir's.	Maryland	Total	% From Maryland	Maryland	Freq. Chg'r.	69 KV CIRCUITS TOTAL	From Md.	% From Md.	Firm	Other	Total From Maryland	% From Maryland	Total	From Maryland	% From Maryland	Total	From Maryland	% From Maryland	60 CY. GENERATORS AT HOLT'D. Steam	Hydro	Freq. Chg'r.	Total	Lehman F.	Wat. Ed. PP & L Co.	Total	From Maryland	% From Maryland	Lehman Farm	Wat. Ed. Firm	Wat. Ed. Other	PP & L	Phil. Elec	Freq. Chg'r.	Total	Freq. Chg'r.	25 Cycle Gen. erators	Highland from Maryland	Total	PP & L Co.	Highland Int.	Freq. Chg'r.	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(12a)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(31a)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)	(43)
1				50	50	100		28	19	19	100	2		2	100	14	14	100	4	4	100	27			27	4		31	4	13			8	2	11	8	29	7			7		6		6
2				44	44	100		26	15	15	100	1		1	100	11	11	100	2	2	100	27			27	2		29	2	7			10	2	8	6	26	5			5	2	2		4
3				38	38	100		29	7	7	100		-2			9	7	78	0[N]			26			26	1		27			1		6	2	9	6	24	6			6	2	2		4
4				41	41	100		28	11	11	100					9	9	100	1	1	100	26			26	1		27	1	4			10	2	8	6	26	4			4	2	2		4
5				41	41	100		25	13	13	100	2		2	100	10	10	100	2	2	100	27			27	2		29	2	7			10	2	9	6	27	6			6	3	2		5
6				43	43	100		28	15	15	100	2		2	100	12	12	100	1[N]	1	100	25	3		28	2		30	1	3	1		10	2	8	5	26	5	1		6	3	4		7
7				57	57	100		29	25	25	100	9		9	100	16	16	100	1[N]	1	100	25	6		31	3		34	1	3	2		10	4	9	9	34	7	5		12	3	7		10
P																																													
8				56	56	100		26	30	30	100	14		14	100	20	16	80	-7			27	22		49			49			7	4	12	6	11	4	43	4	52		56	4	46		50
9	40	1		16	57	28	2	3	52	16	28	17	7	7	28	24	7	28	3	1	28	26	20		46	3		49	1	2		9	14	5	12	4	44	4	62		66	5	55		60
10	68	1		4	73	5	8	6	60	3	5	17	12	1	5	27	1	5	4	-	5	26	20		46	4		50				12	16	5	11	4	48	4	61		65	6	54		60
11	88	1		3	92	3	23		71	2	3	17	16	1	3	26	1	3	8	-	3	27	20		47	8		55				14	17	5	12	2	50	2	62		64	5	53		58
12	76	2		6	84	7	16	1	68	5	7	15	17	2	7	26	2	7	7	-	7	26	20		46	7		53				13	18	4	12	4	51	2	64		66	5	55		60
P																																													
1	17			28	45	62	3	22	20	12	62	12		7	62	20	5	25	-11			26	19		45			45			11	7	6	6	12	2	44		61		61	4	54		58
2	93	9			99		26		75			13	19			26			11			26	20		46	11		57				13	22	4	11	2	52	2	60		62	6	52		58
3	87	5		2	94	2	21		73	1	2	14	20	1	2	26	1	2	10	-	2	26	21		47	10		57				13	22	3	12	4	54	4	50		54	5	44		49
4	86	10			96		35		62			14	15			24			7			26	23		49	7		56				13	18	4	10	4	49	5	50		55	4	46		50
5	81	4			85		57	3	29			14				22			-6			26	22		48			48			6	13	3	6	13	4	45	2	64		66	6	56		62
P																																													
6	90	1			91		57	3	32			15				21			-4			25	21		46			46			4	14	2	5	14	6	45	5	65		70	3	59		62
7	83	1			84		42	3	38			16	4			21			-3			27	23		50			50			3	13	9	6	13	2	46	2	67		69	4	60		64
8	76				76		50	1	27			15				21			-9			26	22		48			48			9	13	3	6	13		44		67		67	4	57		61
9	48	5		1	54	2	26	1	26	1	2	15		-	2	20	-	2	-7			26	22		48			48			7	10	8	6	12		43		67		67	4	57	2	63
10	12		1	19	32	59	2	16	13	8	61	7		4	61	18	4	22	-12			26	22	2	49			49			12	6	10	7	13		48		67		67	4	58	2	64
11				29	29	100		20	8	8	100	5		6	100	13	3	23	-12			26	22	2	50			50			12	5	10	6	12		45		68		68	3	56	2	61
12				36	36	100		19	15	15	100	6		6	100	13	9	69	-5			24	11		35			35			5	3	13	4	10		35		61		61	3	52	1	56
P																																													
Tot.	742	40	1	514	1497		367	317	804			242	108			448			-15			624	359	4	987	65		1052			80	175	267	103	265	88	978	76	1054		1130	90	939	7	1036

Date: Wednesday February 27, 1946

17-19760-46

GENERATION AND TRANSMISSION OF ELECTRIC ENERGY ON HOLTWOOD - SAFE HARBOR SYSTEM AND TRANSMISSION FROM MARYLAND TO HOLTWOOD'S RESALE CUSTOMERS IN PENNSYLVANIA

Values Are In Megawatthours

Hour	ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT SAFE HARBOR FROM -						SEND-OUT FROM 13 KV 60 CYCLE BUS AT SAFE HARBOR TO -					DELIVERIES TO P.P & L CO. VIA DONEGAL				DELIVERIES TO P.P & L CO. VIA LEHMAN FARM			DELIVERIES TO 13 KV 60 CYCLE BUS AT HOLTWOOD VIA LEHMAN F.			ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT HOLTWOOD FROM									SEND-OUT FROM 13 KV 60 CYCLE BUS AT HOLTWOOD TO -							ENERGY SUPPLIED TO 11 KV 25 CYCLE BUS AT HOLTWOOD FROM -				SEND-OUT FROM 11 KV 25 CYCLE BUS AT HOLTWOOD TO -			
									69 KV CIRCUITS													60 CY. GENERATORS AT HOLT'D.												Wst. Ed																
	60 Cycle Gen. at S.H.	Freq. Chg'r.	69 Kv Cir's.	Maryland	Total	% From Maryland	Maryland	Freq. Chg'r.	TOTAL	From Md.	% From Md.	Firm	Other	Total From Maryland	% From Maryland	Total	From Maryland	% From Maryland	Total	From Maryland	% From Maryland	Steam	Hydro	Freq. Chg'r.	Total	Lehman F.	Wst. Ed. PP & L Co	Total	From Maryland	% From Maryland	Lehman Farm	Firm	Other	PP & L	Phil Elec	Freq. Chg'r.	Total	Freq. Chg'r.	25 Cycle Generators	Highland Town Maryland	Total	PP & L Co.	Highland Town Md.	Freq. Chg'r.	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(12a)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(31a)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)	(43)
1	163				163		124	13	29			5	4			13			8				23	4	27	8	-	35				16		2	18		36		79		79	2	66	6	74
2	161	2			163		126	2	38			4	9			13			10				24	6	30	10		40				19	1	1	16		37		79		79	2	64	6	72
3	161				161		110	4	49			5	14			14			15				24	8	32	15		47				19	7		16		42		80		80	2	63	8	73
4	162	1			163		101	3	61			4	19			15			18				22	8	30	18	1	49				19	15		15		49		79		79	2	62	9	73
5	160				160		90	8	64			5	22			16			21				24	8	32	21	1	54				19	17		16		52		80		80	2	62	9	73
6	161				161		111	9	43			6	10			15			12				23	6	29	12		41				19	3		17		39		79		79	2	64	6	72
7	162	4			166		101	5	64			10	15			17			17				23	5	28	17		45				19	7	1	16		43		80		80	2	65	6	73
P																																														
8	162	2			164		109	12	46			13	7			21			20			23	24		47	3		50			1	21	2	4	18		46		79		79	3	69	2	74
9	162				162		92	14	58			15	8			24			6			27	23		50	6		56				21	3	4	21	4	53	4	80		84	5	69		74
10	160	1			161		86	6	72			15	17			27			10			27	24		51	10		61				21	11	4	21	1	58		78		78	3	69		72
11	160				160		70	19	75			16	17			27			10			25	24		49	10		59				21	11	4	19		55		81		81	5	68		73
12	160				160		80	8	74			13	20			28			10			25	22	2	49	10		59				21	10	3	20		54		77		77	3	67	2	72
P																																													
1	160				160		90	11	61			11	18			21			5			26	24	2	52	5		57				21	10	3	18		54		81		81	3	67	2	72
2	160				160		76	14	73			15	19			26			12			27	23		50	12		62				21	14	3	20		58		78		78	5	67	2	74
3	162				162		71	19	74			15	16			27			13			25	24		49	13		62				21	15	2	19		57		79		79	4	67	1	72
4	161				161		84	11	68			13	15			26			12			26	24	2	52	12		64				21	9	4	20		54		81		81	3	69		72
5	160				160		72	14	77			14	22			26			13			26	22		48	13		61				21	16	2	19		58		79		79	7	67		71
P																																													
6	160				160		84	17	62			12	16			22			9			25	24		49	9		53				21	9	3	20	2	55		78		78	4	68	2	74
7	160				160		94	15	56			12	12			22			6			26	24		50	6		56				21	7	4	21		55		77		77	3	68		71
8	160				160		95	13	54			13	9			23			5			26	22	2	50	5		55				21	5	4	22		52		80		80	3	65	4	72
9	160				160		98	12	52			13	12			23			5			26	23	2	51	5		56				21	7	4	21		53		78		78	3	67	2	72
10	161				161		108	13	42			11	7			19			0(M)			26	24	2	52	1		53			1	21	3	5	20		50		80		80	3	67	4	74
11	161				161		92	17	56			9	17			19			8			26	23	6	55	8		63				21	13	2	20		56		78		78	3	64	6	73
12	162				162		114	13	38			6	11			15			5			9	23	5	37	5		42				20	3	2	18		43		81		81	2	63	4	69
P																																													
Tot.	3861	10			3871		2278	272	1386			255	336			499			232(M)			421	560	68	1049	234	2	1285			2	446	198	63	451	7	1207	4	1901		1905	73	1587	81	1741

Date: March 14, 1946 Thursday

GENERATION AND TRANSMISSION OF ELECTRIC ENERGY ON HOLTWOOD - SAFE HARBOR SYSTEM AND TRANSMISSION FROM MARYLAND TO HOLTWOOD'S RESALE CUSTOMERS IN PENNSYLVANIA

Values Are In Megawatthours

Hour	ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT SAFE HARBOR FROM -						SEND-OUT FROM 13 KV 60 CYCLE BUS AT SAFE HARBOR TO -					DELIVERIES TO P P & L CO. VIA DONEGAL				DELIVERIES TO P P & L CO. VIA LEHMAN FARM			DELIVERIES TO 13 KV 60 CYCLE BUS AT HOLTWOOD VIA LEHMAN F.			ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT HOLTWOOD FROM -									SEND-OUT FROM 13 KV 60 CYCLE BUS AT HOLTWOOD TO -						ENERGY SUPPLIED TO 11 KV 25 CYCLE BUS AT HOLTWOOD FROM -				SEND-OUT FROM 11 KV 25 CYCLE BUS AT HOLTWOOD TO -			
	60 Cycle Gen. at S.H.	Freq. Chg'r.	69 Kv Cir's.	Maryland	Total	% From Maryland	Maryland	Freq. Chg'r.	69 KV CIRCUITS TOTAL	From Md.	% From Md.	Fire	Other	Total From Maryland	% From Maryland	Total	From Maryland	% From Maryland	Total	From Maryland	% From Maryland	60 CY. GENERATORS AT HOLT'D. Steam	Hydro	Freq. Chg'r.	Total	Lehman F.	Md. Ed. PP & L Co	Total	From Maryland	% From Maryland	Lehman Ferry	Md. Ed. Fire	Md. Ed. Other	PP & L	Phil. Elec	Freq. Chg'r.	Total	Freq. Chg'r.	25 Cycle Generators	Highland from Md.	Total	PP & L Co.	Highland from Md.	Freq. Chg'r.	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(12a)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(31a)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)	(43)
1				38	38	100		25	12	12	100	3		3	100	11	9	82	-3			26	13		39			39			3	2	12	3	16		36		33		33	3	26		29
2				34	34	100		22	11	11	100					10	10	100	-1[N]			26	10		36	2		38			3		14	2	16		35		10		10	3	6		9
3			1	43	44	98		30	12	12	100		-2			10	9	86	2	2	86	26			26	2		28	2	7			6	2	18		26		6		6	3	2		5
4				31	31	100		23	8	8	100		-3			10	7	73	-2			26	7		33	1		34			3		8	3	17		31		10		10	3	7		10
5			1	25	26	96		18	5	5	100		-1			8	5	63	-4			26	13		39			39			4		12	2	16		34		10		10	3	6		9
6				37	37	100		29	7	7	100		-1			10	7	70	-4			26	13		39			39			4	1	9	3	17		34		29		29	2	25		27
7				42	42	100		25	15	15	100	6		6	100	13	9	69	-4			26	13		39			39			4	1	11	4	17		37		27		27	3	22		25
P																																													
8	30			26	56	46		23	32	15	46	9		4	46	20	9	46	1[N]	-	46	26	12		38	2		40			1	5	7	4	19		36		39		39	5	34		39
9	77	6			83		40	2	42			14				23			3			26	10		36	3		39				9		5	22		36		61		61	5	52		57
10	117	5			122		68		54			17	6	7		25			5			26	11		37	5		42				14		4	21		39		71		71	5	61		66
11	105	6			111		57		54			17	6			27			5			26	12		38	5		43				14		5	21		40		79		79	4	67		71
12	92	2			94		52		46			15	1			24			3			26	12		38	3		41				11		4	22		37		78		78	4	66		70
P																																													
1	39	1		1	41	2	7	5	31	1	2	11		-	2	20	-	2	-2			26	11		37			37			2	9		5	20		36		76		76	4	68		72
2	86	5			91		42	5	45			15				24			3			26	12		38	3		41				11		4	22		37		79		79	4	67		71
3	103	7			110		59		54			14	3			25			7			27	11		38	7		45				13		4	23		40		77		77	5	66		71
4	105	1			106		48	5	51			14	5			25			5			26	12		38	5		43				14		4	21		39		79		79	5	68		73
5	71	1			72		26	6	42			9				23			4			26	12		38	4		42				11		4	22		37		80		80	5	68		73
P																																													
6	48	2		4	54	7	14	5	34	2	7	6		-	7	21	1	7	4	-	7	26	11		37	4		41				11	2	4	22		39		71		71	3	63		66
7	44	3			47		9	4	36			10				20			4			26	11		37	4		41				11		3	23		37		78		78	3	67		70
8	65	5			70		26		44			12				21			7			26	12		38	7		45				13	3	4	23		43		79		79	4	68		72
9	49	7			56		16	1	40			10				22			5			26	11		37	5		42				11	2	3	22		38		77		77	4	69		73
10	41	1		1	43	2	3	3	38	1	2	10		-	2	20	-	2	6	-	2	26	12		38	6		44				11	4	3	21		39		78		78	3	65		68
11	21			23	44	52		14	31	16	52	7		4	52	17	9	52	3	2	52	26	11		37	3		40	2	5		7	6	3	21		37		71		71	4	63		67
12				49	49	100		27	15	15	100	4		4	100	12	11	92	0[N]			26	12		38	2		40			2	3	9	3	20		37		55		55	3	46		49
P																																													
Tot.	1093	52	2	349	1496		467	272	759			203	14			441[P]			47			625	264		889	73		962			26	182	105	85	482		880		1353		1353	90	1157		1242

[V] 12/14 of 10 [B] 12/14 of 2

[V] 8/11 of 10

Date: Thursday April 25, 1946

17-17700-46

GENERATION AND TRANSMISSION OF ELECTRIC ENERGY ON
HOLTWOOD - SAFE HARBOR SYSTEM
AND TRANSMISSION FROM MARYLAND TO HOLTWOOD'S RESALE CUSTOMERS IN PENNSYLVANIA

Values Are In Megawatthours

Hour	ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT SAFE HARBOR FROM -						SEND-OUT FROM 13 KV 60 CYCLE BUS AT SAFE HARBOR TO -					DELIVERIES TO P P & L CO. VIA DONEGAL			DELIVERIES TO P P & L CO. VIA LEHMAN FARM			DELIVERIES TO 13 KV 60 CYCLE BUS AT HOLTWOOD VIA LEHMAN F.			ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT HOLTWOOD FROM -									SEND-OUT FROM 13 KV 60 CYCLE BUS AT HOLTWOOD TO -									ENERGY SUPPLIED TO 11 KV 25 CYCLE BUS AT HOLTWOOD FROM -				SEND-OUT FROM 11 KV 25 CYCLE BUS AT HOLTWOOD TO -			
	60 Cycle Gen. at S.H.	Freq. Chg'r.	69 Kv Cir's.	Maryland	Total	% From Maryland	Maryland	Freq. Chg'r.	69 KV CIRCUITS TOTAL	From Md.	% From Md.	Fire	Other	Total From Maryland	% From Maryland	Total	From Maryland	% From Maryland	Total	From Maryland	% From Maryland	60 CY. GENERATORS AT HOLT'D. Steam	Hydro	Freq. Chg'r.	Total	Lehman F.	Met. Ed. PP & L Co.	Total	From Maryland	% From Maryland	Lehigh Ferro	Met. Ed. Fire	Met. Ed. Other	PP & L	Phil. Elec	Freq. Chg'r.	Total	Freq. Chg'r.	25 Cycle Generators	Highland Town Maryland	Total	PP & L Co.	Highland Town Md.	Freq. Chg'r.	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(12a)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(31a)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)	(43)
1				31	31	100		21	11	11	100		-2			11	9	85	-1			26	12		38	1		39			2	2	13	2	21		40		30		30	2	23		25
2				33	33	100		12	19	19	100	2		2	100	11	11	100	7	7	100	26	4		30	7		37	7	19			14	1	19		34		5		5	2	4		6
3				44	44	100		25	17	17	100		-2			11	10	89	6	5	89	26			26	6		32	6	19			11	1	17		29			3	3	3			3
4				57	57	100		29	27	27	100	3		3	100	11	11	100	10	10	100	25			25	10		35	10	29			16		15		31			2	2	3			3
5				53	53	100		28	24	24	100	7		7	100	11	11	100	7	7	100	27			27	7		34	7	21			15	1	16		32			3	3	3			3
6				40	40	100		22	17	17	100					11	11	100	5	5	100	26	2		28	5		33	5	15			12	2	16		30			4	4	2			2
7				22	22	100		8	14	14	100	3		3	100	12	11	92	-2			26	13		39			39			2	1	13	3	17		36		9		9	3	6		9
P																																													
8	23			8	31	26	7	15	5	1	26	1		-	26	13	1	8	-10			26	25		51			51			10	4	10	5	18		47		10		10	4	6		10
9	25	1		2	28	7	12	8	11	1	7	5		-	7	15	1	7	-10			26	24		50			50			10	7	7	5	19		48		40		40	4	32		36
10	24	3			27		9		21			10				16			-5			26	23		49			49			5	9	7	5	18		45		63		63	4	56		59
11	30	1		1	32	3	12	2	17	1	3	6		-	3	18	1	3	-7			26	21		47			47			7	10	2	5	19		43		67		67	4	57		61
12	31			2	33	6	6	5	23	1	6	10		-	6	16	-	6	-9			25	23		48			48			9	10	8	5	19		46		70		70	4	59		63
P																																													
1	20			12	32	38		16	18	7	38	9		3	38	15	4	27	-6			26	23		49			49			6	7	7	5	19		44		65		65	4	58		62
2	11			20	31	65		21	11	7	65	7		5	65	13	2	15	-8			25	22		47			47			8	7	8	4	18		45		56		56	5	47		52
3	20			18	38	47	1	19	19	9	47	8		4	47	14	5	36	-3			26	17		43			43			3	6	10	4	17		40		37		37	5	31		36
4	22			7	29	24	3	11	15	4	24	5		1	24	13	3	23	-4			26	12		38			38			4	5	10	4	14		37		36		36	3	30		33
5	24			8	32	25	4	12	17	4	25	7		2	25	14	2	14	-4			27	12		39			39			4	5	8	3	13		33		39		39	4	31		35
P																																													
6	36			9	45	20	4	23	20	4	20	8		2	20	13	2	15	-1			25	12		37			37			1	5	11	4	14		35		35		35	4	31		35
7	44			2	46	4	10	21	16	1	4	7		-	4	14	1	4	-4			26	13		39			39			4	7	7	4	13		35		39		39	3	31		34
8	70				70		35	9	26			8				17						27	12		39			39				10	6	4	16		36		36		36	4	31		35
9	65				65		29	11	28			9				19			2			26	13		39	2		41				9	9	4	15		37		38		38	3	32		35
10	37				37		5	13	19			6				15			-2			27	12		39			39			2	7	9	3	15		36		40		40	4	33		37
11	8			20	28	71		13	15	11	71	6		4	71	12	7	58	-4			26	13		39			39			4	4	10	4	13		35		38		38	3	34		37
12				37	37	100		21	13	12	100		-1			11	10	92	2	2	91	9	13		22	3		25	2	8	1	1	6	2	14		24		37		37	2	32		34
P																																													
Tot.	490	5		426	921		137	365	422			127	- 5			326			-36			607	321		928	41		969			77	116	229	80	396		898		794	8	802	82	663		745

1 11/13 of 11
2 12/13 of 11
3 12/13 of 2
4 17/19 of 11
5 17/19 of 6

Date: Saturday April 27, 1946

17-17700-46

GENERATION AND TRANSMISSION OF ELECTRIC ENERGY ON HOLTWOOD - SAFE HARBOR SYSTEM AND TRANSMISSION FROM MARYLAND TO HOLTWOOD'S RESALE CUSTOMERS IN PENNSYLVANIA

Values Are In Megawatthours

Hour	ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT SAFE HARBOR FROM -						SEND-OUT FROM 13 KV 60 CYCLE BUS AT SAFE HARBOR TO -					DELIVERIES TO P P & L CO. VIA DONEGAL				DELIVERIES TO P P & L CO. VIA LEHMAN FARM			DELIVERIES TO 13 KV 60 CYCLE BUS AT HOLTWOOD VIA LEHMAN F.			ENERGY SUPPLIED TO 13 KV. 60 CYCLE BUS AT HOLTWOOD FROM -										SEND-OUT FROM 13 KV 60 CYCLE BUS AT HOLTWOOD TO -							ENERGY SUPPLIED TO 11 KV 25 CYCLE BUS AT HOLTWOOD FROM -				SEND-OUT FROM 11 KV 25 CYCLE BUS AT HOLTWOOD TO -			
	60 Cycle Gen. at S.H.	Freq. Chg	69 Kv Cir's.	Maryland	Total	% From Maryland	Maryland	Freq. Chg'r.	69 KV CIRCUITS TOTAL	From Md.	% From Md.	Firm	Other	Total From Maryland	% From Maryland	Total	From Maryland	% From Maryland	Total	From Maryland	% From Maryland	60 CY. GENERATORS AT HOLT'D. Steam	Hydro	Freq. Chg'r	Total	Lehman F.	Wat. Ed. P P & L Co	Total	From Maryland	% From Maryland	Lehman Ferry	Wat. Ed. Firm	Wat. Ed. Other	PP & L	Phil. Elec	Freq. Chg'r.	Total	Freq. Chg'r.	25 Cycle Generators	Highland Town Maryland	Total	PP & L Co.	Highland Town Md.	Freq. Chg'r.	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(12a)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(31a)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)	(43)
1				34	34	100		7	26	26	100	6		6	100	11	11	100	6	6	100	26	6		32	7		39	6	15	1		22	1	14		38		11		11	9	6		9
2		1		46	47	98		8	38	37	98	7	4	11	98	13	13	98	14	14	98	26			26	14		40	14	35			24		14		38			3	3	3			3
3				41	41	100		21	21	21	100	2		2	100	13	13	100	8	8	100	26			26	8		34	8	324			16	1	15		32			3	3	3			3
4				55	55	100		26	27	27	100	6		6	100	12	12	100	10	10	100	26			26	10	1	37	10	27			18		17		35			2	2	3			3
5				50	50	100		25	25	25	100	3		3	100	12	12	100	9	9	100	26			26	9	1	36	9	25			14		19		33			4	4	3			3
6				54	54	100		18	35	36	100	6		6	100	13	13	100	11	11	100	26			26	11		37	11	30			16	1	14		31		6		6	3	1		4
7				67	67	100		20	45	45	100	5		5	100	21	21	100	12	12	100	26	2		28	12		40	12	30		1	14	2	20		37		29		29	5	23		28
P																																													
8	18	1		26	45	58		9	36	21	58	7		4	58	22	13	58	2	1	68	26	15		41	2		43	1	2		6	10	4	20		40		54		54	5	44		49
9	25	1			76		35	5	38			12				24			1			27	21		48	2		50			1	12	7	5	23		48		58		68	6	49		54
10	96	2			98		51	2	47			18				26			3			26	22		48	3		51				15	6	5	21		47		61		61	6	50		56
11	96				96		52	4	40			16				24			1			27	22		49	1		50				14	6	5	21		46		60		60	5	50		55
12	60	8			68		37		30			10				18			0			26	24		50	1		51			1	12	8	4	21		46		61		61	4	52		56
P																																												
1	46			7	53	13	14	13	29	4	13	5		1	13	21	3	13	-2			27	23		50			50			2	10	10	5	20		47		61		61	5	51		56
2	76				76		32	11	34			9				23			1			26	23		49	1		50				12	8	5	20		45		59		59	5	51		56
3	60	4			64		29	3	34			14				21			-2			26	25		51			51			2	12	12	5	18		49		63		63	5	51		56
4	45	8			53		29	1	23			8				19			-4			26	22		48			48			4	11	9	5	17		46		60		60	6	52		58
5	49	1			50		24	4	28			5				18			-2			27	23		50			50			2	11	8	4	21		46		63		63	4	51		55
P																																												
6	56	9			64		37		28			4				19						25	24		49			49				12	6	4	21		43		66		66	5	55		60
7	41	10			51		21		30			5				20			1			25	23		48	1		49				11	11	5	21		48		63		63	4	54		58
8	52	11			63		36		28			5				21			-1			26	24		50			51			2	12	7	5	21		47		61		61	5	51		56
9	47	9			56		31		26			8				18			-1			26	23		49			49			1	11	8	4	20		44		61		61	4	53		57
10	19	2		10	31	32	3	7	25	8	32	8		3	32	16	5	32	0			26	25		51	1		52			1	9	14	3	21		48		63		63	3	52		55
11	1			37	38	97		25	12	12	97	3		3	97	12	9	75	-4			26	24		50			50			4	5	17	4	18		48		59		59	4	52		56
12		2		27	29	93		9	19	18	93	2		2	93	10	9	93	3	3	93	26	12		38	4		42	3	7	1	2	20	2	15		40		29		29	3	23		26
P																																												
Tot.	836	69		454	1359		431	218	719			174	4			427			66			626	383		1009	88	2	1099			22	178	291	79	452		1022		1048	12	1060	101	871		972

Date: Tuesday, May 7, 1946

GENERATION AND TRANSMISSION OF ELECTRIC ENERGY ON HOLTWOOD - SAFE HARBOR SYSTEM AND TRANSMISSION FROM MARYLAND TO HOLTWOOD'S RESALE CUSTOMERS IN PENNSYLVANIA

Values Are In Megawatthours

HOUR	ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT SAFE HARBOR FROM -						SEND-OUT FROM 13 KV 60 CYCLE BUS AT SAFE HARBOR TO -					DELIVERIES TO P P & L CO. VIA DONEGAL				DELIVERIES TO P P & L CO. VIA LEHMAN FARM			DELIVERIES TO 13 KV 60 CYCLE BUS AT HOLTWOOD VIA LEHMAN F.			ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT HOLTWOOD FROM -									SEND-OUT FROM 13 KV 60 CYCLE BUS AT HOLTWOOD TO -							ENERGY SUPPLIED TO 11 KV 25 CYCLE BUS AT HOLTWOOD FROM -				SEND-OUT FROM 11 KV 25 CYCLE BUS AT BOLTWOOD TO -			
	60 Cycle Gen. at S.H.	Freq. Chg'r.	69 Kv Cir's.	Maryland	Total	% From Maryland	Maryland	Freq. Chg'r.	69 KV CIRCUITS TOTAL	69 KV CIRCUITS From Md.	69 KV CIRCUITS % From Md.	Fire	Other	Total From Maryland	% From Maryland	Total	From Maryland	% From Maryland	Total	From Maryland	% From Maryland	60 CY. GENERATORS AT HOLT'D. System	60 CY. GENERATORS AT HOLT'D. Hydro	60 CY. GENERATORS AT HOLT'D. Freq. Chg'r.	60 CY. GENERATORS AT HOLT'D. Total	Lehman F.	Met. Ed. & PP & L Co	Total	From Maryland	% From Maryland	Lehman Farm	Met. Ed. Fire	Met. Ed. Other	PP & L	Phil. Elec	Freq. Chg'r.	Total	Freq. Chg'r.	25 Cycle Generators	Highland Town Maryland	Total	PP & L Co.	Highland Town Md.	Freq. Chg'r.	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(12a)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(31a)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)	(43)
1	161	8			169		133	1	36			5	10			12			6			26	24		50	6		56				21	15	2	18		56		84		84	2	75		77
2	161	3			164		110	3	51			5	18			14			13			26	24		50	13		63				21	20		16		57		84		84	2	74		76
3	161				161		93	15	56			5	19			14			16			20	24		44	16	1	61				21	21		15		57		84		84	1	74		75
4	162				162		82	16	65			5	19			16			22			15	25		40	22	1	63				21	19		16		56		84		84	2	74		76
5	163				163		75	19	71			8	22			17			26			15	25		40	26	1	67				21	23		17		61		83		83	3	75		78
6	163				163		86	14	65			11	16			19			16			16	24		40	16	1	57				21	19		17		57		84		84	3	74		77
7	163				163		91	17	54			13	10			22			9			27	25		52	9		61				21	18	3	15		57		84		84	4	72		76
P																																														
8	164				164		89	20	54			13	5			24			7			27	24		51	7		58				21	9	4	17		51		83		83	3	72		75
9	160				160		90	19	57			15	7			25			7			26	25		51	7		58				21	16	4	16		57		85		85	4	70		74
10	163				163		93	14	56			15	7			26			6			27	24		51	6		57				21	13	4	13		51		82		82	3	73		76
11	163				163		84	18	60			14	7			26			8			26	24		50	8		58				21	15	4	17		57		84		84	4	71		75
12	165	2			167		112	7	51			12	9			23			6			27	25		52	6		58				21	13	4	16		54		82		82	4	72		76
P																																														
1	162	1			163		105	2	56			13	7			24			8			27	24		51	8		59				21	14	3	16		54		85		85	4	71		75
2	164	7			171		110	1	62			13	9			25			9			26	25		51	9		60				21	15	4	15		55		84		84	3	71		74
3	160				160		101	4	55			12	7			24			9			27	25		52	9		61				21	15	3	16		55		82		82	4	72		76
4	161				161		100	5	57			13	10			23			8			26	24		50	8		58				21	17	3	12		53		83		83	4	72		76
5	166				166		100	15	49			11	11			19			7			27	24		51	7		58				21	17	3	14		55		83		83	4	72		76
P																																														
6	160	2			162		116	2	46			10	9			16			7			26	24		50	7		57				21	16	2	13		52		83		83	3	72		75
7	163	8			171		135		36			11	8			17			3			26	25		51	3		54				21	13	3	13		50		84		84	3	72		75
8	161	14			175		134		44			12	7			19			5			27	24		51	5		56				21	13	3	14		51		84		84	3	73		76
9	163	24			187		130		58			11	12			21			10			26	24		60	10		60				21	15	3	15		54		83		83	3	72		75
10	163	28			191		137		54			8	14			18			10			27	25		52	10		62				21	18	2	14		55		83		83	4	73		77
11	163	26			189		152		39			7	12			16			6			26	25		51	6		57				21	16	2	14		53		84		84	2	74		76
12	164	23			187		166		22			6				10			1			16	24		40	1		41				21	1	2	12		36		83		83	2	73		75
P																																														
Tot.	3899	146			4045		2624	194	1254			248	468			470			225			585	586		1171	225	4	1400				504	371	58	361		1294		2004		2004	44	1743		1817

Date: May 23, 1946 Thursday

17-17700-48

GENERATION AND TRANSMISSION OF ELECTRIC ENERGY ON HOLTWOOD - SAFE HARBOR SYSTEM AND TRANSMISSION FROM MARYLAND TO HOLTWOOD'S RESALE CUSTOMERS IN PENNSYLVANIA

Values Are In Megawatthours

Hour	ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT SAFE HARBOR FROM -						SEND-OUT FROM 13 KV 60 CYCLE BUS AT SAFE HARBOR TO -					DELIVERIES TO P P & L CO. VIA DONEGAL				DELIVERIES TO P P & L CO. VIA LEHMAN FARM			DELIVERIES TO 13 KV 60 CYCLE BUS AT HOLTWOOD VIA LEHMAN F.			ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT HOLTWOOD FROM -										SEND-OUT FROM 13 KV 60 CYCLE BUS AT HOLTWOOD TO -							ENERGY SUPPLIED TO 11 KV 25 CYCLE BUS AT HOLTWOOD FROM -				SEND-OUT FROM 11 KV 25 CYCLE BUS AT HOLTWOOD TO -			
									69 KV CIRCUITS													60 CY. GENERATORS AT HOLT'D.														Mez. Ed												
	60 Cycle Gen. at S.H.	Freq. Chg'r.	69 Kv Cir's.	Maryland	Total	% From Maryland	Maryland	Freq. Chg'r.	TOTAL	From Md.	% From Md.	Firm	Other	Total From Maryland	% From Maryland	Total	From Maryland	% From Maryland	Total	From Maryland	% From Maryland	Steam	Hydro	Freq. Chg'r.	Total	Lehman F.	Met. Ed. & PP & L Co.	Total	From Maryland	% From Maryland	Lehman Farm	Firm	Other	PP & L	Phil Elec	Freq. Chg'r.	Total	Freq. Chg'r	25 Cycle Generators	Highland Town Maryland	Total	PP & L Co.	Highland Town Md.	Freq. Chg'r.	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(12a)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(31a)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)	(43)
1	162	26			188		138		51			5	16			14			16			10	24		34	16	1	51				20	16		12		48		83		83	2	74		76
2	163	23			186		114		72			5	22			14			27				24		24	27	2	53				19	19		11		49		81		81	2	73		75
3	163	24			187		92		96			5	31			19			35				26		26	35	5	65				19	29		11		59		83		83	2	74		76
4	164	13			177		79		99			5	32			18			35				24		24	35	3	62				20	29		10		59		84		84	2	74		76
5	162	5			167		72		98			6	31			18			35				24		24	35	4	63				20	27		11		58		85		85	2	74		76
6	162	16			178		82		96			8	30			21			32				24		24	32	3	59				19	27		10		56		81		81	2	73		75
7	163	27			190		105		86			9	22			21			30				24		24	30	2	56				19	23		12		54		81		81	2	73		75
P																																													
8	169	28			191		118		76			13	15			21			25			3	26		28	25	1	54				20	16		12		48		83		83	3	71		74
9	167	26			193		130		61			14	14			21			15			17	24		41	15		56				21	19	1	12		53		82		82	3	72		75
10	166	26			192		148		44			13	8			18			4			27	24		51	4		55				21	14	3	12		50		82		82	2	72		74
11	167	28			192		151		42			11	8			18			4			27	24		51	4		55				21	15	4	12		52		83		83	3	73		76
12	161	28			189		155		40			9	10			16			3			24	24		50	3		53				21	13	2	11		47		82		82	3	71		74
P																																												
1	166	24			189		169		18			7	1			14			-3(W)			26	25		51	1		52			4	22	6	4	12		48		84		84	2	72		74
2	162	25			187		172		18			6				13			-4			26	24		50			50				4	21	5	4	11		45		82		82	3	73		76
3	162	26			192		170		21			7	3			13			-3			26	24		50			50				3	21	10	4	10		48		82		82	3	72		75
4	164	27			191		170		21			8	04			13			-3			26	23		49			49				3	21	7	3	10		44		84		84	2	72		74
5	164	25			189		172		20			10	3			12			-4			26	25		51			51				4	21	9	4	12		50		80		80	2	72		74
P																																												
6	163	24			187		164		24			10	5			12			-1			26	24		50			50				1	21	9	3	10		44		82		82	2	72		74
7	163	22			185		148		38			10	12			14			3			27	26		52	3		55					21	16	2	10		49		83		83	2	71		73
8	163	19			182		169		13			11				14			-7			27	24		51			51				7	21	5	5	10		48		81		81	3	72		75
9	162	19			181		171		11			8				13			-7			26	23		49			49				7	21	3	4	11		46		82		82	1	73		74
10	162	22			184		165		22			8	4			12			-3			27	24		51			51				3	21	9	4	11		48		81		81	1	73		74
11	164	25			189		159		32			6	13			13			1			25	24		49	1		50					21	12	2	11		46		83		83	2	73		75
12	164	26			190		149		38			4	17			11			4			28	24		52	4		56					21	17	2	9		49		83		83	1	73		74
P																																												
Tot.	3922	554			4476		3362		1137			198	301			373			234(W)			426	379		1005	270	21	1296				36	493	355	51	263		1198		1977		1977	52	1742		1794

Date: May 25, 1946 Saturday

17-17700-46

GENERATION AND TRANSMISSION OF ELECTRIC ENERGY ON HOLTWOOD - SAFE HARBOR SYSTEM AND TRANSMISSION FROM MARYLAND TO HOLTWOOD'S RESALE CUSTOMERS IN PENNSYLVANIA

Values Are In Megawatthours

Hour	ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT SAFE HARBOR FROM -						SEND-OUT FROM 13 KV 60 CYCLE BUS AT SAFE HARBOR TO -					DELIVERIES TO P P & L CO. VIA DONEGAL				DELIVERIES TO P P & L CO. VIA LEHMAN FARM			DELIVERIES TO 13 KV 60 CYCLE BUS AT HOLTWOOD VIA LEHMAN F.			ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT HOLTWOOD FROM -									SEND-OUT FROM 13 KV 60 CYCLE BUS AT HOLTWOOD TO -							ENERGY SUPPLIED TO 11 KV 25 CYCLE BUS AT HOLTWOOD FROM -				SEND-OUT FROM 11 KV 25 CYCLE BUS AT HOLTWOOD TO -			
	60 Cycle Gen. at S.H. (1)	Freq. Chg'r. (2)	69 Kv Cir's. (3)	Maryland (4)	Total (5)	% From Maryland (6)	Maryland (7)	Freq. Chg'r. (8)	69 KV CIRCUITS TOTAL (9)	69 KV CIRCUITS From Md. (10)	69 KV CIRCUITS % From Md. (11)	Firm (12)	Other (12a)	Total From Maryland (13)	% From Maryland (14)	Total (15)	From Maryland (16)	% From Maryland (17)	Total (18)	From Maryland (19)	% From Maryland (20)	60 CY. GENERATORS AT HOLT'D. Steam (21)	Hydro (22)	Freq. Chg'r. (23)	Total (24)	Lehman F. (25)	Met. Ed & PP & L Co. (26)	Total (27)	From Maryland (28)	% From Maryland (29)	Lehman Farm (30)	Met. Ed Firm (31)	Met. Ed Other (31a)	PP & L (32)	Phil Elec (33)	Freq. Chg'rs. (34)	Total (35)	Freq. Chg'r (36)	25 Cycle Generaters (37)	Highland from Maryland (38)	Total (39)	PP & L Co. (40)	Highland from Md. (41)	Freq. Chg'r. (42)	Total (43)
1				46	46	100		25	21	21	100	5	1	6	100	12	12	100	5	5	100	27			27	5		32	5	16			11	1	12	6	30	5			5	2	2		4
2				44	44	100		27	16	16	100	5		5	100	9	9	100	4	4	100	26			26	4		30	4	13			11	1	11	4	27	4			4	2	2		4
3				43	43	100		31	12	12	100	3		3	100	7	7	100	2	2	100	26			26	2		28	2	7			8	2	10	4	24	5			5	2	2		4
4				40	40	100		25	14	14	100	5	3	8	100	8	6	75	-2			27			27			27			2		6	1	12	5	26	4			4	2	1		3
5				28	28	100		17	11	11	100	5	1	6	100	8	5	63	-2			26			26			26			2		4	2	10	4	22	4			4	2	1		3
6			1	29	30	97		25	5	5	100	1	0	1	100	7	4	57	-3			26			26			26			3		2	1	10	6	22	4			4	2	2		4
7				48	48	100		28	19	19	100	5	4	9	100	12	10	83	-2(W)			26			26	1		27			3		10	2	9	6	27	2			2	1	1		2
P																																													
8				47	47	100		29	18	18	100	4		4	100	13	13	100	-2(W)			26			26	1		27			3		10		10	2	25	3			3	2			2
9				39	39	100		28	12	12	100	6		6	100	14	6	43	-6(W)			26			26	1		27			7		2		10	2	21	1			1	2			2
10				45	45	100		31	11	11	100	5		5	100	13	6	46	-8			26			26			26			8		2		11	3	24	2			2	2			2
11				40	40	100		27	13	13	100	4		4	100	14	9	64	-7			26			26			26			7		14		10	4	25	4			4	2	1		3
12				34	34	100		23	10	10	100	6		6	100	13	4	31	-10			26			26			26			10				10	6	26	4			4	2	1		3
P																																													
1				35	35	100		25	10	10	100	7		7	100	12	3	25	-7(W)			26			26	1		27			8		2		10	4	24	3			3	2	1		3
2				36	36	100		23	13	13	100	6		6	100	11	7	64	-4			26			26			26			4		6		10	4	24	4			4	3	2		5
3				38	38	100		22	16	16	100	6		6	100	11	11	100	1	1	100	27			27	1		28	1	4			10		9	4	23	5			5	2	2		4
4				27	27	100		14	13	13	100	7		7	100	11	6	55	-3(W)			26			26	1		27			4		4		10	8	26	5			5	2	3		5
5				42	42	100		27	15	15	100	7		7	100	11	8	73	-2(W)			26			26	1		27			3		8		10	4	26	6			6	2	2		4
P																																													
6				51	51	100		29	22	22	100	8	1	9	100	11	11	100	2(W)	2	100	24			24	4		28	2	7	2		6	2	9	4	23	4			4	3	1		4
7	12		3	20	35	57	7	19	7	4	63	2		1	63	11	3	27	-8			27	10		37			37			8	2	6	4	11	2	33	2	22		24	3	21		24
8	18	1		4	23	17	5	12	6	1	17	4		1	16	13			-10			26	13		39			39			10	5	5	5	13	1	39		38		38	6	32		35
9				30	30	100		17	13	13	100	4		4	100	13	9	69	-3(W)			27	6		33	1		34			4		8	3	11	4	30	2	10		42	3	8		11
10				27	27	100	1	9	17	17	100	4		4	100	11	11	100	2	2	100	26			26	2		28	2	7			7	3	10	7	27	6			33	2	2		4
11				60	60	100		28	31	31	100	6	7	13	100	13	13	100	7	7	100	27			27	7		34	7	21			14	1	010	4	29	4			33	4			4
12				60	60	100		27	33	33	100	4	3	7	100	12	12	100	9	9	100	25			25	9		34	9	26			16		9	4	29	5			34	4	1		5
P																																													
Tot.	30	1	4	913	948		13	568	358			119	20			270			-47(W)			627	29		656	41		697			88	7	162	29	247	99	632	88	70		158	56	88		144

Date: September 16, 1946 Sunday

17-17760-46

GENERATION AND TRANSMISSION OF ELECTRIC ENERGY ON HOLTWOOD - SAFE HARBOR SYSTEM AND TRANSMISSION FROM MARYLAND TO HOLTWOOD'S RESALE CUSTOMERS IN PENNSYLVANIA

Values Are In Megawatthours

	ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT SAFE HARBOR FROM -						SEND-OUT FROM 13 KV 60 CYCLE BUS AT SAFE HARBOR TO -					DELIVERIES TO P P & L CO. VIA DONEGAL				DELIVERIES TO P P & L CO. VIA LEHMAN FARM			DELIVERIES TO 13 KV 60 CYCLE BUS AT HOLTWOOD VIA LEHMAN F.			ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT HOLTWOOD FROM -										SEND-OUT FROM 13 KV 60 CYCLE BUS AT HOLTWOOD TO -							ENERGY SUPPLIED TO 11 KV 25 CYCLE BUS AT HOLTWOOD FROM -				SEND-OUT FROM 11 KV 25 CYCLE BUS AT HOLTWOOD TO -			
									69 KV CIRCUITS													60 CY. GENERATORS AT HOLT'D.													Met. Ed.														
HOUR	60 Cycle Gen. at S.H.	Freq. Chg'r.	69 Kv Cir's.	Maryland	Total	% From Maryland	Maryland	Freq. Chg'r.	TOTAL	From Md.	% From Md.	Firm	Other	Total From Maryland	% From Maryland	Total	From Maryland	% From Maryland	Total	From Maryland	% From Maryland	Steam	Hydro	Freq. Chg'r	Total	Lehman F.	Met. Ed. & PP & L Co	Total	From Maryland	% From Maryland	Lehman Farm	Firm	Other	PP & L	Phil. Elec	Freq. Chg'r.	Total	Freq. Chg'r.	25 Cycle Generators	Highland from Maryland	Total	PP & L Co.	Highland from Md.	Freq. Chg'r.	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(12a)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(31a)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)	(43)
1				95	95	100		20	15	15	100	1		1	100	10	10	100	5	5	100	27			27	5		32	5	16			10	2	11	9	32	7			7	4	1		5
2				44	44	100		16	27	27	100	4	2	6	100	12	12	100	9	9	100	25			26	9		34	9	26			15		9	5	29	6			6	4	2		6
3				41	41	100		23	18	18	100	4		4	100	11	11	100	4	4	100	26			26	4		30	4	13			12	1	9	6	28	4			4	4	1		5
4				46	46	100		27	19	19	100	2		2	100	9	9	100	4	4	100	25			25	4		29	4	14			11	2	8	7	28	6			6	4			4
5				41	41	100		27	12	12	100		-1			12	11	92	ON			26			26	1		27			1		5	2	10	6	24	5			5	3	2		5
6				70	70	100		29	41	41	100	7	2	9	100	18	18	100	9	9	100	26			26	9		35	9	26			14	2	12	5	33	5			5	4	1		5
7				92	92	100		29	62	62	100	12		12	100	24	24	100	17	17	100	26			26	17		43	17	49			14	2	16	4	36	4		1	5	5			5
P																																													
8				124	124	100		30	92	92	100	15	17	32	100	32	32	100	22	22	100	26	10		36	22		58	22	38		2	30	2	21	3	58	2	7	2	11	4		2	6
9	10			95	105	90		24	84	76	90	19	16	32	90	34	31	90	14	15	90	26	14	10	50	14		64	13	20		4	28	4	21		57		39		29	7	12	10	29
10	31			81	112	72		24	88	63	72	17	19	26	72	33	24	72	16	12	72	26	13	8	47	16		63	12	19		7	28	4	21		60		41		41	6	25	10	41
11	25			68	93	73		18	76	56	73	16	15	23	73	32	23	73	11	8	73	26	13	12	51	11		62	8	13		6	28	4	20		58		48		48	5	29	10	44
12	8	1		44	53	83		6	50	42	83	16	5	17	83	24	20	83	6(W)	5	83	26	14		40	8		48	5	10	2	2	16	5	20		45		10		10	4	2	2	8
P																																													
1	18			90	108	83		27	81	67	83	16	16	27	83	32	27	83	14	12	83	27	13	6	46	14		60	12	20		3	29	3	19		54		20		20	6	7	8	21
2	30			75	105	71		26	79	56	71	15	17	23	71	30	31	71	14	10	71	26	13	10	49	14		63	10	16		6	28	4	19		57		40		40	5	23	8	36
3	22			69	91	76		25	68	52	76	15	13	21	76	29	22	76	11	8	76	26	13	7	46	11		57	8	14		5	25	4	21		55		39		39	5	22	10	37
4				57	57	100		26	30	30	100	7		7	100	24	23	96	-2(M)			27	14	2	43			43			2	2	9	5	20		38		24		24	5	14	4	23
5				60	60	100		24	34	34	100	7		7	100	21	21	100	4(M)	4	100	27	7	2	36	5		41	4	10	1		8	4	20	4	37	2	7		9	5	3		8
P																																													
6				73	73	100		26	46	46	100	13		13	100	21	21	100	12	12	100	25			25	12		37	12	32			10	2	17	6	35	6			6	4			4
7	13			38	51	75		17	35	26	75	7		5	75	22	17	75	4	3	75	27	7		34	4		38	3	8		2	4	4	21	2	33	2	8		10	4	4		8
8	9			35	44	80		13	32	26	80	9		7	80	23	19	83	-2			26	12	2	40			40			2	2	8	5	22	1	40		15		16	5	6	3	14
9				53	53	100		20	32	32	100	9		9	100	22	22	100	3(M)	3	100	26	8		34	4		38	3	8	1		8	4	21		34	1	4	2	7	4		1	5
10				77	77	100		27	50	50	100	13	3	14	100	22	22	100	12	12	100	27			27	12		39	12	31			11	2	20	3	36	2		2	4	5			5
11				69	69	100		28	40	40	100	9	2	11	100	17	17	100	12	12	100	26			26	12		38	12	32			8	1	19	7	35	7			7	3	1		4
12				50	50	100		21	29	29	100	6	1	7	100	13	13	100	6	6	100	26			26	6		32	6	19			7	1	16	5	29	4			4	4			4
P																																													
Tot.	166			1537	1694			552	1140			239	127			527			265			627	151	59	837	214		1051			9	41	366	69	413	73	971	63	292	7	362	109	155	68	332

4 12/13 of 12

Date: September 16, 1946 Monday

17-11700-48

GENERATION AND TRANSMISSION OF ELECTRIC ENERGY ON HOLTWOOD - SAFE HARBOR SYSTEM AND TRANSMISSION FROM MARYLAND TO HOLTWOOD'S RESALE CUSTOMERS IN PENNSYLVANIA

Values Are In Megawatthours

Hour	ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT SAFE HARBOR FROM -						SEND-OUT FROM 13 KV 60 CYCLE BUS AT SAFE HARBOR TO -					DELIVERIES TO P P & L CO. VIA DONEGAL				DELIVERIES TO P P & L CO. VIA LEHMAN FARM			DELIVERIES TO 13 KV 60 CYCLE BUS AT HOLTWOOD VIA LEHMAN F.			ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT HOLTWOOD FROM -									SEND-OUT FROM 13 KV 60 CYCLE BUS AT HOLTWOOD TO -								ENERGY SUPPLIED TO 11 KV 25 CYCLE BUS AT HOLTWOOD FROM -				SEND-OUT FROM 11 KV 25 CYCLE BUS AT HOLTWOOD TO -			
	60 Cycle Gen. at S.H.	Freq. Chg'r.	69 Kv Cir's.	Maryland	Total	% From Maryland	Maryland	Freq. Chg'r.	69 KV CIRCUITS TOTAL	From Md.	% From Md.	Firm	Other	Total From Maryland	% From Maryland	Total	From Maryland	% From Maryland	Total	From Maryland	% From Maryland	60 CY. GENERATORS AT HOLT'D. Steam	Hydro	Freq. Chg'r.	Total	Lehman F.	Wat. Ed. PP & L Co	Total	From Maryland	% From Maryland	Lehman Farm	Wat. Ed. Firm	Other	PP & L	Phil. Elec	Freq. Chg'r.	Total	Freq. Chg'r.	25 Cycle Generators	Highland from Maryland	Total	PP & L Co.	Highland from Md.	Freq. Chg'r.	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(12a)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(31a)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)	(43)
1				52	529	100		22	29	29	100	6	2	8	100	14	14	100	7	7	100	27			27	7		34	7	21			8	1	19	4	32	4			4	4			4
2				54	54	100		25	29	29	100	5	4	9	100	13	13	100	7	7	100	26			26	7		33	7	21			9	2	14	6	31	4			4	4			4
3				45	45	100		21	24	24	100	6		6	100	12	12	100	6	6	100	27			27	6		33	6	18			8	1	16	4	29	4			4	4			4
4				55	55	100		26	29	29	100	5	2	7	100	13	13	100	7	7	100	27			27	7		34	7	21			10	1	17	5	33	4		1	5	4			4
5				61	61	100		28	32	32	100	8	1	9	100	14	14	100	8	8	100	25			25	8		33	8	24			8	1	17	3	29	4			4	4			4
6				77	77	100		29	47	47	100	11	3	14	100	18	18	100	13	13	100	27			27	13		40	13	33			10	2	18	4	34	3		1	4	4			4
7				94	94	100		22	71	71	100	15	6	21	100	27	27	100	19	19	100	25		1	26	19		45	19	42			18	1	19	4	42	2		3	5	5			5
P																																													
8				116	116	100		29	87	87	100	16	15	31	100	32	32	100	21	21	100	26	5	7	38	21		59	21	36		3	27	2	23		55		30		30	6	17	8	31
9	18			89	107	83		28	81	67	83	18	15	27	83	31	26	83	14	12	83	26	12	10	48	14		62	12	19		5	27	4	21		57		40		40	5	21	10	36
10	44			62	106	58		22	84	49	58	18	14	19	58	32	19	58	14	8	58	26	12	10	48	14		62	8	13		8	25	4	23		60		50		50	6	28	12	46
11	39			63	102	62		24	79	49	62	18	16	21	62	32	20	62	14	9	62	26	11	10	47	14		61	9	15		8	24	4	20		56		55		55	5	36	10	51
12	20			44	64	69		20	45	31	69	15	1	11	69	23	16	69	1(W)	1	69	26	14	4	44	6		50	1	2	5	3	17	5	17		47		22		22	6	12	5	23
P																																													
1	13			87	100	87		23	79	69	87	15	18	29	87	30	26	87	13	11	87	26	14	8	48	13		61	11	18		4	28	3	20		55		29		35	6	13	8	27
2	44			56	100	56		20	79	44	56	17	16	18	56	30	17	56	13	7	56	26	12	10	48	13		61	7	11		9	24	4	20		57		60		63	6	40	12	58
3	41			55	96	57		23	77	44	57	15	16	18	57	28	16	57	14	8	57	26	13	10	49	14		63	8	13		8	26	3	21		58		61		61	5	42	10	57
4	40	2		31	73	42		20	54	23	42	16	5	9	42	27	11	42	7	3	42	26	12	6	44	7		51	3	6		8	14	4	21		47		57		57	6	41	6	53
5		3		48	51	94		15	35	33	94	14		13	94	21	20	94	2	2	94	26	13	3	42	2		44	2	5		4	12	4	21		41		37		37	4	24	4	32
P																																													
6				51	51	100		22	30	30	100	4		4	100	19	19	100	7	7	100	26	3		29	7		36	7	19			4	3	20	6	33	6	3		3	5	2		7
7	21			32	53	60		19	35	21	60	7		4	60	22	13	60	1(W)	1	60	26	11		37	2		39	1	3	1	3	5	4	21	4	38	3	10		10	4	6		10
8	4			41	45	91		12	33	30	91	12		11	91	22	19	86	0(W)			26	13	2	41	1		42			1	2	10	5	21		39		26		26	4	16	3	23
9				49	49	100		20	28	28	100	6		6	100	22	22	100	-2			26	13		39			39			2		8	4	21		35		6		6	6	2	1	9
10	3			74	74	100		23	48	48	100	12	5	17	100	21	21	100	12	12	100	26			26	12		38	12	32			7	2	20	4	33	4			4	4			4
11				64	64	100		25	38	38	100	9	3	12	100	18	18	100	7	7	100	27			27	7		34	7	21			4	2	20	6	32	5			5	4	1		5
12				50	50	100		23	27	27	100	8	5	13	100	13	13	100	4	4	100	25			25	4		29	4	14			4	2	16	5	27	3		1	4	3			3
P																																													
Tot.	284	5		1450	1739			541	1206			276	147			534			209(W)			626	158	81	865	218		1083			9	65	337	68	466	55	1000	46	486	6	538	114	301	89	504

Date: September 17, 1946 Tuesday

17-17700-46

GENERATION AND TRANSMISSION OF ELECTRIC ENERGY ON HOLTWOOD - SAFE HARBOR SYSTEM AND TRANSMISSION FROM MARYLAND TO HOLTWOOD'S RESALE CUSTOMERS IN PENNSYLVANIA

Values Are In Megawatthours

Hour	ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT SAFE HARBOR FROM -						SEND-OUT FROM 13 KV 60 CYCLE BUS AT SAFE HARBOR TO -					DELIVERIES TO P P & L CO. VIA DONEGAL				DELIVERIES TO P P & L CO. VIA LEHMAN FARM			DELIVERIES TO 13 KV 60 CYCLE BUS AT HOLTWOOD VIA LEHMAN F.			ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT HOLTWOOD FROM -									SEND-OUT FROM 13 KV 60 CYCLE BUS AT HOLTWOOD TO -							ENERGY SUPPLIED TO 11 KV 25 CYCLE BUS AT HOLTWOOD FROM -				SEND-OUT FROM 11 KV 25 CYCLE BUS AT HOLTWOOD TO -			
	40 Cycle Gen. at S.H.	Freq. Chg'r.	69 Kv Circ.	Maryland	Total	% From Maryland	Maryland	Freq. Chg'r.	69 KV CIRCUITS TOTAL	69 KV CIRCUITS From Md.	69 KV CIRCUITS % From Md.	Firm	Other	Total From Maryland	% From Maryland	Total	From Maryland	% From Maryland	Total	From Maryland	% From Maryland	60 CY. GENERATORS AT HOLT'D. Steam	60 CY. GENERATORS AT HOLT'D. Hydro	60 CY. GENERATORS AT HOLT'D. Freq. Chg'r.	60 CY. GENERATORS AT HOLT'D. Total	Lehman F.	Met. Ed. & PP & L Co.	Total	From Maryland	% From Maryland	Lehman Fore	Met. Ed. Firm	Met. Ed. Other	PP & L	Phil. Elec	Freq. Chg'r.	Total	Freq. Chg'r.	25 Cycle Generators	Highland Maryland	Total	PP & L Co.	Highland From Md.	Freq. Chg'r.	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(12a)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(31a)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)	(43)
1				48	48	100		23	25	25	100	7		7	100	12	12	100	4	4	100	26			26	4		30	4	13			2	2	19	5	28	6			6	4			4
2				64	64	100		22	40	40	100	8	11	19	100	14	14	100	8	8	100	26			26	8		34	8	24			10	1	16	4	31	2			2	4			4
3				57	57	100		26	31	31	100	6	6	12	100	13	13	100	6	6	100	26			26	6		32	6	19			7	2	17	3	29	5		1	6	3			3
4				60	60	100		26	34	34	100	8	9	17	100	13	13	100	7	7	100	26			26	7		33	7	21			9	1	14	6	30	3		1	4	4			4
5				52	52	100		24	27	27	100	5		5	100	16	16	100	6	6	100	26			26	6		32	6	19			10	2	15	4	31	4			4	4			4
6				67	67	100		27	39	39	100	12		12	100	18	18	100	10	10	100	25			25	10		35	10	29			8	2	17	4	31	2		1	3	4			4
7	2			77	79	97		21	56	54	97	13		13	97	25	24	97	15	15	97	26			26	16		41	15	37			10	2	21	4	37	4		2	6	6			6
P																																													
8	10			109	119	92		29	92	85	92	17	16	30	92	32	29	92	23	21	92	26	4	6	36	23		59	21	36		3	29	2	22		56		27		27	6	12	6	24
9	33			82	115	71		29	96	61	71	18	18	26	71	33	23	71	16	11	71	26	13	11	50	16		66	11	17		7	27	3	22		59		41		41	6	23	12	41
10	50			63	113	56		28	86	48	56	18	17	20	56	32	18	56	14	8	56	26	13	11	50	14		64	8	13		9	26	4	22		61		59		59	5	39	10	54
11	58			51	109	47		30	80	38	47	17	17	16	47	31	15	47	13	6	47	27	11	12	50	13		63	6	10		10	24	4	21		59		65		65	5	43	14	62
12	21			46	67	69		20	47	32	69	13	5	12	69	24	17	69	1 (h)	1	69	27	13	10	50	5		56	1	2	4	6	14	5	21		50		59		59	5	37	12	54
P																																													
1	18			75	93	81		15	80	65	81	15	17	26	81	30	24	81	13	11	81	26	13	8	47	13		60	11	18		6	26	4	21		57		42		42	5	26	8	39
2	52			56	108	52		26	82	43	52	15	19	18	52	30	16	52	14	7	52	27	11	8	46	14		60	7	12		10	22	3	20		55		64		64	5	45	8	58
3	65			44	109	40		29	84	34	40	15	17	13	40	30	12	40	17	7	40	27	11	8	46	17		63	7	11		10	26	3	19		58		62		62	5	47	10	62
4	31			56	87	64		21	64	41	64	15	12	17	64	27	17	64	10	6	64	26	12	8	46	10		56	6	11		8	22	4	18		52		61		61	6	43	8	57
5	4			51	55	93		27	31	29	93	8		7	93	21	20	93	0 (h)			27	12	2	41	1		42			1	4	9	4	20		38		39		39	5	28	2	36
P																																													
6				73	73	100		30	43	43	100	12		12	100	21	21	100	11	11	100	26	3		29	11		40	11	28			10	2	19	7	38	6	1		7	4	1		5
7	46			47	93	51		28	65	33	51	14	9	12	51	25	13	51	14	7	51	26	8	1	35	14		49	7	14		5	15	2	21	3	46	2	17		19	4	12	2	18
8	16			73	89	82		20	71	58	82	16	16	25	82	26	21	82	11	9	82	27	12	10	49	11		60	9	15		6	25	3	22		56		57		57	5	39	10	54
9				61	61	100		12	49	49	100	14	1	15	100	24	24	100	11	11	100	26	4	2	32	11		43	11	26			14	3	21	2	40	2	15		17	4	6	2	12
10				57	57	100		20	34	34	100	10		10	100	21	21	100	7	7	100	27			27	7		34	7	21			6	3	21	2	32	2		2	4	5			5
11				73	73	100		24	46	46	100	10	2	12	100	19	19	100	13	13	100	27			27	13		40	13	33			11	1	19	3	34	3		2	5	4			4
12				41	41	100		18	23	23	100	7		7	100	14	14	100	5	5	100	25			25	5		30	5	17			3	2	18	3	26	3			3	4			4
P																																													
Tot.	406			1483	1889			575	1315			292	192			551			249 (h)			630	140	97	867	254		1121			5	84	365	64	466	50	1034	44	609	9	662	112	401	104	617

Date: September 18, 1946 Wednesday

17-17700-48

GENERATION AND TRANSMISSION OF ELECTRIC ENERGY ON HOLTWOOD - SAFE HARBOR SYSTEM AND TRANSMISSION FROM MARYLAND TO HOLTWOOD'S RESALE CUSTOMERS IN PENNSYLVANIA

Values Are In Megawatthours

	ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT SAFE HARBOR FROM -						SEND-OUT FROM 13 KV 60 CYCLE BUS AT SAFE HARBOR TO -					DELIVERIES TO P P & L CO. VIA DONEGAL			DELIVERIES TO P P & L CO. VIA LEHMAN FARM			DELIVERIES TO 13 KV 60 CYCLE BUS AT HOLTWOOD VIA LEHMAN F.			ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT HOLTWOOD FROM -										SEND-OUT FROM 13 KV 60 CYCLE BUS AT HOLTWOOD TO -							ENERGY SUPPLIED TO 11 KV 25 CYCLE BUS AT HOLTWOOD FROM -				SEND-OUT FROM 11 KV 25 CYCLE BUS AT HOLTWOOD TO -			
									69 KV CIRCUITS													60 CY. GENERATORS AT HOLT'D.												Met. Ed.												
HOUR	60 Cycle Gen. at S.H. (1)	Freq. Chg'rs. (2)	60 Ky Cir'ts. (3)	Maryland (4)	Total (5)	% From Maryland (6)	Maryland (7)	Freq. Chg'r. (8)	TOTAL (9)	From Md. (10)	% From Md. (11)	Firm (12)	Other (12a)	Total From Maryland (13)	% Maryland (14)	Total (15)	From Maryland (16)	% From Maryland (17)	Total (18)	From Maryland (19)	% From Maryland (20)	Steam (21)	Hydro (22)	Freq. Chg'r. (23)	Total (24)	Lehman F. (25)	Met. Ed. PP & L Co (26)	Total (27)	From Maryland (28)	% From Maryland (29)	Lehman Farm (30)	Firm (31)	Other (31a)	PP & L (32)	Phil Elec (33)	Freq. Chg'r. (34)	Total (35)	Freq. Chg'r. (36)	25 Cycle Generators (37)	Highland Farm Maryland (38)	Total (39)	PP & L Co. (40)	Highland Farm Md. (41)	Freq. Chg'r. (42)	Total (43)
1				54	54	100		25	28	28	100	5		5	100	13	13	100	9	9	100	25			25	9		34	9	26			8	1	19	5	33	4		2	6	5			5
2				50	50	100		19	30	30	100	6		6	100	13	13	100	9	9	100	27			27	9		36	9	25			12		17	5	34	4			4	4			4
3				62	62	100		28	35	35	100	7	3	10	100	13	13	100	11	11	100	25			25	11		36	11	31			14	1	16	4	35	4		2	6	4			4
4				60	60	100		24	36	36	100	6	4	10	100	14	14	100	12	12	100	26			26	12		38	12	32			14		16	3	33	2		2	4	4			4
5				58	58	100		27	29	29	100	4		4	100	14	14	100	8	8	100	26			26	8		34	8	24			10	2	18	3	33	4		1	5	4			4
6				64	64	100		27	38	38	100	9		9	100	19	19	100	10	10	100	26			26	10		36	10	28			9	1	18	5	33	2			2	4			4
7				104	104	100		29	76	74	100	16	7	23	100	27	27	100	21	21	100	26			26	21		47	21	45			22	2	19	4	47	3		4	7	6			6
P																																													
8	9			109	118	92		28	91	84	92	18	17	32	92	32	29	92	22	20	92	27	4	7	38	22		60	20	33		3	27	1	22		53		19		19	6	4	8	18
9	20			90	110	82		25	86	71	82	18	19	30	82	31	25	82	15	12	82	26	13	10	49	15		64	12	19		5	29	4	22		60		36		36	5	21	10	36
10	43			68	111	61		28	84	51	61	16	17	20	61	31	19	61	15	9	61	27	13	11	51	15		66	9	14		9	26	4	23		62		61		61	6	38	12	56
11	34			76	110	69		26	84	58	69	17	17	23	69	31	21	69	17	12	69	26	12	8	46	17		63	12	19		8	26	3	21		58		63		63	5	45	8	58
12	22			54	76	71		28	48	34	71	14	4	18	71	24	17	71	3(m)	2	71	27	13	2	42	6		48	2	4	3	4	14	4	18		43		32		32	5	21	4	30
P																																													
1	22			84	106	79		24	82	65	79	15	18	26	79	29	23	79	16	13	79	26	13	6	45	16		61	13	21		6	28	3	23		60		40		40	5	25	7	37
2	61			49	110	45		27	83	37	45	16	17	18	45	28	13	45	18	8	45	26	12	8	46	18		64	8	13		10	23	3	21		57		58		58	6	41	7	54
3	51			54	105	51		34	81	41	51	15	16	16	51	29	15	51	17	9	51	26	12	6	44	17		61	9	15		9	24	2	22		59		61		61	5	45	9	59
4	39			47	86	55		28	62	34	55	13	11	13	55	27	15	55	19	6	55	26	13	6	45	10		55	6	11		8	18	3	20		49		59		59	6	41	6	53
5	8			55	63	87		26	35	30	87	11		10	87	21	18	87	12	2	87	25	13	3	41	2		43	2	5		4	12	4	21		39		38		38	5	28	4	37
P																																													
6				59	59	100		25	33	33	100	5		5	100	19	19	100	7	7	100	26	2		28	7		35	7	20			6	3	22	4	35	3	10		13	4	6		10
7	41			38	79	48		29	49	24	48	13	3	8	48	23	16	48	6	3	48	26	13	4	43	6		49	3	6		7	12	4	19		42	2	37		39	4	28	4	36
8	49			54	103	52		29	78	39	52	15	16	16	52	26	14	52	14	7	52	26	12	8	46	14		60	7	12		9	23	3	22		57		56		56	5	39	10	54
9	8			74	82	90		28	52	47	90	13	9	20	90	24	22	90	10	9	90	26	9	5	40	10		50	9	18		3	15	3	22		43		30		30	4	18	5	27
10				69	69	100		27	42	42	100	7		7	100	22	22	100	11	11	100	26			26	11		37	11	30			6	1	20	6	33	6			6	5	1		6
11				54	54	100		17	33	33	100	7		7	100	17	17	100	9	9	100	26			26	9		35	9	26			4	2	20	8	34	6			6	4	1		5
12				40	40	100		21	19	19	100	2		2	100	13	13	100	4(m)	4	100	26			26	5	2	33	4	12	1		2	1	16	6	26	6			6	4	1		5
P																																													
Tot.	407			1526	1933			618	1309			268	178			540			276			625	154	84	963	280	2	1145			4	85	384	55	477	93	1068	46	600	11	657	115	403	94	612

Date: September 19, 1946 Thursday

17-17700-46

GENERATION AND TRANSMISSION OF ELECTRIC ENERGY ON HOLTWOOD - SAFE HARBOR SYSTEM AND TRANSMISSION FROM MARYLAND TO HOLTWOOD'S RESALE CUSTOMERS IN PENNSYLVANIA

Values Are In Megawatthours

	ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT SAFE HARBOR FROM -						SEND-OUT FROM 13 KV 60 CYCLE BUS AT SAFE HARBOR TO -					DELIVERIES TO P P & L CO. VIA DONEGAL				DELIVERIES TO P P & L CO. VIA LEHMAN FARM			DELIVERIES TO 13 KV 60 CYCLE BUS AT HOLTWOOD VIA LEHMAN F.			ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT HOLTWOOD FROM -									SEND-OUT FROM 13 KV 60 CYCLE BUS AT HOLTWOOD TO -							ENERGY SUPPLIED TO 11 KV 25 CYCLE BUS AT HOLTWOOD FROM -				SEND-OUT FROM 11 KV 25 CYCLE BUS AT HOLTWOOD TO -			
									60 KV CIRCUITS													60 CY. GENERATORS AT HOLT'D.														Nat. Ed.											
HOUR	60 Cycle Gen. at S.H.	Freq. Chg'rs.	60 Kv Circ's.	Maryland	Total	% From Maryland	Maryland	Freq. Chg'rs.	TOTAL	From Md.	% From Md.	Firm	Other	Total From Maryland	% From Maryland	Total	From Maryland	% From Maryland	Total	From Maryland	% From Maryland	Steam	Hydro	Freq. Chg'rs.	Total	Lehman Farm	Nat. Ed. & P & L Co.	Total	From Maryland	% From Maryland	Lehman Farm	Firm	Other	P P & L	Phil. Elec	Freq. Chg'rs.	Total	Freq. Chg'rs.	25 Cycle Generators	Highland From Maryland	Total	P P & L Co.	Highland From Md.	Freq. Chg'rs.	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(12a)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(31a)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)	(43)
1				47	47	100		22	25	25	100					13	13	100	7	7	100	26			26	7		33	7	22			6	2	17	6	31	6			6	4	1		5
2				61	61	100		30	31	31	100	5		5	100	14	14	100	9	9	100	26			26	9		26	9	26			11	3	15	6	35	4			4	4			4
3				54	54	100		27	26	26	100	4		4	100	13	13	100	9	9	100	27			27	9		36	9	26			10		17	5	32	4			4	4			4
4				59	59	100		30	28	28	100	6		6	100	12	12	100	8	8	100	26			26	8		34	8	24			11		16	5	32	4			4	4			4
5				58	58	100		29	31	31	100	6		6	100	15	15	100	9	9	100	26			26	9		35	9	26			7	1	17	4	29	6		1	7	4			4
6				74	74	100		28	44	44	100	11	1	12	100	18	18	100	12	12	100	25			26	12		37	12	32			12	1	18	6	37	4			4	4	1		5
7				91	91	100		30	61	61	100	14		14	100	26	26	100	17	17	100	27			27	17		44	17	39			14	2	20	4	40	3		1	4	5			5
P																																												
8	2			106	108	98		29	78	76	98	17	12	28	98	29	28	98	18	18	98	26	12	2	40	18		58	18	31		3	23	2	22	2	52	1	17		18	6	8	1	15
9	26			89	115	77		27	88	68	77	17	18	27	77	32	25	77	16	12	77	26	11	6	43	16		59	18	30		8	26	4	21		59		60		60	6	43	8	57
10	54			62	116	53		28	88	47	53	17	18	19	53	32	17	53	17	9	53	24	13	10	47	17		66	9	14		9	27	3	21		60		61		61	5	41	10	56
11	49			61	110	55		29	84	46	55	16	18	19	55	32	18	55	15	8	53	27	12	11	50	15		65	8	12		9	26	4	21		60		67		67	5	36	12	53
12	30			44	74	59		24	43	29	59	14	7	18	59	26	15	59	4(N)	2	59	27	14	5	46	6		52	2	4	2	5	17	4	18		46		30		30	5	17	6	28
P																																												
1	34			70	104	67		26	80	54	67	15	18	22	67	32	21	67	13	9	67	26	14	8	48	18		66	9	15		6	26	4	20		56		36		36	5	20	8	33
2	71			41	112	37		28	84	31	37	16	18	13	37	28	10	37	17	6	37	25	12	9	46	17		63	6	10		11	25	3	22		61		63		63	6	42	10	58
3	56			37	93	40		26	69	28	40	15	14	12	40	28	11	40	12	6	40	27	12	10	49	12		61	5	8		10	28	3	19		56		67		67	5	45	12	62
4	76			16	92	17		27	66	11	17	14	12	4	17	27	5	17	12	2	17	25	12	9	46	12		58	2	3		11	20	4	20		55		66		66	5	48	8	61
5	46			15	61	25	3	19	41	10	25	11	4	4	25	22	6	25	1(N)	-	25	27	13	6	46	2		47	-	-	1	9	10	4	21		45		66		65	4	49	8	61
P																																												
6	43			9	52	17	40	18	32	6	17	7		1	17	20	3	17	2	-	17	27	12	1	40	2		42	-	-		9	5	4	20		38		65		65	5	53	2	60
7	78				78		39	21	28			3				23			-2			26	13	4	43			43			2	10		5	21		38		66		66	4	52	4	60
8	63			4	67	6	12	17	38	2	6	13		1	6	24	1	6	1	-	6	26	12	8	46	1		47	-	-		11	5	5	21		42		72		78	5	54	8	67
9	20			16	36	44	1	8	28	12	44	9		4	44	21	8	38	-3			26	12	6	44			44	-		3	7	7	5	21		43		65		65	5	50	8	63
10				44	44	100		18	24	24	100	9		9	100	19	15	79	-3			26	13	4	43			43			3	3	11	4	18		39		52		52	4	39	4	47
11				50	50	100		24	23	23	100	6		6	100	14	14	100	3(N)	3	100	26	8		34	4		38	3	8	1		7	3	19	4	34	2	6		8	3	5		8
12				48	48	100		24	24	24	100	7		7	100	13	13	100	3(N)	3	100	26			26	4		30	3	3	1		4	2	18	2	27	4			4	4			4
P																																												
Tot.	648			1157	1805		50	583	1170			251	140			538			197			627	196	99	921	210		1131			18	181	333	72	463	44	1043	38	247	2	287	111	604	102	824

Date: 20 SEPTEMBER 1946 : FRIDAY

17-17700-4

GENERATION AND TRANSMISSION OF ELECTRIC ENERGY ON HOLTWOOD - SAFE HARBOR SYSTEM AND TRANSMISSION FROM MARYLAND TO HOLTWOOD'S RESALE CUSTOMERS IN PENNSYLVANIA

Values Are In Megawatthours

Hour	ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT SAFE HARBOR FROM -						SEND-OUT FROM 13 KV 60 CYCLE BUS AT SAFE HARBOR TO -					DELIVERIES TO P P & L CO. VIA DONEGAL				DELIVERIES TO P P & L CO. VIA LEHMAN FARM			DELIVERIES TO 13 KV 60 CYCLE BUS AT HOLTWOOD VIA LEHMAN F.			ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT HOLTWOOD FROM -									SEND-OUT FROM 13 KV 60 CYCLE BUS AT HOLTWOOD TO -							ENERGY SUPPLIED TO 11 KV 25 CYCLE BUS AT HOLTWOOD FROM -				SEND-OUT FROM 11 KV 25 CYCLE BUS AT HOLTWOOD TO -			
	60 Cycle Gen. at S.H.	Freq. Chg'r.	69 Kv Cir's.	Maryland	Total	% From Maryland	Maryland	Freq. Chg'r.	69 KV CIRCUITS TOTAL	From Md.	% From Md.	Firm	Other	Total From Maryland	% From Maryland	Total	From Maryland	% From Maryland	Total	From Maryland	% From Maryland	60 CY. GENERATORS AT HOLT'D. Screw	Hydro	Freq. Chg'r	Total	Lehman F.	Md. Ed. PP & L Co	Total	From Maryland	% From Maryland	Lehman Farm	Md. Ed. Firm	Md. Ed. Other	PP & L	Phil. Elec	Freq. Chg'r.	Total	Freq. Chg'r.	25 Cycle Generators	Highland from Maryland	Total	PP & L Co.	Highland from Md.	Freq. Chg'r.	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(12a)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(31a)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)	(43)
1				45	45	100		23	23	23	100	4		4	100	13	13	100	5	5	100	26			26	5		31	5	16			7	1	19	2	29	2	2	1	5	3			3
2				49	49	100		29	19	19	100	4		4	100	11	11	100	3	3	100	26			26	3		29	3	10			6	2	17		25			3	3	3			3
3				55	55	100		29	24	24	100	5	1	6	100	11	11	100	7	7	100	26			26	7		33	7	21			13	1	16		30			3	3	3			3
4				50	50	100		26	24	24	100	6		6	100	12	12	100	6	6	100	27			27	6		33	6	18			12	1	16		29			2	2	3			3
5				43	43	100		21	21	21	100	7		7	100	11	11	100	3	3	100	29			26	3		29	3	10			9	2	17		28			3	3	4			4
6				64	64	100		28	36	36	100	10	1	11	100	15	15	100	8	8	100	26			26	8		34	8	24			11	2	18		31			3	3	3			3
7				70	70	100		25	44	44	100	11	5	16	100	19	19	100	11	11	100	26			26	11		37	11	30			13	1	18	2	33	2		3	5	2			2
P																																												
8				82	82	100		29	53	53	100	11	3	14	100	23	23	100	13	10	100	26			26	13		39	13	33			10	2	19	6	37	5			5	3	1		4
9	6			68	74	92		24	50	46	92	10		8	82	24	22	92	12	11	92	21			24	12		38	11	29		1	6	2	19	6	34	5	8		13	3	9		12
10	14			61	75	81		27	50	41	81	9		7	81	25	20	81	11	9	81	26			26	11		37	9	24		2	6	3	17	6	34	6	20		26	3	20		23
11	7			53	60	88		21	41	36	88	9		8	88	22	19	88	5	4	88	26	10		36	5		41	4	10		2	10	3	16	7	38	6	22		28	3	24		27
12				65	65	100		28	38	38	100	7	6	13	100	18	18	100	4	4	100	26	12		38	4		42	4	10		2	12	4	18	4	40	2	37		39	3	33		36
P																																												
1				79	79	100		28	50	50	100	8	13	21	100	20	20	100	7	7	100	27	13		40	7		47	7	15		2	18	2	18	2	42	2	39		41	3	36		39
2				66	66	100		27	38	38	100	10	6	16	100	17	17	100	7	7	100	26	7		33	7		40	7	18		1	9	2	18	6	36	6	19		25	2	21		23
3				56	56	100		9	47	47	100	10	6	16	100	18	18	100	13	13	100	26			26	13		39	13	33			10	1	18	10	39	10			10	3	4		7
4				72	72	100		27	45	45	100	8	5	13	100	18	18	100	13	13	100	26			26	13		39	13	33			10	1	14	10	35	9			9	3	6		9
5				66	66	100		30	35	35	100	6	1	7	100	16	16	100	8	8	100	26			26	8		34	8	24			6	2	13	12	33	11			11	3	6		9
P																																												
6				54	54	100		27	28	28	100	6	1	7	100	16	16	100	5	5	100	26	5		31	6		38	6	14			6	2	14	10	32	9	5		14	2	10		12
7	35			14	49	29	9	22	17	5	29	2		1	29	15	4	29	-5			26	13		39		1	40			5	5	1	4	13	10	38	9	21		30	3	25		28
8	43			7	50	14	10	13	29	4	14	10	1	2	14	17	2	14				26	13		39			39					6	6	4	14	6	36	6	33		33	3	34		37
9	2			33	35	94		15	22	21	94	9		8	94	16	13	81	-2			26	14		40			40			2	2	7	4	14	6	35	6	25		30	3	26		29
10				49	49	100		26	25	25	100	9	2	11	100	16	16	100	2	2	100	26	10		36	4		40	2	5	2		10	3	12	8	35	9	9		18	2	12		14
11				55	55	100		26	26	26	100	6		6	100	12	12	100	7	7	100	26			26	7		33	7	21			8	1	12	10	31	7			7	3	6		9
12				56	56	100		24	31	31	100	6	6	12	100	12	12	100	8	8	100	26			26	8		34	8	24			12	1	11	7	31	7			7	2	5		7
P																																												
Tot.	107	0	0	1312	1419		13	584	816			93	67			397			151			626	97		723	160	1	884			9	23	217	51	381	130	811	118	240	18	376	68	260		328

Date: 21 SEPTEMBER 1946 : SATURDAY

17-11700-48

GENERATION AND TRANSMISSION OF ELECTRIC ENERGY ON HOLTWOOD - SAFE HARBOR SYSTEM AND TRANSMISSION FROM MARYLAND TO HOLTWOOD'S RESALE CUSTOMERS IN PENNSYLVANIA

Values Are In-Megawatthours

Hour	ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT SAFE HARBOR FROM -						SEND-OUT FROM 13 KV 60 CYCLE BUS AT SAFE HARBOR TO -					DELIVERIES TO P P & L CO. VIA DONEGAL				DELIVERIES TO P P & L CO. VIA LEHMAN FARM			DELIVERIES TO 13 KV 60 CYCLE BUS AT HOLTWOOD VIA LEHMAN F.			ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT HOLTWOOD FROM -									SEND-OUT FROM 13 KV 60 CYCLE BUS AT HOLTWOOD TO -							ENERGY SUPPLIED TO 11 KV 25 CYCLE BUS AT HOLTWOOD FROM -				SEND-OUT FROM 11 KV 25 CYCLE BUS AT HOLTWOCD TO -			
	60 Cycle Gen. at S.H.	Freq. Chg'r.	69 Kv Cir's.	Maryland	Total	% From Maryland	Maryland	Freq. Chg'r.	69 KV CIRCUITS TOTAL	69 KV CIRCUITS From Md.	69 KV CIRCUITS % From Md.	Fire	Other	Total From Maryland	% From Maryland	Total	From Maryland	% From Maryland	Total	From Maryland	% From Maryland	60 CY. GENERATORS AT HOLT'D. Steam	60 CY. GENERATORS AT HOLT'D. Hydro	60 CY. GENERATORS AT HOLT'D. Freq. Chg'r.	60 CY. GENERATORS AT HOLT'D. Total	Lehman F.	Wet. Ed. PP & L Co	Total	From Maryland	% From Maryland	Lehman Farm	Wet. Ed. Fire	Wet. Ed. Other	PP & L	Phil. Elec	Freq. Chg'r.	Total	Freq. Chg'r.	25 Cycle Generators	Highland Town Maryland	Total	PP & L Co.	Highland Town Md.	Freq. Chg'r.	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(12a)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(31a)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)	(43)
1				50	50	100		24	26	26	100	4	1	5	100	10	10	100	9	9	100	25			25	9		34	9	26			14	1	12	5	32	4			4	1	4		5
2				44	44	100		26	18	18	100	1		1	100	10	10	100	7	7	100	27			27	7		34	7	21			14		10	6	30	7			7	2	3		5
3				48	48	100		29	18	18	100	2		2	100	8	8	100	7	7	100	27			27	7		34	7	21			15		10	7	32	5			5	1	3		4
4				44	44	100		25	19	19	100		-1			8	8	95	6	6	95	26			26	6		32	6	19			13	1	10	5	29	5			5	2	3		5
5				37	37	100		29	7	7	100					7	7	100	2	2	100	26			26	2		28	2	7			9	1	10	5	25	5			5	1	4		5
6			1	27	28	96		25	3	2	100		-6			7	2	25				26			26			26	4				8	1	9	7	25	6			6	1	3		4
7	-2			40	38	100		29	11	11	100	1		1	100	8	8	100	2	2	100	27			27	2		29	2	7			10	1	10	4	25	4			4		2		2
P																																													
8	-1		1	32	32	97		25	9	9	100		-1			8	7	90	-1(4)			26			26	1		27			2		8	3	9	4	26	2			2	1	2		3
9			12	14	26	54		24					-13			6			-5			26			26		2	28			5			4	10	2	21	4			4	1	1		2
10				20	20	100		12	8	8	100		-7			10	5	53				26			26			26					10	2	9	1	22		9		9	1	8		9
11				14	14	100		10	4	4	100		-1			8	4	50	-3			27	1		28			28			3	1	8	3	10	2	27		10		10	1	8		9
12			2	14	16	88		16	1	1	100		-1			8	1	13	-7			26	13		39			39			7	1	13	6	10		37		10		10	1	9		10
P																																													
1			1	11	12	92		7	3	3	100		-5			8	3	38	-4			27	5		32			32			4		10	3	10		27	1	11		12	1	8		9
2		2		5	7	71			6	4	71		-5			10	4(5)	44				26			26			26				1	7	2	10	2	22		10		10	1	9		10
3			3	21	24	88		21	3	3	100		-4			6	3	50	-4(4)			26	11		37	1		38			5	1	13	4	9	4	36	2	10		12	1	11		12
4			7	18	25	72		25					-7			6			-6			25	13		38			38			6		10	4	9	8	37	8	11		19	1	15		16
5			5	22	27	81		28					-8			6			-6			27	13		40			40			6		10	4	10	8	38	8	10		18	1	16		17
P																																													
6	11	1	4	11	24	46	9	11	2	1	48		-3			10	1	10	-8			27	16		43			43			8	3	3	4	11	10	39	10	15		25	1	21		22
7	19			16	35	46	5	17	13	6	46	5		2	46	14	4	29	-7			26	24		50			50			7	6	10	5	12	8	48	7	33		40	1	36		37
8	1			48	49	98		29	19	19	98	8		8	98	14	11	79	-4			26	24		50			50			4	2	15	4	10	10	45	7	26		33	1	30		31
9				58	58	100		29	28	28	100	6		6	100	15	15	100	7	7	100	26			26	7		33	7	21			8	1	11	10	30	11			11	2	8		10
10				58	58	100		28	28	28	100	5		5	100	15	15	100	8	8	100	26			26	8		34	8	24			8	2	11	12	33	9			9	2	7		9
11				54	54	100		30	25	25	100	3		3	100	13	13	100	7	7	100	25			25	7		32	7	22			8	1	10	10	29	12			12	2	7		9
12				49	49	100		26	21	21	100	2		2	100	11	11	100	7	7	100	26			26	7		33	7	21			8	1	9	10	28	8			8	2	6		8
P																																													
Tot.	28	3	33	755	819		14	525	271			37	-61			226			7(4)			628	120		748	64	2	814			37	15	232	58	241	140	743	125	153		280	29	224		253

(1) 19/20 of 8
(2) 19/20 of 6
(3) 2/8 of 7
(4) 9/10 of 8
(5) 8/15 of 10
(6) 4/9 of 10

Date: October 13, 1946 Sunday

GENERATION AND TRANSMISSION OF ELECTRIC ENERGY ON HOLTWOOD - SAFE HARBOR SYSTEM AND TRANSMISSION FROM MARYLAND TO HOLTWOOD'S RESALE CUSTOMERS IN PENNSYLVANIA

Values Are In Megawatthours

Hour	ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT SAFE HARBOR FROM -						SEND-OUT FROM 13 KV 60 CYCLE BUS AT SAFE HARBOR TO -					DELIVERIES TO P P & L CO. VIA DONEGAL				DELIVERIES TO P P & L CO. VIA LEHMAN FARM			DELIVERIES TO 13 KV 60 CYCLE BUS AT HOLTWOOD VIA LEHMAN F.			ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT HOLTWOOD FROM -									SEND-OUT FROM 13 KV 60 CYCLE BUS AT HOLTWOOD TO -						ENERGY SUPPLIED TO 11 KV 25 CYCLE BUS AT HOLTWOOD FROM -				SEND-OUT FROM 25 CYCLE BUS AT HOLTWOOD TO -			
	60 Cycle Gen. at S.H. (1)	Freq. Chg'r. (2)	69 Kv Cir's. (3)	Maryland (4)	Total (5)	% From Maryland (6)	Maryland (7)	Freq. Chg'r. (8)	69 KV CIRCUITS TOTAL (9)	From Md. (10)	% From Md. (11)	Firm (12)	Other (12a)	Total From Maryland (13)	% From Maryland (14)	Total (15)	From Maryland (16)	% From Maryland (17)	Total (18)	From Maryland (19)	% From Maryland (20)	60 CY. GENERATORS AT HOLT'D. Steam (21)	Hydro (22)	Freq. Chg'r. (23)	Total (24)	Lehman F. (25)	Met. Ed. PP & L Co (26)	Total (27)	From Maryland (28)	% From Maryland (29)	Lehman Farm (30)	Met. Ed. Firm (31)	Met. Ed. Other (31a)	PP & L (32)	Phil. Elec (33)	Freq. Chg'r. (34)	Total (35)	Freq. Chg'r (36)	25 Cycle Generators (37)	Highland Town Maryland (38)	Total (39)	P P & L Co. (40)	Highland Town Md. (41)	Freq. Chg'r. (42)	Total (43)
1	44				44		12	3	31			8	1			14			9				23	4	27	9		36				7	5	1	19		32		67		67	5	51	4	60
2	17			26	43	60		15	29	17	60	7	2	5	60	14	8	60	9	5	60		21	4	25	9		34	5	15		5	11	1	17		34		62		62	3	49	4	56
3				37	37	100		20	19	19	100	3		3	100	12	12	100	3	3	100		22	2	24	3		27	3	11		4	6	2	13		25		59		59	5	48	4	57
4	12			41	53	77		24	29	22	77	4		3	77	14	11	77	9	7	77		22	2	24	9		33	7	21		4	8	1	18		31		48		48	3	37	2	42
5	4			25	29	86		9	21	18	86	5		4	86	11	9	86	6	5	86		23		23	6		29	5	17		2	8	1	17	3	31	2	31		33	4	26		30
6	36			1	37	3	7	8	23	1	3	4		-	3	14	-	3	6	-	3		22		22	6		28				5		2	17	2	26	2	36		38	4	31		35
7	41			22	63	35	7	15	43	15	35	13		5	35	20	7	35	12	4	35		24	1	25	12		37	4	11		7	7	1	19		34		52		52	3	42	2	47
P																																													
8	26			46	72	64		21	52	33	64	16	3	12	64	24	15	64	5(M)	3	64	22	21		43	6		49	3	6	1	7	11	5	20	2	46	2	59		61	6	47		53
9	94			6	100	6	16	16	71	4	6	18	9	2	6	30	2	6	13	1	6	26	21		47	13		60	1	2		15	13	3	21	4	56	4	58		62	5	50		55
10	95			3	99	3	11	4	84	3	3	18	16	1	3	30	1	3	15	-	3	26	21		47	15		62				15	19	4	21		59		58		58	6	50		56
11	120				120		23	25	72			18	11			31			13			27	22	1	50	13		63				18	10	4	23	2	57		63		63	5	49	2	56
12	104			9	113	8	10	13	91	7	8	18	19	3	8	30	2	8	17	1	8	26	22	3	51	17		68	1	1		17	24	2	20		63		67		67	5	55	2	62
P																																												
1	38			29	67	43	1	14	54	23	43	14	14	12	43	24	10	43	5	2	43	26	22	2	50	5		55	2	4		11	19	5	17		52		66		66	5	53	2	60
2	100			12	112	11	5	25	79	9	11	17	17	4	11	30	3	11	14	2	11	27	22	2	51	14		65	2	3		17	21	3	19		60		69		69	6	53	4	63
3	104			9	113	8	10	26	80	6	8	17	17	3	8	28	2	8	14	1	8	26	23	2	51	14		65	1	2		16	23	3	19		61		67		67	5	54	4	63
4	104			6	110	5	11	24	75	4	5	17	16	2	5	29	1	5	14	1	5	27	23		50	14		64	1	2		16	22	3	18	1	60		69		69	6	56	2	64
5	88			22	110	20	3	26	84	17	20	16	20	7	20	28	6	20	16	3	20	26	23	3	52	16		68	3	4		15	27	3	19		64		71		71	6	55	2	63
P																																												
6	82			24	106	23	3	24	80	18	23	14	20	8	23	29	7	23	14	3	23	26	24	7	57	14		71	3	4		15	24	3	23		65		68		68	5	50	8	63
7	85			17	102	17	3	24	75	13	17	16	19	6	17	28	5	17	9	2	17	26	22	12	60	9		69	2	3		16	23	4	23		66		69		69	5	47	12	64
8	80			22	102	22		24	80	18	22	17	20	8	22	28	6	22	12	3	22	26	24	10	60	12		72	3	4		16	23	3	23		65		69		69	5	48	12	65
9	66			31	97	32		22	75	24	32	17	17	11	32	27	9	32	14	4	32	26	23	4	53	14		67	4	6		14	24	3	22		63		71		71	5	56	4	65
10	71			12	83	14	6	12	67	9	14	15	14	4	14	26	4	14	13	2	14	26	24		50	13		63	2	3		14	19	3	23		59		67		67	5	56		61
11	62				62		28	4	30			13	2			20			0(M)			26	24		50	1		51			1	12	7	4	22		46		63		63	5	53		58
12	33			16	49	33	4	14	31	10	33	10	1	4	33	15	5	33	3(M)	1	33	14	24		38	4		42	1	2	1	8	6	3	21		39		64		64	5	51		56
P																																												
Tot.	1506	1		416	1923		160	411	1375			317	238			556			245(M)			429	542	59	1030	248		1278			3	276	360	67	474	14	1194	10	1473		1483	117	1167	68	1352

Date: October 16, 1946 Wednesday

17-17700-46

GENERATION AND TRANSMISSION OF ELECTRIC ENERGY ON HOLTWOOD - SAFE HARBOR SYSTEM AND TRANSMISSION FROM MARYLAND TO HOLTWOOD'S RESALE CUSTOMERS IN PENNSYLVANIA

Values Are In Megawatthours

Hour	ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT SAFE HARBOR FROM -						SEND-OUT FROM 13 KV 60 CYCLE BUS AT SAFE HARBOR TO -					DELIVERIES TO P P & L CO. VIA DONEGAL				DELIVERIES TO P P & L CO. VIA LEHMAN FARM			DELIVERIES TO 13 KV 60 CYCLE BUS AT HOLTWOOD VIA LEHMAN F.			ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT HOLTWOOD FROM -										SEND-OUT FROM 13 KV 60 CYCLE BUS AT HOLTWOOD TO -							ENERGY SUPPLIED TO 11 KV 25 CYCLE BUS AT HOLTWOOD FROM -				SEND-OUT FROM 11 KV 25 CYCLE BUS AT HOLTWOOD TO -			
									69 KV CIRCUITS													60 CY. GENERATORS AT HOLT'D.														Wat. Ed.												
	60 Cycle Gen. at S.H.	Freq. Chg'r.	69 Kv Cir's.	Maryland	Total	% From Maryland	Maryland	Freq. Chg'r.	TOTAL	From Md.	% From Md.	Firm	Other	Total From Maryland	% From Maryland	Total	From Maryland	% From Maryland	Total	From Maryland	% From Maryland	Steam	Hydro	Freq. Chg'r	Total	Lehman F.	Wat. Ed. PP & L Co.	Total	From Maryland	% From Maryland	Lehman Farm	Firm	Other	PP & L	Phil. Elec	Freq. Chg'r.	Total	Freq. Chg'r.	25 Cycle Generators	Highland from Maryland	Total	PP & L Co.	Highland Jct.	Freq. Chg'r.	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(12a)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(31a)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)	(43)
1	4			29	33	88		4	31	27	88	9	-	8	88	16	14	88	9	8	88		22		22	9		31	8	26		4	5	1	19		29		64		64	5	54		59
2				46	46	100		7	41	41	100	6	6	12	100	15	15	100	13	13	100		23		23	13		36	13	36		4	9	1	19		33		60		60	6	53		58
3				48	48	100		8	41	41	100	7	7	14	100	15	15	100	12	12	100		24		24	12		36	12	33		3	15		18		36		47		47	4	37		41
4		1		47	48	98		14	35	34	98	6	3	9	100	15	15	100	11	11	100		24		24	11		35	11	31		2	12		17		31		37		37	4	30		34
5				49	49	100		15	36	36	100	9	5	14	100	14	14	100	11	11	100		23		23	11		34	11	32		2	12	1	17		32		35		35	4	29		33
6	10	4		20	34	59	2	5	26	15	59	8		5	59	14	8	59	6	4	59		23		23	6		29	4	14		3	6	2	18		29		38		38	4	29		33
7	49			1	50	2	11	3	36	1	2	12		-	-	18	-	2	8	-	2		24		24	8		32				6	2	2	17		27		35		35	4	29		33
P																																												
8	43			29	72	40	3	16	57	23	40	5	3	8	40	25	10	40	7	3	40	22	21		43	7		50	3	6		9	13	4	22		48		55		55	5	44		49
9	91	4		3	98	3	27	5	69	2	3	18	7	1	3	30	1	3	12	-	3	27	20		47	12		59				14	12	4	23		53		57		57	6	48		54
10	114	1			115		18	5	93			18	20			32			19			26	22		48	19		67				17	21	3	23		64		65		65	6	53		59
11	111				111		14	7	92			18	19			33			18			26	21		47	18		65				17	20	3	22		62		67		67	6	55		61
12	93	1		9	103	9	7	7	85	8	9	18	18	3	9	31	3	9	16	1	9	26	24		50	16		66	1	2		16	20	3	22		61		68		68	6	57		63
P																																												
1	60			15	75	20	7	5	67	13	20	14	14	6	20	26	6	20	10	2	20	27	22		49	10		59	2	3		14	14	3	20		51		68		68	5	56		61
2	107			3	110	3	11	10	86	3	3	17	20	1	3	30	1	3	16	-	3	26	23		49	16		65				17	21	3	21		62		68		68	6	57		63
3	97	1		4	102	4	17	5	84	3	4	17	19	1	4	29	1	4	17	1	4	26	22		48	17		65	1	2		16	21	3	21		61		68		68	6	58		64
4	114	2			116		39		77			16	16			29			14			26	23		49	14		63				17	21	3	21		62		73		73	4	58		62
5	80			9	89	10	9	3	78	8	10	14	16	3	10	28	3	10	14	1	10	26	24		50	14		64	1	2		14	19	3	21		57		69		69	7	58		65
P																																												
6	89			11	100	11	11	12	79	9	11	15	17	4	11	29	3	11	15	2	11	27	23		50	15		65	2	3		15	18	3	24		60		71		71	5	59		64
7	112				112		18	10	86			16	19			30			15			26	23		49	15		64				17	17	3	24		61		71		71	5	60		65
8	93			6	99	6	6	17	76	5	6	17	17	2	6	30	2	6	14	1	6	26	24		50	14		64	1	2		15	18	3	23		59		71		71	4	61		65
9	69			14	83	17	1	13	71	12	17	16	16	5	17	27	5	17	11	2	17	27	24		51	11		62	2	3		14	22	4	20		60		72		72	5	60		65
10	38			19	57	33		19	38	13	33	15	2	6	33	23	7	30	0 (W)			26	23		49	1		50			1	9	9	4	21		44		69		69	6	57		63
11	59				59		29	9	22			7				18			-5			26	24		50			50			5	11	5	5	22		48		62		62	5	52		57
12	45			1	46	2	7	15	26	1	2	9		-	2	16	-	2	2 (W)	-	2	15	23		38	4		42			2	9	3	3	21		38		64		64	4	55		59
P																																												
Tot.	1478	14		363	1855		237	214	1430			318	246			573			265 (W)			431	549		980	273		1253			8	265	335	64	496		1168		1454		1454	121	1209		1330

Date: October 17, 1946 Thursday

47-17706-48

GENERATION AND TRANSMISSION OF ELECTRIC ENERGY ON HOLTWOOD - SAFE HARBOR SYSTEM AND TRANSMISSION FROM MARYLAND TO HOLTWOOD'S RESALE CUSTOMERS IN PENNSYLVANIA

Values Are In Megawatthours

Hour	ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT SAFE HARBOR FROM -						SEND-OUT FROM 13 KV 60 CYCLE BUS AT SAFE HARBOR TO -					DELIVERIES TO P P & L CO. VIA DONEGAL				DELIVERIES TO P P & L CO. VIA LEHMAN FARM			DELIVERIES TO 13 KV 60 CYCLE BUS AT HOLTWOOD VIA LEHMAN F.			ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT HOLTWOOD FROM -									SEND-OUT FROM 13 KV 60 CYCLE BUS AT HOLTWOOD TO -							ENERGY SUPPLIED TO 11 KV 25 CYCLE BUS AT HOLTWOOD FROM -				SEND-OUT FROM 11 KV 25 CYCLE BUS AT HOLTWOOD TO -			
	60 Cycle Gen. at S.H.	Freq. Chg'r.	69 KV Cir's.	Maryland	Total	% From Maryland	Maryland	Freq. Chg'r.	69 KV CIRCUITS TOTAL	From Md.	% From Md.	Fire	Other	Total From Maryland	% From Maryland	Total	From Maryland	% From Maryland	Total	From Maryland	% From Maryland	60 CY. GENERATORS AT HOLT'D. Steam	Hydro	Freq. Chg'r.	Total	Lehman F.	Met. Ed. PP & L Co	Total	From Maryland	% From Maryland	Lehman Ferry	Met. Ed. Fire	Met. Ed. Other	PP & L	Phil. Elec	Freq. Chg'r.	Total	Freq. Chg'r.	25 Cycle Generators	Highland Town Maryland	Total	PP & L Co.	Highland Town Md.	Freq. Chg'r.	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(12a)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(31a)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)	(43)
1	39			24	63	38		17	47	18	38	7	7	5	38	17	6	38	15	6	38		24		24	15		39	6	15		7	11		19		37		63		63	4	54		58
2	2			64	66	97		18	47	46	97	8	9	16	97	16	16	97	15	15	97		21		21	15		36	15	42		2	14	1	18		35		50		50	5	42		47
3				75	75	100		27	46	46	100	7	5	12	100	15	15	100	19	19	100		13		13	19	2	34	19	56			13		18		31		38		38	3	31		34
4				75	75	100		19	58	58	100	7	10	17	100	15	15	100	23	23	100		12		12	23	1	36	23	64			18		16		34		24		24	4	18		22
5				59	59	100		21	36	36	100	9	2	11	100	16	16	100	14	14	100		14		14	14	1	29	14	48			-11		17		28		6		6	3	2		5
6		4		38	42	90		15	27	24	90	7		6	90	15	14	90	8	7	90		23		23	8		31	7	23		1	7	1	17		26		27		27	3	21		24
7				56	56	100		16	39	39	100	13	8	21	100	18	18	100	1(W)	1	100	23	22		45	3		48	1	2	2	4	19	4	17		46		47		47	4	39		43
P																																													
8	38			23	61	38		23	38	14	38	13		5	38	23	9	38	-1(W)			25	20		45	1		46			2	9	7	5	21		44		59		59	6	48		54
9	120			5	125	4	28	14	85	3	4	18	17	1	4	33	1	4	13	1	4	27	21		48	13		61	1	2		17	17	1	28		55		58		58	5	49		54
10	116			7	123	6	23	17	86	5	6	18	19	2	6	34	2	6	12	1	6	26	22		48	12		60	1	2		17	15	3	22		57		67		67	7	55		62
11	101			21	122	17	4	23	95	16	17	17	24	7	17	35	6	17	12	2	17	26	23	8	57	12		69	2	3		17	22	2	22		63		67		67	5	48	8	61
12	113			7	120	6	17	17	86	5	6	17	20	2	6	35	2	6	10	1	6	27	22	4	53	10		63	1	2		17	19	3	21		60		68		68	5	52	4	61
P																																													
1	93			2	95	2	21	2	71	1	2	15	16	1	2	28	-	2	7	-	2	26	23	2	51	7		58	-			16	15	3	21		55		69		69	5	55	4	64
2	112			8	120	7	11	20	92	6	7	17	24	3	7	34	2	7	13	1	17	27	23	7	57	13		70	1	1		17	22	2	22		63		69		69	6	51	6	63
3	89			21	110	19	3	24	85	16	19	16	24	8	19	30	6	19	11	2	19	26	23	7	56	11		67	2	3		15	25	2	22		64		71		71	5	50	9	64
4	90			18	108	17		27	82	14	17	15	22	6	17	30	5	17	12	2	17	26	22	6	54	12		66	2	3		16	25	1	22		64		69		69	6	54	7	67
5	64			44	108	41		28	82	34	41	16	20	15	41	30	12	41	13	5	41	26	24	6	56	13		69	5	7		14	22	2	22		60		69		69	5	53	6	64
P																																													
6	70			33	103	32	2	26	75	24	32	16	16	10	32	29	9	32	12	4	32	26	24	6	56	12		68	4	6		15	21	4	24		64		70		70	5	51	7	63
7	97			10	107	9	9	28	70	6	9	15	16	3	9	29	3	9	8	1	9	26	23	10	59	8		67	1	1		17	17	4	25		63		73		73	6	50	10	66
8	57			36	93	39		24	70	27	39	15	16	12	39	27	11	39	8	3	39	26	24	10	60	8		68	3	4		14	23	4	22		63		69		69	5	51	11	67
9	63			30	95	32		26	69	22	32	15	17	10	32	27	9	32	9	3	32	26	24	6	56	9		65	3	5		14	20	4	22		60		73		73	4	54	8	66
10	40			49	89	55		27	62	34	55	14	15	16	55	25	14	55	9	5	55	26	23	5	54	9		63	5	8		12	20	3	22		57		71		71	5	56	4	65
11	30	7		6	43	14	12	9	23	3	14	11		2	14	19	1	5	-5			26	23		49			49			5	10	7	5	22		49		64		64	4	54		58
12	8			30	38	79		16	23	18	79	10		8	79	15	10	67	0(W)			14	24		38	2		40			2	6	7	4	16		35		63		63	3	53		56
P																																													
Tot.	1342	11		741	2094		130	484	1494			316	307			595			238(W)			455	557	77	1049	249	4	1302			11	257	397	58	490		1213		1404		1404	113	1091	84	1288

Date: October 18, 1946 Friday

17-17700-48

GENERATION AND TRANSMISSION OF ELECTRIC ENERGY ON HOLTWOOD - SAFE HARBOR SYSTEM AND TRANSMISSION FROM MARYLAND TO HOLTWOOD'S RESALE CUSTOMERS IN PENNSYLVANIA

Values Are In Megawatthours

Hour	ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT SAFE HARBOR FROM -						SEND-OUT FROM 13 KV 60 CYCLE BUS AT SAFE HARBOR TO -					DELIVERIES TO P P & L CO. VIA DONEGAL				DELIVERIES TO P P & L CO. VIA LEHMAN FARM			DELIVERIES TO 13 KV 60 CYCLE BUS AT HOLTWOOD VIA LEHMAN F.			ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT HOLTWOOD FROM -									SEND-OUT FROM 13 KV 60 CYCLE BUS AT HOLTWOOD TO -							ENERGY SUPPLIED TO 11 KV 25 CYCLE BUS AT HOLTWOOD FROM -				SEND-OUT FROM 11 KV 25 CYCLE BUS AT HOLTWOOD TO -	
	60 Cycle Gen. at S.H. (1)	Freq. Chg'r. (2)	69 KV Cir's. (3)	Maryland (4)	Total (5)	% From Maryland (6)	Maryland (7)	Freq. Chg'r. (8)	69 KV CIRCUITS TOTAL (9)	From Md. (10)	% From Md. (11)	Fire (12)	Other (12a)	Total From Maryland (13)	% From Maryland (14)	Total (15)	From Maryland (16)	% From Maryland (17)	Total (18)	From Maryland (19)	% From Maryland (20)	60 CY. GENERATORS AT HOLT'D. Steam (21)	Hydro (22)	Freq. Chg'r. (23)	Total (24)	Lehman F. (25)	Met. Ed. & P P & L Co. (26)	Total (27)	From Maryland (28)	% From Maryland (29)	Lehman Farm (30)	Met. Ed. Fire (31)	Met. Ed. Other (31a)	P P & L (32)	Phil. Elec (33)	Freq. Chg'r. (34)	Total (35)	Freq. Chg'r. (36)	25 Cycle Generators (37)	Highland from Maryland (38)	Total (39)	P P & L Co. (40)	Highland from Md. (41)	Freq. Chg'r. (42)	Total (43)
1				47	47	100		24	24	24	100	3		3	100	14	14	100	6	6	100	13	16		29	7		36	6	17	1		8	3	17	9	38	6	15		21	5	17		22
2				58	58	100		24	33	33	100	8	4	12	100	14	14	100	8	8	100	14	19		33	8		41	8	20			16	1	15	6	38	8	16		24	4	16		20
3				51	51	100		27	24	24	100	3		3	100	12	12	100	7	7	100	14	13		27	7		34	7	21			8	1	14	8	31	6	11		17	4	12		16
4				57	57	100		26	32	32	100	8	2	10	100	13	13	100	10	10	100	13	13		26	10		36	10	28			14	1	13	7	35	6	9		15	4	10		14
5				59	59	100		29	29	29	100	7		7	100	15	15	100	9	9	100	14	12		26	9		35	9	26			12	1	15	7	35	6	10		16	5	11		16
6				47	47	100		29	18	18	100	3		3	100	14	14	100	1 N	1	100	13	23		36	3		39	1	3	2		9	2	14	9	36	8	20		28	3	21		24
7				62	62	100		30	30	30	100	12		12	100	17	17	100	2	2	100	14	24		38	2		40	2	5		1	11	4	15	6	37	6	28		34	5	27		32
P																																													
8				56	56	100		22	34	34	100	10		10	100	24	24	100	-1 N			25	24		49	1		50			2	3	9	6	17	9	46	8	33		41	5	32		37
9	64			43	107	40		22	87	35	40	18	17	14	40	31	12	40	15	6	40	26	20		46	15		61	6	10		13	21	3	20	1	58		58		58	5	48		53
10	103			10	113	9		24	90	8	9	17	18	3	9	33	3	9	15	1	9	26	20	1	47	15		62	1	2		16	19	4	19		58		59		59	5	47	2	54
11	91			22	113	19		24	88	17	19	17	20	7	19	34	6	19	15	3	19	26	22	4	52	15		67	3	4		16	22	4	20		62		61		61	6	47	5	58
12	75			30	105	29		24	83	24	29	17	19	10	29	30	9	29	12	3	29	26	22	5	53	12		65	3	5		14	24	4	20		62		62		62	5	45	6	56
P																																													
1	26			47	73	64		23	51	33	64	14	12	17	64	24	15	64	-1 N			27	22	6	55	3		58			4	9	17	5	18		53		62		62	5	46	7	58
2	80			19	99	19		20	82	16	19	16	16	6	19	31	6	19	13	2	19	26	22	5	53	13		66	2	3		15	23	5	21		69		63		63	5	47	5	57
3	96			9	105	9	2	25	79	7	9	16	17	3	9	29	3	9	13	1	9	26	21	5	52	13		65	1	2		15	21	3	19		58		61		61	5	47	5	57
4	67			23	90	26		18	72	19	26	16	14	8	26	29	8	26	11	3	26	27	23	5	55	11		66	3	5		14	25	4	19		62		63		63	5	46	6	57
5	58			38	96	40		25	72	29	40	16	16	13	40	29	12	40	8	3	40	26	24	8	58	8		66	3	5		13	25	5	20		63		62		62	6	44	10	60
P																																													
6	105			6	111	5	9	29	75	4	5	16	15	2	5	30	2	5	9	-	5	26	23	10	59	9		68				17	19	5	21		62		66		66	4	46	10	60
7	67			23	90	26		25	66	17	26	16	15	8	26	30	8	26	4	1	26	26	24	12	62	4		66	1	2		14	24	5	21		64		72		72	4	48	14	66
8	39			39	78	50		13	65	33	50	16	15	16	50	26	13	50	4	2	50	26	24	14	64	4		68	2	3		12	25	5	19		61		72		72	6	49	14	69
9	21			54	75	72		21	55	40	72	15	12	19	72	25	18	72	2	1	72	26	22	10	58	2		60	1	2		9	25	5	19		58		65		65	4	44	10	58
10	2			70	72	97		27	46	45	97	14	7	20	97	24	23	97	1	1	97	26	23	4	53	1		54	1	2		6	20	5	19		50	2	58		60	5	45	4	54
11				73	73	100		29	44	44	100	11	7	18	100	21	21	100	5	5	100	26	24		50	5		55	5	9		2	22	3	18	7	52	6	11		17	5	11		16
12				70	70	100		30	37	37	100	9	3	12	100	18	18	100	7	7	100	18	19		37	7		44	7	16			12	2	16	11	41	9			9	4	4		8
P																																													
Tot.	894			1013	1907		11	589	1316			298	229			567			175 N			530	499	89	1118	184		1302			9	189	431	86	429	80	1224	71	1037		1108	114	810	98	1022

Date: Thursday November 14 1946

17-17700-48

GENERATION AND TRANSMISSION OF ELECTRIC ENERGY ON HOLTWOOD - SAFE HARBOR SYSTEM AND TRANSMISSION FROM MARYLAND TO HOLTWOOD'S RESALE CUSTOMERS IN PENNSYLVANIA

Values Are In Megawatthours

Hour	ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT SAFE HARBOR FROM -						SEND-OUT FROM 13 KV 60 CYCLE BUS AT SAFE HARBOR TO -					DELIVERIES TO P P & L CO. VIA DONEGAL				DELIVERIES TO P P & L CO. VIA LEHMAN FARM			DELIVERIES TO 13 KV 60 CYCLE BUS AT HOLTWOOD VIA LEHMAN F.			ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT HOLTWOOD FROM -									SEND-OUT FROM 13 KV 60 CYCLE BUS AT HOLTWOOD TO -							ENERGY SUPPLIED TO 11 KV 25 CYCLE BUS AT HOLTWOOD FROM -				SEND-OUT FROM 11 KV 25 CYCLE BUS AT HOLTWOOD TO -			
									69 KV CIRCUITS													60 CY. GENERATORS AT HOLT'D.														Wst. Ed.										
	60 Cycle Gen. at S.H.	Freq. Chg'r.	69 Kv Cir's.	Maryland	Total	% From Maryland	Maryland	Freq. Chg'r.	TOTAL	From Md.	% From Md.	Firm	Other	Total From Maryland	% From Maryland	Total	From Maryland	% From Maryland	Total	From Maryland	% From Maryland	Steam	Hydro	Freq. Chg'r.	Total	Lehman F.	Wst. Ed. & PP & L Co	Total	From Maryland	% From Maryland	Lehman Farm	Firm	Other	PP & L	Phil. Elec	Freq. Chg'r.	Total	Freq. Chg'r.	25 Cycle Generaters	Highland Town Maryland	Total	PP & L Co.	Highland Town Md.	Freq. Chg'r.	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(12a)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(31a)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)	(43)
1			1	44	45	98		30	14	14	100	1		1	100	10	10	100	1(4)	1	100	22			22	3		25	1	4	2		7	1	15		25			4	4	2			2
2				56	56	100		26	30	30	100	5		5	100	11	11	100	13	13	100	7			7	13	1	21	13	62			6	1	12		19			4	4	2			2
3				64	64	100		22	41	41	100	5	3	8	100	12	12	100	21	21	100					21	2	23	21	91			8		12		20			3	3	3			3
4				69	69	100		25	44	44	100	5	4	9	100	14	14	100	22	22	100					22	2	24	22	92			12		12		24			2	2	3			3
5				69	69	100		27	32	32	100	5		5	100	11	11	100	18	18	100					18	2	20	18	90			7		11		18			4	4	2			2
6				57	57	100		29	27	27	100		-1			11	11	96	16	15	96					16	1	17	15	88			5		11		16			2	2	3			3
7				64	64	100		29	35	35	100	6	1	7	100	12	12	100	15	15	100	10			10	15	1	26	15	58			12		10		22			3	3	1			1
P																																													
8				56	56	100		30	25	25	100	6		6	100	12	12	100	8	8	100	13			13	8		21	8	38			8		10		18			3	3	4			4
9				36	36	100		24	11	11	100	2		2	100	11	9	82	0(4)			23			23	1		24			1		7	3	11		22			3	3	2			2
10			17	11	28	39		27					-5			9			-21			26	18		44			44			21		1	6	11		39		11		11	2	5		7
11			20	6	26	23		26					-4			7			-25			26	25		51			51			25	2	3	8	11		49		21		21	3	16		19
12		1	5		6		2	3				3				11			-19			26	25		51			51			19	3	6	6	12		46		15		15	2	13		15
P																																													
1		1	1	7	9	78		2	3	3	88	3		3	88	11			-12			25	13		38			38			12	2	6	5	12		37		10		10	3	6		9
2				12	12	100		10	2	2	100	4		2	50	9			-13			26	13		39			39			13	2	6	5	11		37		10		10	2	6		8
3			4	17	21	81		20				2				8			-14			26	14		40			40			14	1	6	5	11		37		10		10	2	6		8
4			3	23	26	88		22	3	3	100					9	3	33	-13			28	13		41			41			13		9	5	11		38		10		10	3	6		9
5	1			21	22	95		16	5	5	95	3		3	95	13	2	15	-10			26	13		39			39			10	1	8	5	12		36		10		10	3	6		9
P																																													
6	45			1	46	2	17	13	17	-	2	8		-	2	16	-	2	-9			26	13		39			39			9	8	1	5	14		37		38		38	3	32		35
7	68			1	69	1	20	23	28	-	1	10	3	-	1	16	-	1	-3			26	13		39			39			3	10	4	5	12		34		49		49	3	42		45
8	42			2	44	5	8	21	16	1	5	7		-	5	15	1	5	-5			26	12		38			38			5	8	6	4	12		35		48		48	3	42		45
9	34			13	47	28		29	19	5	28	9		3	28	16	2	13	-4			26	12		38			38			4	7	11	4	12		38		49		49	3	41		44
10	22			16	38	42		27	13	5	42	4		2	42	13	3	23	-5			26	13		39			39			5	5	10	4	11		35		45		45	3	38		41
11				45	45	100		25	20	20	100	4		4	100	13	13	100	2(4)	2	100	26	4		30	3		33	2	6	1		16	2	11		30	1	4		4	3			3
12				33	33	100		24	8	8	100	1		1	100	12	7	58	-1(4)			26			26	1		27			2		8	3	11		24			5	5	4			4
P																																													
Tot.	212	2	51	713	978		47	530	393			93	1			282			-38(4)			466	201		667	121	9	797			159	49	173	77	278		736		330	33	363	64	259		323

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27/28 of 18

Date: November 17, 1946 Sunday

17-17700-46

GENERATION AND TRANSMISSION OF ELECTRIC ENERGY ON HOLTWOOD - SAFE HARBOR SYSTEM AND TRANSMISSION FROM MARYLAND TO HOLTWOOD'S RESALE CUSTOMERS IN PENNSYLVANIA

Values Are In Megawatthours

Hour	ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT SAFE HARBOR FROM -						SEND-OUT FROM 13 KV 60 CYCLE BUS AT SAFE HARBOR TO -					DELIVERIES TO P P & L CO. VIA DONEGAL				DELIVERIES TO P P & L CO. VIA LEHMAN FARM			DELIVERIES TO 13 KV 60 CYCLE BUS AT HOLTWOOD VIA LEHMAN F.			ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT HOLTWOOD FROM -									SEND-OUT FROM 13 KV 60 CYCLE BUS AT HOLTWOOD TO -						ENERGY SUPPLIED TO 11 KV 25 CYCLE BUS AT HOLTWOOD FROM -				SEND-OUT FROM 11 KV 25 CYCLE BUS AT HOLTWOOD TO -			
	60 Cycle Gen. at S.H.	Freq. Chg'r.	69 Kv Cir's.	Maryland	Total	% From Maryland	Maryland	Freq. Chg'r.	69 KV CIRCUITS Total	From Md.	% From Md.	Firm	Other	Total From Maryland	% From Maryland	Total	From Maryland	% From Maryland	Total	From Maryland	% From Maryland	60 CY. GENERATORS AT HOLT'D. Steam	Hydro	Freq. Chg'r.	Total	Lehman F.	Md. Ed. PP & L Co.	Total	Freq.	Maryland	% From Maryland	Lehman Farm	Md. Ed. Firm	Other	PP & L	Phil. Elec	Freq. Chg'r.	Total	Freq. Chg'r.	25 Cycle Generators	Highland Town Maryland	Total	PP & L Co.	Highland Town Md.	Freq. Chg'r.	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(12a)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(31a)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)	(43)
1				71	71	100		29	42	42	100		-1			16	16	98	24	23	98	8			8	24	3	35	23	66					20	12	32	11			11	4	5		9
2		-		77	77	100		23	53	53	100	7	1	8	100	16	16	100	27	27	100	9			9	27	2	38	27	71			7		19	11	37	10			10	5	5		10
3				79	79	100		29	50	50	100	6		6	100	18	18	100	27	27	100	8			8	27	3	38	27	71			8		17	10	35	10			10	4	5		9
4				65	65	100		19	45	45	100	2		2	100	16	16	100	24	24	100	9			9	24	2	35	24	69			4		17	12	37	10			10	5	5		10
5				75	75	100		27	49	49	100	8		8	100	16	16	100	26	26	100	8			8	26	2	36	26	72			9		16	10	35	10			10	4	4		8
6				75	75	100		25	47	47	100	7		7	100	17	17	100	23	23	100	12			12	23	2	37	23	62			6		16	12	34	10			10	4	5		9
7				96	96	100		31	65	65	100	15	6	21	100	23	23	100	23	23	100	24			24	23		47	23	49			18		19	10	47	10			10	5	4		9
P																																													
8	1			83	84	99		28	56	55	99	17	1	18	99	26	26	99	9	9	99	27	20		47	9		56	9	16		4	16		21	4	45	4	36		40	5	30		35
9	50			57	107	53		24	84	45	53	17	16	17	53	31	16	53	14	7	53	26	22	4	52	14		66	7	11		12	24		23		59		66		66	6	50	4	60
10	67			43	110	39		21	88	34	39	18	17	14	39	33	13	39	15	6	39	26	22	8	56	15		71	6	8		14	24		24		62		69		69	6	50	8	64
11	44			61	105	58		26	82	48	58	18	16	20	58	32	18	58	11	6	58	27	22	8	57	11		68	6	9		12	26		22		60		67		67	6	45	9	60
12	28			66	94	70		25	69	48	70	18	13	22	70	31	22	70	8	6	70	26	22	8	56	8		64	6	9		11	22		22		55		64		64	6	43	10	59
P																																													
1				66	66	100		17	50	50	100	13	1	14	100	25	25	100	9	9	100	26	3	2	31	9		40	9	23			14		22	2	38		10		10	5	2		7
2				44	44	100		4	42	42	100	13		13	100	26	26	100	1	1	100	27	25	-	52	1		53	1	2		2	14		22	2	40	2	10		12	6	4		10
3		2		45	47	96		3	42	40	96	10		10	96	27	26	96	3	3	96	26	19		45	3		48	3	6		2	16		22		40		10		10	6	4		10
4	9			46	55	84		16	40	34	84	9		8	84	26	22	84	1	1	84	26	21		47	2		49	1	2		3	15		20	3	42	2	11		13	6	4		10
5	41			46	87	53		29	69	37	53	15	10	13	53	28	15	53	11	6	53	25	23	4	52	11		63	6	10		10	22		24		56		45		45	6	29	7	42
P																																													
6	127			2	129	2	17	37	84	2	2	16	17	1	2	32	1	2	15	-	2	26	22	11	59	15		74				19	20		23		62		71		71	5	50	10	65
7	93			18	111	16	3	26	84	13	16	16	21	6	16	30	5	16	12	2	16	26	23	10	59	12		71	2	3		16	26		24		66		70		70	5	49	14	68
8	54			46	100	46		28	73	34	46	16	17	15	46	28	13	46	9	4	46	26	24	14	64	9		73	4	5		14	24		23		61		75		75	4	49	12	65
9	15			78	93	84		26	66	55	84	15	15	25	84	28	24	84	7	6	84	26	23	11	60	7		67	6	9		10	28		23		61		66		66	6	45	12	63
10				69	69	100		28	41	41	100	12	2	14	100	22	22	100	1	1	100	27	25	2	54	1		55	1	2		2	20		23	2	47	2	26		28	4	19	2	25
11				83	83	100		30	52	52	100	11	3	14	100	22	22	100	15	15	100	26	7		33	15		48	15	31			15		21	7	44	6	6		12	5	7		12
12				84	84	100		30	52	52	100	9	1	10	100	19	19	100	19	19	100	18			18	20		38	19	50	1		8		12	10	38	10			10	4	4		8
P																																													
Tot.	529	2		1475	2006		20	564	1425			288	156			588			334			515	323	82	920	336	14	1270			2	31	386		507	1129	97	702		799	122	517	88	727

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Date November 12, 1946 Tuesday

GENERATION AND TRANSMISSION OF ELECTRIC ENERGY ON HOLTWOOD - SAFE HARBOR SYSTEM AND TRANSMISSION FROM MARYLAND TO HOLTWOOD'S RESALE CUSTOMERS IN PENNSYLVANIA

Values Are In Megawatthours

Hour	ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT SAFE HARBOR FROM -						SEND-OUT FROM 13 KV 60 CYCLE BUS AT SAFE HARBOR TO -					DELIVERIES TO P P & L CO. VIA DONEGAL				DELIVERIES TO P P & L CO. VIA LEHMAN FARM			DELIVERIES TO 13 KV 60 CYCLE BUS AT HOLTWOOD VIA LEHMAN F.			ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT HOLTWOOD FROM -									SEND-OUT FROM 13 KV 60 CYCLE BUS AT HOLTWOOD TO -							ENERGY SUPPLIED TO 11 KV 25 CYCLE BUS AT HOLTWOOD FROM -				SEND-OUT FROM 11 KV 25 CYCLE BUS AT HOLTWOOD TO -			
	60 Cycle Gen. at S.H.	Freq. Chg'r.	69 Kv Cir's.	Maryland	Totals	% From Maryland	Maryland	Freq. Chg'r.	69 KV CIRCUITS TOTAL	69 KV CIRCUITS From Md.	69 KV CIRCUITS % From Md.	Firm	Other	Total From Maryland	% From Maryland	Total	From Maryland	% From Maryland	Total	From Maryland	% From Maryland	60 CY. GENERATORS AT HOLT'D. Steam	60 CY. GENERATORS AT HOLT'D. Hydro	60 CY. GENERATORS AT HOLT'D. Freq. Chg'r.	60 CY. GENERATORS AT HOLT'D. Total	Lehman F.	Met. Ed. & P P & L Co	Total	From Maryland	% From Maryland	Lehman Farm	Met. Ed. Firm	Met. Ed. Other	P P & L	Phil. Elec	Freq. Chg'r.	Total	Freq. Chg'r.	25 Cycle Generators	Highland from Maryland	Total	P P & L Co.	Highland from Md.	Freq. Chg'r.	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(12a)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(31a)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)	(43)
1				33	33	100		30	3	3	100		-2			10	3	30	-4			26			26			26			4		3	3	11		21			6	6	4			4
2				38	38	100		27	10	10	100		-1			10	9	91	-2			26			26			26			2		11	2	9		24			4	4	4			4
3				27	27	100		28	2	2	100		-6			9	2	22	-4			26			26			26			4		10	3	9		26			4	4	4			4
4			3	38	41	93		29	9	9	100		-2			10	8	82	-2			26			26			26			2		10	3	10		25			5	5	4			4
5				39	39	100		28	10	10	100		-1			10	9	91	-1			26			26	1		27			2		10	2	9		23			4	4	4			4
6			1	48	49	98		30	19	19	100	6		6	100	12	12	100	0			26			26	2		28			2		11	3	10		26			5	5	4			4
7	6			39	44	89		18	26	23	89	6		5	89	18	16	89	0			27			27	1		28			1	1	9	4	12		27		8		8	5	2		7
P																																													
8	23			34	57	60		25	33	20	60	13		8	60	24	12	50	-5			26	19	4	49	1		50			6	6	10	6	18		46		35		35	6	22	4	32
9	60			23	83	28		24	61	17	28	19	4	6	28	30	8	28	4	1	28	27	23	12	62	4		66	1	2		14	14	6	23		57		64		64	5	42	13	60
10	77			24	101	24		27	74	18	24	19	12	7	24	33	8	24	8	2	24	26	22	12	60	8		68	2	3		15	20	5	25		65		71		71	5	47	13	65
11	91			15	106	14	2	25	81	11	14	20	14	5	14	32	4	14	11	2	14	26	23	12	61	11		72	2	3		17	21	5	23		66		71		71	6	45	12	63
12	46			47	93	51		25	70	36	51	17	14	16	51	30	15	51	6	3	51	26	22	15	63	6		69	3	4		12	24	5	23		64		68		68	4	45	16	65
P																																													
1				87	87	100		27	58	58	100	16	16	32	100	26	26	100	2	2	100	26	22	13	61	3		64	2	3	1	7	29	5	21		63		70		70	5	46	14	65
2	18			46	64	72		24	39	28	72	17	1	13	72	25	15	60	-6			27	22	12	61			61			6	10	12	7	22		57		70		70	5	45	13	63
3	20			42	62	68		24	40	27	68	15		10	68	28	17	61	-4			26	22	13	61			61			4	10	14	7	23		58		68		68	5	46	13	64
4	26			36	62	58		21	40	23	58	14		8	58	26	15	58	-3			26	21	12	59			59			3	11	12	7	22		55		70		70	5	46	12	63
5	47			28	75	37	2	24	51	19	37	16		6	37	30	11	37	2	1	37	27	22	12	61	3		64	1	2	1	12	16	6	24		59		66		66	5	43	14	62
P																																													
6	101			1	102	1	15	27	60	1	1	18	3	-	1	30	-	1	6	-	1	26	22	12	60	6		66				16	13	5	27		61		68		68	6	46	12	64
7	68			14	82	17	3	26	54	9	17	18	4	4	17	28	5	17	2	-	17	26	23	12	61	2		63				14	14	6	24		58		64		64	4	39	14	57
8	29			17	46	37		13	32	12	37	12		4	37	25	8	32	-6			26	24	12	62			62			6	7	15	7	24		59		44		44	5	25	12	42
9	2			32	34	94		10	26	24	94	6		6	94	24	18	75	-7			26	25	6	57			57			7	3	14	7	23		54		21		21	5	8	8	21
10				41	41	100		15	24	24	100	6		6	100	22	18	82	-4			26	22		48			48			4	1	12	5	23		45			4	4	5			5
11		1		60	61	100		19	40	40	100	11		11	100	23	23	100	7	7	100	27	9		36	7		43	7	16			13	3	22		38			5	5	5			5
12				59	59	100		21	33	33	100	5		5	100	16	16	100	7	7	100	26			26	8		34	7	21	1		9	3	19		32			6	6	4			4
P																																													
Tot.	613	1	4	868	1486		22	567	895			254	56			531			7			629	343	159	1131	63		1194			56	156	326	115	456		1109		858	43	901	114	547	170	831

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V 9/11 of 10

Date: Monday December 16, 1946

17-17700-46

GENERATION AND TRANSMISSION OF ELECTRIC ENERGY ON HOLTWOOD - SAFE HARBOR SYSTEM AND TRANSMISSION FROM MARYLAND TO HOLTWOOD'S RESALE CUSTOMERS IN PENNSYLVANIA

Values Are In Megawatthours

	ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT SAFE HARBOR FROM -						SEND-OUT FROM 13 KV 60 CYCLE BUS AT SAFE HARBOR TO -					DELIVERIES TO P P & L CO. VIA DONEGAL				DELIVERIES TO P P & L CO. VIA LEHMAN FARM			DELIVERIES TO 13 KV 60 CYCLE BUS AT HOLTWOOD VIA LEHMAN F.			ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT HOLTWOOD FROM -										SEND-OUT FROM 13 KV 60 CYCLE BUS AT HOLTWOOD TO -								ENERGY SUPPLIED TO 11 KV 25 CYCLE BUS AT HOLTWOOD FROM -				SEND-OUT FROM 11 KV 25 CYCLE BUS AT HOLTWOOD TO -			
									69 KV CIRCUITS												60 CY. GENERATORS AT HOLT'D.					Met. Ed. & P P & L Co							Met. Ed.															
HOUR	60 Cycle Gen. at S.H.	Freq. Chg'r.	69 KV Cir's.	Maryland	Total	% From Maryland	Maryland	Freq. Chg'r.	TOTAL	From Md.	% From Md.	Firm	Other	Total From Maryland	% From Maryland	Total	From Maryland	% From Maryland	Total	From Maryland	% From Maryland	Steam	Hydro	Freq. Chg'r.	Total	Lehman F.		Total	From Maryland	% From Maryland	Lehman Farm	Firm	Other	PP & L	Phil. Elec	Freq. Chg'r.	Total	Freq. Chg'r.	25 Cycle Generators	Highland from Maryland	Total	PP & L Co.	Highland from Md.	Freq. Chg'r.	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(12a)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(31a)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)	(43)
1				53	53	100		18	34	34	100	8	5	13	100	15	15	100	8	8	100	26			26	8		34	8	24			12	1	19		32			4	4	5			5
2				42	42	100		16	27	27	100	7		7	100	14	14	100	7	7	100	26			26	7		33	7	21			10	1	18		29			5	5	5			5
3				42	42	100		14	27	27	100	8		8	100	13	13	100	5	5	100	26			26	5		31	5	16			10	2	16		28			5	5	4			4
4				35	35	100		18	17	17	100	4		4	100	12	12	100	3	3	100	26			26	3		29	3	10			7	2	16		25			3	3	4			4
5				39	39	100		22	17	17	100	4		4	100	12	12	100	1	1	100	26			26	2		28	1	4	1		10	2	14		27			5	5	4			4
6				51	51	100		26	24	24	100	5		5	100	15	15	100	4	4	100	26			26	5		31	4	13	1		7	2	18		28		1	3	4	4			4
7				65	65	100		27	36	36	100	11		11	100	18	18	100	7	7	100	26			26	7		33	7	21			8	3	20		31		1	3	4	4			4
P																																													
8	5			68	73	93		26	48	45	93	14		13	93	26	24	93	2	2	93	27	16	6	49	3		52	2	4	1	3	17	5	23		49		24		24	5	11	6	22
9	44			55	99	56		28	71	40	56	18	9	15	56	32	18	56	9	5	56	26	21	13	60	9		69	5	7		12	21	5	25		63		68		68	6	43	13	62
10	91			19	110	17		29	82	14	17	19	13	5	17	34	6	17	12	2	17	26	21	12	59	12		71	2	3		17	21	5	24		67		67		67	5	44	13	62
11	63			63	126	50		30	97	49	50	19	20	20	50	35	18	50	17	9	50	26	21	13	60	17		77	9	12		15	29	4	25		73		71		71	6	44	14	64
12	33			78	111	70		30	91	64	70	17	21	27	70	34	24	70	14	10	70	27	22	13	62	14		76	10	13		10	32	4	25		71		60		60	5	39	14	58
P																																													
1	12			70	82	85		23	59	50	85	15	7	19	85	26	22	85	12	10	85	26	11		37	12		49	10	20		2	15	3	23	2	45		5	2	7	4		1	5
2	27			68	85	68		16	69	47	68	16	11	18	68	29	20	68	9	6	68	26	20	7	53	9		62	6	10		8	24	5	24		61		37		37	6	21	7	34
3	14			84	98	86		25	74	64	86	16	11	23	86	32	28	86	12	10	86	26	12	12	50	12		62	10	16		7	24	4	23		58		56		56	5	34	14	53
4	23			72	95	76		21	73	55	76	16	8	18	76	30	23	76	14	11	76	27	12	11	50	14		64	11	17		8	24	3	25		60		57		57	6	34	12	52
5	41			47	88	53		15	74	39	53	17	9	14	53	32	17	53	12	6	53	27	15	12	54	12		66	6	9		11	21	5	24		61		62		62	5	37	13	55
P																																													
6	105			4	109	4	8	27	77	3	4	13	12	1	4	32	1	4	12	-	4	26	21	12	59	12		71				20	18	4	26		68		68		68	5	45	14	64
7	78			28	106	26		29	78	20	26	15	15	8	26	31	8	26	11	3	26	26	22	14	62	11		73	3	4		14	26	4	25		69		67		67	5	40	15	60
8	17			39	56	70		20	36	26	70	15		10	70	26	15	58	-5			26	26	11	63			63			5	5	19	7	23		59		30		30	4	15	11	30
9	20			27	47	57		19	29	17	57	7		4	57	23	13	57	-5			26	27		53			53			5	4	13	6	22		50		4	2	6	5		1	6
10	3			54	57	95		26	31	29	95	6		6	95	22	21	95	-2			26	24		50	1		51			3	2	16	5	23		49		10		10	5	4		9
11				78	78	100		29	48	48	100	8		8	100	22	22	100	13	13	100	25	2		27	13		40	13	33			12	2	23		37		2	3	2	5			5
12				84	84	100		30	52	52	100	7	5	12	100	19	19	100	15	15	100	26			26	15		41	15	37			16	1	22		39			6	6	5			5
P																																													
Tot.	576			1255	1831		8	554	1271			285	146			584			187			627	293	136	1056	203		1259			16	138	412	85	526	2	1179		690	41	731	117	411	148	676

Date: Tuesday December 17, 1946

17-17760-46

GENERATION AND TRANSMISSION OF ELECTRIC ENERGY ON HOLTWOOD - SAFE HARBOR SYSTEM AND TRANSMISSION FROM MARYLAND TO HOLTWOOD'S RESALE CUSTOMERS IN PENNSYLVANIA

Values Are In Megawatthours

Hour	ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT SAFE HARBOR FROM -						SEND-OUT FROM 13 KV 60 CYCLE BUS AT SAFE HARBOR TO -					DELIVERIES TO P P & L CO. VIA DONEGAL				DELIVERIES TO P P & L CO. VIA LEHMAN FARM			DELIVERIES TO 13 KV 60 CYCLE BUS AT HOLTWOOD VIA LEHMAN F.			ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT HOLTWOOD FROM -									SEND-OUT FROM 13 KV 60 CYCLE BUS AT HOLTWOOD TO -							ENERGY SUPPLIED TO 11 KV 25 CYCLE BUS AT HOLTWOOD FROM -				SEND-OUT FROM 11 KV 25 CYCLE BUS AT HOLTWOOD TO -			
									69 KV CIRCUITS													60 CY. GENERATORS AT HOLT'D.												Net. Ed.												
	60 Cycle Gen. at S.H.	Freq. Chg'r.	69 Kv Cir's.	Maryland	Total	% From Maryland	Maryland	Freq. Chg'r.	TOTAL	From Md.	% From Md.	Firm	Other	Total From Maryland	% From Maryland	Total	From Maryland	% From Maryland	Total	From Maryland	% From Maryland	Steam	Hydro	Freq. Chg'r	Total	Lehman F.	Wat. Ed. PP & L Co	Total	From Maryland	% From Maryland	Lehman Farm	Firm	Other	PP & L	Phil. Elec	Freq. Chg'r.	Total	Freq. Chg'r.	25 Cycle Generators	Highland from Md.	Total	PP & L Co.	Highland from Md.	Freq. Chg'r.	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(12a)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(31a)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)	(43)
1				63	63	100		25	37	37	100	8	6	14	100	16	16	100	11	11	100	26			26	11	1	38	11	29			11	1	20		32			4	4	5			5
2				39	39	100		28	10	10	100		-2			12	10	83	-1			26			26			26			1		2	1	19		23			6	5	4			4
3				47	47	100		26	20	20	100	4		4	100	11	11	100	3	3	100	26			26	3		29	3	10			7	4	17		28			4	4	4			4
4				41	41	100		22	20	20	100	6		6	100	11	11	100	3	3	100	26			26	3		29	3	10			10	1	15		26			4	4	4			4
5				41	41	100		25	13	13	100	1		1	100	13	12	92	0(M)			27			27	2		29			2		6	3	16		27			5	5	5			5
6				61	61	100		29	32	32	100	9	2)	11	100	16	16	100	6	6	100	26			26	6		32	6	19			12	1	16		29			5	5	6			5
7				51	51	100		22	29	29	100	6		6	100	16	16	100	5	5	100	26	3		29	5		34	5	15			4	4	19	4	31	2	2		4	3			3
P																																													
8	2			71	73	97		28	44	43	97	16		16	97	26	25	97	16(M)	1	97	26	17	6	49	3		52	1	2	2	14	14	5	23		48		48		48	5	33	6	44
9	95			9	104	9	2	27	76	7	9	19	10	2	9	32	3	9	13	1	9	27	22	9	58	13		71	1	1		16	20	4	23		63		68		68	5	48	9	62
10	113			7	120	6		23	95	6	6	19	20	2	6	84	4	6	17	1	6	26	22	10	58	17		75	1	1		17	27	4	26		74		70		70	6	47	12	65
11	88			21	109	19		21	90	17	19	19	19	7	19	38	6	19	15	3	19	27	24	14	65	15		80	3	4		15	30	4	24		73		71		71	5	45	14	64
12	80			21	101	21		16	16	18	21	17	21	8	21	34	7	21	13	3	21	26	23	14	63	13		76	3	4		14	30	4	25		73		70		70	6	46	14	66
P																																													
1	22			45	67	67		19	48	32	67	14	8	15	67	23	15	67	-1(M)			27	23	10	60	4		64			5	8	20	5	23		61		63		63	4	43	12	59
2	45	4		19	68	28			70	20	28	17	16	9	28	30	8	28	8	2	28	26	23	10	59	8		67	2	3		0½2	25	5	21		63		71		71	6	49	12	67
3	39	3		25	67	37		2	66	21	37	17	11	10	37	30	11	37	8	3	37	27	22	12	61	8		69	3	4		11	25	5	23		64		69		69	5	48	10	63
4	38			30	68	44		19	49	22	44	17	2	8	44	27	12	44	3	1	44	26	21	10	57	3		60	1	2		10	20	5	22		57		70		70	5	43	12	65
5	50			41	91	45		28	64	29	45	17	10	12	45	27	12	45	5	2	45	26	21	13	60	5		65	2	3		12	22	5	23		62		70		70	6	46	14	66
P																																													
6	122			1	123	1	23	29	72	1	1	14	12	-	1	31	-	1	10	-	1	27	22	12	61	10		71				18	19	5	24		66		69		69	5	45	12	62
7	64			19	83	23	1	36	58	13	23	14	9	5	23	28	6	23	9(M)	1	23	26	22	14	62	4		66	1	2	1	13	19	5	22		60		67		67	5	45	16	66
8	16			30	46	65		18	29	19	65	9		6	65	24	13	54	-8			26	25	12	63			63			8	5	17	7	20		57		38		38	5	18	12	35
9	2			31	33	94		6	27	25	94	6		6	94	23	19	83	-5			26	26		52			52			5	3	13	6	24		51		10		10	5	2		7
10				51	51	100		13	39	39	100	9		9	100	24	24	100	4	4	100	27	19		46	4		50	4	8		2	14	4	24		44		10		10	5	4		9
11				62	62	100		22	38	38	100	7		7	100	22	22	100	7(M)	7	100	26			26	8		34	7	21	1		8	3	21		33		15		15	5	8		13
12				68	68	100		30	37	37	100	7		7	100	17	17	100	9	9	100	26			26	9		35	9	26			10	2)	22		34			5	5	5			5
P																																													
Tot.	776	7		994	1677		26	504	1149			272	143			560			129(M)			631	335	146	1112	154	1	1267			25	160	385	93	512	4	1179	2	881	32	915	118	575	155	848

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Date: December 18 1946 Wednesday

17-17709-48

GENERATION AND TRANSMISSION OF ELECTRIC ENERGY ON HOLTWOOD - SAFE HARBOR SYSTEM AND TRANSMISSION FROM MARYLAND TO HOLTWOOD'S RESALE CUSTOMERS IN PENNSYLVANIA

Values Are In Megawatthours

Hour	ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT SAFE HARBOR FROM -						SEND-OUT FROM 13 KV 60 CYCLE BUS AT SAFE HARBOR TO -					DELIVERIES TO P P & L CO. VIA DONEGAL				DELIVERIES TO P P & L CO. VIA LEHMAN FARM			DELIVERIES TO 13 KV 60 CYCLE BUS AT HOLTWOOD VIA LEHMAN F.			ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT HOLTWOOD FROM -									SEND-OUT FROM 13 KV 60 CYCLE BUS AT HOLTWOOD TO -							ENERGY SUPPLIED TO 11 KV 25 CYCLE BUS AT HOLTWOOD FROM -				SEND-OUT FROM 11 KV 25 CYCLE BUS AT HOLTWOOD TO -			
	60 Cycle Gen. at Sub.	Freq. Chg'r.	69 Kv Circ.	Maryland	Total	% From Maryland	Maryland	Freq. Chg'r.	69 KV CIRCUITS			Fire	Other	Total from Maryland	% From Maryland	Total	From Maryland	% From Maryland	Total	From Maryland	% From Maryland	60 CY. GENERATORS AT HOLT'D.				Lehman F.	Met. Ed. & PP & L Co	Total	From Maryland	% From Maryland	Lehman Farm	Met. Ed.		PP & L	Phil. Elec	Freq. Chg'r.	Total	Freq. Chg'r.	25 Cycle Gen. erators	Highland from Maryland	Total	PP & L Co.	Highland from Md.	Freq. Chg'r.	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	TOTAL (9)	From Md. (10)	% From Md. (11)	(12)	(12a)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	Steam (21)	Hydro (22)	Freq. Chg'r. (23)	Total (24)	(25)	(26)	(27)	(28)	(29)	(30)	Fire (31)	Other (31a)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)	(43)
1				64	64	100		27	37	37	100	8	5	13	100	16	16	100	10	10	100	26			26	10		36	10	28			11	1	21		33			5	5	5			5
2				46	46	100		24	21	21	100	2		2	100	12	12	100	5	5	100	26			26	5		31	5	16			8	2	19		29			5	5	4			4
3				48	48	100		25	22	22	100	5		5	100	13	13	100	4	4	100	26			26	4		30	4	13			6	1	18		25			6	6	5			5
4				45	45	100		26	18	18	100	2		2	100	13	13	100	1(M)	1	100	26			26	2		28	1	4	1		8	3	16		28			4	4	4			4
5				43	43	100		28	15	15	100	4		4	100	12	12	100	1(M)	1	100	26			26	2		28	1	4	1		4	2	18		25			5	5	4			4
6				61	61	100		27	32	32	100	9	1	10	100	15	15	100	7	7	100	26			26	7		33	7	21			12	2	17		31			6	6	4			4
7				61	61	100		27	33	33	100	7		7	100	17	17	100	5	5	100	26	5	1	32	5		37	5	14			8	3	20		31	2	12		14	5	6	2	13
P																																													
8	4			77	81	95		26	54	51	96	19		18	95	27	26	95	7(M)	7	95	26	16	3	45	8		53	7	13	1	5	19	4	22		51		46		46	5	33	2	40
9	46			60	106	57		26	80	46	57	19	12	18	57	31	18	57	15	9	57	26	22	2	50	15		65	9	14		13	22	3	24		62		69		69	6	56	4	66
10	69			34	103	33		25	79	26	33	19	10	10	33	32	11	33	16	5	33	26	22	4	52	16		68	5	7		14	20	4	24		62		68		68	5	53	4	62
11	70			33	103	32		24	80	26	32	19	9	9	32	32	10	32	17	5	32	26	22	2	50	17		67	5	7		14	22	3	25		64		69		69	7	54	4	65
12	69			32	101	32		26	76	24	32	16	10	8	32	32	10	32	14	4	32	26	22	4	51	14		65	4	6		14	19	4	23		60		71		71	4	55	4	63
P																																													
1	14			59	75	79		25	50	40	79	13	3	13	79	24	19	79	7	6	79	26	18	2	46	7		53	6	11		7	15	4	23		49		54		54	5	43	2	50
2	64			27	91	30		13	78	23	30	16	12	8	30	30	9	30	16	5	30	26	21		47	16		69	5	8		14	22	3	23		62		69		69	6	57	2	65
3	56			45	101	45		26	76	34	45	16	12	13	45	30	14	45	15	7	45	26	22	6	54	15		69	7	10		13	23	3	23		62		70		70	6	53	6	65
4	39			58	97	60		27	69	41	60	16	11	16	60	29	17	60	11	7	60	26	22	6	54	11		65	7	11		11	24	4	21		60		71		71	6	52	7	65
5	52			47	99	47		24	77	36	47	16	12	13	47	31	15	47	14	7	47	26	22	7	55	14		69	7	10		12	24	4	26		66		67		67	5	52	7	64
P																																													
6	129			2	131	2	14	30	89	2	2	14	15	1	2	33	1	2	20	-	2	26	22	7	55	20		75				21	19	3	25		68		71		71	5	51	7	63
7	113	1		1	115	1	17	28	71	1	1	15	9	-	1	29	-	1	13	-	1	27	23	5	55	13		68				17	16	4	26		63		70		70	7	53	6	66
8	53	5		2	63	3	7	5	42	1	3	10		-	3	26	1	3	2	-	3	27	22	1	50	2		52				12	8	5	24		49		72		72	4	60	2	66
9	46	6		1	52	2	10	1	43	1	2	8		-	2	26	1	2	5	-	2	25	22		47	5		52				12	8	4	22	4	50	2	73		75	5	62		67
10	32			13	45	29	2	5	43	12	29	12		3	29	23	7	29	6	2	29	27	23		50	6		56	2	4		11	9	4	23	6	53	4	69		73	5	64		69
11	14			52	66	79		25	43	34	79	11	2	10	79	22	17	79	5	4	79	26	22		48	5		53	4	8		7	13	4	23	2	49	2	69		71	6	61		67
12				50	50	100		28	21	21	100	4		4	100	16	16	100	-(M)			26	15		41	1		42			2		12	4	21		39		9		9	4	3		7
P																																													
Tot.	872	11		961	1844		50	548	1249			280	123			571			215(M)			625	363	30	1038	220		1258			5	197	352	78	527	12	1171	10	1099	31	1140	122	868	59	1049

Date: December 19, 1946 Thursday

17-17700-68

GENERATION AND TRANSMISSION OF ELECTRIC ENERGY ON HOLTWOOD - SAFE HARBOR SYSTEM AND TRANSMISSION FROM MARYLAND TO HOLTWOOD'S RESALE CUSTOMERS IN PENNSYLVANIA

Values Are In Megawatthours

Hour	ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT SAFE HARBOR FROM						SEND-OUT FROM 13 KV 60 CYCLE BUS AT SAFE HARBOR TO -					DELIVERIES TO P P & L CO. VIA DONEGAL				DELIVERIES TO P P & L CO. VIA LEHMAN FARM			DELIVERIES TO 13 KV 60 CYCLE BUS AT HOLTWOOD VIA LEHMAN F.			ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT HOLTWOOD FROM -									SEND-OUT FROM 13 KV 60 CYCLE BUS AT HOLTWOOD TO -							ENERGY SUPPLIED TO 11 KV 25 CYCLE BUS AT HOLTWOOD FROM -				SEND-OUT FROM 11 KV 25 CYCLE BUS AT HOLTWOOD TO -			
	60 Cycle Gen. at S.H.	Freq. Chg'r.	69 Kv Cir's.	Maryland	Total	% From Maryland	Maryland	Freq. Chg'r.	69 KV CIRCUITS TOTAL	69 KV CIRCUITS From Md.	69 KV CIRCUITS % From Md.	Firm	Other	Total From Maryland	% From Maryland	Total	From Maryland	% From Maryland	Total	From Maryland	% From Maryland	60-CY. GENERATORS AT HOLT'D. Steam	Hydro	Freq. Chg'r.	Total	Lehman F.	Met. Ed. PP & L Co	Total	From Maryland	% From Maryland	Lehman Farm	Met. Ed. Firm	Met. Ed. Other	PP & L	Phil. Elec.	Freq. Chg'r.	Total	Freq. Chg'r.	25 Cycle Generators	Highland Farm Maryland	Total	PP & L Co.	Highland Farm Md.	Freq. Chg'r.	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(12a)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(31a)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)	(43)
1				54	54	100		24	29	29	100	8	4	12	100	15	15	100	4	4	100	27	7		34	4		38	4	11			14	2	18		34		2	4	6	4			4
2				39	39	100		30	11	11	100	3		3	100	11	8	73	-6(M)			26	15		41	1		42			7		14	4	16		41		10		10	5	6		11
3				40	40	100		26	12	12	100	1		1	100	12	12	100				26			26			26					7	2	15		24			4	4	4			4
4				42	42	100		25	17	17	100		-1			12	11	94	3	3	94	27			27	3		30	3	10			9	2	15		26			4	4	4			4
5				42	42	100		30	10	10	100	2		2	100	11	8	73	-3(M)			26	8		34	1		35			4		11	3	14		32		6		6	4			4
6			7	20	27	74		27	1	1	100					11	1	9	-17			26	26		52			52			17	1	9	6	15		48		14		14	4	9		13
7			2	48	50	96		27	21	21	100	8		8	100	15	13	87	-8			27	20		47			47			8	4	12	6	17		47		57		57	4	49		53
P																																												
8	11			54	65	83		19	45	37	83	16		13	83	26	22	83	2	2	83	26	21		47	2		49	2	4		7	15	5	19		46		57		57	6	48		54
9	92			16	108	15	1	28	82	12	15	19	9	4	15	34	5	15	17	3	15	26	21	1	48	17		65	3	5		16	16	3	21		56		67		67	5	53		58
10	101			12	113	11	2	27	84	9	11	19	12	3	11	32	4	11	14	2	11	26	20	5	51	14		65	2	3		16	21	4	22		63		70		70	6	54	6	66
11	84			22	106	21	1	26	80	17	21	19	13	7	21	34	7	21	12	3	21	26	22	9	57	12		69	3	4		30	18	5	22		65		69		69	5	48	10	63
12	85			18	103	17	1	25	77	13	17	17	12	5	17	32	5	17	11	2	17	27	20	10	57	11		68	2	3		15	21	5	23		64		68		68	4	49	12	65
P																																												
1	36			52	88	59		26	63	37	59	14	15	17	59	27	16	59	6	4	59	26	22	12	60	6		66	4	6		12	24	4	21		61		77		77	6	53	12	71
2	73			26	99	26		24	75	20	26	17	11	7	26	32	8	26	12	3	26	25	22	10	57	12		69	3	4		15	20	4	26		65		71		71	6	52	10	68
3	76			21	97	22		27	70	15	22	16	11	6	22	29	6	22	10	2	22	27	24	10	61	10		71	2	3		15	21	5	24		66		76		76	6	51	12	69
4	73			23	96	24	1	26	70	17	24	16	12	7	24	29	7	24	10	2	24	26	21	12	59	10		69	2	3		15	22	4	24		65		75		76	5	52	12	69
5	80			8	88	9	8	26	52	5	9	16	2	2	9	29	3	9	4	-	9	26	23	10	59	4		63				15	17	5	24		61		68		68	5	44	10	59
P																																												
6	95			2	97	2	14	29	56	1	2	17		-	2	29	1	2	6	-	2	26	22	10	58	6		64				23	5	6	25		59		71		71	5	42	12	59
7	82			15	97	15		26	72	11	15	16	11	4	15	30	5	16	11	2	15	26	21	10	57	11		68	2	3		15	21	4	25		65		69		69	5	47	10	62
8	66			9	75	12	5	19	52	6	12	16		2	12	27	3	12	7	1	12	27	22	6	55	7		62	1	2		12	14	4	24		54		71		71	5	54	6	65
9	44	2			46		6		42			11				25			4			26	22		48	4		52				11	8	5	25		49		70		70	5	58		63
10	52			2	54	4	9	5	38	2	4	12		-	4	23	1	4	4	-	4	26	21		47	4		51				11	9	4	23		47		68		68	5	59		64
11	24			22	41	48	1	15	34	16	48	11		5	48	22	11	48	2(M)	1	48	26	22		48	3		51	1	2	1	7	13	4	23		48		60		60	6	30		56
12	19			23	42	55		24	18	10	55	6		3	55	13	7	55	-5			26	19		45			45			5	4	8	4	20		41		23		23	5	17		22
P																																												
Tot.	1093	2	9	610	1714		49	561	1111			280	111			560			100(M)			629	441	105	1175	142		1317			42	234	349	100	501		1226		1219	12	1231	119	895	112	1126

v 17/18 of 12

v 17/18 of 3

Date: December 20, 1946 Friday

17-17700-68

GENERATION AND TRANSMISSION OF ELECTRIC ENERGY ON HOLTWOOD - SAFE HARBOR SYSTEM AND TRANSMISSION FROM MARYLAND TO HOLTWOOD'S RESALE CUSTOMERS IN PENNSYLVANIA

Values Are In Megawatthours

Hour	ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT SAFE HARBOR FROM -						SEND-OUT FROM 13 KV 60 CYCLE BUS AT SAFE HARBOR TO -					DELIVERIES TO P P & L CO. VIA DONEGAL				DELIVERIES TO P P & L CO. VIA LEHMAN FARM			DELIVERIES TO 13 KV 60 CYCLE BUS AT HOLTWOOD VIA LEHMAN F.			ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT HOLTWOOD FROM -									SEND-OUT FROM 13 KV 60 CYCLE BUS AT HOLTWOOD TO -							ENERGY SUPPLIED TO 11 KV 25 CYCLE BUS AT BOLTWOOD FROM -				SEND-OUT FROM 11 KV 25 CYCLE BUS AT BOLTWOOD TO -			
									69 KV CIRCUITS													50 CY. GENERATORS AT HOLT'D.																								
	60 Cycle Gen. at S.H.	Freq. Chg'r.	69 Kv Cir's.	Maryland	Total	% From Maryland	Maryland	Freq. Chg'r.	TOTAL	From Md.	% From Md.	Firm	Other	Total From Maryland	% From Maryland	Total	From Maryland	% From Maryland	Total	From Maryland	% From Maryland	Steam	Hydro	Freq. Chg'r.	Total	Lehman F.	Wet. Ed. PP & L Co	Total	From Maryland	% From Maryland	Lehman Farm	Wet. Ed. Firm	Wet. Ed. Other	PP & L	Phil. Elec	Freq. Chg'r.	Total	Freq. Chg'r.	25 Cycle Generators	Highland Town Maryland	Total	PP & L Co.	Highland Town Md.	Freq. Chg'r.	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(12a)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(31a)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)	(43)
1	4			64	68	94		27	41	39	94	8	9	16	94	16	15	94	12	11	94	26			26	12		38	11	29			16	1	20		37		5	1	6	5			5
2				50	50	100		23	26	26	100	4		4	100	13	13	100	6	6	100	26			26	6		32	6	19			10	1	18		29			5	5	3			3
3				51	51	100		29	22	22	100	4		4	100	12	12	100	5	5	100	26			26	5		31	5	16			9	1	18		28			4	4	4			4
4				36	36	100		19	15	15	100					10	10	100	2	2	100	25			25	2		27	2	7			8	2	16		26			4	4	4			4
5				28	28	100		17	12	12	100	5		5	100	10	7	70	OM			27			27	1		28			1		6	3	16		26			4	4	3			3
6				45	45	100		27	17	17	100	2		2	100	13	13	100	2M	2	100	26			26	3		29	2	7	1		4	2	19		26			3	3	3			3
7				73	73	100		30	42	42	100	12		12	100	15	15	100	11	11	100	26			26	11		37	11	30			16	1	17		34			5	5	4			4
P																																													
8				74	74	100		28	44	44	100	14	5	19	100	21	21	100	10	10	100	26			26	10		36	10	28			14	2	19		35		1	4	5	4			4
9				46	46	100		12	33	33	100	7		7	100	21	21	100	4	4	100	26	4		30	4		34	4	12		2	6	4	20		32		14		14	4	9		13
10	32			16	48	33	6	19	24	8	33	6		2	33	20	6	30	-4			26	19		45			45			4	5	7	5	22		43		20		20	5	13		18
11	37			21	58	36	3	22	31	11	36	13		5	36	23	6	26	-3			26	25		51			51			3	8	10	5	22		48		50		50	4	40		44
12	29			10	39	26	6	10	26	7	26	11		3	26	20	4	20	-4			26	25		51			51			4	7	9	5	21		46		38		38	5	30		35
P																																													
1	26			13	39	33	3	22	16	5	33	8		3	33	17	2	12	-9			26	26		52			52			9	5	10	6	20		50		26		26	4	19		23
2	16			26	42	62	1	24	17	11	62	8		5	62	16	6	40	-6			26	25		51			51			6	4	12	4	20		46		27		27	4	20		24
3	4			56	60	93		28	33	31	93	10	3	12	93	18	17	93	7	7	93	26	7		33	7		40	7	18		2	12	3	21		38		22		22	5	16		21
4				66	66	100		27	38	38	100	10	1	11	100	17	17	100	10	10	100	26			26	10		36	10	28			12	2	19		33		17		17	5	12		17
5	8			43	51	84	1	21	29	24	84	9		8	84	18	15	84	1M	1	84	26	1		27	2		29	1	3	1	1	9	3	15		29		14		14	4	7		11
P																																													
6	69			2	71	3	24	24	25	1	3	6		-	3	22	1	3	-7			26	23		49			49			7	11	5	6	16		45		58		58	5	51		56
7	67			6	73	8	18	24	29	2	8	12		1	8	22	1	5	-4			26	22		48			48			4	12	6	6	17		45		71		71	3	59		62
8	45			12	57	21	7	25	29	6	21	12		3	21	21	3	14	-5			27	23		50			50			5	9	11	5	15		45		51		51	4	44		48
9	35			15	50	30	2	27	22	7	30	10		3	30	20	4	20	-7			25	26		51			51			7	7	13	6	15		48		40		40	5	31		36
10	6			47	53	89		26	26	23	89	9	2	10	89	18	13	72	-5			26	26		52			52			5	4	19	5	14		47		32		32	3	27		30
11				44	44	100		21	22	20	100	8		8	100	16	14	88	-4			27	18		45			45			4		20	4	15		43		11		11	3	7		10
12				45	45	100		29	15	15	100	4	0	4	100	12	11	92	-3			27	17		44			44			3		12	3	13		31		10		10	2	6		8
P																																													
Tot.	378			889	1267		71	560	634			193	20			410			9(N)			616	287		903	73		976			64	77	256	85	428		910		507	30	537	95	391		486

Date: December 21, 1946 Saturday

17117700-68

GENERATION AND TRANSMISSION OF ELECTRIC ENERGY ON HOLTWOOD - SAFE HARBOR SYSTEM AND TRANSMISSION FROM MARYLAND TO HOLTWOOD'S RESALE CUSTOMERS IN PENNSYLVANIA

Values Are In Megawatthours

Hour	ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT SAFE HARBOR FROM -						SEND-OUT FROM 13 KV 60 CYCLE BUS AT SAFE HARBOR TO -					DELIVERIES TO P P & L CO. VIA DONEGAL				DELIVERIES TO P P & L CO. VIA LEHMAN FARM			DELIVERIES TO 13 KV 60 CYCLE BUS AT HOLTWOOD VIA LEHMAN F.			ENERGY SUPPLIED TO 13 KV 60 CYCLE BUS AT HOLTWOOD FROM -										SEND-OUT FROM 13 KV 60 CYCLE BUS AT HOLTWOOD TO -									ENERGY SUPPLIED TO 11 KV 25 CYCLE BUS AT HOLTWOOD FROM -				SEND-OUT FROM 11 KV 25 CYCLE BUS AT HOLTWOOD TO -			
									69 KV CIRCUITS												60 CY. GENERATORS AT HOLT'D.												Met. Ed.																	
	60 Cycle Gen. at S.H.	Freq. Chg'r.	69 Kv Cir's.	Maryland	Total	% From Maryland	Maryland	Freq. Chg'r.	TOTAL	From Md.	% From Md.	Firm	Other	Total From Maryland	% From Maryland	Total	From Maryland	% From Maryland	Total	From Maryland	% From Maryland	Steam	Hydro	Freq. Chg'r	Total	Lehman F.	Met. Ed. PP & L Co	Total	From Maryland	% From Maryland	Lehman Farm	Firm	Other	PP & L	Phil. Elec	Freq. Chg'r.	Total	Freq. Chg'r.	25 Cycle Generators	Highland from Maryland	Total	PP & L Co.	Highland from Md.	Freq. Chg'r.	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(12a)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(31a)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)	(43)
1				39	39	100		24	15	15	100	1		1	100	11	11	100	3	3	100		24		24	3		27	3	11		1	9	2	13		25		36		36	2	35		37
2				43	43	100		27	16	16	100	2		2	100	10	10	100	3(M)	3	100		24		24	4		28	3	11	1	2	8	2	13		26		47		47	2	39		41
3				34	34	100		26	8	8	100		-1			8	7 V	89	0(M)				20		20	2		22			2		8	1	11		22		5		5	1	2		3
4				36	36	100		21	13	13	100		-5			8	6 W	72	5	4 X	72		12		12	5		17	4	24			4	1	11		16		3		3	2			2
5				40	40	100		28	11	11	100	1		1	100	8	8	100	2	2	100		26		26	2		28	2	7			14	1	11		26		5		5	2	2		4
6			3	26	29	90		25	4	4	100		-4			8	4 Y	50	-3				25		26			25			3		9	3	10		24		5		5	2	2		4
7				30	30	100		23	5	5	100		-3			8	5 Z	63	-2				25		25			25			2		6	2	11		21		9		9	2	6		8
P																																													
8				69	69	100		30	39	39	100	6		6	100	13	13	100	17	17	100		4		4	17	2	23	17	74			10		12		22		9		9	2	7		9
9				46	46	100		22	22	22	100					13	13	100	9	9	100		10		10	9		19	9	47			5	1	13		19		10		10	2	6		8
10				53	53	100		21	32	32	100	6		6	100	13	13	100	12	12	100		13		13	12		25	12	48			10	1	13		24		9		9	2	7		9
11	23			42	65	65		26	39	25	65	6		4	65	15	10	65	19	12	65		4		4	19	1	24	12	50			8		13		21		2		2	2			2
12	26			37	63	59		17	45	27	59	9		5	59	16	9	59	21	12	59					21	1	22	12	55			9		13		22			2	21	2			2
P																																													
1	21			45	66	68		22	43	29	68	7		5	68	15	10	68	22	15	68					22	2	24	15	63			9		14		23			2	2	1			1
2	30			30	60	50		21	39	20	50	3		2	60	14	7	50	18	9	50					18	1	19	9	47			5		12		17			2	2	2			2
3	21			33	54	61		17	35	21	61	3		2	61	15	9	61	17	10	61		2		2	17	1	20	10	50			8		12		20		3		3	2			2
4				37	37	100		11	25	25	100	2		2	100	12	12	100	10	10	100		14		14	10		24	10	42			7		14		21		10		10	2	8		10
5	20			31	51	61		25	26	16	61	2		1	61	14	9	61	5	3	61		22		22	5		27	3	11		3	7	2	16		28		17		17	2	14		16
P																																													
6	59			6	65	9	14	7	45	4	9	8	2	1	9	21	2	9	12	1	9		22		22 U	12		34	1	3		10	2	2	17		31		57		57	1	49		50
7	55			9	64	14	14	6	46	6	14	11	1	2	14	19	3	14	12	2	14		22		22	12		34	2	6		11	1	1	18		31		68		68	2	62		64
8	55			5	60	8	15	8	38	3	8	11	1	1	8	20	2	8	9	1	8		22		22	9		31	1	3		10	2	2	16		30		59		59	2	51		53
9	42			9	51	18	8	10	35	6	18	11		2	18	18	3	18	7	1	18		24		24	7		31	1	3		7	5	3	16		31		45		45	2	39		41
10	18			26	44	59	1	9	34	21	59	8		5	59	17	10	59	8	5	59		23		23	8		31	5	16		4	8	1	15		28		45		45	3	39		42
11				64	64	100		28	34	34	100	7	1	8	100	16	16	100	9	9	100		22		22	9		31	9	29		21	12	2	15		31		46		46	2	40		42
12				63	63	100		28	35	35	100	6	4	10	100	15	15	100	9(M)	9	100		23		23	10		33	9	27	1		17		14		32		32		32	3	28		31
P																																													
Tot.	370		3	853	1226		52	482	686			110	-4			327			224(M)				383		383	232	8	624			9	50	182	27	323		591		522	6	528	47	436		483

V 8/9 of 8 V 4/8 of 8 V 13/18 of 5

W 13/18 of 8 X 5/8 of 8

Date December 22, 1946 Sunday

17-17760-48

EXHIBIT NO. 444.

[24772]

(Copy of letter attached to P. W. P. Co. voucher #6892, December, 1915.)

New York, December 20th, 1915.

PENNSYLVANIA WATER & POWER COMPANY. Dr.

To Simpson, Thacher & Barlett,
Counsellors at Law,
62 Cedar Street.

To all professional services from December 28, 1914, to date, including services in connection with the following matters:

Matter of the sale of bonds of the Power Company to Kissel, Kinnicutt & Company and Drexel & Company, including general opinion as to titles, validity and priority, also special opinion as to the liability imposed on the Power Company by the contract of February 8, 1911, with the United Railways & Electric Company, and special opinion for a customer of the bankers as to the Power Company's title to riparian rights; also consideration of the limitations on the issuance of bonds proposed by Kissel, Kinnicutt & Company, and attention to the matter of the bond sale in general: [*Bond Issue Exp.*]

Preparing resolution of the directors as to putting all after-issued stocks and bonds of the Transmission Companies under the Power Company mortgage, and advice thereon: [*Legal*]

Opinion as to the purchase of stock of the United Railways & Electric Company with the proceeds of $1,200,000 bonds of the Power Company: [*Legal*]

Consideration and advice as to the sale of bonds of the Power Company at 85; preparation for the Pennsylvania Public Service Commission

of a certificate of notification of sale of $1,251,000 bonds, and proceedings thereon: [*Bond Issue Exp.*]

Preparing and securing approval of papers for the certification and delivery by the Columbia Trust Company of bonds of the Transmission Companies: [*Legal*]

Revising and securing approval of papers for the certification and delivery by the Columbia Trust Company of $200,000 bonds of the Power Company: [*Bond Issue Exp.*]

Matter of amending application to the Philadelphia Stock Exchange for listing the bonds of the Power Company: [*do*]

Consideration of the Woelpper injunction case: [*Flowage Rights*]

[24772A] (page 2)

Consideration and advice as to revenue stamps on newly issued bonds; corporate meetings; payment of corporate loan tax; replacement of Kitcat & Aitken's lost stock certificates; stock of Maryland Electric Furnace Company; and miscellaneous legal matters. [*Legal*] $2,000.00

DISBURSEMENTS:

Stenography, typewriting, notary fees and petty disbursements 44.15

Total $2,044.15

OK
C. E. F. C.
a/c Pay Suspense (Legal) *$1,000.00*
Bond Issue Expense *1,000.00*
Flowage *44.15*
2,044.15

Note.—The hand written notations were copied from the original bill.

Newlands.

EXHIBIT NO. 445.

[24773]

December 12, 1945

MEMORANDUM

Re: Lancaster Office Expense

The following memorandum is in reference to Mr. Newlands' inquiry concerning the duties assigned to the Lancaster Office in the early days of the Company, and the work carried on or supervised by the Lancaster Office at the present time.

Work carried out by and through the Lancaster Office, and a description of its mode of operation, are referred to in memorandums dated March 29, 1945 and May 23, 1945. These memorandums, together with a memorandum dated April 5, 1945 and supplement dated May 26, 1945, cover in general the reasons for establishing a Lancaster Office, and show in detail property purchases and similar plant additions required for the Holtwood Development made in whole or in part by that agency up to the year 1930. After 1930, all expenses of the Lancaster Office, with the exception of expenses charged to job orders, were charged to operation. Therefore, it is assumed that Mr. Newlands' question involves two elements namely: (1) what, if any, were the activities of the Lancaster Office other than those indicated in the various memorandums referred to above; (2) what is the present function of the Lancaster Office.

Referring to item (1) above, it is known that prior to 1930 Mr. Bushong was engaged at times in matters not directly associated with property purchases or plant additions so that, where the expense could be identified, it was eliminated from our origina' cost. These activities, insofar as our present knowledge is concerned, may be described by years as follows:

1912—None—(Mr. Bushong worked on per diem basis)
1913—None—(Mr. Bushong worked on per diem basis)

1914—None—(Mr. Bushong worked on per diem basis)
1915—None
1916—Represented Company at hearings involving rates to be charged on ferry at McCalls Ferry.
Attended legislative hearings on "Spangler Fishway Act."
Negotiated with National Transit Company for sale of pipe line right of way through York Furnace and Urey Farms.
1917—Checked titles to Susquehanna and Tidewater canal property.
Helped to organize guard force for Holtwood.
Helped to sell Liberty Bonds.
1918—Collected data on power requirements for Lancaster and York Furnace Street Railway Company.
1919—Further negotiations with National Transit Company for oil pipe line crossings near Holtwood.
Discussed with local residents proposed highway bridge across Susquehanna River in vicinity of Holtwood.
Negotiated with Pioneer Electric Light Company for service line extensions in vicinity of Holtwood.

[24774] (page 2)

1920—Further negotiations with National Transit Company.
Settled claim for flooding of public road in Lower Chanceford Township.
1921—Attended hearings held by Pennsylvania Public Service Commission.
Helped Pioneer Electric Light Company to extend distribution lines in Martic Township near Holtwood.
Distributed, to interested parties, panoramic views of Holtwood.

1922—Investigation of Martin Construction Company property rights and activities—Pequea.
Observation of activities of Pioneer Electric Light Company.
Arranged for public showing of motion pictures of Holtwood.
Distributed descriptive booklets and photographs of Holtwood Development.
Aided in defense of suit brought as a result of an automobile accident in vicinity of the York County end of the dam.
Investigated property titles in vicinity of Muddy Run—probably in connection with feed water supply for proposed Holtwood Steam Plant.
Checked up on extension of distribution lines by Pioneer Electric Light Company.

1923—Made report on financial condition of Lancaster County Railway & Light Company.
Assisted in matters pertaining to contract with Chester Valley Electric Company.

1924—Followed up matters pertaining to Conowingo Project.
Checked up on line extensions of Pioneer Electric Light Company.
Made proposal to Martic Township Supervisors for erection of new school near Holtwood.

1925—Followed up tax bills introduced in 1925 session of Pennsylvania Legislature.
Followed up Holtwood School matter.
Followed up progress of Conowingo Project.
Arranged for aerial survey of proposed transmission route to Philadelphia.

1926—Attended hearings before Public Service Commission in matters involving Philadelphia Electric Company.

Arranged meeting at Holtwood for residents of Lancaster and York Counties for discussion of proposed highway bridge near Holtwood.
Made reports on legislation introduced in extra session of Pennsylvania Legislature in reference to taxes and regulation of public utilities.
Followed up extension of distribution lines by Pioneer Electric Light Company.
Followed up Holtwood School matter.

[24775] (page 3)

1927—Helped to negotiate sale of Pioneer Electric Light Company to Lehigh Power Securities Company.
Followed up progress of Conowingo Project.
Reported on financial condition of Lancaster County Railway and Light Company.

1928—Completed arrangements for building of Holtwood School.
Attended conferences with Public Service Commission in connection with Series "B" Bonds.
Attended meetings held by residents of Lancaster and York counties in connection with proposed highway bridge near Holtwood.

1929—Arranged loan to Pequea Fuel Company.
Further activities in connection with proposed highway bridge near Holtwood.

GENERAL—Beginning about 1917, the Lancaster Office approved lease and license agreements covering use and occupancy of our property, and assisted at times in collection of rents and sale of buildings, although these matters were handled in the field by our Local Property Agent at Holtwood. The Lancaster Office was always aware of the local labor situation and assisted in obtaining labor for construction work at Holtwood and the recovery of river coal.

In the period between 1930 and the present time, the Lancaster Office acquired properties for the Safe Harbor Development and for the Westport and Riverside transmission lines, and carried out other duties of a general character. As noted above, all expenses of the office except those charged to job orders were charged as operation. It is somewhat difficult to give a complete picture of the duties assigned to the Lancaster Office at the present time as they vary to some extent with conditions, but the following list covers some of the specific items.

1. To advise the Baltimore Office of local conditions which might have an effect upon the Company's relationship with its employees or the public.
2. To make investigations of applicants for employment. Because of Mrs. Bushong's position in the community, her wide acquaintanceship, and her family and other connections this phase of the work is handled with accuracy and speed; the reports are reliable and useful.
3. Upon request, to recommend persons to fill specific jobs when there are openings.
4. To adjust, or to suggest methods to adjust, policies or procedures of the Company which may be objectionable to individuals or groups in the community.

[24776] (page 4)

5. To advise the Company when there is an opportunity to earn the commendation of its employees or neighbors by taking some action at little trouble or expense, such as (a) the preservation of some historical relic; (b) the removal of an unsightly building; (c) arranging for maps or other data to be furnished to public authorities in connection with road relocations or other matters; (d) removal, from Company owned property, of tenants who are objectionable to adjoining residents or property owners; (e) use of Company property by Boy Scout or other

groups for recreational purposes; (f) use of Company property by fishermen—in this connection it should be noted that a total of 10,639 fishermen were registered at Holtwood and Safe Harbor between August 15 and November 30, 1945.

6. To advise the Company in connection with the many requests for contributions received from charitable, welfare, or business associations. Because of the number of such requests, it is important to have someone familiar with local conditions to advise as to the desirable and undesirable requests, and the propriety of making contributions.
7. To assist in the dissemination of information designed to prevent shooting at insulators on transmission lines, to show the danger of flying kites near transmission lines, and to bring to public attention similar matters which are helpful in protecting the public and in maintaining service over our system.
8. To furnish information as to developments in local industry.
9. To assist in adjusting local tax matters and to advise of changes in assessments, tax rates, etc.
10. To assist in obtaining tenants for properties, particularly those located near Lancaster, and to help in getting workmen and materials for maintenance; to help in adjusting insurance claims; to help in rent collections.
11. To keep in touch with old and new stockholders living in Lancaster County so as to get the personal ideas and suggestions of a small cross-section of our shareholders.
12. To get data from courthouse records when required.
13. To maintain duplicate files of deeds and other real estate records so that copies of file documents are always available in Lancaster.

14. To furnish clerical and stenographic service to employees of the Company from Baltimore or other offices, when working in Lancaster.

[24777] (page 5)

It is to be understood that the preceding items are not intended to limit the work of the Lancaster Office, but rather to give some idea of the specific duties assigned to Mrs. Bushong. There are probably many other matters referred to the Lancaster Office from time to time by other departments, such as requests for information on specific subjects from libraries or newspaper files, and other non-recurring matters which it would be difficult to enumerate.

Docket IT-5915

PENNSYLVANIA WATER & POWER COMPANY

Sheet 1 of 2

SUMMARY OF LANDS AND RIPARIAN RIGHTS TRANSFERRED BY McCALL FERRY POWER COMPANY TO THE SUSQUEHANNA POWER COMPANY INTERESTS IN AUGUST 1908 SHOWING RELATIONSHIP TO TOTAL LANDS AND RIPARIAN RIGHTS ACQUIRED FROM THE HARLOW-McGAW INTERESTS UNDER AGREEMENT OF APRIL 27, 1905

Conowingo Parcel No.	Name of Property	Nature of Interest (1)	Approximate Acreage (Note 2) (2)	Acreage Transferred to Susq.Power Co. Interests (3)	Acreage Retained by McCall Ferry Power Co. (4)	Remarks
	A. TOTAL LANDS AND RIPARIAN RIGHTS ACQUIRED FROM THE HARLOW-McGAW INTERESTS UNDER AGREEMENT OF APRIL 27, 1905 (NOTE 1)					
	Proprietors of the Susquehanna Canal					
Various	Land and riparian rights (Length of canal about 9 miles)	Fee	152.48	152.48		McCall Co. interest represented by the entire outstanding stock of "Proprietors" acquired from Harlow-McGaw in 1905 and transferred to the Susq. Power Co. interests in 1908.
	Tidewater Canal					
R-29	Land and riparian rights (Length of canal about 14.25 miles)	Fee	286.82	286.82		Represents canal property formerly owned by Tidewater Canal Co.
	Susquehanna Canal and Power Co.					
Y-55	Canal property from the Penna.-Md. State line to the foot of Cullys Falls	Release	(7.50 Miles)	(7.50 Miles)		These entire properties were bought in 1902 for $60,000 by Harlow-McGaw and conveyed to Susq. Canal and Power Co. Stock ownership of the lattef company was acquired by McCall Co. from Harlow-McGaw in 1905 and retained.
-	Canal property from the foot of Cullys Falls to the Safe Harbor dam	Release	(8.32 Miles)		(8.32 Miles)	
-	Canal property from the Safe Harbor dam to Wrightsville, Penna.	Release	(11.68 Miles)		(11.68 Miles)	(Transferred to Safe Harbor Water Power Corporation in (June 1930 by Pennsylvania Water & Power Company.
-	Else Island (Now listed as seven separate islands)	Fee	117.00		117.00	(
-	Margaret Cunningham tract	Fee	3.00		3.00	
	Conowingo Land Company					
C-10	J. C. Bell Estate (total acreage)	Fee	830.16	830.16		McCall Co. interest represented by ownership of two-thirds of the outstanding stock of Conowingo Land Co. acquired from Harlow-McGaw in 1905 and transferred to the Susq. Power Co. interests in 1908.
	Sundry Tracts Below the Holtwood Dam					
H-1	Hugh E. Dooley	Fee	7.82	7.82		
H-3	Daniel F. and Mary C. Landis	Fee	1.51	1.51		
H-4	(Hugh and Lizzie Whiteford, et al. (Sarah E. Dinsmore, et al.	Fee	4.38	4.38		One-fourth undivided interest in acreage shown.
H-7	Otho S. Lee, Trustee (John's Design)	Fee	7.97	7.97		One-fourth interest in acreage shown.
H-28	Grace and Wm. J. Shure	Fee	3.97	3.97		
H-5	Farmers' Mutual Warehouse Co.	Fee	8.63	8.63		
H-6	Sarah E. Orr	Fee	45.40	45.40		
P-1	Wm. H. Bayless—"Progress"	Patent	296.79	296.79		Patent to river bed in Maryland.
P-2	Wm. H. Bayless—"New Enterprise"	Patent	1016.23	1016.23		Patent to river bed in Maryland.
L-2	Taylor and Margaret Sprout	Fee	1.19	1.19		
L-28	Thomas and Ada B. McSparren	Fee	1.74	1.74		
L-30	Rosanna J. Long	Fee	0.82	0.82		
L-35	Stephen J. Caldwell (Emilie Sechler)	Fee	3.01	3.01		
L-36,37	Wm. Sweigart	Fee	2.09	See "Remarks"		(McCall Co. transferred the fee on a portion of this acreage (and flowage rights on the remainder.
Y-29	L. H. and Deanie Semple	Fee	1.94	1.94		
Y-50	John and Margaret Scott	Fee	9.57	9.57		
Y-51	A. R. and Mary H. Kilgore (1/2 interest)	Fee	26.91	See "Remarks"		(McCall Co. transferred the portion of this tract below (Cullys Falls.
I-10,13	Christian E. Herr, et al. (Bear's Island)	Fee	120.00	120.00		
I-30	T. L. and Margaret A. Urban (Mt. Johnson Is.)	Fee	75.00	75.00		

Docket IT-5915

PENNSYLVANIA WATER & POWER COMPANY

SUMMARY OF LANDS AND RIPARIAN RIGHTS TRANSFERRED BY McCALL FERRY POWER COMPANY TO THE SUSQUEHANNA POWER COMPANY INTERESTS IN AUGUST 1908 SHOWING RELATIONSHIP TO TOTAL LANDS AND RIPARIAN RIGHTS ACQUIRED FROM THE HARLOW-McGAW INTERESTS UNDER AGREEMENT OF APRIL 27, 1905

Conowingo Parcel No.	Name of Property	Nature of Interest (1)	Approximate Acreage (Note 2) (2)	Acreage Transferred to Susq. Power Co. Interests (3)	Acreage Retained by McCall Ferry Power Co. (4)	Remarks
	B. ADDITIONAL LANDS OWNED BY McCALL FERRY POWER COMPANY TRANSFERRED TO SUSQUEHANNA POWER INTERESTS IN AUGUST 1908					
	Sundry Tracts Acquired from Cary T. Hutchinson in June 1905					
Y-4	Levi Cooper	Fee	16.50	16.50		
Y-6	Charles S. Cooper	Fee	9.85	9.85		
Y-17	Ida B. McLaughlin	Fee	12.33	12.33		
Y-30	Rachel K. Robinson, et al.	Fee	18.08	18.08		
Y-33	Wm. T. Ramsey, et al.	Fee	0.15	0.15		
Y-34	S. D. and Emma E. Fry (God Cabin Tract)	Fee	9.27	9.27		
Y-45,48	Marcenas Craig	Fee	9.76	9.76		
I-18	White or Chestnut Island	Fee	15.18	15.18		
I-39	Mud Island	Fee	2.45	2.45		
	Sundry Additional Tracts					
I-26	Henry C. Demuth (Beach Island)	Fee	1.94	1.94		
L-38 to 41	Wm. A. Brown (Tracts 1, 2, 3, 4)	Fee	43.17	43.17		
L-48	Henry C. Demuth	Fee	5.16	5.16		
L-49	Mary I. Cutler	Fee	1.04	1.04		
L-54	Amer Kline	Fee	59.00	See "Remarks"		(McCall retained the fee on the entire acreage, transferring (flowage rights to the Susquehanna Power Co. interests on (the portion of the tract below Cullys Falls.

Note (1):
In addition to the listed properties, the McCall Co. also acquired from Harlow-McGaw the capital stock of several inactive companies, a release from the Tidewater and Susquehanna River Railroad regarding its proposed right of way (never acquired), and a release from the Conowingo Bridge Co. McCall Co. transferred all of these additional items to the Susquehanna Power Co. interests in 1908 with the exception of the stock of two of the inactive companies. These latter two companies have since been dissolved by Pennsylvania Water & Power Company.

Note (2):
The above acreages were taken from the F.P.C. staff accounting report on the actual legitimate original cost of the initial Conowingo project (Part II, Volume II, Schedule B), except for the property of Susquehanna Canal and Power Co. The acreage of the Susquehanna Canal is unknown, therefore, the approximate length in miles is given as furnished by R. L. Bortner, Assistant Secretary of Pennsylvania Water & Power Co. The acreages of Else Island and the Cunningham tract were taken from the Safe Harbor and Holtwood project map indices.

Docket IT 5915

PENNSYLVANIA WATER & POWER COMPANY

CALCULATION OF APPROXIMATE COST OF THE HARLOW-McGAW LANDS RETAINED BY McCALL FERRY POWER COMPANY AFTER THE SALE OF THE LANDS BELOW CULLY FALLS TO THE SUSQUEHANNA POWER COMPANY INTERESTS IN 1908.

Cash paid to Harlow-McGaw		$200,432
$250,000. McCall bonds at 90		225,000
Cash paid for Pullen options		10,022
Legal services, Note (1)		19,000
Expenses re: Susq. Power Co. condemnation suit		23,000
		477,454
Less land sold to Susq. Power Co. interests		
Proceeds of entire sale	$290,000	
Deduct portion of proceeds applied by Penn Water in its original cost study to properties acquired from other owners than Harlow-McGaw	13,370	
Net proceeds applicable to Harlow-McGaw lands		186,630
		290,824
Interest at 6% on expenditures to January 1, 1911 (less cessation period)		89,000
		$379,824

Note (1) Represents legal fees paid by Susquehanna Contracting Company to Simpson Thacher & Bartlett ($47,307), and Lorenzo Semple ($5,000) allocated to the Harlow-McGaw purchase in the ratio of the amount paid for these properties in 1905 ($435,000) to the total amount paid for the Harlow-McGaw and Hutchinson properties, ($1,185,000).

May 22, 1945

LITIGATION - COURT OF COMMON PLEAS
LANCASTER COUNTY

Defendant P.W.&P.Co.

Plaintiff	Date Filed	Reference	Disposition	Nature of Case
Nicola Di Silivestro by his brother and next friend Atira Di Silviestro	9/21/10	Oct. Term 1910 No. 9	Discontinued 11/9/10	Trespass
C. F. Quade	9/26/10	Oct. Term 1910 No. 187	Service of within writ accepted 10/3/10 W. U. Hensel, Atty.	"
County of Lancaster	9/2/11	Sept. Term 1911 No. 40	Service accepted "Praecipe filed" W. U. Hensel, Atty.	"
Samuel & Grace Harmer et al Susan Henry, John Henry and A.B. Witmer, Gdn of Chester Stigelman Benjamin Stigelman, and Henry Stigelman, Minors J.E. Senft, Attorney	3/24/13	April Term 1913 No. 39	"Praecipe filed" Service accepted W. U. Hensel, Atty.	"
San Montilovic (Coyle & Keller Attorneys)	6/12/14	Aug. Term 1914 No. 22	Service accepted John E. Malone Settled and ended Coyle & Keller 4/23/15.	"
Emanuel S. Mumma	4/12/15	May Term 1915 No. 7	Continued 11/19/17 Costs unpaid	"

May 22, 1945

2

LITIGATION -COURT OF COMMON PLEAS
LANCASTER COUNTY

Defendant P.W.& P.Co.

Plaintiff	Date Filed	Reference	Disposition	Nature of Case
Emanuel S. Mumma	4/12/15	May Term 1915 No. 6	Costs unpaid Continued 11/19/17	Trespass
Lanc. & York Furnace Railway Co.	7/27/18	Aug. Term 1918 No. 118	Settled 10/7/21 F.L. Windolph, Atty.	"
Colemanville Water & Power Co.	7/27/18	Aug. Term 1918 No. 119	Settled 10/7/21 Chas. F. Hager, Atty.	"
Christian F. Quade	8/6/18	Aug. Term 1918 No. 134	Deft's affidavit of defense filed 1/10/22	"
Alice M. Tripple	8/17/18	Sept. Term 1918 No. 25	Settled 10/7/21 F.L. Windolph, Atty.	"
Township of Conestoga By Harry W. Warfel F.S. Harnish H.S. Lefevre, Supervisors	9/15/19	Oct. Term 1919 No. 53	Continued 4/24/22 Costs Paid 5/5/23	"
Annie M. Ruppert	6/17/22	Aug. Term 1922 No. 27	Service of Writ accepted, J.E.H. Case discontinued Costs Paid	"
Harvey Ruth	6/17/22	Aug. Term 1922 No. 28	Service of Writ accepted, J.E.H Case discontinued. Costs paid	"
Grace Hammer Susan Henry Chester Steigelman Benjamin Steigelman A.B. Witmer, Guardian of Sophia Hammer and Harry Steigelman	9/21/23	Oct. Term 1923 No. 39	Suit settled and ended Costs paid 12/12/24 H. Edgar Sherts, Attorney	"
Louise Depue, Extrx of Will Arthur W. Depue and Louise Depue individually	11/18/24	Dec. Term 1924 No. 30	Settled 1/2/26 Windolph, Atty	"

May 22, 1945

Litigation Court of Common Pleas of Lancaster County

Plaintiff	Date Filed	Reference	Disposition	Nature of Case
Amos Spahr (vs. Harry Lindeman trading as the Lindeman Co.	5/14/25	June Term 1925 No. 24	Judgment against Lindeman & Co. 6/7/26	Attachment on Chattel
Amos Spahr - etc. "	6/8/26	June Term 1926 No. 93	P.W.&P. Co. suffers non-suit 4/25/27	
Benj. F. Brady	1/14/26	Feb. Term 1926 No. 26	Continued 11/29/26	Trespass
Mary M. Hartman	1/19/35	Feb. Term 1935 No. 181	Settled 12/19/38 Jas. N. Lightner Attorney	" See Equity Docket 8 page 278
Annie W. Shoff	7/9/35	Aug. Term 1935 No. 55	Settled - Costs Paid 9/26/42 Jas. N. Lightner Attorney	Trespass

May 22, 1945

Equity Cases - P.W.&P.Co., Defendant

Plaintiff	Date Filed	Reference	Disposition	Nature of Case
Sam'l M. Fulton, Assignee for benefit of creditors of John Bair	7/21/10	Docket No. 5 Page 261	Settled 6/3/15	Injunction to prevent flooding of Pltff's land by erection of dam
Wm. F. Beyer	7/31/11	Docket No. 5 Page 311	Opinion read & filed 8/26/11	Injunction to prevent use of flash boards
B. F. Davis	8/15/11	Docket No. 5 Page 327	Opinion read & filed 8/26/11	Injunction to prevent use of flash boards
Lanc. Electric Light, Heat & Power Co.	7/31/11	Docket No. 5 Page 307	Opinion read & filed 8/26/11	Injunction to prevent use of flash boards
H.M. Stauffer & Co.	8/15/11	Docket No. 5 Page 331	Opinion read & filed 8/26/11	Injunction to prevent use of flash boards
Daniel M. Witmer	8/15/11	Docket No. 5 Page 323	Settled 3/25/13	" " "
Wilson Woelpper	6/11/12	Docket No. 5 Page 377	Settled 7/6/16	" " "
Lanc. & York Furnace Street Rwy. Co.	7/27/18	Docket No. 6 Page 249	Settled 10/7/21	" " "
Colemanville Water & Power Company	7/27/18	Docket No. 6 Page 251	Settled 10/7/21	" " "
John E. Vandersloot	8/31/18	Docket No. 6 Page 263	Settled 10/8/21	Restrain Deft. from flooding Pltff's land and claim for past damages
Alice M. Tripple	9/5/18	Docket No. 6 Page 266	Settled 10/7/21	Injunction to prevent use of flash boards
Annie W. Shoff	3/26/29	Docket No. 7 Page 532	Settled 10/4/33	" " "
Mary M. Hartman	8/29/33	Docket No. 8 Page 278	Settled 6/25/40	" " "

EXHIBIT NO. 452.

[24790]

YORK COUNTY—EQUITY

John A. Nauman and Coyle & Keller

SAMUEL M. FULTON, ASSIGNEE FOR THE BENEFIT OF CREDITORS OF JOHN BAIR, PLAINTIFF

vs.

W. U. Hensel

PENNSYLVANIA WATER & POWER COMPANY

Equity Docket No. 9, p. 64

July 26, 1910

August Term, 1910

July 19, 1910. Bill of Complaint filed—injunction to restrain from flooding plaintiff's land.

July 26, 1910. Petition for service filed.

Aug. 5, 1910. Appearance of W. U. Hensel for defendant.

Aug. 3, 1910. Served bill in equity on defendant—John H. Schinn, Sheriff.

Sept. 9, 1910. Answer filed—W. F. Beyers & W. U. Hensel.

Sept. 21, 1910. Replication filed.

June 5, 1915. Above suit discontinued, settled and ended (vide paper filed) Costs paid.

Exhibit No. 452

[24791]

YORK COUNTY—EQUITY

Niles & Neff

JOHN EDWARD VANDERSLOOT

vs.

PENNA. WATER & POWER CO.

Equity Docket No. 13, p. 250

Sept. 13, 1916

October Term, 1916

John E. Malone
Stewart & Gerber

Sept. 13, 1916. Bill of Complaint filed—use of flashboards and flooding—damage claim. Petition for order of service filed.

Sept. 16, 1916. Served Bill in Equity—Wm. D. Haas, Sheriff York County. C. G. Garber, Sheriff Lancaster County.

Sept. 28, 1916. Appearance of John E. Malone and Stewart & Gerber for defendant.

Oct. 16, 1916. Motion to vacate order of court and set aside bill served.

Dec. 11, 1916. Argument list.

Feb. 12, 1917. Motion refused at cost of defendant.

Feb. 27, 1917. Ruling of court filed.

Mar. 7, 1917. Hearing and argument by court—motion of 10/16/16 refused and ordered defendant to file answer to plaintiff's bill within 30 days.

Mar. 15, 1917. Exceptions to decree filed.

Mar. 21, 1917. Exceptions of defendant to decree entered 3/7/17 dismissed.

Apr. 7, 1917. Appeal by defendant from decree of 3/21/17—bond on appeal to Supreme Court filed and bond and security approved.

Apr. 9, 1917.	Certiorari from Supreme Court of Pa. to Court of Common Pleas for York County filed. Returnable 5/2/17; also rule on Appellee to appear and plead on return-day of writ.
Apr. 10, 1917.	Service of rule accepted by appellee—certificate of value filed.
July 11, 1917.	Assignment of error sustained by Supreme Court of Pa. and Order of Court below reversed and service of bill set aside; appellee to pay costs.
July 12, 1917.	Defendant's bill of costs filed.

[24792]

YORK COUNTY
COURT OF COMMON PLEAS

Samuel K. McCall
J. Edgar Small
Stewart & Gerber

CLARK F. WILSON
vs.
PENNA. WATER & POWER Co.

July 14, 1930
Aug. Term 1930
Docket 240, page 156

Summons in ejectment for unseated and unoccupied premises in Lower Chanceford Township, York County.

7/14/30—Plaintiff's affidavit filed.
Plaintiff's declaration and abstract of title, with notice to defendant to file plea, answer, and abstract of title as required by Act of 5/8/1901, P. L. 142 and rule #185 of Court of Common Pleas, York County, within 30 days.

7/15/30—Served writ of ejectment.

9/13/30—Defendant's plea filed—answer and abstract of title filed.

11/30/30—Plaintiff's amended declaration and amended abstract of title filed.

12/ 8/30—Defendant's amended answer and amended abstract of title filed—defendant's plea filed.

2/ 2/31—Motion to amend summons in ejectment and amended summons in ejectment as allowed filed, and 30 days given defendant to file its answer. Plaintiff's second amended declaration and amended abstract of title filed.

3/ 2/31—Defendant's second amended answer and second amended abstract of title filed.
Defendant's plea filed.

12/ 8/31—Motion to amend summons in ejectment filed and amendment of summons in ejectment allowed.

12/ 8/31—Plaintiff's third amended declaration and amended abstract of title filed, and amendment of declaration in ejectment allowed.

1/ 5/32—Defendant's third amended answer and third amended abstract of title filed.
Defendant's plea filed.

4/26/32—Trial ordered by Hon. Henry C. Niles, P. J.

4/28/32—Jury called.

4/28/32—Plaintiff's and defendant's points filed and answer by Court. Stipulation showing description of disputed area filed.

4/30/32—Plaintiff's bill of costs filed.

5/ 2/32—Motion for new trial filed.

5/ 2/32—Plaintiff's bill of costs, supplement filed.

5/23/32—Stenographer's transcript lodged.

6/ 6/32—Stenographer's transcript filed.

9/ 6/32—Death of Clark F. Wilson announced and following next in interest substituted; Sarah E. Fleming, Jas. M., John B., Raymond D., and Martin V. Wilson.

[24793]

10/19/32—Motion to withdraw motion for new trial filed, and permission granted.

10/25/32—Judgment entered in favor of plaintiffs against defendant for possession of 12 acres (described). All names of plaintiffs withdrawn except Sarah E. Fleming.

Exhibit No. 452

[24794]

YORK COUNTY
COURT OF COMMON PLEAS

Hoober — HENRY G. HEINEMEYER *vs.* PENNA. WATER & POWER CO. — F. B. Gerber

July 3, 1941
Aug. Term, 1941
Docket 284, page 162

Summons in trespass returnable first Monday in August, 1941.

7/12/41—Writ served.

11/19/43—Plaintiff's statement of claim with notice to defendant to file affidavit of defense within 15 days.

11/30/43—Motion to strike off plaintiff's statement of claim filed and rule granted to show cause why plaintiff's statement of claim should not be stricken off.

12/ 1/43—Service of copy of motion and rule accepted.

6/19/44—Rule stricken off will be absolute unless amended statement of claim is filed in compliance with opinion within 15 days, in which event rule will be discharged by court.

6/28/44—Amended statement with notice to defendant to file affidavit of defense within 15 days.

10/ 5/44—Settled and satisfied—costs paid.

Hoober — MINNIE C. HEINEMEYER AND EDWARD F. HEINEMEYER *vs.* PENNA. WATER & POWER CO. — F. B. Gerber

July 3, 1941
Aug. Term, 1941
Docket 284, page 163

Summons in Trespass.

Procedure same as above.

EXHIBIT NO. 453.

[24795]

IN THE COURT OF COMMON PLEAS OF LANCASTER COUNTY

J. M. Groff
W. Clarke Mason

Hensel
Malone
Nauman

WILSON WOELPPER *vs.* PENNSYLVANIA WATER AND POWER COMPANY	Equity Docket No. 5 Page 377 Bill of Complaint Entered and filed August 15, 1911.

July 27, 1912. Appearance of W. U. Hensel, Esq., in writing filed.
July 18, 1912. Defendant's answer filed.
June 10, 1914. Replication filed by Plaintiff.
Oct. 5, 1914. On trial list, tried.
Oct. 30, 1914. Notes of testimony lodged.
Dec. 21, 1914. On argument list; argued C. A. V.

And now January 16, 1915. Opinion read and filed, and the Court makes the following decree to be entered, to wit:

That the defendant, its agents and employees are hereby enjoined and restrained from increasing the height of its dam, which is constructed across the Susquehanna River at or near McCall's Ferry, by at any time in the future placing flash boards or any other device upon the crest of said dam, so as to cause the water of the said Susquehanna River to back and flow into the Tucquan Creek and overflow and injure the lands of the Plaintiff, located along the same.

CHAS. I. LANDIS, P. J.

January 21, 1915. Exceptions to the opinion and decree filed.
Mar. 4, 1915. Appearance of John E. Malone and John A. Nauman, Esqs., in Writing filed for Defendant.
Mar. 15, 1915. On argument list; submitted C. A. V.

[24796]

OPINION

And now, March 20, 1915, this cause came on to be heard at this Term of the Argument List, upon the exceptions duly filed to the opinion and decree entered January 16, 1915, and the same having been argued by counsel, upon further consideration thereof, it is ordered, adjudged and decreed as follows:

That the defendant, its agents and employees, are hereby enjoined and restrained from increasing the height of its dam, which is constructed across the Susquehanna River, at or near McCall's Ferry, by at any time in the future placing flash boards, or any other device, upon the crest of said dam, so as to cause the water of the said Susquehanna River to back and flow into the Tucquan Creek, and overflow and injure the lands of the plaintiff located along the same.

CHAS. I. LANDIS, P. J.

Defendant excepts. Bill of Exceptions signed and sealed.

CHAS. I. LANDIS, P. J.

Bail fixed for Appeal

Mar. 27, 1915. The defendant desiring to appeal from the decree of the Court in above case. Court fixes the bail for the appeal at the sum of $1,000.00.

Mar. 27, 1915. Defendant appeals to Supreme Court. Bond filed in $1,000.00.

Mar. 30, 1915. Writ of Certiorari from Supreme Court filed.

July 14, 1915. Remittitur from Supreme Court filed, the assignments of error are overruled, the decree of the Court below is affirmed and this appeal is dismissed at the cost of appellant.

And now July 6, 1916 the above proceedings are settled and ended.

Jno. M. Groff
Attorney for Plaintiff.

[24797]

IN THE COURT OF COMMON PLEAS OF LANCASTER COUNTY

F. Lyman Windolph
S. Schaeffer
Wm. H. Keller

LANCASTER AND YORK FURNACE STREET RAILWAY COMPANY, *Plaintiff*

and

John E. Malone

THE PENNSYLVANIA WATER AND POWER COMPANY

Equity Docket No. 6 Page 249

Bill of Complaint

Entered and Filed July 27, 1918.

July 27, 1918.	Appearance of John E. Malone, Esq., in writing filed for Defendant.
July 29, 1918.	Copy of bill served on John E. Malone, Esq.
Sept. 17, 1918.	Printed answer of Defendant filed.
Dec. 16, 1918.	On argument list, continued.
Dec. 20, 1918.	Replication filed.
Mar. 3, 1919.	On Equity List, continued.
Oct. 6, 1919.	On Equity List, continued.
Mar. 1, 1920.	On Equity List, continued.
Mar. 13, 1920.	Defendant's amended answer filed.
Mar. 26, 1920.	Exceptions to Defendant's amended answer filed.
June 21, 1920.	On Argument List, submitted C. A. V.
June 26, 1920.	Opinion read and filed and exceptions to Defendant's amended answer sustained and Defendant ordered to file an answer within ten days after filing this Opinion.
July 26, 1920.	Amendment to Defendant's amended answer filed.

Sept. 27, 1920. On Equity List, continued on account of serious illness of the father of F. A. Aliner, a material witness for Defendant.

Mar. 7, 1921. On Equity List, continued by consent.

Oct. 7, 1921. This suit is discontinued, settled and ended.

F. LYMAN WINDOLPH
(of counsel for Plaintiff).

Exhibit No. 453

[24798]

IN THE COURT OF COMMON PLEAS OF LANCASTER COUNTY

Windolph
Chas. F. Hager
Wm. H. Keller

COLEMANVILLE WATER AND POWER COMPANY, *Plaintiff*

and

John E. Malone

THE PENNSYLVANIA WATER AND POWER COMPANY

Equity Docket No. 6
Page 251

Bill of Complaint

Entered and filed July 27, 1918.

July 27, 1918.	Appearance of John E. Malone, Esq., in writing filed for Defendant.
July 29, 1918.	Bill served on John E. Malone, Esq.
Sept. 17, 1918.	Printed answer of Defendant filed.
Dec. 16, 1918.	On Argument List, continued.
Dec. 20, 1918.	Replication filed.
Mar. 3, 1919.	On Equity List, continued.
Oct. 6, 1919.	On Equity List, continued.
Mar. 1, 1920.	On Equity List, continued.
Mar. 13, 1920.	Defendant's amended answer filed.
Mar. 26, 1920.	Exceptions to Defendant's amended answer filed.
June 21, 1920.	On Argument List, submitted C. A. V.
June 26, 1920.	Opinion read and filed and exceptions to Defendant's amended answer sustained, and we order and direct the Defendant to answer fully the Plaintiff's Bill, concerning the matters embraced in the exceptions, and direct that said answer shall be filed within ten days after the handing down of this opinion.

CHAS. I. LANDIS, P. J.

July 26, 1920. Amendment to Defendant's amended answer filed:

Sept. 27, 1920. On Equity List, continued on account of serious illness of the father of F. A. Allner, a material witness for Defendant.

Mar. 7, 1921. On Equity List, continued by consent.

Oct. 7, 1921. This suit settled and ended.

Charles F. Hager,
Solicitor for Plaintiff.

[24799]

IN THE COURT OF COMMON PLEAS OF LANCASTER COUNTY

Niles & Neff Coyle

JOHN EDWARD VANDERSLOOT, *Plaintiff*

vs.

John E. Malone

PENNSYLVANIA WATER AND POWER COMPANY, *Defendant*

Equity Docket No. 6 - Page 263

Bill of Complaint

Entered and Filed August 31, 1918

Sept. 16, 1918.	Appearance of John E. Malone, Esq., counsel for Defendant in writing filed.
Nov. 5, 1918.	Defendant's answer to Bill of Complaint filed.
Dec. 2, 1918.	Niles and Neff and Coyle and Keller, Attorneys for Plaintiff move the Court that said issue raised by said answer shall be decided *in limine* before a hearing of the cause upon its merits, as provided by the Act of 1907, P. L. 440, and *secundum regulum*.
Dec. 20, 1918.	Replication filed.
Mar. 3, 1919.	On Equity List, continued.
Mar. 1, 1920.	On Equity List, continued.
Sept. 27, 1920.	On List, continued on account of serious illness of the father of F. A. Allner, a material witness for Defendant.
Mar. 7, 1921.	On Equity List and tried March 8, 1921.
Apr. 27, 1921.	Notes of testimony lodged.
Oct. 8, 1921.	This suit is settled and ended.

JOHN A. COYLE
Attorney for Plaintiff.

[24800]

IN THE COURT OF COMMON PLEAS OF LANCASTER COUNTY

F. Lyman Windolph

ALICE M. TRIPPLE,
Plaintiff
vs.
THE PENNSYLVANIA WATER AND POWER COMPANY
Defendant

John E. Malone

Equity Docket No. 6
Page 266
Bill of Complaint
Entered and Filed
September 5, 1918.

Sept. 13, 1918. Printed Bill filed.

Sept. 13, 1918. Appearance of John E. Malone, Esq., in writing filed for Defendant.

Sept. 17, 1918. Printed answer of Defendant filed.

Jan. 29, 1919. Replication filed.

Mar. 3, 1919. On Equity List, continued.

Oct. 6, 1919. On Equity List, continued.

Mar. 1, 1920. On Equity List, continued.

Mar. 13, 1920. Defendant's amended answer filed.

Sept. 27, 1920. Continued on account of the serious illness of the father of F. A. Allner, who is a material witness for defendant.

Mar. 7, 1921. On Equity list and continued by consent.

Oct. 7, 1921. This suit is discontinued settled and ended.

F. LYMAN WINDOLPH
Solicitor for Plaintiff.

Exhibit No. 453

[24801]

IN THE COURT OF COMMON PLEAS OF LANCASTER COUNTY

Willis G. Kendig

ANNIE W. SHOFF

vs.

John E. Malone

THE PENNSYLVANIA WATER AND POWER COMPANY

Equity Docket No. 7
Page 532
Bill of Complaint
Entered and Filed
March 26, 1929.

Mar. 26, 1929. Service accepted for Defendant by John E. Malone, Esq.

Mar. 27, 1929. Appearance of Willis G. Kendig, Esq., Attorney for Plaintiff in writing filed.

Apr. 8, 1929. Appearance of John E. Malone, Esq., Attorney for Defendant in writing filed.

Apr. 27, 1929. Defendant's answer filed.

May 4, 1929. Replication filed.

June 3, 1929. On equity list, continued by consent.

Oct. 7, 1929. On equity list, continued by consent.

Oct. 4, 1933. The above complaint is settled, ended and costs paid.

WILLIS G. KENDIG

EXHIBIT NO. 454.

[24802]

June 25, 1924

Mr. M. E. Bushong, Real Est. Agent
636 Woolworth Building
Lancaster, Pa.

Dear Sir:

1. As indicated to you, I am asking you to assume the responsibility of following up the moves that are made in connection with the organization of the Holtwood Power Company, to the end that we may get our bonds issued at the earliest possible moment, get the legal matters and governmental applications and approvals in proper shape, and see that before Mr. Malone's departure arrangements are made with others to carry on the work as Mr. Malone has planned.

2. I am putting down hereunder my idea of some of the most important things to be attended to. I am not a lawyer and this list may not be complete, nor may it be correct, but since you are in constant touch with Mr. Malone I look to you, with this as a basis, to draw up your own list for your guidance and send me a copy thereof.

3. Organization of Holtwood Power Company:

Mr. Malone advises in his letter of June 18th that application for the charter of the Holtwood Power Company was filed June 16th with the Secretary of the Commonwealth.

4. Advertisements of intention have to be made in certain Journals a certain number of times. Please advise me of the names of the Journals and of the dates. I assume that the first advertisement was June 20th and that the subsequent advertisements would be June 27th, July 4th and July 11th.

5. At the expiration of the period of advertising the petition for charter, accompanied by affidavits as to advertisement, have to be filed with the Secretary of the Commonwealth, who, I assume, certifies same to the Public Service Commission, that all laws relative to incorporation, etc. of the proposed company have been complied with. I assume you will do your best to arrange in advance that such certification be forwarded by the Secretary of the Commonwealth with the least possible delay after his receipt thereof.

6. After having received endorsement of the Public Service Commission I assume that the papers are returned to the Secretary of the Commonwealth to be certified to the Governor. You have already taken steps in regard to doing the utmost possible to avoid delay in having these papers lay over, unsigned, on the Governor's desk and it is assumed that you will follow up this matter.

7. I assume that before the Public Service Commission can consider the application for charter, it must be presented with the application for certificate [24803] (page 2) of Public Convenience. Certain data required for the application was sent to Mr. Malone June 20th. I believe you have procured the information required to answer Section VI. You were given in New York certain (but not complete) information regarding our financing plans. I have been discussing the bond circular with Mr. Aldred and with Minsch, Monell & Co. today and we think it is in its final form, so that when I see you tomorrow afternoon I will give you further details of the financing plan. I do not know when the Certificate of Public Convenience has to be filed, nor whether it has to be advertised, nor what period of notification to the public or to public service companies interested, the Public Service Commission expects to give before it grants the hearing; nor when the hearing might be held; nor what length of time might be expected to elapse after the hearing before approval by the Public Service Commission; nor whether endorsements of consent on the

part of other Public Service Companies operating in Martic Township would facilitate matters before the Public Service Commission.

8. I assume that after the signing of the Letters Patent by the Governor they will have to be recorded in Lancaster and that only after that may the Company be considered as organized.

9. Then arrangements must be made for the increase of the capital stock, for the bond issue, and for the substitution of the new Board and Officers for the organizing Board and Officers. I assume that by that time you will require:

(a) The Deed of Trust.

(b) The financing agreement between Penna. W. & P. Co. and Holtwood Power Co.

(c) Application form to be presented to Public Service Commission for approval to enable P. W. & P. Co. to acquire all the stock (except Directors qualifying stock) of Holtwood Power Co.

(d) Certificate of notification filled out to be filed with Public Service Commission prior to the stock issue.

(e) Certificate of notification to be filed with Public Service Commission prior to issue of the bonds.

(f) Deed from P. W. & P. Co. to Holtwood Steam Company of site for steam plant.

(g) Certificates from Mr. Malone, Judge Stewart and Senator Reed's firm in connection with the Deed of Trust.

(h) Deed with plan accompanied by certificates of Counsel and engineer for release by Trustees of P. W. & P. Co.'s mortgages of steam plant site, together with minutes of P. W. & P. Co.'s Directors meeting.

10. I assume the above will be followed by a recording of the Deed of Trust in Lancaster.

11. Within thirty days from the issue of the securities, I assume you will be required to file with the Public Service Commission proper notifications that the security issues have been made.

12. I assume that Mr. Malone will draw, or have drawn, the appropriate Minutes of the Stockholders and Directors meetings of Holtwood Power Company and that you will provide for the necessary notarial signatures.

13. In connection with the above, as you know, we expect to make sale against the bonds when, as and if, before July 4th, and that interim trust certificates will be issued against the definitive bonds. The form of these certificates and the form of the bonds is to be worked up by Simpson, Thacher & Bartlett, and Mr. Allen in New York is to follow up this matter and to attend to the printing and engraving. I will ask Mr. Allen to send us the necessary data regarding the Minutes of the last meeting of the P. W. & P. Co. to give Mr. Malone. I am enclosing herewith a copy of the By-Laws of the P. W. & P. Co. to which it may be advisable to have the by-laws of the Holtwood Power Company conform.

14. In connection with the list of officers and directors sent you previously, we will wish to make an addition. The matter of who should sign the letter appearing in the bond circular was discussed, and though it is desirable to have the letter signed by the President, Mr. Clarke, yet the latter's absence in Europe makes this impossible, and it was not deemed advisable to try to secure his approval by cable. It did not seem desirable to have a letter signed by a Vice-President, so it was finally arranged that Mr. Aldred would sign as Chairman of the Boards of both Companies. We shall, therefore, wish to provide that the Holtwood Power Company elect Mr. Aldred as Chairman of its Board.

15. I assume you will let me know just what work Mr. Malone during his absence will wish to have carried out by Mr. Zimmermann, and what by Judge Stewart.

Yours very truly,

J. A. WALLS
Vice Prest. & Chief Engr.

JAW*R

EXHIBIT NO. 455

[24805]

Marvin E. Bushong
R.F.D. No. 4
Quarryville, Pa.

June 28, 1924.

Mr. J. A. Walls, Vice Prest. & Chief Engr.
Pennsylvania Water & Power Co.
Lexington Building
Baltimore, Maryland

Dear Sir:

In reply to your letter of June 25th I wish to submit the following tentative sketch subject to revision at your suggestion, and after having received Mr. Malone's suggested revision:

3. Has been covered and disposed of.

4. The advertisements have been placed and are now running in the following papers, viz: Law Review, June 20, June 27, and July 4. Lancaster New Era, June 27, July 4, and July 11. I am enclosing herewith a copy of each advertisement.

5. Mr. Malone has made arrangements for the certification to be forwarded by the Secretary of the Commonwealth to the Public Service Commission. I will follow this up and will have the proper affidavits prepared, signed, and filed as to advertisement.

6. Mr. Malone will leave a schedule to take care of this subject through Mr. Zimmerman.

7. The application for certificate of Public Convenience has been mailed to the Public Service Commissioners. The completion of this will be attended to by Mr. Zimmerman.

8. I will look after the recording of the charter in Lancaster.

9. In the matter of the permanent organization of the new Company, permit me to suggest that Mr. Rintoul have prepared a stock certificate book for the Holtwood Power Company, and that he provide the usual Pennsylvania stock transfer stamps and Federal Revenue Stamps to be used on the certificates when issued. Under the United States law we will be required to affix stamps in the amount of five cents per share of a par value of $100.00 on the original issue of stock of the Holtwood Power Company and two cents per $100.00 on each transfer. Under the Pennsylvania law we do not have to affix any stamps on original issue of stock but on each transfer after the original issue we are required to affix two cents for each share of a par value of $100.00. I would suggest that Mr. Rintoul have prepared a proper seal for the Holtwood Power Company. Mr. Malone is leaving a schedule with the minutes covering the increase of the capital stock, bond issue, and for the substitution of the new Board of Directors for the Holtwood Power Company.

(a) I assume that you will procure the Deed of Trust from the New York attorneys.

[24806] (page 2)

(b) I am assuming that the financing agreement between P.W. & P.Co. and Holtwood Power Company will come from the New York attorneys through you.

(c) The application form to be presented to Public Service Commission for approval to enable P.W. &P.Co. to acquire the stock of Holtwood Power Company will be prepared by Mr. Malone.

(d) The certificate of notification to be filed with the Public Service Commission prior to the stock issue should be filled out by Mr. Rintoul.

(e) The certificate of notification to be filed with the Public Service Commission prior to the issue of bonds should also be filled out by Mr. Rintoul. Both of these blanks are being obtained by Mr. Malone.

(f) Mr. Malone will prepare the deed from the P.W.& P.Co. to Holtwood Power Company for the site for the steam plant, data for which you are furnishing.

(g) Certificates from Mr. Malone and Judge Stewart in connection with the Deed of Trust will come from them without difficulty. Mr. Malone has already obtained the certificate from Senator Reed's offices as you know.

(h) The release by Trustees of the P.W.&P.Co's. mortgages of the steam plant site, together with the minutes of the P.W.&P.Co's Directors meeting should come from Simpson, Thacher & Bartlett.

10. I will see to the recording of the Deed of Trust in Lancaster as soon as it is adopted by the Board of Directors.

11. The notifications that the security issues have been made will have to be prepared by the Officers of the Holtwood Power Company, and I will see that they have the proper blanks and that the filing of these notifications is attended to.

12. The Minutes of Stockholders and Directors meetings mentioned under Paragraph 9, will cover the suggestions mentioned in Paragraph 12, with the exception of the notarial services which I will provide by having Miss Wiley of the Conestoga Traction Company in attendance at the meetings.

13. I have sent a copy of the By-Laws of the P.W.&P. Co. to Mr. Malone for his use in preparing a set of By-Laws for the Holtwood Power Company. The other matters under this paragraph will come from Simpson, Thacher & Bartlett through you.

[24807] (page 3)

14. The new Board of Directors will consist of the following:

	Officers of the Company	
Chairman of the Board	J. E. Aldred	40 Wall Street, New York
President	Chas. E. F. Clarke	40 Wall Street, New York
Vice President	J. A. Walls	Lewisburg, Pa.
Treasurer	Jas. L. Rintoul	1611 Lexington Building Baltimore, Md.
Secretary and	F. J. Allen	40 Wall Street, New York
Jos. W. Gross		1600 Walnut Street, Philadelphia, Pa.
M. E. Bushong		636 Woolworth Building, Lancaster, Pa.

This is in accordance with your verbal direction to me on Thursday, June 26th.

15. Mr. Malone and Mr. Zimmerman will go to Harrisburg and see the proper parties there in order to provide for an expeditious handling of certain legal matters there. There will, in all probability, be no necessity for a conference with Judge Stewart because Mr. Zimmerman will handle the work before the Public Service Commission and in the other offices in Harrisburg in Mr. Malone's absence.

Very truly yours,

(s) Marvin E. Bushong.

MEB*W
Encls.

EXHIBIT NO. 456

[24808]

May 23, 1945

IN RE: DUTIES OF MEN EMPLOYED BY LANCASTER OFFICE

In the Flowage Basin Account (338) prior to 1930 there were charged certain amounts paid for services to men whose names do not appear on any other records. It is known that these men were employed by Mr. Bushong, presumably in connection with the purchase of properties, bridge or road relocations, or similar matters, but in only a few cases can the exact nature of their duties be set forth in detail. This matter is referred to in some detail on page 2 of memorandum dated March 29, 1945 entitled "Lancaster Office Expense."

In the early days of the Company, and to some extent until 1933, the responsibility for the defense of law suits, the acquisition of property, and other matters not of a technical nature, was held by Mr. Charles E. F. Clarke, vice-president from 1910 to 1914 and president from 1914 to 1933. When Mr. Bushong was employed by the Company he came under the supervision of Mr. Clarke, who was located in New York; for this reason, as well as for other reasons referred to elsewhere, many of the details of the work carried on by Mr. Bushong and his assistants are not clear to us today. However, during the time of the employment of the men under discussion Mr. Bushong was engaged in acquiring properties for the Company or in other construction work. It is known that some of these people were notaries and others justices of the peace, so that the services rendered may have been in their official capacities in acknowledging or witnessing options, contracts, deeds, etc. It is also probable that many of the payments for services were to persons who helped to prepare evidence, assisted in securing favorable witnesses, and

otherwise aided in defending the numerous law suits filed against the Company, resulting frequently in the purchase of the property involved.

The condition of Mr. Bushong's health, particularly after an attack of influenza in 1918, was such that he was not able to do much strenuous field work and it was necessary for him to have somewhat more help than would otherwise have been required. It is understood that he did not feel able at times to drive long distances, and it is definitely known that he frequently requested others to operate his car. It may therefore be assumed that some of the services rendered by these part time employees were in connection with transportation of Mr. Bushong or his agents engaged in the purchase of land or other negotiations.

It has previously been pointed out that it was, in many cases, advantageous to the Company to have properties purchased by agents who were not identified with the Company or Mr. Bushong. There was no attempt to hide the fact that Mr. Bushong was an employee of the Company, and the same agent could not be used in more than a few cases before his association with the Company would be evident; therefore, except in such cases as the purchase of properties in different localities, frequent changes in personnel were required.

The services performed by some of the men whose names appear in the 338 account are not known to us. However, in other cases the services performed are known, at least in part, and it is believed that the following list of duties is typical of all of the group:

[24809] (page 2)

E. R. Griel—acted as part time chauffeur in connection with flowage basin property and Lancaster Transmission line. Part of his time was charged to Holtwood Power Company.

G. S. Burkholder—operated a garage—took care of Mr. Bushong's car and acted as part time chauffeur.

E. D. Sensenig—for many years tax assessor in Martic Twp. Knew land values in Martic and Conestoga Townships and had personal contacts with many of the property owners. Probably supplied Mr. Bushong with information as to land values, ownership, sale prices, etc. Was definitely connected with purchase of rights from Lancaster and York Furnace Street Railway Company, and assisted in securing witnesses to testify for us in law suit in reference to flooding.

E. D. Barton—acted as part time chauffeur and probably assisted in making investigations.

M. H. Fritz—purchased Heine property (Hess House), now part of Conestoga Substation, and probably was connected with other similar purchases.

T. C. Evans—was notary public. In addition to work on flowage basin also acted as right of way agent on York, Coatesville, and Westport transmission lines. One of incorporators of Holtwood Power Company.

H. J. Taylor—assisted in acquisition of Harnish property at Shenks Ferry in 1920. Later duties (1927-1928) not known.

J. H. Wickersham—was contractor and builder—probably rendered service as an appraiser.

John Funk—kept a store in Washingtonboro and acted as a boatman on river. Was familiar with islands and purchased several for Safe Harbor development.

R. M. Sheeler—was a notary public.

J. S. Graybill—purchased Bleacher, Creamer, Kendig, and Miller properties (Manor Substation), also Lant property. Later purchased a number of properties for Safe Harbor development. One of incorporators of Holtwood Power Company.

J. C. Collins—at one time a notary public. Also worked as right of way agent on York, Lancaster, Westport,

Riverside, and Perryville transmission lines. Was one of incorporators of Holtwood Power Company, Safe Harbor Water Power Corporation, and Chanceford Water Power Corporation.

C. E. Todd—lived along river just below Holtwood, and investigated and supplied property information to Mr. Bushong. Was one of incorporators of Holtwood Power Company and also worked on York and Lancaster transmission lines. Was also a notary public.

[24810] (page 3)

A. Z. Zercher—posted notices and did other work in connection with construction of new Conestoga Township road and vacation of old road.

S. L. Kirk—part time chauffeur, and acted as messenger.

O. P. Bricker—attorney at law; services in connection with Washington Martin and Newton Rineer tracts.

Kersey Carrigan—purchased Hiemenz property in 1920. Also worked on York line (Violet Hill Substation), and is believed to have assisted in purchase of Geo. B. Willson properties on Conestoga Creek in 1927 and 1928. Was one of incorporators of Holtwood Power Company, Safe Harbor Water Power Corporation, and Chanceford Water Power Corporation. Also acquired some property for Safe Harbor development.

M. J. Brinton—part time chauffeur in connection with purchase of Heine, Hiemenz, and Harnish tracts at Shenks Ferry.

EXHIBIT NO. 461.

[24819]

EXCERPT FROM THE EIGHTEENTH ANNUAL REPORT OF THE PENNSYLVANIA WATER & POWER CO. FOR THE YEAR 1927

"When the steam station at Holtwood was constructed there was some doubt as to whether, under Pennsylvania law, a steam station could be owned and operated by a water power company. This matter has since been cleared up in the courts. The Pennsylvania Water & Power Company, which at that time had considered it prudent under the circumstances to organize a subsidiary, the Holtwood Power Company, has now gone through the necessary legal procedure and has purchased the assets of the Holtwood Power Company, merging that Company with itself, and assuming the $2,750,000 principal amount of Holtwood Power Company bonds outstanding. It is expected that a saving in interest charges will be possible by retiring these bonds in the near future, and issuing therefor lower interest bearing bonds of the Pennsylvania Water & Power Company." (P. 2)

EXHIBIT NO. 469.

[24828]

R. L. T.—EXHIBIT A.

(COPY OF PETITION OF PENNSYLVANIA WATER & POWER COMPANY AS SENT TO PUBLIC SERVICE COMMISSION OF PENNSYLVANIA BY MR. MALONE ON APRIL 21, 1932.)

BEFORE THE PUBLIC SERVICE COMMISSION OF THE COMMONWEALTH OF PENNSYLVANIA.

In Re: Application of the Pennsylvania Water & Power Company for a Certificate of Public Convenience evidencing the Commission's approval of the right to supply electric power and energy to The Pennsylvania Railroad Company in Manor Township, Lancaster County, Pa.	Application Docket No. 1932

TO THE PUBLIC SERVICE COMMISSION OF THE COMMONWEALTH OF PENNSYLVANIA:

The Petition of the Pennsylvania Water & Power Company,

Respectfully Represents:

* * *

[24831] (page 4)

* * *

5. Your petitioner desires to supply electric power and energy to The Pennsylvania Railroad Company in the Township of Manor, Lancaster County, Pa., a township in which your said petitioner has not heretofore supplied electric power and energy.

* * *

[24832] (page 5)

* * *

8. That the approval is necessary and proper for the service, accommodation and convenience of the public for the following reasons:

Your petitioner and the Consolidated Gas Electric Light and Power Company of Baltimore and the Safe Harbor Water Power Corporation, jointly as the "Electric Companies" have entered into an agreement with The Pennsylvania Railroad Company under which the Baltimore Company will sell to the Railroad Company in Maryland all of the power and energy required for the electrification of the Railroad Company's lines from the Susquehanna River to Washington, D. C. The same contract covers the supply of power and energy for the electrification of lines of the Railroad Company in the vicinity of Safe Harbor. It is expected that there will be two points of supply of such power and energy to the Railroad Company in Pennsylvania—Safe Harbor in Manor Township and Holtwood in Martic Township, Lancaster County. The bulk of power and energy thus supplied will originate in the Safe Harbor hydro plant, but some of it will be generated at the Holtwood hydro and steam plants and at times of low river flow the [24833] (page 6) supply of hydro energy will be supplemented by steam energy purchased from the Baltimore steam plants or from other sources. It is intended that the sale in Martic Township be made by your petitioner. It is desirable that the sale in Manor Township be made by either your petitioner or the Safe Harbor Water Power Corporation or by both, depending upon the actual conditions existing at the time, such as amount and division of load, economic source of supply, transmission facilities available, etc. Therefore your petitioner is asking for approval of the right to supply power and energy to The Pennsylvania Railroad Company in Manor Township and the Safe Harbor Water Power Corporation in a separate petition is also asking for approval of the same right.

* * *

EXHIBIT NO. 470.

[24841]

R. L. T.—EXHIBIT B.

March 3, 1937

Memorandum to Mr. H. A. Wagner
Mr. J. A. Walls

ARRANGEMENTS AMONG THE ALDRED COMPANIES WITH RESPECT TO PENNSYLVANIA RAILROAD ELECTRIFICATION EXTENSION

It has always been recognized that power delivered to the Pennsylvania Railroad in the state of Pennsylvania must be sold by a Pennsylvania corporation—i.e., one of the hydro companies. In 1931 a so-called "Working Agreement" was drafted and actually signed by Baltimore Company (dated November 25, 1931). It was then held in abeyance for a long time and finally dropped as unnecessary. (See Operating Committee's memorandum of December 12, 1934). As drafted in 1931, the proposed working agreement provided in Paragraph 7 that "all power and energy delivered to the Railroad Company in Pennsylvania will be sold to the Railroad Company by Holtwood Company."

It was later realized that on account of increasing gross receipts tax rates, a court decision upholding double or repeated gross receipts taxation in case of the sale and resale of power in Pennsylvania, and other reasons, it might some time prove to be desirable to have the Safe Harbor Company sell some of the power directly to the Pennsylvania Railroad. Hence in the orders obtained from the Public Service Commission of Pennsylvania dated January 10, 1933, issued over the protest of Pennsylvania Power & Light Company and upheld by the Superior Court of Pennsylvania, complete flexibility was secured in that permission was obtained for Safe Harbor Company to sell power directly to the Pennsylvania Railroad and for Holtwood Com-

pany to sell power to the Pennsylvania Railroad in Manor Township, in which the Conestoga Substation is located. (Holtwood Company of course already had the right to sell to the Railroad at Holtwood).

[24842] (page 2)

It is now necessary to decide how the sale will be handled.

As it would be too complicated to have Holtwood Company and Safe Harbor Company each sell power to the Pennsylvania Railroad, the two alternatives appear to be as follows:

PLAN 1—SALE BY HOLTWOOD COMPANY: Under this plan power and energy delivered to the Pennsylvania Railroad in Pennsylvania would be considered as sold to the Pennsylvania Railroad by Holtwood Company, and the revenue received therefor would be credited to Baltimore Company on the Holtwood-Baltimore bill under Paragraph (e) of Article III of the Supplemental Agreement, in exactly the same manner as sales to Lancaster, York and Coatesville. This is the plan which was contemplated at the time the so-called Working Agreement was drafted in 1931.

PLAN 2—SALE BY SAFE HARBOR COMPANY: Under this plan power and energy delivered to the Pennsylvania Railroad in Pennsylvania would be sold to the Pennsylvania Railroad by Safe Harbor Company. Baltimore Company and Holtwood Company would purchase the *balance* of the Safe Harbor output in the proportion of two-thirds and one-third respectively. In determining the payments to be made by Baltimore Company and Holtwood Company to Safe Harbor Company, the revenue received from the Pennsylvania Railroad for power and energy delivered in Pennsylvania would be deducted from the total Safe Harbor bill as computed under the three party contract as it

now stands, and Baltimore Company and Holtwood Company would pay to Safe Harbor Company the balance, in the proportion of two-thirds and one-third respectively.

COMPARISON OF THE TWO PLANS

We believe that Plan 1, sale by Holtwood Company, does not require any modification or supplementing of any contract unless and until Holtwood Company's one-third share of Safe Harbor output has to be increased in order to cover the sales to which Holtwood Company is committed. Under our method of accounting for energy, such increase will not be necessary, at least for many years, since the only requirement is that the annual energy supply available to Holtwood Company (Holtwood hydro, plus Holtwood steam, plus one-third of Safe Harbor hydro, plus energy purchased from Baltimore Company, Pennsylvania Power & Light Company, Philadelphia Electric Company and Metropolitan Edison Company) must be greater than the annual energy sold by Holtwood Company to the Pennsylvania customers, plus the annual energy delivered to Pennsylvania Railroad in [24843] (page 3) Pennsylvania, plus at least the greater part of energy delivered to Pennsylvania Railroad in Maryland (Perryville and Conowingo) over the Safe Harbor-Perryville line. The reason for including the latter item is that Holtwood Company's lawyers approved the ownership and operation of this line by Holtwood Company itself, without further authorization, only on the assumption that the line would be used to carry *Holtwood Company's* energy. An estimate for 1939 shows that even with a repetition of the minimum flow year of 1931, Holtwood Company would have an ample supply of energy on an annual basis.

We believe that Plan 2, sale by Safe Harbor Company, would require modification or supplementing of the three party Safe Harbor contract, for which prior filing with the Federal Power Commission and the Public Service Com-

mission of Pennsylvania is necessary, and would also cause complications in Safe Harbor billing. Furthermore, Safe Harbor Company at present has no arrangement whatever for purchasing steam generated energy which must be supplied to the Pennsylvania Railroad in low flow, and some sort of contractual arrangement covering this would have to be made and filed with the Federal Power Commission and the Pennsylvania Public Service Commission.

In addition to the making and filing of contractual changes, we believe that under Plan 2, it would be necessary to do a great deal of explaining to statistical companies, insurance companies, investors, the Securities and Exchange Commission, etc., because the statement has been made so frequently that Baltimore Company and Holtwood Company are purchasing or are "entitled to" the entire output of the initial Safe Harbor project.

The only advantage of Plan 2, sale by Safe Harbor Company, is a saving in Pennsylvania gross receipts tax, and this is not believed to be large enough to justify the contractual changes and complications. The tax on receipts from the Railroad Company is the same under both [24844] (page 4) plans, being paid by Holtwood Company under Plan 1 and by Safe Harbor Company under Plan 2. However the tax paid by Safe Harbor Company on receipts from Holtwood Company is less under Plan 2. Under that plan Safe Harbor Company's receipts from the Railroad Company would be deducted from the total gross revenue computed under the contract, and the *balance* would be divided between Baltimore Company and Holtwood Company in the proportion of two-thirds and one-third respectively. Hence Safe Harbor Company's receipts from Holtwood Company would be less under Plan 2 by one-third of the Pennsylvania portion of the total Railroad bill, and the gross receipts tax would be less by a corresponding amount. This amount cannot now be determined because neither the rate of taxation nor the allocation of the Railroad bill is

known. The twenty mill "emergency" rate (i.e., 2%) in effect in 1936 expired at the end of the year and, pending action by the 1937 Legislature, the rate is now the old one of eight mills. If the twenty mill rate is renewed and continued by the Legislature (as now seems likely for at least a two year period, since Governor Earle has made such a recommendation) the saving in tax under Plan 2 would be of the order of $13,000 in 1939. At the eight mill tax rate, the saving would be only about $5,300 in 1939. (These figures are based on revenue from the Pennsylvania Railroad of $2,000,000 for power and energy delivered in Pennsylvania).

It is an interesting fact that a similar saving in gross receipts tax could be effected by having Safe Harbor Company make the sales to other customers in Pennsylvania, as for example Pennsylvania Power & Light Company. Safe Harbor Company was made a party to all recent contracts with Pennsylvania customers partly to make that possible. Furthermore, in the case of Lancaster at least, such a set-up would be about as logical as in the case of the Railroad sale, because a considerable part of the energy going to Lancaster originates in the Safe Harbor power house and is stepped up by transformers owned by Safe [24845] (page 5) Harbor Company. Nevertheless the tax saving (equal in amount to the gross receipts tax on one-third of the revenue received from the Pennsylvania customers) has never been considered sufficient to justify contractual changes and complications resulting from direct sale by Safe Harbor Company.

RECOMMENDATIONS:

We recommend that Plan 1, sale by Holtwood Company, be followed under present conditions. However nothing should be done that will prevent changing to Plan 2 or some other equitable arrangement later if it should prove desirable. For example, if, as the result of action by

regulatory authorities or otherwise, the contractual set-up should be changed, it would be necessary to reconsider the method of allocating revenue received from the Pennsylvania Railroad, as well as other items covered by the contracts, in order to reach an equitable arrangement.

It is necessary of course to divide the total revenue received from Pennsylvania Railroad into two parts—Baltimore Company's revenue and Holtwood Company's revenue. It should be noted that the method of making this allocation will directly affect the *gross* revenue reported by Baltimore Company, but it will affect Holtwood Company's gross revenue only to the extent of changes in Holtwood Company's taxes. It will not have any effect on Holtwood Company's net revenue, and it will affect Baltimore Company's *net* revenue only to the extent that it changes the total combined taxes of the two companies. Under present tax laws only the Pennsylvania gross receipts tax and the Pennsylvania income tax paid by Holtwood Company are affected.

We recommend that under present conditions the *total* revenue (including charges for special facilities) be divided between Baltimore Company and Holtwood Company in proportion to the Kwh. delivered to the Pennsylvania Railroad in Maryland (including Benning Station in the District of Columbia) and Pennsylvania respectively. Under this method the average rates received for energy sold to the Pennsylvania Railroad [24846] (page 6) by the two companies will be the same. The rate received by Baltimore Company will be less than the present average rate, and the gross revenue for a given number of Kwh. will be less than it is now. This is shown by the following tabulation:

	Million Kwh.	$	Mills per Kwh.
1. Actual 1936 P. R. R. bill	114.8	1,192,857	10.39
2. 1939 bill without additional electrification (load—120% of 1936)	138.0*	1,350,600	9.8
3. Baltimore Company's portion of total 1939 bill with additional electrification under our proposal (total bill allocated in proportion to Kwh.)	161. *	1,188,000	7.38
4. Holtwood Company's portion of total 1939 bill under our proposal (total bill allocated in in proportion to Kwh.)	272.	2,006,000	7.38
5. Total 1939 bill with additional electrification	433.	3,194,000	7.38

* Item 3 is larger than Item 2 because power will be delivered to the Columbia & Port Deposit Branch at Conowingo in Maryland, and because traffic on the Perryville-Baltimore section will be increased by electric operation of freight between the west and Baltimore by way of Perryville.

OPERATING COMMITTEE:

(signed) F. E. RICKETTS
F. E. Ricketts
(signed) R. L. THOMAS
R. L. Thomas

FER
/MS
RLT

ENERGY PURCHASED BY BALTIMORE AND HOLTWOOD COMPANIES FROM SAFE HARBOR COMPANY AND ENERGY PURCHASED BY BALTIMORE COMPANY FROM HOLTWOOD COMPANY

		1944	1945	1946	1947	1948	1949
1	S. H. 230 Kv. Sendout	281,610,000	513,520,000	300,340,000			
2	S. H. 230 Kv. Received	201,075,000	53,034,000	157,961,000			
3	S. H. Net 230 Kv. Sendout (1-2)	80,535,000	460,486,000	142,379,000			
4	S. H. 69 Kv. Sendout	339,868,000	330,812,000	331,740,000			
5	S. H. 69 Kv. Received	1,962,000	4,948,000	3,672,000			
6	S. H. 69 Kv. Net Sendout (4-5)	337,906,000	325,864,000	328,068,000			
7	S. H. 132 Kv. Sendout	355,036,000	452,069,000	407,746,000			
8	S. H. 132 Kv. Received	1,335,000	882,000	1,225,000			
9	S. H. Net 132 Kv. Sendout (7-8)	353,701,000	451,187,000	406,521,000			
10	S. H. Net Metered Sendout (3+6+9)	772,142,000	1237,537,000	876,968,000			
11	Baltimore Total 230 Kv. Received	224,038,000	384,974,000	237,211,000			
12	Baltimore Total 230 Kv. Sendout	206,611,000	56,378,000	150,303,000			
13	Washington Total 230 Kv. Received	85,630,000	133,151,000	92,778,000			
14	Washington Total 230 Kv. Sendout	35,265,000	15,345,000	50,280,000			
15	Net Delivered to Baltimore Company at Perryville	140,489,000	208,648,000	121,628,000			
16	Net Delivered to Highlandtown and Pratt Street	321,206,000	471,695,000	375,008,000			
17	Total Purchased by Holtwood Company from Baltimore Company	-	-	-			
18	Metered 230 Kv. Line Loss (1+12+14)-(2+11+13)	12,743,000	14,084,000	12,973,000			
19	Actual Percent 230 Kv. Line Loss 18/(1+12+14)						
20	Energy Purchased by Baltimore Company from Safe Harbor Company 2/3 (Item 10) x 100.0-Item 19,	502,669,000	805,252,000	570,025,000			
21	Energy Purchased by Holtwood Company from Safe Harbor Company (1/3(Item 10)	257,381,000	412,514,000	292,322,000			
22	Energy Purchased by Baltimore Company from Holtwood Company (11+13+15+16+17)-(12+14+20)	26,818,000	321,493,000	56,017,000			

EXHIBIT NO. 478.

[24861]

June 9, 1947

Mr. George W. Spaulding
Member of Operating Committee
Pennsylvania Water & Power Company
Lexington Building
Baltimore—3, Maryland.

Dear Mr. Spaulding:

We have given consideration to your letter of May 27 and the accompanying draft of a supplemental agreement with the Philadelphia Electric Company for the Coatesville area.

In Mr. Wm. Schmidt, Jr.'s letter to Mr. J. A. Walls, dated January 24, 1947, he stated that this Company would approve a renewal agreement with the Philadelphia Electric Company for one year from March 31, 1948 with certain modifications of the terms in the present agreement. We see no reason for departing from this position and will therefore be unwilling to approve the draft of the supplemental agreement.

When the power contract with the Metropolitan Edison Company was renewed in November 1945, you agreed with me that the reason for making Safe Harbor Water Power Corporation a party to the contracts with your Pennsylvania customers was the purpose of putting the Companies in a position to avoid the payment of double gross receipts taxes, but the Companies had never found it necessary to take any action with respect to this tax question, and it was therefore unnecessary to continue Safe Harbor as a party to the contracts. Accordingly, the agreement dated November 15, 1945 is between Holtwood Company only and Metropolitan Edison Company.

When any renewal agreements are made with Philadelphia Electric Company or Pennsylvania Power and Light

Company we will insist that Safe Harbor Water Power Corporation shall not be a party to them.

As fully explained in Mr. R. L. Thomas' testimony in your pending rate case before the Federal Power Commission, this Company's entitlement to two-thirds of the output of the Safe Harbor Plant under the 1931 Power Contract has not in any way been impaired by reason of Safe Harbor Water Power Corporation becoming a nominal party to the contracts with Pennsylvania Power and Light Company and Philadelphia Electric Company.

Yours very truly,

(Signed) R. T. GREER
R. T. Greer
Member of Operating Committee

EXHIBIT NO. 479.

[24873]

June 10, 1947

Mr. N. B. Higgins, President,
Safe Harbor Water Power Corporation,
Lexington Building,
Baltimore 1, Maryland.

Dear Mr. Higgins:

Prior to January 1, 1947, each monthly Management Report of the Safe Harbor Water Power Corporation has shown two-thirds of the kilowatt hour output of the Safe Harbor Plant as sold to this Company and one-third to Pennsylvania Water & Power Company. On June 3, 1947, we received Page 6 of the January and February Management Reports with a notation: "Please substitute the following *January* and *February* pages in your copy of the management report." Upon examining these pages, we find that the form of the page has been changed by adding under the Operating Revenue figures footnotes reading:

"(a)—Includes compensation in part for services supplied to P. R. R.

(b)—Includes compensation for services supplied Pennsylvania customers jointly with P. W. & P. Co.

(c)—Energy supplied P. W. & P. Co., P. P. & L. Co., P. E. Co., and P. R. R."

Furthermore, instead of showing two-thirds of the kilowatt hour output as sold to this Company and one-third sold to Pennsylvania Water & Power Company, other figures have been substituted.

We also find that these changes in the form and in the kilowatt hours sold have been made in the March and April Management Reports.

These changes have obviously been made at the instance of the Pennsylvania Water and Power Company in an attempt to support the contentions being made by that Company in its rate case now pending before the Federal Power Commission. As it should have been apparent that these changes were intended to be detrimental to our interests we are at a loss to understand why they were made.

We pointed out to the Federal Power Commission that the Pennsylvania Water & Power Company's contentions were not in accord with the facts in a statement filed with the Commission on December 26, 1946, entitled: "Statement of the Position of Consolidated Gas Electric Light and Power Company of Baltimore Regarding Sale of Safe Harbor Output." A copy of this statement was given counsel for Safe Harbor Water Power Corporation at the time it was filed and you have doubtless seen it, but we are enclosing a copy.

As the owner of two-thirds of the capital stock of Safe Harbor Water Power Corporation, we request that the erroneous statements in the Management Reports above mentioned be deleted and that proper statements be made in accordance with the uniform practice up to 1947. Page 6 of the January and February reports and the March and April reports are returned herewith for correction.

Yours very truly,

(Signed) Wm. Schmidt, Jr.
President.

EXHIBIT NO. 483.

[24925]

STATEMENT BY PENNSYLVANIA WATER & POWER COMPANY AND SAFE HARBOR WATER POWER CORPORATION GIVING HISTORICAL BACKGROUND FOR THEIR EXISTING POWER CONTRACTS WITH CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE

February 24, 1938

[24932] (page 6)

* * *

Safe Harbor Company sells one-third of its output to Holtwood Company at Safe Harbor in Pennsylvania and the balance to Baltimore Company at Baltimore and Takoma Park in Maryland.

* * *

[24934] (page 8)

* * *

Construction was started in October, 1905, and proceeded well until the fall of 1907, when the Company ran into financial difficulties in part connected with the failure of the Knickerbocker Trust Company, and stopped all work except that the tailrace cut was completed in the summer of 1908.

* * *

Mr. Aldred became Receiver on July 17, 1909. The Pennsylvania Water & Power Company was formed on January 13, 1910. His first problem [24935] (page 9) was to obtain the money with which to complete the initial project. Naturally it was difficult to get new money for a bankrupt venture. Also at that time construction projects and utilities were not looked upon favorably in the United States market. It was necessary for Mr. Aldred to obtain the bulk of the new capital in England and Canada.

In his reorganization Mr. Aldred endeavored to carry out the intention he originally stated to the bondholders' committee of squeezing the "water" out of the project capital. Whereas the balance sheet of the McCall Company showed a combined value of $18,186,482.29 for property, plant and equipment, and securities of other companies, the opening entry on the new company's books showed a value of $11,797,450.97 for property, plant and equipment, and securities of other companies. This was a reduction of $6,389,031.32, or 35%.

• • • •

[24939] (page 13)

• • • •

The development had been started without any contracts for disposal of the output. There were vague plans for selling power in Baltimore, Lancaster, Reading, Harrisburg, Wilmington, etc., and surveys for transmission lines to several points were actually made. However when the financial crisis of 1907 came the company had contracts for the sale only of less than one-third of the output of the proposed [24940] (page 14) initial project.

One of Mr. Aldred's problems in taking over the project was to find a market for the power. After extended negotiations, in August 1910 he obtained a ten year contract with the Baltimore Company. He later became interested in, and successively the President and the Chairman of the Board, of the Baltimore Company. In February, 1911 he closed a fifteen year contract with the United Railways & Electric Company of Baltimore. In these negotiations Mr. Aldred was handicapped by the fact that the reliability of hydroelectric power supply over high tension transmission lines had not yet been established and proper methods of coordinating hydro and steam resources had not been worked out.

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EXHIBIT NO. 485.

[25027]

PENNSYLVANIA WATER AND POWER CO.

TWENTY SECOND ANNUAL REPORT

AND

YEAR BOOK—1931

[25047]

* * *

Prospects

It may be remarked that your Company by the above arrangements, twenty-one years after its initial delivery of power to Baltimore from its Holtwood generating plant, is now entering upon a new stage of its development, one that has been carefully considered and planned for over a long period, which should result in very effective utilization of your Company's power resources and give an assurance of even greater stability than heretofore to your Company's earnings. The new contractual arrangement with the Consolidated Company covers a period of forty-eight years and constitutes virtually a guarantee of earnings on your Company's capital stock, since all the payments which the Consolidated Company is obligated to make to your Company are an operating expense of that company and thus come ahead of the dividends on its own preferred and common stock. * * *

EXHIBIT NO. 489.

[25171] (page 27)

NOTES

CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY
ANNUAL REPORT 1941
(Excerpt)

TO CONSOLIDATED STATEMENT OF OPERATIONS AND BALANCE SHEET

Note A—Under contracts with Safe Harbor Water Power Corporation and Pennsylvania Water & Power Company to continue in force until April 22, 1980, whereby the Company purchases the entire electrical energy output of the plants now operated by those companies except such energy as is sold by those companies to other customers, the Company pays annual charges for the purchase of electrical power from those companies independent of the volume of energy received. The proceeds of all sales of power by those companies to other customers are deducted in determining the payments the Company is required to make. Pursuant to the Company's practice established in 1931, Operating Expenses have been adjusted through the Balance Sheet account "Hydro Equalization" to avoid variations in the costs of power from period to period due to variations in the usable flow of the Susquehanna River above or below averages computed from records for past periods. Beginning as of January 1, 1940, the Company amended its hydro equalization practice so that the debit in "Hydro Equalization" account as of December 31, 1939 and the debit or credit for each year thereafter resulting from below or above average usable river flow will be amortized to Operating Expenses over the immediately succeeding ten-year period.

Through such adjustments $1,107,166.23 in 1941, and $198,535.20 in 1940 were deducted from Operating Expenses and debited to "Hydro Equalization." The net of the adjustments of Operating Expenses which have been debited or credited to "Hydro Equalization" has been from 1931 to 1941, inclusive, a net debit, *i.e.*, a net deferment of Operating Expenses, of $2,562,976.43. An appropriation from Surplus in the amount of $500,000 was made in 1935 to reduce the then accumulated debit balance in "Hydro Equalization" account.

EXHIBIT NO. 493.

[25180] (page 10)

SAFE HARBOR WATER POWER CORPORATION ANNUAL REPORT 1933

* * *

It was considered desirable to put your Company in position to make delivery [25181] (page 11) of power directly to Pennsylvania Power & Light Company and to Philadelphia Electric Company with the consent of Consolidated Gas Electric Light and Power Company of Baltimore and Pennsylvania Water & Power Company, without relieving the latter companies of their commitments above referred to. Therefore, during the year your Company as one of the parties, together with Pennsylvania Water & Power Company, entered into two power contracts; one with Pennsylvania Power & Light Company, effective May 1, 1933, to run until October 31, 1940, and the other with Philadelphia Electric Company, effective as of April 1, 1934, to continue in force until March 31, 1939.

EXHIBIT NO. 494.

[25183] (page 9)

PENNSYLVANIA WATER & POWER COMPANY

ANNUAL REPORT—1946

(Excerpt)

• • •

The development and duration of your Company's several power agreements appear in diagrammatic form on page 10. The electric services available from your Company's power development and as supplemented by electric services purchased from others are disposed of under five firm power contracts with the following customers: (1) Consolidated Gas Electric Light and Power Company of Baltimore; (2) Metropolitan Edison Company for system-wide power supply, including York; (3) Pennsylvania Power & Light Company for the Lancaster power supply; (4) Philadelphia Electric Company for the Coatesville power supply; and (5) The Pennsylvania Railroad Company for its electrified lines within the region. The services supplied to these several customers are supplied jointly by your Company and the Safe Harbor Water Power Corporation. Your Company also has certain interchange agreements providing for the interchange of electric services with others. Any savings from such interchange transactions, as and when operating economies can be effected, are not retained by your Company, but accrue to the benefit of Consolidated Gas Electric Light and Power Company of Baltimore under the terms of the power contract with that company.

EXHIBIT NO. 498.

[25200] (page 10)

CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE

REGISTRATION STATEMENT

(Excerpts)

FORM A-2 1933

* * *

The Company, under contracts with Safe Harbor Water Power Corporation and Pennsylvania Water & Power Company (mentioned in subdivisions 1 and 2 of Item 41) purchases the entire electrical energy output of the Safe Harbor Water Power Corporation's hydroelectric development on the Susquehanna River and the Holtwood hydroelectric and steam-electric plants of Pennsylvania Water & Power Company, except such electricity as may be required by the latter two companies in performance of other contracts or any legal obligation to serve, e. g., such as may be sold to Pennsylvania customers. The Safe Harbor and Holtwood plants are located about eight miles apart on the Susquehanna River, both within a radius of about forty-five miles of Baltimore. The present installed capacity of the Safe Harbor plant is 255,000 horsepower and the plant has been designed so that its capacity may be expanded. Additions to this plant now under construction and expected to be placed into operation about October 1, 1940 will increase the capacity by 42,500 horsepower. The plants of Pennsylvania Water & Power Company at Holtwood have a present installed capacity of 180,000 horsepower (150,000 hydroelectric and 30,000 steam-electric).

* * *

[25201] (page 81)

This registration statement comprises:

(1) *The registration statement proper, containing pages numbered 1 to 85 consecutive, and insert pages numbered 42A, 42B, 84A and 84B.*

(2) *The following financial statements and schedules:*

Certificate dated July 22, 1940 of Messrs. Sharp, Milne & Co., Accountants and Auditors.

Balance Sheet of the Company as at May 31, 1940, Statements of Operations and of Surplus for the Five Months Ended May 31, 1940 and the Years Ended December 31, 1939, 1938 and 1937, and supporting Schedules III, V, VI, VII, IX, XI, XII, XIII, XVI, XVII, and XVIII.

(3) *The following exhibits:*

A-1 to A-65
B-1 to B-17
C-1 to C-2
F-1 to F-3
G
H
I-1 to I-94

(4) *The prospectus, consisting of 60 pages.*

In addition to the registration statement proper, the financial statements and schedules, the exhibits and the prospectus, this registration statement includes the statement of eligibility and qualification of each person designated to act as trustee under the indenture to be qualified.

UNDERTAKING TO FILE PERIODIC REPORTS

Pursuant to Section 15 (d) of the Securities Exchange Act of 1934, the undersigned registrant hereby undertakes to file with the Securities and Exchange Commission such supplementary and periodic information, documents, and reports as may be prescribed by any rule or regulation of the Commission heretofore or hereafter duly adopted pursuant to authority conferred in said Section 15 (d); provided, however, that this undertaking shall become operative only upon the conditions specified in said Section 15 (d), and provided, further, that the duty to file pursuant to this undertaking shall be automatically suspended upon the conditions and for the periods specified in clauses (1), (2), and (3) of said Section 15 (d).

SIGNATURES

(a) *Of the Issuer.*

[25202] (page 82)

In pursuance of the requirements of the Securities Act of 1933, the registrant Consolidated Gas Electric Light and Power Company of Baltimore, a corporation organized and existing under the laws of Maryland, has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, and its seal to be hereunto affixed and attested, all in the city of Baltimore and State of Maryland on the 24th day of July, 1940.

CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE

By (Signed) HERBERT A. WAGNER President
Herbert A. Wagner (Title)

(SEAL)

Attest (Signed) HERMAN L. GRUEHN Secretary
Herman L. Gruehn (Title)

(b) *Of the Principal Executive Officer or Officers, the Principal Financial Officer and the Comptroller or Principal Accounting Officer:*

In pursuance of the Securities Act of 1933, the undersigned have signed the within registration statement on the respective dates set beside their names.

(i) *Principal executive officer or officers:*

(Signed)		
HERBERT A. WAGNER	President	July 24, 1940
Herbert A. Wagner	(Title)	(Date)
(Signed)		
CHAS. M. COHN	Executive Vice-President	July 24, 1940
Chas. M. Cohn	(Title)	(Date)

(ii) *Principal financial officers:*

(Signed)		
WM. SCHMIDT, JR.	Vice-President	July 24, 1940
Wm. Schmidt, Jr.	(Title)	(Date)

(iii) *Comptroller or principal accounting officer:*

(Signed)

Wm. Schmidt, Jr.	Vice-President	July 24, 1940
Wm. Schmidt, Jr.	(Title)	(Date)

[25203] (page 83)

(c) *Of the Directors:*

In pursuance of the Securities Act of 1933, the undersigned have signed the within registration statement on the respective dates set beside their names.

(Signed) Herbert A. Wagner Herbert A. Wagner		July 24, 1940 (Date)
(Signed) Charles M. Cohn Charles M. Cohn		July 24, 1940 (Date)
(Signed) Wm. Schmidt, Jr. Wm. Schmidt, Jr.		July 24, 1940 (Date)
(Signed) Ralph L. Thomas Ralph L. Thomas		July 24, 1940 (Date)
(Signed) F. W. Wood F. W. Wood		July 24, 1940 (Date)
(Signed) William J. Casey William J. Casey		July 24, 1940 (Date)
(Signed) John K. Shaw John K. Shaw		July 24, 1940 (Date)
(Signed) S. Baldwin, Jr. S. Baldwin, Jr.		July 24, 1940 (Date)
(Signed) John L. Whitehurst John L. Whitehurst		July 24, 1940 (Date)
(Signed) John M. Nelson, Jr. John M. Nelson, Jr.		July 24, 1940 (Date)
(Signed) W. Bladen Lowndes W. Bladen Lowndes		July 24, 1940 (Date)
(Signed) Chas. S. Jackson Chas. S. Jackson		July 24, 1940 (Date)

(Signed) R. Howard Bland	July 24, 1940
R. Howard Bland	(Date)
.....	July , 1940
	(Date)
.....	July , 1940
	(Date)
.....	July , 1940
	(Date)
.....	July , 1940
	(Date)

(d) *Of the Duly Authorized Representative in the United States:*

In pursuance of the Securities Act of 1933, the undersigned has signed the within registration statement on the day of 1940.

(Not Applicable)

• • •

[25204] (page 98)

CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE

FORM A-2 1933

NOTES APPLICABLE TO STATEMENT OF OPERATIONS

Note II: Under contracts with Safe Harbor Water Power Corporation and Pennsylvania Water & Power Company (mentioned in subdivisions 1 and 2 of Item 41), whereby the Company purchases the entire electrical energy output of the plants now operated by those companies except such energy as is sold by those companies to Pennsylvania customers, the Company pays annual charges for the purchase of electrical power from those companies independent of the volume of energy received. The proceeds of all sales of power by those companies to Pennsylvania customers are deducted in determining the payments the Company is required to make.

EXHIBIT NO. 499.

[25206] (page 24)

SAFE HARBOR WATER POWER CORPORATION

REGISTRATION STATEMENT

(Excerpts)

FORM S-1 1946

* * *

CERTAIN CONTRACTS

The electric services available from the Corporation's hydroelectric project are disposed of under four contracts, all of which consist of an original and one or more supplements and all hereinafter more fully referred to. These contracts are:

(1) Three-party Contract between the Corporation, Consolidated Company and Holtwood Company,

(2) Lancaster Power Supply Contract,

(3) Coatesville Power Supply Contract, and

(4) Pennsylvania Railroad Power Contract,

[25207] (page 25) the last three of which were entered into by the Corporation with the consent or approval of Holtwood Company and Consolidated Company.

The following statements are brief summaries for the most part in general terms of certain of the principal provisions of the aforementioned contracts and are in all respects subject to and are qualified in their entirety by express reference thereto.

(1) Three-Party Contract Between the Corporation, Consolidated Company and Holtwood Company

This contract consists of the original contract dated June 1, 1931 and two supplemental contracts hereinafter more fully designated.

Under the terms of these contracts Consolidated Company and Holtwood Company are presently entitled to two-thirds and one-third, respectively, of all the capacity, energy and other electric services avail-

able from the Corporation's hydroelectric development, other than any which may be required for the performance of any duty or obligation to serve imposed on the Corporation by its charter or otherwise by law and subject to the Corporation's responsibilities under its other contracts made with the consent or approval of Holtwood Company and Consolidated Company.

Consolidated Company and Holtwood Company make annual payments therefor in proportion to their entitlements as stated above (which payments are subject to increase or decrease by regulatory authorities) and which payments since 1937 have been the amounts required to yield to the Corporation a net income of 7% on its accumulated actual investment in its hydroelectric development (as defined in the contract) after "all reasonable operating expenses", and without regard to the amount of electric services actually furnished.

The Corporation is also obligated at the request of either Consolidated Company or Holtwood Company with the consent of the other to install additional machinery or equipment, and the requesting parties shall make the necessary additional annual payments therefor.

The contract also provides for abatement of the obligations of the respective parties for failures due to specified causes beyond the control of the parties, subject to the proviso that the payments shall not be reduced to less than enough for the Corporation to pay its bond interest and sinking fund charges over and above operating expenses (including allowance for depreciation).

Holtwood Company undertakes to transmit for Consolidated Company, Consolidated Company's share of the electric services available from the Corporation and is obligated in the event of its failure so to transmit Consolidated's share of such electric services to take

and pay for at the contract rate Consolidated Company's share of such electric services as well as its own. The contract likewise provides for the guaranty of the payment of the principal of and interest on the presently outstanding 4½% Series Bonds of the Corporation which it is intended shall be retired upon the completion of the present financing and which guaranty will not apply to the New Bonds to be issued and registered hereunder. These contracts continue in force until April 22, 1980. Copies of the contract dated June 1, 1931, Supplemental Contract dated August 1, 1932 and Supplemental Contract dated November 22, 1939 are filed with the Registration Statement as an Exhibit.

(2) Lancaster Power Supply Contract

This contract between the Corporation and Holtwood Company of the one part and the Pennsylvania Power & Light Company of the other part, provides for the delivery by the Corporation and Holtwood Company at Holtwood and near Safe Harbor, Pennsylvania, of the electric service requirements (as defined in the contract) of Pennsylvania Power & Light Company for distribution in its territory in and surrounding Lancaster, Pennsylvania, and for use in other parts of the system of Pennsylvania Power & Light Company (under conditions set forth in the contract) and the Corporation and Holtwood Company are to receive monthly payments from Pennsylvania Power & Light Company in respect to the several kinds of services rendered at specified rates. (See last paragraph under this main heading). This contract in addition to providing for firm power services also provides for the purchase and sale of electric services on an interchange basis. This contract by its terms continues in force until October 31, 1946 and thereafter for successive periods of two years each unless terminated by either party on eighteen months' written notice prior to the

expiration of any extension period thereto. At present this contract is effective to October 31, 1948.

Copies of the agreements constituting the Lancaster Power Supply Contract dated October 9, 1912, May 1, 1933, June 11, 1934, and Letter Agreements dated April 28, 1939, August 26, 1941 and October 14, 1941 are filed with the Registration Statement as an Exhibit.

(3) Coatesville Power Supply Contract

This contract between the Corporation and Holtwood Company of the one part and Philadelphia Electric Company of the other part, provides that the Corporation and Holtwood [25208] (page 26) Company are to deliver at Coatesville, Pennsylvania, the electric service requirements of the Philadelphia Electric Company for distribution in Coatesville and surrounding territory for which the Corporation and Holtwood Company are to receive monthly payments from Philadelphia Electric Company at specified rates. (See last paragraph under this main heading). This contract continues in force until March 31, 1948. Under the provisions of the contract Philadelphia Electric Company has given notice to the Corporation and Holtwood Company of its desire to terminate this contract on that date unless certain changes and modifications necessitated by conditions in the area supplied can be made in said agreement.

Copies of the agreements constituting this contract dated August 1, 1933 and December 13, 1938 are filed with the Registration Statement as an Exhibit.

(4) Pennsylvania Railroad Power Contract

This contract between the Corporation, Consolidated Company, Potomac Electric Power Company and Holtwood Company of the one part and The Pennsylvania Railroad Company of the other part, provides that the Corporation, Holtwood Company and Con-

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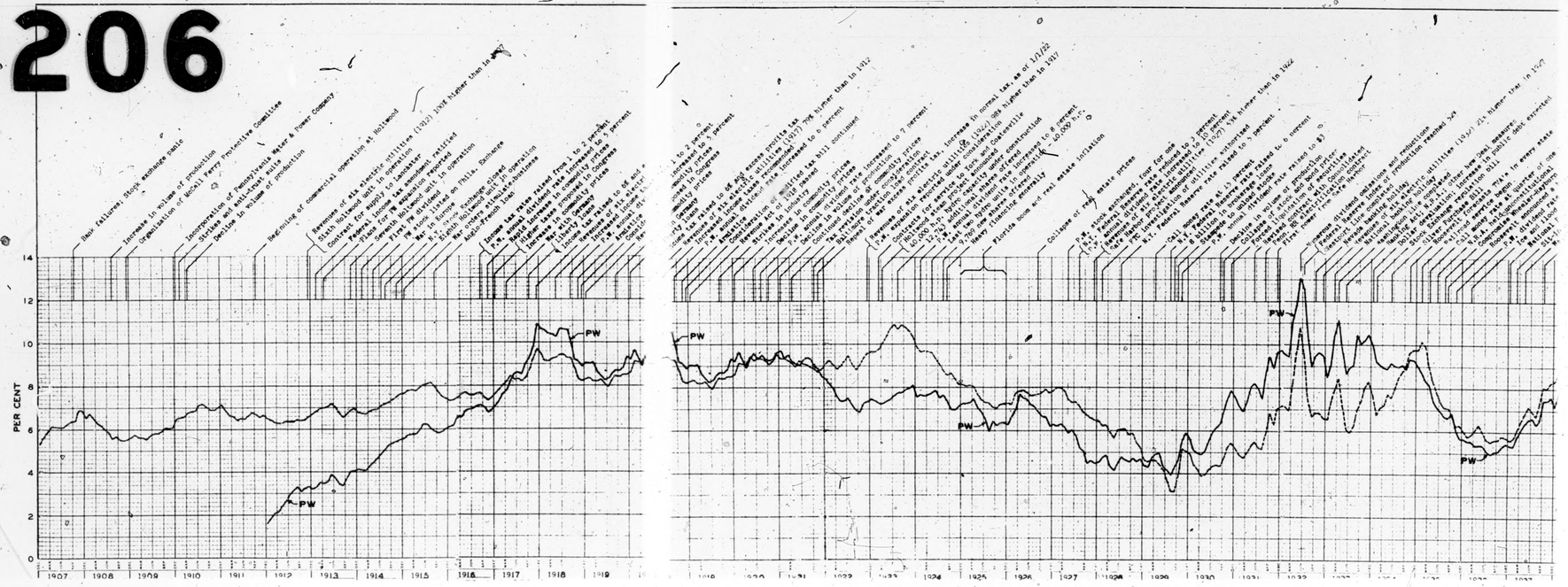
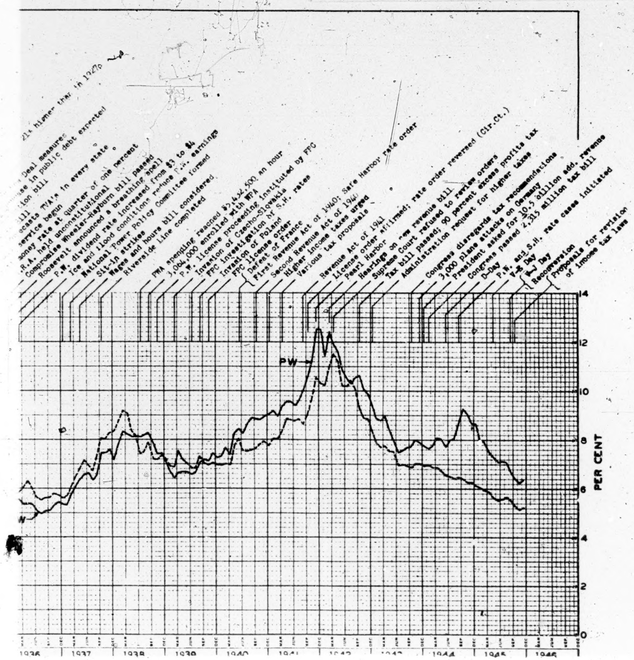
ELECTRIC AND ELECTRIC COMBINATION UTILITY EARNINGS-PRICE RATIOS
MEAN OF MEDIAL FOUR OF SIX RATIOS
AND
PENNSYLVANIA WATER & POWER COMPANY





solidated Company as "Electric Companies", are to supply the entire electrification requirements of the Pennsylvania Railroad for passenger, freight and switching services on the main line of the Philadelphia, Baltimore and Washington Railroad from Perryville, Maryland to Washington, D. C., on the passenger and freight lines of the present Philadelphia Division between Thorndale, Pennsylvania and Harrisburg and Enola, Pennsylvania, on the Columbia and Port Deposit Railroad from Columbia, Pennsylvania to Perryville, Maryland, and yards adjacent thereto and supporting these services. The Railroad Company may also call for additional services on said lines and/or for passenger, freight, and switching services on additional lines in connection with extensions of Railroad Company's electrification and for installation of additional facilities.

To meet the requirements of these contracts special facilities consisting principally of two single phase hydroelectric generating units of 30,000 kw. each and a frequency changer unit of 25,000 kw. capacity were installed by the Corporation in its Safe Harbor Project. This contract continues in force until September 30, 1960.

Copies of the agreements constituting the Pennsylvania Railroad Power Contract dated September 2, 1931, August 15, 1934 and June 22, 1938, in composite form, are filed with the Registration Statement as an Exhibit, and a copy of the Railroad Parallel Operation Agreement between the Corporation, Consolidated Company, Holtwood Company, Philadelphia Electric Company and The Pennsylvania Railroad Company dated June 22, 1938 is filed with the Registration Statement as an Exhibit.

All of the foregoing power supply contracts are now the subject of review as to rates and services by public

regulatory bodies, as is more fully set forth under the heading "Material Litigation". For a description of the Federal Power Commission Order dated October 25, 1946 which was issued November 4, 1946 concerning the rates and charges of the Corporation, see "Material Litigation," subheading "Federal Power Commission."

The Corporation does not directly receive from the receiving Companies under the Lancaster, Coatesville and Railroad power supply contracts, any of the compensation for the joint services rendered under such contracts, but such revenues are received by its Agents, Holtwood Company (under the Lancaster and Coatesville Power Supply Contracts) and Consolidated Company (under the Pennsylvania Railroad Power Contract). All of the Corporation's revenues for services which it renders in connection with these contracts are received solely under the terms of the Three-Party Contract between the Corporation, Consolidated Company and Holtwood Company referred to in item (1) above.

EXHIBIT NO. 500.

[25210]

FEDERAL POWER COMMISSION
Washington

January 9, 1941

Consolidated Gas Electric Light and Power Company of Baltimore,
Lexington and Liberty Streets,
Baltimore, Maryland.

Attention: Mr. William Schmidt, Jr., Vice President.

Gentlemen:

Reference is made to the reports by your company on F. P. C. Form No. 169 and related data on F. P. C. Form No. 64 (1939).

The monthly reports on power requirements and supply, which the Commission is compiling pursuant to the request of the President, indicate that power loads are increasing rapidly in many sections of the country. It therefore becomes increasingly important to appraise more definitely the ability of each power supply system to meet increased power requirements.

In order that the available system capacity, of those systems with considerable hydro capacity, may be treated as a band with the lower limit reflecting conditions equivalent to the most adverse stream flow and the upper limit reflecting conditions equivalent to a year which would give the average annual potential output, the following supplemental information is requested:

1. Available kilowatt-hour output from system hydro plants by months under the following conditions:
   (a) Assuming flows equivalent to the year of most adverse stream flow.

(b) Assuming flows equivalent to a year which would give the average annual potential output.

2. Maximum portion of the peak load in kilowatts which could, on the present load shape, be carried each month by system hydro plants under conditions 1(a) and 1(b).

Data now at hand does not show, except in a few cases, the monthly variation in available system capacity of those systems whose capacity all (or nearly so) comes from fuel plants. In order to have more complete data on this subject, the following supplemental information is also requested:

[25211] (page 2)

1. Maximum continuous capacity in kilowatts available by months from system fuel plants making allowance for any outage which must be scheduled either for maintenance or other reasons. If different under conditions 1(a) and 1(b) of the preceding paragraph, give both.

2. Fuel plant capacity not normally available for service each month under conditions 1(a) or 1(b) of the preceding paragraph due to scheduled maintenance or other reasons. If the scheduling of maintenance is done in cooperation with other interconnected systems, please explain the relations.

It is desired that the supplemental data requested be furnished as soon as possible. The data submitted shall cover the pool operations of all the companies included in the current reports on Form No. 169. Your cooperation in this matter will be greatly appreciated.

Very truly yours,

(Signed) Leland Olds
Chairman.

[25212]

February 27, 1941.

Federal Power Commission,
Washington, D. C.

Attention of Mr. Leland Olds, Chairman.

Gentlemen:

In reply to your letter of January 9, 1941, we are submitting on the attached Tabulation I our understanding of the supplemental data requested covering the combined operations of the Holtwood, Safe Harbor, Baltimore, Bethlehem Steel and Washington Systems.

In reference to the data on hydro energy and capacity it is desired to especially call attention to the fact that it is not possible to select any one year which, as a whole, has the most adverse stream flow with respect to both available energy and capacity, as the Safe Harbor and Holtwood hydro plants do not have seasonal storage facilities. Therefore, both capacity and energy corresponding to the most adverse stream flow conditions for each month have been given in the attached Tabulation I, without regard to the year in which these conditions may have occurred. In many instances the years were different, with respect to the different months and in addition with respect to energy and capacity for the same month.

More specifically, the energy figures in Column 1 show the lowest available energy output for each calendar month, most of which are based on river flow records of different years. The kilowatts shown in Column 3 represent the difference between the maximum clock hour integrated load and the maximum kw. steam generation which would be required during each of these months based on estimated 1941 loads, present hydro facilities and the most adverse river flow with respect to capacity recorded for the respective months in the past 50 years. Floods are the controlling condition in March, April and May and low flows in the other months with normal weekly use of hydro stor-

age. The river flows used as the basis for the capacity shown in Column 3 are different in many months from those used as the basis for the energy shown in Column 1.

The figures shown in Column 4 have been derived in the same manner as those in Column 3, except that they are based on the average weekly energy, with normal weekly use of hydro storage, corresponding to the average potential monthly hydro output shown in Column 2.

It should be clearly recognized that there has never been a year when the river flow conditions were so severe as to result in the hydro capacity being reduced throughout the whole year to that shown in Column 3. The available hydro capacity for the greater part of the time is equal to or greater than that shown in Column 4 and the period of time during which the capacity approaches that shown in Column 3 is comparatively small. The "most adverse" river flows which [25213] (page 2) are the basis of the capacities in Column 3 have occurred but once in 50 years and not all in the same year. In the peak load season, November and December, the potential capacity with the present plants in nine out of ten years has been equal to or greater than that shown in Column 4 for that period of the year.

Also it is desired to point out that the figures in Column 3 have been derived on the basis used to determine the *limiting condition* for arranging maintenance schedules. The present practice, in general, is to allow capacity equivalent to the largest unit for operating spare (now 48,000 kw.) plus the small standby plant at Westminster, Maryland, and to rely upon hydro storage for additional reserve (the usable hydro storage will provide for slightly more than the loss of the largest unit on the system for a week, which in itself is believed to be a severe assumption). These monthly hydro capacity figures are *not* on the same basis as that which is used to determine requirements for capacity installation and which is reported on FPC Form 64 in connection with the annual peak. The latter figure

is determined by including use of hydro storage over a 20-day period based on the very conservative assumption of the simultaneous loss of capacity equal to that of the two largest units for the entire 20-day period.

In reference to the fuel plant capacities it will be noted that in certain months the capacity shown in Column 7, as not normally available under "most adverse stream flow" conditions, is less than the corresponding capacity shown in Column 8 for "average output" conditions. The difference is due to certain maintenance outages scheduled for normal river conditions being subject to deferment to other more favorable periods in the same year or succeeding year dependent upon the actual or immediately prospective river conditions. The capacity figures in Columns 7 and 8 also show, in addition to scheduled maintenance outage, capacity unavailable due to other causes such as allowance for certain unscheduled maintenance outages of boilers and gas-electric engines which are required at frequent periods, inability of available boilers to sustain rated output of the plant for a continuous period, and condenser water limitations. A portion of this capacity is available for carrying peak loads of short duration (i. e., one hour or less).

To further clarify the use of the attached capacity data we are submitting Tabulation II which shows for both "average" and "most adverse" river conditions the application of these figures in Schedule 16, FPC Form 64 or Schedule 3, FPC Form 169 (1941) to determine "net assured" capacity for operating purposes.

Yours very truly,

(Signed) F. E. Ricketts
Vice-President.

Enclosures
FMJ

TABULATION I

SUPPLEMENTAL DATA REQUESTED BY FEDERAL POWER COMMISSION IN LETTER OF JANUARY 9, 1941, FOR COMBINED HOLTWOOD, SAFE HARBOR, BALTIMORE, WASHINGTON AND BETHLEHEM STEEL SYSTEMS

	1	2	3	4	5	6	7	8
	Available Kw.-Hr. Output from System Hydro Plants by Months		Maximum Portion of Peak Load in Kw. Which Could on the Present Load Shape (1941) be carried by the System Hydro Plants		Maximum Continuous Capacity in Kw. Available from System Fuel Plants		Fuel Plant Capacity in Kw. Not Normally Available from System Fuel Plants Due to Scheduled Maintenance or Other Reasons	
Months	Most Adverse Stream Flow	Average Potential Hydro Output	Most Adverse Stream Flow	Average Potential Hydro Output	Most Adverse Stream Flow	Average Potential Hydro Output	Most Adverse Stream Flow	Average Potential Hydro Output
January	26,600,000	123,600,000	181,000	305,000	583,150	563,150	60,800	80,800
February	46,000,000	125,100,000	171,000	305,000	574,950	530,950	69,000	113,000
March	130,700,000	198,100,000	207,000	315,000	534,250	503,250	109,700	140,700
April	144,700,000	192,800,000	259,000	315,000	502,250	502,250	141,700	141,700
May	72,500,000	161,000,000	234,000	315,000	531,250	531,250	112,700	112,700
June	52,800,000	116,700,000	171,000	305,000	567,950	547,950	76,000	96,000
July	33,900,000	85,200,000	155,000	270,000	615,550	595,550	28,400	48,400
August	17,200,000	69,000,000	117,000	236,000	624,950	624,950	19,000	19,000
September	14,100,000	61,800,000	125,000	243,000	674,950	674,950	19,000	19,000
October	14,100,000	78,100,000	172,000	288,000	649,950	649,950	44,000	44,000
November	14,100,000	96,800,000	200,000	305,000	683,950	683,950	10,000	10,000
December	23,500,000	123,300,000	196,000	305,000	683,950	683,950	10,000	10,000

Note: The data given above are applicable only under the conditions described in the attached letter and as shown in Tabulation II.

2/24/41-J-7

TABULATION II

COMBINED HOLTWOOD, SAFE HARBOR, BALTIMORE, WASHINGTON AND BETHLEHEM STEEL SYSTEMS.

"NET ASSURED" CAPACITY FOR OPERATING PURPOSES IN KILOWATTS - METHOD OF SCHEDULE 3, FPC FORM 169 (1941)

FOR YEAR 1941

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Assuming "Most Adverse Stream Flow"												
1. Net available capacity from:												
a. System fuel plants	583,150	574,950	534,250	502,250	531,250	567,950	615,550	624,950	674,950	649,950	683,950	683,950
b. System hydro plants	181,000	171,000	207,000	259,000	234,000	171,000	155,000	117,000	125,000	172,000	200,000	196,000
c. Subtotal (a plus b)	764,150	745,950	741,250	761,250	765,250	738,950	770,550	741,950	799,950	821,950	883,950	879,950
2. Total Reserve Capacity Required	49,450	49,450	49,450	49,450	49,450	49,450	49,450	49,450	[illegible],450	51,450	51,450	51,450
3. Subtotal (1c minus 2)	714,700	696,500	691,800	711,800	715,800	689,500	721,100	692,500	748,500	770,500	832,500	828,500
4. Capacity available from firm purchases	0	0	0	0	0	0	0	0	0	0	0	0
5. Firm obligations to systems other than those whose requirements are included in Schedule 1, item 5	51,000	49,000	55,000	53,000	58,000	50,000	53,000	53,000	52,000	54,000	59,000	59,000
6. Net assured system capacity (3 plus 4 minus 5)	663,700	647,500	636,800	658,800	657,800	639,500	668,100	639,500	696,500	716,500	773,500	769,500
Assuming "Average Potential Hydro Output"												
1. Net available capacity from:												
a. System fuel plants	563,150	530,950	503,250	502,250	531,250	547,950	595,550	624,950	674,950	649,950	683,950	683,950
b. System hydro plants	305,000	305,000	315,000	315,000	315,000	305,000	270,000	236,000	243,000	288,000	305,000	305,000
c. Subtotal (a plus b)	868,150	835,950	818,250	817,250	846,250	852,950	865,550	860,950	917,950	937,950	988,950	988,950
2. Total Reserve Capacity Required	49,450	49,450	49,450	49,450	49,450	49,450	49,450	49,450	51,450	51,450	51,450	51,450
3. Subtotal (1c minus 2)	818,700	786,500	768,800	767,800	796,800	803,500	816,100	811,500	866,500	886,500	937,500	937,500
4. Capacity available from firm purchases	0	0	0	0	0	0	0	0	0	0	0	0
5. Firm obligations to systems other than those whose requirements are included in Schedule 1, item 5	59,000	57,000	55,000	53,000	58,000	50,000	53,000	53,000	52,000	54,000	59,000	67,000
6. Net assured system capacity (3 plus 4 minus 5)	759,700	729,500	713,800	714,800	738,800	753,500	763,100	758,500	814,500	832,500	878,500	870,500

2/24/41-J-7

EXHIBIT NO. 501.

[25216]

CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE

February 10, 1942

Mr. A. J. Kohler, Associate Engineer,
Federal Power Commission,
1735 Baltimore Trust Building;
Baltimore, Maryland.

Dear Mr. Kohler:

Confirming our conversation in your office, I wish to supply the following description of the changes we wish to propose in the load and generation data supplied to the Commission.

In July of 1941 our system load records were changed from a delivered or net basis to the basis of main unit output. With the growth of system loads, larger steam units and more transmission lines, it afforded considerable advantages in system operation and simplicity of records to include transmission losses and generating station use as part of the system requirements to be provided for. Because of the magnitude of the system load, it was no longer considered practicable to record hourly load data to less than whole megawatts. Operating capacity figures are also reported to even megawatts and show capability of main generators without deductions for station use or transmission losses.

As a result of the change in our load and capacity records it has been necessary in our reports to the Commission, since July 1941, to convert all of our generating records over to the basis provided by the forms. It is felt that a better picture of the relationship of our system load and capacity can be obtained directly from the operating rec-

ords. Accordingly, we have selected the month of December 1941 for example and prepared a copy of Form No. 169 on the proposed basis.

The only change from the original report which has been made in Schedules 1 and 2 is to include the transmission losses and generating station uses.

A comparison of the capacity figures shown in Figure 3 of the proposed report with those reported on the form actually submitted is shown below:

	Proposed Form	Net Basis Used for December, 1941
1-a. Net Dependable Capacity Available from system fuel plants:		
Westport	266,000	240,000
Gould St.	71,000	67,000
Pratt St.	18,000	18,000
Westminster	1,000	1,450
Benning	175,000	171,000
Buzzard Point	120,000	115,000
Bethlehem Steel Co.	46,000	45,000
Holtwood	26,000	24,000
Total	723,000	681,450

[25217] (page 2)

1-b. Net Dependable Capacity Available from system hydro plants	265,000	253,000
2- Reserve Capacity Required		
Largest Baltimore Unit	59,000	50,000
Largest Washington Unit	50,000	48,000
Westminster (Cold Reserve)	1,000	1,450
Total	110,000	99,450

The change of 26,000 kw. in the capacity of Westport is due to 6,000 kw. station use supplied from the main bus and 20,000 kw. additional capability which was demonstrated during the sustained low flow periods of 1941. The change of 4,000 kw. in Gould St. capacity is due to 3,000 kw. station use supplied from the main bus and 1,000 kw. additional capability.

The Pratt St. capacity is the metered output of the generating unit as no facilities are provided for station use metering at this plant.

The Westminster capacity has been reduced to the nearest whole megawatt.

The capacities shown for the Buzzard and Benning stations are the capacities furnished by the Potomac Electric Power Company adjusted for station use.

The difference in the figures for Bethlehem Steel Company's capacity represents the estimated station use which was deducted in previous reports.

The difference of 2,000 kw. shown for the Holtwood Steam plant represents the combination of station use and transmission losses. This is likewise true as regards the difference of 12,000 kw. shown in the dependable capacity of the system hydro plants.

The difference in the reserve capacity required was caused by the increased capability demonstrated by No. 2 unit at Westport, the largest Baltimore steam unit, the change from net to gross capacity of the Buzzard unit, and the revised rating of the Westminster plant to the nearest whole megawatt.

From a comparison of the proposed form with the report submitted for December 1941, it may be seen that the effect of these changes has been to increase the peak load shown in Schedule 2 for December 1942 by 37,000 kw., while the net assured system capacity, Line 6, Schedule 3, has been changed by 43,000 kw. This represents a net gain to the system of only 6,000 kw. of generating capacity from the proposed revision in the basis of reporting. It should

be noted that the capacities given in the revised report are based on average winter circulating water conditions which prevail at time of the present annual peak load. For circulating water temperatures higher than those estimated for the present annual peak period the capacity of the fuel burning plants will be reduced appreciably.

[25218] (page 3)

The adoption of this proposed method will not only give a more accurate report of the system load and capacity relations, but will eliminate the necessity of obtaining hourly readings of station use and keeping duplicate records of system load, now required only for the purpose of reports to the Commission.

Very truly yours,

(Signed) R. T. Greer
R. T. Greer, Director,
Intersystem Power Utilization Bureau

RTG:JC

This report was discussed with Mr. Penniman in his office on February 11, 1942 and he approved giving this information to the Commission.

(Signed) R. T. G.
2/11/42

EXHIBIT NO. 506.

[25298]

CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE

ANNUAL REPORT TO SEC

Form 10-K 1941

NOTES APPLICABLE TO STATEMENT OF OPERATIONS

Note 1

Under contracts with Safe Harbor Water Power Corporation and Pennsylvania Water & Power Company to continue in force until April 22, 1980, whereby the Company purchases the entire electrical energy output of the plants now operated by those companies except such energy as is sold by those companies to other customers, the Company pays annual charges for the purchase of electrical power from those companies independent of the volume of energy received. The proceeds of all sales of power by those companies to other customers are deducted in determining the payments the Company is required to make.

Schedule X

Additional Data Derived from Tables V and V-B and Revision of Table III-A

Cost of Capacity and Energy Supplied by "Diversion from Baltimore" = 2/3 of Safe Harbor"

		Total	Capacity	Energy
1	Cost of 2/3 of SH Capacity and Energy (2 times the amount in line 20, col 1, Table V, Ex 421)	2014370		
2	Allocation of SH Hydro Costs, 74.85 % to Capacity and 25.15 % to Energy		1507756	506614
3	2/3 of CH Services Capacity (2/3 amount in line 9, col. 3, Table V-A, Ex 421)		105688 kw	
4	Energy (2 times the amount in line 2, col. 3, Table V-B, Ex 421)			584,646,000 kwh
5	Unit Cost of Services Purchased from Baltimore's 2/3 of Safe Harbor", Capacity		$14.27/kw	
6	Energy			0.867 mills/kwh

Diversion of Supply by Baltimore" between Backfeed and "Diversion from Baltimore's 2/3 of Safe Harbor" (Based on Table V-B, Ex 421)

		Energy 1000 kwh	Energy 1000 kwh	Lines 9 & 12 as percent of Line 12	Supply in Ex "Holtwood Resources" %	"Holtwood Resources" 1000 kwh	Supply in Ex "Supply by Baltimore" %	"Supply by Baltimore" 1000 kwh
7	Backfeed on 220 kv lines (line 8, Table V-B, Ex 421)	157961	157961					
8	Backfeed at Holtwood" (line 9 " ")	1676	1676					
9	Total of Backfeed	159687	159687	17.02 %				
10	"Diversion from Baltimore's 2/3 of Safe Harbor" (line 10, Table V-B, Ex 421)	162677	162677	17.34				
11	Total "Supply by Baltimore"	322314	322314	34.36 %				
12	Total available supply for firm and interchange sales in Pa (line 12, Table V-B)	937950	937950	100.0 %				
13	Total firm load requirements in Pa. (line 13, col. 6, Table V-B, Ex 421)	746286	746286					
14	Supply from "Holtwood Resources" (line 13, col. 7 and 8, Table V-B, Ex 421)				65.64 %	489835		
15	Backfeed						17.02 %	127031
16	"Diversion from Baltimore's 2/3 of Safe Harbor"						17.34 %	129420

11	Total "Supply by Baltimore"	322314	322314	34.36 %				
12	Total available supply for firm and interchange sales in Pa (line 12, Table V-B)	937950	937950	100.0 %				
13	Total firm load requirements in Pa. (line 13, col. 6, Table V-B, Ex 421)	746286	746286					
14	Supply from "Holtwood Resources" (line 13, col. 7 and 8, Table V-B, Ex 421)				65.64 %	489835		
15	Backfeed						17.02 %	127031
16	"Diversion from Baltimore's 2/3 of Safe Harbor"						17.34 %	129420

Adjustment of Revenue from Baltimore (Revision of Table III-A)

17	Revenue from Baltimore, as reported	$1,104,952	(Note - No adjustment reported for
18	Revenue from net interchange in Pa	1127699	(Note - No adjustment made of revenues as reported from PRR in Pa.)
19	Total	$2232651	

Table V-A (Revised)

Dependable Capacity Available to Baltimore, and Capacity "Supply by Baltimore"

Schedule Y

		Holtwood Steam 1	Holtwood Hydro 2	Safe Harbor 3	Total Hydro 4	Total Hydro and Steam 5	Safe Harbor 3	Total Hydro 4	Total Hydro and Steam 5	Sum Loads 6	Sum Loads plus Reserve 7	"Holtwood Reserves" amount 8	"Holtwood Reserves" % of Total 9	"Supply by Baltimore" 10
1														
2														
3														
4	Lines 1 to 9, cols. 1 to 5, are the same as													
5	the corresponding lines and columns													
6	of Table V-A, Exhibit 421													
7														
8														
9	"Net dependable capacity available for load"	25784 kw	71684 kw	158332 kw	230216 kw	214 kw	158332 kw	230216 kw	256000 kw					
	Amount and Use of "Holtwood Reserves"													
10	"Holtwood net dependable capacity" - Steam											25784 kw		
11	" " " - Hydro											71684		
12	"1/3 of SH " "											32844		
13	Total Holtwood plus 1/3 of SH - "Holtwood Reserves" of "net dependable capacity"											150312 kw	100. %	
14	Capacity delivered to Baltimore at Highland Jct. (1945 and 1946 experience corresponding to Total Hydro generation of 250,000 kw)											53,000 kw	35.26 %	
15	Balance of "Holtwood Reserves" used in Pa.											97312 kw	64.74 %	
	Demands of Pa. Customers on System Peak													
16	P.P.+L. Co.									55000 kw	60500 kw			
17	P.E. Co.									27000	29700			
18	M.E. Co. (no reserve provided for this load)									21000	21000			
19	PRR in Pa. (use 47% of total PRR load)									30550	33605			
20	Total									133550 kw	144805 kw	144805 kw		
21	"Supply by Baltimore" or "Diversion from Baltimore" is 2/3 of Safe Harbor (20-15)													47493 kw

Table II (Revised)

Assembly of Capacity, Energy, and Special Facility Costs for Each Customer and Credit to Baltimore, Comparison of Costs and Revenues

Schedule Z

		Capacity Services kw	Energy Services million kwh	Capacity Cost $1000	Energy Cost $1000	Special Facility Cost $1000	Total Costs (and Credits) $1000	Energy Cost $1000	Special Facility Cost $1000	Total Costs (and Credits) $1000	Net Costs $1000	Total Revenues $1000	Excess Revenues $1000	Excess Revenues %
		1	2	3	4	5	6	$	5	6	7	8	9	10
	Pennsylvania Customers and PRR in Pa													
1	PP + L Co.	67 000	308.6	1110.9	556.5	10.8	1678	556.5	10.8	1678.2	1678.2	1958.4	280.2	12.3
2	PE Co.	26 000	135.6	431.1	244.5	59.2	734	244.5	59.2	734.8	734.8	948.9	214.1	9.4
3	ME Co.	23.000	88.6	381.3	159.8	34.5	575	159.8	34.5	576.6	575.6	667.4	91.8	4.1
4	PRR in Pa.	38 000	213.5	630.0	384.9	94.0	1108	384.9	94.0	1108.9	1108.9	1625.6	516.7	22.7
4a	Subtotal	154000	746.3	(a) 2553.3	(b) 1345.7	198.5	4097	1345.7	198.5	4097.5	4097.5	5200.3	1102.8	48.5
5	Baltimore													
5a	Service to Baltimore, and Costs	53.000	502.5	(c) 1021.5	(d) 652.9	772.6	2447	652.9	772.6	2447.0				
5b	Supply by Baltimore, and Credits	47500	256.5	(e) 677.7	(e) 709.2	—	(e) 1386	709.2	—	(e) 1386.9				
5c	Net Service and Cost to Baltimore	5500	246.0	343.8	(56.3)	772.6		(56.3)	772.6		1060.1	2232.6	1172.5	51.5
6	Total (4a plus 5c)	159500	992.3	2897.1	1,289.4	971.1		1,289.4	971.1		5157.6	7432.9	2275.3	100.0

Notes

(a) Cost of Capacity for Pennsylvania Customers and PRR in Pa.

64.74 % of the cost of capacity (line 26, Table V) from "Holtwood Reserves" 64.74% x $2897,112 = $1875590

47,473 kw "Diversion from Baltimore's 2/3 of Safe Harbor" 47,493 kw x $14.27 = 677.725

Total cost distributed to the Pennsylvania Customers in proportion to max. demands $2553315

(b) Cost of Energy for Pennsylvania Customers and PRR in Pa.

65.69 % from "Holtwood Reserves", at cost of 1.30 mills/kwh = 0.853

7.02 % from Conowingo, at assumed cost of 4.70 0.800

27.34 % by "Diversion from Baltimore's 2/3 of Safe Harbor" at cost of 0.867 0.150

Weighted average unit cost applied to Pa. Customers from energy mills/kwh = 1.803

(c) Cost of Capacity

35.26 % of the cost of capacity (line 26, Table V) from "Holtwood Reserves" 35.26% x $2897112 = $1021522

(d) Cost of Energy for Baltimore

502,485,000 kwh (line 15, col 11, Table V-B) at 13 mills/kwh = $652919

(e) Credits to Baltimore

for backfeed 127.031.000 kwh (Sch X) at 4.7 mills/kwh = $597.046

for energy "Diverted from Baltimore's 2/3 of Safe Harbor" 194260000 kwh (Sch X) at 0.867 mills/kwh = 112207

Subtotal - energy credits $709.253

for capacity "Diverted from Baltimore's 2/3 of Safe Harbor" 47.493 kw (Sch Y) at $14.27/kw = 677.725

Total credits $1,386778

RELATIONS OF (1) HOLTWOOD HYDRO GENERATION, (2) 25 CYCLE DELIVERY TO HIGH LAND TOWN AND (3) P.W. & S.H. TRANSM. LOSSES AND STATION USES TO TOTAL P.W. & S.H HYDRO GENERATION, FOR THE HOURS OF SYSTEM PEAK LOAD (AREA G + PA. CUST.) ON ALL DAYS OF 1945 & 1946 EXCEPT SAT., SUN & HOL. AND THOSE DAYS ON WHICH HYDRO UNITS (AT HOLT OR S.H.) WERE OUT OF SERVICE FOR MAINTENANCE

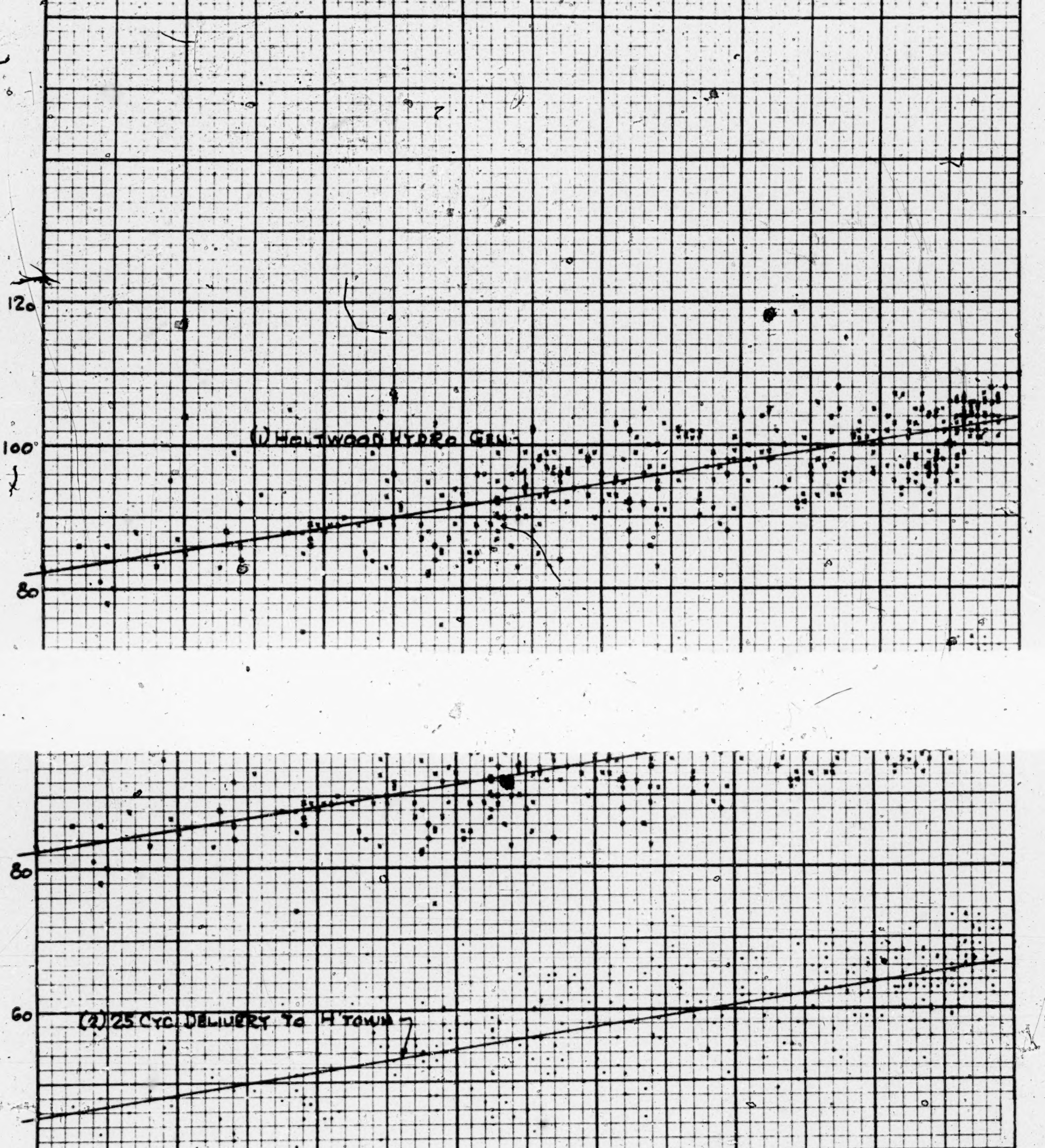


EXHIBIT NO. 511.

[25311]

January 6, 1947

To Mr. F. A. Leslie
From R. L. Ashley

Subject Revised Basis for Average Flow Hydro Generation.

When the present basis for computing excess and deficiency in the hydro generation was agreed upon in 1944, average flow generation was based on the 25-year record from 1917 to 1941, inclusive; however, it was agreed between the Pennsylvania Water & Power Company and ourselves, as stated in Mr. Greer's memorandum of December 21, 1944, that this basis would be revised at five-year intervals as soon as additional data are available. Therefore, beginning January 1, 1947, computations of excess and deficiency of hydro generation will be based upon the following average figures which have been determined for the 30-year period of 1917 to 1946, inclusive:

30-Year Average Flow Hydro Generation
100% Utilization
(1000's of Kilowatthours)

	Per Day	Per Week	Per Month
Jan.	4,343	30,401	134,633
Feb.	4,570	31,990	*127,960
Mar.	6,901	48,307	213,931
Apr.	6,936	48,552	208,080
May	5,672	39,704	175,832

*In leap year the figure for February is 132,530 mwh.

Exhibit No. 511

	Per Day	Per Week	Per Month
June	3,977	27,839	119,310
July	2,796	19,572	86,676
Aug.	2,181	15,267	67,611
Sept.	1,986	13,902	59,580
Oct.	2,618	18,326	81,158
Nov.	3,976	27,832	119,280
Dec.	4,256	29,792	131,936
			1,525,987

The above figures are for the entire year, and this letter supersedes a previous letter dated December 31, 1946 which contained figures for only 11 months.

R. L. ASHLEY
Assistant Director
Intersystem Power Utilization Bureau

RLA:JC

CC to Messrs. Sherry, Knight and Von Eiff

Copy sent: Messrs. Spaulding, Watchorn, Loane, Seitz, Stumpf.

HAV:K 1-21-47

EXHIBIT NO. 512.

[25313]

CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE

NOTES APPLICABLE TO STATEMENT OF OPERATIONS

PROSPECTUS

223,063 Shares

CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE

Preferred Stock, Series B 4½%

• • •

Note III: Under contracts with Safe Harbor Water Power Corporation and Pennsylvania Water & Power Company (see pages 23, 24) whereby the Company purchases the entire electrical energy output of the plants now operated by those companies except such energy as is sold by those companies to Pennsylvania customers, the Company pays annual charges for the purchase of electrical power from those companies independent of the volume of energy received.

Vol. XV

TRANSCRIPT OF RECORD

(Pages 4537 to 4806)

Supreme Court of the United States

OCTOBER TERM, 1951

No. 428

PENNSYLVANIA WATER AND POWER COMPANY AND SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND, PETITIONERS,

vs.

FEDERAL POWER COMMISSION ET AL.

No. 429

PENNSYLVANIA PUBLIC UTILITY COMMISSION, PETITIONER,

vs.

FEDERAL POWER COMMISSION

ON WRITS OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

PETITIONS FOR CERTIORARI FILED NOVEMBER 16, 1951

CERTIORARI GRANTED FEBRUARY [illegible], 1952

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B	Agreement between Pennsylvania Water & Power Company and Susquehanna Transmission Co. of Maryland dated April 3, 1911	4540
C	Agreement between Pennsylvania Water & Power Company, Susquehanna Transmission Co. of Maryland, and Consolidated Gas Electric Light and Power Company of Baltimore dated March 19, 1931	4543
D	Supplemental Agreement between Pennsylvania Water & Power Company, Susquehanna Transmission Co. of Maryland, and Consolidated Gas Electric Light and Power Company of Baltimore dated August 1, 1932	4550
E	Agreement between Safe Harbor Water Power Corporation, Consolidated Gas Electric Light and Power Company of Baltimore, and Pennsylvania Water & Power Company dated June 1, 1931	4554
F	Supplemental Agreement between Safe Harbor Water Power Corporation, Consolidated Gas Electric Light and Power Company of Baltimore, and Pennsylvania Water & Power Company dated August 1, 1932	4570
G	Supplemental Agreement between Safe Harbor Water Power Corporation, Consolidated Gas Electric Light and Power Company of Baltimore, and Pennsylvania Water & Power Company dated November 22, 1939	4574
H	Agreement between Consolidated Gas Electric Light and Power Company of Baltimore and Pennsylvania Water & Power Company dated December 31, 1927 and Supplemental Agreements dated December 27, 1928 and June 1, 1931	4577
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W	Order of Federal Power Commission Permitting Merger of Pennsylvania Water & Power Company, Susquehanna Transmission Co. of Pennsylvania, and Pennsylvania Transmission Company	4639
X	Pennsylvania Water & Power Company Application for License from Federal Power Commission for Holtwood Project (Excerpt)	4643
AA	Safe Harbor Water Power Corporation Annual Report to FPC for Year Ended December 31, 1945 (Excerpt)	4645
BB	Pennsylvania Water & Power Company Annual Report to FPC for Year Ended December 31, 1945 (Excerpts)	4647
HH	Pennsylvania Water & Power Company, Safe Harbor Water Power Corporation, Power System Statement for 1945 (Excerpts)	4653
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SS	Pennsylvania Water & Power Company Annual Report to FPC for Year Ended December 31, 1946 (Excerpt)	4667
VV	Pennsylvania Power & Light Company Annual Report to FPC for Year Ended December 31, 1945 (Excerpts)	4682
BBB	Philadelphia Electric Company Annual Report to FPC for Year Ended December 31, 1944 (Excerpts)	4685
EEE	Pennsylvania Water & Power Company Annual Report to FPC for Year Ended December 31, 1937 (Excerpts)	4688
MMM	Safe Harbor Water Power Corporation Annual Report to FPC for Year Ended December 31, 1937 (Excerpts)	4695
AAAA	Testimony of J. U. Diehl in Merger Proceeding, Docket No. IT-5582, IT-5583	4699
CCCC	Testimony of J. A. Walls in Safe Harbor Water Power Corporation Rate Proceeding, Docket No. IT-5914	4701

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IIII	Pennsylvania Water & Power Company, Safe Harbor Water Power Corporation, Power System Statement for 1946 (Excerpt)	4714
JJJJ	Consolidated Gas Electric Light and Power Company of Baltimore Annual Report to FPC for Year Ended December 31, 1946 (Excerpts)	4724
KKKK	Consolidated Gas Electric Light and Power Company of Baltimore Annual Report to FPC for Year Ended December 31, 1944 (Excerpt)	4729

	Joint Petition of the Mayor and City Council of Baltimore, County Commissioners of Baltimore County, Bethlehem-Fairfield Shipyard, Inc., and Rustless Iron & Steel Corp. dated August 12, 1944	4731
	Letter of Public Service Commission of Maryland dated August 30, 1944 Requesting Rate Investigation	4734
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Letter to Federal Power Commission from Consolidated Gas Electric Light and Power Company of Baltimore, dated June 14, 1949, with Memorandum in Respect to Proposed Electric Tariff	4763
Letter to Federal Power Commission from Pennsylvania Water & Power Company, dated June 24, 1949, Objecting to Comments of Consolidated Gas Electric Light and Power Company of Baltimore	4798
Letter to Pennsylvania Water & Power Company from Federal Power Commission, dated October 27, 1949, Transmitting Order Entered by the Commission on October 25, 1949	4799
Letter to Pennsylvania Water & Power Company from Federal Power Commission, dated December 15, 1949, Transmitting Order Entered by the Commission on December 14, 1949	4803

ITEM A

[25347] (page 1)

THIS AGREEMENT made this 12th day of April, 1910, between PENNSYLVANIA WATER & POWER COMPANY, a corporation of the State of Pennsylvania, party of the first part, hereinafter called the Power Company, and SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND, a corporation of the State of Maryland, party of the second part, hereinafter called the Transmission Company.

WITNESSETH that WHEREAS the Transmission Company has begun the construction and equipment of a Transformer House in Orangeville, Baltimore County, Maryland, and the construction of a line for the transmission of electric current between said Transformer House and a point on the State line between Pennsylvania and Maryland, for which purpose it has acquired a Right of Way, and

WHEREAS it is desirous of completing this Transformer House and line without interruption, in accordance with plans which were prepared by the Power Company and are known to it, and for this purpose requires to have a guarantee of sufficient funds to cover previous and future expenditure.

NOW THEREFORE the Power Company hereby guarantees to furnish to the Transmission Company all monies necessary for the completion of the Transformer House and transmission line, in accordance with such plans, in such amounts and at such times as said Transmission Company may desire, it being understood that the total amount of money so advanced shall be sufficient to include all expenses incidental to the completion of said Transformer House and Transmission Line, including salaries of engineers and draughtsmen, wages of laborers, cost of material and all other legitimate items of expense connected therewith, and the Power Company hereby binds itself to furnish monies

as aforesaid, regardless of any business or financial depression, or any other unfavorable condition, which may arise prior to the completion of said Transformer House and transmission line.

In consideration of the undertakings of the Power Company hereinbefore set forth, the Transmission Company hereby agrees to mortgage all property, real and personal, and all easements, privileges, franchises and rights which it now has, or hereafter may acquire by a Deed of Trust in which such institution, person or persons as the Power Company may designate, shall be named as Trustee or Trustees to secure an issue of Bonds not to exceed Two Million Five Hundred Thousand Dollars ($2,500,000.00) and to issue and deliver to the Power Company such Bonds taken at 90% of their face value plus accrued interest, to an amount equal to the total amount of money advanced by the Power Company to the Transmission Company, that is, for every Nine Hundred Dollars ($900.00) advanced by the Power Company, the Transmission Company will deliver to the Power Company Bonds to the value of One Thousand Dollars ($1,000.00), said Bonds to be dated July 1st, 1910 and to bear interest at the rate of Five Per Cent (5%) per annum from the date of issue, delivery to the Power Company to be made on August 1st, 1910, of Bonds to an amount equal to the amount of money already advanced by the Power Company to the Transmission Company, and to [25348] (page 2) be made on the first day of each month thereafter to an amount equal to the amount of money advanced by the Power Company to the Transmission Company during the preceding month, and to be made as to all said Bonds remaining upon the completion of said Transmission line. The Deed of Trust and the Bonds are to be in such form as the Power Company shall require.

It is further agreed that should the Transmission Company undertake the construction of lines, the erection of buildings or any other work in addition to that specified in this agreement, the Power Company will furnish the neces-

sary monies on the same terms and conditions as hereinbefore set forth, provided that before beginning such new work the Transmission Company shall secure the approval of the Power Company and shall carry out such new work in accordance with plans prepared by the Power Company.

IN WITNESS WHEREOF, this instrument has been executed by the parties hereto, the day and year first above written.

PENNSYLVANIA WATER & POWER COMPANY
(SEAL)

(Signed) J. E. Aldred
President

(Signed) Sherman L. Lewis
Secretary

SUSQUEHANNA TRANSMISSION CO. OF MARYLAND
(SEAL)

(Signed) Chas. E. F. Clarke
President

(Signed) Sherman L. Lewis
Secretary

ITEM B

[25349] (page 1)

THIS AGREEMENT, made this 3rd day of April, 1911, between the PENNSYLVANIA WATER & POWER COMPANY, a corporation of the State of Pennsylvania (hereinafter called "The Power Company"), and the SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND, a corporation of the State of Maryland (hereinafter called "The Transmission Company");

WITNESSETH THAT WHEREAS the Power Company has a hydro-electric power plant at or near McCall Ferry, Pennsylvania, and has contracted to supply electric power therefrom to purchasers in the City of Baltimore; and

WHEREAS, The Transmission Company has a transmission line extending from the end of the transmission line of the Susquehanna Transmission Company of Pennsylvania, at the Maryland and Pennsylvania State Line, to a point outside of the City of Baltimore, where The Transmission Company has a transformer station; and

WHEREAS, The Power Company is entitled to first mortgage five per cent. bonds of The Transmission Company of an aggregate par value of $1,032,000. for advances made to April 1, 1911, and to additional bonds of the same series for advances since made, and will be entitled to further bonds upon making subsequent advances, pursuant to the contract between the parties hereto;

NOW, THEREFORE, in consideration of the premises, and of the mutual covenants and promises of the parties, it is agreed as follows:

The Transmission Company agrees to receive at said State Line such electricity and electrical energy as may be delivered to it by The Power Company, not exceeding the capacity of its line, and carry and deliver the same, less the

natural loss of transmission, to said transformer station, and there transform the same to such voltage as may be required by The Power Company, and thereupon make delivery thereof at said transformer station to purchasers from The Power Company, as may be directed by The Power Company.

The Transmission Company further agrees to maintain, operate and keep in repair its said transmission line and transformer station, and pay the taxes, insurance and other necessary expenses in connection therewith.

In consideration of the premises, The Power Company agrees to forbear and waive the payment of the interest for each successive six months' interest period on the bonds of The Transmission Company held by The Power Company, and to endorse upon such bonds at each interest date a cancellation of the interest accruing for the preceding six months, provided, however, The Transmission Company shall have faithfully performed its obligations under this agreement to such date. The Power Company agrees that such cancellation of interest on the bonds shall be operative though the bonds are deposited with the Trustee of the Power Company's mortgage, and that all the bonds of The Transmission Company received by The Power Company shall be so far kept in the ownership and control of the Power Company that the interest thereon may be effectually canceled, or, if that be not done, that The Power Company will pay in cash to The Transmission Company an amount equal to the interest accruing on the bonds no longer so kept.

[25350] (page 2)

The Power Company further agrees to pay to The Transmission Company on the first days of January and July in each year a sum equal to the cost of maintaining, operating and keeping in repair its said transmission line and transformer station, and the taxes, insurance and other necessary expenses in connection therewith, for the preced-

ing six months. In arriving at the sum aforesaid, The Power Company shall be credited with the incidental revenue collected by The Transmission Company, including receipts for agricultural leases and farming rights and the sale of wood and other products, but not with the proceeds of lands sold.

This agreement is to take effect from January 1, 1911, and may be terminated by either party forthwith upon a breach thereof on the part of the other party. If not so terminated, it is to remain in force until terminated by either party on six months' notice to the other party.

In Witness Whereof, the parties have executed this agreement the day and year first above written.

Pennslyvania Water & Power Company,
(Seal)
By (Signed) J. E. Aldred
President.

Attest:

(Signed) Sherman L. Lewis
Secretary.

Susquehanna Transmission Company of Maryland.
(Seal)
By (Signed) Chas. E. F. Clarke
President.

Attest:

(Signed) Sherman L. Lewis
Secretary.

ITEM C.

[25351] (page 1)

THIS AGREEMENT, made on this 19th day of March, 1931, between PENNSYLVANIA WATER AND POWER COMPANY, a corporation of the State of Pennsylvania, party of the first part, (hereinafter called Power Company), SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND, a corporation of the State of Maryland, party of the second part, (hereinafter called Transmission Company), and CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE, a corporation of the State of Maryland, party of the third part, (hereinafter called Baltimore Company).

WHEREAS the Transmission Company is a wholly owned subsidiary of Power Company, and in pursuance of agreements, entered into on the 12th day of April, 1910, and the 3rd day of April, 1911, understood to construct and also to maintain, operate and keep in repair a transmission line and other necessary equipment for the purpose of conveying electrical power and energy from the Maryland-Pennsylvania State Line to a transformer substation, situated near the boundary line of Baltimore City, but now located in Baltimore City, which transmission line runs from said Maryland-Pennsylvania State Line through Harford and Baltimore Counties in the State of Maryland to said transformer station, at which point it delivers the said power in accordance with instructions of the Power Company; and

WHEREAS the Power Company and the Transmission Company have both fully performed all of the terms and stipulations of said contracts of April 12th, 1910, and April 3rd, 1911, above referred to, both of which contracts are in full force and effect and are in course of performance; and

WHEREAS the Power Company has heretofore notified the Transmission Company that it has agreed to enter into a contract with the Baltimore Company and Safe Harbor

Water Power Corporation, a Pennsylvania corporation, whereby, amongst other things, the Power Company will undertake to convey and transmit and cause to be conveyed and transmitted electrical power or energy, generated at the plant or dam of the Safe Harbor Water Power Corporation, situated in York and Lancaster Counties in the State of Pennsylvania, to, or approximately to, the step-down substations to be built by the Baltimore Company at or near Westport, Baltimore City, and Turner's Station, Baltimore County; and

WHEREAS the Power Company has requested the Transmission Company to acquire such lands, rights of way and easements as may be necessary, by purchase or by condemnation, and thereon to erect and construct two transmission lines, both beginning at the Maryland-Pennsylvania State Line, the first of which to be known as the Westport Line, will pass through Baltimore, Howard and Anne Arundel Counties to, or approximately to, a step-down substation to be built by the Baltimore Company, near its Westport power house, and the second of which, to be known as the Riverside Line, will run through Harford and Baltimore Counties to a step-down substation to be built by the Baltimore Company adjacent to the site of its proposed power house at Turner's Station in Baltimore County, the Westport Line to be completed and ready for operation when the first generating unit of the Safe Harbor Water Power Corporation is ready for service and operation, and the Riverside Line, to be constructed later, to be ready for service on a date to be agreed upon by the parties hereinbefore referred to; and

[25352] (page 2)

WHEREAS in order to provide and finance the cost of said additional facilities, as contemplated by the Power Company, the Baltimore Company and said Safe Harbor Water Power Corporation, the Transmission Company has authorized an increase of its capital stock from the sum or

amount of Fifty Thousand Dollars ($50,000), consisting of five hundred (500) shares of the par value of One Hundred Dollars ($100.00) each, whereof five (5) shares are now outstanding, to the sum or amount of Five Million Dollars ($5,000,000.00), consisting of fifty thousand (50,000) shares of the par value of One Hundred Dollars ($100.00) each, and to finance the cost of said additional facilities by the sale of so many of said shares of stock as may be required to the Power Company upon the terms herein set forth.

THEREFORE THESE PRESENTS WITNESS, that in consideration of the premises and of the mutual covenants and agreements herein contained, the parties hereto have agreed as follows:

First: This agreement is supplementary to, and not in substitution for, the agreements of April 12th, 1910, and April 3rd, 1911, above referred to, which said agreements, with all their terms, provisions and conditions, are hereby reaffirmed between the Power Company and the Transmission Company, except as hereinafter provided.

Second: The Transmission Company agrees to purchase and acquire lands, rights of way and easements, and to construct the transmission lines hereinbefore referred to, in accordance with plans and specifications supplied by the Power Company to the Transmission Company; and the Transmission Company further agrees to receive, carry, convey and transmit electricity and electrical energy delivered to it at said Maryland-Pennsylvania State Line by the Power Company, up to but not exceeding the capacity of its said transmission lines, as the same may be originally constructed or may be added to and extended any time in the future. The Transmission Company further agrees to make all necessary additions to and extensions of its transmission lines, including new and additional buildings, lines and other facilities, machinery and equipment of all kinds, as may be reasonably requested by the Power Company.

Third: The Power Company agrees to advance and furnish to the Transmission Company the full cost of said lands, rights of way and easements, new and additional buildings, transmission lines and other facilities, machinery and equipment of all kinds, including costs of condemnation, if condemnation be necessary, counsel fees, salaries of engineers and draughtsmen, wages of laborers, cost of materials, and all other items of expense connected therewith, and to furnish said moneys regardless of business conditions or financial depression or any other unfavorable condition which may arise prior to the completion of said transmission lines as the same may be originally constructed, or may be added to and extended any time in the future.

Fourth: The Transmission Company agrees to pay to the Power Company interest on all such advances until such advances shall have been paid as hereinafter provided.

[25353] (page 3)

Fifth: The Power Company shall and will accept in payment of its said advances and accumulated interest thereon, shares of stock of the Transmission Company at the par value thereof, if requested by the Transmission Company so to do; or will accept cash therefor, or such obligations of the Transmission Company as may be acceptable to the Power Company, all subject, however, to the approval of the Public Service Commission of the State of Maryland.

Sixth: Upon the completion by the Transmission Company of any of the construction work enumerated in paragraph "Second" hereof, or upon any date or dates as may be agreed upon by the parties hereto from time to time, accounts shall be stated of the sums advanced by the Power Company for the purposes aforesaid, together with accumulated interest thereon, and settlement thereof shall be

made in accordance with the "Fifth" paragraph of this agreement.

Seventh: The Transmission Company agrees to receive at said Maryland-Pennsylvania State Line such electricity and electrical energy as may be delivered to it by the Power Company, not exceeding the capacity of its said lines, or either of them, and to carry and deliver the same, less the natural waste of transmission, to the points in or near the City of Baltimore, as hereinbefore referred to, and there to make delivery of the same to the Consolidated Gas Electric Light and Power Company of Baltimore.

The Transmission Company further agrees to maintain, operate and keep in repair its transmission system in this agreement referred to.

Eighth: The Power Company undertakes to pay in cash to the Transmission Company, or for its account, all sums expended by the Transmission Company for the maintenance, operation and repair of its said transmission lines, and for its taxes, insurance premiums, general expenses and all other necessary expenditures required of the Transmission Company of whatsoever kind and howsoever incurred, including renewals and replacements, and any damage claims.

Ninth: The Transmission Company will at all times perform the obligations undertaken by the Power Company under its agreement with the Baltimore Company and Safe Harbor Water Power Corporation, hereinbefore referred to, insofar as the Power Company binds itself to do acts and things which are performable through the instrumentality of the Transmission Company.

Tenth: In order that the Transmission Company shall be able at all times to comply fully with the provisions of its charter, as amended, and the laws of the State of Mary-

land, Baltimore Company and Power Company agree to supply to the said Transmission Company such amounts of hydro electrical energy received from the Safe Harbor plant and/or Holtwood Plant and steam generated electrical energy as the said Transmission Company may require from time to time during the term of this agreement, in order to supply electrical energy to such of the public as may apply for it, or to comply with any order of the Public Service Commission of Maryland. The Baltimore Company also agrees that for the aforesaid purposes it will promptly make its distribution lines and facilities available for the use of the said Transmission Company.

[25354] (page 4)

The rates to be paid by the Transmission Company for the energy and the use of the distribution lines and facilities of the Baltimore Company shall be agreed upon from time to time by the said two companies. In the event the companies are unable to agree upon the rates, the Baltimore Company shall supply the electrical energy to the Transmission Company as soon as it is needed by the latter Company, and permit it to use its distribution lines and facilities, and the question of the rates shall be settled by arbitration. Each of the parties shall name one arbitrator and the two thus appointed shall choose the third arbitrator. Should the second or third arbitrator remain unselected at the expiration of thirty (30) days after notice of appeal to arbitration is given by either party, the second or third arbitrator, or both, shall be selected by one of the members of the Public Service Commission of Maryland. The determination of the arbitrators, or a majority of them, shall be final and binding upon the Transmission Company and the Baltimore Company.

Eleventh: This agreement is to take effect from March 19th, 1931, and is to remain in force until the 22nd day of April, 1980.

IN WITNESS WHEREOF the parties have executed this agreement the day and year first above written.

PENNSYLVANIA WATER AND POWER COMPANY
(SEAL)
By (Signed) CHAS. E. F. CLARKE
President

ATTEST:
(signed) F. J. ALLEN
Secretary

SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND
(SEAL)
By (Signed) J. A. WALLS
Vice President

ATTEST:
(signed) JAS. L. RINTOUL
Secretary

CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE
(SEAL)
By (Signed) CHAS. M. COHN
Vice President

ATTEST:
(signed) C. E. WOLLMAN
Asst. Secretary

ITEM D.

[25355] (page 1)

AGREEMENT BETWEEN P. W. & P. COMPANY, SUSQ. TRANS. COMPANY OF MARYLAND AND BALTIMORE COMPANY, CONCERNING TRANSMISSION LINE TO WASHINGTON

THIS SUPPLEMENTAL AGREEMENT made as of the first day of August, 1932, between PENNSYLVANIA WATER & POWER COMPANY, a corporation of the State of Pennsylvania, hereinafter called "Power Company," SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND, a corporation of the State of Maryland, hereinafter called "Transmission Company," and CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE, a corporation of the State of Maryland, hereinafter called "Baltimore Company."

WHEREAS Transmission Company is a wholly owned subsidiary of Power Company, and in pursuance of an agreement entered into on the nineteenth day of March, 1931, with Power Company and Baltimore Company, has constructed the section that is located in the State of Maryland, of the transmission line from Safe Harbor, Pennsylvania, to Baltimore, Maryland, known as the Westport line; and

WHEREAS in paragraph "Second" of the said agreement of March 19, 1931, Transmission Company further agreed to make at any time in the future all necessary additions to and extensions of its transmission lines, including new and additional buildings, lines and other facilities, machinery and equipment of all kinds, as may be reasonably requested by Power Company; and

WHEREAS Power Company has entered into a contract of even date herewith with Baltimore Company, whereby, amongst other things, Power Company will construct or cause to be constructed a high tension interconnection between the electric system of Baltimore Company and the

electric system of the Potomac Electric Power Company of Washington.

NOW, THEREFORE, THIS AGREEMENT WITNESSETH: That for and in consideration of the mutual covenants and agreements hereinafter contained and the sum of Five Dollars ($5.00) paid by each of the parties hereto to the other, receipt whereof is hereby acknowledged, and of other valuable considerations, Power Company, Transmission Company and Baltimore Company do covenant and agree as follows:

First: This agreement is supplementary to the said agreement of March 19, 1931, above referred to, and all the terms, provisions, and conditions contained therein are hereby reaffirmed between Power Company, Transmission Company and Baltimore Company.

Second: Power Company hereby requests Transmission Company, and Transmission Company hereby agrees, to construct, operate and maintain, as additions to and extensions of its transmission lines under paragraph "Second" of the said agreement of March 19, 1931, two (2) parallel and adjacent transmission lines of substantially the same design and construction as the said existing Westport line, to extend from a point [25356] (page 2) near Ellicott City, in Howard County, Maryland, on the said Westport transmission line of Transmission Company, east of the Ilchester Road and north of the Montgomery Road, to a point in Prince Georges County, near Takoma Park, Maryland, adjacent to the northeasterly boundary line of the District of Columbia, one of the said lines to be completed and ready for operation by October 1, 1933, and the other line to be constructed within two years after such date or as may be agreed upon by the parties hereto, together with a switching station to connect the said transmission lines to the existing Westport line of Transmission Company.

Third: Transmission Company agrees to transmit over said line such electrical power and energy as may be de-

livered to it at the terminals of said transmission lines for the purpose.

Fourth: Transmission Company will at all times perform the obligations undertaken by Power Company under its agreement with Baltimore Company, hereinbefore referred to, insofar as Power Company binds itself to do acts and things which are performable through the instrumentality of Transmission Company.

Fifth: In order that Transmission Company shall be able at all times to comply fully with the provisions of its charter, as amended, and the laws of the State of Maryland, Baltimore Company and Power Company agree to supply to said Transmission Company such amounts of electrical energy as said Transmission Company may require from time to time during the term of this agreement, in order to supply electrical energy to such of the public as may apply for it, or to comply with any order of the Public Service Commission of Maryland. Baltimore Company also agrees that for the aforesaid purposes it will promptly make its distribution lines and facilities available for the use of said Transmission Company.

The rates to be paid by Transmission Company for the energy and the use of the distribution lines and facilities of Baltimore Company shall be agreed upon from time to time by the said two companies. In the event the companies are unable to agree upon the rates, Baltimore Company shall supply the electrical energy to Transmission Company as soon as it is needed by the latter Company, and permit it to use its distribution lines and facilities, and the question of the rates shall be settled by arbitration. Each of the parties shall name one arbitrator and the two thus appointed shall choose the third arbitrator. Should the second or third arbitrator remain unselected at the expiration of thirty (30) days after notice of appeal to arbitration is given by either party, the second or third arbitrator, or both, shall be selected by one of the members of the Public

Service Commission of Maryland. The determination of the arbitrators, or a majority of them, shall be final and binding upon Transmission Company and Baltimore Company.

Sixth: This agreement shall remain in force until midnight of April 22, 1980.

[25357] (page 3)

IN WITNESS WHEREOF the parties hereto have executed this agreement the day and year first above written.

PENNSYLVANIA WATER & POWER COMPANY
(SEAL)

By (Signed) J. A. WALLS
Vice President

Attest:

(Signed) J. E. O'CONNOR
Asst. Secretary

SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND
(SEAL)

By (Signed) J. A. WALLS
Vice President

Attest:

(Signed) JAS. L. RINTOUL
Secretary

CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE
(SEAL)

By (Signed) HERBERT A. WAGNER
President

Attest:

(Signed) WM. SCHMIDT, JR.
Secretary

ITEM E.

[25361] (page 1)

AGREEMENT BETWEEN SAFE HARBOR WATER POWER CORPORATION, CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE AND PENNSYLVANIA WATER AND POWER COMPANY.

THIS AGREEMENT made as of the 1st day of June, 1931, between SAFE HARBOR WATER POWER CORPORATION, a Pennsylvania corporation, hereinafter called "Safe Harbor Company," CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE, a Maryland corporation, hereinafter called "Baltimore Company," and PENNSYLVANIA WATER AND POWER COMPANY, a Pennsylvania corporation, hereinafter called "Holtwood Company."

Safe Harbor Company is constructing a hydro-electric development on the Susquehanna River at Safe Harbor, Pennsylvania, in York and Lancaster Counties. The so-called "initial development" will consist of six main generating units with a total turbine capacity of approximately 255,000 horsepower and the required step-up transformers, exclusive of high tension switching stations.

Baltimore Company is engaged in the generation, purchase and sale of electrical power and energy for light, heat and power purposes in the City of Baltimore and in the State of Maryland.

Holtwood Company is engaged in the generation, purchase and sale of electrical power and energy and owns and operates a hydro-electrical development and a steam-electric generating station on the Susquehanna River, below Safe Harbor, at Holtwood, Pennsylvania, in York and Lancaster Counties, and an interconnected transmission system.

[25362] (page 2)

Baltimore Company and Holtwood Company (referred to hereinafter as the "receiving companies") desire to purchase, and Safe Harbor Company desires to sell, the entire output of the initial Safe Harbor development.

Holtwood Company is now supplying electrical energy to Baltimore Company at Baltimore under an agreement dated December 31, 1927, and terminating December 31, 1970, to be supplemented by a supplemental agreement of even date herewith. Said agreement provides that the investment policies of the two companies for additional generating and transmission facilities shall be co-ordinated well in advance, that the co-operative use of facilities should be encouraged, and that "the joint use of property and equipment by the two parties shall give the greatest practical benefit to the general public supplied by the two systems and that all unnecessary duplication of investment and operating cost shall be avoided except such as would contribute toward the maintenance and improvement of the high standard of service rendered." Holtwood Company subsidiaries, the Susquehanna Transmission Company of Pennsylvania and the Susquehanna Transmission Company of Maryland, own and operate high tension transmission lines in Pennsylvania and Maryland and a large substation in Baltimore, for the purpose of delivering energy to Baltimore Company. For economy of operation and of division of loads among the several lines, co-ordination of investment, and avoiding duplication in equipment and personnel, it is desirable that Holtwood Company, through itself and/or subsidiaries, should be the carrier for Safe Harbor energy purchased by Baltimore Company.

The construction of Safe Harbor Company's initial development is to be financed through the issuance by Safe Harbor Company of stock and first mortgage bonds. The stock [25363] (page 3) issued or about to be issued by Safe Harbor Company is to be two-thirds voting stock and one-

third non-voting stock. Of the voting stock half is to be owned by Baltimore Company, half by Holtwood Company. All of the non-voting stock is to be owned by Baltimore Company. The bonds of Safe Harbor Company are to be guaranteed by Baltimore Company and/or Holtwood Company. As between Baltimore Company and Holtwood Company, Baltimore Company's ultimate liability on any such guaranty of the bonds is to be two-thirds, Holtwood Company's one-third.

Now, Therefore, This Agreement Witnesseth: That for and in consideration of the mutual covenants and agreements hereinafter contained and the sum of Five Dollars ($5.00) paid by each of the parties hereto to the other, receipt whereof is hereby acknowledged, and of other valuable considerations, Safe Harbor Company, Baltimore Company and Holtwood Company do covenant and agree as follows:

ARTICLE I

Duration of Agreement

This agreement shall remain in force until midnight of April 22, 1980.

ARTICLE II

Power and Energy Entitlements

Baltimore Company and Holtwood Company shall be entitled to all the capacity and energy available (other than any which may be required for the performance of any duty or obligation to serve imposed on Safe Harbor Company by its charter or otherwise by law) from the initial six unit development at Safe Harbor, equal to approximately 255,000 horsepower and 850,000,000 kwh, average annual energy [25364] (page 4). at full utilization, this total entitlement to be divided between Baltimore Company and Holtwood Company as follows:

The part of the total capacity and daily energy available from the initial development, as measured on the low

tension side of the step-up transformers at Safe Harbor, to which each receiving company is entitled will be called that company's "contract proportion." Baltimore Company's contract proportion shall be two-thirds and Holtwood Company's contract proportion one-third.

ARTICLE III

Other Entitlements

(*a*) At the request and for the benefit of either Baltimore Company or Holtwood Company, Safe Harbor Company shall install additional machinery or equipment, not included in the initial development, subject to the stipulation in the last paragraph of Article V, provided such request is submitted in writing to Safe Harbor Company at least eighteen months before the date when the facilities are to be completed, and that the arrangement is approved by the receiving company which is not making the request. Furthermore, Safe Harbor Company will not contract to supply power and energy (except any which may be required for the performance of any duty or obligation to serve imposed on it by its charter or otherwise by law) from additions to its plant to any party other than Baltimore Company and Holtwood Company without the written consent of both Baltimore Company and Holtwood Company.

(*b*) When there is an actual or threatened power shortage in the interconnected hydro and steam systems of the receiving companies, or of the customers of hydro plants located on the Susquehanna River below Safe Harbor, the Safe Harbor [25365] (page 5) reservoir will be operated to regulate the flow to the maximum shown to be possible by computations based on previous minimum flow periods. In the event of further power shortage, either Baltimore Company or Holtwood Company is entitled to draw from the reservoir its contract proportion of the then available storage, provided, however, that when and if either company alone exercises this right it will use a portion of its normal

energy entitlement to compensate the other receiving company for its loss in energy caused by the reduction in head due to such additional draw-down.

(*c*) Each of the receiving companies, Baltimore Company and Holtwood Company, is entitled to receive from Safe Harbor Company its contract proportion of all energy, payments or other compensations that Safe Harbor Company may be able to secure from the owners or operators of power plants on the Susquehanna River below Safe Harbor by reason of being beneficiaries of the operation of the Safe Harbor reservoir for flow regulation, or from supplying power and energy to any person or corporation other than Baltimore Company and Holtwood Company. Any such payments to which Baltimore Company and Holtwood Company may become entitled may be deducted from the payments required under Article V hereof.

ARTICLE IV

Co-ordination and Joint Use of Facilities

It is the intent *inter alia* of this long term agreement to encourage the maximum co-operative utilization of the power and energy entitlements and resources and other facilities of the parties hereto to the end that the joint use of their property and equipment shall give the greatest practical benefit to the public and that all duplication of investment and [25366] (page 6) operating cost shall be avoided except such as would contribute toward the maintenance and improvement of the high standard of service rendered. The parties hereto shall co-operate to the fullest extent in the selection of the most suitable equipment, in the coordination of their investment programs for additional generating capacity, transmission and tie-in facilities, etc., and shall so conduct their operations that economic interchange of power and energy during the different hours of the day, the seasons of the year, and over more prolonged periods, shall be encouraged in every possible way. For this pur-

pose Safe Harbor Company will not enter into other agreements with either receiving company without the approval of the other, and will take into consideration either receiving company's suggestions for the best co-ordinated utilization of all facilities that may be mutually beneficial.

ARTICLE V

Payments for Power and Energy

During the period prior to July 1, 1932, or such other date as may hereafter be agreed upon as the beginning of regular commercial service from the Safe Harbor plant, energy received by Baltimore Company, as metered at Baltimore Company's terminal station at or near Westport, and energy received by Holtwood Company, as metered on the low tension side of the 66,000 volt step-up transformers at Safe Harbor, shall be paid for by the respective receiving companies at reasonable rates to be agreed upon. It is the intention that, subject to the approval of regulatory authorities in the exercise of their respective powers and jurisdiction, this period will be considered to be part of the construction period, during which all of Safe Harbor Company's expenses will be charged to construction and its revenue will be credited to construction.

[25367] (page 7)

Thereafter the total combined annual payments for power and energy to be made by Baltimore Company and Holtwood Company to Safe Harbor Company, as nearly as possible in equal monthly installments, shall be as follows:

From and including the date on which the Safe Harbor plant goes into commercial service until December 31, 1932, at the rate of $1,400,000 per year.

For the calendar year 1933	$1,450,000
For the calendar year 1934	1,600,000
For the calendar year 1935	1,800,000
For the calendar year 1936	2,000,000
For the calendar year 1937	2,500,000

Provided, however, that in any event the annual payments for said years shall be not less than the respective amounts required by Safe Harbor Company to pay its bond interest and sinking fund charges, over and above operating expenses, including allowance for depreciation.

Beginning January 1, 1938, the annual payment shall be such amount as is required to yield to Safe Harbor Company a net income of seven per cent., after all reasonable operating expenses, including maintenance and general expenses, insurance, taxes and reasonable allowance for depreciation, on its accumulated actual investment in the initial development (*i.e.*, the actual legitimate investment, as defined in the Federal Water Power Act and in the Rules and Regulations of the Federal Power Commission), averaged for the year in question, without regard to the amount of power actually furnished.

The above payments for energy and/or power shall be subject to increase and/or decrease from time to time by order of regulatory authorities within their respective powers and jurisdiction, including the power to fix reasonable rates, [25368] (page 8) under the constitution and laws of Pennsylvania, Maryland and the United States; and may also be increased by agreement of the parties subject to the regulatory powers of such authorities.

The combined annual payment shall be pro-rated between Baltimore Company and Holtwood Company in the ratio of their contract proportions; *i.e.*, each shall pay to Safe Harbor Company its contract proportion of the total payment specified herein.

In the event that Safe Harbor Company provides additional facilities at the request of either Baltimore Company or Holtwood Company as provided in Article III, Paragraph (*a*), the receiving company for whose benefit the facilities are provided shall make to Safe Harbor Company additional payments such that Safe Harbor Company's rate of net income on its actual accumulated in-

vestment shall be the same as it would have been without the additions, under the terms hereinbefore set forth.

ARTICLE VI

Guaranty of Bonds

To finance the construction of its initial development Safe Harbor Company will issue its 4½ per cent. First Mortgage Bonds in the principal amount of $21,000,000 or such other amount as may be agreed upon between Safe Harbor Company, Baltimore Company and Holtwood Company. The terms and provisions of such bonds and of the mortgage to secure them shall be approved by Baltimore Company and Holtwood Company. Payment of the principal of and interest on said bonds shall be unconditionally guaranteed to the holders thereof and/or to the Trustee under the mortgage securing the bonds by Baltimore Company and/or Holtwood [25369]. (page 9) Company jointly and/or severally by endorsement on the bonds and/or otherwise. Whether such guaranty to the holders of bonds and/or the Trustee be a joint, several or joint and several guaranty or guaranties of Baltimore Company and Holtwood Company or either, in any event Baltimore Company and Holtwood Company, as between themselves, shall ultimately assume and bear respectively two-thirds and one-third of any and all liability on or in respect of such guaranty. Anything herein to the contrary notwithstanding, Holtwood Company assumes and shall assume no liability either to bondholders or Trustee or to Baltimore Company on or in respect of any such guaranty before September 1, 1931, or for or in respect of any default of Safe Harbor Company occurring before September 1, 1931, but Holtwood Company hereby covenants and agrees (as a condition precedent to the continuance after September 1, 1931 of any of Holtwood Company's rights under this agreement) that on September 1, 1931 it will guarantee and/or assume liability on and in respect of any guaranty to the

full extent hereinbefore provided, and will execute such further assurances by way of guaranty, assumption of guaranty, counter-indemnity and/or otherwise as may reasonably be required.

ARTICLE VII

Transmission Lines and Charges

Baltimore Company desires its contract proportion of electrical energy to be delivered at the points of delivery specified in Article XII, and agrees to pay the cost of transmission from Safe Harbor to said delivery points in addition to making the payments named in Article V. As set forth in the recitals herein, Holtwood Company, through subsidiaries, already has a transmission system and organization and is [25370] (page 10) best qualified to convey, or cause to be conveyed, energy from Safe Harbor to Baltimore economically and in co-ordination with the supply from Holtwood to Baltimore. Therefore Baltimore Company and Safe Harbor Company desire Holtwood Company, and Holtwood Company undertakes, to transmit or cause to be transmitted to Baltimore the energy sold by Safe Harbor Company to Baltimore Company, and Baltimore Company agrees to pay directly to Holtwood Company certain charges for such transmission service, as hereinafter provided. Should Holtwood Company at any time fail to transmit or cause to be transmitted any of the energy sold by Safe Harbor Company to Baltimore Company, Holtwood Company forthwith will purchase all such energy from Safe Harbor Company at Safe Harbor and will pay therefor at the rates payable by Baltimore Company therefor under Article V hereof.

Holtwood Company agrees to construct, operate and maintain and/or cause to be constructed, operated and maintained (in its own rights and/or through subsidiaries) two 220,000 volt single circuit steel tower transmission lines on separate rights-of-way from Safe Harbor to Baltimore, and a 220,000 volt switching station at Safe Harbor when it

becomes necessary. The first transmission line, to be known as the Westport line, will pass through York County in Pennsylvania, and Baltimore, Howard and Anne Arundel Counties in Maryland, to the step-down substation to be built by Baltimore Company near its Westport power house (the term "substation" as here used including the high tension structures and leads from the transformers to the Baltimore City line). The second line, to be known as the Riverside line, will pass through York County in Pennsylvania, and Harford and Baltimore Counties in Maryland, to the step-down substation to be built by Baltimore Company adjacent [25371] (page 11) to the site of its proposed power house at Turner's Station in Baltimore County. The Westport line shall be completed and ready for operation when the first main generating unit at Safe Harbor is ready for service. The Riverside line shall be constructed later, to be ready for service at a date to be agreed upon by the parties hereto.

From and after the respective dates on which each line goes into service Baltimore Company shall pay to Holtwood Company annually for each calendar year (*a*) the sum of twelve monthly amounts, computed at the end of each calendar month, equal to 10.25% per annum of the cost, on the books of Holtwood Company and its subsidiaries, of said transmission lines and switching station and net additions thereto plus (*b*) an amount equal to all reasonable operating expenses, except depreciation (or provision therefor through renewals and replacements), including maintenance and general expenses, insurance and taxes, in the operation of said transmission lines and switching station. The amounts of said annual payments by Baltimore Company to Holtwood Company shall be estimated by Baltimore Company and Holtwood Company in advance and shall be paid as nearly as possible in equal monthly installments, the payment for any month to be made not later than the 15th day of the next succeeding month with subsequent adjustment to the next yearly payment. Said

payments shall be subject to increase and/or decrease from time to time by order of regulatory authorities within their respective powers and jurisdiction, including the power to fix reasonable rates, under the constitution and laws of Pennsylvania, Maryland and the United States; and may also be increased by agreement of Baltimore Company and Holtwood Company subject to the regulatory powers of such authorities.

[25372] (page 12)

The Baltimore Company shall pay the above costs and charges on the 220,000 volt switching station at Safe Harbor so long as it is used exclusively in connection with transmitting energy to and from Baltimore, and if the said station is used for a tie-in with other power systems, an equitable apportionment of the aforesaid costs and charges shall be made between the Baltimore Company, the Holtwood Company and/or the Safe Harbor Company.

ARTICLE VIII

Causes Beyond Control

If at any time during the continuance of this agreement Safe Harbor Company shall be prevented from supplying and Baltimore Company and Holtwood Company from receiving all or any part of the power and energy herein specified, by reason of war, rebellion, civil disturbance, strikes, serious epidemics, major catastrophe, or any other cause of a like nature beyond the control of either party, the obligation of Safe Harbor Company to supply and the obligation of Baltimore Company and Holtwood Company to take power and energy herein specified shall cease until such time as the party so incapacitated shall, by the exercise of reasonable diligence, be able to resume such supply or use, and a reasonable abatement in the payments by Baltimore Company and Holtwood Company shall be made; provided, however, that in no event shall such abatement reduce such payments to less than the

respective amounts required by Safe Harbor Company to pay its bond interest and sinking fund charges, over and above operating expenses, including allowance for depreciation.

[25373] (page 13)

ARTICLE IX

Terms of Payment

All bills for power and energy as provided in Article V shall be rendered by Safe Harbor Company to Baltimore Company and Holtwood Company, and for transmission services as provided in Article VII shall be rendered by Holtwood Company to Baltimore Company, for each calendar month not later than the fifth day of the next succeeding month, and shall be paid on or before the fifteenth day of said month.

ARTICLE X

Audit of Costs

For the purpose of determining Safe Harbor Company's investment and operating costs and income as required by the provisions of Article V Baltimore Company and Holtwood Company shall each have complete access to and may audit the accounts of Safe Harbor Company at any time.

ARTICLE XI

Characteristics of Supply

Unless otherwise agreed by the parties hereto, the electrical energy supplied under this agreement shall be in the form of three phase alternating current at a normal frequency of 60 cycles per second, and at approximately 220,000 volts as to supply to Baltimore Company and approximately 66,000 volts as to supply to Holtwood Company.

Safe Harbor Company shall at all times keep its equipment in first-class condition in accordance with good engi-

neering practice and shall arrange whenever possible to have all maintenance work done in the low flow periods. If any [25374] (page 14) equipment by necessity is out of service during high flow, Safe Harbor Company shall use every reasonable effort to return equipment to service as quickly as possible, consistent with high standards of operating and maintenance practice.

ARTICLE XII

Points of Delivery

Power and energy contracted for hereunder shall be delivered to Baltimore Company at the high tension (220,000 volt) terminals of its step-down substations at or near Westport, Baltimore City, and Turner's Station, Baltimore County, and/or elsewhere in the State of Maryland as the parties hereto may agree, and to Holtwood Company on the high tension (66,000 volt) side of the step-up transformers installed by Safe Harbor Company for supply to Holtwood Company, and/or elsewhere as the parties hereto may agree.

ARTICLE XIII

Metering

For the purpose of allotting capacity and energy to the receiving companies, integrating watthour meters equipped with ratchets shall be installed by Safe Harbor Company on the low tension side of the step-up transformers at Safe Harbor. For checking purposes and for use in case of backfeed, Baltimore Company shall install two sets of ratchet integrating watthour meters, one for registering incoming energy and one for registering backfeed, on the low tension side of the step-down transformers at Baltimore.

Procedure in respect to maintenance, testing, calibration and correction, registration records and precision tolerance of metering equipment shall be in accordance with good practice, [25375] (page 15) as may be agreed upon by the parties hereto from time to time.

ARTICLE XIV

Operating Committee

Within thirty days after the execution of this agreement Baltimore Company and Holtwood Company shall each appoint one representative to act as its agent for investigation, consultation and advice in all operating, engineering and accounting matters pertaining to this agreement. Each appointment shall be evidenced by written notice to the other party signed by an executive officer. Either party at any time may change its representative or withhold or withdraw from its representative the authority to act for it in any matters specified in the notice, provided that it designate in such notice other representation in respect to such matters. These representatives, to be known as the Operating Committee, shall confer upon request of either; in case of their inability to agree, the question in dispute shall be submitted to the Presidents of the respective companies for their decision.

ARTICLE XV

Arbitration

In case of any dispute arising between any of the Companies which are parties to this agreement, the said dispute shall be referred to a Board of Arbitration upon service of written notice by any party to the other parties hereto.

The said Board of Arbitration shall consist of three members, the first member to be chosen by the party or parties complaining, the second member to be chosen by the opposing party or parties, and the third member to be chosen by the first and second members. Should the second [25376] (page 16) or third member remain unselected at the expiration of thirty days after notice of arbitration is given, then upon the request of the complaining party, and upon notice thereof having been given to the other parties hereto, the second or third member, or both, of the Arbitra-

tion Board shall be selected by the then Chief Judge of the Supreme Bench of Baltimore City or, in the event of the said Judge's disinclination or failure to act within thirty days, by the then Chairman of the Public Service Commission of Maryland.

The Board of Arbitrators shall proceed at its earliest convenience to hear and determine the questions at issue after having given each party hereto not less than five days notice of the time and place of the first meeting.

Each party shall be permitted to be represented by counsel before the Board of Arbitrators, and to present in full, by competent witnesses, all facts, figures and statements which might aid the Board of Arbitrators to give a final and fair judgment as to the questions in dispute.

The determination of the Board of Arbitrators, or a majority thereof, shall be made within sixty days after the submission to said Board, unless prevented by circumstances unforeseen, and the decision of the Board of Arbitrators, or a majority thereof, shall be final and conclusive upon the parties hereto and said parties shall abide by such decision.

All expenses in connection with such arbitration, including a reasonable compensation for the arbitrators, shall be divided equally between the Companies who are parties to the arbitration, with the exception of expenses and counsel, witnesses and employes of the parties hereto, which expenses shall be borne by the parties incurring them.

All notices herein provided for may be given by serving the same in writing, or by sending the same by registered [25377] (page 17) mail addressed to the parties interested at their respective principal places of business.

In Testimony Whereof each of the parties hereto has caused these presents to be signed in its corporate name by its President or a Vice-President and its corporate seal to be hereunto affixed, duly attested by its Secretary or an

Assistant Secretary as of the day and year first above written.

SAFE HARBOR WATER POWER CORPORATION

(Signed) J. A. WALLS,
Vice-President.

Attest:

[SEAL]

(Signed) F. J. ALLEN,
Secretary.

CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE

(Signed) CHARLES M. COHN,
Vice-President.

Attest:

[SEAL]

(Signed) WM. SCHMIDT, JR.,
Secretary.

PENNSYLVANIA WATER AND POWER COMPANY

(Signed) J. A. WALLS,
Vice-President.

Attest:

[SEAL]

(Signed) F. J. ALLEN,
Secretary.

ITEM F.

[25378] (page 1)

AGREEMENT BETWEEN SAFE HARBOR COMPANY, BALTIMORE COMPANY AND HOLTWOOD COMPANY, CONCERNING TRANSMISSION LINE TO WASHINGTON

THIS SUPPLEMENTAL AGREEMENT made as of the first day of August, 1932, between SAFE HARBOR WATER POWER CORPORATION, a Pennsylvania Corporation, hereinafter called "Safe Harbor Company," CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE, a Maryland Corporation, hereinafter called "Baltimore Company," and PENNSYLVANIA WATER & POWER COMPANY, a Pennsylvania Corporation, hereinafter called "Holtwood Company."

WHEREAS in pursuance of Article VII of an agreement entered into on the first day of June, 1931, by the parties hereto, Holtwood Company, through its subsidiaries, has constructed, and operates and maintains a transmission line from Safe Harbor to Baltimore, known as the Westport line, and transmits to Baltimore Company the energy sold by Safe Harbor Company to Baltimore Company, and Baltimore Company pays directly to Holtwood Company certain charges for such transmission service; and

WHEREAS it was pro ded in Article XII of said agreement of June 1, 1931, that the electrical power and energy contracted for thereunder by Baltimore Company was to be delivered to Baltimore Company a s substations at or near Westport, Baltimore City, and Turner's station, Baltimore County, and/or elsewhere in the State of Maryland as the parties hereto might agree; and

WHEREAS Baltimore Company has entered into an agreement on the sixteenth day of June, 1932, with the Potomac Electric Power Company of Washington, hereinafter called "Washington Company," whereby amongst other things, Baltimore Company undertook, directly or in-

directly, to construct, operate and maintain a high tension interconnection between its electric system and the electric system of Washington Company; and

WHEREAS to facilitate such interconnection, Baltimore Company has requested Holtwood Company, and Holtwood Company has agreed, to construct, operate and maintain two (2) parallel and adjacent transmission lines to extend from a point near Ellicott City, Howard County, Maryland, on the said Westport line, to a point near Takoma Park, Prince Georges County, Maryland, on the system of Washington Company, together with the necessary switching facilities near Ellicott City to tap the said Westport line.

NOW, THEREFORE, THIS AGREEMENT WITNESSETH: That for and in consideration of the mutual convenants and agreements hereinafter contained and the sum of Five Dollars ($5.00) paid by each of the parties hereto to the other, receipt whereof is hereby acknowledged, and of other valuable considerations, Safe Harbor Company, Baltimore Company and Holtwood Company do covenant and agree as follows:

[25379] (page 2)

First: This agreement is supplementary to the Agreement of June 1, 1931 above referred to, which agreement with all its terms, provisions, and conditions is hereby reaffirmed between Baltimore Company, Safe Harbor Company and Holtwood Company, except as hereinafter provided.

Second: Holtwood Company agrees to construct, operate and maintain and/or cause to be constructed, operated and maintained (in its own rights and/or through a subsidiary) a switching station near Ellicott City on the said Westport line, and two (2) parallel and adjacent transmission lines of substantially the same design and construction as the said existing Westport line, to extend from a point

near Ellicott City in Howard County, Maryland, on the said Westport transmission line east of the Ilchester Road and north of the Montgomery Road, to a point in Prince Georges County near Takoma Park, Maryland, adjacent to the northeasterly boundary line of the District of Columbia, one of the said lines to be completed and ready for operation by October 1, 1933, and the other line to be constructed within two (2) years after such date, or as may be agreed upon by the parties hereto.

Third: Holtwood Company agrees to transmit over said lines such electrical power and energy as may be delivered to it at the terminals of said transmission lines for the purpose.

Fourth: Baltimore Company hereby agrees to pay Holtwood Company for the said transmission service in accordance with the provisions of Article III of the Supplemental Agreement of June 1, 1931, between Baltimore Company and Holtwood Company.

Fifth: The parties hereto agree that the Takoma Park substation of Washington Company shall be an additional point of delivery under Article XII of the said agreement of June 1, 1931, between the parties hereto, for the power and energy contracted for thereunder by Baltimore Company.

Sixth: Holtwood Company will at all times perform the obligations undertaken by Baltimore Company under its agreement of June 16, 1932, with Washington Company, hereinbefore referred to, insofar as Baltimore Company binds itself to do acts and things which are performable through the instrumentality of Holtwood Company.

Seventh: This agreement shall remain in force until midnight of April 22, 1980.

[25380] (page 3)

IN WITNESS WHEREOF the parties hereto have executed this agreement the day and year first above written.

SAFE HARBOR WATER POWER CORPORATION

By (Signed) J. A. Walls
Vice-President

Attest:

(Signed) J. E. O'Connor (SEAL)
Assistant Secretary

CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE

By (Signed) Herbert A. Wagner
President

Attest:

(Signed) Wm. Schmidt, Jr. (SEAL)
Secretary

PENNSYLVANIA WATER & POWER COMPANY

By (Signed) J. A. Walls
Vice-President

Attest:

(Signed) J. E. O'Connor (SEAL)
Assistant Secretary

ITEM G.

[25381]

SUPPLEMENTAL AGREEMENT

THIS SUPPLEMENTAL AGREEMENT made as of the 22nd day of November, 1939, between SAFE HARBOR WATER POWER CORPORATION, a Pennsylvania corporation, hereinafter called "Safe Harbor Company," CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE, a Maryland corporation, hereinafter called "Baltimore Company," and PENNSYLVANIA WATER & POWER COMPANY, a Pennsylvania corporation, hereinafter called "Holtwood Company."

WHEREAS, by agreement dated as of June 1st, 1931, hereinafter called the "Original Agreement," the parties hereto provided for the sale to Baltimore Company and Holtwood Company of the electrical power and energy generated by the Safe Harbor Company at its hydro-electric development at Safe Harbor, Pennsylvania, and

WHEREAS, the Baltimore Company and Holtwood Company, pursuant to Article III of the Original Agreement, have requested Safe Harbor Company to install additional machinery and equipment in order to provide for increased power and energy requirements of the Pennsylvania Railroad Company:

NOW, THEREFORE, the parties hereto do agree as follows:

Safe Harbor Company shall, subject to any necessary approval of regulatory authorities in the exercise of their respective powers and jurisdiction, proceed with and complete as soon as practicable, the installation of a 42,500 horsepower water wheel turbine and a 25 cycle, single phase generator in the No. 1 position in its Safe Harbor power house, together with cables from the power house to the

transformer substation of the Holtwood Company near the mouth of Conestoga Creek and all necessary protective, control and other appurtenant equipment, which turbine, generator and appurtenant equipment are herein collectively called the "No. 1 Unit."

[25382]

The Baltimore Company shall be entitled to two-thirds and the Holtwood Company to one-third of all the capacity and energy available from the No. 1 Unit. They shall make payments therefor, pursuant to Article V of the Original Agreement, in the ratio of their said entitlements.

In Testimony Whereof each of the parties hereto has caused these presents to be signed in its corporate name by its President or a Vice-President and its corporate seal to be hereunto affixed, duly attested by its Secretary or an Assistant Secretary as of the day and year first above written.

Safe Harbor Water Power Corporation

By (Signed) J. A. Walls
President
(Seal)

Attest:

(Signed) J. E. O'Connor
Assistant Secretary

Consolidated Gas Electric Light and Power Company of Baltimore

By (Signed) Herbert A. Wagner
President
(Seal)

Attest:

(Signed) Herman L. Gruehn
Secretary

PENNSYLVANIA WATER & POWER COMPANY

By (Signed) F. A. Allner
Vice-President
(Seal)

Attest;

(Signed) J. E. O'Connor
Assistant Secretary

ITEM H.

[25387] (page 1)

THIS AGREEMENT, Made as of the 31st day of December, 1927, between CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE, a corporation of the State of Maryland, hereinafter called "Electric," and PENNSYLVANIA WATER AND POWER COMPANY, a corporation of the State of Pennsylvania, hereinafter called "Power."

WHEREAS, Electric is engaged in the sale of electricity for light, heat and power purposes in the City of Baltimore and territory adjacent thereto, and Power is engaged in the generation and sale of electrical energy and for this purpose owns and operates a hydro-electric plant and a steam-electric generating station at Holtwood, Lancaster County, Pennsylvania, and an interconnected transmission system; and

WHEREAS, Power has for a number of years supplied electrical energy to Electric, and it is the desire of the two parties to enter into a new contract setting forth the terms and conditions under which such electrical energy is hereafter to be supplied;

NOW, THEREFORE, THIS AGREEMENT WITNESSETH: That for and in consideration of the mutual covenants and agreements hereinafter expressed, and the sum of Five Dollars ($5.00) paid by each of the parties hereto to the other, receipt whereof is hereby acknowledged, and of other valuable considerations, Electric and Power do agree as follows:

ARTICLE 1.

DURATION OF AGREEMENT.

This agreement, effective as of January 1, 1927, supersedes all previous short-term arrangements for power and energy between Electric and Power and shall continue in force until midnight of December 31, 1970.

[25388] (page 2)

ARTICLE 2.

Basic Considerations.

The rates hereinafter referred to have been obtained as the result of careful determinations and exhaustive studies of the practical possibilities of the best coordination of the power resources and other facilities of Power and Electric. These studies have disclosed ways and means of rendering Power's supply of greater service value to Electric, by more complete coordination of the various factors controlling amount of peak service, than the amount and character of services heretofore supplied by Power to Electric. The various factors affecting the different elements of value have been investigated in detail by the engineering and operating experts of the two parties, and are set forth in the joint reports placed in the record files of Electric and Power and in the exhibits attached to this agreement and forming a part thereof. The following are the principal factors:

Without continuation of hydro supply Electric would have built, prior to the expiration of the last agreement between the said parties, and would now be operating a steam plant equal in capacity to the minimum predetermined one hour integrated hydro supply of Power (48,778 K. W.), plus allowance for reserves and swings; and this steam plant would have been equipped with substantially the same type of apparatus that was put in service by Electric during 1924, and its investment cost per kilowatt would not have been less than the estimated average cost ($103.62) of the four stages of Electric's Gould Street Station which was put into operation in 1927. The annual fixed charges on the investment in such a steam plant have been figured at the rate of 12.75%, equaling $13.21 per k. w.

The average cost of coal to Electric during the five and ten year periods ending with 1926 was in excess of $5.00 per [25389] (page 3) net ton unloaded at the generating sta-

tions, and it is expected that for a long period of years Electric's cost of coal for steam plant operation, if no hydro were available, would average not less than $5.00 per net ton. The value of Power's hydro as determined in the engineers' studies is based on a cost of coal of $5.00 per net ton, but the average rate per K. W. H. to be paid by Electric as hereinafter specified is based on a cost of coal 7% lower than $5.00 per net ton.

Certain other features of value in connection with Power's hydro supply have been investigated by the engineering and operating experts of the two parties and a determination of the average savings per year to Electric resulting therefrom has been agreed to in accordance with their joint reports, but they are not included as a consideration of the payments for power and energy hereinafter specified.

At any time during the term of this agreement upon demand of either party hereto (as more specifically provided in Article 7-B and in the exhibits attached to and forming part of this agreement), readjustment shall be made, substantially in accordance with the initial method of determining the several factors entering into the charges herein provided, of the fixed charge for capacity and proportion of charges for other entitlements of Electric, but the basic rates averaging 4.7365 mills per K. W. H. on a supply of 400 Million K. W. H. per year (Article 7-A), and the basic annual fixed charges of $13.21 per K. W. shall remain unchanged during the term of this agreement. The initially determined amount of 48,778 K. W. one hour integrated peak service to be paid for by Electric shall remain unchanged for the years 1928 and 1929.

It is further the intent of this long term agreement to broaden the scope of the cooperative utilization of power resources as well as of other facilities now owned or controlled or acquired in the future by either party to the end that the joint use of property and equipment by the two parties shall give [25390] (page 4) the greatest practical

benefit to the general public supplied by the two systems and that all unnecessary duplication of investment and operating cost shall be avoided except such as would contribute toward the maintenance and improvement of the high standard of the service rendered. Toward this end the investment policies of the two companies for providing increased steam generating facilities, or for developing hydro supply from new sources, shall be coordinated well in advance of the time before either party is committed to a definite plan of investment or disposal of power, and no major investment steps affecting power generating and transmission facilities shall be undertaken by either party without keeping the other fully informed of the work contemplated and granting it under otherwise equal conditions the position of preferred customer or seller, as the case may be.

The initially determined one hour integrated peak supply (48,778 K. W.) is not to be regarded as either a fixed maximum or minimum for which Electric need pay, and it is conceded that from the very nature of the conditions determining the availability and usability of this supply, variations from one year to another in the amount of peak service are to be expected and are allowable, subject to the following limitations:

1. During the period up to and including the calendar year immediately preceding the first year in which additional capacity is needed by Electric, as indicated by joint load estimates made by the two parties, the amount of one hour integrated peak service for which Electric shall be required to pay shall not average more than 48,778 K. W., unless expressly agreed to by the parties hereto.
2. Thereafter the increase in amount of one hour integrated peak supply paid for by Electric in any year over the preceding year shall not be greater than the actual increase in Electric's maximum one hour integrated total load.

[25391] (page 5)

3. Power agrees that the one hour integrated peak supply shall not be lower than a minimum of 25,000 K. W. unless expressly agreed to by the parties hereto or unless such lower peak supply is caused by load conditions, either of Electric or of Power's other customers, beyond the control of Power and not anticipated in forecasts of loads made by the two parties.

4. If at any time, as a result of a joint forecast made by Electric and Power, it is agreed that Electric should increase its own generating capacity or incur a tie-in investment, by reason either of expected increase in load or decrease in the amount of Power's one hour integrated peak service, or both, then during the period from January 1st of the year in which such capacity addition goes into service to January 1st of the first year in which Electric's effective load carrying capacity, plus the "maximum average peak service" mentioned hereinafter, is not sufficient to meet Electric's load requirements, the amount of one hour integrated peak service for which Electric shall be required to pay shall not average more than the amount of peak service redetermined in December immediately preceding the year in which Electric's capacity addition goes into service (referred to in this paragraph as "maximum average peak service"), and in any year during said period it shall not exceed said "maximum average peak service" by more than 5000 K. W. In the redetermination of peak service used in establishing the "maximum average peak service" there shall be excluded the effect of major changes in Power's load obligations to customers other than Electric which were not anticipated in the forecast which resulted in Electric's capacity addition. For example of procedure, see Exhibit "A".

[25392] (page 6)

ARTICLE 3.

Transition Period.

Inasmuch as certain features of equipment and of improved operating methods for the best coordination of hydro and steam resources have not been fully available to Electric during the entire year 1927, it has been agreed that the year 1927 shall be regarded as a transition period during which the rates and charges specified in this agreement will not be in effect. The rates and charges for the year 1927 are fixed at an energy rate of 6.0 mills per K. W. H. and a demand charge of $310,000 per year—including substation rental.

ARTICLE 4.

Electric's Power and Energy Entitlements.

Electric is entitled to all power and daily energy available from the Holtwood capacity of Power, as limited by the average daily river flow, in excess of that which may at the time be required by Power to supply its other customers. In addition Electric, at times of capacity shortage on its system, is entitled to draw from Power's pondage a maximum amount of storage energy (delivered basis) of 250,000 K. W. H. in any one day of the week, except Saturday and Sunday, or of approximately 600,000 K. W. H. (i. e., the amount of energy in storage above forebay elevation 161.5, which is 3½ feet below the crest of the concrete dam) in any five consecutive days, Saturdays and Sundays excluded, whenever same is available, and at a maximum rate of K. W. power draft that can be supplied from Power's generating capacity available for Electric, including therein the predetermined one hour integrated peak service as per Exhibit "A," but Power shall not be obligated to provide transformer and transmission investment in excess of that necessary to deliver a maximum one hour integrated peak

[25393] (page 7) service of 80,000 K. W., nor shall Electric be obligated to provide cable investment in excess of that necessary to avoid loss of hydro energy that would be deliverable to Electric except for insufficient cable capacity. In the case of emergencies, Power's various tie-in and diversion services may also be called upon by Electric to the extent that they are needed by Electric and can be made available by Power.

The principal purpose of the above provisions is to assure for Electric's use, when needed by it, a sufficient amount of weekly energy in kilowatt-hours to be supplied by Power to Electric so that this energy will yield to Electric a certain minimum amount of peak service in kilowatts, designated herein as the predetermined one hour integrated peak supply under minimum flow conditions. To meet the above condition, Electric shall take this amount of weekly energy when needed by it at such varying K. W. rates as may be necessary to hold down Electric's maximum one hour integrated steam peak to a value which is less than Electric's maximum one hour integrated peak during the same year by an amount in kilowatts which is equal to the said predetermined one hour integrated peak supply, and which has been initially established as 48,778 K. W., as per Exhibit "A."

The minimum amount of annual energy to which Electric is entitled from Power shall average over the term of this agreement approximately 400 million K. W. H., the amount supplied in individual years varying with river flow, load conditions on Electric's system and of Power's other customers, availability of equipment, etc.; the minimum annual entitlement taken as an average over a ten year period shall not be less than 350 million K. W. H., and the minimum in any one year not less than 250 million K. W. H., except in the event that Power may be prevented from supplying or Electric from receiving the minimum amount of energy by abnormal conditions or any cause beyond the control of either party.

[25394] (page 8)

ARTICLE 5.

OTHER ENTITLEMENTS OF ELECTRIC.

Electric is entitled to the use of certain transmission and distribution facilities now owned by, or to be provided for in the future by Power, if requested by Electric, as specifically set forth in Exhibits "B"; "C" and "D" attached to this Agreement and forming part thereof. As of January 1st, 1928, these facilities comprise:—

(a) Power's terminal and distribution station at Highlandtown, for certain portions of which Electric shall pay Power, as per Exhibit "B", annual fixed charges at the rate of 12.75% on the actual cost to Power, together with an annual charge equivalent to one-half of the average annual cost of substation operation and maintenance of the five year period ending with 1926, but exclusive of the cost of energy losses between Highlandtown and Pratt Street.

(b) The 60 cycle transmission line from Philadelphia Road Substation to Gunpowder Falls, built by Power for the use of Electric in 1924, for which Electric shall pay Power, as per Exhibit "C", annual fixed charges at the rate of 12.75% on the cost of this line to Power, but exclusive of the cost of right-of-way and other facilities owned by Power previous to the erection of this line, together with an annual charge equivalent to 10/90ths of the average annual cost of operation and maintenance of Power's transmission lines from Holtwood to Baltimore during the five year period ending with 1926.

(c) 13,200 and 33,000 volt switching equipment, two transformer banks totalling 8,000 K. V. A. capacity, a 33,000 volt river crossing, certain right-of-way facilities, etc., located at or near the Holtwood

Plant, which may be used in part, or as a whole, by Electric free of charge for delivering power at or near Havre de Grace, as per Exhibit "D".

[25395] (page 9)

ARTICLE 6.

Steam Energy Purchased.

Upon request of Power, Electric will supply to Power steam generated energy in excess of Electric's own requirements up to the limit of its available generating capacity, provided, however, that Electric is not obligated to start up a station which would not otherwise be operated. For all such energy Power will be billed for the daily net amount of such backfeed at actual costs plus ten per cent. (10%). The costs to be used are those reported on Electric's monthly production statement covering the month during which steam energy was furnished to Power.

ARTICLE 7.

Rates for Power and Energy.

Commencing January 1, 1928, there shall be a graded energy charge and an adjustable annual fixed charge for capacity as follows:—

A—Energy Rate:

Power shall bill Electric and Electric shall pay Power for the first 60 million K. W. H. per year at the rate of 6.0 mills per K. W. H., for the next 180 million K. W. H. per year at the rate of 4.97 mills per K. W. H. and for all energy in excess of 240 million K W. H. per year at the rate of 4.0 mills per K. W. H. The graded energy rates average 4.7365 mills per K. W. H. on a supply of 400 million K. W. H. per year. These steps in rates may be prorated as agreed upon for convenience of monthly billing.

B—Fixed Charge for Capacity:

Electric shall pay Power in equal monthly instalments an adjustable annual fixed charge for capacity of $820,486.31, of which amount $644,357.38 represents payment of $13.21 per K. W. on 48,778 K. W. (see [25396] (page 10) Article 2), and the balance of $176,128.93 represents payment by Electric for swing and reserve capacity service in excess of the predetermined one hour integrated peak supply under minimum flow conditions. The latter payment and the exact K. W. amount of one hour integrated peak service may be amended from time to time upon request in writing by either party by redetermining same in accordance with Article 2 and Exhibit "A", in substantially the same manner as the above payment and the amount of 48,778 K. W. peak service were originally determined by the engineers of the two parties, provided, however, that proper consideration is given not only to actual and predictable changes in the amount and character of the loads of Electric and of Power's other customers, in the generating capacities installed and their availability, in the methods of operation, etc., but also to any other factors that would be effective in determining the peak supply to Electric.

ARTICLE 8.

Payments.

All bills for power and energy, as per Article 7, and for rental, fixed charges, etc., as per Exhibits "B", "C" and "D", for each calendar month, shall be rendered by Power not later than the fifth day of the next succeeding month, and shall be paid by Electric on or before the fifteenth day of said month.

ARTICLE 9.

DIVISION OF LOAD BETWEEN HYDRO AND STEAM PLANTS.

During low flow Power's hydro plant shall operate on the peak portion of Electric's load and shall take care of fluctuations of load, and of reserve capacity within the limits of available capacity, but maximum pond level shall be restored under normal conditions every morning except Sundays and holidays.

[25397] (page 11)

During high flow (i. e., when water is spilled over the Holtwood dam for more than two consecutive hours), Power's hydro plant shall operate for maximum energy output, and shall carry the base portion of Electric's load, except that during periods of storms, ice runs, breakdowns or other emergencies beyond the control of either party, Electric shall be permitted to generate such reasonable amount of steam output as it may deem to be required by good practice and safety in the operation of its steam equipment and by due regard to service, but at all other times Electric shall not generate by steam to an extent that will cause hydro loss (i. e., a loss of hydro-electric energy which Power is ready and able to deliver to Electric and which could be absorbed by Electric's load), excepting such steam generation as is from time to time agreed by the parties hereto to be necessary for safe operation of Electric's steam plants from the point of view of minimum practical load, maximum rate of load change, and capacity margin.

Electric shall pay Power for hydro loss referred to in Article 4, caused by Electric's failure to provide adequate facilities for receiving hydro energy available from Power (with the exception of such occasional losses under extraordinary circumstances as may be reasonable), and also for hydro loss caused by Electric's unnecessary steam generation, i. e., steam generation in excess of the above mentioned

allowances, at the rate of four mills per kilowatt hour of such loss.

For the purpose of the above definition of unnecessary steam it is agreed that, under present conditions, at any time when Power's available hydro units are not fully loaded, Electric shall not generate by steam more than 5,000 K. W. H. per hour, except when a greater amount of generation is required to prevent the rate of load change at the steam plants from exceeding a rate agreed upon as a maximum.

[25398] (page 12)

The power factor shall, as far as reasonably convenient, be so adjusted as to permit of operation under minimum overall loss due to wattless current.

ARTICLE 10.

Points of Delivery, Metering, Characteristics of Energy Supply, Etc.

Points of delivery and metering for all energy supplied under this agreement shall be at the terminals of the outgoing low tension feeders at Power's Highlandtown Substation except for the energy delivered over Power's cables to Pratt Street Station, which shall be metered at Pratt Street.

The electrical energy supplied under this agreement shall be in the form of three-phase alternating current at a normal frequency of 25 cycles per second and at a normal potential of 13,200 volts.

Power and energy may be supplied at other points of delivery and at frequencies or voltages other than those specified herein and under conditions as may be agreed upon from time to time by the parties hereto, making due allowance for those factors that cannot be predicted in advance, such as extra cost to Power due to delivering, and savings to Electric due to receiving, supply at other points of de-

livery and at frequencies or voltages other than those specified above.

Meters shall be installed and calibrated and adjustment of bills in case of inaccuracy shall be made as set forth in Exhibit "E" attached hereto and made a part hereof.

In Witness Whereof, The parties hereto have caused this agreement to be executed in duplicate by their duly authorized officers and to be sealed with their respective [25399] (page 13) corporate seals, attested by their respective Secretaries, as of the day and year first above written.

Consolidated Gas Electric Light and Power Company of Baltimore.

[Seal]

(Signed) Herbert A. Wagner,
President.

Attest:

(Signed) Wm. Schmidt, Jr.,
Secretary.

Pennsylvania Water and Power Company

[Seal]

(Signed) Chas. E. F. Clarke,
President.

Attest:

(Signed) F. J. Allen,
Secretary.

[25400] (page 15)

EXHIBIT "A".

The purpose of this Exhibit is to give a summary of the more important subjects investigated by the respective experts of the two companies under the guidance of a Two-Man Board of Engineers, in response to specific questions placed before them for evaluation. All details in connection with these studies will be placed on the record files of the two companies and may be referred to from time to time in connection with the adjustments of certain annual charges.

The subjects were:

1. Cost of steam investment.
2. Load curves for monthly peak days.
3. Determination of minimum Holtwood peak service to Baltimore, averaged for three months of
3. (a) & 4 minimum flow—September, October and November and minimum flow peak service during other months.
4. (a) & 5 Effect of high flood stages, frazil ice and trash runs on minimum peak service.
6. Seasonal relation of prearranged maintenance work on steam units and of Electric's load requirements.
7. Energy value of Holtwood supply.
8. Average Holtwood capacity available for Baltimore on peak hours.
9. Value of substation service.
10. Forecast of probable trend of Holtwood peak service to Baltimore in future years.
11. Hydro battery service.
12. Effect of hydro supply on coal storage.

13. Comparison of capacity availability of Holtwood supply and of steam equipment under average conditions.

14. Analysis of service disturbances, traceable to hydro or steam source of supply.

15. Annual rate of fixed charges on investment.

[25401] (page 16)

This Exhibit also establishes a proper guide for adjusting from time to time, as provided in Article 7 (B), the amount of one hour integrated peak service during the three minimum flow months—September, October and November, and the equivalent K. W. amount of additional capacity service representing the swing service and reserve capacity allowance which is not included in the determination of the one hour integrated peak service.

The value per K. W. shall remain unchanged at $13.21 per K. W., which has been originally established as being equal to 12.75% on the estimated average cost per K. W. of the four stages of the Gould Street investment, as per Investigation No. 1.

As provided in Article 7 (B), either party at any time may request a redetermination of peak service. The amended peak service shall be the average of nine values (Cases a, b and c in September, October and November) obtained as in Investigations Nos. 3 and 3 (a). The actual computation cannot be made until December, as the actual loads for September, October and November of that year, as well as the load estimates for these months made the previous year, will form a part of the investigation. The resulting adjustment is to become effective on January first of the year following the request for adjustment and remain in effect until again changed due to request of either party, or until there is a major change in Power's load obligations to customers other than Electric, in which case there

shall be an equitable adjustment based on a new redetermination as of the preceding December.

In December of every year, whether or not a request for redetermination of peak service is expected to be made in the next year, Electric and Power shall jointly prepare estimates of hourly loads for the Baltimore peak days of the following September, October and November, so that these will be on file in case either party in the following year requests a redetermination of peak service.

Referring to the temporary limitation of Power's peak service, subsequent to a large step addition to Electric's load carrying capacity, as per the last paragraph of Article 2, the following example will illustrate the procedure that is to be followed:

Suppose that in 1935, for the purpose of deciding on the investment program, a joint forecast is made of loads, capacities and peak service in 1937. It is estimated that the one hour integrated peak service from power will be 42,000 K. W., and that this together with Electric's effective load carrying capacity will be inadequate in 1937, leaving a capacity [25402] (page 17) shortage of 10,000 K. W. It is also agreed that the best method of providing this additional capacity is the installation by Electric of a steam generating unit, which will yield a net increase in effective capacity in 1937 of more than 10,000 K. W. In December, 1936, a redetermination of one hour integrated peak service shall be made as outlined above. Suppose that the result is 40,000 K. W. Suppose also that the increase in effective load carrying capacity is sufficient to take care of the increase in Electric's load up to the end of 1940. Then from January 1, 1937, to December 31, 1940, the one hour integrated peak service paid for by Electric shall not average more than 40,000 K. W., and in any year in that period it shall not exceed 45,000 K. W.

The amount of $176,128.93 corresponds to 13,333 K. W. at $13.21, which is the equivalent amount of one hour integrated generating capacity agreed to as a compromise

payment to represent swing service and reserve capacity value not included in the one hour integrated peak service during minimum flow months. The proportion of the K. W. amount that Electric's payment to Power is based upon, to the K. W. amount of capacity service rendered by Power in excess of the one hour integrated supply under minimum flow conditions, may be established by two separate and distinct methods:

(a)—Swing service, i. e., the difference between maximum indicated load of electric and maximum one hour integrated load, has been determined initially as 13,500 K. W., as per Investigation No. 3. The ratio of reserve capacity of Electric's active steam generating stations to Electric's installed capacity less reserves has been determined as 26.9% to 73.1%, as per Investigation No. 3 (a). Applying the same ratio to Holtwood one hour integrated peak service of 48,778 K. W. would require an equivalent amount of 17,950 K. W. of steam reserve capacity. The sum of the two, i. e., 31,450 K. W., represents the combined swing and reserve capacity value of Holtwood supply. 13,333 K. W. is 42.4% of this amount.

(b)—Under Investigation No. 8 the average one hour integrated capacity available on Electric's peak hour has been determined as 76,800 K. W., which is 28,022 K. W. in excess of the initially determined one hour integrated peak service during minimum flow months. 13,333 K. W. is 47.6% of this amount.

The payment of $176,128.93, i. e., $13.21 on 13,333 K. W., shall be regarded as a minimum amount which may be adjusted from time to time (but shall never be lower than 13,333 K. W.), upon request in writing by either party. In the event that the amount of either the combined swing [25403] (page 18) and reserve capacity value, as per (a),

or the difference between average one hour integrated peak supply and minimum flow peak service, as per (b), is greater than the initially determined amount, Electric shall thereafter pay Power for half the number of K. W. increase of either of these two amounts, whichever is greater, at the rate of $13.21 per K. W. per annum beginning with the year succeeding the one in which the new determination was made.

[25404] (page 19)

EXHIBIT "B".

The purpose of this Exhibit is to give a proper guide for redetermining from time to time, upon request in writing by either party, the amount of substation rental, referred to in Article 5 (a) of the agreement, which has been determined by the engineers as $100,757.00, under Investigation No. 9, but from which amount it has been agreed to deduct the sum of $18,733.58, representing 12.75% on the Highlandtown-Pratt Street cable investment of $146,930.00 and Power hereby agrees to sell and Electric agrees to purchase January 1st, 1929, for the nominal consideration of $1.00, Power's underground cable system between Highlandtown Substation and Pratt Street Station. After said date Electric shall operate and maintain said cable system. The initially agreed to total annual rental for substation service shall therefore be $82,023.42, payable in equal monthly instalments of $6,835.285 each.

Electric may utilize, without payment of additional rental, unless such increased utilization increases Power's cost of operation and maintenance, Power's terminal and distribution station at Highlandtown, including grounds, buildings, equipment, etc., in whatever manner Electric may find most expedient for carrying out its distribution business in the City of Baltimore, in so far as such use of Power's property may be consistent with due regard to safety and good operating practice.

Power may continue to make additions and improvements to high tension lines and terminal arrangements, step-down transformers and their control equipment, communication system between power house and terminal station, etc., the cost of which shall be entirely borne by Power. For those additions and improvements to parts of buildings and equipment on which Electric pays Power the carrying charges, Electric shall pay Power carrying charges (at the rate of 12.75% per annum) and additional cost of opera-

tion and maintenance, provided, however, that either Electric has requested Power to install such additions and improvements, or that Power upon its own initiative, but with the approval of Electric, has carried out such work.

The Highlandtown station is used for two purposes:—(1) a step-down station for Power and (2) a distributing station for Electric.

The carrying charges and operating costs of such improvements as cannot be clearly allocated to either the step-down station part of Power's property or to that portion which functions as a distributing station [25405] (page 20) employed for Electric's service, shall be apportioned in equal half shares to the two parties, provided, however, that previous to the carrying out of such work notification in writing is given by one party to the other describing the purpose of the proposed improvement and stating the approximate amount of cost, thus affording to both companies an opportunity of coordinating such work with other improvements contemplated on other parts of the system.

In the event that at any time in the future actual developments such as improvements or extensions to property and equipment, abandonments, or other conditions the exact nature of which cannot be predicted over a long term of years, should cause the originally established payment or subsequent modifications thereof, based on a certain apportionment of carrying charges and operating costs, to appear either excessive or inadequate by reason of the above indicated developments, or as a result of material changes in basic costs of labor and material, or in consequence of more costly requirements of service for Electric, or for any other reasons, the two parties hereto shall agree on a new apportionment of carrying charges and of total actual cost of substation operation and maintenance of future years, in a manner that will thereafter allocate to each party a fair share of the costs corresponding to the use made of and the services rendered by these facilities.

[25406] (page 21)

EXHIBIT "C".

The purpose of this Exhibit is to set forth the basis of charges for use of the 60 cycle transmission line from Philadelphia Road Substation to Gunpowder Falls which Power built for the use of Electric in 1924. A formal agreement has heretofore not been made covering the continued use of these facilities and the charges therefore have been fluctuating from year to year.

Commencing January 1st, 1928, Electric shall pay Power each year the following charges in equal monthly instalments:

(1)—12.75% of $193,694.42 being cost to Power as of January 1, 1927, of constructing the above mentioned 60 cycle transmission line	$24,696.04
(2)—10/90ths of $42,709.68 being the average annual cost of operation and maintenance of Power's transmission lines from Holtwood to Baltimore during the five years ending with 1926	4,745.52
Annual Charge	$29,441.56
Monthly Instalment	2,453.46

The amount of this annual charge shall remain unchanged during the term of this agreement, except under the following conditions:

(a)—If additional investment becomes necessary, or is incurred by Power at the request of Electric, for the purpose of modifying, improving or extending the property or equipment in connection with this transmission service; the annual payment shall then be increased by an amount equal to 12.75% on such additional investment cost.

(b)—In the event that Power desires to use for its own transmission purposes a portion of the above mentioned transmission line and equipment which originally had been provided exclusively for Electric's transmission service, the fixed charges on the total investment shall be prorated between Electric and Power in proportion to the use made of the facilities by Electric and Power. Thus, for example, if Power decides to string a second circuit on the tower structures between Philadelphia Road Substation and Gunpowder Falls to be employed exclusively for Power's own transmission purposes, the sum of the cost of the said transmission line and equipment ($193,694.42 plus cost of additions made under paragraph (a)), plus the cost of erecting the second circuit for Power's purposes shall be divided into halves and Electric shall pay Power annual fixed charges at the rate of 12.75% on one-half of this total investment.

[25407] (page 22)

(c)—In the event that actual developments in the future, such as improvements or extensions to the property and equipment provided by Power for Electric's transmission service, abandonments, or other conditions, should cause the originally established payment for operation and maintenance, based on the ratio of 10/90ths of total cost of Holtwood-Baltimore line operation and maintenance (representing the ratio of lengths of tower lines) to appear either excessive or inadequate by reason of improvements and extensions to equipment, or as a result of material changes in basic cost of labor and material, or in consequence of more costly requirements of service for Electric, or for other reasons, the two parties hereto

shall agree on a new apportionment of total actual cost of Holtwood-Baltimore transmission line operation and maintenance of future years in a manner that will thereafter allocate to each party a fair share of costs, corresponding to the use made of and the services rendered by these facilities.

[25408] (page 23)

EXHIBIT "D".

The purpose of this Exhibit is to set forth in greater detail the conditions referred to in Article 5 (c) of the agreement, governing the supply of power and energy to Electric at or near Havre de Grace.

Power, upon request of Electric, will construct, operate and maintain a transmission line from Holtwood to Havre de Grace.

Power now has available at or near the Holtwood Plant 13,200 and 33,000 volt switching equipment, two transformer banks totalling 8,000 K. V. A. capacity, a 33,000 volt river crossing, certain rights-of-way, etc., which may be used in whole or in part for the transmission of power and energy to Havre de Grace. Power will hold these facilities for such use until May 1st, 1928, and Electric will advise Power on or before that date whether it desires Power to construct a transmission line to Havre de Grace.

If the said transmission line is constructed, Electric shall pay Power each year the following charges in equal monthly instalments:

(1) A fixed charge at the rate of 12.75% of the cost of the transmission line, tie-in equipment, etc., but the switching equipment, transformer bank, river crossing, rights-of-way, etc., mentioned in the preceding paragraph shall not be included in said cost, it being agreed that Electric shall have the use of said equipment and facilities free of cost.

(2) The additional costs incurred by Power for the operation and maintenance of facilities now owned or hereafter installed by Power in connection with the supplying of power and energy to Havre de Grace.

In the event that Power should employ for its own transmission services a portion of the property, transmission line or equipment that Power may provide at Elec-

tric's request for service to Havre de Grace (in addition to the facilities now owned by Power), the annual fixed charges of 12.75% and the cost of operation and maintenance shall be apportioned in a fair ratio between Power and Electric, following the general principle governing the apportionment of such charges in connection with transmission service between Philadelphia Road and Gunpowder as covered by Exhibit "C."

Power and energy delivered at Havre de Grace shall be metered and billed on the low tension side of the main step-down transformers at Havre de Grace as a portion of the supply contracted for under this agreement, except that if such supply to Havre de Grace should make it necessary for Power to incur investment costs for which Electric is not obligated to pay the carrying charges as provided above, then the supply to Havre de Grace shall be treated separately as agreed upon by the two parties, but the unit rates for power and energy specified in Article 7 shall not be changed.

[25409] (page 24)

EXHIBIT "E".

Metering and Adjustment of Bills

There shall be installed at points of delivery standard watthour meters to be known as billing meters and such other meters known as check meters as may be mutually agreed upon by the parties concerned.

Routine calibration tests of billing and check meters shall be made in the presence of representatives of both parties at least once in every twelve months, or at such shorter intervals as may be mutually agreed upon. In addition to these routine tests, in case either party at any time believes that any billing meter equipment registers incorrectly, it shall have the right to make or have made a special test on such equipment, using methods mutually acceptable and making such tests in the presence of representatives of the other party. After every test the meters shall be adjusted to read with as near absolute accuracy as possible within the then prevailing range of use, allowing for inaccuracies in the instrument transformers as determined by tests. Calibration of the ratio of instrument transformers, which involves considerable expense, shall be made only as found necessary.

Any meter equipment shall be considered accurate for billing purposes if, as the result of tests, the weighted average error above or below accuracy is found to be not greater than two (2) per cent. The calibration points (selected according to the prevailing range of use) and the method of weighting the results are to be agreed upon before the test by the parties concerned.

If the weighted average error of any billing meter equipment is found to be greater than two (2) per cent., but the error of the check meter is two (2) per cent. or less, the consumption since the last monthly reading preceding request for test shall be billed according to the registration

of the check meter. If both billing and check meters are found to be more than two (2) per cent. inaccurate, the probable consumption since the last monthly reading preceding the request for test shall be estimated and paid for as may be agreed upon between the parties. In no case shall any correction whatever on account of inaccuracy of metering equipment extend back beyond thirty days prior to the day of request for test, or beyond the last preceding test in case this was within the thirty-day period.

[25410] (page 25)

SUPPLEMENTAL AGREEMENT

THIS SUPPLEMENTAL AGREEMENT made this 27th day of December, 1928, between CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE, a corporation of the State of Maryland, hereinafter called "Electric", and PENNSYLVANIA WATER AND POWER COMPANY, a corporation of the State of Pennsylvania, hereinafter called "Power".

WHEREAS, by an agreement between Electric and Power made as of the 31st day of December, 1927, Power agreed to supply electrical energy to Electric until December 31, 1970; and

WHEREAS, it was provided in the first paragraph of Exhibit "B" attached to and forming part of said agreement that "Power hereby agrees to sell and Electric agrees to purchase January 1st, 1929, for the nominal consideration of $1.00, Power's underground cable system between Highlandtown Substation and Pratt Street Station. After said date Electric shall operate and maintain said cable system. The initially agreed to total annual rental for substation service shall therefore be $82,023.42, payable in equal monthly instalments of $6,835.285 each."; and

WHEREAS, the parties hereto have mutually agreed to change said provision.

NOW, THEREFORE, THIS AGREEMENT WITNESSETH: That for and in consideration of the sum of Five Dollars ($5.00) and other valuable considerations paid by each of the parties hereto to the other, receipt whereof is hereby acknowledged, it is agreed as follows:

1. That the aforesaid provision of Exhibit "B" shall be stricken out and the following inserted in lieu thereof;—

"Electric agrees to purchase December 31st, 1928, from Power's subsidiary (Susquehanna Transmission Company

of Maryland) for the consideration of $105,935.69 (cable investment of $146,930.00 less $40,994.31 depreciation) the [25411] (page 26) underground cable system between Highlandtown Substation and Pratt Street Station. After said date Electric shall operate and maintain said cable system. The initially agreed to total annual rental for substation service shall therefore be $82,023.42, payable in equal monthly instalments of $6,835.285 each, but for the year 1929 and subsequent years shall be reduced by 12.75% of $105,935.69, thus making the annual rental $68,516.62, payable in equal monthly instalments of $5,709.718."

2. That on and after December 31st, 1928, the electrical energy delivered by Power to Electric and carried over the above mentioned underground cable system to the Pratt Street Station shall be metered as heretofore at said Station.

IN WITNESS WHEREOF the parties hereto have caused this agreement to be executed in duplicate by their duly authorized officers and to be sealed with their respective corporate seals, attested by their respective secretaries.

CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE

[SEAL]

(Signed) HERBERT A. WAGNER, *President.*

Attest:

(Signed) WM. SCHMIDT, JR., *Secretary.*

PENNSYLVANIA WATER AND POWER COMPANY

[SEAL]

(Signed) CHAS. E. F. CLARKE, *President.*

Attest:

(Signed) F. J. ALLEN, *Secretary.*

[25412] (page 27)

SUPPLEMENTAL AGREEMENT.

THIS SUPPLEMENTAL AGREEMENT made as of the 1st day of June, 1931, between CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE, a corporation of the State of Maryland, hereinafter called "Electric," and PENNSYLVANIA WATER AND POWER COMPANY, a corporation of the State of Pennsylvania, hereinafter called "Power."

WHEREAS an agreement has been made between Power and Electric dated December 31, 1927, and terminating December 31, 1970, providing among other things that the investment programs of said companies for additional generating and transmission facilities shall be co-ordinated well in advance to the greatest benefit to the parties and to the public service by them; and

WHEREAS in accordance with this intent of said agreement, Power and Electric have made an agreement of even date herewith, terminating April 22, 1980, with Safe Harbor Water Power Corporation, a corporation of the State of Pennsylvania, hereinafter called Safe Harbor, for the transmission and purchase of electrical power and energy, by Power one-third, and by Electric two-thirds, of the electrical output of the initial development of a hydroelectric project of Safe Harbor, known as the Safe Harbor Development, whereby the operation of the hydroelectric and steam-electric generating plants of Power at Holtwood, Pennsylvania, and of the Safe Harbor Development, will be so co-ordinated that the greatest possible combined amount of power and energy will be derived therefrom; and

WHEREAS determination of the relative pecuniary rights and obligations of Electric and Power under said two [25413] (page 28) agreements is difficult and expensive, and likely to become increasingly so, and is not conducive to the

most effective utilization of output, and co-ordination in operation, of the two plants; and more complete co-ordination can be attained and greater economies effected by the sale to Electric of all of Power's electrical power and energy (including that to be purchased from Safe Harbor) available for such sale, and by payment therefor on the basis of an annual charge, (instead of unit rates for power and energy), which together with payments from other customers is expected to yield to Power approximately the same net power revenue now received by Power from all its customers, including Electric, plus a reasonable income on any additional investments hereafter made by Power to serve any customers.

NOW, THEREFORE, THIS AGREEMENT WITNESSETH: That for and in consideration of the mutual covenants and agreements hereinafter contained and the sum of five dollars ($5.00) paid by each of the parties hereto to the other, receipt whereof is hereby acknowledged, and of other valuable considerations, Electric and Power do covenant and agree as follows:

ARTICLE I.

This agreement shall become effective as of January 1, 1931, and shall supplement the agreement of December 31, 1927, above referred to, and the general intent of said agreement and all the provisions thereof not inconsistent herewith are hereby reaffirmed. This agreement shall continue in force until midnight of April 22, 1980.

ARTICLE II.

Electric shall be entitled at all times to all the electrical capacity and energy from time to time available to Power at [25414] (page 29) its Holtwood hydroelectric and steam-electric generating plants and from the Safe Harbor Development under the said agreement with Safe Harbor, and not otherwise disposed of in performance of now existing

contracts, new contracts entered into by Power with Electric's approval or any duty or obligation to serve imposed on Power by its charter or otherwise by law.

ARTICLE III.

In payment for all the electrical capacity and energy which Electric receives from Power pursuant to Article II hereof, Electric shall pay annually to Power the following sum of money, which shall be increased and/or decreased from time to time, by order of, or pursuant to determination of unreasonableness thereof by, any regulatory authorities in the exercise of their respective powers and jurisdiction under the laws of Pennsylvania, Maryland and/or the United States to fix reasonable rates, and may be increased and/or decreased by agreement of the parties subject to the regulatory powers of such authorities:

(a) The amount of net power revenue, before interest but after depreciation, that would have accrued to Power in the calendar year 1930 had the flow of the Susquehanna River been equal to the 40 year average flow (1891-1930 inclusive) usable by the Holtwood hydroelectric plant of Power. This sum is computed to be approximately, and shall be taken to be, $2,832,259.75, as shown in Exhibit "A" attached hereto. If, however, there is a decrease during the year 1931 in the income accrued to Power from all of its customers other than Electric for the sale of electrical and hydraulic power and energy, below the corresponding income accrued in 1930, then the sum of $2,832,259.75 shall be reduced by such decrease, and the resulting decreased amount shall be the amount that Electric shall pay to [25415] (page 30) Power under this subparagraph (a); provided, however, if the average income so accrued to Power from its customers other than Electric during the years 1931 to 1933, inclusive, be greater than the corresponding income accrued in 1930, then for the year 1933 and thereafter Electric shall pay to Power the sum of $2,832,259.75.

The sum of $2,832,259.75 is computed after an allowance of $355,146.73 for renewals and replacements. Subject to the determinations, from time to time, of any regulatory authorities acting within their respective powers and jurisdiction under the laws of Pennsylvania, Maryland and/or the United States, Power may appropriate at least this allowance (plus an appropriation in respect of net additions referred to in paragraph (b) of this Article III) each year to its reserve for these purposes, which was $2,875,440.89 as of December 31, 1930; provided, however, that (subject as aforesaid) said reserve shall never at any time amount to more than 15 per cent. of the book value (or the fair value which may be determined from time to time by any such regulatory authorities in the exercise of their respective powers and jurisdiction) of the plant, power development, transmission lines and other property used by Power and its subsidiaries in the generation and transmission of electrical power and energy; the allowance of $355,146.73 shall be reduced whenever necessary so that the reserve shall not exceed this amount.

(b) The sum of twelve monthly amounts, computed at the end of each month, equal to 10.25 per cent. per annum of the cost of net additions, after December 31, 1930, on the books of Power and its subsidiaries, to investment in plant, power development, transmission lines and like property, by Power and by subsidiaries engaged in the generation and transmission of electrical power and energy, or businesses incidental thereto. The amount mentioned in this paragraph (b) shall not be based on any additions included in the basis of similar [25416] (page 31) computation under Article VII of the agreement between Safe Harbor and the parties hereto.

(c) An amount equal to all reasonable operating expenses accrued during the calendar year, including maintenance and general expenses, insurance and taxes, and a reasonable allowance (above referred to) for renewals and replacements (which shall be regarded as including provision for depreciation) of property other than net additions referred to in paragraph (b) of this Article III, in the operation of generating plants, interconnected transmission systems, and all facilities appurtenant thereto.

(d) An amount equal to the actual payments made by Power, or accrued, during the calendar year for electrical power and energy obtained from Safe Harbor and/or from other sellers with whom Power may now have contracts for the purchase of electrical power and energy, or may hereafter contract for such purchase with the approval of Electric.

(e) From the sum of the amounts mentioned in paragraphs (a), (b), (c) and (d) hereof, there shall be deducted, in determining the sum to be paid by Electric to Power, the amounts accrued during the calendar year to Power from its customers and/or contracting parties other than Electric, for the sale to them by Power of electrical and hydraulic power and energy and for the lease to and/or use by them of real estate, riparian property and privileges, generation, transmission and other facilities owned and/or controlled by Power, for the purpose, either direct or indirect, of generating, transmitting, distributing, and/or exchanging electrical and hydraulic power and energy.

(f) From the sum of the amounts aforesaid there shall also be deducted a reasonable credit on account of (1) increase at the end of the year in net reserve for depreciation or renewals (whether in respect of additions after December 31, 1930, or of property already [25417] (page 32) owned on December 31,

1930) over and above the net amount of said reserve on December 31, 1930, and/or (2) other decrease, (*e.g.*, through sale or retirement), in book cost, less such reserve, of property owned on December 31, 1930.

(g) Electric estimates that its sales of electrical energy, other than energy for railroad electrification purposes, during the years 1932 to 1937 will be not less than the amounts set up in the following schedule:—

Year	*Sales in million k.w.h.*
1932	905
1933	943
1934	984
1935	1024
1936	1065
1937	1106

A charge shall be set up by Electric against Power for each of the above years in the following amount:

1932	$175,000
1933	200,000
1934	225,000
1935	250,000
1936	287,400
1937	287,400

Against the said charge there shall be credited in each of said years—

1—Six dollars and sixty-three cents per meg.w.h. for all sales of energy by Electric, (other than for railroad electrification), in excess of the amounts specified in the above schedule.

2—One mill per k.w.h. for all sales of energy by Electric for railroad electrification purposes.

[25418] (page 33) If the credits are less than the charge in any year, Power shall pay the deficiency to Electric, but if the credits are more than the charge,

Electric shall pay the excess to Power, provided, however, that the total of such excess payments by Electric for the six year period ending December 31, 1937, shall not exceed the total of such deficiency payments by Power to Electric.

[*For paragraph (h) see supplemental agreement of September 29, 1939.*]

The net sum of the above amounts to be paid annually by Electric to Power shall be estimated by the parties hereto in advance, and shall be paid as nearly as possible in equal monthly installments, the payment for any month to be made not later than the fifteenth day of the next succeeding month, with subsequent adjustment to the correct yearly payment.

ARTICLE IV.

So far as possible consistently with the performance of any duty or obligation to serve imposed on Power by its charter or otherwise by law, Power shall obtain the approval of Electric before entering into any agreement or agreements with any other person or corporation for the sale and/or purchase and/or interchange of electrical and hydraulic power and energy, or before making any substantial modifications in the existing contracts now in force between Power and its customers other than Electric.

ARTICLE V.

So far as possible consistently with the performance of any duty or obligation aforesaid, Power shall obtain the approval of Electric (1) before incurring any single commitment for investment (except for renewals or replacements) in excess of $50,000.00 on the basis of which Electric shall make payment under Article III (b) hereof, and (2) before alienating or disposing of in any one year any property, [25419] (page 34) plant, or equipment, other than stores and construction equipment, having a total

value in excess of $50,000.00 and included in the investments of Power and/or subsidiaries of Power in plant, property or power development devoted to the generation, transmission, or distribution of electrical power and energy.

ARTICLE VI.

Power shall at all times as far as practicable keep its equipment in first-class condition in accordance with good engineering practice and shall arrange whenever possible to have all maintenance work in its hydroelectric plant done in the low flow periods. If any equipment by necessity is out of service during high flow, Power shall use every reasonable effort to return equipment to service as quickly as possible, consistent with high standards of operating and maintenance practice.

ARTICLE VII.

If at any time during the continuance of this agreement Power shall be prevented from supplying and Electric from receiving all or any part of the power and energy herein specified, by reason of war, rebellion, civil disturbance, strikes, serious epidemics, major catastrophe, or any other cause of a like nature beyond the control of either party, the obligation of Power to supply and the obligation of Electric to take, power and energy herein specified, shall cease until such time as the party so incapacitated shall, by the exercise of reasonable diligence, be able to resume such supply or use, and a reasonable abatement in the payments by Electric to Power shall be made.

[25420] (page 35)

ARTICLE VIII.

It is the intent among other things of this long term agreement to encourage the maximum cooperative utilization of the power and energy entitlements and resources

and other facilities of the parties hereto to the end that the joint use of their property and equipment shall give the greatest practical benefit to the public, and that all duplication of investment, and all unnecessary operating and maintenance costs, shall be avoided except such as would contribute toward the maintenance and improvement of the high standard of service rendered. The parties hereto shall cooperate to the fullest extent in the selection of the most suitable equipment, in the co-ordination of their investment programs for additional generating capacity, transmission and tie-in facilities, etc., and shall so conduct their operations that economic interchange of power and energy during the different hours of the day, the seasons of the year, and over more prolonged periods, shall be encouraged in every possible way. For this purpose and to insure that the costs of operation and maintenance, and other current costs, of Power's facilities for the generation and transmission of electrical power and energy, shall be at all times the minimum that is practical in view of the high standard of service rendered, each party shall, within thirty (30) days after the execution of this agreement, appoint one representative to act as its agent for investigation, consultation, and advice in all operating, engineering and accounting matters pertaining to the interconnected facilities herein contemplated, and to the supply and interchange of power and energy herein provided for. Each appointment shall be evidenced by written notice to the other party signed by an executive officer. Either party at any time may change its representative or withhold or withdraw from its representative the authority to act for it in any matters specified in the [25421] (page 36) notice, provided that it designate in such notice other representation in respect to such matters. These representatives, to be known as the Operating Committee, shall confer upon request of either; in case of their inability to agree, the question in dispute shall be submitted to the Presidents of the respective companies for their decision.

ARTICLE IX.

For the purpose of determining the payments to be made by Electric to Power under Article III hereof, Electric shall have complete access to and may audit the accounts of Power at any time.

ARTICLE X.

In case of any dispute arising between the parties to this agreement, the said dispute shall be referred to a Board of Arbitration upon service of written notice by either party to the other.

The said Board of Arbitration shall consist of three members, the first member to be chosen by the party complaining, the second member to be chosen by the other party, and the third member to be chosen by the first and second members. Should the second or third member remain unselected at the expiration of thirty days after notice of arbitration is given, then upon the request of the complaining party, and upon notice thereof having been given to the other party, the second or third member, or both, of the Arbitration Board shall be selected by the then Chief Judge of the Supreme Bench of Baltimore City or, in the event of the said Judge's [25422] (page 37) disinclination or failure to act within thirty days, by the then Chairman of the Public Service Commission of Maryland.

The Board of Arbitrators shall proceed at its earliest convenience to hear and determine the questions at issue after having given each party hereto not less than five days notice of the time and place of the first meeting.

Each party shall be permitted to be represented by counsel before the Board of Arbitrators, and to present in full, by competent witnesses, all facts, figures and statements which might aid the Board of Arbitrators to give a final and fair judgment as to the questions in dispute.

The determination of the Board of Arbitrators, or a majority thereof, shall be made within sixty days after the

submission to said Board, unless prevented by circumstances unforeseen, and the decision of the Board of Arbitrators, or a majority thereof, shall be final and conclusive upon the parties hereto and said parties shall abide by such decision.

All expenses in connection with such arbitration, including a reasonable compensation for the arbitrators, shall be divided equally between the parties, with the exception of expenses of counsel, witnesses and employes of the parties, which expenses shall be borne by the parties incurring them.

All notices herein provided for may be given by serving the same in writing, or by sending the same by registered mail addressed to the party interested at its principal places of business.

IN TESTIMONY WHEREOF each of the parties hereto has caused these presents to be signed in its corporate name by its President or a Vice-President and its corporate seal to be [25423] (page 38) hereunto affixed duly attested by its Secretary or an Assistant Secretary as of the day and year first above written.

CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE

(Signed) CHARLES M. COHN,
Vice-President.
[SEAL]

Attest:

(Signed) WM. SCHMIDT, JR.,
Secretary.

PENNSYLVANIA WATER AND POWER COMPANY

(Signed) J. A. WALLS,
Vice-President.
[SEAL]

Attest:

(Signed) F. J. ALLEN,
Secretary.

[25424] (page 39)

EXHIBIT A.

PENNSYLVANIA WATER & POWER COMPANY

Revenue for 1930 (adjusted for flow deficiency) applicable as basis for payment under Art. IV paragraph (a) Supplemental Agreement dated 6-1-1931.

POWER REVENUE:

From Consolidated Gas Electric Light and Power Company		$2,836,007.66
Capacity Charge	$ 820,486.31	
Energy Charge (269,217,100 KWH)	1,371,468.40	
Deficiency in flow—144,453,000 KWH @ 4.0 mills	577,812.00	
Highlandtown Substation Rental	68,516.62	
Gunpowder Transmission Line Rental	29,441.56	
	$2,867,724.89	
Less credit for back feed (7,095,600 KWH)	31,717.23	
From Edison Electric Co., Lancaster, Pa.		1,074,589.83
From Edison Electric Light & Power Co., York, Pa.		282,456.72
From Chester Valley Electric Co., Coatesville, Pa.		430,548.95
From Arundel Corporation, Safe Harbor, Pa.		21,753.20

From Pioneer Electric Light Co., Lancaster, Pa.		4,479.00
From The Susquehanna Power Company and The Susquehanna Electric Company		124,500.00
Total Power Revenue		$4,774,335.36
Rentals received from Power Development Property		28,450.46
		$4,802,785.82
DEDUCTIONS:		
Operating expenses	$569,470.59	
General Expenses	211,304.24	
Taxes	391,040.79	
Maintenance	443,563.72	
Renewals and Replacements	355,146.73	
		$1,970,526.07
		$2,832,259.75

ITEM I.

[25425] (page 41)

SUPPLEMENTAL AGREEMENT

THIS SUPPLEMENTAL AGREEMENT made as of the 29th day of September, 1939, between CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE, a corporation of the State of Maryland, hereinafter called "Electric," and PENNSYLVANIA WATER & POWER COMPANY, a corporation of the State of Pennsylvania, hereinafter called "Power,"

WHEREAS, the Public Service Commission of Maryland has requested that Electric's rates be reduced and that a substantial portion of such rate reduction be provided for through decrease in Electric's payments to Power, and

WHEREAS, it is desired by both parties to simplify and revise certain provisions of their Supplemental Agreement of June 1, 1931 with respect to annual allowances for renewals and replacements (or depreciation), and

WHEREAS, by incorporating such simplifications and revision of said provisions with modifications of other provisions of said Supplemental Agreement of June 1, 1931, the whole will effect a reduction of total payments by Electric to Power as requested by the Public Service Commission of Maryland.

NOW THEREFORE, the following amendments to the Supplemental Agreement of June 1, 1931 are hereby agreed to, effective December 1, 1939:

(1) The second paragraph of Article III. (a) is amended to read as follows:

The sum of $2,832,259.75 is computed after an allowance of $355,146.73 for renewals and replacements (or depreciation). Subject to the determinations, from

time [25426] (page 42) to time, of any regulatory authorities acting within their respective powers and jurisdiction under the laws of Pennsylvania, Maryland and/or the United States, Power may so appropriate this allowance (plus an appropriation, out of and not in addition to the amounts computed under paragraph (b) of this Article III, in respect of net additions referred to in that paragraph) each year to its reserve for these purposes, which was $2,875,440.89 as of December 31, 1930.

(2) Paragraph (b) of Article III is hereby amended to read as follows:

(b) The sum of twelve monthly amounts, computed at the end of each month, equal to 10.25 per cent. per annum of the cost of net additions after December 31, 1930 to and including December 31, 1938, (not exceeding the cost of all net additions after December 31, 1930), plus 9.5 per cent. per annum of the cost of net additions after December 31, 1938, on the books of Power and its subsidiaries, to investment in plant, power development, transmission lines and like property, by Power and by subsidiaries engaged in the generation and transmission of electrical power and energy, or businesses incidental thereto. The amount mentioned in this paragraph (b) shall not be based on any additions included in the basis of similar computation under Article VII of the agreement between Safe Harbor and the parties hereto, but in such computations under Article VII of said agreement the above mentioned rate of 9.5 per cent. shall be substituted for the rate mentioned in said Article VII with respect to net additions after December 31, 1938 to transmission lines and switching stations.

(3) Immediately after Paragraph (g) of Article III insert the following:

(h) From the net sum of the amounts aforesaid there shall be deducted the sum of $600,000.

[25427] (page 43)

IN TESTIMONY WHEREOF each of the parties hereto has caused these presents to be signed in its corporate name by its President or a Vice-President and its corporate seal to be hereunto affixed, duly attested by its Secretary or an Assistant Secretary as of the day and year first above written.

CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE

(Signed) HERBERT A. WAGNER,
President.
[SEAL]

Attest:

(Signed) HERMAN L. GRUEHN,
Secretary.

PENNSYLVANIA WATER & POWER COMPANY

(Signed) F. A. ALLNER,
Vice-President.
[SEAL]

Attest:

(Signed) J. E. O'CONNOR,
Assistant Secretary.

ITEM K.

DETERMINATION OF ORIGINAL COST
OF ELECTRIC PLANT
OF
PENNSYLVANIA WATER & POWER COMPANY
PURSUANT TO
ELECTRIC PLANT INSTRUCTION 2-D
OF THE
UNIFORM SYSTEM OF ACCOUNTS
OUTLINE OF ORIGIN AND DEVELOPMENT
TO JANUARY 1, 1937
(Excerpt)

[25447]

* * *

On June 12, 1905 the Susquehanna Contracting Company was incorporated in New York to facilitate the development and financing of the McCall project. It had capital stock of only $500. and was a "paper" company which did no construction work and derived no profit. It was dissolved in April 1910.

* * *

COPY

PUBLIC SERVICE COMMISSION
Lansey Building
FORMAL Baltimore-2

Copies for:
Commissioners
Mr. Shannon
Mr. C.W.Smith

DOCKET NO. II-...5.9.1.5...

August 30th, 1944

FEDERAL POWER COMMISSION
DOCKETED
AUG 31
DOCUMENT SECTION

Honorable Basil Manly,
Acting Chairman,
Federal Power Commission,
Washington, D. C.

Dear Mr. Chairman:

As you know, this Commission is engaged in an investigation of the rates charged by Consolidated Gas Electric Light and Power Company of Baltimore which receives large quantities of electric energy from Safe Harbor Water Power Corporation and Pennsylvania Water and Power Company.

In considering a motion by People's Counsel that this Commission request the Federal Power Commission to determine the reasonable rates to be charged by these two companies for energy supplied to Maryland, we have first inquired into the preparedness of the two state commissions to exercise the regulation indicated by U. S. Circuit Court of Appeals in Safe Harbor Water Power Corporation v. Federal Power Commission.

While the state commissions are ready to engage in co-operative regulation and the opinion of the Circuit Court indicates state jurisdiction, the public interest demands the procedure which will get results in the shortest possible time and we understand that the Federal Power Commission is prepared to pursue the matter to a conclusion in much less time than probably would be required by state action.

Under the circumstances, this Commission has decided to grant the motion of People's Counsel and hereby requests that the Federal Power Commission proceed to determine the reasonable rates to be charged by Safe Harbor Water Power Corporation and by Pennsylvania Water and Power Company for energy sold to Consolidated Gas Electric Light and Power Company of Baltimore.

At the request of People's Counsel we are forwarding copies of schedules 10 to 13, inclusive of his exhibit No. 1, for your information.

(no enclosures
Mail Room)

Very truly yours,

/s/ Stewart Purnell

Chairman.

Schedule No. 20

PENNSYLVANIA WATER AND POWER COMPANY

(INCLUDING SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND)

DOCKET NO. IT-5915

Files

RATE BASE, RETURN AND RATE OF RETURN
FOR THE YEARS ENDED DECEMBER 31, 1942 AND 1943

1944 JPS

Item	Particulars (a)	Year Ended December 31, 1942 (b)	1943 (c)
1	Average Fixed Capital at Book Figures	$38,512,434	$38,673,077
2	Deduct: Plant Adjustment Account	2,106,765	2,106,765
3	Average Fixed Capital at Original Cost	$36,405,669	$36,566,242
4	Average Reserve for Depreciation	7,096,591	7,642,043
5	Average Depreciated Fixed Capital at Original Cost	$29,309,078	$28,924,199
6	Working Capital Allowance	134,412	149,020
7	Materials and Supplies	341,102	353,882
8	Rate Base	$29,784,592	$29,427,101
9	Operating Revenues	$ 6,904.824	$ 6,643,075
	Operating Revenue Deductions:		
10	Operating Expenses	$ 2,260,331	$ 2,041,109
11	Depreciation	568,805	570,874
12	Federal Income Taxes (Note)	1,040,810	1,100,024
13	Other Taxes	416,919	354,225
14	Total Operating Revenue Deductions	$ 4,286,865	$ 4,066,232
15	Operating Income (Return)	$ 2,617,959	$ 2,576,843
16	Rate of Return	8.79%	8.76%
17	Net Income Per Share of Common Stock	19.49%	18.47%

Note: Federal Income Taxes of the Company are charged in total as an operating revenue deduction; part of this item of cost is allocable to Non-operating Income.

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[25523E]

Item R

4624

PENNSYLVANIA WATER & POWER COMPANY
(INCLUDING SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND)

DOCKET NO. 11-5915

STATEMENT OF INCOME REDUCTIONS WITH ASSOCIATED TAX SAVINGS AT VARIOUS RATES OF RETURN AND CONSEQUENT REDUCTIONS IN COST OF PURCHASED POWER TO CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE

Item	Particulars (a)	Year Ended December 31, 1942 (b)	Year Ended December 31, 1943 (c)
1	Rate Base (Schedule No. 10, Item 8)	$29,784,592	$29,427,101
2	Operating Income (Return) (Schedule No. 10, Item 15)	$ 2,617,959	$ 2,576,843
	Return of 6% on Rate Base, Item 1:		
3	Operating Income, Item 2	$ 2,617,959	$ 2,576,843
4	Operating Income (Return) of 6%	1,787,076	1,765,626
5	Reduction in Income of Pennsylvania Water & Power Company	$ 830,883	$ 811,217
6	Tax Saving Associated with Income Reduction	553,922	540,811
7	Reduction in Cost of Purchased Power to Baltimore	$ 1,384,805	$ 1,352,028
	Return of 5½% on Rate Base, Item 1:		
8	Operating Income, Item 2	$ 2,617,959	$ 2,576,843
9	Operating Income (Return) of 5½%	1,638,153	1,618,491
10	Reduction in Income of Pennsylvania Water & Power Company	$ 979,806	$ 958,352
11	Tax Saving Associated with Income Reduction	653,204	638,901
12	Reduction in Cost of Purchased Power to Baltimore	$ 1,633,010	$ 1,597,253
	Return of 5% on Rate Base, Item 1:		
13	Operating Income, Item 2	$ 2,617,959	$ 2,576,843
14	Operating Income (Return) of 5%	1,489,230	1,471,355
15	Reduction in Income of Pennsylvania Water & Power Company	$ 1,128,729	$ 1,105,488
16	Tax Saving Associated with Income Reduction	752,486	736,992
17	Reduction in Cost of Purchased Power to Baltimore	$ 1,881,215	$ 1,842,480

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FEDERAL POWER COMMISSION

SAFE HARBOR WATER POWER CORPORATION

DOCKET NO. 5914

RATE BASE, RETURN AND RATE OF RETURN
FOR THE YEARS ENDING DECEMBER 31, 1942 AND 1943

Item	Particulars (a)	Year Ended December 31, 1942 (b)	1943 (c)
1	Average Fixed Capital	$30,127,358	$30,141,176
2	Average Reserve for Depreciation	1,349,875	1,575,673
3	Depreciated Book Cost of Average Fixed Capital	$28,777,483	$28,565,503
4	Working Capital Allowance	47,690	53,000
5	Materials and Supplies	145,881	140,982
6	Rate Base	$28,971,054	$28,759,485
7	Operating Revenues	$ 3,447,660	$ 3,620,412
	Operating Revenue Deductions:		
8	Operating Expenses	$ 559,489	$ 634,962
9	Depreciation	173,711	174,192
10	Interest Accretion on Depreciation Reserve	52,701	62,038
11	Federal Income Taxes	369,438	369,970
12	Federal Excess Profits Tax - Net	95,796	200,925
13	Other Taxes	141,908	143,360
14	Total Operating Revenue Deductions	$ 1,393,043	$ 1,585,447
15	Operating Income (Return)	$ 2,054,617	$ 2,034,965
16	Rate of Return	7.14%	7.12%
17	Net Income Per Share of Common Stock	12.23%	12.17%

[25523G]

Item R,

4626

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SAFE HARBOR WATER POWER CORPORATION

5914

STATEMENT OF INCOME REDUCTION WITH ASSOCIATED TAX SAVINGS AT VARIOUS RATES OF RETURN AND CONSEQUENT REDUCTIONS IN COST OF PURCHASED POWER TO CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE

Item	Particulars (a)	Year Ended December 31, 1942 (b)	1943 (c)
1	Rate Base (Schedule No. 12, Item 6)	$28,971,054	$28,759,485
2	Operating Income (Return) (Schedule No. 12, Item 15)	$ 2,054,617	$ 2,034,965
3	Add Back: Federal Excess Profits Tax	95,796	200,925
		$ 2,150,413	$ 2,235,890
4	Deduct: Additional Federal Income Taxes (See Note)	47,307	99,222
5	Operating Income (Return) Adjusted for Federal Income Taxes	$ 2,103,106	$ 2,136,668
	Return of 6% on Rate Base, Item 1:		
6	Operating Income Adjusted, Item 5	$ 2,103,106	$ 2,136,668
7	Operating Income (Return) of 6%	1,738,263	1,725,569
8	Reduction in Income of Safe Harbor Company	$ 364,843	$ 411,099
9	Tax Saving Associated with Income Reduction	243,228	274,066
10	Reduction in Cost of Purchased Power to Baltimore	$ 608,071	$ 685,165
	Return of 5½% on Rate Base, Item 1:		
11	Operating Income Adjusted, Item 5	$ 2,103,106	$ 2,136,668
12	Operating Income (Return) of 5½%	1,593,408	1,581,772
13	Reduction in Income of Safe Harbor Company	$ 509,698	$ 554,896
14	Tax Saving Associated with Income Reduction	339,799	369,931
15	Reduction in Cost of Purchased Power to Baltimore	$ 849,497	$ 924,827
	Return of 5% on Rate Base, Item 1:		
16	Operating Income Adjusted, Item 5	$ 2,103,106	$ 2,136,668
17	Operating Income (Return) of 5%	1,448,553	1,437,974
18	Reduction in Income of Safe Harbor Company	$ 654,553	$ 698,694
19	Tax Saving Associated with Income Reduction	436,369	465,796
20	Reduction in Cost of Power Purchased to Baltimore	$ 1,090,922	$ 1,164,490

Note: A computation of actual taxable net income discloses that Safe Harbor Water Power Corporation would be subject only to Federal Surtax and Normal Taxes of 40% were the income reductinns, shown above, in effect.

[25523H]

Item R

4627

ITEM U.

Docket No. IT-5582

1939

BEFORE THE FEDERAL POWER COMMISSION

In re: Application of Pennsylvania Water & Power Company for Commission's approval of the merger of its facilities for the transmission or sale at wholesale of electric energy in interstate commerce with the transmission facilities of the Susquehanna Transmission Company of Pennsylvania, within the meaning of Section 203 of the Federal Power Act.

(Excerpts)

[25524]

* * *

E. That the applicant, Pennsylvania Water & Power Company, is a public utility engaged in the business of generation, purchasing, selling and transmission of electric power and energy at wholesale.

The generating properties of applicant consist of a hydroelectric plant and a steam-electric plant located at Holtwood, Pa., on the Susquehanna River and having a combined capacity of 131,000 Kw. The transmission lines of applicant and its wholly-owned subsidiary transmission companies, Susquehanna Transmission Company of Pennsylvania (a party to this proceeding), Pennsylvania Transmission Company (a party to a companion proceeding) and Susquehanna Transmission Company of Maryland, form a regional power supply system referred to below. The properties of these subsidiary transmission companies are operated under contractual arrangements by applicant.

[25525]

The hydroelectric plant of Safe Harbor Water Power Corporation (a licensee under the Federal Power Act), located about 8 miles above the applicant's generating plants at Holtwood, Pa., has a capacity of 180,000 Kw. and has been tied in with applicant's plants and the steam-electric plants of Consolidated Gas Electric Light and Power Company of Baltimore by transmission lines owned by applicant or its wholly-owned transmission subsidiaries. Power resources of the three companies are thus coordinated and operated as a regional power supply system by means of the transmission lines operated by the applicant for the delivery and interchange of power and energy to the customers of the three companies. Reference is made to a map which is submitted herewith and identified as Exhibit "M".

530. SALES TO OTHER ELECTRIC UTILITIES (Account 605)

1. Report below the information called for concerning sales during year to other electric utilities and to cities or other public authorities for distribution to ultimate consumers.
2. Report separately firm, dump, and other power sold to the same company. Describe the nature of any sales classified as Other Power, column (g).
3. If a fixed number of kilowatts of maximum demand is specified in the power contract as a basis of billing to the customer this number should be shown in column (k). The number of kilowatts of maximum demand to be shown in columns (l) and (m) should be actual based on monthly readings and should be furnished whether or not used in the determination of demand charges. Show in column (n) type of demand reading (instantaneous, 15, 30, or 60 minutes integrated).

A. Summary of Sales According to Companies and Points of Delivery

Line No.	Sales to—	Associated utilities	Nonassociated utilities	Municipalities	Firm power	Dump or surplus power	Other power	Sales within State boundaries	Exports across State lines	Point of delivery (If necessary use an insert page and identify points of delivery by line numbers of this schedule)	KILOWATTS OF DEMAND: Contract demand	Average monthly maximum demand	Annual maximum demand
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)
1	Consolidated Gas												
2	Electric Light and									Baltimore and			
3	Power Company of									Takoma Park,			
4	Baltimore		x				x		x	Maryland			
5	Pennsylvania Water												
6	& Power Company		x				x	x		Safe Harbor, Pa.			
7													
8													
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28													
29													
30													
31													
32													
35	TOTAL												

B. Summary of Sales According to Statistical Classifications

51	Associated utilities	
52	Nonassociated utilities	
53	Municipalities	
54	Firm power	
55	Dump or surplus power	
56	Other power	
57	Sales within State boundaries	
58	Exports across State lines (Do not total.)	

Applicant does no retail distribution business. With one exception, all of applicant's power and energy is sold at wholesale to public utility companies, who resell and distribute the same. The public utility companies which applicant so serves are Pennsylvania Power & Light Company for part of its requirements in Lancaster County, Pennsylvania; Edison Light and Power Company of York, Pennsylvania, for part of its requirements in York County, Pennsylvania; Philadelphia Electric Company for part of its requirements in Chester County, Pennsylvania; and Consolidated Gas Electric Light and Power Company of Baltimore for part of its requirements within the State of Maryland. Applicant also has agreements with the Pennsylvania Power & Light Company, the Philadelphia Electric Company and the Metropolitan Edison Company for interchange of economy power and energy.

Applicant sells power and energy to The Pennsylvania Railroad Company at Safe Harbor, Manor Township, Lancaster County, Pennsylvania, which is used by The Pennsylvania Railroad Company for its electrification requirements [25526] on the passenger and freight lines of the present Philadelphia Division between Thorndale, Pennsylvania, and Harrisburg and Enola, Pennsylvania on that section of the Columbia and Port Deposit Railroad between Columbia, Pennsylvania, and the Pennsylvania-Maryland State Line and yards adjacent thereto and supporting these services.

F. That the following table shows descriptive data of the facilities owned and/or operated by applicant for transmission of electric energy in interstate commerce or the sale of electric energy at wholesale in interstate commerce.

Item U

[25527]

Pole Miles Owned (A)

Line No.	Voltage	No. of Circuits	Pennsylvania: Applicant	Pennsylvania: Susq. Trans. Co. of Pa.	Pennsylvania: Penna. Trans. Co.	Maryland: Susq. Trans. Co. of Md.	Total	Total Circuit Miles (A)
	Holtwood, Pa. to Baltimore, Md. (25 Cycle)							
1	66,000	2	.58	7.74	—	31.70	40.02	80.04
2	66,000	2	.62	7.74	—	31.72	40.08	80.16
			1.20	15.48	—	63.42	80.10	160.20
	Holtwood, Pa. to Coatesville, Pa. (60 Cycle)							
3	66,000	2	29.38				29.38	58.76
	Holtwood, Pa. to York, Pa. (60 Cycle)							
4	66,000	2	23.01				23.01	46.02
	Holtwood, Pa. to Lehman Farm, Pa. (60 Cycle)							
5	66,000	2	7.68				7.68	15.36
	Holtwood, Pa. to Piney Island, Pa. (25 and 60 Cycle)							
6	66,000	2	.28				.28	.56
	Safe Harbor, Pa. to Lehman Farm, Pa. (60 Cycle)							
7	66,000	2	1.43				1.43	2.86
	Baltimore, Md. to Gunpowder, Md. (60 Cycle)							
8	110,000	1				9.64	9.64	9.64
	Safe Harbor, Pa. to Perryville, Md. (25 Cycle)							
9	132,000	4	17.89			13.61	31.50	126.00
10	132,000	2	.65				.65	1.30
11	132,000	2				1.69	1.69	3.38
			18.54			15.30	33.84	130.68
	Safe Harbor, Pa. to Westport, Md. (60 Cycle)							
12	220,000	1	.22		17.61	50.09	67.92	67.92
	Ellicott City, Md. to Takoma Park, Md. (60 Cycle)							
13	220,000	1				14.59	14.59	14.59
	Safe Harbor, Pa. to Dundalk, Md. (60 Cycle)							
14	220,000	1	.29		14.41	35.56	50.26	50.26

(A) Approximate mileage

[25527A]

K. That the facilities of the Susquehanna Transmission Company of Pennsylvania which are to be merged with the applicant's facilities, consist [25527B] of the Pennsylvania portion of two double circuit steel tower transmission lines extending from Holtwood, Pennsylvania, to points in the State of Maryland. Further particulars concerning these transmission lines are set forth on lines 1 and 2 of the table appearing under Item "F" of this application. These lines are at present used in the transmission of electrical energy generated by applicant and sold to Consolidated Gas Electric Light and Power Company of Baltimore and will be so used after the proposed merger is consummated. These transmission lines constitute all the operating facilities of that company and the attached map, marked Exhibit "M", shows the location of these lines and their interconnection with applicant's facilities.

ITEM V.

Docket No. IT-5583

1939

BEFORE THE FEDERAL POWER COMMISSION

In Re: Application of *Pennsylvania Water & Power Company* for Commission's approval of the merger of its facilities for the transmission or sale at wholesale of electric energy in interstate commerce with the transmission facilities of the *Pennsylvania Transmission Company*, within the meaning of Section 203 of the Federal Power Act.

(Excerpts)

[25528]

To the Federal Power Commission:

The application of Pennsylvania Water & Power Company respectfully represents:

* * *

B. That the applicant was formed under the laws of the Commonwealth of Pennsylvania on January 13, 1910.

That applicant possesses no rights to do business in any State other than Pennsylvania.

* * *

[25529]

E. That the applicant, Pennsylvania Water & Power Company, is a public utility engaged in the business of generating, purchasing, selling and transmission of electric power and energy at wholesale.

The generating properties of applicant consist of a hydroelectric plant and a steam-electric plant located at Holtwood, Pa., on the Susquehanna River and having a combined capacity of 131,000 Kw. The transmission lines of applicant and its wholly-owned subsidiary transmission companies, Susquehanna Transmission Company of Pennsylvania (a party to a companion proceeding), Pennsylvania Transmission Company (a party to this proceeding) and Susquehanna Transmission Company of Maryland, form a regional power supply system referred to below. The properties of these subsidiary transmission companies are operated under contractual arrangements by applicant.

[25530]

The hydroelectric plant of Safe Harbor Water Power Corporation (a licensee under the Federal Power Act), located about 8 miles above the applicant's generating plants at Holtwood, Pa., has a capacity of 180,000 Kw. and has been tied in with applicant's plants and the steam-electric plants of Consolidated Gas Electric Light and Power Company of Baltimore by transmission lines owned by applicant or its wholly-owned transmission subsidiaries.

Power resources of the three companies are thus coordinated and operated as a regional power supply system by means of the transmission lines operated by the applicant for the delivery and interchange of power and energy to the customers of the three companies. Reference is made to a map which is submitted herewith and identified as Exhibit "M".

Applicant does no retail distribution business. With one exception, all of applicant's power and energy is sold at wholesale to public utility companies, who resell and distribute the same. The public utility companies which applicant so serves are Pennsylvania Power & Light Company for part of its requirements in Lancaster County, Pennsylvania; Edison Light and Power Company of York, Pennsylvania, for part of its requirements in York County, Pennsylvania; Philadelphia Electric Company for part of its requirements in Chester County, Pennsylvania; and Consolidated Gas Electric Light and Power Company of Baltimore for part of its requirements within the State of Maryland. Applicant also has agreements with the Pennsylvania Power & Light Company, the Philadelphia Electric Company and the Metropolitan Edison Company for interchange of economy power and energy.

Applicant sells power and energy to The Pennsylvania Railroad Company at Safe Harbor, Manor Township, Lancaster County, Pennsylvania, which is used by The Pennsylvania Railroad Company for its electrification requirements on the passenger and freight lines of the present Philadelphia Division [25531] between Thorndale, Pennsylvania, and Harrisburg and Enola, Pennsylvania, on that section of the Columbia and Port Deposit Railroad between Columbia, Pennsylvania and the Pennsylvania-Maryland State Line and yards adjacent thereto and supporting these services.

F. That the following table shows descriptive data of the facilities owned and/or operated by applicant for transmission of electric energy in interstate commerce or the sale of electric energy at wholesale in interstate commerce:

[25532]

POLE MILES OWNED (A)

Line No.	Voltage	No. of Circuits	Pennsylvania: Applicant	Pennsylvania: Susq. Trans. Co. of Pa.	Pennsylvania: Penna. Trans. Co.	Maryland: Susq. Trans. Co. of Md.	Total	Total Circuit Miles (A)
	HOLTWOOD, PA. TO BALTIMORE, MD. (25 CYCLE)							
1	66,000	2	.58	7.74	—	31.70	40.02	80.04
2	66,000	2	.62	7.74	—	31.72	40.08	80.16
			1.20	15.48	—	63.42	80.10	160.20
	HOLTWOOD, PA. TO COATESVILLE, PA. (60 CYCLE)							
3	66,000	2	29.38				29.38	58.76
	HOLTWOOD, PA. TO YORK, PA. (60 CYCLE)							
4	66,000	2	23.01				23.01	46.02
	HOLTWOOD, PA. TO LEHMAN FARM, PA. (60 CYCLE)							
5	66,000	2	7.68				7.68	15.36
	HOLTWOOD, PA. TO PINEY ISLAND, PA. (25 AND 60 CYCLE)							
6	66,000	2	.28				.28	.56
	SAFE HARBOR, PA. TO LEHMAN FARM, PA. (60 CYCLE)							
7	66,000	2	1.43				1.43	2.86
	BALTIMORE, MD. TO GUNPOWDER, MD. (60 CYCLE)							
8	110,000	1				9.64	9.64	9.64
	SAFE HARBOR, PA. TO PERRYVILLE, MD. (25 CYCLE)							
9	132,000	4	17.89			13.61	31.50	126.00
10	132,000	2	.65				.65	1.30
11	132,000	2				1.69	1.69	3.38
			18.54			15.30	33.84	130.68
	SAFE HARBOR, PA. TO WESTPORT, MD. (60 CYCLE)							
12	220,000	1	.22		17.61	50.09	67.92	67.92
	ELLICOTT CITY, MD. TO TAKOMA PARK, MD. (60 CYCLE)							
13	220,000	1				14.59	14.59	14.59
	SAFE HARBOR, PA. TO DUNDALK, MD. (60 CYCLE)							
14	220,000	1	.29		14.41	35.56	50.26	50.26

(A) Approximate mileage

[25533]

* * *

K. That the facilities of the Pennsylvania Transmission Company, which are to be merged with the applicant's facilities, consist of the Pennsylvania portion of two single circuit steel tower transmission lines extending from Safe Harbor, Pennsylvania, to points in the State of Maryland. Further particulars concerning these transmission lines are set forth on [25534] lines 12 and 14 of the table appearing under Item "F" of this application. These lines are at present used in the transmission of electrical energy generated by the Safe Harbor Water Power Corporation and sold to Consolidated Gas Electric Light and Power Company of Baltimore and will be so used after the proposed merger is consummated. These transmission lines constitute all the operating facilities of that company and the attached map, marked Exhibit "M", shows the location of these lines and their interconnections with applicant's facilities.

* * *

ITEM W.

[25535]

UNITED STATES OF AMERICA
FEDERAL POWER COMMISSION

Commissioners: Clyde L. Seavey, Chairman; Claude L. Draper, Basil Manly, Leland Olds, John W. Scott, not participating.

November 28, 1939

In the Matter of Susquehanna Transmission Company of Pennsylvania and Pennsylvania Water & Power Company	Docket No. IT-5582
Pennsylvania Transmission Company and Pennsylvania Water & Power Company	Docket No. IT-5583

ORDER AUTHORIZING AND APPROVING SALE AND MERGER OF FACILITIES

* * *

[25536] (page 2)

* * *

The Commission *finds* that:

* * *

[25537] (page 3)

(3) Susquehanna Transmission Company of Pennsylvania owns electric facilities, including, among others, two 66 Kv double-circuit transmission lines, approximately 7.75 miles in length, extending from the vicinity of the Holtwood hydroelectric develop-

ment at Holtwood, Pennsylvania, to the Pennsylvania-Maryland State line, which facilities are utilized in the transmission and sale at wholesale of electric energy transmitted between the State of Maryland and the Commonwealth of Pennsylvania, and consumed by persons other than the transmitter at points outside the state from which transmitted; and Susquehanna Transmission Company is, therefore, a public utility within the meaning of Section 203 of the Federal Power Act;

(4) Pennsylvania Transmission Company owns electric facilities including, among others, two 220 Kv single-circuit transmission lines, approximately 15 and 18 miles in length, extending from the vicinity of the Safe Harbor Hydroelectric development at Safe Harbor, Pennsylvania, to the Pennsylvania-Maryland State line, which facilities are utilized in the transmission and sale at wholesale of electric energy transmitted between the State of Maryland and the Commonwealth of Pennsylvania, and consumed by persons other than the transmitter at points outside the state from which transmitted; and Susquehanna Transmission Company is, therefore, a public utility within the meaning of Section 203 of the Federal Power Act;

(5) The electric facilities of Susquehanna Transmission Company and of Pennsylvania Transmission Company are operated and maintained by Pennsylvania Water & Power Company, and constitute integral parts of the transmission system of Pennsylvania Water & Power Company;

(6) Pennsylvania Water & Power Company owns and operates facilities for the generation, transmission and sale of electric energy, and is engaged in the generation, purchase, transmission, and sale at wholesale of electric energy, which electric energy

is transmitted and sold within the Commonwealth of Pennsylvania and between the State of Maryland and the Commonwealth of Pennsylvania;

(7) Pennsylvania Water & Power Company is a public utility within the meaning of Section 203 of the Federal Power Act by reason of ownership and operation of facilities, among others, for the transmission or sale at wholesale of electric energy transmitted from a state and consumed by persons other than the transmitter at points outside the state from which transmitted;

• • •

Page 4642
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ITEM X.

PENNSYLVANIA WATER & POWER COMPANY
APPLICATION FOR LICENSE
FROM
FEDERAL POWER COMMISSION
FOR
HOLTWOOD PROJECT

May 18, 1942

(Excerpt)

[25540] (page 10)

* * *

Applicant sells power to Consolidated Gas Electric Light and Power Company of Baltimore which serves the Baltimore area and, in turn, sells a substantial amount of power to Potomac Electric Power Company for consumption in the Washington area. Holtwood energy is sold to Philadelphia Electric Company at Coatesville, Pa., and resold by Philadelphia Electric Company to the public. Pennsylvania Power & Light Company purchases Hotwood energy and resells it to the public either in the Lancaster area or in other locations of Pennsylvania Power & Light Company's territory. Edison Light and Power Company and Metropolitan Edison Company purchase Holtwood energy at York for resale [25541] (page 11) to the public in that area and in other parts of Metropolitan Edison Company's territory. Philadelphia Electric Company, Pennsylvania Power & Light Company, and Metropolitan Edison Company, in turn, tie in to the Public Service Electric and Gas Company of New Jersey system.

Holtwood energy is also sold to The Pennsylvania Railroad Company which uses the power in the operation of its electrified lines.

In coordinating the use of Applicant's power generating facilities with other hydro projects and with the steam stations of the various systems to which Applicant's power is supplied, Applicant's interconnecting primary transmission system serves not only as the interconnecting links between Applicant's plants and the various systems served by it, but also as a direct interconnection between the various power systems themselves. The amount and direction of power flow over Applicant's interconnected primary transmission system are determined by system load demands, as well as by river flow, by allocation of load to the various steam stations and by other operating conditions resulting from the most effective utilization of the diversified sources of power tied in to Applicant's interconnected primary transmission system.

* * *

ITEM AA.

Electric Utilities and Licensees

(Classes A and B).

ANNUAL REPORT

of

SAFE HARBOR WATER POWER CORPORATION

Lexington Building, Baltimore, Maryland

to the

FEDERAL POWER COMMISSION

for the

YEAR ENDED DECEMBER 31, 1945

(Excerpts)

ITEM BB.

Electric Utilities and Licensees

(Classes A and B)

ANNUAL REPORT

of

PENNSYLVANIA WATER & POWER COMPANY

Lexington Building, Baltimore, Maryland

to the

FEDERAL POWER COMMISSION

for the

YEAR ENDED DECEMBER 31, 1945

(Excerpts)

530. SALES TO OTHER ELECTRIC UTILITIES (Account 605)

1. Report below the information called for concerning sales during year to other electric utilities and to cities or other public authorities for distribution to ultimate consumers.
2. Report separately firm, dump, and other power sold to the same company. Describe the nature of any sales classified as Other Power, column (g).
3. If a fixed number of kilowatts of maximum demand is specified in the power contract as a basis of billing to the customer this number should be shown in column (k). The number of kilowatts of maximum demand to be shown in columns (l) and (m) should be actual based on monthly readings and should be furnished whether or not used in the determination of demand charges. Show in column (n) type of demand reading (instantaneous, 15, 30, or 60 minutes integrated).

A. Summary of Sales According to Companies and Points of Delivery

Line No.	Sales to — (a)	Associated utilities (b)	Nonassociated utilities (c)	Municipalities (d)	Firm power (e)	Dump or surplus power (f)	Other power (g)	Sales within State boundaries (h)	Exports across State lines (i)	Point of delivery (If necessary use an insert page and identify points of delivery by line numbers of this schedule) (j)	KILOWATTS OF DEMAND: Contract demand (k)	Average monthly maximum demand (l)	Annual maximum demand (m)
1	Consolidated Gas									Baltimore,			
2	Electric Light and									Takoma Park,			
3	Power Company of Baltimore		x				x		x	Conowingo & Perryville, Md.			
4	Pennsylvania Power &												
5	Light Company		x		x			x		Lancaster, Pa			
6	Philadelphia Electric												
7	Company		x		x			x		Coatesville, Pa.		23,050	25,400
8	Edison Light & Power												
9	Company		x		x			x		York, Pa.		24,510	27,700
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													
23													
24													
25													
26													
27													
28													
29													
30													
31													
32													
35										TOTAL			

B. Summary of Sales According to Statistical Classifications

51	Associated utilities	
52	Nonassociated utilities	
53	Municipalities	
54	Firm power	
55	Dump or surplus power	
56	Other power	
57	Sales within State boundaries	
58	Exports across State lines (Do not total.)	

532. SALES TO RAILROADS AND RAILWAYS (Account 606)

1. Designate associated companies by placing an "x" in column (c).
2. If a contract covers several points of delivery and small amounts of electric energy are delivered at each point, such sales may be grouped.

Line No.	Name of railroad or railway (a)	Point of delivery (b)	Associated company (c)	Kilowatt-hours (d)	Revenue (e) $	Revenue (e) c.	Revenue per kwh (f) c.
1	The Pennsylvania Railroad Company	Safe Harbor, Pa.		194,937,000	1,432,348	44	0.734
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19			TOTAL..	194,937,000	1,432,348	44	0.734

533. INTERDEPARTMENTAL SALES (Account 607)

Line No.	Name of other department (a)	Basis of charge to other department (b)	Point of delivery (c)	Kilowatt-hours (d)	Revenue (e) $	Revenue (e) c.	Revenue per kwh (f) c.
34							
35							
36							
37							
38							
39							
40							
41							
42			TOTAL..				

534. OTHER SALES (Account 608)

Line No.	Description of other sales (a)	Point of delivery (b)	Kilowatt-hours (c)	Revenue (d) $	Revenue (d) c.	Revenue per kwh (e) c.
63						
64						
65						
66						
67						
68						
69						
70						
71						
72						
73						
74						
75			TOTAL..			

551. PURCHASED POWER (Account 738)

1. Report below the information called for concerning power purchased for resale during the year.
2. All purchases from publicly owned power systems should be classified as purchases from municipalities.
3. Report separately firm, dump, and other power purchased from the same company. Describe the nature of any purchases classified as Other Power, column (f).
4. If a fixed number of kilowatts of maximum demand is specified in the power contract as a basis of billing this number should be shown in column (m). The number of kilowatts of maximum demand to be shown in columns (n) and (o) should be actual based on monthly readings and should be furnished whether or not used in the determination of demand charges. Show in column (p) type of demand reading (instantaneous, 15 30, or 60 minutes integrated).

A. Summary of Purchases According to Companies and Points of Receipt

Line No.	Purchased from — (a)	Associated utilities (b)	Nonassociated utilities (c)	Associated nonutilities (d)	Other nonutilities (e)	Municipalities (f)	Firm power (g)	Dump or surplus power (h)	Other power (i)	Purchases within State boundaries (j)	Imports across State lines (k)	Point of receipt (Use an insert page and designate points of receipt by line numbers of this schedule) (l)	KILOWATTS OF DEMAND: Contract demand (m)	Average monthly maximum demand (n)	Annual maximum demand (o)
1	Safe Harbor Water											Safe Harbor			
2	Power Corporation		x						x	x		Pa.			
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															
25															
26															
27															
28															
29															
30															
31	TOTAL.														

B. Summary of Purchases According to Statistical Classifications

51	Associated utilities	
52	Nonassociated utilities	
53	Associated nonutilities	
54	Other nonutilities	
55	Municipalities	
56	Firm power	
57	Dump or surplus power	
58	Other power	
59	Purchases within State boundaries	
60	Imports across State lines (Do not total.)	

RECORD

P.4651 -4671

552 INTERCHANGE POWER (Account 739)

1. Report below the kilowatt-hours received and delivered during the year and the net charge or credit under interchange power agreements.
2. All interchanges with publicly owned power systems should be classified as municipalities.
3. Explain any amounts entered in column (s)
4. Designate the statistical classifications applicable to each interchange listed, by placing "x's" in the appropriate columns (b) to (h)

A. Summary of Interchanges According to Companies and Points of Interchange

Line No.	Name of company (a)	Associated utilities (b)	Nonassociated utilities (c)	Associated municipalities (d)	Other competitive (e)	Municipalities (f)	Interchange within State boundaries (g)	Interchange across State lines (h)	Point of interchange (i)	Voltage at which interchanged (j)	KILOWATT-HOURS Received (k)	Delivered (l)	Net difference (m)	Amount of settlement (n)
1	Phila.Electric Co.		x					(A)	Perryville,Md	132,000 &				$ c
2										12,000	2,680,000	23,730,000	(21,050,000)	(95,539 39)
3	Phila.Electric Co.		X				(A)		Thorndale,Pa.	132,000 &				
4										12,000	6,086,000	32,638,000	(26,552,000)	(120,718 71)
5	Pa.Power & Light Co.		x						Harrisburg,Pa.	66,000	6,053,000	63,343,000	(57,290,000)	(247,204 30)
6	Metropolitan Ed.Co.		x						Violet Hill,Pa.	66,000 &	1,232,000	81,548,000	(80,316,000)	(348,671 37)
7										13,200				
8										TOTAL	16,051,000	201,259,000	(185,208,000)	(812,133 77)

(A) In the report of these transactions the kilowatt hours shown as delivered were delivered to the Pennsylvania Railroad Company for the account of the Philadelphia Electric Company and the kilowatt hours reported received were kilowatt hours delivered to the Pennsylvania Railroad Company by the Philadelphia Electric Company System for the account of Respondent. Deliveries were not at a point of connection between Railroad Company and the power was used by the said Railroad on its lines.

(B) Settlement for special transformer facilities.

(C) The above data comprehend only economy and as there is no demand associated with this type of energy, no demand charge can be reported.

	201,259,000	(185,208,000)	(812,133 77)		
	177,529,000	(164,158,000)	(716,594 38)		
	23.730,000	(21,050,000)	(95,539 39)		

Line No.	Name of company (o)	Remarks (p)	Demand charges (q)	Energy charges (r)	Other charges (s)	Total settlement (t)
41	Phila.Electric Co.		$ c	$ c	$ c	$ c
42	Pa.Power & Light Co.			(216,258 10)		(216,258 10)
43	Metropolitan Ed.Co.			(247,204 30)		(247,204 30)
44				(348,405 93)	(B) (265 44)	(348,671 37)
45						
46						
47						
48		TOTAL	(C)	(811,868 33)	(265 44)	(812,133 77)
49						

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ITEM HH.

1945

POWER SYSTEM STATEMENT

From

PENNSYLVANIA WATER & POWER COMPANY

(Including Safe Harbor Water Power Corporation)

LEXINGTON BUILDING, BALTIMORE-3, MARYLAND

Covering

HOLTWOOD-SAFE HARBOR SYSTEM

to the

FEDERAL POWER COMMISSION

(Excerpts)

[25751]

Reference: Schedule 8, Column 4, Lines 12-16, Incl. Page 19

The Respondents, under long-term contracts (copies of which are on file with the Commission) agree to deliver to Consolidated Gas Electric Light and Power Company of Baltimore all power generated at the Safe Harbor hydroelectric development on the Susquehanna River and at the Holtwood hydroelectric and steam electric plants, except such power as may be sold by Pennsylvania Water & Power Company to its other (firm) customers.

The net hourly amounts of kilowatthours shown in column 6, line 14, as actually delivered to Consolidated Gas Electric Light and Power Company of Baltimore, would have been materially increased if the energy available to Baltimore Company had actually been delivered rather than resold in part by Pennsylvania Water & Power Company as economy interchange to others, such interchange sales resulting in a diversion of energy from Baltimore Company.

Similarly, the net hourly amounts of kilowatthours shown in column 5, line 14, as received from Consolidated Gas Electric Light and Power Company of Baltimore, would have been increased.

In actual operating practice, energy is diverted by Respondents and delivered by Pennsylvania Water & Power Company over its northern interconnections to others whenever interchange transactions are practicable and economically justified, i. e., whenever the cost of increased generation at the steam plants on Consolidated Gas Electric Light and Power Company's or Potomac Electric Power Company's systems is lower than the cost of power generation on other plants on the interconnected systems. In the actual accounting for interchange transactions by Pennsylvania Water & Power Company [25752] (page 2) such energy is considered to have come from the Baltimore and/or Washington steam plants. Similarly, Pennsylvania

Water & Power Company purchases interchange power, the effect of which is to reduce steam generation in Baltimore and Washington.

• • •

[25756]

Reference: Schedule 13D Line 21

The portion of the hourly load supplied to the Pennsylvania Railroad *in Maryland* by the respondent for the account of the Consolidated Gas Electric Light and Power Company is not included in this item as hourly load allocations are not measured. The total supply to the Pennsylvania Railroad *in both Maryland and Pennsylvania* is included in Line 23 below.

Reference: Schedule 13E Line 23

This item includes the joint supply to the Pennsylvania Railroad by the respondent and the Consolidated Gas Electric Light and Power Company and also the Holtwood-Safe Harbor System transmission losses and station uses.

• • •

Page 4655 is blank.

ITEM RR.

Electric Utilities and Licensees

(Classes A and B)

ANNUAL REPORT

of

SAFE HARBOR WATER POWER CORPORATION

Lexington Building, Baltimore, Maryland

to the

FEDERAL POWER COMMISSION

for the

YEAR ENDED DECEMBER 31, 1946

(Excerpts)

525. ELECTRIC OPERATING REVENUES (Account 501)

1. Report below the amount of operating revenue for the year for each prescribed account and the amount of increase or decrease over the preceding year.
2. If increases and decreases are not derived from previously reported figures explain any inconsistencies.
3. Number of customers should be reported on the basis of number of meters, plus number of flat rate accounts, except that where separate meter readings are added for billing purposes, one customer shall be counted for each group of meters so added. The average number of customers means the average of the 12 figures at the close of each month.
4. Unmetered sales should be included below. The details of such sales should be given in a footnote.

Line No.	Account (a)	OPERATING REVENUES: Amount for year (b)	OPERATING REVENUES: Increase or decrease from preceding year (c)	KILOWATT-HOURS SOLD: Amount for year (d)	KILOWATT-HOURS SOLD: Increase or decrease from preceding year (e)	AVERAGE NUMBER OF CUSTOMERS PER MONTH: Number for year (f)	AVERAGE NUMBER OF CUSTOMERS PER MONTH: Increase or decrease from preceding year (g)
1	SALES OF ELECTRIC ENERGY	x x x x x x	x x x x x x				
2	(600) Residential or domestic sales						
3	(601) Rural sales						
4	(602) Commercial and industrial sales						
5	(603) Public street and highway lighting						
6	(604) Other sales to public authorities						
7	(605) Sales to other electric utilities	3,041,733 82	(653,583 59)	876,968,000	(360,569,000)	4	(1)
8	(606) Sales to railroads and railways					1	-
9	(607) Interdepartmental sales						
10	(608) Other sales						
11							
12							
13							
14	TOTAL SALES OF ELECTRIC ENERGY	3,041,733 82	(653,583 59)	876,968,000	(360,569,000)	5	(1)
15	OTHER ELECTRIC REVENUES	x x x x x x	x x x x x x				
16	(610) Rent from electric property	562 60	394 60				
17	(611) Interdepartmental rents						
18	(612) Consumers' forfeited disc. and penalties						
19	(613) Sales of water and water power						
20	(614) Servicing of customers' installations						
21	(615) Miscellaneous electric revenues						
22							
23							
24							
25	TOTAL OTHER ELECTRIC REVENUES	562 60	394 60				
26	TOTAL ELECTRIC OPERATING REVENUES	3,042,296 42	(653,188 99)				

Lines 7 and 8 - Cols. (b), (c), (d) and (e)

See Pages 512-513 (Schedule 530) and notes pertaining to Lines 3, 5, 7 and 9.

530. SALES TO OTHER ELECTRIC UTILITIES (Account 605)

1. Report below the information called for concerning sales during year to other electric utilities and to cities or other public authorities for distribution to ultimate consumers.
2. Report separately firm, dump, and other power sold to the same company. Describe the nature of any sales classified as Other Power, column (g).
3. If a fixed number of kilowatts of maximum demand is specified in the power contract as a basis of billing to the customer this number should be shown in column (k). The number of kilowatts of maximum demand to be shown in columns (l) and (m) should be actual based on monthly readings and should be furnished whether or not used in the determination of demand charges. Show in column (n) type of demand reading (instantaneous, 15, 30, or 60 minutes integrated).

A. Summary of Sales According to Companies and Points of Delivery

Line No.	Sales to—	Associated utilities	Nonassociated utilities	Municipalities	Firm power	Dump or surplus power	Other power	Sales within State boundaries	Exports across State lines	Point of delivery (If necessary use an insert page and identify points of delivery by line numbers of this schedule)	KILOWATTS OF DEMAND: Contract demand	Average monthly maximum demand	Annual maximum demand
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)
1	Consolidated Gas												
2	Electric Light and												
3	Power Company of												
4	Baltimore		x				x	x		Safe Harbor, Pa			
5	Pennsylvania Power &												
6	Light Company		x		x			x		" " "			
7	Philadelphia Electric												
8	Company		x		x			x		" " "			
9	Pennsylvania Water												
10	& Power Company		x				x	x		" " "			
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													
23													
24													
25													
26													
27													
28													
29													
30													
31													
32													
33	TOTAL												

B. Summary of Sales According to Statistical Classifications

51	Associated utilities	
52	Nonassociated utilities	
53	Municipalities	
54	Firm power	
55	Dump or surplus power	
56	Other power	
57	Sales within State boundaries	
58	Exports across State lines (Do not total.)	

SAFE HARBOR WATER POWER CORPORATION

SALES TO OTHER ELECTRIC UTILITIES (Account 605)

Line 3 - Col. (p)

The energy shown was the metered (net hourly basis) supply by Respondent to the 220,000 volt transmission facilities of Pennsylvania Water & Power Company at Safe Harbor, Pa. for delivery by Pennsylvania Water & Power Company to Consolidated Gas Electric Light and Power Company of Baltimore at or near Baltimore, Maryland, and to the Potomac Electric Power Company near Takoma Park, Maryland for Consolidated Gas Electric Light and Power Company of Baltimore (Such delivery involved transmission losses of 7,041,000 kwh.)

Line 3 - Cols. (s), (t) and (u)

The revenue was independent of the amounts or proportion of electric services supplied. It included compensation in part for Respondent's services to the Pennsylvania Railroad under a contract between The Pennsylvania Railroad Company, Consolidated Gas Electric Light & Power Company of Baltimore, Pennsylvania Water & Power Company, Potomac Electric Power Company and Respondent. It did not include any cost of Pennsylvania Water & Power Company for the transmission facilities used or for the services rendered in connection with the delivery of electric services from Safe Harbor, Pa. to the Consolidated Gas Electric Light and Power Company of Baltimore at or near Baltimore, Maryland and the Potomac Electric Power Company near Takoma Park, Maryland.

Lines 5, 7 and 9 - Col (p)

The energy shown was the metered (net hourly basis) supply by Respondent to Pennsylvania Water & Power Company, in part for its own use and in part for joint services by Respondent and Pennsylvania Water & Power Company under certain power supply contracts (including such services to the Pennsylvania Railroad shown on Page 514 (Schedule 532)).

Lines 5, 7 and 9 - Cols. (s), (t) and (u)

The revenue was independent of the amounts or proportion of electric services supplied. It included compensation for Respondent's services to Pennsylvania Power & Light Company and Philadelphia Electric Company under joint power supply contracts with Pennsylvania Water & Power Company, and in part for Respondent's services to the Pennsylvania Railroad under a contract between The Pennsylvania Railroad Company, Consolidated Gas Electric Light and Power Company of Baltimore, Pennsylvania Water & Power Company, Potomac Electric Power Company, and Respondent.

[25850] Item RR 4-60

530. SALES TO OTHER ELECTRIC UTILITIES (Account 605) — Continued

4. The number of kilowatt-hours sold should be the quantities shown by the bills rendered to the purchasers.
5. Explain any amounts entered in column (s).
6. Provision is made in this schedule for summarizing the sales according to certain statistical classifications. For each of the sales reported designate the several statistical classifications applicable thereto by placing "x's" in the appropriate columns (b) to (i). Each sales item will appear in more than one classification. Summarize the total sales in section B, according to the several statistical classifications.
7. If a contract covers several points of delivery and small amounts of electric energy are delivered at each point, such sales may be grouped.

A. Summary of Sales According to Companies and Points of Delivery — Continued

Type of demand reading (n)	Voltage at which delivered (o)	Kilowatt-hours (p)	REVENUE: Demand charges (q)	Energy charges (r)	Other charges (s)	Total (t)	Revenues per kwh (u)	Line No.
			$ c.	$ c.	$ c.	$ c.	c.	
	220,000	293,797,000		2,025,233.03		2,025,233 03		3
	66,000							4
	66,000							5
	13,000	583,171,000		1,016,500.79		1,016,500 79		6
	66,000							7
xxxxxxxxxx	xxxxxxx	876,968,000		3,041,733.82		3,041,733 82		35

B. Summary of Sales According to Statistical Classifications — Continued

		876,968,000		3,041,733.82		3,041,733 82		51
		876,968,000		3,041,733.82		3,041,733 82		57

[25851] Item RR 4660

532. SALES TO RAILROADS AND RAILWAYS (Account 606)

1. Designate associated companies by placing an "x" in column (c).
2. If a contract covers several points of delivery and small amounts of electric energy are delivered at each point, such sales may be grouped.

Line No.	Name of railroad or railway (a)	Point of delivery (b)	Associated company (c)	Kilowatt-hours (d)	Revenue (e)	Revenue per kwh (f)
1	The Pennsylvania Rail-				$ c.	c.
2	road Company	Safe Harbor, Pa.		320,344,000	See Note	
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19			TOTAL	320,344,000		

533. INTERDEPARTMENTAL SALES (Account 607)

Line No.	Name of other department (a)	Basis of charge to other department (b)	Point of delivery (c)	Kilowatt-hours (d)	Revenue (e)	Revenue per kwh (f)
34					$ c.	c.
35						
36						
37						
38						
39						
40						
41						
42			TOTAL			

534. OTHER SALES (Account 608)

Line No.	Description of other sales (a)	Point of delivery (b)	Kilowatt-hours (c)	Revenue (d)	Revenue per kwh (e)
63				$ c.	c.
64					
65					
66					
67					
68					
69					
70					
71					
72					
73					
74					
75					
76			TOTAL		

SAFE HARBOR WATER POWER CORPORATION

532 SALES TO RAILROADS AND RAILWAYS (Account 606)

Line 2 - Col. (d)

The energy shown was supplied jointly by Respondent and Pennsylvania Water & Power Company. This energy was included in the energy shown in Line 9 Col. (p) of Page 513 (Schedule 530).

Line 2 - Cols. (e) and (f)

Respondent received directly no division of the total revenue received by Consolidated Gas Electric Light and Power Company of Baltimore acting for itself and as agent for others including Respondent. Respondent's revenues for such service are included in the amount set forth in Schedule 530. See notes to Lines 3, 5, 7 and 9, Columns (s), (t) and (u) of that Schedule.

552. INTERCHANGE POWER (Account 739)

1. Report below the kilowatt-hours received and delivered during the year and the net charge or credit under interchange power agreements.
2. All interchanges with publicly owned power systems should be classified as municipalities.
3. Explain any amounts entered in column (s).
4. Designate the statistical classifications applicable to each interchange listed, by placing "x's" in the appropriate columns (b) to (h).

A. Summary of Interchanges According to Companies and Points of Interchange

Line No.	Name of company (a)	Associated utilities (b)	Nonassociated utili. (c)	Associated nonutili. (d)	Other nonutilities (e)	Municipalities (f)	Interchanges within State boundaries (g)	Interchanges across State lines (h)	Point of interchange (i)	Voltage at which interchanged (j)	KILOWATT-HOURS Received (k)	Delivered (l)	Net difference (m)	Amount of settlement (n)
1	Pennsylvania Power & Light Company		X				X		Safe Harbor, Pa.	66,000		51,192,000		See Note
2														
3														
4														
5														
6														
7														
8	TOTAL											51,192,000		

B. Summary of Interchanges According to Statistical Classifications

21	Associated utilities		
22	Nonassociated utilities		51,192,000
23	Associated nonutilities		
24	Other nonutilities		
25	Municipalities		
26	Interchanges within State boundaries		51,192,000
27	Interchanges across State lines		
28	(Do not total.)		

C. Details of Settlement for Interchange Power

Line No.	Name of company (o)	Remarks (p)	Demand charges (q)	Energy charges (r)	Other charges (s)	Total settlement (t)
41			$ c	$ c	$ c	$ c
42						
43						
44						
45						
46						
47						
48						
49	TOTAL					

SAFE HARBOR WATER POWER CORPORATION

552-INTERCHANGE POWER (Account 739)

Line 2 - Cols. (l) and (n)

The energy shown was sold under a joint power supply contract by Respondent and Pennsylvania Water & Power Company. The energy shown in Col. (l) was included in the energy shown in Line 9 Col. (p) on Page 513 (Schedule 530) and Respondent's compensation for such services was included in the revenues shown in Line 9 Col. (s) of the same schedule.

575. ELECTRIC ENERGY ACCOUNT

Report below the information called for concerning the disposition of electric energy generated, purchased, and interchanged during the year.

Line No.	Item (a)	Kilowatt-hours (b)
1	ENERGY GENERATED, PURCHASED, AND INTERCHANGED	x x x x x x x x x x
2	Generation (excluding station use):	x x x x x x x x x x
3	Steam	
4	Hydro	876,968,000
5	Internal combustion engine	
6	Total generation	876,968,000
7	Purchases	
8	Interchanges — In (gross)	
9	TOTAL ENERGY GENERATED, PURCHASED AND INTERCHANGED	876,968,000
10	DISPOSITION OF ENERGY GENERATED, PURCHASED, AND INTERCHANGED	x x x x x x x x x x
11	Sales (excluding interdepartmental sales None kwh)	876,968,000
12	Interchanges — Out (gross)	
13	Energy furnished without charge	
14	Energy used by the company (excluding station use):	x x x x x x x x x x
15	Electric utility	
16	Gas utility	
17	Other utility departments:	x x x x x x x x x x
18	1.	
19	2.	
20	3.	
21	Common (office, shops, garages, etc. serving two or more utility departments)	
22	Total energy used by the company	
23	Energy losses:	x x x x x x x x x x
24	Transmission and conversion losses	
25	Distribution losses	
26	Unaccounted for losses	
27	Total energy losses	
28	(....percent of total energy generated, purchased, and interchanged)	x x x x x x x x x x
29	TOTAL DISPOSITION OF ENERGY GENERATED, PURCHASED, AND INTERCHANGED	876,968,000

577. MONTHLY PEAKS AND OUTPUT

1. Report hereunder the information called for pertaining to simultaneous peaks established monthly (in kilowatts) and monthly output (in kilowatt-hours) for the combined sources of electric energy of respondent.
2. The monthly peak should be the maximum simultaneous load on generating stations and other sources of supply.
3. State type of monthly peak reading (instantaneous, 15, 30, or 60 minutes integrated).
4. The monthly output should correspond with the total energy generated, purchased, and interchanged-in, per line 9 of Schedule 575 above.
5. If the respondent has two or more power systems not physically connected, the information called for below should be furnished for each system.

Line No.	Month (a)	Gross Generated Peaks MONTHLY PEAK Kilowatts (b)	Day of week (c)	Day of month (d)	Hour (e)	Type of reading (f)	Monthly output (kwh) (g)
41	January	235,000	Wed.	16	8 a.m.	60 Min. Inte	110,503,000
42	February	194,000	Fri.	1	9 a.m.	" " "	47,130,000
43	March	236,000	Sat.	23	6 p.m.	" " "	162,853,000
44	April	219,000	Wed.	3	2 p.m.	" " "	61,196,000
45	May	234,000	Sat.	25	9 a.m.	" " "	97,798,000
46	June	238,000	Sun.	9	7 a.m.	" " "	138,373,000
47	July	219,000	Fri.	5	7 p.m.	" " "	56,376,000
48	August	182,000	Fri.	9	11 a.m.	" " "	48,352,000
49	September	147,000	Tue.	24	10 a.m.	" " "	18,599,000
50	October	212,000	Thu.	31	10 a.m.	" " "	60,762,000
51	November	201,000	Mon.	18	6 p.m.	" " "	40,620,000
52	December	213,000	Fri.	27	6 p.m.	" " "	34,406,000

[25858] Item RR 4665

1946

SAFE HARBOR WATER POWER CORPORATION

575 - ELECTRIC ENERGY ACCOUNT

Line 4 - Col. (b)

1946 was a year of approximately average river flow. The gross generation of Respondent's hydro plant was approximately 3,600,000 kwh. above that expected with average river flow.

ITEM SS.

Electric Utilities and Licensees

(Classes A and B)

ANNUAL REPORT

of

PENNSYLVANIA WATER & POWER COMPANY

Lexington Building, Baltimore, Maryland

to the

FEDERAL POWER COMMISSION

for the

YEAR ENDED DECEMBER 31, 1946

(Excerpts)

325. ELECTRIC OPERATING REVENUES (Account 501)

1. Report below the amount of operating revenue for the year for each prescribed account and the amount of increase or decrease over the preceding year.
2. If increases and decreases are not derived from previously reported figures explain any inconsistencies.
3. Number of customers should be reported on the basis of number of meters, plus number of flat rate accounts, except that where separate meter readings are added for billing purposes, one customer shall be counted for each group of meters so added. The average number of customers means the average of the 12 figures at the close of each month.
4. Unmetered sales should be included below. The details of such sales should be given in a footnote.

Line No.	Account (a)	OPERATING REVENUES Amount for year (b)	OPERATING REVENUES Increase or decrease from preceding year (c)	KILOWATT-HOURS SOLD Amount for year (d)	KILOWATT-HOURS SOLD Increase or decrease from preceding year (e)	AVERAGE NUMBER OF CUSTOMERS PER MONTH Number for year (f)	AVERAGE NUMBER OF CUSTOMERS PER MONTH Increase or decrease from preceding year (g)
		$ c.	$ c.				
1	SALES OF ELECTRIC ENERGY	x x x x x x x	x x x x x x x				
2	(600) Residential or domestic sales						
3	(601) Rural sales						
4	(602) Commercial and industrial sales						
5	(603) Public street and highway lighting						
6	(604) Other sales to public authorities						
7	(605) Sales to other electric utilities	4,679,623 18	(805,954 42)	924,710,000	(91,167,000)	4	-
8	(606) Sales to railroads and railways	1,625,575 45	193,227 01	320,344,000	(57,515,000)	1	-
9	(607) Interdepartmental sales						
10	(608) Other sales						
11							
12							
13							
14	TOTAL SALES OF ELECTRIC ENERGY	6,305,198 63	(612,727 41)	1,245,054,000	(148,682,000)	5	-
15	OTHER ELECTRIC REVENUES	x x x x x x x	x x x x x x x				
16	(610) Rent from electric property	34 65	34 65				
17	(611) Interdepartmental rents						
18	(612) Consumers' forfeited disc. and penalties						
19	(613) Sales of water and water power						
20	(614) Servicing of customers' installations						
21	(615) Miscellaneous electric revenues	133,750 00					
22							
23							
24							
25	TOTAL OTHER ELECTRIC REVENUES	133,784 65	34 65				
26	TOTAL ELECTRIC OPERATING REVENUES	6,438,983 28	(612,692 76)				

Line 7 Cols. (b), (c), (d) and (e)
See Pages 512-513 (Schedule 530) and notes pertaining to Lines 3, 5 and 7.
Line 8 Cols. (b), (c), (d) and (e)
See Page 514 (Schedule 532) and notes pertaining to Line 2.

530. SALES TO OTHER ELECTRIC UTILITIES (Account 605)

1. Report below the information called for concerning sales during year to other electric utilities and to cities or other public authorities for distribution to ultimate consumers.
2. Report separately firm, dump, and other power sold to the same company. Describe the nature of any sales classified as Other Power, column (g).
3. If a fixed number of kilowatts of maximum demand is specified in the power contract as a basis of billing to the customer this number should be shown in column (k). The number of kilowatts of maximum demand to be shown in columns (l) and (m) should be actual based on monthly readings and should be furnished whether or not used in the determination of demand charges. Show in column (n) type of demand reading (instantaneous, 15, 30, or 60 minutes integrated).

A. Summary of Sales According to Companies and Points of Delivery

Line No.	Sales to — (a)	Associated utilities (b)	Nonassociated utilities (c)	Municipalities (d)	Firm power (e)	Dump or surplus power (f)	Other power (g)	Sales within State boundaries (h)	Exports across State lines (i)	Point of delivery (If necessary use an insert page and identify points of delivery by line numbers of this schedule) (j)	KILOWATTS OF DEMAND: Contract demand (k)	Average monthly maximum demand (l)	Annual maximum demand (m)
1	Consolidated Gas,												
2	Electric Light and									Baltimore and			
3	Power Company of									Takoma Park,			
4	Baltimore		X				X		X	Maryland			
5	Pennsylvania Power &												
6	Light Company		X		X			X		Lancaster, Pa.			
7	Philadelphia Electric												
8	Company		X		X			X		Coatesville, Pa.		23,200	26,300
9	Metropolitan Edison												
10	Company and Edison												
11	Light and Power												
12	Company		X		X			X		York, Pa.		21,830	23,000
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													
23													
24													
25													
26													
27													
28													
29													
30													
31													
32													
33	TOTAL												

B. Summary of Sales According to Statistical Classifications

51	Associated utilities	
52	Nonassociated utilities	
53	Municipalities	
54	Firm power	
55	Dump or surplus power	
56	Other power	
57	Sales within State boundaries	
58	Exports across State lines (Do not total.)	

PENNSYLVANIA WATER & POWER COMPANY 1946

530 - Sales to Other Electric Utilities (Account 605)

Line 3 Col. (p)

This energy was supplied by Respondent to Consolidated Gas Electric Light and Power Company of Baltimore as follows: At Highlandtown Substation, Baltimore, Maryland 376,681,000 kwh.; by the 132,000 volt 25-cycle single phase facilities of Respondent and the Pennsylvania Railroad Company, 14,766,000 kwh.; and by Respondent's 220,000 volt transmission facilities between Safe Harbor, Baltimore and Takoma Park, Maryland, 459,000 kwh. Such supply was in addition to the electric services received by Respondent from Safe Harbor Water Power Corporation for delivery to Consolidated Gas Electric Light and Power Company of Baltimore.

The Respondent, under a long term contract, delivers to Consolidated Gas Electric Light and Power Company of Baltimore all power and energy available to Respondent from its hydro-electric and steam-electric plants and from the Safe Harbor hydroelectric development, except such power and energy as may be furnished to its other customers. The kilowatts shown were the metered (net hourly basis) supplied by Respondent.

Line 3 Cols. (s), (t) and (u)

The revenue was independent of the amount of power and energy supplied by Respondent. It included charges for various special facilities provided for the exclusive or joint use of Baltimore Company; it included compensation for services rendered other than the supply of power and energy from the Holtwood Power Development of Respondent and such revenue also included settlement for Baltimore Company's backfeed services rendered to Respondent. Consequently, any unit average charge (Col. u) is meaningless. The charges for special facilities include the operating and fixed costs of the 220,000 volt transmission system of Respondent and its wholly owned subsidiary between Safe Harbor, Baltimore and Takoma Park; of the 110,000 volt transmission line between Baltimore and Gunpowder Falls, Md.; and of other facilities provided for the exclusive or joint use of Baltimore Company.

The compensation for electric services rendered by Respondent, other than from the Holtwood power plants, included interchange transactions by Respondent with other customers, and in part for Respondent's services to the Pennsylvania Railroad not otherwise compensated for through the divisions of revenue received from Baltimore Company, acting as agent for Respondent and others. (See Note Page 514 (Schedule 532), Line 2, Column (e).)

Line 5 and 7 Col. (p)

The energies shown were supplied jointly by Respondent and Safe Harbor Water Power Corporation under certain power supply contracts.

[25862] Item 55 4670

Penna Wtr & Pwr. Co 1946

513-a

Lines 5 and 7 Cols. (q), (r), (s) and (t)

The revenues shown were received by Respondent acting for itself and as agent for Safe Harbor Water Power Corporation.

331 SALES TO OTHER ELECTRIC UTILITIES (Account 447) — Continued

4. The number of kilowatt-hours sold should be the quantities shown by the bills rendered to the purchasers.
5. Explain any amounts entered in column (a).
6. Provision is made in this schedule for summarizing the sales according to certain statistical classifications. For each of the sales reported designate the several statistical classifications applicable thereto by placing "x's" in the appropriate columns (b) to (i). Each sales item will appear in more than one classification. Summarize the total sales in section B, according to the several statistical classifications.
7. If a contract covers several points of delivery and small amounts of electric energy are delivered at each point, such sales may be grouped.

A. Summary of Sales According to Companies and Points of Delivery — Continued

Type of demand reading (n)	Voltage at which delivered (o)	Kilowatt-hours (p)	REVENUE: Demand charges (q)	Energy charges (r)	Other charges (s)	Total (t)	Revenues per kwh (u)	Line No.
			$ c.	$ c.	$ c.	$ c.	c.	
	13,000							1
	220,000	391,906,000			1,104,951 85	1,104,951 85		2
	66,000	308,569,000		1,956,934 73	1,420 92	1,958,355 65	0.639	3
30 Min. Integ.	66,000	135,629,000	313,998 75	574,862 20	60,000 00	948,860 95	0.700	4
60 Min. Integ.	66,000	88,606,000	327,500 00	308,042 66	31,912 07	667,454 73	0.753	5
								6
								7
								8
								9
								10
								11
								12
								13
								14
								15
								16
								17
								18
								19
								20
								21
								22
								23
								24
								25
								26
								27
								28
								29
								30
								31
								32
XXXXXXXXXX	XXXXXX	924,710,000	641,498 75	2,839,839 59	1,198,284 84	4,679,623 18		33

B. Summary of Sales According to Statistical Classifications — Continued

	924,710,000	641,498 75	2,839,839 59	1,198,284 84	4,679,623 18			51
								52
								53
	532,804,000	641,498 75	2,839,839 59	93,332 99	3,574,671 33	0.671		54
								55
	391,906,000			1,104,951 85	1,104,951 85			56
	532,804,000	641,498 75	2,839,839 59	93,332 99	3,574,671 33	0.671		57
	391,906,000			1,104,951 85	1,104,951 85			58

532. SALES TO RAILROADS AND RAILWAYS (Account 606)

1. Designate associated companies by placing an "x" in column (c).
2. If a contract covers several points of delivery and small amounts of electric energy are delivered at each point, such sales may be grouped.

Line No.	Name of railroad or railway (a)	Point of delivery (b)	Associated company (c)	Kilowatt-hours (d)	Revenue (e) $	Revenue (e) c.	Revenue per kwh (f) c.
1	The Pennsylvania	Safe Harbor, Fishing					
2	Railroad	Creek, Conowingo.					
3	Company	and Perryville		320,344,000	1,625,575	45	
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19		TOTAL		320,344,000	1,625,575	45	

533. INTERDEPARTMENTAL SALES (Account 607)

Line No.	Name of other department (a)	Basis of charge to other department (b)	Point of delivery (c)	Kilowatt-hours (d)	Revenue (e) $	Revenue (e) c.	Revenue per kwh (f) c.
34							
35							
36							
37							
38							
39							
40							
41							
42			TOTAL				

534. OTHER SALES (Account 608)

Line No.	Description of other sales (a)	Point of delivery (b)	Kilowatt-hours (c)	Revenue (d)	Revenue (d) c.	Revenue per kwh (e) c.
63						
64						
65						
66						
67						
68						
69						
70						
71						
72						
73						
74						
75						
76		TOTAL				

[258657]

Item 55

4673

575. ELECTRIC ENERGY ACCOUNT

Report below the information called for concerning the disposition of electric energy generated, purchased, and interchanged during the year.

Line No.	Item (a)	Kilowatt-hours (b)
1	ENERGY GENERATED, PURCHASED, AND INTERCHANGED	x x x x x x x x x x x
2	Generation (excluding station use):	x x x x x x x x x x x
3	Steam	166,112,000
4	Hydro	592,689,000
5	Internal combustion engine	
6	Total generation	758,801,000
7	Purchases	583,171,000
8	Interchanges — In (gross)	172,242,000
9	TOTAL ENERGY GENERATED, PURCHASED, AND INTERCHANGED	1,514,214,000
10	DISPOSITION OF ENERGY GENERATED, PURCHASED, AND INTERCHANGED	x x x x x x x x x x x
11	Sales (excluding interdepartmental sales None kwh)	1,245,054,000
12	Interchanges — Out (gross)	204,424,000
13	Energy furnished without charge	
14	Energy used by the company (excluding station use):	x x x x x x x x x x x
15	Electric utility	
16	Gas utility	
17	Other utility departments:	x x x x x x x x x x x
18	1.	
19	2.	
20	3.	
21	Common (office, shops, garages, etc. serving two or more utility departments)	
22	Total energy used by the company	
23	Energy losses: Substation	x x x x x x x x x x x
24	Transmission and ~~conversion~~ losses	64,736,000
25	Distribution losses	
26	Unaccounted for losses	
27	Total energy losses	64,736,000
28	(4.3 percent of total energy generated, purchased, and interchanged)	x x x x x x x x x x x
29	TOTAL DISPOSITION OF ENERGY GENERATED, PURCHASED, AND INTERCHANGED	1,514,214,000

577. MONTHLY PEAKS AND OUTPUT

1. Report hereunder the information called for pertaining to simultaneous peaks established monthly (in kilowatts) and monthly output (in kilowatt-hours) for the combined sources of electric energy of respondent.
2. The monthly peak should be the maximum simultaneous load on generating stations and other sources of supply.
3. State type of monthly peak reading (instantaneous, 15, 30, or 60 minutes integrated).
4. The monthly output should correspond with the total energy generated, purchased, and interchanged-in, per line 9 of Schedule 575 above.
5. If the respondent has two or more power systems not physically connected, the information called for below should be furnished for each system.

Combined Hydro and Steam Gross Generated Peaks

Line No.	Month (a)	MONTHLY PEAK Kilowatts (b)	Day of week (c)	Day of month (d)	Hour (e)	Type of reading (f)	Monthly output (kwh) (g)
41	January	122,000	Tues.	8	2 p.m.	60 Min. Integ	144,553,000
42	February	127,000	Thur.	28	8 p.m.	" " "	100,123,000
43	March	135,000	Sat.	9	5 p.m.	" " "	177,509,000
44	April	130,000	Sat.	6	1 a.m.	" " "	118,995,000
45	May	137,000	Wed.	22	5 p.m.	" " "	138,439,000
46	June	135,000	Fri.	14	8 p.m.	" " "	158,625,000
47	July	134,000	Sun.	7	2 a.m.	" " "	114,205,000
48	August	133,000	Fri.	9	9 p.m.	" " "	113,761,000
49	September	113,000	Tues.	24	3 p.m.	" " "	91,287,000
50	October	134,000	Wed.	30	4 p.m.	" " "	135,536,000
51	November	130,000	Mon.	4	8 p.m.	" " "	115,213,000
52	December	128,000	Tues.	10	7 p.m.	" " "	105,968,000

[25872]

Item 55

4681

PENNSYLVANIA WATER & POWER COMPANY 1946

532 - Sales to Railroads and Railways (Account 606)

Line 2 Col. (d)

The energy shown was supplied jointly by Respondent and Safe Harbor Water Power Corporation.

Line 2 Cols. (e) and (f)

The revenue shown was Respondent's division of $3,434,731.07 total revenue received from The Pennsylvania Railroad Company by Consolidated Gas Electric Light and Power Company of Baltimore acting for itself and as agent for others including Respondent and Safe Harbor Water Power Corporation. Such division was independent of the actual services supplied (including other services in addition to power and energy) by Respondent and Safe Harbor Water Power Corporation.

551. PURCHASED POWER (Account 738)

1. Report below the information called for concerning power purchased for resale during the year.
2. All purchases from publicly owned power systems should be classified as purchases from municipalities.
3. Report separately firm, dump, and other power purchased from the same company. Describe the nature of any purchases classified as Other Power, column (i).
4. If a fixed number of kilowatts of maximum demand is specified in the power contract as a basis of billing this number should be shown in column (m). The number of kilowatts of maximum demand to be shown in columns (n) and (o) should be actual based on monthly readings and should be furnished whether or not used in the determination of demand charges. Show in column (p) type of demand reading (instantaneous, 15, 30, or 60 minutes integrated).

A. Summary of Purchases According to Companies and Points of Receipt

Line No.	Purchased from — (a)	Associated utilities (b)	Nonassociated utilities (c)	Associated nonutilities (d)	Other nonutilities (e)	Municipalities (f)	Firm power (g)	Dump or surplus power (h)	Other power (i)	Purchases within State boundaries (j)	Imports across State lines (k)	Point of receipt (Use an insert page and designate points of receipt by line numbers of this schedule) (l)	KILOWATTS OF DEMAND: Contract demand (m)	Average monthly maximum demand (n)	Annual maximum demand (o)
1	Safe Harbor Water														
2	Power Corporation		x						x	x		Safe Harbor, Pa.			
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															
25															
26															
27															
28															
29															
30															
33	TOTAL														

B. Summary of Purchases According to Statistical Classifications

51	Associated utilities	
52	Nonassociated utilities	
53	Associated nonutilities	
54	Other nonutilities	
55	Municipalities	
56	Firm power	
57	Dump or surplus power	
58	Other power	
59	Purchases within State boundaries	
60	Imports across State lines (Do not total.)	

551 - Purchased Power (Account 738)

[25868]

Item SS

Line 2 Col. (r)

The energy shown was the metered (net hourly basis) supply by Safe Harbor Water Power Corporation to Respondent in part for Respondents own use and in part for joint supply by Respondent and Safe Harbor Water Power Corporation under certain power supply contracts.

Line 2 Cols. (u), (v) and (w)

The payments were independent of the amounts or proportion of electric services received. It included compensation for Safe Harbor Water Power Corporation's services rendered jointly with Respondent to Pennsylvania Power & Light Company and Philadelphia Electric Company under certain power supply contracts and in part for Safe Harbor Water Power Corporation's services rendered jointly with Consolidated Gas Electric Light and Power Company of Baltimore, Potomac Electric Power Company and Respondent to The Pennsylvania Railroad Company.

4676

551. PURCHASED POWER (Account 736) — Continued

5. The number of kilowatt hours purchased should be the quantities shown by the power bills.

6. Explain any amounts entered in column (u).

7. Provision is made in this schedule to summarize power purchases according to certain statistical classifications. For each of the purchases reported, designate the several statistical classifications applicable thereto by placing "x's" in the appropriate columns (b) to (k). Each purchase will appear in more than one classification. In section B summarize the total purchases according to the several statistical classifications.

A. Summary of Purchases According to Companies and Points of Receipt — Continued

Type of demand reading	Voltage at which received	Kilowatt-hours	COST OF ENERGY				Cost per kWh	Line No.
			Demand charges	Energy charges	Other charges	Total		
(p)	(q)	(r)	(s)	(t)	(u)	(v)	(w)	
			$ c.	$ c.	$ c.	$ c.	c.	
	13,000							1
	66,000	583,171,000		1,016,500.79		1,016,500.79		2
								3
								4
								5
								6
								7
								8
								9
								10
								11
								12
								13
								14
								15
								16
								17
								18
								19
								20
								21
								22
								23
								24
								25
								26
								27
								28
								29
								30
xxxxxxxx xxxxxx	583,171,000			1,016,500.79		1,016,500.79		33

B. Summary of Purchases According to Statistical Classifications — Continued

	583,171,000			1,016,500.79		1,016,500.79		51
								52
								53
								54
								55
								56
								57
	583,171,000			1,016,500.79		1,016,500.79		58
	583,171,000			1,016,500.79		1,016,500.79		59
								60

552. INTERCHANGE POWER (Account 739)

1. Report below the kilowatt-hours received and delivered during the year and the net charge or credit under interchange power agreements.
2. All interchanges with publicly-owned power systems should be classified as municipalities.
3. Explain any amounts entered in column (s).
4. Designate the statistical classifications applicable to each interchange listed, by placing "x's" in the appropriate columns (b) to (h).

A. Summary of Interchanges According to Companies and Points of Interchange

Line No.	Name of company (a)	Associated utilities (b)	Nonassociated utilities (c)	Associated nonutilities (d)	Other nonutilities (e)	Municipalities (f)	Interchanges within State boundaries (g)	Interchanges across State lines (h)	Point of interchange (i)	Voltage at which interchanged (j)	KILOWATT-HOURS Received (k)	Delivered (l)	Net difference (m)	Amount of settlement (n)
1	Cons.Gas,Elec.Lt.&Pwr.Co.		x					x	Balto,Bk.Fk,Mi.	13,000-220,000	159,482,000	-	159,482,000	See Note
2	Phila. Elec. Co.		x					A	Perryville,Md	132,000	3,968,000	32,786,000	(28,818,000)	(179,598 35)
3														
4	Penn. Pwr. & Lt. Co.		x				A		Thorndale,Pa.	132,000	5,425,000	48,018,000	(42,593,000)	(268,975 19)
5	Met. Ed. Co.		x				x		Harrisburg,Pa.	66,000	2,919,000	51,192,000	(48,273,000)	(307,996,55)
6							x		York, Pa.	66,000	448,000	72,428,000	(71,980,000)	(371,128.64)
7														
8														
9										TOTAL	172,242,000	204,424,000	(32,182,000)	(1,127,698 73)

B. Summary of Interchanges According to Statistical Classifications

21	Associated utilities				
22	Nonassociated utilities	172,242,000	204,424,000	(32,182,000)	(1,127,698 73)
23	Associated nonutilities				
24	Other nonutilities				
25	Municipalities				
26	Interchanges within State boundaries	8,792,000	171,638,000	(162,846,000)	(948,100 38)
27	Interchanges across State lines	163,450,000	32,786,000	130,664,000	(179,598 35)
28	(Do not total.)				

C. Details of Settlement for Interchange Power

Line No.	Name of company (o)	Remarks (p)	Demand charges (q) $	Demand charges (q) c	Energy charges (r) $	Energy charges (r) c	Other charges (s) $	Other charges (s) c	Total settlement (t) $	Total settlement (t) c
41	Cons.Gas Elec.Lt.&Pwr.Co.				See Note					
42	Phila.Elec.Co.				(448,573	54)			(448,573	54)
43	Penn.Pwr. & Lt. Co.				(307,996	55)			(307,996	55)
44	Met. Ed. Co.				(371,128	64)			(371,128	64)
45										
46										
47										
48										
49		TOTAL			(1,127,698	73)			(1,127,698	73)

PENNSYLVANIA WATER & POWER COMPANY 1946

552 - Interchange Power (Account 739)

Line 1 Col. (k)

The energy shown was the metered (net hourly basis) supply to the 220,000 volt system of Respondent at Baltimore and Takoma Park, Maryland, and to the 13,000 volt system at Highlandtown Substation (Baltimore, Md.).

Line 1 Col. (n)
Line 41 Cols. (r) and (t)

The settlement is a part of the consideration shown on Pages 512-513 (Schedule 530) Line 3 Cols. (s) and (t).

Lines 2 and 3 (Note A)

The energy shown was delivered to The Pennsylvania Railroad Company for the account of the Philadelphia Electric Company and the kilowatt-hours reported received were kilowatt-hours delivered to The Pennsylvania Railroad Company by the Philadelphia Electric Company system for the account of the Respondent. Deliveries were not made at a point of connection between the two electric companies but each company delivered at a point on its own system to The Pennsylvania Railroad Company and the power was used by the said railroad on its lines.

Line 4 Col. (k)

The energy shown was sold under a joint power supply contract by Respondent and Safe Harbor Water Power Corporation.

Line 4 Col. (n)

The settlement shown reflects $320,028.21 billed by Respondent acting for itself and as agent for Safe Harbor Water Power Corporation.

Lines 42, 43 and 44 Col. (r)

The amounts shown included charges for other interchange services in addition to charges for interchange energy; the several interchange services are not billed separately.

PENNSYLVANIA WATER & POWER COMPANY 1946

575 - Electric Energy Account

Line 4 Col. (b)

1946 was a year of approximately average river flow. The gross generation of Respondent's hydro plant was approximately 27,400,000 kwh. above that expected with average river flow.

Line 7 Col (b)

See Page 523 (Schedule 551) and notes pertaining to Line 2 Col. (r).

Line 11 Col. (b)

See Pages 512-513 (Schedule 530) and notes pertaining to Lines 5 and 7 Col. (p) and Page 524 (Schedule 532) and notes pertaining to Line 2 Col. (d).

Line 12 Col. (b)

See Page 524 (Schedule 552) and notes pertaining to Line 4 Col. (l).

Lines 24 and 27 Col. (b)

The energy shown does not include 7,041,000 kwh. of transmission losses on Respondent's 220,000 volt transmission system between Safe Harbor, Baltimore and Takoma Park, Maryland resulting from the transmission of electric services by Respondent from Safe Harbor, Pa. to Consolidated Gas Electric Light and Power Company of Baltimore.

ITEM VV.

Electric Utilities and Licensees

(Classes A and B)

ANNUAL REPORT

of

PENNSYLVANIA POWER & LIGHT COMPANY

Ninth and Hamilton Sts., Allentown, Pennsylvania

to the

FEDERAL POWER COMMISSION

for the

YEAR ENDED DECEMBER 31, 1945

(Excerpts)

551. PURCHASED POWER (Account 736)

1. Report below the information called for concerning power purchased for resale during the year.
2. All purchases from publicly owned power systems should be classified as purchases from municipalities.
3. Report separately firm, dump, and other power purchased from the same company. Describe the nature of any purchases classified as Other Power, column (i).
4. If a fixed number of kilowatts of maximum demand is specified in the power contract as a basis of billing this number should be shown in column (m). The number of kilowatts of maximum demand to be shown in columns (n) and (o) should be actual based on monthly readings and should be furnished whether or not used in the determination of demand charges. Show in column (p) type of demand reading (instantaneous, 15, 30, or 60 minutes integrated).

A. Summary of Purchases According to Companies and Points of Receipt

Line No.	Purchased from — (a)	Associated utilities (b)	Nonassociated utilities (c)	Associated nonutilities (d)	Other nonutilities (e)	Municipalities (f)	Firm power (g)	Dump or surplus power (h)	Other power (i)	Purchases within State boundaries (j)	Imports across State lines (k)	Point of receipt (Use an insert page and designate points of receipt by line numbers of this schedule) (l)	KILOWATTS OF DEMAND: Contract demand (m)	Average monthly maximum demand (n)	Annual maximum demand (o)
1	Alpha Portland														
2	Cement Co.				x			x		x			*	*	*
3	Bethlehem Steel Co.				x			x		x			*	*	*
4	Luzerne County G. &														
5	E. Corp.		x				x			x			*	*	*
6	Metropolitan Edison														
7	Co.		x				x			x			*	*	*
8	" "		x				x			x		See	*	*	*
9	" "		x				x			x			*	*	*
10	Mill Hall Mfg. Co.				x		x			x		Schedule	*	*	*
11	Northern Penna.														
12	Power Co.		x				x			x		Attached	*	*	*
13	" "		x				x			x			*	*	*
14	" "		x				x			x			*	*	*
15	Penna. Dixie Cement														
16	Corp.				x			x		x			*	*	*
17	Penna. Edison Co.		x				x			x			*	*	*
18	Penna. Water &														
19	Power Co.		x				x			x			*	*	*
20	" "		x				x			x			*	*	*
21	Philadelphia														
22	Electric Co.		x				x			x			*	*	*
23	Scranton Electric Co.,		x				x			x			*	*	*
24															
25															
26															
27	*Demands are not recorded														
28	**Not billed on demand basis														
29															
30															
33												TOTAL			

B. Summary of Purchases According to Statistical Classifications

51	Associated utilities	
52	Nonassociated utilities	
53	Associated nonutilities	
54	Other nonutilities	
55	Municipalities	
56	Firm power	
57	Dump or surplus power	
58	Other power	
59	Purchases within State boundaries	
60	Imports across State lines (Do not total.)	

552. INTERCHANGE POWER (Account 739)

1. Report below the kilowatt-hours received and delivered during the year and the net charge or credit under interchange power agreements.
2. All interchanges with publicly owned power systems should be classified as municipalities.
3. Explain any amounts entered in column (*i*).
4. Designate the statistical classifications applicable to each interchange listed, by placing "x's" in the appropriate columns (*b*) to (*h*).

A. Summary of Interchanges According to Companies and Points of Interchange

Line No.	Name of company (a)	Associated utilities (b)	Nonassociated utilities (c)	Associated nonutilities (d)	Other nonutilities (e)	Municipalities (f)	Interchange within State boundaries (g)	Interchange across State lines (h)	Point of interchange (i)	Voltage at which interchanged (j)	KILOWATT-HOURS Received (k)	KILOWATT-HOURS Delivered (l)	KILOWATT-HOURS Net difference (m)	Amount of settlement (n)	
1	Luzerne Co.G.& E.Corp.		x				x		(a)	66,000	43,524,500	3,930,900	39,593,600	$183,316	52
2	Metropolitan Edison Co.		x				x		(b)	66,000-33,000-22,000	5,663,993	11,431,412	(5,767,419)	*66,608	16
3	Northern Penna.Power Co.		x				x		(c)	11,000	268,500	501,100	(232,600)	(2,010	73)
4	Penna.Water & Power Co.		x				x		(d)	66,000	63,343,000	6,053,000	57,290,000	247,204	30
5	Philadelphia Elec. Co.		x				x		(e)	220,000	55,244,000	68,026,000	(12,782,000)	27,539	72
6	" " "		x				x		(f)	33,000	1,375,000		1,375,000	13,750	00
7	Public Service E.& G.Co.		x				x	x	(g)	220,000	40,183,000	21,979,000	18,204,000	86,251	91
8	Scranton Electric Co.		x				x		(h)	66,000	31,165,380	6,223,000	24,942,380	124,341	11
9										TOTAL	240,767,373	118,144,412	122,622,961	747,000	99

B. Summary of Interchanges According to Statistical Classifications

21	Associated utilities					
22	Nonassociated utilities	240,767,373	118,144,412	122,622,961	747,000	99
23	Associated nonutilities					
24	Other nonutilities					
25	Municipalities					
26	Interchanges within State boundaries	200,584,373	96,165,412	104,418,961	660,749	08
27	Interchanges across State lines	40,183,000	21,979,000	18,204,000	86,251	91
28	(Do not total.)					

*Includes capacity charge of $85,364.42

C. Details of Settlement for Interchange Power

Line No.	Name of company (o)	Remarks (p)	Demand charges (q)	Energy charges (r)	Other charges (s)	Total settlement (t)	
41	Luzerne County Gas & Electric Corporation			$ 183,316 52		$ 183,316	52
42	Metropolitan Edison Company			66,608 16		66,608	16
43	Northern Pennsylvania Power Company			(2,010 73)		(2,010	73)
44	Pennsylvania Water & Power Company			247,204 30		247,204	30
45	Philadelphia Electric Company			27,539 72		27,539	72
46	" " "			13,750 00		13,750	00
47	Public Service Electric & Gas Company			86,251 91		86,251	91
48	Scranton Electric Company			124,341 11		124,341	11
49	TOTAL			747,000 99		747,000	99

ITEM BBB.

Electric Utilities and Licensees

(Classes A and B)

ANNUAL REPORT

of

PHILADELPHIA ELECTRIC COMPANY

1000 Chestnut Street, Philadelphia, Pennsylvania

to the

FEDERAL POWER COMMISSION

for the

YEAR ENDED DECEMBER 31, 1945

(Excerpts)

4686

Item BBB

[25906]

551. PURCHASED POWER (Account 736)

1. Report below the information called for concerning power purchased for resale during the year.
2. All purchases from publicly owned power systems should be classified as purchases from municipalities.
3. Report separately firm, dump, and other power purchased from the same company. Describe the nature of any purchases classified as Other Power, column (i).
4. If a fixed number of kilowatts of maximum demand is specified in the power contract as a basis of billing this number should be shown in column (m). The number of kilowatts of maximum demand to be shown in columns (n) and (o) should be actual based on monthly readings and should be furnished whether or not used in the determination of demand charges. Show in column (p) type of demand reading (instantaneous, 15, 30, or 60 minutes integrated).

A. Summary of Purchases According to Companies and Points of Receipt

Line No.	Purchased from — (a)	Associated utilities (b)	Nonassociated utilities (c)	Associated nonutilities (d)	Other nonutilities (e)	Municipalities (f)	Firm power (g)	Dump or surplus power (h)	Other power (i)	Purchases within State boundaries (j)	Imports across State lines (k)	Point of receipt (Use an insert page and designate points of receipt by like numbers of this schedule) (l)	KILOWATTS OF DEMAND: Contract demand (m)	Average monthly maximum demand (n)	Annual maximum demand (o)
1	Chester County Light and								(D)						
2	Power Company	x	x						x	x[a]		SEE SUPPLEMENT ATTACHED	NONE	*	*
3	Deepwater Light and								(E)						
4	Power Company	x							x		x		NONE	97 667	106 000
5	Metropolitan Edison								(D)						
6	Company		x						x	x			NONE	*	*
7	Metropolitan Edison								(D)						
8	Company		x						x	x			NONE	*	*
9	Pennsylvania Water &														
10	Power Company		x				x			x			NONE	23 046	25 400
11	The Susquehanna								(F)						
12	Electric Company	x							x		x		NONE	*	*
13															
14															
15															
16															
17	(D) Borderline Agreements														
18	(E) Deepwater Light and Power Company makes available to Philadelphia Electric Company all of														
19	that part of the electrical capacity and output of Deepwater Station to which Deepwater														
20	Light and Power Company is entitled. Also includes Net Interchange Energy which was														
21	made available to Philadelphia Electric Company.														
22	(F) The Susquehanna Electric Company sells all of its electrical capacity and energy to														
23	Philadelphia Electric Company excepting a comparatively small amount sold to														
24	Conowingo Power Company.														
25															
26															
27															
28															
29															
30															
33	TOTAL														

* Not Recorded

B. Summary of Purchases According to Statistical Classifications

51	Associated utilities	
52	Nonassociated utilities	
53	Associated nonutilities	
54	Other nonutilities	
55	Municipalities	
56	Firm power	
57	Dump or surplus power	
58	Other power	
59	Purchases within State boundaries	
60	Imports across State lines	

552. INTERCHANGE POWER (Account 739)

1. Report below the kilowatt-hours received and delivered during the year and the net charge or credit under interchange power agreements.
2. All interchanges with publicly owned power systems should be classified as municipalities.
3. Explain any amounts entered in column (s).
4. Designate the statistical classifications applicable to each interchange listed, by placing "x's" in the appropriate columns (b) to (h).

A. Summary of Interchanges According to Companies and Points of Interchange

Line No.	Name of company (a)	Associated utilities (b)	Nonassociated utilities (c)	Associated nonutilities (d)	Other nonutilities (e)	Municipalities (f)	Interchanges within State boundaries (g)	Interchanges across State lines (h)	Point of interchange (i)	Voltage at which Interchanged (j)	KILOWATT-HOURS Received (k)	KILOWATT-HOURS Delivered (l)	KILOWATT-HOURS Net difference (m)	Amount of settlement (n)
1	Public Service Electric													
2	and Gas Company		x					x	Pa.-N.J. State Line near New Hope, Pa.	220 000				
3									near Trenton, N.J.	66 000	163 730 000	67 414 000	96 316 000	413 616 67
4									at Philadelphia, Pa.	26 000				
4	Pennsylvania Power & Light Co.	x	x				x		North Wales, Pa.	33 000	68 026 000	56 619 000	11 407 000	(41 289 72)
5	Pennsylvania Water & Power Co.		x				x		Towamencin Twp.Line,Pa.	220 000				
5									Via Lines of Pa.R.R.Co.	132 000	56 368 000	8 766 000	47 602 000	216 258 10
6	Southern Pennsylvania													
7	Power Company	x					x		West Fallowfield Twp. near Cochranville,Pa.	33 000 / 4 000	31 000	1 873 600	(1 842 600)	(15 815 03)
9									TOTAL		288 155 000	134 672 600	153 482 400	572 770 02

B. Summary of Interchanges According to Statistical Classifications

21	Associated utilities	31 000	1 873 600	(1 842 600)	(15 815 03)
22	Nonassociated utilities	288 124 000	132 799 000	155 325 000	588 585 05
23	Associated nonutilities				
24	Other nonutilities				
25	Municipalities				
26	Interchanges within State boundaries	124 425 000	67 258 600	57 166 400	159 153 35
27	Interchanges across State lines	163 730 000	67 414 000	96 316 000	413 616 67
28	(Do not total.)				

C. Details of Settlement for Interchange Power

Line No.	Name of company (o)	Remarks (p)	Demand charges (q)	Energy charges (r)	Other charges (s)	Total settlement (t)
41	Public Service Electric		$ c	$ c	$ c	$ c
42	and Gas Company			413 616 67		413 616 67
43	Pennsylvania Power & Light Co.			(41 289 72)		(41 289 72)
44	Pennsylvania Water & Power Co.			216 258 10		216 258 10
45	Southern Pennsylvania					
46	Power Company	Other charges Col. "S" line 46 represents twelve (12) percent of	(6 538 36)	(6 307 87)	(2 968 80)	(15 815 03)
47		the investment of the facilities used to serve this customer.				
48						
49		TOTAL	(6 538 36)	582 277 18	(2 968 80)	572 770 02

ITEM EEE.

Electric Utilities and Licensees

(Classes A and B)

ANNUAL REPORT

of

PENNSYLVANIA WATER & POWER COMPANY

Lexington Building, Baltimore, Maryland

to the

FEDERAL POWER COMMISSION

for the

YEAR ENDED DECEMBER 31, 1937

(Excerpts)

530. SALES TO OTHER ELECTRIC UTILITIES (Account 605)

1. Report below the information called for concerning sales during year to other electric utilities and to cities or other public authorities for distribution to ultimate consumers.

2. Report separately firm, dump, and other power sold to the same company. Describe the nature of any sales classified as Other Power, column (g).

3. If a fixed number of kilowatts of maximum demand is specified in the power contract as a basis of billing to the customer this number should be shown in column (k). The number of kilowatts of maximum demand to be shown in columns (l) and (m) should be actual based on monthly readings and should be furnished whether or not used in the determination of demand charges. Show in column (n) type of demand reading (instantaneous, 15, 30, or 60 minutes integrated).

A. Summary of Sales According to Companies and Points of Delivery

Line No.	Sales to— (a)	Associated utilities (b)	Nonassociated utilities (c)	Municipalities (d)	Firm power (e)	Dump or surplus power (f)	Other power (g)	Sales within State boundaries (h)	Exports across State lines (i)	Point of delivery (j)	Kilowatts of Demand: Contract demand (k)	Average monthly maximum demand (l)	Annual maximum demand (m)
1	Phila. Electric Co. - Coatesville Div.		x		x			x		Coatesville, Pa.	-	11,679	12,500
2	Pa.Pwr.&Lt.Co.- Lancaster Div.		x		x			x		Lancaster, Pa.	-	-	-
3	York Edison Co.		x		x			x		Violet Hill, Pa.	-	6,453	7,040
4	Consol. Gas Elec. Lt. & Power Co.of Balto.		x				x		x	Balto., Takoma Pk. & Perryville, Md.	-	-	-
5													
6													
7													
8													
9													
21													
22													
23													
24													
25													
26													
27													
28													
29													
30													
31													
32													
33													
34													
35										TOTAL	-	-	-

Note:
Blank lines in document folded over at this point for better camera reduction.

B. Summary of Sales According to Statistical Classifications

51	Associated utilities	
52	Nonassociated utilities	
53	Municipalities	
54	Firm power	
55	Dump or surplus power	
56	Other power	
57	Sales within State boundaries	
58	Exports across State lines	
59	(Do not total.)	

532. SALES TO RAILROADS AND RAILWAYS (Account 606)

1. Designate associated companies by placing an "x" in column (c).
2. If a contract covers several points of delivery and small amounts of electric energy are delivered at each point, such sales may be grouped.

Line No.	Name of railroad or railway (a)	Point of delivery (b)	Associated company (c)	Kilowatt-hours (d)	Revenue (e) $	Revenue (e) c.	Revenue per kwh (f) c.
1	The Pennsylvania Railroad Company	Safe Harbor, Pa.		22,600		224 88	0.995
2							
3							
4							
5							
15							
16							
17							
18							
19			TOTAL	22,600		224 88	0.995

Note:
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533. INTERDEPARTMENTAL SALES (Account 607)

Line No.	Name of other department (a)	Basis of charge to other department (b)	Point of delivery (c)	Kilowatt-hours (d)	Revenue (e) $	Revenue (e) c.	Revenue per kwh (f) c.
31							
32							
33		NOT APPLICABLE					
34							
35							
36							
37							
38							
39							
40							
41							
42			TOTAL				

534. OTHER SALES (Account 608)

Line No.	Description of other sales (a)	Point of delivery (b)	Kilowatt-hours (c)	Revenue (d) $	Revenue (d) c.	Revenue per kwh (e) c.
61						
62						
63	NOT APPLICABLE					
64						
65						
66						
67						
68						
69						
70						
71						
72						
73						
74						
75						
76			TOTAL			

551. PURCHASED POWER (Account 738)

1. Report below the information called for concerning power purchased for resale during the year.

2. All purchases from publicly owned power systems should be classified as purchases from municipalities.

3. Report separately firm, dump, and other power purchased from the same company. Describe the nature of any purchases classified as Other Power, column (i).

4. If a fixed number of kilowatts of maximum demand is specified in the power contract as a basis of billing this number should be shown in column (*m*). The number of kilowatts of maximum demand to be shown in columns (*n*) and (*o*) should be actual based on monthly readings and should be furnished whether or not used in the determination of demand charges. Show in column (*p*) type of demand reading (instantaneous, 15, 30, or 60 minutes integrated).

A. Summary of Purchases According to Companies and Points of Receipt

Line No.	Purchased from—	Associated utilities (b)	Nonassociated utilities (c)	Associated nonutilities (d)	Other nonutilities (e)	Municipalities (f)	Firm power (g)	Dump or surplus power (h)	Other power (i)	Purchases within State boundaries (j)	Imports across State lines (k)	Point of receipt (l)	Kilowatts of Demand: Contract demand (m)	Average monthly maximum demand (n)	Annual maximum demand (o)
1	Safe Harbor Water Power Corporation		X						X	X		Safe Harbor, Pa.	-	-	-
2															
3															
4															
5															
6															
7															
8															
9															
22															
23															
24															
25															
26															
27															
28															
29															
30															
31															
32															
33												TOTAL	-	-	-

Note:
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B. Summary of Purchases According to Statistical Classifications

51	Associated utilities	
52	Nonassociated utilities	
53	Associated nonutilities	
54	Other nonutilities	
55	Municipalities	
56	Firm power	
57	Dump or surplus power	
58	Other power	
59	Purchases within State boundaries	
60	Imports across State lines (Do not total.)	

552. INTERCHANGE POWER (Account 739)

1. Report below the kilowatt-hours received and delivered during the year and the net charge or credit under interchange power agreements.
2. All interchanges with publicly owned power systems should be classified as municipalities.
3. Explain any amounts entered in column (s).
4. Designate the statistical classifications applicable to each interchange listed, by placing "x's" in the appropriate columns (b) to (h).

A. Summary of Interchanges According to Companies and Points of Interchange

Line No.	Name of company (a)	Associated utilities (b)	Nonassociated utilities (c)	Associated nonutilities (d)	Other nonutilities (e)	Municipalities (f)	Interchanges within State boundaries (g)	Interchanges across State lines (h)	Point of interchange (i)	Voltage at which interchanged (j)	Kilowatt-Hours: Received (k)	Kilowatt-Hours: Delivered (l)	Kilowatt-Hours: Net difference (m)	Amount of settlement (n) $	c.
1	Phila. Electric Co.		x					x	Perryville, Md.	132,000	13,858,000	31,753,800	17,895,800	14	50
2	Pa. Power & Light Co.		x				x		Harrisburg, Pa.	70,000	16,610,000	21,611,000	5,001,000	19	56
3	Metropolitan Edison Co.		x				x		Violet Hill, Pa.	70,000	828,000	89,892,000	89,064,000	191	50
4															
5															
6															
7															
8															
9										TOTAL	31,296,000	143,256,800	111,960,800	225	56

B. Summary of Interchanges According to Statistical Classifications

Line No.						
21	Associated utilities					
22	Nonassociated utilities	31,296,000	143,256,800	111,960,800	$225	56
23	Associated nonutilities					
24	Other nonutilities					
25	Municipalities					
26	Interchanges within State boundaries	17,438,000	111,503,000	94,065,000	$210	06
27	Interchanges across State lines	13,858,000	31,753,800	17,895,800	14	50
28	(Do not total.)					

C. Details of Settlement for Interchange Power

Line No.	Name of company (o)	Remarks (p)	Demand charges (q) $	c.	Energy charges (r) $	c.	Other charges (s) $	c.	Total settlement (t) $	c.
41	Phila. Electric Co.		-		14 428	50	-		14 428	50
42	Pa. Power & Light Co.		-		19 513	56	-		19 513	56
43	Metropolitan Edison Co.		-		190 337	98	(a) 725	52	191 063	50
44										
45										
46		(a) Special Transformer Facilities.								
47										
48										
49		TOTAL			$224 280	04	$ 725	52	$225 005	56

STATE OF Maryland

602. CONTRACTS, RATE SCHEDULES, AND AGREEMENTS

(A) With Other Utilities for the Sale or Interchange of Energy for Resale

(B) With Industrial Companies for the Purchase or Interchange of Energy for Resale

1. Report below the data requested for each contract, agreement, or rate schedule in force at end of year, with (A) other utilities covering sales or interchanges of energy for resale and (B) industrial companies covering purchases or interchanges of energy for resale.
2. State in column (d) whether or not two copies of each of the contracts, agreements, or rate schedules listed below have previously been furnished the Federal Power Commission. Enclose with this statement two copies of each such contract, agreement, or schedule that have not been furnished this Commission.

(A) WITH OTHER UTILITIES FOR THE SALE OR INTERCHANGE OF ENERGY FOR RESALE

Line No.	Name of utility or industrial company with which contract, agreement, or schedule is made (a)	Date of making contract, agreement, or schedule (b)	Date of expiration of contract, agreement, or schedule (c)	Has copy been furnished Federal Power Commission? (yes or no) (d)	Specify whether contract is for sale, interchange, purchase, or a combination of these (e)
1	Consolidated Gas Electric Light				
2	& Power Co.	12-31-27	4-22-80	Yes	Sale
3	Philadelphia Electric Co.	5-20-35	9-1-38	Yes	Interchange*
4					
5					
6	* This is really a transfer of Pennsylvania Railroad load from one				
7	supplying electric company to the other. Energy is delivered to the				
8	Pennsylvania Railroad for the account of Philadelphia Electric Co., or				
9	it is delivered by Philadelphia Electric Co. to Pennsylvania Railroad				
10	for the account of Pennsylvania Water & Power Co.				
11					

(B) WITH INDUSTRIAL COMPANIES FOR THE PURCHASE OR INTERCHANGE OF ENERGY FOR RESALE

21					
22					
23					
24					
25					
26			None		
27					
28					
29					
30					
31					
32					
33					

STATE OF Pennsylvania

602. CONTRACTS, RATE SCHEDULES, AND AGREEMENTS

(A) With Other Utilities for the Sale or Interchange of Energy for Resale

(B) With Industrial Companies for the Purchase or Interchange of Energy for Resale

1. Report below the data requested for each contract, agreement, or rate schedule in force at end of year, with (A) other utilities covering sales or interchanges of energy for resale and (B) industrial companies covering purchases or interchanges of energy for resale.
2. State in column (d) whether or not two copies of each of the contracts, agreements, or rate schedules listed below have previously been furnished the Federal Power Commission. Enclose with this statement two copies of each such contract, agreement, or schedule that have not been furnished this Commission.

(A) WITH OTHER UTILITIES FOR THE SALE OR INTERCHANGE OF ENERGY FOR RESALE

Line No.	Name of utility or industrial company with which contract, agreement, or schedule is made (a)	Date of making contract, agreement, or schedule (b)	Date of expiration of contract, agreement, or schedule (c)	Has copy been furnished Federal Power Commission? (yes or no) (d)	Specify whether contract is for sale, interchange, purchase, or a combination of these (e)
1	Phil.Elec.Co., Coatesville Div.	8-1-33	3-31-39	Yes	Sale
2	Pa.Pwr.& Lt.Co., Lancaster Div.	5-21-33	10-31-40	Yes	Sale (a)
3	Edison Light & Power Co.	1-1-35	3-31-45	Yes	Sale
4	Metropolitan Edison Co.	3-11-31	By request with 1 yr.notice	Yes	Interchange
5	Safe Harbor Water Power Corp.	6-1-31	4-22-80	Yes	Purchase
6					
7	(a) There is also a small amount of interchange under oral arrangements pending				
8	completion of interchange agreement.				
9					
10					
11					

(B) WITH INDUSTRIAL COMPANIES FOR THE PURCHASE OR INTERCHANGE OF ENERGY FOR RESALE

21					
22					
23					
24	Not Applicable				
25					
26					
27					
28					
32					
33					

Note:
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ITEM MMM.

Electric Utilities and Licensees

(Classes A and B)

ANNUAL REPORT

of

SAFE HARBOR WATER POWER CORPORATION

Lexington Building, Baltimore, Maryland

to the

FEDERAL POWER COMMISSION

for the

YEAR ENDED DECEMBER 31, 1937

(Excerpts)

530. SALES TO OTHER ELECTRIC UTILITIES (Account 605)

1. Report below the information called for concerning sales during year to other electric utilities and to cities or other public authorities for distribution to ultimate consumers.

2. Report separately firm, dump, and other power sold to the same company. Describe the nature of any sales classified as Other Power, column (g).

3. If a fixed number of kilowatts of maximum demand is specified in the power contract as a basis of billing to the customer this number should be shown in column (k). The number of kilowatts of maximum demand to be shown in columns (l) and (m) should be actual based on monthly readings and should be furnished whether or not used in the determination of demand charges. Show in column (n) type of demand reading (instantaneous, 15, 30, or 60 minutes integrated).

A. Summary of Sales According to Companies and Points of Delivery

Line No.	Sales to— (a)	Associated utilities (b)	Nonassociated utilities (c)	Municipalities (d)	Firm power (e)	Dump or surplus power (f)	Other power (g)	Sales within State boundaries (h)	Exports across State lines (i)	Point of delivery (j)	Kilowatts of Demand: Contract demand (k)	Average monthly maximum demand (l)	Annual maximum demand (m)
1	Pennsylvania Water												
2	& Power Co.		X				X	X		Safe Harbor, Pa.	-	-	-
3	Consolidated Gas Elec.									Baltimore and			
4	Lt. & Power Co.		X				X		X	Takoma Pk, Md.	-	-	-
5													
6													
7													
8													
9													
21													
22													
23													
24													
25													
26													
27													
28													
29													
31													
32													
33													
34													
35										Total			

Note:
Blank lines in document folded over at this point, for better camera reduction.

B. Summary of Sales According to Statistical Classifications

Line No.		
51	Associated utilities	
52	Nonassociated utilities	
54	Municipalities	
54	Firm power	
56	Dump or surplus power	
58	Other power	
57	Sales within State boundaries	
58	Exports across State lines	
59	(Do not total.)	

532. SALES TO RAILROADS AND RAILWAYS (Account 606)

1. Designate associated companies by placing an "x" in column (c).
2. If a contract covers several points of delivery and small amounts of electric energy are delivered at each point, such sales may be grouped.

Line No.	Name of railroad or railway (a)	Point of delivery (b)	Associated company (c)	Kilowatt-hours (d)	Revenue (e) $	Revenue (e) c.	Revenue per kwh (f) c.
1							
2							
3							
4							
5							
6							
7							
8							
9		Not Applicable					
10							
17							
18							
19			TOTAL				

Note: Blank lines in document folded over at this point for better camera reduction.

533. INTERDEPARTMENTAL SALES (Account 607)

Line No.	Name of other department (a)	Basis of charge to other department (b)	Point of delivery (c)	Kilowatt-hours (d)	Revenue (e) $	Revenue (e) c.	Revenue per kwh (f) c.
31							
32							
33							
34							
35		Not Applicable					
36							
37							
38							
39							
40							
41							
42			TOTAL				

534. OTHER SALES (Account 608)

Line No.	Description of other sales (a)	Point of delivery (b)	Kilowatt-hours (c)	Revenue (d) $	Revenue (d) c.	Revenue per kwh (e) c.
61						
62						
63						
64						
65						
66						
67		Not Applicable				
68						
69						
70						
71						
72						
73						
74						
75			TOTAL			

[26026] Item MMM

552. INTERCHANGE POWER (Account 739)

1. Report below the kilowatt-hours received and delivered during the year and the net charge or credit under interchange power agreements.
2. All interchanges with publicly owned power systems should be classified as municipalities.
3. Explain any amounts entered in column (s).
4. Designate the statistical classifications applicable to each interchange listed, by placing "x's" in the appropriate columns (b) to (h).

A. Summary of Interchanges According to Companies and Points of Interchange

Line No.	Name of company (a)	Associated utilities (b)	Nonassociated utilities (c)	Associated nonutilities (d)	Other nonutilities (e)	Municipalities (f)	Interchanges within State boundaries (g)	Interchanges across State lines (h)	Point of interchange (i)	Voltage at which interchanged (j)	Kilowatt-Hours: Received (k)	Kilowatt-Hours: Delivered (l)	Kilowatt-Hours: Net difference (m)	Amount of settlement (n)
1														
2														
3									Not applicable					
4														
5														
6														
7														
8														
9	TOTAL													

B. Summary of Interchanges According to Statistical Classifications

Line No.		
21	Associated utilities	
22	Nonassociated utilities	
23	Associated nonutilities	
24	Other nonutilities	
25	Municipalities	
26	Interchanges within State boundaries	
27	Interchanges across State lines	
28	(Do not total)	

C. Details of Settlement for Interchange Power

Line No.	Name of company (o)	Remarks (p)	Demand charges (q) $	Demand charges (q) c.	Energy charges (r) $	Energy charges (r) c.	Other charges, (s) $	Other charges, (s) c.	Total settlement (t) $	Total settlement (t) c.
41										
42										
43										
44										
45										
46										
47										
48										
49	TOTAL									

550. ELECTRIC OPERATING EXPENSES — Continued

Line No.	Account (a)	CLASS A (b)	CLASS B (c)	Amount for year (d)	Increase or decrease from preceding year (e)
1	ELECTRIC GENERATION — HYDRAULIC POWER — Contd.				
2	*Maintenance:*				
3	(719) Supervision and engineering	A	B		
4	(720) Structures and improvements	A	B		
5	(721) Reservoirs, dams, and waterways	A	B		
6	(722) Generating and electric equipment		B		
7	(722.1) Prime movers and generators	A			
8	(722.2) Accessory electric equipment	A			
9	(722.3) Miscellaneous power plant equipment	A			
10	(723) Roads, railroads, and bridges	A	B		
11	Total maintenance				
12	*Miscellaneous:*				
13	(724) Rents	A	B		
14	(725) Joint expenses — Debit	A	B		
15	(726) Joint expenses — Credit	A	B		
16	Total miscellaneous				
17	Total production expenses — Hydraulic power				
18	ELECTRIC GENERATION — INT. COMB. ENGINE POWER				
19	*Operation:*				
20	(727) Supervision and engineering	A	B		
21	(728) Station labor		B		
22	(728.1) Engine labor	A			
23	(728.2) Electric labor	A			
24	(728.3) Miscellaneous station labor	A			
25	(729) Engine fuel	A	B		
26	(730) Supplies and expenses		B		
27	(730.1) Water	A			
28	(730.2) Lubricants	A			
29	(730.3) Station supplies	A			
30	(730.4) Station expenses	A			
31	Total operation				
32	*Maintenance:*				
33	(731) Supervision and engineering	A	B		
34	(732) Structures and improvements	A	B		
35	(733) Fuel holders, producers, and accessories	A	B		
36	(734) Generating and electric equipment		B		
37	(734.1) Engines	A			
38	(734.2) Generators	A			
39	(734.3) Accessory electric equipment	A			
40	(734.4) Miscellaneous power plant equipment	A			
41	Total maintenance				
42	*Miscellaneous:*				
43	(735) Rents	A	B		
44	(736) Joint expenses — Debit	A	B		
45	(737) Joint expenses — Credit	A	B		
46	Total miscellaneous				
47	Total prod. expenses — Int. comb. engine power				
48	OTHER PRODUCTION EXPENSES AND CREDITS				
49	(738) Purchased power	A	B	3,328,178 69	1,164,212 12
50	(739) Interchange power	A	B	423,552 45	825,809 44
51	(740) Other expenses	A	B	-	-
52	(741) Joint expenses — Debit	A	B	-	-
53	(742) Joint expenses — Credit	A	B	-	-
54	Total other production expenses and credits			3,751,731 14	338,402 68
55	Total production expenses			12,958,225 29	656,417 61

[26159] Item EEEE 47

ITEM AAAA

Docket No. IT-5582

In the Matter of:

SUSQUEHANNA TRANSMISSION COMPANY
OF PENNSYLVANIA

and

PENNSYLVANIA WATER AND POWER COMPANY

Docket No. IT-5583

In the Matter of:

PENNSYLVANIA TRANSMISSION COMPANY

and

PENNSYLVANIA WATER AND POWER COMPANY

Testimony, Pages 65, 77

[26135] (page 65)

JOSEPH U. DIEHL

resumed the stand and testified further as follows:

CROSS-EXAMINATION (Continued).

By MR. WHITTLESEY:

* * *

[26137] (page 77)

* * *

Q. May I ask what were the reasons for the change in the depreciation policy of the company that you mentioned took place in 1931?

A. Well, I do not know as I can answer your question specifically. I think perhaps another witness from the company can best explain that answer, explain the answer to your question.

Q. Perhaps then you might be able to tell us this: Is the present depreciation policy actually designed to provide for depreciation on an age-life basis?

A. It would seem to have the same effect. That is, we are using a composite rate on the additions since 1931. That might be said to be tantamount to the assignment of lives to each class of property.

* * *

ITEM CCCC.

In the Matter of:

SAFE HARBOR WATER POWER CORPORATION

Docket IT-5914,

Testimony, Page 60

Witness: John A. Walls

[26153] (page 60)

* * *

Even if the metering and classification of power and energy could be carried out, any power and energy schedules, with fixed unit rates, which might be designed would fail to be equitable to all three companies under varying conditions, would interfere seriously with the economy of system operation and dispatching of water and of electric power, would prevent the best utilization of the available water power, lead to endless disputes, and by increasing the combined system operating cost would finally be reflected in higher rates to the ultimate consumers.

On the other hand, under the type of power contract now in effect, the operations of the several generating plants are coordinated for maximum system economy. This often actually results in a reduction of the efficiency and output of the hydro plants for the benefit of the steam plants. Likewise, generation may be shifted from Holtwood to Safe Harbor or vice versa, and the pondages may be controlled as justified without thought of intercompany charges.

* * *

ITEM DDDD.

In the Matter of:

SAFE HARBOR WATER POWER CORPORATION

Docket IT-5914

EXHIBITS NOS. 182, 183

EXHIBIT No. 182.

[26154]

Mar 28, 1940

Safe Harbor Water Power Corporation
Baltimore, Maryland

Gentlemen:

Your report of Interstate Electric Transactions on FPC Form No. 88, for the period ending December 31, 1939, did not contain the transactions under the following rate schedules:

F. P. C. No. 1—Pennsylvania Water & Power Co., etc.
F. P. C. No. 2—Consolidated Gas Elec. Light & Pwr. Co.
F. P. C. No. 3—Pennsylvania Water & Power Co.
F. P. C. No. 4—Philadelphia Electric Co., etc.

It is requested that a report of transactions under the above be submitted as soon as possible. If there were none, please report accordingly.

Very truly yours,

LEON M. FUQUAY
Secretary.

Line No.	Account (a)	CLASS A (b)	CLASS B (c)	Amount for year (d) $	Amount for year (d) ¢	Increase or decrease from preceding year (e) $	Increase or decrease from preceding year (e) ¢
1	DISTRIBUTION EXPENSES—Continued			x x x x x x	x	x x x x x x	x
2	Maintenance:			x x x x x x	x	x x x x x x	x
3	(764) Supervision and engineering	A	B	183,453	78	1,439	13
4	(765) Structures and improvements	A	B	39,415	11	4,900	46
5	(766) Station equipment	A	B	184,678	12	22,775	01
6	(767) Storage battery equipment	A	B	26,913	94	24,014	43
7	(768) Overhead system		B				
8	(768.1) Poles, towers, and fixtures	A		44,241	71	5,666	42
9	(768.2) Conductors and devices	A		242,513	73	32,291	80
10	(769) Underground system		B				
11	(769.1) Conduit	A		3,532	07	5,267	04
12	(769.2) Conductors and devices	A		74,038	26	9,644	44
13	(770) Line transformers and devices	A	B	83,136	36	22,000	88
14	(771) Services	A	B	49,930	77	2,375	17
15	(772) Meters	A	B	83,801	10	15,316	98
16	(773) Installations on customers' premises	A	B	-		-	
17	(774) Leased property on customers' premises	A	B	-		-	
18	(775) Street lighting and signal systems	A	B	122,026	08	12,515	03
19	Total maintenance			1,137,681	03	59,049	89
20	Miscellaneous:			x x x x x x	x	x x x x x x	x
21	(776) Rents	A	B	423,156	08	422	03
22	(777) Joint expenses—Debit	A	B	-		-	
23	(778) Joint expenses—Credit	A	B	-		-	
24	Total miscellaneous			423,156	08	422	03
25	Total distribution expenses			4,032,427	45	443,385	88
26	CUSTOMERS' ACCTG. AND COLLECTING EXPENSES			x x x x x x	x	x x x x x x	x
27	(779) Supervision	A	B	52,109	51	5,206	70
28	(780) Customers' contracts, orders, meter reading, and collecting		B				
29	(780.1) Customers' contracts and orders	A		404,572	36	65,687	22
30	(780.2) Credit investigations and records	A		35,694	31	1,058	97
31	(780.3) Meter reading	A		242,380	67	27,742	88
32	(780.4) Collecting	A		221,061	72	10,136	89
33	(781) Customers' billing and accounting	A	B	489,715	74	13,126	89
34	(782) Miscellaneous expenses	A	B	-		-	
35	(783) Uncollectible accounts	A	B	43,067	55	33,377	31
36	(784) Rents	A	B	-		-	
37	Total customers' accounting and collecting expenses			1,488,601	86	156,336	86
38	SALES PROMOTION EXPENSES			x x x x x x	x	x x x x x x	x
39	(785) Supervision	A	B	104,520	12	12,520	60
40	(786) Salaries and commissions	A	B	179,827	14	51,631	28
41	(787) Demonstration, advertising, and other sales expenses		B				
42	(787.1) Demonstration	A		8,125	18	6,630	12
43	(787.2) Advertising	A		20,039	58	4,965	74
44	(787.3) Miscellaneous sales expenses	A		29,387	23	14,633	95
45	(788) Rents	A	B	-		-	
46	(789) Merchandising, jobbing, and contract work	A	B	81,452	37	136,755	47
47	Total sales promotion expenses			260,446	88	46,373	78
48							
49							
50							
51							
52							
53							
54							

EXHIBIT No. 183.

[26155]

SAFE HARBOR WATER POWER CORPORATION
Lexington Building
Baltimore, Maryland

April 2, 1940

Federal Power Commission
Washington, D. C.

Attention: Mr. Leon M. Fuquay, Secretary.

Gentlemen:

In reply to your inquiry of March 28, 1940, regarding Report of Interstate Electric Transactions on FPC Form No 88 for the 6-months period ending December 31, 1939 under rate schedules

FPC No. 1; Safe Harbor Water Power Corporation—Pennsylvania Water & Power Company and Consolidated Gas Electric Light and Power Company of Baltimore

FPC No. 2; Safe Harbor Water Power Corporation, Pennsylvania Water & Power Company and Consolidated Gas Electric Light and Power Company of Baltimore—Pennsylvania Railroad Company

FPC No. 3; Safe Harbor Water Power Corporation, Pennsylvania Water & Power Company—Pennsylvania Power & Light Company at Lancaster

FPC No. 4; Safe Harbor Water Power Corporation, Pennsylvania Water & Power Company—Philadelphia Electric Company at Coatesville

the following is submitted.

This Company sells its entire output to the Consolidated Gas Electric Light and Power Company of Baltimore and the Pennsylvania Water & Power Company under rate schedule FPC No. 1. The energy sold to the Baltimore Company was reported on Form No. 88 which accompanied our letter of February 15; this transaction was under rate schedule FPC No. 1. You are now asking, as we understand your letter, what part of the energy sold by this Company to the Pennsylvania Water & Power Company under rate schedule FPC No. 1 entered interstate transmission. It is physically impossible to determine that point for the reason that the Pennsylvania Water & Power Company has customers in both Pennsylvania and Maryland and the energy from the generating plants of the two companies is co-mingled.

As to rate schedule FPC No. 2, although this Company is a party to the contract between the Consolidated Gas Electric Light and Power Company of Baltimore, the Pennsylvania Water & Power Company, and the Pennsylvania Railroad Company, it does not sell any energy under this contract, because as noted in the [26156] (Folio 2) preceding paragraph all of the Company's output is sold under rate schedule FPC No. 1 to the Consolidated Gas Electric Light and Power Company of Baltimore and Pennsylvania Water & Power Company. Therefore, there are no transactions by this Company under rate schedule FPC No. 2.

With respect to rate schedules FPC Nos. 3 and 4; it is also true that this Company is a party to these contracts, but for the reason noted above there are no transactions by this Company under these rate schedules.

Yours very truly,

/s/ Jas. L. Rintoul
Jas. L. Rintoul
Treasurer

550. ELECTRIC OPERATING EXPENSES—Continued

Line No.	Account (a)	CLASS A (b)	CLASS B (c)	Amount for year (d) $	Amount for year (d) c	Increase or decrease from preceding year (e) $	Increase or decrease from preceding year (e) c
1	ADMINISTRATIVE AND GENERAL EXPENSES			x x x x x x	x	x x x x x x	x
2	(790) Salaries of general officers and executives	A	B	218,303	23	10,813	23
3	(791) Other general office salaries	A	B	1,311,154	03	89,684	21
4	(792) Expenses of general officers and general office employees		B				
5	(792.1) Expenses of general officers	A		1,883	00	973	56
6	(792.2) Expenses of general office employees	A		9,530	75	4,937	13
7	(793) General office supplies and expenses	A	B	283,859	60	29,497	21
8	(794) Management and supervision fees and expenses	A	B	-		-	
9	(795) Special services	A	B	6,300	01	305	44
10	(796) Legal services	A	B	4,057	48	1,474	78
11	(797) Regulatory commission expenses	A	B	33,328	15	2,573	98
12	(798) Insurance	A	B	93,807	62	5,167	90
13	(799) Injuries and damages	A	B	70,947	09	5,568	78
14	(800) Employees' welfare expenses and pensions		B				
15	(800.1) Employees' welfare expenses	A		89,557	29	9,900	11
16	(800.2) Pensions	A		809,995	54	32,874	81
17	(801) Miscellaneous general expenses	A	B	177,290	70	13,770	45
18	(802) Maintenance of general property		B				
19	(802.1) Maintenance of structures and improvements	A		165,196	24	21,142	77
20	(802.2) Maintenance of office furniture and equipment	A		9,333	24	768	19
21	(802.3) Maintenance of communication equipment	A		14,838	88	3,426	23
22	(802.4) Maintenance of miscellaneous property	A		1,262	70	1,220	56
23	(803) Rents	A	B	7,734	67	199	97
24	(804) Commissions paid under agency sales contracts	A	B	-		-	
25	(805) Franchise requirements	A	B	-		-	
26	(806) Duplicate miscellaneous charges—Credit	A	B	-		-	
27	(807) Administrative and general expenses transferred—Credit	A	B	-		-	
28	(808) Joint expenses—Debit	A	B	-		-	
29	(809) Joint expenses—Credit	A	B	-		-	
30	Total administrative and general expenses			3,308,920	82	118,226	63
31	TOTAL ELECTRIC OPERATING EXPENSES			22,475,319	20	1,326,150	08

(A) Since Respondent is a combination Company rendering utility services other than electric, this figure is an approximation only, departments considered electric plus an apportionment of departments functioning jointly for electric, gas and other departments were considered in developing this estimate.

Summary of Electric Operating Expenses

51	Electric generation—Steam power	9,206,494	15	994,820	29
52	Electric generation—Hydraulic power	-		-	
53	Electric generation—Internal combustion engine power	-		-	
54	Other production expenses and credits	3,751,731	14	338,402	68
55	Total production expenses	12,958,225	29	656,417	61
56	Transmission expenses	426,690	90	1,843	12
57	Distribution expenses	4,032,427	45	443,385	88
58	Customers' accounting and collecting expenses	1,488,001	86	156,336	86
59	Sales promotion expenses	200,446	88	46,373	78
60	Administrative and general expenses	3,308,920	82	118,226	63
61	TOTAL ELECTRIC OPERATING EXPENSES	22,475,319	20	1,326,150	08
62	Total salaries and wages of electric department for year, including amounts charged to operating expenses, construction, and other accounts	(A)11,151,864	72	1,319,057	29
63	Total number of employees of electric department at end of year, including administrative, operating, maintenance, construction, and other employees	(A) 3,819		298	

ITEM EEEE.

Electric Utilities and Licensees

(Classes A and B)

ANNUAL REPORT

of

CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE

Lexington Building, Baltimore, Maryland

to the

FEDERAL POWER COMMISSION

for the

YEAR ENDED DECEMBER 31, 1946

(Excerpts)

274. ACCRUED AND PREPAID TAXES

1. This schedule is intended to give particulars of the combined prepaid and accrued tax accounts and to show the total taxes charged to operations and other accounts during the year. Do not include gasoline and other sales taxes which have been charged to the accounts to which the material on which the tax was levied was charged.

2. Taxes paid during the year and charged direct to final accounts, that is, not charged to prepaid or accrued taxes, should be included in the schedule. Enter the amounts both in columns (d) and (e). The balancing of the schedule is not affected by the inclusion of these taxes.

3. Taxes charged during the year, column (d), includes taxes charged to operations and other accounts through (a) accruals credited to taxes accrued, (b) amounts credited to prepaid taxes for proportions of prepaid taxes chargeable to current year, and (c) taxes paid and charged direct to operations or accounts other than accrued and prepaid tax accounts.

4. The aggregate of each kind of tax should be listed under the appropriate heading of "Federal", "State", and "Local" in such manner that the total tax for each State and for all subdivisions can readily be ascertained.

5. If any tax covers more than 1 year, each year should be shown separately.

6. Enter all adjustments of the accrued and prepaid tax accounts in column (f) and explain each adjustment. Designate debit adjustments by red figures or appropriate symbol.

7. See schedule 420 for a distribution of taxes charged, column (d), according to utility departments and accounts.

Line No.	Kind of tax (a)	BALANCE BEGINNING OF YEAR: Taxes accrued (b)	BALANCE BEGINNING OF YEAR: Prepaid taxes (c)	Taxes charged during year (d)	Paid during year (e)	Adjustments (f)	BALANCE END OF YEAR: Taxes accrued (account 2280) (g)	BALANCE END OF YEAR: Prepaid taxes (Incl. in account 165) (h)
		$ c	$ c	$ c	$ c	$ c	$ c	$ c
1	Federal							
2	Income - Normal	1,926,771 33		1,405,681 55	1,920,740 54		1,411,712 34	
3	Income - Surtax	1,079,887 48		640,476 55	1,075 866 95		644,497 08	
4	Coupon Interest	1,919 70		1,501 20	1,919 70		1,501 20	
5	Electrical Energy	58,507 29		816,013 31	806,798 63		67,721 97	
6	Unemployment	35,506 72		42,279 00	35,113 96		42,671 76	
7	Insurance Contributions	23,947 64		141,168 16	131,314 45		33,801 35	
8	2% on Dividends of Pref. Stock	19 50		19 82	19 50		19 82	
9	State							
10	Real Estate	-		23,541 47	23,541 47		-	
11	Structural	-		46,454 33	46,454 33		-	
12	Easement	-		10,912 89	10,912 89		-	
13	Capital Stock	-		45,473 43	45,473 43		-	
14	Gross Receipts	588,431 83		599,482 15	588,431 83		592,482 15	
15	Unemployment Compensation	21,474 82		126,836 98	117,821 02		30,490 78	
16	Income	-		369 12	-		369 12	
17	Local							
18	Real Estate	-		603,339 04	603,339 04		-	
19	Structural	-		1,214,943 92	1,214,943 92		-	
20	Easement	-		326,295 32	326,295 32		-	
21	Capital Stock	-		1,343,499 18	1,343,499 18		-	
22	Conduit Charge in Lieu of Easement	-		3,858 48	3,858 48		-	
23	Pole	-		19,027 25	19,027 25		-	
24	Paving, Sewerage and Water Benefits	-		344 99	344 99		-	
25	Franchise	-		212 00	212 00		-	
26								
27								
28	TOTAL	3,736,466 31		7,411,730 14	8,315,928 88		2,832,267 57	

579. GENERATING STATION STATISTICS

1. If any plant is a leased plant, or is operated under a license from the Federal Power Commission, or is operated as a joint facility, indicate such facts by the use of asterisks and footnotes.
2. Specify if total plant capacity is reported in kva instead of kilowatts as called for on line 4.
3. If peak demand for 60 minutes is not available, give that which is available, specifying period.
4. The total plant hours shown on line 10 should equal 8,760 or 8,784 depending upon the number of days in the year.
5. If a group of employees attends more than one generating station, report on line 11 the approximate average number of employees assignable to each station.
6. If gas is used and purchased on a therm basis, the B. t. u. content of the gas should be given and the quantity of fuel consumed converted to M cu. ft.
7. Quantities of fuel consumed and average cost per unit of fuel consumed should be consistent with charges to expense accounts 703 and 729 as shown on line 24.
8. The items under cost of plant and production expenses represent accounts or combinations of accounts prescribed by the Uniform System of Accounts. Production expenses, however, do not include purchased power, interchange power, other expenses, and joint expenses—debit and credit classified as "Other Production Expenses and Credits" in the Uniform System of Accounts.
9. If any plant is equipped with combinations of steam, hydro, and combustion engine equipment, each should be reported as a separate plant.

See Page 532A for notes.

Line No.	Item (a)	Westport Plant (b)	Gould St. Plant (c)	Riverside Plant (d)	Pratt St. (4) Plant (e)
1	Kind of plant (steam, hydro, int. comb.)	Steam	Steam	Steam	Steam
2	Year originally constructed	1906	1926	1942	1893
3	Year last unit was installed	1941	1928	1944	1919
4	Total inst. cap. (name plate ratings in kw)	250,000	72,000	120,000	20,000
5	Peak demand on plant—kilowatts (60 minutes)	256,000	77,000	122,000	17,000
6	Plant hours:	x x x x x x x	x x x x x x x	x x x x x x x	x x x x x x x
7	Connected to load	8,743	5,284	8,581	18
8	Hot, but not connected to load	17	3,476	179	122
9	Held in cold reserve	-	-	-	8,620
10	Total plant hours	8,760	8,760	8,760	8,760
11	Average number of employees	(F) 419	76	96	-
12	Net generation, exclusive of station use	901,022,000 (B)	280,867,000 (B)	768,354,000	162,000
13	Cost of plant (omit cents):	x x x x x x x	x x x x x x x	x x x x x x x	x x x x x x x
14	Land and land rights	$ 116,001	$ 115,821	$ 158,100	
15	Structures and improvements	4,698,100	1,673,373	3,688,660	
16	Reservoirs, dams, and waterways	-	-	-	
17	Equipment costs	15,313,770	4,282,426	8,370,078	(A)
18	Roads, railroads, and bridges	-	-	-	
19	Total cost	$20,123,871	$6,071,620	$12,216,838	
20	Cost per kw of installed capacity	$80.50	$84.33	$101.81	
21	Production expenses:	x x x x x x x	x x x x x x x	x x x x x x x	x x x x x x x
22	Operation supervision and engineering	$ 74,701.43	$ 44,825.88	$ 46,250.26	$ -
23	Station labor	779,457.00	204,707.41	252,799.13	1,258.27
24	Fuel	3,363,159.88	1,046,010.28	2,236,090.51	1,525.83
25	Water (steam plants only)	7,535.73	2,177.66	3,690.58	-
26	Water for power (hydroelectric plants only)	-	-	-	-
27	Supplies and expenses	57,488.64	16,696.38	27,116.81	120.51
28	Maintenance	659,799.56	199,965.37	179,875.09	1,196.94
29	Rents	40.00	5.00	-	-
30	Steam from other sources	-	-	-	-
31	Steam transferred—Credit	-	-	-	-
32	Joint expenses—Debit	-	-	-	-
33	Joint expenses—Credit	-	-	-	-
34	Total production expenses	$4,942,182.24	$1,514,387.98	$2,745,822.38	$ 4,101.55
36	Fuel: Kind	Coal	Coal	Coal	Coal
37	Unit: (Coal—tons of 2,000 lb.) (Oil—barrels of 42 gals.) (Gas—M cu. ft.)	Net Tons	Net Tons	Net Tons	Net Tons
38	Quantity (units) of fuel consumed	(C) 513,901.57	(D) 165,682.62	(E) 341,488.21	233.16
39	Average heat content of fuel (B. t. u. per lb. of coal, per gal. of oil, or per cu. ft. of gas) (as received)	13,215	13,075	13,181	13,551
40	Average cost of fuel per unit consumed	$6.5444	$6.3133	$6.5481	$6.5441
41	Average cost of fuel per million B. t. u.	$ .2476	$ .2414	$ .2484	$ .2415
42	Average cost of fuel per kwh net generation	.0037	.0037	.0029	.0094
43	Average B. t. u. per kwh net generation	15,043	15,426	11,716	39,007
44	Lubricating oil (int. combustion engines only):	x x x x x x x	x x x x x x x	x x x x x x x	x x x x x x x
45	Quantity				
46	Total cost				

5. ELECTRIC OPERATING EXPENSES

1. Enter in the spaces provided the electric operating expenses for the year.
2. The designations in columns (b) and (c) indicate the accounts prescribed for each class of utility.
3. If the increases and decreases are not derived from previously reported figures explain in footnotes.

Line No.	Account (a)	CLASS A (b)	CLASS B (c)	Amount for year (d)		Increase or decrease from preceding year (e)	
				$	c.	$	c.
1	PRODUCTION EXPENSES			x x x x x x	x	x x x x x x	x
2	ELECTRIC GENERATION—STEAM POWER			x x x x x x	x	x x x x x x	x
3	Operation:			x x x x x x	x	x x x x x x	x
4	(701) Supervision and engineering	A	B	165,777	57	213	86
5	(702) Station labor		B				
6	(702.1) Boiler labor	A		578,274	90	9,201	05
7	(702.2) Prime mover and generator labor	A		334,559	28	25,477	06
8	(702.3) Electric labor	A		101,513	56	8,445	47
9	(702.4) Miscellaneous station labor	A		223,874	07	12,268	96
10	(703) Fuel	A	B	6,646,786	50	1,023,688	45
11	(704) Water	A	B	13,403	97	3,573	84
12	(705) Supplies and expenses		B				
13	(705.1) Lubricants	A		8,371	84	1,353	95
14	(705.2) Station supplies	A		35,318	29	3,953	96
15	(705.3) Station expenses	A		57,732	21	7,206	68
16	Total operation			8,165,612	19	972,220	18
17	Maintenance:			x x x x x x	x	x x x x x x	x
18	(706) Supervision and engineering	A	B	91,345	25	9,303	96
19	(707) Structures and improvements	A	B	139,612	98	26,020	26
20	(708) Boiler plant equipment		B				
21	(708.1) Coal storage, handling, and weighing equipment	A		134,808	18	43,830	00
22	(708.2) Furnaces and boilers	A		270,513	62	7,181	04
23	(708.3) Boiler apparatus	A		145,405	74	19,499	75
24	(708.4) Steam piping and accessories	A		41,758	66	9,423	96
25	(709) Generating and electric equipment		B				
26	(709.1) Prime movers and generators	A		172,450	70	81,855	61
27	(709.2) Accessory electric equipment	A		25,386	12	713	53
28	(709.3) Miscellaneous power plant equipment	A		19,555	71	4,262	92
29	Total maintenance			1,040,836	96	22,590	67
30	Miscellaneous:			x x x x x x	x	x x x x x x	x
31	(710) Rents	A	B	45	00	9	44
32	(711) Steam from other sources	A	B	-		-	
33	(712) Steam transferred—Credit	A	B	-		-	
34	(713) Joint expenses—Debit	A	B	-		-	
35	(714) Joint expenses—Credit	A	B	-		-	
36	Total miscellaneous			45	00	9	44
37	Total production expenses—Steam power			9,206,494	15	994,820	29
38	ELECTRIC GENERATION—HYDRAULIC POWER			x x x x x x	x	x x x x x x	x
39	Operation:			x x x x x x	x	x x x x x x	x
40	(715) Supervision and engineering	A	B				
41	(716) Station labor		B				
42	(716.1) Hydraulic labor	A					
43	(716.2) Prime mover and generator labor	A					
44	(716.3) Electric labor	A					
45	(716.4) Miscellaneous station labor	A					
46	(717) Water for power	A	B				
47	(718) Supplies and expenses		B				
48	(718.1) Lubricants	A					
49	(718.2) Station supplies	A					
50	(718.3) Station expenses	A					
51	Total operation						

[26158]

Item EEEE

Consolidated Mo. L. & Pow.

550. ELECTRIC OPERATING EXPENSES—Continued

Line No.	Account (a)	CLASS A (b)	CLASS B (c)	Amount for year (d)	Increase or decrease from preceding year (e)
1	**TRANSMISSION EXPENSES**				
2	Operation:				
3	(743) Supervision and engineering	A	B	35,142 83	2,370 65
4	(744) Load dispatching labor and expenses	A	B	25,174 96	1,911 84
5	(745) Stations		B		
6	(745.1) Station labor	A		81,890 41	2,581 79
7	(745.2) Station supplies and expenses	A		6,343 14	1,107 23
8	(746) Lines		B		
9	(746.1) Overhead lines	A		26,241 41	23,677 27
10	(746.2) Underground lines	A		5,320 55	828 91
11	Total operation			180,113 30	22,572 81
12	Maintenance:				
13	(747) Supervision and engineering	A	B	19,779 46	802 52
14	(748) Structures and improvements	A	B	13,882 98	1,384 38
15	(749) Station equipment	A	B	73,670 32	20,997 67
16	(750) Overhead system		B		
17	(750.1) Towers and fixtures	A		576 47	3,638 65
18	(750.2) Poles and fixtures	A		261 73	124 03
19	(750.3) Conductors and devices	A		7,693 03	2,424 59
20	(751) Underground system		B		
21	(751.1) Conduit	A		131 81	83 95
22	(751.2) Conductors and devices	A		4,852 47	1,270 49
23	(752) Roads and trails	A	B	-	-
24	Total maintenance			120,848 27	18,139 24
25	Miscellaneous:				
26	(753) Rents	A	B	125,735 33	2,590 45
27	(754) Joint expenses — Debit	A	B	-	-
28	(755) Joint expenses — Credit	A	B	-	-
29	Total miscellaneous			125,735 33	2,590 45
30	Total transmission expenses			426,696 90	1,843 12
31	**DISTRIBUTION EXPENSES**				
32	Operation:				
33	(756) Supervision and engineering	A	B	420,508 91	40,954 64
34	(757) Load dispatching labor and expenses	A	B	-	-
35	(758) Distribution office expenses		B		
36	(758.1) Distribution maps and records	A		137,092 65	11,009 69
37	(758.2) Other distribution office expenses	A		-	-
38	(759) Stations		B		
39	(759.1) Station labor	A		425,464 60	7,792 20
40	(759.2) Station supplies and expenses	A		41,849 93	8,908 89
41	(760) Storage batteries		B		
42	(760.1) Storage battery labor	A		6,681 83	459 12
43	(760.2) Storage battery supplies and expenses	A		341 40	2 92
44	(761) Lines		B		
45	(761.1) Overhead lines	A		456,694 59	45,249 10
46	(761.2) Underground lines	A		44,704 21	10,831 43
47	(761.3) Removing and resetting line transformers	A		31,687 87	16,465 54
48	(762) Services on customers' premises		B		
49	(762.1) Removing and resetting meters	A		165,939 27	76,759 22
50	(762.2) Other services on customers' premises	A		634,491 37	210,436 46
51	(763) Street lighting and signal systems		B		
52	(763.1) Overhead systems	A		102,415 50	4,274 55
53	(763.2) Underground systems	A		3,718 21	275 98
54	Total operation			2,471,590 34	383,913 96

[26160]

Item EEEE

NOTES APPLICABLE TO SCHEDULE 579 - GENERATING STATION STATISTICS

(A) The capability of this plant for electric generating purposes is limited at times by the requirements for steam from the boilers for use in the Respondent's steam heating operations. No investment in this plant is reflected in the Respondent's Electric Plant Accounts, the generating unit having been written off and the boilers and equipment accessory thereto transferred to Steam Heating Plant Accounts.

(B) Represents the cost included in Account 100.1 for these properties; does not represent total book costs of these facilities since amounts in Account 100.5 are not included herein.

(C) Includes 1,489,138 gallons of fuel oil equivalent to 7,846.59 net tons of coal used for incidental purposes, such as starting boilers, etc., and during the coal strike at the end of 1946.

(D) Includes 1,401,625 cu.ft. of oil refinery gas equivalent to 90.86 net tons of coal and 620,266 cu.ft. of manufactured gas equivalent to 11.99 net tons of coal used for incidental purposes, such as starting boilers, etc.

(E) Includes 1,239,942 gallons of fuel oil equivalent to 6,584.42 net tons of coal used for incidental purposes, such as starting boilers, etc., and during the coal strike at the end of 1946.

(F) Includes certain employees whose time is applicable to all stations, but it is not feasible to allocate these employees among the individual stations.

ITEM IIII.

1946

POWER SYSTEM STATEMENT

From

PENNSYLVANIA WATER & POWER CO. AND
SAFE HARBOR WATER POWER CORP.

Lexington Building, Baltimore 3, Md.

Covering

Holtwood-Safe Harbor System

to the

FEDERAL POWER COMMISSION

(Excerpts)

Schedule 2

SYSTEM HYDROELECTRIC DATA

A. AGGREGATE DEPENDABLE HYDROELECTRIC CAPACITY AND POTENTIAL ENERGY.

B. This schedule need not be completed if there have been no changes affecting the data previously reported. In such case the following notation should be made at the bottom of the page: "Data reported on FPC Form 12 for the year 19__, correct as of December 31, 1946."

C. Furnish data indicated below in accordance with the instructions in paragraphs 1-5:

ADVERSE FLOW CONDITIONS

Month	PLANNED USE OF STREAM FLOW AND STORAGE Energy (1,000 Kilowatt-hours)					MACHINE CAPABILITY (Megawatts)[3]		Dependable Capacity (Megawatts)[3]
	Storage Plants		Run-of-River Plants	Total Available (Col. 2 plus col. 3 plus col. 4)	In Storage End of Month[2]	Run-of-River Plants	Storage Plants	
	Natural flow	Storage[1]						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Dec.	x x x x	x x x x	x x x x	x x x x		x x x x	x x x x	x x x x
Jan.		3,600	5,800	9,400		307		238
Feb.		3,400	6,300	9,700		306		232
Mar.		-	6,768	6,768		282		282
April		-	7,128	7,128		297		297
May		-	7,152	7,152		298		298
June		2,400	9,300	11,700		316		263
July		3,600	5,800	9,400		310		238
Aug.		4,200	3,800	8,000		310		221
Sept.		4,600	2,800	7,400		315		215
Oct.		4,500	3,100	7,600		307		212
Nov.		4,500	3,300	7,800		307		261
Dec.		4,300	3,600	7,900		307		275
Year					x x x x	x x x x	x x x x	x x x x

~~AVERAGE~~ OR MEDIAN FLOW CONDITIONS

Month	PLANNED USE OF STREAM FLOW AND STORAGE Energy (1,000 Kilowatt-hours)					MACHINE CAPABILITY (Megawatts)[3]		Dependable Capacity (Megawatts)[3]
	Storage Plants		Run-of-River Plants	Total Available (Col. 2 plus col. 3 plus col. 4)	In Storage End of Month[2]	Run-of-River Plants	Storage Plants	
	Natural flow	Storage[1]						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Dec	x x x x	x x x x	x x x x	x x x x		x x x x	x x x x	x x x x
Jan		-	18,500	18,500		330		330
Feb.		-	18,000	18,000		315		315
Mar.		-	7,704	7,704		321		321
April		-	7,848	7,848		327		327
May		-	7,824	7,824		326		326
June		900	14,800	15,700		316		305
July		1,600	12,100	13,700		310		284
Aug		2,700	8,300	11,000		310		256
Sept.		2,900	7,500	10,400		316		249
Oct		2,700	8,300	11,000		306		251
Nov		-	19,300	19,300		330		330
Dec		-	16,700	16,700		330		330
Year					x x x x	x x x x	x x x x	x x x x

[1] When energy is drawn from storage, show as a positive quantity. When energy is stored, show as a negative quantity in parenthesis.

[2] Change in storage based on entry in column 3.

[3] One megawatt equals 1,000 kilowatts.

NOTE.—The method or basis used in determining the above data for adverse flow and average or median flow conditions should be explained in accordance with instructions 2 and 3 of this schedule.

Notes:

[26171] Item IIII 4715

NOTES TO SCHEDULE 2

The Holtwood and Safe Harbor hydroelectric developments of Respondents are predominantly run-of-river plants but have about 6,000,000 kilowatthours of usable storage at Holtwood and Safe Harbor for regulation on a daily, weekly, or longer basis when low river flows are experienced coincident with peak load periods.

The amounts shown in Columns 3, 4 and 5 are energies for periods of one week, except for the months of March, April and May, which are energies for periods of one day.

The amounts shown in Column 9 for both "most adverse flow conditions" and "median flow conditions", which column is headed "Dependable Capacity", are based on loads estimated for the year 1947 and are the one-hour integrated load carrying capabilities of the system hydro plants for the specified river flow conditions, assuming that the most critical monthly load conditions coincide therewith and storage of various amounts is used for periods of one week during the different months as shown in Column 3. These amounts in Column 9 are not "dependable hydro capacity" in the sense of the installed "dependable steam capacity" replaced on the system by the hydro plants, which amount is that shown as Item 1(b) of Schedule 16 hereof.

Schedule 2—Continued

SYSTEM HYDROELECTRIC DATA—Continued

1. The data to be reported in Part A of Schedule 2 are intended to present a realistic picture of the potential energy and capacity of system hydroelectric plants under the specified flow conditions. The data to be reported should be based upon an assumed schedule of system operation that would permit serving the maximum possible annual system load with existing facilities and arrangements for purchase or sale of firm power, assuming a continuance of the relative seasonal and hourly variations of load that occurred during the year of this report. Contracts for purchase or interchange of off-peak energy also may be taken into account. In determining the magnitude of the seasonal load that could be carried by the system and the necessary scheduling of system operations, provisions for necessary maintenance scheduling and reserve capacity to be supplied by own system should be taken into account. Explanatory notes relative to Schedule 16 should be referred to in connection with this schedule. If the seasonal and hourly variations in load are expected to change materially, the information given may be based on the expected load shape, explaining in a footnote.

2. The information to be reported under adverse flow conditions should, in general, be based on stream flows equivalent to the year giving the most adverse flow conditions of record during the critical period of system operation. Where stream-flow records indicate that the most adverse flows are not likely to occur except at long intervals of time and are likely to be of a very short duration, the figures used in determining the capacity and energy available from hydro plants may be modified, treating such abnormal limitations as emergency conditions to be covered by the reserve capacity; such modifications, however, should be fully explained. Any system which maintains comparable data based on flows during a year which would give the minimum potential annual output, or based on minimum flow or output for each month, may report on whichever basis it believes will present the most realistic condition for its system. The basis of reporting should be fully explained in the space provided for notes with addenda sheets if needed.

3. Information to be reported under average or median flow conditions may be made on the assumption of the recurrence of flows equivalent to a year which would give the average annual potential output or may be based on median flow or output for each month, or average flow or output for each month, whichever it is believed will present the most realistic condition for its system. The basis of reporting should be fully explained in footnotes or addenda sheets.

4. "Run-of-river" refers to those plants whose operation cannot be regulated over a period of more than a few hours, either from storage at site or above, but whose operation is, in general, controlled by the volume of flow which must be utilized as it occurs or be wasted.

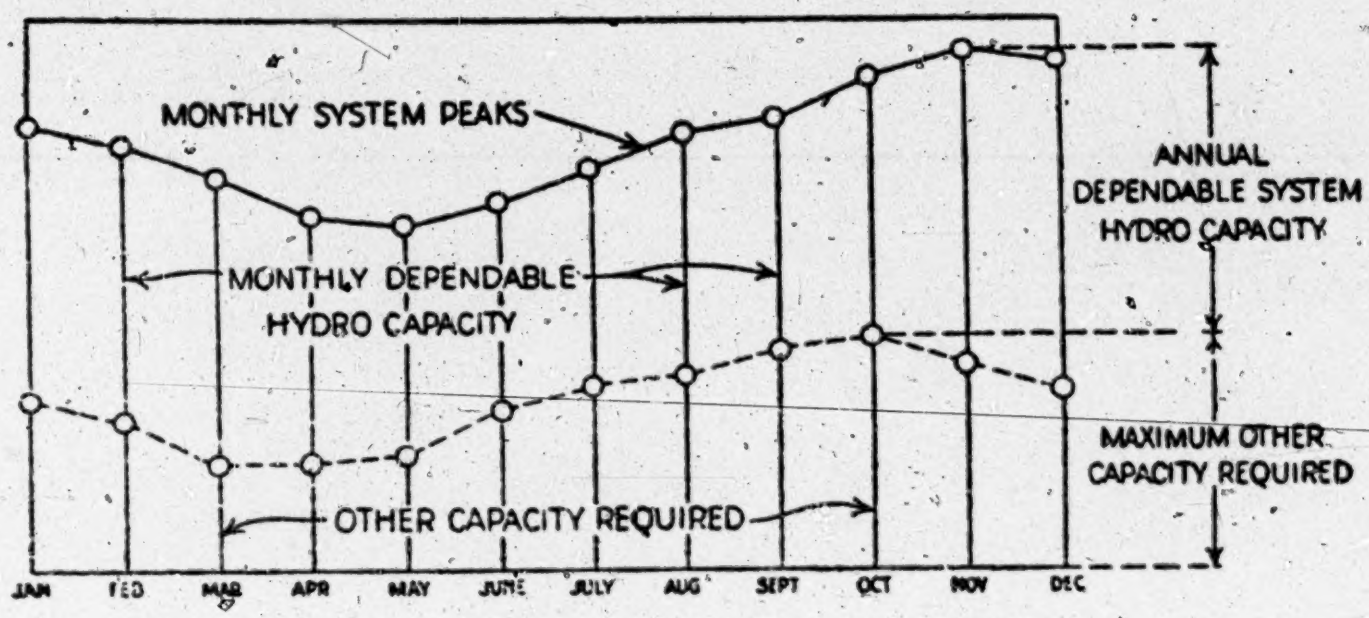
"Storage" refers to those plants whose operations can be varied as desired because of storage at site or above. This regulation may be weekly, monthly, or seasonal.

"Total available energy" refers to the maximum potential output of the existing hydro-generating facilities on the basis of the regulated stream flow, regardless of whether such output can be fully utilized in serving system load or by transfer to other systems. The monthly distribution of storage energy should be such as to permit the serving of the maximum annual peak load under the conditions outlined in instruction 1. However, where required releases for irrigation, navigation, flood control, and other water-use are controlling, the monthly distribution of available energy should reflect the effect of such requirements and full explanation should be given in footnotes.

"Capability" in any month is the machine capability under the most adverse conditions to be expected in that month under the assumed flow conditions without respect to the energy available or the characteristics of the load to be served other than the power factor conditions normally to be expected.

"Dependable capacity" in any month is that capacity that can be relied upon for serving system load and firm power commitments on the basis of the energy available in that month and its use as limited by the characteristics of the load to be served.

5. Dependable hydroelectric capacity as used in this power system statement is intended to be the capacity value of the system hydroelectric plants in serving, together with the other available system capacity, the maximum annual system peak load under the conditions given in instruction 1. For any specified period it represents, on the basis of complete utilization of available storage energy over the critical flow periods, the difference between the peak load for that period and the maximum other capacity required. Where a portion of storage energy is scheduled to be held as a reserve for emergency use only, the dependable capacity should also include the reserve capacity value of such energy reserve. The dependable hydroelectric capacity shown in column 9 under adverse flow conditions for the month of annual peak demand may not necessarily be the same as the annual dependable hydroelectric capacity to be reported in schedule 16, as the annual peak demand may not occur in the month requiring the maximum capacity from other than system hydro-electric plants. This is illustrated by the following graph:



[26173] Item IIII 4717

SYSTEM HYDROELECTRIC DATA—Continued

INSTRUCTIONS FOR PARTS B AND C

1. All the data requested on this page should be furnished for reservoirs and plants which were:
   (a) Constructed, purchased, or leased, and placed in operation by the respondent during the year, or,
   (b) Operated by the respondent prior to the year covered by this statement but not reported to this Commission in the form prescribed below.

2. Revised data for the appropriate items should be furnished if changes have been made in the installed capacity or design of hydro plants, in available storage, or in "operating rule curves" during the year or the data have not been reported in the prescribed form.

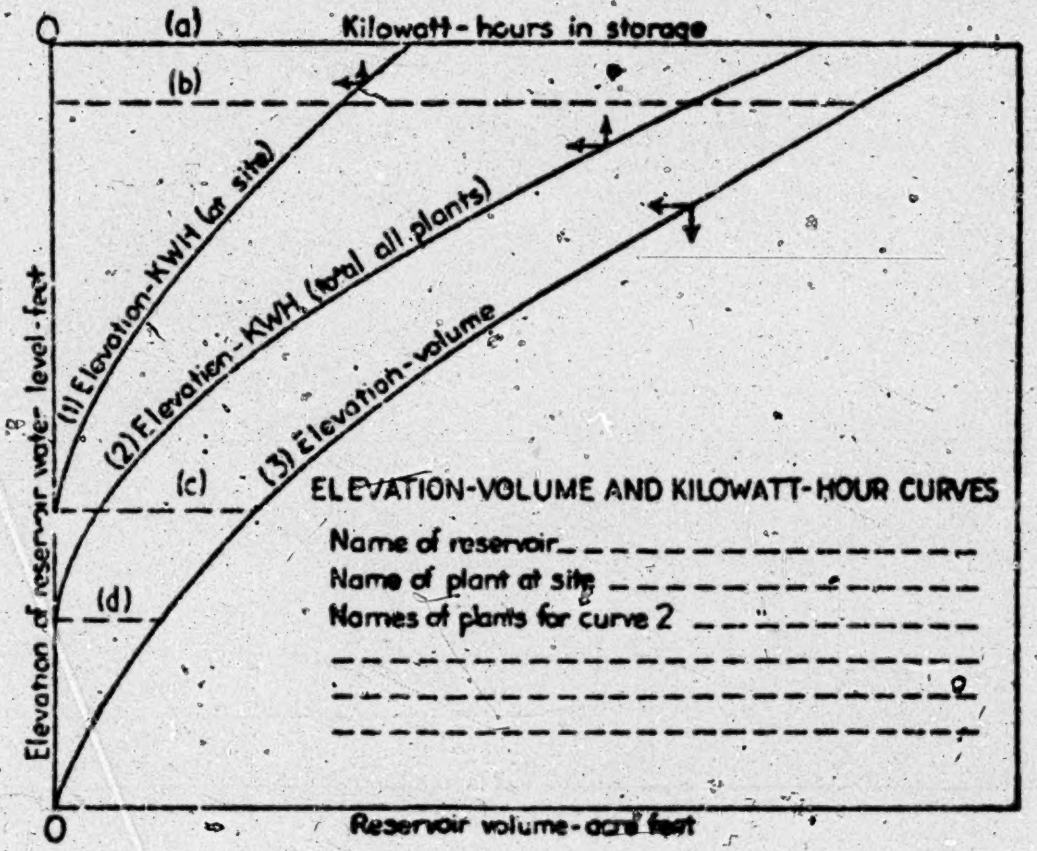
3. For those reservoirs and plants in which no physical change or revision in operating practice has occurred affecting the data previously reported, list on an addenda sheet each reservoir and plant name and the year in which the information was furnished together with the notation "correct as of December 31, 1946."

B. Storage Reservoirs.

1. Furnish "Elevation—Volume" and "Elevation-Kilowatt-hour" curves for each storage reservoir on the system that can provide monthly or seasonal storage. A form for showing these data is illustrated in the accompanying sketch.

2. In addition to the foregoing curves, show (a) the maximum water level without spill (to be furnished for operation without and with flash boards if used), and (b) the maximum water level at which the reservoir is normally carried; (c) the minimum water level of the reservoir for plant operation at the site, and, (d) the minimum water level to which water can be drawn for use at other plants; and (e) capacity-head curves for plants having large variations in head. Elevations should be referred to U. S. G. S. datum (or to the same datum as used in plant layout sketches—see item C (1) below).

3. Furnish "Operating Rule Curves" for each of the foregoing reservoirs, in the form in which they are available, and state period for which curves are applicable.



C. Hydroelectric Power Plants.

1. For each hydroelectric plant of 2,500-kilowatt installed capacity or greater furnish:
   (a) A sketch of the plant layout, showing elevations, referred to U. S. G. S. datum if such datum is available. Furnish curves showing headwater and tailwater elevations, in feet, plotted against total discharge, including plant use, in cubic feet per second.
   (b) A photograph of the plant if available.

2. If available, furnish for all hydroelectric plants of 10,000-kilowatt installed capacity or greater, curves showing the relation between over-all water use in cubic feet per second and gross plant load in kilowatts, from minimum to full load at a constant gross head which approximates the average head. The gross head should be stated.

[26174] Item IIII 4718

Schedule 13

DEMAND ON GENERATING PLANTS, POWER RECEIVED, AND POWER DELIVERED, FOR RESALE, AT THE TIME OF SYSTEM PEAK LOAD OF THE YEAR

1. This schedule and schedules 14 and 15 are intended to show the load characteristics of the respondent's system in a form that avoids duplication with similar data for other systems. For this purpose the respondent's "system load" for any 60-minute clock-hour interval is defined as being equal to the aggregate of the energy supplied during that interval:
   (a) To ultimate consumers of the respondent;
   (b) To the systems listed in schedule 8 Part A i.e., to class I and class II systems that received their entire power supply and class III systems that received all or a part of their power supply, from the respondent's system during the year;
   (c) To other departments of the respondent; and, for transmission and distribution losses and energy unaccounted for on the respondent's system; and, for the respondent's electric utility operations (exclusive of plant use).

Note that the system load as here defined does not include the demands of other class I and class II systems whose power requirements during the year were not wholly supplied by the respondent's system, i. e., which obtained a part of their requirements from their own generating facilities or from sources other than the respondent's system. Deliveries to such systems, listed in "D" below, must be excluded in order to avoid duplication.

2. Class I and class II systems should furnish the information requested below for the 60-minute clock-hour interval during which the system peak load of the year occurred.

3. All of the demand data called for in this schedule should show integrated kilowatt demands for the 60-minute clock-hour interval during which the system peak load of the year occurred. Where integrated demands for 60-minute clock-hour intervals are not available, it is desired that available data be adjusted to approximate the integrated demand for 60-minute clock-hour intervals. Adjustments made should be explained in footnotes. Where such adjustments cannot be made, demand data should be furnished in the form available.

4. Estimated quantities (noted "Est.") should be furnished where measured data are not available.

	Integrated Demand—Kilowatts (at time of system peak)	
Date and hour of system peak load of year May 25 - 1 PM	Demand Interval Clock Hr.	
A. Combined net demand on system generating plants (from col. 11, line 36, schedule 1)	368,000	1
B. Itemized accounting of power received from other systems and industrial companies, except "borderline" receipts entered on line 40, schedule 8 part A.		
Name of other systems		2
		3
		4
		5
		6
		7
		8
		9
		10
Total of lines 2 to 10, inclusive	0	11
C. Demand on generating plants plus power received (line 1 plus line 11)	368,000	12
D. Itemized accounting of power delivered to other systems for resale, except to those listed in schedule 8 part A		
Name of other system		13
Philadelphia Electric Company	14,000	14
Metropolitan Edison Co.	28,000	15
Pennsylvania Power & Light Co.	27,000	16
		17
Consolidated Gas Electric Light & Power Co.	270,000	18
		19
		20
		21
Total of lines 13 to 21, inclusive	339,000	22
E. System peak load of the year (C minus D). This entry should agree with the peak load of the year as shown in schedules 14 and 15, using the same demand interval Clock Hour	29,000	23
F. System power factor at time of system peak corresponding to item "E" above Approx. 95 percent. Estimate (noted "Est.") should be furnished if power factor is not obtainable from actual measurements		24

[26176] Item IIII 4719

Schedule 16

SYSTEM DEPENDABLE AND ASSURED CAPACITY

INSTRUCTIONS

1 (a). Show as the dependable capacity of the system fuel plants that capacity which can be relied upon to be available for active or standby service at the usual time of the annual system peak. Allowance should be made for any maintenance outage of equipment which MUST be scheduled during the usual time of the annual system peak, giving an explanation under "Remarks." In the space under "Remarks", show what part of the dependable system fuel capacity is suitable only for short-time operation or standby service.

1 (b). The dependable capacity of system hydro plants, as defined for Schedule 16, relates to the capacity which under the most adverse flow conditions of record can be relied upon to carry system load, provide dependable reserve capacity, and meet firm power obligations, taking into account seasonal variations and other characteristics of the load to be supplied and of the firm power obligations. Some systems may be able to utilize off-peak energy from other systems so as to increase the dependable capacity of the reporting system hydro plants. Where consideration is given to the off-peak energy which can be secured from others, an explanation of the amount and conditions governing the receipt of such energy should be given. In cases where the stream-flow records indicate that the most adverse flows are not likely to occur except at long intervals of time and are likely to be of very short duration, the figures used in determining the capacity available from hydro plants may be modified, treating such abnormal limitations as an emergency condition to be covered by the reserve capacity. Such modifications should be fully explained. Full consideration should be given to data reported in Schedule 2 for adverse flow conditions in computing the annual dependable system hydro capacity.

2. Show the amount of firm power which is intended to be available at the usual time of the annual system peak from utilities, industries, or others. Show amount stated in contract; if it is not a single, definite, fixed amount, explain under "Remarks" or on a separate sheet. DO NOT INCLUDE POWER WHICH MIGHT BE AVAILABLE UNDER INTERCHANGE, EMERGENCY, OR "WHEN, AS, AND IF" ARRANGEMENTS. It is desired that corresponding items reported be in agreement as between the affected companies. It is, therefore, suggested that the companies concerned agree upon the figures to be reported.

3. Show the amount of firm power committed or obligated which is intended to be available at the usual time of the respondent's system peak to other systems. Show amount stated in contract; if it is not a single, definite, fixed amount, explain under "Remarks" or on a separate sheet. DO NOT INCLUDE OBLIGATIONS UNDER INTERCHANGE, EMERGENCY, OR "WHEN, AS, AND IF" ARRANGEMENTS. It is desired that corresponding items reported be in agreement as between the affected companies. It is, therefore, suggested that the companies concerned agree upon the figures to be reported.

5 (a). Show the total amount of reserve capacity, regardless of the source, considered necessary to maintain adequate service at the usual time of the annual system peak, without regard to the relation of net assured capacity to system peak. In general, the largest reduction in dependable capacity which might result from an outage of a generator or boiler unit determines the minimum reserve capacity required. Where unusual conditions obtain, explain fully in the space under "Remarks."

5 (b). Show that portion of the total required reserve capacity which is relied upon to be available at the usual time of system peak under interchange, emergency, or similar agreements with others. In the space under "Remarks" show in detail the sources of this capacity and state what portion is (1) spinning reserve instantly available; (2) available during times of maintenance and inspection; (3) available upon short notice; and (4) length of time available.

5 (c). Show in the space provided for "Remarks" whether the reserve capacity required to be supplied by own plants is available wholly from fuel plants or wholly from hydroelectric plants or a combination of both, and state the length of time this capacity could be depended upon in case of system outages. Some systems having storage hydro may be limited as to the magnitude of load that can be carried by the amount of potential energy available under adverse stream flow conditions. Such systems may have excess peaking capacity, some portion of which can be considered as dependable reserve capacity, provided sufficient energy is held in storage to take care of possible system outages during the critical period. Such capacity should be included in Item 1 (b) with full explanation under "Remarks."

If a considerable amount of energy is normally received from or delivered to others (exclusive of deliveries to systems listed in Schedule 8, Part A) under interchange, emergency, or "When, as, and if" arrangements and such transfers are expected to continue, give a brief description under "Remarks." Where firm power obligations or purchases vary in the amount of capacity that is available for any specific period of time or have limitations as to the amount of energy available, full explanation should be given under "Remarks." Use additional sheets for remarks if necessary.

Remarks:

Item 1(b)

The amount shown hereon as the dependable capacity of system hydro plants was determined in accordance with the instructions to Schedules 2 and 16 and is our determination of the dependable capacity of Respondents' hydroelectric plants in the sense of the installed dependable steam capacity replaced on the interconnected system by such hydro plants. This determination is based on loads now estimated for the year 1947 and takes into account seasonal variations in the firm power load of the interconnected system of area 6, peaking capabilities of system steam capacity, scheduled hydro and steam maintenance requirements and

[26177] Item IIII 4720

frequency of occurrence, duration and magnitude of high and low river flows in the various seasons throughout the year, together with the requirements for emergency use of stored energy to carry the system load during periods of forced outages of large amounts of system steam capacity.

The dependable capacity of the Holtwood hydroelectric plant of Pennsylvania Water & Power Company is 100 000 kw.

Item 3

Based on loads estimated for the year 1947.

Item 5(a)

This amount is determined as 15%, which is the minimum reserve equipment for the interconnected system of Area 6, of the sum of the non coincident one-hour integrated peak loads ("assured capacity" requirements) of the firm power supply estimated for year 1947 to the Coatesville division of the Philadelphia Electric Co., and the Lancaster division of the Pennsylvania Power & Light Co., both in Area 5. There is no such similar provision made with respect to the firm supply to the Metropolitan Edison Co. since such supply is of "firm capacity" or "dependable capacity" rather than the carrying of a firm load with respect to which "assured capacity" is required to be provided.

Power System Statement of Holtwood-Safe Harbor System for the Year Ended December 31, 1946

Schedule 16—Continued

SYSTEM DEPENDABLE AND ASSURED CAPACITY

Assuming a continuance of the relative seasonal and hourly variations of load that occurred during the year of this report, show in item 6, as derived below, what MAXIMUM ANNUAL SYSTEM LOAD could be carried with the system facilities and arrangements for the purchase or sale of firm power as they existed at the end of year covered by this report with allowance for reserve capacity theoretically required: (See detailed instructions on page 30.)

	1000 Kilowatts	1000 Kilowatts
1. Net dependable capacity available from:		
(a) System fuel plants (including capacity required for station use)	28	
(b) System hydro plants	300	
(c) Subtotal ((a) plus (b))		310*
2. Capacity available from firm purchases:		
From:		
Total		
3. Firm obligations to systems listed in schedule 8, part B: (At time of annual peak of Area 6)		
To: Respondents' Pennsylvania Customers in Area 5	111	
Total		111
4. Net dependable capacity plus net purchases (1 (c) plus 2 minus 3)		199
5. Reserve capacity required (exclusive of reserve for load growth):		
(a) Total reserve for system (Applicable to assumed obligations included in Item 3)	15	
(b) Available through interchange or emergency agreements		
(c) Reserve capacity required to be supplied by own system ((a) minus (b))		15
6. Net dependable system capacity (4 minus 5 (c)) (Available to Area 6)		184

List below all scheduled alterations, additions, or retirements in system generating plants and changes in firm power contracts with other systems.

Description of Change (Give plant name and location where applicable) (1)	Date (Month—Year) Start (2)	Completion (3)	Contract Change or Name-Plate Rating (Kilowatts) (4)	Effect in Kilowatts on— Net dependable capacity (5)	Reserve capacity (6)	Net assured capacity (7)

1 If the seasonal and hourly variations in load are expected to change materially from those experienced during the year of this report, the information given may be based on the expected load shape, explaining in a footnote.

Remarks:

*After allowance of 18 mw. for transmission losses and station uses.

[26179] Item IIII 4722

J. A. WALLS, PRESIDENT
JAS. L. RINTOUL, EXEC. VICE-PRESIDENT
G. W. SPAULDING, VICE-PRESIDENT
J. U. DIEHL, TREASURER
WM. H. EICHHORN, JR., SECRETARY

Pennsylvania Water & Power Company

Lexington Building

Baltimore 1, Md.

June 20, 1947

Mr. R. T. Greer,
Member - Operating Committee,
Consolidated Gas Electric Light and Power Company,
Baltimore-3, Maryland

Dear Mr. Greer:

Please find enclosed operating data prepared by this Company for Schedules 2 and 16 of F.P.C. Form 12 for the year 1946. The attached schedules and accompanying notes are being filed by Pennsylvania Water & Power Company and Safe Harbor Water Power Corporation in their Power System Statement to the Federal Power Commission, and these same data are applicable to the Combined System Statement compiled by your Company.

We regret that you did not consult us before this Combined System Report was filed, particularly as such information is presumed to be compiled from data submitted by the several operating companies. Certain of the data which you did incorporate are, in our opinion, incorrect and do not agree with the data shown on the attached schedules as reported for the Penn Water and Safe Harbor System. We believe the statements enclosed are the only correct data for submission to the Federal Power Commission as respects the capacities of this Company and of Safe Harbor Water Power Corporation.

We must, therefore, enter our objection to and disagreement with such data as reported by your Company.

Yours very truly,

G. W. Spaulding
Member - Operating Committee

GWS:F
Encls.

[261801] Item IIII 4723

ITEM JJJJ.

Electric Utilities and Licensees

(Classes A and B)

ANNUAL REPORT

of

CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE

Lexington Building, Baltimore, Maryland

to the

FEDERAL POWER COMMISSION

for the

YEAR ENDED DECEMBER 31, 1946

(Excerpts)

530. SALES TO OTHER ELECTRIC UTILITIES (Account 555)

1. Report below the information called for concerning sales during year to other electric utilities and to cities or other public authorities for distribution to ultimate consumers.
2. Report separately firm, dump, and other power sold to the same company. Describe the nature of any sales classified as Other Power, column (g).
3. If a fixed number of kilowatts of maximum demand is specified in the power contract as a basis of billing to the customer this number should be shown in column (k). The number of kilowatts of maximum demand to be shown in columns (l) and (m) should be actual based on monthly readings and should be furnished whether or not used in the determination of demand charges. Show in column (n) type of demand reading (instantaneous, 15, 30, or 60 minutes integrated).

A. Summary of Sales According to Companies and Points of Delivery

Line No.	Sales to — (a)	Associated utilities (b)	Nonassociated utilities (c)	Municipalities (d)	Firm power (e)	Dump or surplus power (f)	Other power (g)	Sales within State boundaries (h)	Exports across State lines (i)	Point of delivery (If necessary use an insert page and identify points of delivery by line numbers of this schedule) (j)	KILOWATTS OF DEMAND: Contract demand (k)	Average monthly maximum demand (l)	Annual maximum demand (m)
1	Potomac Electric									(Near Takoma Park, Md.			
2	Power Company (A)		X		X				X	and Benning, D.C.)	35,000	12,250 (B)	48,000 (C)
3													
4													
5	(A) Excludes "Interchange Power" to Potomac Electric Power Company. See Schedule												
6	552.												
7													
8	(B) Represents average maximum difference during each month computed as explained												
9	in Note (C).												
10													
11	(C) Represents the maximum difference for the year which occurred during the												
12	month of July between Potomac Electric Power Company's load as indicated												
13	by graphic wattmeter and steam line (as defined in Article III, Section 2												
14	of the contract).												
15													
16	(D) Includes 778,000 kw.-hrs. which were purchased by the Respondent as "Inter-												
17	change Power" but generated and used by Potomac Electric Power Company in												
18	its own system.												
19													
20	(E) Includes demand and energy charge for "Firm Power" delivered to Potomac												
21	Electric Power Company. See Article IX, Section 1 of contract on file with												
22	the Commission.												
23													
24													
25													
26													
27													
28													
29													
30													
31													
32													
33										TOTAL	35,000	12,250 (B)	48,000 (C)

B. Summary of Sales According to Statistical Classifications

		Contract demand	Average monthly maximum demand	Annual maximum demand
51	Associated utilities			
52	Nonassociated utilities			
53	Municipalities			
54	Firm power			
55	Dump or surplus power			
56	Other power			
57	Sales within State boundaries			
58	Exports across State lines (Do not total.)			

551. PURCHASED POWER (Account 738)

1. Report below the information called for concerning power purchased for resale during the year.
2. All purchases from publicly owned power systems should be classified as purchases from municipalities.
3. Report separately firm, dump, and other power purchased from the same company. Describe the nature of any purchases classified as Other Power, column (i).
4. If a fixed number of kilowatts of maximum demand is specified in the power contract as a basis of billing this number should be shown in column (m). The number of kilowatts of maximum demand to be shown in columns (n) and (o) should be actual based on monthly readings and should be furnished whether or not used in the determination of demand charges. Show in column (p) type of demand reading (instantaneous, 15, 30, or 60 minutes integrated).

A. Summary of Purchases According to Companies and Points of Receipt

Line No.	Purchased from — (a)	Associated utilities (b)	Nonassociated utilities (c)	Associated nonutilities (d)	Other nonutilities (e)	Municipalities (f)	Firm power (g)	Dump or surplus power (h)	Other power (i)	Purchases within State boundaries (j)	Imports across State lines (k)	Point of receipt (Use an insert page and designate points of receipt by line numbers of this schedule) (l)	KILOWATTS OF DEMAND: Contract demand (m)	Average monthly maximum demand (n)	Annual maximum demand (o)
1	Pennsylvania Water														
2	& Power Co. (P)		X						X			Baltimore,			
3												Perryville,			
4											X	near Conowingo (C)	None	(A)	(A)
5												and near			
6	Safe Harbor Water											Takoma			
7	Power Corp. (B)		X						X			Park, Md.			
8															
9	Bethlehem Steel Com-											Sparrows			
10	pany				X			X		X		Point, Md.	None	-	-
11															
12	W. J. Dickey & Sons				X			X		X		Pella, Md.	None	-	-
13															
14	Savage Manufactur-														
15	ing Co.				X			X		X		Savage, Md.	None	-	-
16															
17	C. R. Daniels, Inc.				X			X		X		Alberton,			
18												Md.	None	-	-
19															
20															
21															
22															
23															
24															
25															
26	See Page 522A for notes.														
27															
28															
29															
30															
33	TOTAL														

B. Summary of Purchases According to Statistical Classifications

51	Associated utilities	
52	Nonassociated utilities	
53	Associated nonutilities	
54	Other nonutilities	
55	Municipalities	
56	Firm power	
57	Dump or surplus power	
58	Other power	
59	Purchases within State boundaries	
60	Imports across State lines (Do not total.)	

[26184] Item JJJJ 4726

1946

Consolidated Gas Elec. Lt + Power

NOTES APPLICABLE TO SCHEDULE 551 - PURCHASED POWER

(A) Not available; see, also, Note B.

(B) The Respondent and Pennsylvania Water & Power Company, under a long-term contract continuing until April 22, 1980, purchase two-thirds and one-third, respectively, of the entire electrical capacity and energy available from Safe Harbor Water Power Corporation's hydro-electric development on the Susquehanna River. The Respondent also purchases, under another long-term contract continuing until April 22, 1980, all of the electrical capacity and energy available to Pennsylvania Water & Power Company produced at its own plants and purchased by it from the Safe Harbor Water Power Corporation, except such energy as is sold by Pennsylvania Water & Power Company to its Pennsylvania Customers. Under the above contracts, Respondent purchased 570,025,000 kwh. from Safe Harbor Water Power Corporation and a net amount of 56,017,000 kwh. from Pennsylvania Water & Power Company for the year 1946. The coordination and interconnection of the plants at Holtwood and Safe Harbor with the plants owned by Respondent create a power pool wherein the flow of energy is such that energy purchases from individual sources cannot be traced to the points of receipt. Under these contracts the Respondent pays annual amounts for all power available from said developments which are independent of the volume of energy received and which produce annual net operating revenue to those companies as stipulated in the contracts, after providing for their reasonable operating expenses including taxes, etc. Amount shown as payment to Pennsylvania Water & Power Company does not include $36,551.75 allocated by Respondent to transmission expense.

(C) Conowingo Substation of The Pennsylvania Railroad Company.

(D) Energy is metered at 132,000, 33,000 and 13,200 volts.

(E) Energy is metered at 6,600 volts.

[26185]

Item JJJJ

47227

ITEM KKKK.

Electric Utilities and Licensees

(Classes A and B)

ANNUAL REPORT

of

CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE

Lexington Building, Baltimore, Maryland

to the

FEDERAL POWER COMMISSION

for the

YEAR ENDED DECEMBER 31, 1944

(Excerpts)

[26198] (Page 522A)

NOTES APPLICABLE TO SCHEDULE 551. PURCHASED POWER

(A) Not available; see, also, Note B.

(B) The Respondent, under long-term contracts (copies of which are on file with the Commission) with Pennsylvania Water & Power Company and Safe Harbor Water Power Corporation, is entitled to all power generated at Safe Harbor Water Power Corporation's hydroelectric development on the Susquehanna River and at the Holtwood hydroelectric and steam-electric plants of the Pennsylvania Water & Power Company, except such power as may be sold by those companies to other customers. Under these contracts the Respondent pays annual amounts for all power available from said developments which are independent of the volume of energy received and which when added to revenue from power so sold to other customers produce annual net operating revenue to those companies as stipulated in the contracts, after providing for their operating expenses and taxes. Amount shown as payment to Pennsylvania Water & Power Company does not include $33,126.87 allocated by Respondent to transmission expense.

(C) Delivery of energy is made to Respondent in Maryland and title passes at time of delivery.

(D) Conowingo Substation of The Pennsylvania Railroad Company.

Joint Petition of the Mayor and City Council of Baltimore, County Commissioners of Baltimore County, Bethlehem-Fairfield Shipyard, Inc., and Rustless Iron & Steel Corp, dated August 12, 1944.

[26215]

Baltimore, Maryland
August 12, 1944

FEDERAL POWER COMMISSION
Aug 14 1944
RECEIVED

Hon. Basil Manly
Acting Chairman—Federal Power Commission
18th Street and Pennsylvania Avenue, N. W.
Washington, D. C.

Dear Commissioner Manly:

The undersigned are counsel for certain intervenors in an investigation now pending before the Maryland Public Service Commission of the rates for electric service charged by the Consolidated Gas Electric Light and Power Company of Baltimore. The purpose of this letter is to request your Commission to determine, at the earliest convenient date, the just and reasonable wholesale rates charged for electric energy which is sold to the Consolidated Company in interstate commerce by two hydro-electric companies whose plants are located in the State of Pennsylvania, namely, Pennsylvania Water and Power Company and Safe Harbor Water Power Corporation. Reference is made to an interview which one of the undersigned, Mr. Charles C. G. Evans, had with your Commission some weeks ago at which this matter was informally discussed.

The Mayor and City Council of Baltimore, a municipal corporation of Maryland, is interested in the rates charged by the river companies in two respects and capacities. First, it is one of the largest single consumers of gas and electric energy supplied by the Consolidated Gas Electric Light and

Power Company of Baltimore in connection with the lighting of its streets and public buildings. Second, it is deeply concerned with the rates charged to other ratepayers in Baltimore City by that company. Baltimore County has a similar concern with regard to its own consumption and that of its residents.

The investigation here has proceeded to a point where it has become apparent that the rates of the Consolidated Company cannot be effectively determined unless determinations are also made of the just and reasonable wholesale rates at which this Company purchases energy in interstate commerce from the two hydro-electric companies. It also appears that the wholesale rates of these two companies, which have never been regulated, are grossly excessive. Evidence already submitted to the Maryland Commission tends to show *prima facie* that, on the basis of book figures and a return of five and a half per cent., a reduction is indicated of at least $2,500,000 in the annual power bills paid these companies by [26216] (page 2) the Consolidated Company. In this connection we beg to call your attention to the fact that in case known as Docket IT-5494, decided June 11, 1940, the Federal Power Commission found the rates of Safe Harbor Water Power Corporation to be excessive. Yet, notwithstanding the considerable time which has elapsed since this finding was made, the ratepayers affected, including the undersigned, have obtained no relief.

On June 27, 1944, People's Counsel for the State of Maryland, an official appointed by the Governor and charged by statute with the duty of representing the interest of the public in cases involving the rates and practices of public utility corporations, formally petitioned the Maryland Public Service Commission to request your Commission to make the rate determinations here requested. The undersigned joined in that application. While no order has been passed upon those petitions, we understand informally that joint hearings with regard to these rates are

contemplated by the Maryland and Pennsylvania commissions.

While Safe Harbor Water Power Corporation is a licensee under the Federal Power Act, the Pennsylvania Water and Power Company is not a licensee. Furthermore, a portion of the energy sold by the latter company in interstate commerce is generated by a steam plant.

In view of the clearer jurisdiction of the Federal Power Commission and its superior facilities for making these determinations, we respectfully request that the Federal Power Commission itself determine these rates and if practicable afford relief by interim orders.

Respectfully,

THOMAS J. TINGLEY
Assistant City Solicitor
Attorney for Mayor and City Council of Baltimore

MICHAEL PAUL SMITH
Attorney for County Commissioners of Baltimore County

CHARLES C. G. EVANS
Attorney for Bethlehem-Fairfield Shipyard, Inc.

JOHN HENRY LEWIN
Attorney for Rustless Iron & Steel Corporation

Letter of Public Service Commission of Maryland Dated August 30, 1944 Requesting Rate Investigation.

[26217]

(included herein as part of Item R at Page 25523D)

Letter Dated November 16, 1945 from Federal Power Commission Outlining Order of Procedure.

[26257]

FEDERAL POWER COMMISSION
Washington 25

Nov 16 1945

Pennsylvania Water & Power Company,
Lexington Building,
Baltimore, Maryland.

Re: Pennsylvania Water & Power Company
Docket No. IT-5915

Gentlemen:

Enclosed is the order entered by the Commission on November 9, 1945, in the above entitled proceeding.

The order of procedure at the public hearing in this proceeding will be for the Pennsylvania Water & Power Company to proceed first with the presentation of its evidence; for the Susquehanna Transmission Company of Maryland, Consolidated Gas Electric Light & Power Company of Baltimore, Pennsylvania Public Utility Commission, Public Service Commission of Maryland, and the staff of the Federal Power Commission to follow with the presentation of their evidence in the order named, while the order of presentation of evidence by any other participant shall be as determined at the hearing by the presiding Commissioner, Examiner, or other representative of the Commission.

Very truly yours,

/s/ J. H. GUTRIDE,
J. H. Gutride,
Acting Secretary.

Enclosure.
Registered

Petition for Specification of Issues filed April 3, 1946 by Pennsylvania Water & Power Company and Susquehanna Transmission Co., of Maryland.

[26279]

UNITED STATES OF AMERICA
FEDERAL POWER COMMISSION

In the Matter of PENNSYLVANIA WATER & POWER COMPANY } Docket No. IT-5915

PETITION FOR SPECIFICATION OF ISSUES AND RECONSIDERATION OF DIRECTION FIXING ORDER OF PROCEDURE

Reserving to themselves all or any questions of jurisdiction available to them, whether or not specifically referred to herein, come the Pennsylvania Water & Power Company and the Susquehanna Transmission Company of Maryland and respectfully petition the Commission for specification of the issues and for reconsideration of the direction of the Commission fixing the order of procedure, for the following reasons:

(1) Your Commission's Order Instituting Investigation, dated September 1, 1944, in the above-entitled matter, recited among other things that it was issued upon consideration of a petition filed on August 31, 1944, by the Maryland Public Service Commission requesting that your Commission institute an investigation of the interstate wholesale rates of the Safe Harbor Water Power Corporation and the Pennsylvan' Water & Power Company; and upon consideration of a joint petition filed on August 14, 1944, by counsel for the Mayor and City Council of Baltimore, Maryland, counsel for the County [26280] (page 2) Commissioners of Baltimore County, Maryland, counsel for Bethlehem-Fairfield Shipyard, Inc., and counsel for Rust-

less Iron & Steel Corporation, also requesting your Commission to institute such an investigation. Examination of the public record in the matter of Safe Harbor Water Power Corporation, F. P. C. Docket No. IT-5914, shows that the Maryland Commission, by letter dated August 30, 1944, and filed on August 31, 1944, requested your Commission to determine reasonable rates to be charged by Safe Harbor Water Power Corporation and by Pennsylvania Water & Power Company for energy sold to Consolidated Gas Electric Light and Power Company of Baltimore, without alleging that any of such existing rates were unjust, unreasonable, unduly discriminatory, preferential or excessive. Such letter included a statement that the State Commissions were ready to engage in cooperative regulation, and forwarded copies of schedules 10 to 13, inclusive, of exhibit No. 1 of Maryland People's Counsel in a proceeding before the Maryland Commission involving the rates of Consolidated Company. The same record shows that the joint petition referred to above was a letter, under date of August 12, 1944, which requested your Commission to determine the just and reasonable wholesale rates charged for electric energy sold to Consolidated Company in interstate commerce by the Safe Harbor Water Power Corporation and the Pennsylvania Water & Power Company. Such joint petition stated that it was understood that joint hearings with regard to such rates were contemplated by the Maryland and Pennsylvania Commissions; and alleged among other things that the wholesale rates of Pennsylvania [26281] (page 3) Water & Power Company and Safe Harbor Water Power Corporation are excessive, without specifying which of the companies' rates or charges were so excessive and in what respects it is contended they are excessive; and further alleged that on the basis of evidence submitted to the Maryland Commission a specific reduction was indicated in the annual power bills of the Consolidated Company. There is no allegation in either the petition of

the Maryland Commission or in such joint petition that the Maryland and Pennsylvania Commissions are unable to agree on the services to be rendered or on the rates or charges of payment therefor of Pennsylvania Water & Power Company and Safe Harbor Water Power Corporation. No copies of such request by the Maryland Commission with accompanying documents, or such joint petition, or the evidence relied upon submitted to the Maryland Commission were ever served upon your Petitioners and your Petitioners were not parties to said proceeding before the Maryland Commission involving the rates of the Consolidated Company. Nor were any statements of the complaints contained in such petitions forwarded by your Commission to your Petitioners.

(2) The Commission's Order Instituting Investigation, dated September 1, 1944, ordered an investigation instituted to enable the Commission:

(A) To determine whether, in connection with any transmission or sale of electric energy subject to the jurisdiction of this Commission under the Federal Power Act, by Pennsylvania Water & Power Company, any rates, charges, or classifications demanded, observed, charged, or collected, or any rules, regulations, practices, or contracts affecting such rates, charges or classifications, are unjust, unreasonable, unduly discriminatory or preferential; and

[26282] (page 4)

(B) If, after hearing, it shall find that any of such rates, charges, classifications, rules, regulations, practices, or contracts are unjust, unreasonable, unduly discriminatory, or preferential, to determine and fix by appropriate order or orders, just and reasonable rates, charges, classifications, rules, regulations, practices, or contracts to be thereafter observed and in force.

Such Order of Investigation did not specify which of your Petitioners' rates, charges or classifications, contained in various contracts mentioned in paragraph (c) of an "appearing" clause of the Order, are considered by the Commission as subject to its jurisdiction and under investigation; and did not specify in what respects it is conterded, if at all, that any of such rates, charges, or classifications, or any of the rules, regulations, practices or contracts affecting them, are unjust, unreasonable, unduly discriminatory or preferential. Nor does such Order specify whether the Commission is exercising jurisdiction under Part I or Part II of the Federal Power Act. There is no finding by the Commission in such Order that the States of Pennsylvania and Maryland are unable to agree through their properly constituted authorities on the services to be rendered or on the rates or charges of payment therefor of Pennsylvania Water & Power Company by itself or jointly with others, as a prerequisite under Section 20 of Part I of the Act before the Commission has jurisdiction to act under such Section 20. On the contrary the aforementioned petition of the Maryland Commission shows on its face that such State Commissions are not unable to agree on the services to be rendered or on the rates and charges of payment therefor of Pennsylvania Water & Power Company by itself or jointly with others.

[26283] (page 5)

(3) A Supplemental Order Enlarging Investigation, dated October 3, 1944, in the above-entitled matter, recited that Susquehanna Transmission Company of Maryland owns facilities used in the rendering of interstate service by Pennsylvania Water & Power Company and Safe Harbor Water Power Corporation and ordered that:

(A) The investigation instituted by the Commission's order of September 1, 1944, be and the same is hereby enlarged to include Susquehanna Trans-

mission Company of Maryland for the purpose of enabling the Commission to determine whether, in connection with any transmission or sale of electric energy by Pennsylvania Water & Power Company or Susquehanna Transmission Company of Maryland subject to the jurisdiction of the Commission, any rates, charges, or classifications demanded, observed, charged or collected, or any rules, regulations, practices, or contracts affecting such rates, charges or classifications, are unjust, unreasonable, unduly discriminatory or preferential; and

(B) If, after hearing, it shall find that any of such rates, charges, classifications, rules, regulations, practices or contracts are unjust, unreasonable, unduly discriminatory, or preferential, to determine and fix by appropriate order or orders, just and reasonable rates, charges, classifications, rules, regulations, practices, or contracts to be thereafter observed and in force.

Such Supplemental Order did not specify which of your Petitioners' rates, charges or classifications are considered by the Commission as subject to its jurisdiction and under investigation; and did not specify in what respects it is contended, if at all, that any of such rates, charges or classifications, or any of the rules, regulations, practices or contracts affecting them, are unjust, unreasonable, unduly discriminatory or preferential. Nor does such Order specify whether the Commission is exercising jurisdiction under Part I or Part II of the Act; nor were there any of the findings necessary for [26284] (page 6) jurisdiction under Part I of the Act, as outlined in paragraph (2) above.

(4) If Pennsylvania Water & Power Company is to be treated as if a Licensee under Part I of the Act by virtue of the Commission's Order of November 3, 1939, in Docket

No. IT-5524, as indicated by paragraph (b) of the "appearing" clause of the Commission's Order of September 1, 1944, in the above-entitled matter, or if Pennsylvania Water & Power Company is to be considered a purchaser of power from Safe Harbor Water Power Corporation, a Licensee, for use in public service; then under Part II of the Act the Commission has no jurisdiction to regulate the rates or charges of Pennsylvania Water & Power Company or of that Company and Safe Harbor Water Power Corporation for service rendered jointly.

(5) Under Section 20 of Part I of the Act any rate regulatory jurisdiction the Commission may have is limited to the authority to regulate and control so much of the services rendered by Pennsylvania Water & Power Company jointly with others, and of the joint rates and charges of payment therefor as constitute interstate or foreign commerce. If under Part II of the Act the Commission has any rate regulatory jurisdiction, it is limited by Sections 201 (b) and 206 (a) to authority, under appropriate circumstances, for the determination and fixation by order of future just and reasonable rates, charges or classifications for any transmission of electric energy in interstate commerce or for any sale of electric energy at wholesale in interstate commerce, or of future rules, regulations, practices or contracts affecting such interstate rates, charges or classifications. [26285] (page 7) The Commission has no jurisdiction under Part II to regulate rates, charges or classifications for any sales of electric energy other than for sales of electric energy at wholesale in interstate commerce. Pennsylvania Water & Power Company renders services to the Pennsylvania Railroad Company jointly with the Safe Harbor Water Power Corporation, the Consolidated Company and the Potomac Electric Power Company of Washington, D. C., for which joint charges are made under joint rates. Part of such services do not constitute interstate or foreign commerce and none

of such services and the payments received therefor constitutes a sale of electric energy at wholesale, within the meaning of Section 201 of Part II of the Act. In addition, a large proportion of the revenues received by Pennsylvania Water & Power Company, for services other than to the Pennsylvania Railroad Company, are for services rendered by itself and jointly with Safe Harbor Water Power Corporation in the State of Pennsylvania in intrastate commerce. Such services do not constitute interstate or foreign commerce, and the rates, charges and classifications therefor are not for the transmission of electric energy in interstate commerce or for the sale of electric energy at wholesale in interstate commerce.

(6) All of the services rendered by Pennsylvania Water & Power Company, except those rendered to Metropolitan Edison Company in the State of Pennsylvania and in addition to those rendered to the Pennsylvania Railroad Company described above, are rendered jointly with Safe Harbor Water Power Corporation; and the rates and charges for such services are joint rates and charges from which [26286] (page 8) Pennsylvania Water & Power Company derives revenues in the form of divisions of such rates and charges. The Commission is without jurisdiction under the Act to regulate or control or to determine and fix by order the just and reasonable divisions of such joint rates or charges, or to regulate the revenues to be received by Pennsylvania Water & Power Company from such divisions. The Commission is without jurisdiction to regulate or control or to determine and fix by order any of such joint rates or charges without giving a fair hearing to all participants in such joint services and the rates and charges of payment therefor. None of such other participants have been made respondents in the above-entitled matter.

(7) By Order, dated November 9, 1945, in the above-entitled matter, the Commission ordered a hearing be held.

Such hearing is now set for April 15, 1946. In a letter dated November 16, 1945, from the Acting Secretary of the Commission to your Petitioners, enclosing copies of the Order fixing Date of Hearing on November 9, 1945, the order of procedure at the public hearing was specified as follows:

> The order of procedure at the public hearing in this proceeding will be for the Pennsylvania Water & Power Company to proceed first with the presentation of its evidence; for the Susquehanna Transmission Company of Maryland, Consolidated Gas Electric Light & Power Company of Baltimore, Pennsylvania Public Utility Commission, Public Service Commission of Maryland, and the staff of the Federal Power Commission to follow with the presentation of their evidence in the order named, while the order of presentation of evidence by any other participant shall be as determined at the hearing by the presiding Commissioner, Examiner, or other representative of the Commission.
>
> [26287] (page 9)

By such letter Petitioners are required to proceed first with the presentation of their evidence before hearing the contentions and evidence of the joint petitioners complaining of your Petitioners' rates and charges who are or may become Intervenors in the above-entitled matter, the Maryland Commission, the Pennsylvania Commission, the Consolidated Company, or the staff of your Commission, in a proceeding initiated at the request of the Maryland Commission and on the complaint of others. Neither such letter nor any of the Commission's Orders in the above-entitled matter specify what evidence it is desired that your Petitioners produce at the hearing.

(8) The rates, charges and classifications, made, demanded, received, observed, charged and collected by Pennsylvania Water & Power Company by itself and jointly with others, and the rules, regulations, practices and con-

tracts affecting such rates, charges and classifications are now lawfully in force under the laws of the United States and of the State of Pennsylvania, are not unjust, unreasonable, unduly discriminatory or preferential, and are therefore now unlawful unless and until shown by adequate evidence and found by competent authority to be unjust, unreasonable, unduly discriminatory or preferential, after a fair hearing.

(9) The effect of the requirements of the Commission's letter of November 16, 1945, together with the Orders heretofore issued in the above-entitled matter, is to require Petitioners to proceed with unspecified evidence as to the reasonableness of their rates, charges and classifications, now lawfully in force under the [26288] (page 10) laws of the United States and of the State of Pennsylvania, without fair notice, evidence or findings (a) as to the statutory basis of the exercise of any rate regulatory jurisdiction by the Commission; (b) as to which of such rates, charges or classifications, if any, are subject to the jurisdiction of the Commission and under investigation; or (c) as to the contentions of or facts relied upon by the complainants, the Consolidated Company as a customer of Pennsylvania Water & Power Company and Safe Harbor Water Power Corporation jointly, the State Commissions, or the Government as represented by the staff of the Commission with respect to the just or unjust, reasonable or unreasonable, non-discriminatory or discriminatory, or non-preferential or preferential character of any of Petitioners' rates, charges or classifications, or any of the rules, regulations, practices or contracts affecting them; thereby depriving Petitioners of the fair hearing required by the Federal Power Act and the due process clause of the 5th Amendment to the Constitution of the United States.

(10) Such requirements will also (a) tend to prolong unduly the hearings by encouraging the production of evidence which may not be necessary to be produced if the

contentions as to the basis and scope of the jurisdiction of the Commission and the contentions and issues with respect to Petitioners' rates, charges, classifications, rules, regulations, practices and contracts were adequately defined; and (b) tend to produce a disorderly record by the presentation of evidence by Petitioners without adequate knowledge of the contentions and issues, if any, by process of direct and [26289] (page 11) rebuttal evidence instead of by rebuttal evidence alone, if any, after adequate knowledge of the contentions, issues and evidence of complainants, Consolidated Company, the State Commissions and the staff of the Commission.

(11) Evidence in the possession of the other participants in the joint services participated in by Pennsylvania Water & Power Company, necessary to a lawful determination of the justness or reasonableness of the joint rates or charges therefor, is peculiarly within the knowledge of such other participants; and it is therefore unfair to your Petitioners and unreasonable to require them to produce any such evidence or to require Petitioners to produce only a part of such necessary evidence before hearing and without adequate knowledge of the remaining part in the possession of such other participants.

Wherefore, your Petitioners pray that the Commission relieve them of the requirement to proceed first with the presentation of their evidence at the hearing in the above-entitled matter; require any intervening parties complaining of Petitioners' rates, charges or classifications, or any rules, regulations, practices or contracts affecting them, to so proceed first; require the Consolidated Gas Electric Light & Power Company of Baltimore, the Public Service Commission of Maryland, the Pennsylvania Public Utility Commission, the staff of the Federal Power Commission, to so proceed before requiring the Petitioners to proceed with the presentation of their evidence; and require the staff of the Commission and all such parties other [26290] (page

12) than your Petitioners to file a written statement prior to hearing as to their contentions with respect to, (a) the statutory basis of the exercise of the Commission's jurisdiction in the above-entitled matter; (b) which of your Petitioners' rates, charges or classifications, if any, are subject to the jurisdiction of the Commission and under investigation; and (c) the unjust, unreasonable, unduly discriminatory or preferential character of any of such rates, charges or classifications, and of any rules, regulations, practices, or contracts affecting such rates, charges or classifications.

HEWES AND AWALT

By F. G. AWALT
822 Connecticut Avenue
Washington 6, D. C.
Attorneys for Pennsylvania Water & Power Company and Susquehanna Transmission Company of Maryland.

Letter to Maryland Public Service Commission from Federal Power Commission, dated June 2, 1949, transmitting proposed Electric Tariff.

[26783]

JUN—2 1949

FEDERAL POWER COMMISSION
DOCKETED
June 2, 1949
NW
DOCKET SECTION
SECRETARY'S OFFICE

Docket No. IT-5915

Maryland Public Service Commission
Baltimore, Maryland

Gentlemen:

There is inclosed a copy of a proposed Electric Tariff recently tendered for filing by Pennsylvania Water & Power Company in response to this Commission's order issued January 5, 1949 prescribing an annual rate reduction in the interstate wholesale rates and charges of $1,954,261 on the basis of 1946 sales and services. There is also inclosed a copy of this Commission's order issued January 5, 1949 which is referred to in the company's proposed Tariff.

The Commission will appreciate receiving by June 14, 1949 any comments or suggestions you may desire to make concerning this proposed FPC Electric Tariff. Please forward your response in duplicate.

Very truly yours,

LEON M. FUQUAY
Secretary.

Inclosure No. 35053
RATES
JLB:hb
6-2-49
E S C

Same letter sent to companies listed on attached sheet.

[26784]

Pennsylvania Public Utility Commission
Harrisburg, Pennsylvania

Mr. Simon E. Sobleoff, City Solicitor
Baltimore, Maryland

Mr. Thomas J. Tingley, Asst. City Solicitor
Baltimore, Maryland

Metropolitan Edison Company
412 Washington Street
Reading, Pennsylvania

Consolidated Gas, Electric Light & Power Company of Baltimore
Lexington and Liberty Streets
Baltimore 3, Maryland

Pennsylvania Power & Light Company
Ninth and Hamilton Streets
Allentown, Pennsylvania

Philadelphia Electric Company
1000 Chestnut Street
Philadelphia 5, Pennsylvania

Letter to Federal Power Commission from Pennsylvania Public Utility Commission, dated June 8, 1949, in respect to proposed Electric Tariff.

[26785]

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA PUBLIC UTILITY COMMISSION
Harrisburg, June 8, 1949

IN REPLY PLEASE
REFER TO OUR FILE

Received
Jun 9 1 09 PM '49
Federal Power Commission

FEDERAL POWER COMMISSION
DOCKETED
Jun 9, 1949
NW
DOCKET SECTION
SECRETARY'S OFFICE

Docket No. IT-5915

Leon M. Fuquay, Secretary
Federal Power Commission
Washington 25, D. C.

Dear Sir:

This will acknowledge receipt of your letter dated June 2, 1949, enclosing a copy of proposed electric tariff tendered for filing by Pennsylvania Water & Power Company in compliance with the order of your Commission issued January 5, 1949, together with a copy of the order.

As you know this Commission has appealed from the order of the Federal Power Commission, the case being docketed at No. 10239 in the United States Court of Appeals for the District of Columbia Circuit, on the grounds, inter alia, that your Commission lacked jurisdiction to make the order of January 5, 1949.

Since the requirement of filing a tariff presupposes jurisdiction over the rates and charges of Pennsylvania Water & Power Company, this Commission must object to the filing, without, however, commenting on the form or contents of the tariff itself.

Very truly yours,

JOHN SIGGINS, JR.
John Siggins, Jr.
Chairman

Letter to Federal Power Commission from Philadelphia Electric Company, dated June 10, 1949, in respect to proposed Electric Tariff.

[26786]

PHILADELPHIA ELECTRIC COMPANY
1000 Chestnut Street
Philadelphia 5, Pa.

N. E. FUNK
Executive Vice-President

June 10, 1949

FEDERAL POWER COMMISSION
DOCKETED
Jun 13, 1949
NW
DOCKET SECTION
SECRETARY'S OFFICE

Docket No. IT-5915

Mr. Leon M. Fuquay, Secretary,
Federal Power Commission,
Washington 25, D. C.

Dear Sir:

This will acknowledge your letter dated June 2, 1949, enclosing copy of the proposed Electric Tariff tendered for filing by Pennsylvania Water & Power Company in response to the Federal Power Commission Order issued January 5, 1949, together with a copy of the said Order.

Philadelphia Electric Company has no comment or suggestion to make at this time relative to the proposed Electric Tariff.

Very truly yours,

N. E. FUNK
Executive Vice-President

NEF:C

Letter to Federal Power Commission from Metropolitan Edison Company, dated June 9, 1949, in respect to proposed Electric Tariff.

[26787]

METROPOLITAN EDISON COMPANY
412 Washington Street
Reading, Pa.

Received
Jun 14 10 13 AM '49
Federal Power Commission

June 9, 1949
Docket No. IT-5915

FEDERAL POWER COMMISSION
DOCKETED
Jun 14, 1949
NW
DOCKET SECTION
SECRETARY'S OFFICE

Mr. Leon M. Fuquay, Secretary
Federal Power Commission
Washington 25, D. C.

Dear Sir:

Without prejudice to any position which this Company may take with respect to the tariff hereinafter referred to, we acknowledge receipt of your letter of June 2, 1949 inclosing a copy of a proposed FPC Electric Tariff recently tendered for filing by Pennsylvania Water & Power Company with your Commission.

Very truly yours,

O. TITUS
O. Titus
President

OT:DS

Letter to Federal Power Commission from Pennsylvania Power & Light Company, dated June 13, 1949, in respect to proposed Electric Tariff.

[26788]

PENNSYLVANIA POWER & LIGHT COMPANY
Ninth and Hamilton Streets
Allentown, Pa.
June 13, 1949

FEDERAL POWER COMMISSION
DOCKETED
Jun 14, 1949
NW
DOCKET SECTION
SECRETARY'S OFFICE

Mr. Leon M. Fuquay
Secretary
Federal Power Commission
Washington 25, D. C.

DOCKET NO. IT-5915

Dear Sir:

This will acknowledge receipt of your letter of June 2nd, enclosing a copy of a proposed Electric Tariff recently tendered for filing by Pennsylvania Water & Power Company in response to the Commission's order issued January 5, 1949 at Docket No. IT-5915.

We have no comments or suggestions to make concerning this proposed tariff. This statement is made, of course, without prejudice to any legal rights we may have in the premises.

Very truly yours,

H. FERGUSON
H. Ferguson
Vice President, Operating Department

Letter to Federal Power Commission from City of Baltimore, dated June 13, 1949, in respect to proposed Electric Tariff.

[26789]

(Seal of City of Baltimore)

DEPARTMENT OF LAW
217 Court House
Baltimore 2, Maryland
June 13, 1949

THOMAS N. BIDDISON
City Solicitor

Received
Jun 14 10 41 AM '49
Federal Power Commission
FEDERAL POWER COMMISSION
DOCKETED
Jun 14, 1949
NW
DOCKET SECTION
SECRETARY'S OFFICE

Docket No. IT-5915
Federal Power Commission
Washington—25, D. C.

ATTENTION—Mr. Leon M. Fuquay

Gentlemen:

Your letter dated June 2, 1949, enclosing a proposed electric tariff recently tendered for filing by the Pennsylvania Water and Power Company, and a copy of the Commission's Order issued January 5, 1949 in connection with same, was received in due course.

Speaking for Baltimore City, we feel that the schedules issued by the Pennsylvania Water and Power Company in said tariff violate the Order of the Commission, and that

the Commission should reject them and promptly issue proper schedules under the power referred to in Paragraph E of the Order of January 5, 1949.

The City's appearance as observer throughout these proceedings was not expanded because of the very active participation of the Consolidated Gas Electric Light and Power Company of Baltimore and the Public Service Commission of Maryland, which resulted in full presentation of of the position which the City would have maintained. The Orders of the Commission basically recognize that position. We feel we have the right to rely upon the Commission to implement its Orders to proper rate schedules.

In this respect, we would like to state that the City of Baltimore and its consuming public have paid electric rates for many years predicated in part upon the charges for hydro-power contained in the basic contracts between the Pennsylvania Water and Power Company, Safe Harbor Water Power Corporation and the Consolidated Gas Electric Light and Power Company of Baltimore. Now that the Commission [26790] has reduced these wholesale charges and given the major portion of this reduction to Consolidated Gas Electric Light and Power Company of Baltimore, through whom it will come to the consuming public of Baltimore, we are advised that the Pennsylvania Water and Power Company has sought or is seeking to repudiate its basic agreements with the Consolidated Gas Electric Light and Power Company in an effort to avoid your regulation. In pursuance thereof, it now seeks your approval of rate schedules which will enable it to sell ever-increasing amounts of the power in Pennsylvania. We feel that this would be at the expense of the Baltimore public which, throughout the last eighteen years, has paid at the higher unregulated rates and is now entitled to the service which it has always received at the reduced rates which the Commission has ordered.

In conclusion, we would like to urge upon the Commission to pass an order which would

1. Preserve the basic contractual arrangements;

2. Depart from existing schedules and contracts only to the extent necessary to put into effect the just, reasonable and non-discriminatory charges which it is the Commission's legal duty to enforce; and

3. Preserve to the Baltimore consuming public through Consolidated Gas Electric Light and Power Company of Baltimore that portion of the rate reduction ordered to Consolidated on the 1946 basis.

We would like to thank the Commission for keeping us informed of the steps in the proceeding. We wish to continue our appearance so that we may at any time take whatever further steps may be necessary to fully protect our rights and those of the consuming public of Baltimore.

Very truly yours,

THOMAS N. BIDDISON
City Solicitor

EDWIN HARLAN
Deputy City Solicitor

EH-L

Letter to Federal Power Commission from Maryland Public Service Commission, dated June 14, 1949, in respect to proposed Electric Tariff.

[26791]

Commissioners

John H. Hessey
Chairman
Frank Harper
Olin R. Higgins

Charles D. Harris
General Counsel
Philip H. Dorsey, Jr.
People's Counsel
Albert L. Deen
Executive Secretary

STATE OF MARYLAND
PUBLIC SERVICE COMMISSION
MUNSEY BUILDING
BALTIMORE-2

June 14, 1949

Received
June 15 8:20 A. M. '49
Federal Power Commission

FEDERAL POWER COMMISSION
DOCKETED
Jun 15, 1949
N.W.
DOCKET SECTION
SECRETARY'S OFFICE

Mr. Leon M. Fuquay
Secretary, Federal Power Commission
Washington 25, D. C.

Re: In the Matter of
Pennsylvania Water & Power Company
Docket No. IT-5915

Dear Mr. Fuquay:

The Public Service Commission of Maryland, (hereinafter referred to as the Maryland Commission), recently received from the Federal Power Commission a letter dated June 2, 1949, with a copy of Pennsylvania Water and

Power Company's "FPC Electric Tariff, Original Volume No. 1", that letter stating that your Commission "will appreciate receiving by June 14, 1949 any comments or suggestions" which we might desire to make concerning this proposed tariff.

It is obvious that the schedules issued for filing by Pennsylvania Water and Power Company (hereinafter referred to as Penn Water) do not comply with the Federal Power Commission Order of January 5, 1949, as modified by its Order of January 31, 1949. Paragraphs C and D of the Order of January 5 directed Penn Water *alone* to file schedules. There was no provision for a conditional filing. Ignoring the direction of these Orders, Penn Water has filed three schedules (namely, A, B, and D) on behalf of itself and Safe Harbor Water Power Corporation (hereinafter referred to as Safe Harbor), and a fourth schedule (E) on behalf of Consolidated Gas Electric Light and Power Company of Baltimore (hereinafter referred to as Baltimore Company). All four of these schedules are stated to require the concurrence of such other company before they become effective.

Moreover, the schedules as filed contravene in many respects the findings made by your Commission in issuing its Orders, as well as Opinions Nos. 173 and 173A which [26792] were "incorporated by reference and made a part" of the orders. The Maryland Commission is particularly interested to see that the following discussed deviations from your Commission's directions be corrected.

In Finding No. 15 of the Order of January 5, 1949, it was stated that:

> "(15) Penn Water alone sells firm power and energy to Metropolitan Company under a 1945 agreement, to supply a part of the latter's requirements in York, Pennsylvania; to Philadelphia Company under a 1933 agreement, to supply its requirements in Coatesville, Pennsylvania; and to PP&L, under a 1933 agreement, to supply its requirements in Lancaster, Penn-

sylvania. In addition, Penn Water alone sells energy to each of these companies in interchange."

This finding was the only possible conclusion to be drawn from the evidence before your Commission, as was argued in the Maryland Commission's Brief (pp. 12-14), Baltimore Company's Brief (pp. 6-28), and the Staff's Brief (pp. 40-51). Nevertheless, Penn Water has purported to file joint schedules (A & B) on behalf of itself and Safe Harbor for service to Pennsylvania Power and Light Company and Philadelphia Electric Company. This is a repetition of the untenable position taken by Penn Water before the Commission and repeated in Penn Water's petition for rehearing, but which the Commission rejected in the above mentioned Orders. Because Penn Water has refused to comply with the Commission's direction, the Commission should establish proper schedules on its own initiative in this respect.

In its Opinions No. 173 (p. 167) and No. 173-A (pp. 9-12), the Federal Power Commission found that the basic contract (Items H and I) between Penn Water and Baltimore Company is in the public interest, and ordered that the arrangement under it should be continued with only such modifications as are necessary to accomplish the reductions in rates ordered by your Commission. Schedule E, as filed by Penn Water on behalf of Baltimore Company (presumably without authorization from Baltimore Company), is clearly contrary to the basic contract above referred to and to your Commission's Orders. It constitutes part of Penn Water's attempt to break up the basic arrangements which was restrained by the United States District Court for the District of Maryland (referred to in Opinion No. 173A, p. 14) pending final determination by that Court that of Penn Water's suit to declare the basic contract void. For Penn Water to refuse [26793] to take backfeed from Baltimore Company in interstate commerce or to take it at the fixed rate specified in Schedule E would

be contrary (a) to the system operations under the basic contract; (b) to the above mentioned temporary restraining order; and (c) to your Commission's Orders. There can be no doubt that Schedule E should be rejected.

The proposed schedules for service to Penn Water's Pennsylvania customers (Schedules A, B, and C) also deviate from the intent of the Federal Power Commission to preserve the existing basic arrangements, in that said schedules eliminate the fuel rate adjustments previously applicable to the Philadelphia Electric and Metropolitan Edison Company contracts, and also in that they fail to include some similar adjustment to keep the PP&L reduction at the level specified by your Commission. Baltimore Company, in approving such Pennsylvania customer contracts, as is its right under the basic agreement with Penn Water (Item H), has insisted upon the need for such fuel rate adjustments because all energy sold to such Pennsylvania customers by Penn Water must be replaced by an equivalent amount of steam generated energy in Baltimore. The Maryland Commission, through its then Chief Engineer, Mr. Paul L. Holland, offered evidence that the price of such energy to such customers must be sufficient to compensate for the added cost of the steam generated energy (T. 20,400-43 and 20,449-56) as summarized in our Brief (pp. 9-10, particularly points 6 and 7).

Penn Water has eliminated all fuel rate adjustments as part of its plan to break up the integrated operations, and to transfer as much of its business to Pennsylvania as possible. The Maryland Commission intervened in the proceedings before your Commission (and has intervened in the proceedings before the U. S. District Court for the Middle District of Pennsylvania, the U. S. District Court for the District of Maryland, and the appeal pending before the U. S. Court of Appeals for the Third Circuit with reference to the Commission's Order in the Safe Harbor Case, Docket No. IT-5914) to protect the Maryland public

against this effort of Penn Water to further its own interests at the expense of the Maryland public. We look to your Commission to protect properly the interest of the Maryland public in the schedules which may issue.

Schedule D, as filed by Penn Water, necessarily results in higher payments by Baltimore Company than were contemplated by your Commission's Orders to the extent to which Schedules A, [26794] B, and C have been calculated to give the Pennsylvania customers of Penn Water an ever expanding benefit from the reductions ordered by your Commission on a 1946 basis. This situation can be cured only by a proper fuel rate adjustment being retained in the Coatesville and York area contracts, and some similar adjustment being made with reference to the charges in the Lancaster area contract. Schedule D also deviates from the Commission's Order in that it seems to give Baltimore Company no credit for the adjustment of revenue made in the Commission's allocation for special facilities from Pennsylvania Railroad in the amount of $141,777 (Opinion No. 173, p. 142) and it also seems to eliminate the fuel rate adjustment clause contained in the existing Railroad contract. There may be other departures which Schedule D makes from the contracts and from your Commission's Orders. (Sub-par. (4) (a) and (b) seems to contemplate a hypothetical tax computation contrary to the contract and your Commission's Orders). Your Commission, in addition to establishing proper schedules for the Pennsylvania customers of Penn Water, should establish a schedule for service to Baltimore Company which completely preserves the existing contractual arrangement (Items H and I) as emphasized in its Opinions.

For all of the above reasons, the Maryland Commission calls upon the Federal Power Commission, under Paragraph E of its Order of January 5, 1949, to reject the schedules filed by Penn Water as not being in compliance with the orders under which they were filed and "in lieu

thereof to prescribe by further order the appropriate rates, charges, classifications, rules, regulations, practices, or contracts'' as will carry out the Orders of January 5, 1949 and January 31, 1949, as exemplified by the findings and opinions which were made part thereof.

Until the Federal Power Commission has issued such schedules, the Maryland Commission will reserve any detailed comments as to what they should be. We do urge that your Commission reconsider carefully the sections of the Maryland Commission's Brief contained between pages 4 to 18 and Baltimore Company's Brief, pages 6-49, particularly pp. 44-49. Your Commission did not see fit to allocate the entire reduction to Baltimore Company as was there argued, and to that extent in our judgment impaired the integrated operations of the combined system in the public interest. However, we believe that it was your intent to issue an Order which would preserve the general basic agreements between Penn Water, Safe Harbor, and Baltimore Company, and as between the several customers of Penn Water, apportion the reduction in the relative amounts indicated. In order to preserve integrated operations and to secure maximum utilization of the combined [26795] resources as contemplated by the basic system contracts (Items E, F, G, H, and I), it is essential that the ratio of the several reductions ordered to each of Penn Water's customers on a 1946 basis be preserved as fully as possible by the new schedules to these customers. The schedules filed by Penn Water frustrate this purpose, expand greatly the reduction afforded its Pennsylvania customers (by eliminating fuel rate adjustments), and carry out Penn Water's recently avowed effort (in the United States District Court proceeding in Baltimore before Judge William C. Coleman) to terminate the basic arrangements with Baltimore Company and Safe Harbor.

The schedules as filed should be rejected, and your Commission should prescribe schedules which will accom-

plish the original purposes of your Order, with which the Maryland Commission fully agrees.

Respectfully submitted,

CHARLES D. HARRIS,
Charles D. Harris,
General Counsel.

GDH:F

Letter to Federal Power Commission from Consolidated Gas Electric Light and Power Company of Baltimore, dated June 14, 1949, with memorandum in respect to proposed Electric Tariff.

[26796]

WM. SCHMIDT, JR.
Chairman of the Board and President

CHARLES P. CRANE
Executive Vice-President

CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE

Baltimore—3, Md.
June
Fourteenth
1949

FEDERAL POWER COMMISSION
DOCKETED
Jun. 15, 1949
NW
DOCKET SECTION
SECRETARY'S OFFICE

Received
June 15 2 13 PM '49
Federal Power Commission

Federal Power Commission,
Washington—25, D. C.

Re: Docket No. IT-5915

Gentlemen:

This will acknowledge receipt of your letter of June 2, 1949 enclosing a copy of proposed Electric Tariff of Pennsylvania Water & Power Company, issued May 27, 1949, and a copy of the Commission's Order dated January 5, 1949.

In response to your request for our comments and suggestions, we respectfully submit that, in our opinion, the proposed Tariff should be rejected and proper schedules established by the Commission pursuant to Paragraph E of its above Order.

A memorandum covering in detail the requested comments and suggestions is enclosed herewith.

Very truly yours,

WM. SCHMIDT, JR.
President.

[26797]

COMMENTS AND SUGGESTIONS OF CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE WITH RESPECT TO PROPOSED FEDERAL POWER COMMISSION ELECTRIC TARIFF OF PENNSYLVANIA WATER AND POWER COMPANY ISSUED MAY 27, 1949

The proposed Tariff is improper because—

1. It contravenes the Commission's Orders and accompanying Opinions Nos. 173 and 173A;
2. It contravenes the provisions of the contract of June 1, 1931, as amended, between Penn Water and the Baltimore Company;
3. It purports to constitute a filing on behalf of Safe Harbor and of Baltimore Company without the authority, approval, or concurrence of either of those companies;
4. It is discriminatory against Baltimore Company in that it imposes on Baltimore Company all of the risks of changing costs of operation and none of such risks are shared by the other customers of Penn Water;
5. It is designed to implement the contentions of Penn Water in its pending litigation to strike down its contracts with the Baltimore Company contrary to the Commission's stated intention to preserve the basic arrangement under said contracts;
6. It will have the effect of disrupting the over-all economical operation of the integrated system established by those contracts and, therefore,
7. It is opposed to the public welfare.

We believe that the public welfare will best be served under present conditions if the new Tariff be required by the Commission to conform to the following (This suggés-

tion is made without prejudice to the Baltimore Company's contractual rights or to any future redetermination of rates by the Commission because of intervening economic factors.)":

1. The new Tariff should be restricted to rates of Penn Water only.

2. The new Tariff should continue in effect the present contracts, subject only to the reduction of Penn Water's rates and charges thereunder and to the ultimate determination [26798] by the Courts of the rights and obligations of the respective companies.

3. The new Tariff should establish rates which are just, reasonable, and non-discriminatory for *all* customers.

The following comments are in elaboration of the foregoing:

1. The new Tariff should be restricted to rates of Penn Water only.

Schedules A, B, and D

Schedules A, B, and D have been filed by Penn Water purportedly on behalf of itself and Safe Harbor and conditioned upon the concurrence of Safe Harbor. This was done without the authority, consent, or concurrence of Safe Harbor. Baltimore Company, as 2/3 equity owner of Safe Harbor, protests such filing.

Schedules A and B are in direct disregard of the Commission's Opinion No. 173 (pp. 11, 19, 20 and 21) and finding No. 15 of the Order of January 5, 1949. The Commission found that Safe Harbor's contractual status is a nominal one only, that it cannot sell to others what it has already sold in its entirety to Penn Water and Baltimore Company, and that Penn Water *alone* sells power and energy to M. E., P. E., and P. P. & L.

The references and provisions as to "joint services" in the Tariff as filed by Penn Water are also in direct disregard of the Commission's Opinion No. 143 and Order of November 4, 1946 in Docket No. IT-5914, in the matter of Safe Harbor Water Power Corporation, which Order is now on appeal before the United States Court of Appeals for the Third Circuit. Subparagraph (a) of the paragraph "Contracts" in Opinion No. 143 and Paragraph D of the Order hold that Safe Harbor "makes no sales" to the above mentioned companies and that Safe Harbor has only two customers, viz., Penn Water and Baltimore Company. They are also inconsistent with the Tariff filed by Safe Harbor pursuant to the above Order.

The references and provisions as to "joint services" are also contrary to the terms and provisions of the contract of June 1, 1931 between Baltimore Company, Safe Harbor, and Penn Water under which Safe Harbor sells all of its capacity and energy one-third to Penn Water and two-thirds to Baltimore Company.

Paragraphs C and D of the Order of January 5, 1949 ordered Penn Water *alone* to file schedules for service to its Pennsylvania customers and to Baltimore Company. Schedules A, B, and D violate this Order as well as the above referred to findings and opinions and they should be rejected.

[26799]

Schedule E

Schedule E has been filed purportedly on behalf of Baltimore Company without any advance notice to Baltimore Company. Baltimore Company protests the issuance of such schedule as being in violation of its 50-year contract with Penn Water and of the

Opinions and Orders of the Commission as discussed below.

2. The new Tariff should continue in effect the present contracts between Baltimore Company and Penn Water.

Opinion No. 173, in its entirety, shows that the Commission's Orders contemplate a continuance of the arrangement for system operations established by the 50-year basic contract entered into in 1931 between Penn Water and Baltimore Company and the companion agreement with Safe Harbor Water Power Corporation. At p. 167, the Commission said:

> "It is not feasible, because of the nature of Penn Water's operations, for the latter to assume firm commitments to all its customers, including Baltimore Company. The present arrangement whereby sales to Pennsylvania customers are made on a firm basis on definite rate schedules whereas Baltimore Company takes what is left and assures Respondents of the recovery of all proper operating expenses, depreciation, taxes and a fair return, is the most practicable under the circumstances. That arrangement will, therefore, be continued with, however, such modifications as are necessary to accomplish the reductions mentioned above to Pennsylvania Power & Light, Philadelphia Company, Metropolitan Company and Baltimore Company."

This was repeated with approval in Opinion No. 173A (p. 9) in response to Penn Water's assertion in its Petition for Rehearing that it was prepared to show that it had served notice of termination of said long-term contracts and had brought suit to establish their invalidity. Opinion No. 173A (pp. 5, 6, 8, and 9) further stated:

"The contracts which Penn Water by the *ex parte* action thus alleged has sought to terminate are the fifty-year foundation contracts referred to in our former opinion. Under those contracts the steam and hydroelectric generating capacity and transmission facilities of Baltimore Company, Penn Water, Susquehanna, and Safe [26800] Harbor, were designed and constructed, and for up to 17 years and more operated, so as to achieve close integration and coordination among all of the companies. We pointed out in our opinion that such pooling of Baltimore Company's steam capacity with the hydro capacity of the other companies resulted in a much more economical supply of the combined power requirements of all the companies, including supply to Pepco in the Washington area."

"The regional integration and coordination of facilities, the resulting economies, and the utilization and conservation of natural resources thus achieved are precisely what was sought to be encouraged and fostered by the Federal Power Act and established as a part of the criterion of the public interest to be served by regulation thereunder (Cf. Section 202 (a))."

"Now, by the changes referred to in Penn Water's application for rehearing, all of the carefully built-up benefits of pool design, investment, construction and operation apparently are intended to be sacrificed by Penn Water. Penn Water's non-receipt of steam generated energy from outside Pennsylvania for sale to resale customers would destroy the pool economies under the established method of operation."

There can be no doubt that the evidence before the Commission, including that submitted by officers of Penn Water (Baltimore Company's Brief, pp. 45-48) supports the above quoted conclusions of the Commission. The schedules filed by Penn Water, if received and made effective, would severely impair and perhaps destroy the integrated coordinated economical utilization of the combined resources which the Commission has found to be in the public interest. Penn Water has previously signified its disregard for this in its attempt to break its contracts with Safe Harbor and Baltimore Company and in its suit in the United States District Court for the District of Maryland referred to in Opinion No. 173A (p. 5). The schedules as filed are consistent parts of Penn Water's contentions rather than compliance with the Commission's Orders and Opinions 173 and 173A. This is particularly shown by Schedule E, but also manifests itself in all of the schedules.

Schedule E

This schedule was filed purportedly on behalf of Baltimore Company but without any advance notice to or consent of Baltimore Company. It is contrary to the 50-year contracts and is in contravention [26801] of the above quoted portions of the Commission's Opinions. The "option" which Schedule E would give Penn Water to receive or not to receive "backfeed" is directly contrary to the free flow of energy according to the requirements of over-all system economy, as is called for by the contracts and the Commission's Order. Also, the placing of a charge on "backfeed" is contrary to the 1931 agreement and would have no meaning because such a payment by Penn Water to Baltimore Company would merely "wash out" as an operating expense in the

power bill between Penn Water and Baltimore Company (T. 20, 191-93, Baltimore Company's Reply Brief, pp. 9-10).

Schedule E was not called for by the Commission's Orders, is directly contrary to them, and should be rejected.

Schedules A, B, and C

The very filing of Schedule E confirms the conclusion that all of the schedules have been filed by Penn Water in an attempt to avoid the Commission's intention to preserve the basic arrangements under the 50-year contracts. Schedules A, B, and C constitute part of this attempt in that they have been designed to give to the Pennsylvania customers larger reductions than were ordered, thereby causing a smaller reduction to Baltimore Company. Primarily by eliminating all fuel rate adjustments, Penn Water would increase the rate reductions to the Pennsylvania customers from $220,943 on a 1946 basis to $644,140 on a 1948 basis, with the reduction to Baltimore Company correspondingly curtailed. Through the handling of the Pennsylvania Railroad revenues in Schedule D, discussed hereinafter, Penn Water has also increased its own revenues by approximately $200,000 at the expense of Baltimore Company. Baltimore Company alone would have to bear *all* of the increased costs of service because the schedules to the other customers omit fuel rate adjustments. Baltimore Company has urged such adjustments under its right to approve the contracts with the Pennsylvania customers since it is the only party burdened by the charges to the Pennsylvania customers.

The proposed schedules would destroy the incentive for coordinated economical utilization of the combined resources and would foster the disintegra-

tion of the system now sought by Penn Water. This was not intended by the Orders and Opinions 173 and 173A and the intent of the Commission should be accomplished by the issuance of schedules which properly apportion cost variations between the several customers of Penn Water rather than burden Baltimore Company with them in their entirety. This can be done most simply by changing as little as possible the existing contracts to the Pennsylvania customers, continuing the existing fuel rate adjustments and adding such an adjustment to the P. P. & L. schedule to avoid a discrimination that otherwise exists in favor of that customer. (Exhibit A, enclosed herewith, has illustrative schedules following this approach but bringing the fuel [26802] rate adjustments to a 1946 base.) A similar result would be obtained by establishing demand and energy rates for each customer on a 1946 basis as in the schedules issued by Penn Water but including in the schedules fuel rate adjustments which move from a 1946 base. (Exhibit B filed herewith shows illustrative schedules of this type.) The existing fuel rate adjustment clauses could be continued as to type but adjusted to a 1946 base—or a uniform clause could be placed on each schedule. Under any of these several suggestions, the purpose of the Commission to preserve the existing integrated and coordinated operations of the combined system would be accomplished under just, reasonable, and non-discriminatory rates. (See discussion below under (3).)

Schedule D

This schedule ignores the contracts as well as the Commission's Orders and Opinions. It contains two unnecessary subparagraphs (4 (a) and (b)) which suggest a hypothetical tax computation

whereby Baltimore Company could become responsible for taxes not actually paid by Penn Water. This is contrary to the contracts and the Commission's Order. It is not called for by Finding No. 37 of the Order of January 5, 1949. Subparagraphs 4 (a) and (b) (on original sheets 13 and 14 of the Tariff as issued) should not have been included, and the parenthetical exception of "other than Federal and State taxes in respect to income" should not have been stated in subparagraph (2) (original sheet, p. 15).

The computation as to Pennsylvania Railroad revenues in subparagraph (3) on original sheet No. 14 also deviates from the Commission's Order and the long-term contracts. As in the case of the Pennsylvania customer contracts, the fuel rate adjustment has been omitted. Also, Baltimore Company does not receive proper credit for the adjustment made by the Commission in relation to special facilities (Opinion 173, p. 142) in the amount of $141,777. The attached Exhibits A and B show suggested treatments of the computation of the power bill to Baltimore Company which are in accord with Finding No. 37 and the Orders and Opinions 173 and 173A of the Commission in their entirety.

Schedule D, as issued, should be rejected and a proper schedule issued by the Commission.

3. The new Tariff should establish rates which are just, reasonable, and non-discriminatory.

It is the Commission's statutory duty to see that the rates and charges of licensees and of public utilities subject to its jurisdiction [26803] are just, reasonable, and non-discriminatory (Federal Power Act, Section 20 and Sections 205, 206; 16 USCA, Secs. 813, 824d, 824e). The Orders and Opinions

here in question were intended to carry out this duty.

The schedules filed by Penn Water so change the ratio of the allocation of the reduction between the several customers as made on a 1946 basis that they necessarily result in a discrimination against Baltimore Company and possibly as between the several Pennsylvania customers of Penn Water. The evidence before the Commission showed fuel-rate adjustments related to the service to the Pennsylvania Railroad, Philadelphia Electric Company, and Metropolitan Edison Company. There was no evidence or argument that any one of these adjustments resulted in unjust, unreasonable, or discriminatory rates to any of the customers involved. Nevertheless, without any direction from the Commission, Penn Water has eliminated these adjustments from the proposed schedules. It is submitted that either the existing fuel rate adjustments or appropriate modifications of them should be included in any schedules which are permitted finally to become effective.

As to the service to Pennsylvania Power & Light Company, Mr. Thomas testified on behalf of Baltimore Company that a defect of the existing contract is the absence of any automatic fuel rate adjustment provisions (T. 1275-76). The original 1912 agreement with that Company (Exhibit 136, Article IX) provided:

> "This contract shall automatically renew itself for a further period of ten (10) years duration, at the option of the Receiving Company, provided a readjustment of rate for power to be determined by arbitration is made if insisted upon by either party, such readjustment based upon any increase in the cost of steam generated

power which might then exist as compared with the cost of steam generated power as of date of this contract."

The present agreement (Exhibit 76, Article I) provides for the continuance of "said agreement of October 9, 1912, as herein modified or extended." Under these provisions, Baltimore Company at the expiration of any current terms of the P. P. & L. contract, in exercising its power of approval of any extension or new agreement, would ask that a fuel adjustment clause be added so that P. P. & L. Co., like all other customers, should carry its fair share of increasing costs. The Commission, in following the Davis study (Exhibit No. 421) in making its allocation of the rate reduction between the several customers, applied to each customer an energy charge for the steam energy received by that customer which purported to compensate fully for the costs of steam generation in Baltimore. The proper projection of that allocation as the basis for future rates would require that each Pennsylvania [26804] customer of Penn Water have a proper automatic fuel adjustment clause as part of its service schedule. Only in this manner can discrimination be avoided, and, as indicated in part (2) above, only in this manner can the integrated coordinated economical utilization of the system resources be preserved in the manner contemplated by the Commission's Orders.

As argued by the Maryland Commission and Baltimore Company, this integrated coordinated economical utilization of the system resources results from Baltimore Company's unusual position as system guarantor and residual beneficiary of system operations. This is impaired by any action (regulatory or otherwise) which reduces Baltimore Com-

pany's ability to supervise and control the sales of power from the system to the Pennsylvania customers of Penn Water. It could be eventually destroyed by regulation which gave such customers rates which were freed of relation to the changing costs of steam generation.

Accordingly, in order to foster the integrated, unified, and economical operation which the Commission's Orders call for, it is essential that the reductions to the Pennsylvania customers of Penn Water be accomplished by schedules which contain proper fuel rate adjustments. (The attached Exhibits A and B contain illustrative schedules consistent with the Commission's Orders and Opinions which accomplish this result.)

[26805]

EXHIBIT A

Schedule A

RATE SCHEDULE A, Pennsylvania Power & Light Company

Pursuant to the Commission's Order issued January 5, 1949, the rate provisions of Article VI of the contract between Pennsylvania Water & Power Company, Safe Harbor Water Power Corporation and Pennsylvania Power & Light Company dated May 1, 1933, as supplemented and amended by Section (13) of the Letter-Agreement dated April 28, 1939 entitled "Credit for Greater Utilization of Generating Companies' Present Facilities" are hereby revised to read as shown below under the caption "Rates". All other provisions of said agreement as supplemented and amended, including amendment by the Letter-Agreement dated Feb. 19, 1946, remain unchanged.

RATES

The rates to be paid by Pennsylvania Power & Light Company to Pennsylvania Water & Power Company for power and energy shall be as follows:

6.10 mills per kilowatthour for the first 13.5 million kilowatthours of Lancaster Load Requirement supplied hereunder in each month.

6.0 mills per kilowatthour for all Lancaster Load Requirement supplied hereunder in excess of 13.5 million kilowatthours in each month.

3.5 mills per kilowatthour of Excess Energy supplied hereunder.

The above rates shall be subject to a fuel rate adjustment * determined in the following manner:

The monthly fuel rate adjustment will apply to the total Lancaster Load Requirement and Excess Energy supplied under this Contract; will be based on the proportion of steam-electric generation to the total generation of a combined system (which for this purpose includes the power systems of Pennsylvania Water & Power Company, Safe Harbor Water Power Corporation and Consolidated Gas Electric [26806] Light and Power Company of Baltimore) after adjustment for power interchange transactions by Pennsylvania Water & Power Company; will vary with the average pounds of coal used per kwh. (station send-out) in all of the steam-electric generating plants of the Consolidated Gas Electric Light and Power Company of Baltimore; and will vary with the increase or decrease in the average cost of coal as reported monthly by Consolidated Gas Electric Light and Power Company of Baltimore to the Public Service Commission of Maryland from a base price of $6.41 per net ton (1946 weighted average). The details of such monthly fuel rate adjustment computations are shown on the table below and will apply so long as the average price of coal per net ton during any month as reported by Consolidated Gas Electric Light and Power Company of Baltimore to the Public Service Commission of Maryland exceeds $6.66 or is less than $6.16 per net ton.

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* This is the Coatesville fuel rate adjustment formula adjusted to 1946 cost base.

Fuel Rate Adjustment Under Lancaster Power Supply Contract

$$\text{A. Ratio} = \frac{\text{Net Steam Generation}^{*}}{\text{Net Total Generation}^{**}} \quad \%$$

B. Total Lancaster Load Requirement and Excess Energy supplied kwh.

C. Average Pounds Coal per kwh. (Baltimore Steam Plants) #/kwh.

D. Cost of Coal per Net Ton (in bunkers of Baltimore steam plants) $

E. Variation in Dollars per Net Ton from $6.41 base price $

$$\text{Fuel Rate Adjustment} = A \times B \times C \times \frac{E}{2000} = \$$$

* Total Baltimore and Holtwood net steam generation less steam interchange sales to Pennsylvania ties plus steam interchange purchased from Pennsylvania ties.

** Total steam and hydro net generation less all interchange sales to Pennsylvania ties; plus all interchange purchased from Pennsylvania ties.

[26807]

EXHIBIT A

Schedule B

RATE SCHEDULE B, Philadelphia Electric Company

Pursuant to the Commission's Order issued January 5, 1949, the rate provisions of the contract between Pennsylvania Water & Power Company, Safe Harbor Water Power Corporation and Philadelphia Electric Company, dated August 1, 1933, as supplemented and amended by agreement dated December 13, 1938, and by letters between the parties dated February 8, 1944 and February 9, 1944, are hereby revised to read as set forth below under the caption "Rates". All other provisions of said agreement as supplemented and amended shall remain unchanged.

RATES

Philadelphia Electric Company shall pay Pennsylvania Water & Power Company for electrical supply described in Article II, Section 1 of the contract as amended by Sections 2 and 3 of the Agreement of December 13, 1938, a Demand Charge, an Energy Charge, and a Transmission Charge according to the following schedules:

Demand Charge

$1.35 per month per kilowatt for the first 2,500 kilowatts of Billing Demand.

$1.05 per month per kilowatt of Billing Demand above 2,500 kilowatts.

Energy Charge

3.83 mills per kilowatthour for the first 150 kilowatthours per month per kilowatt of the monthly maximum demand.

3.33 mills per kilowatthour for the next 250 kilowatthours per month per kilowatt of the monthly maximum demand.

2.83 mills per kilowatthour for all excess kilowatthours.

The above energy charges shall be subject to a fuel rate adjustment as set forth in the exchange of letters between the parties dated February 8, 1944 and February 9, 1944, except that the base coal price shall be $6.44 per net [26808] ton instead of $4.25 and shall apply only so long as the average price of coal per net ton during any month as reported by Consolidated Gas Electric Light and Power Company of Baltimore to the Public Service Commission of Maryland exceeds $6.69, or is less than $6.19 per net ton.

Transmission Charge

$5000.00 per month.

Note: If it is desired to retain the present base price of $4.25 per net ton in the fuel rate adjustment formula, the above energy rates must be further reduced by 0.67 mill per kwh.

[26809]

EXHIBIT A

Schedule C

RATE SCHEDULE C, Metropolitan Edison Company

Pursuant to the Commission's Order issued January 5, 1949, the rate provisions of Article V, Section 5 of the contract dated November 15, 1945 between Pennsylvania Water & Power Company and Metropolitan Edison Company are hereby revised to read as set forth below under the caption "Rates". All other provisions of said contract, including the provisions of Sections 1, 2, 3, 4, 6 and 7 of Article V, shall remain unchanged.

RATES

Article V, Section 5, is revised to read as follows:

The monthly energy charges specified in Sections 3 and 4 hereof shall be subject to monthly adjustment based upon changes in cost of fuel to Metropolitan. The charges per kilowatthour in any month shall be increased or decreased one (1) per cent for each ten (10) cent increase above or decrease below $5.90 per net or short ton in the average cost of bituminous coal and freight only, on hand and delivered at Metropolitan's steam generating stations during the second preceding calendar month.

Note: If it is desired to retain the present base price of $5.00 per net ton in the fuel rate adjustment it would be necessary to reduce each of the energy rates in Article V, Section 3 by 0.29 miles per kwh.

[26810]

EXHIBIT A

Schedule D

RATE SCHEDULE D, Consolidated Gas Electric Light & Power Company of Baltimore

Pursuant to the Commission's Order issued January 5, 1949, all rate provisions of the contract between Pennsylvania Water & Power Company (hereinafter referred to as Holtwood Company) and Consolidated Gas Electric Light and Power Company of Baltimore (hereinafter referred to as Baltimore Company) dated December 31, 1927, as supplemented and amended by agreements dated December 27, 1928, June 1, 1931 and September 29, 1939, are hereby amended as set forth below under the caption "Rates". All other provisions of said contract as supplemented and amended shall remain unchanged.

RATES

The gross annual charge by Holtwood Company to Baltimore Company under this contract, without regard to the amount of energy, capacity or other services or facilities actually furnished, shall be computed in accordance with the following formula:

(A) Add the following amounts:

(1) 5¼% of the rate base computed in accordance with paragraph (35) of the findings contained in the Order of the Federal Power Commission issued January 5, 1949 in its Docket No. IT-5915.

(2) All reasonable and necessary operating expenses of Holtwood Company (including taxes and payments by Holtwood Company

for power and energy purchased from Safe Harbor Water Power Corporation and others) and depreciation expenses calculated as referred to in paragraphs (27) and (28) of such findings in such Order.

(B) Deduct the sum of the following amounts from the sum of the amounts in paragraph (A) above:

(1) The Conowingo backwater payment.

(2) All electric revenues received from others, including Metropolitan Edison Company, Philadelphia Electric Company, Pennsylvania Power & Light Company, but excluding revenue received from the Pennsylvania Railroad Company.

(3) To the extent Holtwood Company receives any revenue from [26811] the Pennsylvania Railroad, the amount computed by deducting the amount of $141,777 (revenue received by Holtwood Company for special facilities for services to Pennsylvania Railroad in Maryland) from the product obtained by multiplying

(a) the total kilowatthours of energy sold by Holtwood Company to Pennsylvania Railroad (determined in accordance with the Operating Committee Agreement of March 3, 1937, Exhibit #470 IT-5915)

by

(b) a rate in mills per kilowatthour obtained by subtracting 1.042 mills per kilowatthour from the rate obtained by dividing

(1) the total amount of revenues received by Baltimore Company under the contract with Pennsylvania Railroad

dated September 2, 1931 as amended by supplemental agreements dated August 15, 1934 and June 22, 1938 on behalf of the supplying companies

by

(2) the total kilowatthours delivered to the Pennsylvania Railroad under said contract.

(4) The income taxes associated with revenues received by Holtwood Company from Pennsylvania Railroad in excess of the deduction computed under item (3) above.

The net payment to be made by Baltimore Company to Holtwood Company shall be determined by crediting the following amounts against the gross annual charge by Holtwood Company to Baltimore Company computed as set forth above:

1. The net revenue received by Holtwood Company from interchange power transaction. (This credit necessary only if not included in A (2) or B (2) above. See Opinion #173, p. 142.)
2. The amount of $141,777 paid by Baltimore Company (through normal allocation of Railroad revenue) to Holtwood Company for special facilities for service to Pennsylvania Railroad in Maryland. (See Opinion #173, p. 142.)

If the sum of the credits exceeds the gross annual charge by Holtwood Company, the excess of such credits shall be paid by Holtwood Company to Baltimore Company.

The annual amount to be paid hereunder shall be estimated by the parties hereto in advance, and shall be paid as nearly as possible in equal monthly installments, with subsequent adjustment to the correct yearly payments.

[26812]

Exhibit B

Schedule A

RATE SCHEDULE A, PENNSYLVANIA POWER & LIGHT COMPANY

Pursuant to the Commission's Order issued January 5, 1949, the rate provisions of Article VI of the contract between Pennsylvania Water & Power Company, Safe Harbor Water Power Corporation and Pennsylvania Power & Light Company dated May 1, 1933, as supplemented and amended by section (5) entitled "Continuation of 4,000 Volt Service at Holtwood Power House", section (7) entitled "Manor Substation and Transmission Line" and section (13) entitled "Credit for Greater Utilization of Generating Companies' Present Facilities" of the Letter Agreement dated April 28, 1939, are hereby revised to read as shown below under the caption "Rates." All other provisions of said agreement as supplemented and amended, including amendment by the Letter Agreement dated February 19, 1946, remain unchanged.

Rates

The rates to be paid by Pennsylvania Power & Light Company to Pennsylvania Water & Power Company for power, energy and special facilities shall be as follows:

Demand Charge:

$1.38 per month per kilowatt of Billing Demand.

Energy Charge:

2.5 mills per kilowatthour for the Lancaster Load Requirements and Excess Energy supplied, except 4,000 volt service at Holtwood.

6.0 mills per kilowatthour for 4,000 volt service at Holtwood.

Reactive Charge:

0.2 mills per lagging reactive kilovolt-ampere-hour for all such kilovolt-ampere-hours supplied per month numerically in excess of 50% of the kilowatthours of energy supplied under this rate schedule in that month.

[26813]

Special Facilities Charge:

$965 per month.

Billing Demand:

The billing demand in any month shall be the maximum power requirement of the services specified in the existing contract (excluding Excess Energy under Article IV of the contract dated May 1, 1933), measured on a clock one-hour integrated basis in units of 1,000 kilowatts (1,000 kwh. per hour) during that month or the preceding eleven months. The 4,000-volt service at Holtwood is excluded in the determination of the Billing Demand.

Fuel Rate Adjustment:*

The energy charge specified above shall be subject to fuel rate adjustment as follows:

The monthly fuel rate adjustment will apply to the total Lancaster Load Requirement, Excess Energy and 4,000 Volt Service supplied under this contract; will be based on the proportion of steam-electric generation to the total generation of a combined system (which for this purpose includes the power systems of Pennsylvania Water & Power Company, Safe Harbor Water Power

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* This is the Coatesville fuel rate adjustment formula adjusted to 1946 cost base.

Corporation and Consolidated Gas Electric Light and Power Company of Baltimore) after adjustment for power interchange transactions by Pennsylvania Water & Power Company; will vary with the average pounds of coal used per kwh. (station sendout) in all of the steam-electric generating plants [26814] of the Consolidated Gas Electric Light and Power Company of Baltimore; and will vary with the increase or decrease in the average cost of coal as reported monthly by Consolidated Gas Electric Light and Power Company of Baltimore to the Public Service Commission of Maryland from a base price of $6.41 per net ton (1946 weighted average). The details of such monthly fuel rate adjustment computations are shown on an attached sheet and will apply so long as the average price of coal per net ton during any month as reported by Consolidated Gas Electric Light and Power Company of Baltimore to the Public Service Commission of Maryland exceeds $6.66 or is less than $6.16 per net ton.

[26815]

FUEL RATE ADJUSTMENT UNDER LANCASTER POWER SUPPLY CONTRACT

$$A\text{—Ratio} = \frac{\text{Net Steam Generation}^*}{\text{Net Total Generation}^{**}} \quad \%$$

B—Total Lancaster Load Requirements and Excess Energy and 4000 volt service supplied kwh.

C—Average Pounds Coal per kwh. (Baltimore Steam Plants) #/kwh.

D—Cost of Coal per Net Ton (in bunkers of Baltimore steam plants) $

E—Variation in Dollars per Net Ton from $6.41 base price $

$$\text{Fuel Rate Adjustment} = A \times B \times C \times \frac{E}{2000} = \$$$

*Total Baltimore and Holtwood net steam generation.

Less steam interchange sales to Pennsylvania ties.

Plus steam interchange purchased from Pennsylvania ties.

**Total steam and hydro net generation

Less all interchange sales to Pennsylvania ties.

Plus all interchange purchased from Pennsylvania ties.

[26816]

Exhibit B

Schedule B

RATE SCHEDULE B, PHILADELPHIA ELECTRIC COMPANY

Pursuant to the Commission's Order issued January 5, 1943, the provisions of Sections 1, 2 and 4 of Article III of the contract between Pennsylvania Water & Power Company, Safe Harbor Water Power Corporation and Philadelphia Electric Company, dated August 1, 1933, as supplemented and amended by agreement dated December 13, 1938, and by letters between the parties dated February 8, 1944 and February 9, 1944, are hereby revised to read as set forth below under the caption "Rates." All other provisions of said agreement as supplemented and amended shall remain unchanged.

Rates

Philadelphia Electric Company shall pay Pennsylvania Water & Power Company for electrical supply described in Article II, Section 1 of the contract as amended by Sections 2 and 3 of the agreement of December 13, 1938, a Demand Charge, an Energy Charge, a Reactive Charge and a Transmission Charge according to the following schedule:

Demand Charge:

$1.38 per month per kilowatt of Billing Demand.

Energy Charge:

2.5 mills per kilowatthour.

Reactive Charge:

0.2 mills per lagging reactive kilovolt-ampere-hour for all such kilovolt-ampere-hours supplied per month numerically in excess of 50% of the kilowatthours of energy supplied under this rate schedule in that month.

Special Facilities Charge:

$6,559.00 per month.

Billing Demand:

The Billing Demand in any month shall be an amount equal [26817] to the maximum power requirement of the services specified in the existing service contract (excluding emergency supply under Article II, Section 2 of the contract dated August 1, 1933), measured on a clock one-hour integrated basis in units of 1,000 kilowatts (1,000 kwh. per hour) during that month or the preceding eleven months.

Fuel Rate Adjustment:

The above energy charges shall be subject to a fuel rate adjustment as provided for in Article II, Section 4 of the contract and as set forth in the exchange of letters between the parties dated February 8, 1944 and February 9, 1944, except that the base coal price shall be $6.44 per net ton instead of $4.25 and shall apply only so long as the average price of coal per net ton during any month as reported by Consolidated Gas Electric Light and Power Company of Baltimore to the Public Service Commission of Maryland exceeds $6.69 or is less than $6.19 per net ton.

[26818]

Exhibit B

Schedule C

RATE SCHEDULE C, METROPOLITAN EDISON COMPANY

Pursuant to the Commission's Order issued January 5, 1949, the rate provisions of Articles V and VI of the contract dated November 15, 1945 between Pennsylvania Water & Power Company and Metropolitan Edison Company are hereby revised as set forth under the caption "Rates." All other provisions of said contract shall remain unchanged.

Rates

The rates for service under this rate schedule are as follows:

Demand Charge:

$1.38 per month per kilowatt of specified firm power.

$0.40 per 1,000 kilowatts of spinning reserve capacity for each clock hour in which such capacity is provided.

Energy Charge:

(a) 3.5 mills per kilowatt hour for energy supplied in any month in the portion of the customer's total requirements above its steam line.

(b) 2.75 mills per kilowatt hour for energy supplied in any month, between the hours of 7 a.m. and 9 p.m. Eastern Standard Time, or Daylight Saving Time when in effect, on all days except Sundays and holidays in the customer's specified area, in excess of energy billed under Section (a) above.

(c) 2.0 mills per kilowatt hour for all additional energy supplied in any month in excess of energy billed under Sections (a) and (b) above.

Reactive Charge:

0.2 mills per lagging reactive kilovolt-ampere-hour for all such kilovolt-ampere-hours supplied per month numerically in excess of 50% of the kilowatt hours [26819] of energy supplied under this rate schedule plus kilowatt hours use of spinning reserve capacity in that month.

Special Facilities Charge:

$2,751.00 per month.

Fuel Rate Adjustment:

The above energy charges shall be subject to monthly adjustment based upon changes in cost of fuel to Metropolitan Edison Company. The charges per kilowatt hour in any month shall be increased or decreased one (1) per cent for each ten (10) cent increase above or decrease below $6.00 per net or short ton in the average cost of bituminous coal and freight only, on hand and delivered at Metropolitan's steam generating stations during the second preceding calendar month.

[26820]

Exhibit B

Schedule D

RATE SCHEDULE D, CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE

Pursuant to the Commission's Order issued January 5, 1949, all rate provisions of the contract between Pennsylvania Water & Power Company (hereinafter referred to as Holtwood Company) and Consolidated Gas Electric Light and Power Company of Baltimore (hereinafter referred to as Baltimore Company) dated December 31, 1927, as supplemented and amended by agreements dated December 27, 1928, June 1, 1931 and September 29, 1939, are hereby amended as set forth below under the caption "Rates". All other provisions of said contract as supplemented and amended shall remain unchanged.

Rates

The gross annual charge by Holtwood Company to Baltimore Company under this contract, without regard to the amount of energy, capacity or other services or facilities actually furnished, shall be computed in accordance with the following formula:

(A) Add the following amounts:

(1) 5¼% of the rate base computed in accordance with paragraph (35) of the findings contained in the Order of the Federal Power Commission issued January 5, 1949 in its Docket No. IT-5915.

(2) All reasonable and necessary operating expenses of Holtwood Company (including taxes and payments by Holtwood Company for power and energy purchased from Safe Harbor Water Power Corporation and others)

and depreciation expenses calculated as referred to in paragraphs (27) and (28) of such findings in such Order.

(B) Deduct the sum of the following amounts from the sum of the amounts in paragraph (A) above:

(1) The Conowingo backwater payment.

(2) All electric revenues received from others, including Metropolitan Edison Company, Philadelphia Electric Company, Pennsylvania Power & Light Company, but excluding revenue received from the Pennsylvania Railroad Company.

[26821]

(3) An amount, to the extent Pennsylvania Water & Power Company receives any revenue from the Pennsylvania Railroad, computed as the sum of:

(a) 1.657 mills per kilowatt hour [illegible]es the portion of the annual energy supplied in Pennsylvania to the Pennsylvania Railroad, under a contract dated September 2, 1931, as amended by agreements dated August 15, 1934 and June 22, 1938, between The Pennsylvania Railroad Company, the issuing company, Safe Harbor Water Power Corporation and others.

(b) $16.61 per kilowatt per year times the portion of the total billing demand of the Pennsylvania Railroad supply under the contract referred to in paragraph (a), which portion of the demand is to be the annual maximum among the products for each month of the year of the monthly billing demand and the ratio for that month of the energy supplied to the Penn-

sylvania Railroad in Pennsylvania to the total energy supplied to the Pennsylvania Railroad under such contract.

(c) An annual amount of $109,289.

(d) The portion of the annual fuel rate adjustment, billed to the Pennsylvania Railroad under the contract referred to in paragraph (a), applicable to energy supplied to the Pennsylvania Railroad in Pennsylvania; said portion to be determined as the sum of the products for each month of the total monthly fuel rate adjustment and the ratio for that month of the energy supplied to the Pennsylvania Railroad in Pennsylvania to the total energy supplied to the Pennsylvania Railroad under the contract.

(4) The income taxes associated with revenues received by Holtwood Company from Pennsylvania Railroad in excess of the deduction computed under item (3) above.

The net payment to be made by Baltimore Company to Holtwood Company shall be determined by crediting the following amounts against the gross annual charge by Holtwood Company to Baltimore Company computed as set forth above:

1. The net revenue received by Holtwood Company from interchange power transaction. (This credit necessary only if not included in A (2) or B (2) above. See Opinion #173, p. 142).
2. The amount of $141,777 paid by Baltimore Company (through normal allocation of Railroad revenue) to Holtwood Company for special facilities for service to Pennsylvania Railroad in Maryland. (See Opinion #173, p. 142).

If the sum of the credits exceeds the gross annual charge by Holtwood Company, the excess of such credits shall be paid by Holtwood Company to Baltimore Company.

[26822]

The annual amount to be paid hereunder shall be estimated by the parties hereto in advance, and shall be paid as nearly as possible in equal monthly installments, with subsequent adjustment to the correct yearly payments.

Letter to Federal Power Commission from Pennsylvania Water & Power Company, dated June 24, 1949, objecting to comments of Consolidated Gas Electric Light and Power Company of Baltimore.

[26823]

(Letterhead of)

PENNSYLVANIA WATER & POWER COMPANY
Lexington Building
Baltimore 3, Md.

June 24, 1949

Received
Jun 27 9 40 AM '49
Federal Power Commission
FEDERAL POWER COMMISSION
DOCKETED
Jun. 27, 1949
DOCKET SECTION
SECRETARY'S OFFICE

Re: Docket No. IT-5915
Mr. Leon M. Fuquay, Secretary
Federal Power Commission
Washington—25, D. C.
Dear Sir:

Under date of June 21, 1949, we received from Consolidated Gas Electric Light and Power Company of Baltimore a copy of its letter to you with attached memorandum relating to the proposed electric tariff of respondent company, issued May 27, 1949, in the above docket number.

We wish to advise the Commission that we find such comments of Consolidated Gas Electric Light and Power Company of Baltimore erroneous and its suggestions contrary to Order and Opinion No. 173 of the Commission dated January 5, 1949.

Yours very truly,

G. W. SPAULDING
G. W. Spaulding
Executive Vice President

GWS:F

Letter to Pennsylvania Water & Power Company from Federal Power Commission, dated October 27, 1949, transmitting Order entered by the Commission on October 25, 1949.

[26847]

Oct 27 1949

Pennsylvania Water & Power Company
Lexington Building
Baltimore, Maryland

443776

Re: Pennsylvania Water & Power Company and Susquehanna Transmission Company of Maryland
Docket No. IT-5915

FEDERAL POWER COMMISSION
DOCKETED
Oct. 27, 1949
ES
DOCKET SECTION
SECRETARY'S OFFICE
100-2 Formal

Gentlemen:

Enclosed is the order entered by the Commission on October 25, 1949, in the above entitled matter.

Very truly yours,

LEON M. FUQUAY
Secretary.

Enclosure
Registered

ES

Same letter sent Registered to:

Susquehanna Transmission Company of Maryland, Lexington Building, Baltimore, Maryland 443777

The Mayor and City Council of Baltimore, 729 Munsey Building, Baltimore, Maryland, Att: Thomas J. Tingley, Assistant City Solicitor 443778

County Commissioners of Baltimore County, Baltimore, Maryland, Att: Michael P. Smith, Counsel 443779

Rustless Iron & Steel Corporation, Baltimore, Maryland, Att: John H. Lewin, Counsel 443780

Charles Harris, General Counsel, Public Service Commission of Maryland, Baltimore, Maryland 443781

Charles E. Thomas, Counsel, Pennsylvania Public Utility Commission, Harrisburg, Pennsylvania 443782

G. Kenneth Reiblich, Esquire, 1707 Lexington Building, Baltimore, Maryland (Attorney, Consolidated Gas Electric Light & Power Company of Baltimore) 443783

Safe Harbor Water Power Corporation, Lexington Building, Baltimore, Md. 443784

[26848]

10/25/49

Docket No. IT-5915

Copy of order sent to:

The Mayor and City Council of Baltimore, 729 Munsey Building, Baltimore, Maryland, Att: Simon E. Sobeloff, City Solicitor of Baltimore

Messrs. Hewes & Awalt, 822 Connecticut Avenue, N. W., Washington. D. C. (for Appls.)

William B. Rafferty, Esquire, Lexington Building, Baltimore, Maryland (Consolidated Gas Electric Light & Power Company of Baltimore)

20 copies—Messrs. Awalt, Sparks, Myse and King, 822 Connecticut Avenue, N. W., Washington, D. C. (for Appls.)

E. M. Sturtevant, Esquire, Clarence W. Miles, Esquire, 1707 Lexington Building, Baltimore, Maryland (Consolidated Gas Electric Light and Power Co. of Baltimore)

George T. Hambright, Esquire, 56 North Duke Street, Lancaster, Pennsylvania (Pennsylvania Water and Power Company)

George Ross Hull, Esquire, Kline Building, 208-210 Walnut Street, Harrisburg, Pennsylvania (Pennsylvania Water and Power Company)

John C. Kelley, Associate Counsel, Pennsylvania Public Utility Commission, Harrisburg, Pennsylvania (for Pennsylvania Water & Power Company)

Mr. Bernard J. Sowa, 1533 East 72nd Street, Chicago 19, Illinois

Mr. Shirley C. Morgan, Equitable Building, Baltimore, Maryland

Mr. H. Arthur Wormcke, Trust Department, Hartford National Bank & Trust Company, Hartford, Connecticut

Pennsylvania Power and Light Company, 901 Hamilton Street, Allentown, Pennsylvania

Philadelphia Electric Company, 1000 Chestnut Street, Philadelphia, Pennsylvania

Metropolitan Edison Company, 412 Washington Street, Reading, Pennsylvania

Alfred P. Ramsey, Esquire, 1707 Lexington Building, Baltimore, Maryland (Consolidated Gas Electric Light & Power Company of Baltimore)

Thomas N. Biddison, City Solicitor, 217 Court House, City of Baltimore, Maryland

Securities and Exchange Commission, 425 Second Street, N. W., Washington, D. C.

cc: Regional Office: New York
Law; Publications; Rates; Power; AFR

ES:en 10/26/49

Letter to Pennsylvania Water & Power Company from Federal Power Commission, dated December 15, 1949, transmitting Order entered by the Commission on December 14, 1949.

[26876]

FEDERAL POWER COMMISSION
DOCKETED
Dec 15 1949
ES

Dec 15 1949

DOCKET SECTION
SECRETARY'S OFFICE
100-2 Formal
443301

Pennsylvania Water & Power Company
Lexington Building
Baltimore, Maryland

Re: Pennsylvania Water & Power Company
Docket No. IT-5915

Gentlemen:

Enclosed is the order entered by the Commission on December 14, 1949, in the above entitled matter.

Very truly yours,
LEON M. FUQUAY
Secretary.

Enclosure—Registered

Same letter sent to:

Charles Harris, Esq., Public Service Commission of Maryland, Baltimore, Md. 443302

Susquehanna Transmission Co. of Md. Lexington Bldg., Baltimore, Md. 443303

Charles E. Thomas, Counsel, Public Utility Commission, Harrisburg, Pa. 443304

G. Kenneth Reiblich, Esq., Consolidated Gas Electric Light & Power Company of Baltimore, 1707 Lexington Bldg., Baltimore, Md. 443305

Copy of order sent to:

The Mayor and City Council of Baltimore, 729 Munsey Bldg., Baltimore, Md. Att: T. J. Tingley, Asst. City Solicitor

Michael Paul Smith, Counsel, County Commissioners of Baltimore County, Balto. Md.

Rustless Iron and Steel Corporation, Baltimore, Md. Att: J. H. Lewin, Counsel

Safe Harbor Water Power Corp., Lexington Bldg., Baltimore, Md.

(20) copies—Messrs. Hewes & Awalt, Attys., 822 Connecticut Ave., N. W., Washington (Pennsylvania Water & Power Co. & Susquehanna Transmission Co.)

William B. Rafferty, Esq., Lexington Bldg., Baltimore, Md. (Consolidated)

F. G. Awalt, Raymond Sparks, D. A. Myse and P. C. King, Jr., 822 Connecticut Avenue, N. W., Washington, D. C. (Consolidated)

E. M. Sturtevant and Clarence W. Miles, Attys., Lexington Bldg., Baltimore, Md. (Consolidated)

George T. Hambright, Esq., 56 North Duke Street, Lancaster, Pa. (Pennsylvania)

George Ross Hull, Esq., Kline Bldg., 208-210 Walnut St., Harrisburg, Pa. (Penn)

John C. Kelley, Associate Counsel, Pennsylvania Public Utility Commission, Harrisburg, Pa.

Mr. Bernard J. Sowa, 1533 East 72nd St., Chicago, Illinois

Mr. Shirley C. Morgan, Equitable Building, Baltimore, Md.

Mr. H. Arthur Wormcke, Hartford National Bank & Trust Co., Trust Dept., Hartford, Connecticut

Securities and Exchange Commission, 425 2nd Street, N. W., Washington, D. C.

Pennsylvania Power & Light Co., 901 Hamilton St., Allentown, Pa.

Philadelphia Electric Co., 1000 Chestnut St., Philadelphia, Pa.

Metropolitan Edison Company, 412 Washington St., Reading, Pa.

Alfred P. Ramsey, Esq., 1707 Lexington Bldg., Baltimore, Md. (Consolidated)

Thomas N. Biddison, City Solicitor, 217 Court House, Baltimore, Md.

Randall J. LeBoeuf, Jr., Esq., 15 Broad St., New York, New York (Penn.)

cc: Regional Office—New York, Law, Publications, AFR, Power and Rates
ES:dlp 12/15/49

Vol. XVI

TRANSCRIPT OF RECORD

(Pages 4807 to 5221)

Supreme Court of the United States

OCTOBER TERM, 1951

No. 428

PENNSYLVANIA WATER AND POWER COMPANY AND SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND, PETITIONERS,

vs.

FEDERAL POWER COMMISSION ET AL.

No. 429

PENNSYLVANIA PUBLIC UTILITY COMMISSION, PETITIONER,

vs.

FEDERAL POWER COMMISSION

ON WRITS OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

PETITIONS FOR CERTIORARI FILED NOVEMBER 16, 1951

CERTIORARI GRANTED FEBRUARY 4, 1952

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IN THE

United States Court of Appeals

FOR THE DISTRICT OF COLUMBIA CIRCUIT.

No. 10236.

PENNSYLVANIA WATER & POWER COMPANY, A CORPORATION, AND SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND, A CORPORATION,
Petitioners,

v.

FEDERAL POWER COMMISSION,
Respondent.

PETITION FOR REVIEW.

(Filed April 22, 1949.)

To the Honorable, the Judges of the United States Court of Appeals for the District of Columbia Circuit:

PENNSYLVANIA WATER & POWER COMPANY (Penn Water), Petitioner, being aggrieved on its own behalf by an "Order Reducing Rates", issued by the Federal Power Commission (the Commission) January 5, 1949, being so aggrieved by an order issued February 28, 1949, denying rehearing of and amending the order issued January 5, 1949, and amending an order issued January 31, 1949, and being so aggrieved by an order issued March 17, 1949, denying rehearing of the order issued February 28, 1949, all of which orders were issued by the Commission in its Docket No. IT-5915; Penn Water being separately and independently so aggrieved by such orders as the owner of one-half of the Class B voting stock of Safe Harbor Water Power Corporation (Safe Harbor), said Safe Harbor being unable to intervene in this proceeding to protect its interests because of a deadlock in its Board of Directors, as set forth in Petitioners' Application for Rehearing of the Com-

mission's order of January 5, 1949, to be hereinafter referred to; and Penn Water also being separately and independently so aggrieved by such orders as agent for and on behalf of Safe Harbor under the provisions of certain contracts for joint services rendered to Pennsylvania Power & Light Company (PP & L) and Philadelphia Electric Company (Philadelphia Company); and SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND (Transmission Company), Petitioner, also being aggrieved by such orders; hereby file this their Petition for Review under Section 313 (b) of the Federal Power Act (16 U. S. C. § 825-l (b); 49 Stat. 860), and pursuant to Rule 38 of this Court, to review, hold unlawful, and set aside such orders of January 5, 1949, February 28, 1949, and March 17, 1949, certain findings and conclusions incorporated therein, and certain preliminary, procedural, and intermediate orders, actions and rulings of the Commission in its Docket No. IT-5915, in accordance with the provisions of Section 10 of the Administrative Procedure Act (5 U. S. C. § 1009; 60 Stat. 243); and Petitioners represent and show to the Court:

The Nature of the Proceedings as to Which Review Is Sought.

I. Petitioner, Penn Water, is a corporation organized under the laws of the Commonwealth of Pennsylvania, and owns and operates a hydro-electric generating plant and a steam-electric generating plant on the Susquehanna River at Holtwood, Pennsylvania; and it also owns and operates electric transmission lines wholly within Pennsylvania radiating therefrom. It generates, transmits, distributes, and renders hydro and steam electric power and other services for use in public service. Construction of Penn Water's hydro-electric generating plant began in 1905 and commercial operation began in 1911. On November 3, 1939, the Commission found and required that Penn Water should apply for and obtain a license from the Commission for

its then existing hydro-electric project under the provisions of Part I of the Federal Power Act (16 U. S. C. §§ 791a *et seq.;* 41 Stat. 1063; 46 Stat. 797; 49 Stat. 838). After application the Commission ordered a license issued on November 23, 1943, but such order was stayed by the Commission on application for rehearing by Penn Water with respect to certain of the conditions imposed by the Commission.

II. Petitioner, Transmission Company, is a corporation organized under the laws of the State of Maryland, a wholly owned subsidiary of Penn Water, and owns transmission lines wholly within Maryland, some of which are connected to the transmission lines of Penn Water at the Pennsylvania-Maryland State line.

III. Safe Harbor is a Pennsylvania corporation, and owns and operates a hydro-electric generating plant, on the Susquehanna River in Pennsylvania, a short distance above the Holtwood Plant of Penn Water. Its hydro-electric plant is connected to the Holtwood plant by means of the transmission lines of Penn Water; and all of the output generated at the Safe Harbor plant is received on and transmitted by the transmission lines of Penn Water. Penn Water and Consolidated Gas Electric Light & Power Company of Baltimore (Baltimore Company) each owns one-half of the voting stock of Safe Harbor; and membership on the Safe Harbor Board of Directors is divided evenly between nominees of each of the two stockholders.

IV. Penn Water and Safe Harbor have entered into a number of contracts for the purchase or exchange of energy, for the rendering of transmission and other services, and for the disposition of the electrical resources available at their respective plants.

V. Penn Water, Safe Harbor, and Baltimore Company, with a specified participation by Potomac Electric Power Company (PEPCO), are jointly obligated under a contract with The Pennsylvania Railroad Company (Railroad) for

the furnishing of services to the Railroad for electrified railroad use in specified areas in Pennsylvania and Maryland. The revenues are collected under this contract by Baltimore Company as agent for the other suppliers, and divided between Penn Water and Baltimore Company by a separate agreement.

VI. Penn Water and Safe Harbor are jointly obligated under a contract with PP & L for the furnishing of services to PP & L in its Lancaster and Harrisburg, Pennsylvania, territories. Penn Water and Safe Harbor are also jointly obligated under a contract with Philadelphia Company for the furnishing of services to the latter in its Coatesville, Pennsylvania territory. Revenues from these two contracts are collected by Penn Water as agent for Safe Harbor. Safe Harbor receives its revenues for its services rendered under these contracts, as well as the services it renders under the Railroad contract and all of its other contracts, under a three-party contract between Penn Water, Baltimore Company, and Safe Harbor, hereinafter referred to.

VII. Penn Water furnishes services to Metropolitan Edison Company (Metropolitan Company) under a contract for the supply of such services to Metropolitan Company in a specified area in Pennsylvania. Penn Water, and in some cases Safe Harbor, are parties to other ancillary contracts providing for interchange of energy and coordination of services and facilities between the parties.

VIII. Under an agreement dated December 31, 1927, as amended on December 27, 1928, June 1, 1931, and September 29, 1939, Penn Water agreed to furnish certain services including the use by Baltimore Company of certain specified facilities, and agreed to supply Baltimore Company all electrical capacity and energy available to Penn Water at its Holtwood plant and from Safe Harbor (under the three-party contract next referred to), not otherwise disposed of under other contracts. Baltimore

Company agreed to pay specified amounts in accordance with a formula set forth therein, without regard to the amount of electrical services received. Baltimore Company also agreed to supply, at Penn Water's request, steam-generated electric energy under specified conditions and at a specified cost rate, plus ten per cent, applied to the daily net amount of backfeed supplied.

IX. On June 1, 1931, the same date as a substantial amendment of the foregoing two-party agreement between Penn Water and Baltimore Company, and when all three parties were affiliated under common control, Safe Harbor, Penn Water, and Baltimore Company also entered into a three-party contract. This three-party contract, as supplemented by amendments dated August 1, 1932, and November 22, 1939, provided for the payment to Safe Harbor by Penn Water and Baltimore Company, in specified proportions, of all costs of Safe Harbor, plus a specified return, less revenues received from others, without regard to the amount of power actually furnished. The contract provided for the entitlement by Penn Water and Baltimore Company, in specified proportions, to all of the capacity and daily energy available from the Safe Harbor plant, after deducting the capacity and energy required for the performance of the duties or obligations to serve imposed on Safe Harbor by its charter or otherwise by law. Safe Harbor, with the written consent of Baltimore Company and Penn Water, obligated itself to render services under the contracts with the Railroad, PP & L, and Philadelphia Company. As a part of the provisions of the three-party contract Penn Water agreed to construct transmission facilities between Safe Harbor and Baltimore Company, and to transmit under certain conditions and limitations any energy sold by Safe Harbor to Baltimore Company.

X. By order dated September 1, 1944, the Commission issued and instituted in its Docket No. IT-5915 a general order of investigation to determine whether any rates, charges, classifications, rules, regulations, practices, or con-

tracts of Penn Water, subject to the jurisdiction of the Commission, are unjust, unreasonable, unduly discriminatory, or preferential. There was no specification of which of Penn Water's rates, charges, etc., were subject to the jurisdiction of the Commission; nor was there any specification of the issues with respect to any of its rates, charges, etc. On the same date, in a separate Docket No. IT-5914, the Commission instituted a similar general investigation with respect to Safe Harbor. By order dated October 3, 1944, the proceeding in Docket No. IT-5915 was enlarged to include Transmission Company as a respondent. The Pennsylvania Public Utility Commission (Pennsylvania Commission), the Public Service Commission of Maryland (Maryland Commission), and Baltimore Company were permitted to intervene in Docket No. IT-5915. Prior to commencement of hearings Penn Water filed a Petition with the Commission requesting dismissal of the proceeding or in any event specification of the issues. This Petition was denied by order of the Commission dated April 5, 1946. Hearings began on April 15, 1946, and were closed on July 16, 1947. Copies of the said Commission orders of September 1, 1944, October 3, 1944, and April 5, 1946, are attached hereto and made a part hereof as Exhibits A, B, and C, respectively.

XI. By its order issued November 4, 1946, in its Docket No. IT-5914, the Commission required Safe Harbor to reduce substantially its revenues received from Penn Water and Baltimore Company under the three-party contract between them. The validity of that order of the Commission is now the subject of a petition for review pending before the United States Court of Appeals for the Third Circuit (*Safe Harbor Water Power Corp. v. Federal Power Commission*, No. 9345).

XII. By two orders dated September 27, 1948, the Pennsylvania Commission, in an investigation in its Docket No. 14028, instituted on December 5, 1944, fixed temporary rates and charges for the joint intrastate services of Penn

Water and Safe Harbor to PP & L, Philadelphia Company, and the Railroad, and for the intrastate services of Penn Water to Metropolitan Company. Baltimore Company intervened in that proceeding as a stockholder of Safe Harbor. The Pennsylvania Commission found that Safe Harbor and Penn Water operated an integrated and coordinated system in rendering intrastate services to their Pennsylvania customers, and that its jurisdiction to regulate so much of such intrastate services was unaffected by any proceedings or orders of the Federal Power Commission, or any other regulatory authority, properly limited to interstate services. Copies of such Pennsylvania Commission orders are attached as Exhibits to Petitioners' Application for Rehearing of the Commission's order of January 5, 1949, to be hereinafter referred to. The orders of the Pennsylvania Commission are the subject of a complaint by Baltimore Company now pending before the United States District Court for the Middle District of Pennsylvania. (*Consolidated Gas Electric Light & Power Company of Baltimore v. Pennsylvania Public Utility Commission, et al.*, Civil Action No. 3274).

XIII. In December, 1948, in litigation instituted sometime prior thereto before the United States District Court for the District of Maryland (*Pennsylvania Water & Power Co. v. Consolidated Gas Electric Light and Power Company of Baltimore*, Civil Action No. 4179), Penn Water filed an amended complaint requesting a declaratory order declaring the two-party contract between Penn Water and Baltimore Company null, void and unenforceable as *ultra vires*, contrary to public policy, and as constituting an agreement in unreasonable restraint of trade, and unreasonably restricting competition in the generation and sale of electrical services, and unreasonably limiting the output of electrical energy, contrary to the laws of the United States, Pennsylvania, and Maryland. In this connection Baltimore Company has refused to permit expansion of Penn Water's facilities necessary for adequate service to

its customers, has attempted to compel termination of the services of Penn Water and Safe Harbor to their Pennsylvania customers, and has otherwise interfered with the rendering of adequate service by Penn Water and Safe Harbor to their customers. The contract was terminated by Penn Water by notice dated December 20, 1948, for the foregoing reasons and because of material breaches of the terms of the contract. Such litigation is now pending in the District Court.

XIV. By its order issued January 5, 1949, and accompanying Opinion No. 173, in its Docket No. IT-5915, the Federal Power Commission, asserted jurisdiction to regulate the revenues derived from the entire services rendered by Penn Water from plants in Pennsylvania (except to the Railroad) to PP & L, Philadelphia Company, and Metropolitan Company in Pennsylvania, as well as to Baltimore Company in Maryland. The revenue reductions required by the Commission's order to the Pennsylvania customers were substantially different from the revenue changes arising out of the temporary rates and charges fixed by the Pennsylvania Commission and result in a direct conflict between the two commission orders. By the Federal Power Commission Order, Penn Water was required to file its individual tariffs effecting the reductions in revenues ordered, without regard to the joint obligations of Safe Harbor to render services to certain of the Pennsylvania customers. and without regard to the fact that Penn Water is unable to assume and render service to its Pennsylvania customers as its sole obligation. The reduction in revenues for service by Penn Water to Baltimore Company, required by such Order, was based almost entirely upon an increase allowed by the Commission in the rates or charges of Baltimore Company for purported services by Baltimore Company to Penn Water. Such increase was allowed as a credit to Baltimore Company by offset against the costs found by the Commission to be allocable to the services rendered by Penn Water to Baltimore Company. The Commission's

determination of the allocation of Penn Water's costs incurred and revenues received in rendering service to its various customers was based upon the Commission's erroneous interpretation of the legal effect of the terms of the three-party and two-party contracts between Penn Water, Safe Harbor, and Baltimore Company, and not upon the undisputed facts as to the services rendered by Safe Harbor. A copy of the Commission's Opinion No. 173 and accompanying Order issued January 5, 1949, is attached hereto and made a part hereof as Exhibit D.

XV. On January 28, 1949, Penn Water and Transmission Company filed with the Commission their Application for Rehearing of the Commission's Order of January 5, 1949. Such Application for Rehearing included a request for further hearing to give Petitioners an opportunity to prove a number of facts stated therein, (a) in rebuttal of many statements in the Commission's Opinion No. 173 and findings in its Order; (b) showing changes in facts deemed material by the Commission in its Opinion occurring since the close of the record or since the issuance of the Opinion and Order; and (c) new facts occurring after the close of the record or after the issuance of such order. A copy of such Application for Rehearing of Order issued January 5, 1949, is attached hereto and made a part hereof as Exhibit E.

XVI. By its order issued January 31, 1949, the Commission stayed the effective date of its order of January 5, 1949, pending expiration of the period in which Petitioners' Application for Rehearing may be acted upon and petition for judicial review may be filed. The stay was granted on condition that the difference between payments received by Petitioners under existing arrangements and those which would be required under the Commission's order be segregated in a reserve for the purpose of possible repayment if and to the extent the Commission's order shall finally become effective. A copy of such order of

January 31, 1949, is attached hereto and made a part hereof as Exhibit F.

XVII. By its order issued February 28, 1949, and accompanying Opinion No. 173-A, the Commission denied Petitioner's Application for Rehearing of Order issued January 5, 1949; but in addition amended its Orders of January 5, 1949, and January 31, 1949, making without hearing additional unsupported statements, conclusions, findings, and requirements. The Order of February 28, 1949, was made effective retroactively to February 26, 1949. Under the terms of the Commission's Order of January 31, 1949, the stay of the Commission's Order of January 5, 1949, is effective only until the end of the period in which a petition for judicial review may be filed. Such period is prescribed by Section 313 (b) of the Federal Power Act as "within sixty days after the order of the Commission upon application for rehearing." The effectiveness of the Commission's stay is about to expire and the same considerations which required the granting of the Commission's stay support interim judicial relief in the form of a stay of the Commission's orders, pending final determination of the validity of such orders on this review. A copy of the Commission's Opinion No. 173-A and accompanying order issued February 28, 1949, is attached hereto and made a part hereof as Exhibit G.

XVIII. On March 11, 1949, Penn Water and Transmission Company filed with the Commission their Application for Rehearing of the Commission's order of February 28, 1949. Such Application for Rehearing again included a request for further opportunity for hearing to prove additional facts in rebuttal to statements in the Commission's Opinion No. 173-A and its order of February 28, 1949, and showing additional changes in facts and new facts. It also included a complaint, pursuant to Section 306 of the Federal Power Act (16 U. S. C. § 825e; 49 Stat. 856), against the excessive, unreasonable, and unlawful

rates or charges of Baltimore Company for its purported services to Penn Water, to the extent that the Commission fixed such rates or charges by allowing credits to Baltimore Company therefor in regulating the revenues of Penn Water for its services to Baltimore Company. A copy of such Application for Rehearing of Order issued February 28, 1949, is attached hereto and made a part hereof as Exhibit H.

XIX. By its order issued March 17, 1949, the Commission denied Petitioners' Application for Rehearing of Order issued February 28, 1949. No action was taken by the Commission on Petitioners' complaint as required by Section 306 of the Act. A copy of such order issued March 17, 1949, is attached hereto and made a part hereof as Exhibit I.

XX. Petitioners are here before your Honorable Court for review of the orders, actions, and rulings of the Commission in its Docket No. IT-5915, and for interim judicial relief, pending such review, to prevent the irreparable injury to Petitioners which would result from the effectiveness of the Commission's orders during the pendency of such review in the event such orders are finally held to be unlawful and set aside or modified, and to preserve the *status* during such review. No injury will result to the Commission or to any customer of Petitioners from such interim relief.

The Facts and Statutes Upon Which Jurisdiction Is Based.

I. The final orders of the Commission of which review is sought were issued January 5, 1949, February 28, 1949, and March 17, 1949, purportedly under the provisions of the Federal Power Act (16 U. S. C. § 791a *et seq.*; 41 Stat. 1063; 46 Stat. 797; 49 Stat. 838, 847). Petitioners have applied to the Commission for a rehearing of each of the orders of January 5, 1949, and February 28, 1949, within

the thirty days prescribed by Section 313 (a) of the Act (16 U. S. C. § 825-l (a); 49 Stat. 860), as shown by Exhibits E and H hereto. By its order of February 28, 1949, the Commission denied rehearing of its order of January 5, 1949; and by its order of March 17, 1949, the Commission denied rehearing of its order of February 28, 1949. This Petition for Review is filed within sixty days after both of the orders of the Commission upon the applications for rehearing; and a copy of this Petition for Review is being served forthwith upon a member of the Commission; as required by Section 313 (b) of the Act (16 U. S. C. § 825-l (b); 49 Stat. 860).

II. Section 313 (b) of the Federal Power Act provides for judicial review of orders of the Commission in this Court by written petition to review praying that the orders of the Commission be modified or set aside in whole or in part. Section 313 (b) also provides that if any party shall apply to the Court for leave to adduce additional evidence, and shall show to the satisfaction of the Court that such additional evidence is material and that there were reasonable grounds for failure to adduce such evidence in the proceedings before the Commission, the Court may order such additional evidence to be taken before the Commission and to be adduced upon the hearing in such manner and upon such terms as to the Court may seem proper. Section 313 (c) of the Act (16 U. S. C. § 825-l (c); 49 Stat. 860) provides that the commencement of proceedings for judicial review under Section 313 (b) of the Act shall not, unless specifically ordered by the Court, operate as a stay of the Commission's orders.

III. Section 10 (a) of the Administrative Procedure Act (~~16~~ U. S. C. § 1009 (a); 60 Stat. 243) entitles Petitioners to judicial review of the Commission's orders as persons suffering legal wrong because of such actions and as persons adversely affected and aggrieved by such actions. Section 10 (b) of such Act (~~16~~ U. S. C. § 1009 (b))

specifies the form of proceeding for such review to be that provided by the Federal Power Act, and, in the event of inadequacy thereof, any applicable form of legal action. Section 10 (c) of such Act (16 U. S. C. § 1009 (c)) makes reviewable each of the orders sought to be reviewed herein, and all preliminary, procedural, and intermediate orders, actions, and rulings of the Commission in its Docket No. IT-5915. Section 10 (d) of such Act (16 U. S. C. § 1009 (d)) authorizes the Court to issue all necessary and appropriate process to postpone the effective date of the Commission's orders to the extent necessary to prevent irreparable injury or to preserve status or rights pending conclusion of the review proceedings. Section 10 (e) of such Act (16 U. S. C. § 1009 (e)) provides for the scope of judicial review and the authority of the Court in connection therewith.

The Relief Prayed.

Petitioners pray that:

I. The said Commission orders of January 5, 1949, February 28, 1949, and March 17, 1949, be reviewed by this Court; and that said orders be held unlawful and set aside, or modified as may be necessary to the extent such orders are held unlawful; or that such other orders may be made herein as to this Court may seem just;

II. The said Commission orders of September 1, 1944, October 3, 1944, and April 5, 1946, and the conditions contained in the Commission's Order of January 31, 1949, be reviewed by this Court; that said preliminary, procedural, and intermediate orders and conditions be held unlawful; and that all other preliminary, procedural, and intermediate actions and rulings of the Commission in its Docket No. IT-5915 be reviewed and held unlawful by the Court to the extent necessary to render complete judicial relief from the actions of the Commission;

III. Pending such review by this Court and conclusion of such review proceedings, the effectiveness of the said Commission order of January 5, 1949, be stayed upon such conditions, if any, as to this Court may seem just; and

IV. Petitioners hereby apply to this Court for leave to adduce additional evidence as specified in the offers of proof contained in paragraphs I (6) (h), II (3), II (3) (c), II (7) (c), II (26) (c), II (28) (c), II (41) (b), II (47) (b), II (47) (c), II (50), II (51), II (54) (c), II (56) (c), and II (65), Section 92 of Petitioners' Application for Rehearing of order issued January 5, 1949, attached hereto as Exhibit E; as specified in the offers of proof contained in paragraphs II (6) (b), II (9) (b), II (10) (e), II (10) (h), II (10) (i), II (11) (b), and V of Petitioners' Application for Rehearing of order issued February 28, 1949, attached hereto as Exhibit H; and to prove that the fair value of Petitioners' property used and useful in rendering services to the customers of Penn Water is not less than $41,000,000; that the estimated cost of constructing, as of December 31, 1945, a substitute new plant capable of providing the same service as provided by such property is not less than $55,300,000; that the cost of constructing and reproducing such property, as of December 31, 1945, is not less than $62,400,000; and that the nominal dollar investment in such property, adjusted for changes in purchasing power of the dollar to 1945, is not less than $50,000,000; and as a showing to the Court that such additional evidence is material and that there were reasonable grounds for failure to adduce such evidence in the proceedings before the Commission Petitioners state:

(A) That on their face all of the facts sought to be proved by the offers of proof contained in said Applications for Rehearing are material as facts in rebuttal to statements of the Commission in its Opinions or Orders issued in its Docket No. IT-5915; that to the extent any of the facts alleged in such offers of proof were known to Petitioners prior to the close of the record before the Commission on

July 16, 1947, or occurred after such date and were known to Petitioners prior to the issuance of the Commission's Opinion No. 173 and its order of January 5, 1949, or occurred after the date of such order and were known to Petitioners prior to the issuance of the Commission's Opinion No. 173-A and its order of February 28, 1949, Petitioners had no notice that such facts would be necessary to rebut the arbitrary, capricious, and unlawful and unsupported statements of the Commission in such opinions and orders in reference to which each of such offers of proof were made; that the Commission had notice in fact of the orders of the Pennsylvania Commission, dated September 27, 1948, on or about October 1, 1948; that the facts occurring after either of the Commission's orders of January 5, 1949, and February 28, 1949, could not have been adduced as evidence in the proceedings before the Commission except by way of offers of proof as so made; and that the Commission, by its orders of February 28, 1949, and March 17, 1949, refused to give Petitioners any opportunity to adduce such evidence; and

(B) That the facts as to fair value, cost of construction of a substitute new plant, cost of construction and reproduction, and adjusted dollar investment were the subject of offers of proof in the proceedings before the Commission as evidence material and relevant to a determination of the valuation of Petitioners' property for purposes of rate making under either Section 20 or Sections 206 (a) and 208 (a) of the Federal Power Act (16 U. S. C. §§ 813, 824e (a), 824a (a); 41 Stat. 1073, 49 Stat. 852, 853) and to a determination of the fair rate of return and the fair return allowance; and that the Commission refused to allow such evidence to be adduced before it.

V. This Court grant such further relief as may seem just and proper in the premises.

The Points on Which Petitioners Intend to Rely.

I. The Federal Power Commission had no jurisdiction, authority, or power to issue and enforce its said Orders of September 1, 1944, October 3, 1944, April 5, 1946, January 5, 1949, February 28, 1949, and March 17, 1949, or the conditions of its said Order of January 31, 1949, in its Docket No. IT-5915 for the following reasons:

(A) There was no substantial evidence of record before the Commission to support any exercise of jurisdiction by the Commission under either Sections 19 or 20 of Part I of the Federal Power Act (16 U. S. C. §§ 812, 813; 41 Stat. 1073, 49 Stat. 847); and exclusive jurisdiction to regulate any of Petitioners' rates or charges is vested in the Pennsylvania and Maryland Commissions by such Sections;

(B) None of the provisions of Part II of the Federal Power Act (16 U. S. C. §§ 824-824h; 49 Stat. 847) authorize or support the issuance of the said Commission orders, for the reason that Penn Water must be treated as a licensee within the meaning of Part I of the Act, and such a licensee is not subject to the rate regulatory provisions of Part II of the Act;

(C) The Commission does not have jurisdiction, authority, or power under either Sections 20, 201, or 206 (a) of the Federal Power Act (16 U. S. C. §§ 813, 824, 824e; 41 Stat. 1073; 49 Stat. 847, 852) to regulate, control, determine, or fix so much of Petitioners' services or rates, charges, or classifications for services not constituting interstate or foreign commerce, or the rules, regulations, practices, or contracts affecting such rates, charges, or classifications;

(D) Neither the provisions of Section 206 (a) of the Federal Power Act, nor any other provisions of the Act, authorize or support the issuance of the said Commission Orders for the reasons that:

(1) Neither Penn Water nor Transmission Company have any rates, charges, or classifications subject to the jurisdiction of the Commission, within the meaning of Section 206 (a) of the Act or of Section 205 of the Act (16 U. S. C. 1946 ed. § 824d; 49 Stat. 851), in that:

(a) The rendering of services by Penn Water to Metropolitan Company, and jointly with Safe Harbor to PP & L, and Philadelphia Company, and the rates, charges, and classifications therefor, constitute transactions in intrastate commerce and do not constitute transactions, transmissions, or sales in interstate commerce, within the meaning of Sections 201 (b) and (c) of the Act; and there is no substantial evidence of record to the contrary.

(b) The rendering of services by Penn Water, jointly with Safe Harbor, Baltimore Company, and PEPCO to the Railroad, and the rates, charges, and classifications therefor, do not constitute sales of electric energy at wholesale, within the meaning of Sections 206 (a) and 201 (d) of the Act; and there is no substantial evidence of record to the contrary.

(c) Penn Water has no rates, charges, or classifications for the transmission or sale of electric energy to Baltimore Company, within the meaning of Sections 206 (a) and 201 (b) of the Act.

(d) Certain of the rates, charges, or classifications of Penn Water, or Penn Water and Safe Harbor jointly, for services rendered to Metropolitan Company, PP & L, and Philadelphia Company are not rates, charges, or classifications for the transmission or sale of electric energy, within the meaning of Sections 206 (a) and 201 (b) of the Act.

(2) The services rendered by Penn Water to PP & L, Philadelphia Company, Railroad Company, and Baltimore Company are rendered jointly with others not

made Respondents to these proceedings, and the rates, charges, and classifications therefor are joint; there is no substantial evidence of record to the contrary; and the said Commission Orders were issued without notice or opportunity for hearing to Safe Harbor jointly obligated to and jointly serving the foregoing customers, contrary to the provisions of Section 206 (a) of the Act and the due process clause of the Fifth Amendment to the Constitution of the United States.

(3) The said Commission Order of January 5, 1949, requires Penn Water alone to file new schedules of rates and charges for services to PP & L and Philadelphia Company without requiring Safe Harbor to join or concur in the filing of such schedules, without authority under the Federal Power Act; thereby requiring Penn Water to assume the entire obligations to such customers instead of the joint obligation which exists to the impairment of its ability to render adequate service to its customers within the meaning of Section 207 of the Act (16 U. S. C. 1946 ed. § 824f; 49 Stat. 853); and there is no substantial evidence of record to the contrary.

(4) Insofar as the said Commission Order of January 5, 1949, undertakes to require a reduction in the revenues of Penn Water alone it constitutes regulation by the Commission of the divisions of revenue received by Penn Water for its participation in the rendering of joint services to each of its customers except Metropolitan Company, without jurisdiction, authority, or power in the Commission to regulate divisions of rates or charges for joint service under the Federal Power Act.

(5) There is no substantial evidence of record nor adequate subsidiary findings to support any finding by the Commission that any of the rates, charges, or classifications, demanded, observed, charged, or collected by Penn Water, or that any rule, regulation, practice, or contract affecting any such rate, charge or classification is unjust,

unreasonable, unduly discriminatory or preferential, as required by Section 206 (a) of the Act or by Section 20 of the Act.

(6) The said Commission Orders of January 5, 1949, and February 28, 1949, were issued without a fair hearing, and the said Commission Orders of September 1, 1944, October 3, 1944, and April 5, 1946, operated to deprive Petitioners of an opportunity for such a hearing, in violation of Section 206 (a) of the Act, Section 20 of the Act insofar as such Section 20 makes applicable the provisions of Section 15 (1) of the Interstate Commerce Act (49 U. S. C. § 15 (1); 24 Stat. 384, 34 Stat. 589, 36 Stat. 484, 48 Stat. 1102, 54 Stat. 911), and contrary to the provisions of the due process clause of the Fifth Amendment to the Constitution of the United States.

(E) If the Federal Power Act can properly be construed otherwise than as described in paragraphs (A), (B), (C), and (D) above, the same is unconstitutional because in violation of the Tenth Amendment to the Constitution of the United States.

(F) The said Commission Order of January 5, 1949, requires Petitioners to make changes from time to time in the future in rates and charges for services to Baltimore Company without notice, opportunity for hearing, or findings as of such future times that the then existing rates and charges are unjust, unreasonable, unduly discriminatory, or preferential as of such future times, upon the basis of the facts as of such future times; without authority under the Federal Power Act and contrary to the provisions of Section 206 (a) of the Act; and contrary to Article I, Section 1, of the Constitution of the United States.

(G) The said Commission Order of January 5, 1949, and the conditions contained in its Order of January 31, 1949, purport to make effective the requirements of said Order of January 5, 1949, within a period of less than thirty days from the date of issuance of such order, contrary to

Petitioners' rights and the limitations on the Commission's power under the provisions of Section 15 (2) of the Interstate Commerce Act (49 U. S. C. § 15 (2); 34 Stat. 589; 36 Stat. 551; 41 Stat. 484), as made applicable by Section 20 of the Federal Power Act.

(H) To the extent that the conditions contained in the said Commission Order of January 31, 1949, purport to permit the Commission subsequently to enter an order *nunc pro tunc,* or otherwise, requiring any reduction in Petitioners' revenues, rates, or charges, under its Order of January 5, 1949, retrospectively from any date prior to the date of the subsequent order, and requiring reparation or repayment of any money amounts in excess of twenty dollars to any persons, such order is in excess of any statutory authority of the Commission under the Federal Power Act, deprives Petitioners and Safe Harbor of their property without due process of law in violation of the Fifth Amendment to the Constitution of the United States, and is contrary to and in violation of Article III, Section 1 of, and the Seventh Amendment to, the Constitution of the United States.

(I) To the extent that the said Commission Order of February 28, 1949, extended or modified its Orders of January 5, 1949, and January 31, 1949, adversely against Petitioners without hearing it is unlawful and in excess of the authority contained in Section 313 (a) of the Federal Power Act, and in violation of Section 206 (a) of the Act, and deprives Petitioners of their property without due process of law in violation of the Fifth Amendment to the Constitution of the United States.

II. The said Commission Orders, accompanying Opinions, and the statements, findings and conclusions contained therein, and the rates and charges which purport to be thereby determined, fixed, prescribed, and required to be filed, charged, and observed are unlawful and unconstitutional in that they are unreasonable, arbitrary, capricious,

discriminatory, in excess of the Commission's statutory jurisdiction, authority, and limitations under the Federal Power Act and contrary to the provisions of such Act, without observance of the procedure required by law, unsupported by substantial evidence, contrary to the substantial evidence, and result from failure of the Commission to make proper findings and determine proper facts and conclusions of law; and if enforced would deprive petitioners and Safe Harbor of their property without due process of law, in violation of the Fifth Amendment to the Constitution of the United States; all as set forth in Petitioners' Applications for Rehearing attached hereto as Exhibits E and H and without in any manner limiting or waiving the points or reasons set forth in said Applications for Rehearing the said orders, opinions, statements, findings, conclusions, rates and charges are unlawful and unconstitutional as aforesaid in the following particular respects:

(A) *Erroneous Allocation of Costs and Revenues.*

(1) The Commission's conclusions as to excessive revenues from Petitioners' services to Baltimore Company are based upon an allocation of costs and revenues which is in error in the following respects:

(a) Substantially all of the purported excess revenues from Baltimore Company result from a determination and allowance by the Commission of an increase in Baltimore Company rates, charges, or revenues in the form of a credit for its purported services to Penn Water, without notice that the reasonableness or lawfulness of such Baltimore Company rates, charges, or revenues were at issue in the proceeding before the Commission, without substantial evidence to support any such increase over the existing rates or charges, without adequate findings to support such an increase, and without observance of the procedure required by the Federal Power Act; and the Commission failed to act upon a complaint by Penn Water, under Sec-

tion 306 of the Federal Power Act (16 U. S. C. §§ 825e; 49 Stat. 856), against the excessiveness, unreasonableness, and unlawfulness of such Baltimore Company rates, charges, and revenues.

(b) Such credit of revenues to Baltimore Company was based in substantial part upon an assumed "diversion" by Penn Water of Safe Harbor energy and capacity for service to Pennsylvania customers to which Baltimore Company was assumed to be "entitled" under an erroneous construction of the respective obligations, rights, and "entitlements" of Safe Harbor, Penn Water, and Baltimore Company created by the three-party contract between them and by the contracts of Penn Water and Safe Harbor with their Pennsylvania customers.

(c) Such credit of revenues to Baltimore Company for an assumed "diversion" of Safe Harbor services was not determined upon the basis of the Safe Harbor costs of such services, but was determined upon the basis of assumed higher Baltimore Company costs, having no support by substantial evidence of record.

(d) Such purported excess revenues from Baltimore Company are based in part upon an arbitrary inclusion, in revenues from Baltimore Company, of net revenues actually received from other customers for interchange transactions conducted with them by Penn Water or by Penn Water and Safe Harbor jointly.

(e) Such purported excess revenues from Baltimore Company are based in part upon an arbitrary reduction in the division of revenues received by Penn Water from Baltimore Company for service to the Railroad and including such amount as revenues from Baltimore Company, without authority to adjust or regulate such division under the Federal Power Act, and without support by adequate findings or by the evidence of record; and the reduction in the revenues Penn Water is to receive from

Baltimore Company was based in part upon the arbitrary elimination of income taxes as an expense on that portion of the Penn Water division of Railroad revenues determined by the Commission to be "excess".

(f) Such purported excess revenues from Baltimore Company are based in part upon an allocation of costs to Baltimore Company which does not reflect the actual substantially greater use of Petitioners' plant in rendering services to Baltimore Company.

(2) The Commission's conclusions as to excessive revenues from Petitioners' services to each of its customers are based upon an allocation of costs and revenues which is in error in the following respects:

(a) The purported excess revenues from services to each of Petitioners' customers are based in part upon the arbitrary elimination of substantial actual expenses incurred by Petitioners in rendering such services, without adequate findings or evidence to support such eliminations.

(b) Not all of the normal costs of power received by Penn Water from Safe Harbor for use in serving their Pennsylvania customers were included in the total costs allocated by the Commission; and in the event the Commission's Order in its Docket No. IT-5914, reducing the revenues paid by Penn Water to Safe Harbor is set aside in pending litigation, and in the event the orders of the Pennsylvania Commission of September 27, 1948, are sustained in pending litigation, Penn Water will be liable to pay to Safe Harbor substantial amounts in excess of the amounts included in Penn Water's expenses by the Commission.

(B) *Rate of Return and Return.*

The rate of return and return allowed by the Commission is not commensurate with returns on investments in other enterprises having corresponding risks and is insuffi-

cient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and attract capital; and if the Commission's Order of January 5, 1949, were enforced in this respect it would deprive Petitioners of their property without due process of law, in violation of the Fifth Amendment to the Constitution of the United States.

(C) *Rate Base.*

(1) The Federal Power Commission, by its orders fixing the rates, charges, and revenues to which Petitioners are entitled used a rate base arrived at by deducting from purported actual legitimate investment in Petitioners' project, the adjusted book reserve for depreciation, and adding thereto an insufficient allowance for working capital. Such a rate base is unsupported by substantial evidence and contrary to the substantial evidence and the provisions of the Federal Power Act; and the Commission erred in deducting from purported actual legitimate investment the adjusted book reserve for depreciation on a finding that such depreciation reserve was accumulated from earnings in excess of a fair return, which finding is not supported by substantial evidence and contrary to the substantial evidence. Petitioners contend that the determination of rates on an investment basis requires the use of an undepreciated rate base with an appropriate credit to the rate payer measured by the earnings available on risk-free investment thereof, otherwise the rates determined thereon fail to afford a return of all of the costs of service.

(2) The Federal Power Commission by its orders fixing the rates, charges, and revenues to which Petitioners are entitled erroneously determined that the actual legitimate investment in Petitioners' electric plant used and useful was $33,113,148.00 as of December 31, 1946, that for the purpose of fixing a proper rate base it is fair and reasonable to use the 1946 year's average actual legitimate

investment in Petitioners' electric plant used and useful of $33,126,585, that Petitioners' net investment rate base for the year 1946 was $24,774,712.00 and that it is fair and reasonable to use $33,113,148.00 plus the recorded cost of additions less recorded retirements, as the actual legitimate investment in Petitioners' electric plant used and useful for the future. Said determinations are unreasonable, arbitrary, capricious, unlawful, unsupported by substantial evidence, contrary to the provisions of the Federal Power Act, and deprive Petitioners of their property without due process of law in violation of the Fifth Amendment to the Constitution of the United States, for the reasons specified in paragraph (1) above and in that they exclude from Petitioners' actual legitimate investment and their rate base, a total of $3,465,677.73 being composed of the following items of original cost:

Value of McCall Ferry Power Company stock issued for Land and Water Power Rights:		
McCall Company stock issued to Hutchinson as part consideration for land and water power rights—18,840 shares common at $25 per share	$471,000.00	
McCall Company stock issued for organization expenses of company—10 shares common at $25 per share	250.00	
McCall Company stock issued to Harlow-McGaw as part consideration for land and water power rights—1,000 shares common at $25 per share	25,000.00	

McCall Company stock issued to C. D. Pullen as part consideration for options on Harlow McGaw properties —150 shares common at $25 per share	3,750.00	$500,000.00
Fisk Management Fee:		
McCall Company stock issued to Harvey Fisk & Sons for management services		199,570.31
Aldred Management Fee:		
Pennsylvania Company stock issued to J. E. Aldred for management services for period Nov. 1, 1908 to Oct. 31, 1912—5,000 shares at $60 per share—$300,000—Portion applicable to construction period Nov. 1, 1908 to Sept. 30, 1911 on a prorated basis		218,750.00
Stock Issuance Expense:		
McCall Company bond issuance expense applicable to Pennsylvania Company stock exchanged for McCall Company bonds	331,703.15	
Expenses incurred in connection with the issuance of Capital stock of Pennsylvania Company from 1923 to 1935	81,906.59	413,609.74
Interest During Construction (including operating income for the period July 1 to Sept. 30, 1911)		1,008,579.57

Disallowed Costs Relating to "Cessation Period"		143,981.46
Promotion Expense		29,601.59
Difference between Respondents [Petitioners] and Staff as to Value in 1908 of $703,000 Susquehanna Power Company Bonds and 1,500 shares of Susquehanna Properties Company Stock issued in Exchange for McCall Company Properties and Water Power Rights Located Below McCall Development		37,063.98
Profit on Certain Property Sold to Safe Harbor Water Power Corp.		119,940.20
Flashboard Development Costs		49,754.97
Land and Water Rights Acquired Since Dec. 31, 1909:		
Acquisition expenses and necessary legal and engineering services	171,134.28	
Establishment of gauges for determination of river flow.	12,420.77	
Costs of property acquired from the Baltimore Electro Alloys Co., a former affiliate	24,151.83	
Acquisition costs of property described as Boyd Mill tract charged in error to operating expenses when incurred.	1,427.42	209,134.30
Conowingo Backwater Litigation		39,301.46
Donations in Aid of Construction.		18,127.71
Loss of Materials and Supplies and Cash Unaccounted for		13,164.03

Susquehanna Contracting Co. Administrative Expenses	6,621.85
Construction Fee Charged to Holtwood Power Co.	50,194.73
Holtwood Power Co. Organization Expense	17,875.34
Riverside Line—Four Unused Tower Foundations	3,595.96
Physical Items of Property Which Were Originally Charged in Error to Operating Expenses or Depreciation Reserve	96,116.84
Holtwood Church	1,400.00
River Coal Investigation Expense.	6,132.41
Construction Work in Progress	205,243.01
Property Held for Future Use	77,918.28
Total Items Described Above.	$3,465,677.73

(D) *Depreciation.*

The orders, findings, and conclusions of the Federal Power Commission insofar as they relate to depreciation are unsupported by substantial evidence, contrary to the substantial evidence, arbitrary, capricious, unreasonable, contrary to law and the Federal Power Act, and deprive Petitioners of their property without due process of law contrary to the Fifth Amendment to the Constitution of the United States because:

(1) The Federal Power Commission's purported determination of depreciation is not the actual depreciation in Petitioners' property but simply represents an unsupported guess as to the consumed "service life" of Petitioners' property, determined by fixing so-called "service lives" of Petitioners' property which bear no relationship thereto; and

(2) The Federal Power Commission has considered as depreciable property certain elements of Petitioners' property which are in fact and in law non-depreciable.

(E) *Failure to Make Specific Findings of Fact.*

The said Commission orders of January 5, 1949, and February 28, 1949, failed to make certain specific findings of fact as requested by Petitioners in their Applications for Rehearing, attached hereto as Exhibits E and H.

(F) *Denial of Applications for Rehearing.*

The said Orders of February 28, 1949, and March 17, 1949, are unlawful and unconstitutional in that they are unreasonable, arbitrary, capricious, and deprive Petitioners of their property without due process of law in violation of the Fifth Amendment to the Constitution of the United States for each and all of the reasons specified in Petitioners' Application for Rehearing of Order issued February 28, 1949, attached hereto as Exhibit H; and by reason of the new facts stated in such Application and in Petitioners' Application for Rehearing of Order issued January 5, 1949, attached hereto as Exhibit E.

(G) *Other Objections and Exceptions.*

Petitioners do not waive but expressly reaffirm and renew each and all of the objections and exceptions to the jurisdiction of the Commission and to the admission or exclusion of evidence, as shown by the transcript of the record before the Commission.

Respectfully submitted,

Sgd. F. G. AWALT,
F. G. Awalt,
Sgd. RAYMOND SPARKS,
Raymond Sparks,
Sgd. DARYAL A. MYSE,
Daryal A. Myse,
Sgd. PRESTON C. KING, JR.,
Preston C. King, Jr.,
Counsel for Petitioners.

Dated at Washington, D. C.
April 22, 1949.

DISTRICT OF COLUMBIA: ss.:

The undersigned, being first duly sworn, states that he is counsel for the Petitioners in the foregoing Petition; that he has read said Petition and knows the contents thereof; and that all of the statements contained therein are true and correct to the best of his knowledge, information or belief.

Sgd. RAYMOND SPARKS
Raymond Sparks

Sworn to and subscribed before me, a notary public, in and for said District of Columbia, this 22d day of April, 1949.

Sgd. FLORA A. MEYERS,
(Seal) *Notary Public, D. C.*
My Commission expires Oct. 14, 1953.

EXHIBIT A TO PETITION FOR REVIEW.

UNITED STATES OF AMERICA

FEDERAL POWER COMMISSION

Commissioners } Basil Manly, Acting Chairman, Claude L. Draper and John W. Scott. Nelson Lee Smith not participating.

September 1, 1944

In the Matter of Pennsylvania Water & Power Company } Docket No. IT-5915

ORDER INSTITUTING INVESTIGATION

Upon consideration of the petition filed on August 31, 1944, by the Maryland Public Service Commission requesting this Commission to institute an investigation of the interstate wholesale rates of Safe Harbor Water Power Corporation and Pennsylvania Water & Power Company, and the joint petition filed on August 14, 1944, by counsel for the Mayor and City Council of Baltimore, Maryland, counsel for the County Commissioners of Baltimore County, Maryland, counsel for Bethlehem-Fairfield Shipyard, Inc., and counsel for Rustless Iron & Steel Corporation, also requesting this Commission to institute such investigation; and

It appearing to the Commission that:

(a) Pennsylvania Water & Power Company owns and operates facilities, among others, used for the transmission and sale at wholesale

(i) of electric energy generated in Pennsylvania and transmitted therefrom to Maryland and the District of Columbia, and

(ii) of electric energy generated in Maryland and the District of Columbia and transmitted therefrom to Pennsylvania,

all such electric energy being consumed at points outside the respective States in which it is generated. Such facilities are facilities for the transmission and sale at wholesale of electric energy in interstate commerce. Pennsylvania Water & Power Company is a public utility within the meaning of that term as used in the Federal Power Act.

(b) Pennsylvania Water & Power Company owns and operates the Holtwood hydroelectric project on the Susquehanna River in Pennsylvania and by order of November 3, 1939, in Docket No. IT-5524, the Commission required the Company to apply for a license for said project under the Federal Power Act. On review the Commission's order was affirmed in *Pennsylvania Water & Power Company* v. *Federal Power Commission* (App. D. C.) 123 F. (2d) 155; *cert. denied*, 315 U. S. 806. By order of November 23, 1943, the Commission authorized the issuance of a license for the Holtwood Project No. 1881. On December 22, 1943, the Company filed an application for rehearing with respect to the amortization reserve provisions of the Commission's order of November 23, 1943, and such rehearing was granted by order of January 21, 1944, and the matter is now pending before the Commission.

(c) In addition to an agreement involving the transmission and sale of electric energy subject to the jurisdiction of the Commission to which Pennsylvania Water & Power Company is a party, and which is designated in the files of the Commission as Pennsylvania Water & Power Company

Rate Schedule FPC No. 1 and Supplement No. 1 thereto, Safe Harbor Water Power Corporation and Pennsylvania Water & Power Company are both parties to certain agreements involving the transmission and sale of electric energy subject to the jurisdiction of the Commission, which said agreements include those designated in the files of the Commission as follows: Safe Harbor Water Power Corporation Rate Schedule FPC No. 1 (also designated as Pennsylvania Water & Power Company Rate Schedule FPC No. 8), and Supplements Nos. 1 and 2 thereto; Safe Harbor Water Power Corporation Rate Schedule FPC No. 3 and Supplements Nos. 1 and 2 thereto, and Supplement No. 1 to Supplement No. 2 thereto; Safe Harbor Water Power Corporation Rate Schedule FPC No. 4 and Supplements Nos. 1 and 2 thereto; Safe Harbor Water Power Corporation Rate Schedule FPC No. 5.

(d) By order of September 1, 1944, the Commission has instituted an investigation of the interstate wholesale rates of Safe Harbor Water Power Corporation.

The Commission *finds* that:

It is necessary and proper in the public interest, and to aid in the enforcement of the provisions of the Federal Power Act, that an investigation be instituted by the Commission into and concerning all rates, charges, or classifications demanded, observed, charged, or collected by Pennsylvania Water & Power Company for or in connection with any transmission or sale of electric energy subject to the jurisdiction of the Commission, and any rules, regulations, practices, or contracts affecting such rates, charges, or classifications.

The Commission *orders* that:

An investigation be and the same hereby is instituted for the purpose of enabling the Commission:

(A) To determine whether, in connection with any transmission or sale of electric energy subject to the jurisdiction of this Commission under the Federal Power Act, by Pennsylvania Water & Power Company, any rates, charges, or classifications demanded, observed, charged, or collected, or any rules, regulations, practices, or contracts affecting such rates, charges or classifications, are unjust, unreasonable, unduly discriminatory or preferential; and

(B) If, after hearing, it shall find that any of such rates, charges, classifications, rules, regulations, practices, or contracts are unjust, unreasonable, unduly discriminatory, or preferential, to determine and fix by appropriate order or orders, just and reasonable rates, charges, classifications, rules, regulations, practices, or contracts to be thereafter observed and in force.

By the Commission.

(Signed) J. H. GUTRIDE
J. H. Gutride
Acting Secretary.

(Seal)

EXHIBIT B TO PETITION FOR REVIEW.

UNITED STATES OF AMERICA

FEDERAL POWER COMMISSION

Before Commissioners: Basil Manly, Chairman; Claude L. Draper, Leland Olds, John W. Scott and Nelson Lee Smith.

October 3, 1944

In the Matter of Pennsylvania Water & Power Company	Docket No. IT-5915

SUPPLEMENTAL ORDER ENLARGING INVESTIGATION

It appearing to the Commission that:

(a) By order of September 1, 1944, the Commission instituted an investigation of Pennsylvania Water & Power Company to determine whether, in connection with any transmission or sale of electric energy subject to the jurisdiction of the Commission, any rates, charges, or classifications demanded, observed, charged or collected, or any rules, regulations, practices, or contracts affecting such rates, charges or classifications, are unjust, unreasonable, unduly discriminatory or preferential; and if, after hearing, found to be unjust, unreasonable, unduly discriminatory or preferential, to determine and fix by order or orders, just and reasonable rates, charges, classifications, rules, regulations, practices or contracts to be thereafter observed and in force.

(b) Susquehanna Transmission Company of Maryland is a wholly owned subsidiary of Pennsylvania

Water & Power Company and owns transmission lines and facilities which are operated as and constitute an integral part of the transmission system of Pennsylvania Water & Power Company, and are utilized in the transmission and sale at wholesale of electric energy in interstate commerce from the Safe Harbor hydroelectric generating plant of Safe Harbor Water Power Corporation and from the system of Pennsylvania Water & Power Company.

The Commission *finds* that:

It is necessary and proper, in the public interest, and to aid in the enforcement of the provisions of the Federal Power Act that the investigation instituted by the order of September 1, 1944, of Pennsylvania Water & Power Company be enlarged to include Susquehanna Transmission Company of Maryland.

The Commission *orders* that:

(A) The investigation instituted by the Commission's order of September 1, 1944, be and the same is hereby enlarged to include Susquehanna Transmission Company of Maryland for the purpose of enabling the Commission to determine whether, in connection with any transmission or sale of electric energy by Pennsylvania Water & Power Company or Susquehanna Transmission Company of Maryland subject to the jurisdiction of the Commission, any rates, charges, or classifications demanded, observed, charged or collected, or any rules, regulations, practices, or contracts affecting such rates, charges or classifications, are unjust, unreasonable unduly discriminatory or preferential; and

(B) If, after hearing, it shall find that any of such rates, charges, classifications, rules, regulations, practices or contracts are unjust, unreasonable, unduly discriminatory, or preferential, to determine

and fix by appropriate order or orders, just and reasonable rates, charges, classifications, rules, regulations, practices, or contracts to be thereafter observed and in force.

By the Commission.

(Signed) LEON M. FUQUAY
Leon M. Fuquay
Secretary.

(Seal)

EXHIBIT C TO PETITION FOR REVIEW.

UNITED STATES OF AMERICA

FEDERAL POWER COMMISSION

Before Commissioners: Leland Olds, Chairman; Claude L. Draper and Harrington Wimberly.

April 5, 1946

In the Matter of Pennsylvania Water & Power Company	Docket No. IT-5915

ORDER DENYING PETITION

Upon consideration of the "Petition for Specification of Issues and Reconsideration of Direction Fixing Order of Procedure" filed April 3, 1946, by Pennsylvania Water & Power Company and Susquehanna Transmission Company of Maryland;

The Commission *orders* that:

The petition be and the same is hereby denied; Provided, however, that nothing herein shall preclude the Trial Examiner from taking any steps he deems appropriate at the hearing to assure adequate definition of the position of all participants in the proceedings, and clarification of the issues to be determined.

By the Commission.

(Signed) LEON M. FUQUAY,
Leon M. Fuquay,
Secretary.

(Seal)

EXHIBIT D TO PETITION FOR REVIEW.

UNITED STATES OF AMERICA
FEDERAL POWER COMMISSION

OPINION NO. 173

In the Matter of Pennsylvania Water & Power Company } Docket No. IT-5915

APPEARANCES.

For Respondents
George T. Hambright
F. G. Awalt
Raymond Sparks
Daryal A. Myse
Preston C. King, Jr.
George Ross Hull
John C. Kelley

For Consolidated Gas Electric Light and Power Company of Baltimore
Edwin M. Sturtevant
Clarence W. Miles
G. Kenneth Reiblich

For Public Service Commission of Maryland
Robert France
Charles D. Harris

For Public Utility Commission of Pennsylvania
Samuel G. Miller
Arthur J. Diskin
Charles E. Thomas
William M. Rutter

For Staff of the Federal Power Commission
Howard E. Wahrenbrock
Reuben Goldberg
Francis L. Hall

[1]* OPINION

By THE COMMISSION:

This is a proceeding under the Federal Power Act (Act)[1] upon an order of the Commission instituting an investigation to determine just and reasonable rates and charges for the Respondents, Pennsylvania Water & Power Company (Penn Water) and Susquehanna Transmission Company of Maryland (Transmission Company), the latter being Penn Water's wholly-owned affiliate.[2] The matters at issue involve a determination of the scope of the jurisdiction of the Commission with respect to the rates and charges of Penn Water, a determination of the amount of the rate base (including the investment of both Penn Water and Transmission Company) and the fair rate of return with respect thereto, the amount, if any, of revenues received by Penn Water in excess of the reasonable cost of service rendered by Penn Water and Transmission Company and of resulting reductions in rates subject to the Commission's jurisdiction.

[2] BACKGROUND OF PROCEEDING

By an order issued September 1, 1944, and a supplemental order issued October 3, 1944, the Commission instituted an investigation of rates and charges charged or collected by Respondents with respect to any transmission or sale of electric energy subject to the Commission's jurisdiction under the Federal Power Act. This investigation was instituted to enable the Commission to determine whether any of the foregoing rates and charges were unjust, unrea-

* Figures in brackets represent page numbers of Opinion in typewritten form.

1. 49 Stat. 838; 16 U. S. C. 791a, et seq.

2. By agreement, Penn Water pays all of the expenses of Transmission Company and in addition, has waived interest on the outstanding first-mortgage bonds of Transmission Company, all of which Penn Water owns. In exchange, Transmission Company transmits electric power and energy delivered to it by Penn Water at the Pennsylvania-Maryland state line for redelivery in Maryland or delivered to it in Maryland for redelivery to Penn Water at the said state line. Transmission Company, therefore, has no separate rates or charges.

sonable, or unduly discriminatory. Previously, however, there had been received two petitions requesting that the Commission undertake such an investigation, the one a joint petition filed August 14, 1944, by the Mayor and City Council of Baltimore, Maryland, The County Commissioners of Baltimore County, Maryland, Bethlehem-Fairfield Shipyard, Inc., and Rustless Iron & Steel Corporation, and the other a petition filed August 31, 1944 by the Public Service Commission of Maryland (Maryland Commission).

The Public Utility Commission of the Commonwealth of Pennsylvania (Pennsylvania Commission), the Maryland Commission, and Consolidated Gas Electric Light and Power Company of Baltimore (Md.) (Baltimore Company) [3] petitioned to become interveners in this proceeding. The Commission permitted intervention in each instance, and each of the interveners took active part in the proceedings.

Extensive hearings were held commencing April 15, 1946 and concluding July 16, 1947. The evidence received and the briefs have been carefully considered.

[3] PROPERTIES AND OPERATIONS

The Respondent, Penn Water, owns and operates the hydroelectric plant at Holtwood (Pa.), the Holtwood steam plant, and that part of an interconnected interstate transmission system consisting of various substations, transmission lines and associated equipment which are located in Pennsylvania. The respondent, Transmission Company, owns and operates that part of the same transmission system consisting of various substations, transmission lines and associated equipment which are located in Maryland. The facilities involved include the main dam, power house, turbines, 25- and 60-cycle electric generators, and frequency changers, all located at Holtwood (Pa.); the steam electric

3. Baltimore Company purchases electric power and energy from Penn Water and is further engaged in the generation, purchase, distribution and sale of electric power and energy in the City of Baltimore and elsewhere in the State of Maryland.

generating plant, coal recovery and preparation plant and accessory equipment,[4] transformer stations,[5] transmission lines, switching stations and facilities; and an operators' village. The hydroelectric and steam generating plants, with appurtenant facilities and equipment, are located together on the Susquehanna River, some 9 miles north of the Pennsylvania-Maryland state line, near what was formerly known as McCall's Ferry, in the Counties of Lancaster and York, Pennsylvania.

Ten hydro turbines in Penn Water's hydroelectric plant have a nominal total capacity of 150,000 hp. Eight 25-cycle generators have a total rated capacity of 87,000 kw, and two 60-cycle generators 24,000 kw, for a plant nominal rated capacity of 111,000 kw or a total [4] reported effective capacity of 104,000 kw. Two 60-cycle generators in Penn Water's steam electric generating plant have a nominal rating of 10,000 kw each, or a 3-hour peak rating of 28,000 kw.[6]

To provide for increased flexibility in system operations there were installed in the Holtwood hydro plant (1923) two 5,000 kw frequency changers for the conversion of 25-cycle energy, generated at the plant or received at the plant from other sources, to 60-cycle energy, and likewise for the conversion of 60-cycle energy to 25-cycle energy, as system demands require.

Respondents' interconnected interstate transmission system is a regional network comprising 566 circuit miles of high-voltage lines which include 60-cycle three-phase and 25-cycle single and three-phase circuits installed as tower lines of from one to four circuits each. These circuits operate at 220 kv and 66 kv, as to the 60-cycle (three-phase) circuit, and 132 kv (single-phase) and 66-kv (three-phase) as to the 25-cycle circuits.

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4. Also located at Holtwood (Pa.), the coal-recovery equipment being used to dredge, dry and mill low-cost river-bottom anthracite coal recovered from the Holtwood dam pond, for use in the steam electric generating plant.

5. Conestoga and Holtwood, in Pennsylvania; Highlandtown in Maryland.

6. The 3-hour peak rating is effective from September 15 to May 15; the base load rating of the steam plant is 26,000 kw at all times.

The hydroelectric development at Safe Harbor (Pa.) is owned and operated by Penn Water's affiliate, Safe Harbor Water Power Corporation (Safe Harbor). From interconnections with Safe Harbor's transmission facilities, the entire output of Safe Harbor is transmitted to Pennsylvania customers over the facilities of Penn Water and to Maryland customers over the facilities of both Respondents. These facilities are interconnected with the facilities of Penn Water's Pennsylvania customers, including the Thorndale-Columbia section of [5] The Pennsylvania Railroad (Railroad), and with the facilities of Baltimore Company and Potomac Electric Power Company (PEPCO),[7] and the Perryville (Md.)-Benning (D. C.) section of the Railroad.

Operations of Penn Water, Safe Harbor and Baltimore Company are closely integrated and coordinated as a matter of economy, efficiency, flexibility, and maximum utilization of hydro capabilities, contracts being carefully worked out for that purpose as to firm energy requirements, while operations involving firm, interchange and emergency energy are conducted at all times by a dispatching system controlled by a dispatcher's office in coordination with various operating committees. In addition to the foregoing coordination and integration of operations, the constituent companies of this interconnected system plan and coordinate far in advance steam maintenance schedules which are based largely upon the predicted flows of the Susquehanna River and the determination of the availability of hydro energy during periodic steam maintenance outages.

That hydroelectric operations involve something more than the mere addition of cheaper energy to the system is revealed by the fact that such energy can be used for peaking purposes at such times that its location on comparatively sharp peak portions of the load curve permits substantial economy in system plant investment. Further, the

7. PEPCO is engaged in the generation, distribution, sale and delivery of electric power and energy in the District of Columbia and in adjoining territory in the State of Maryland.

quick-starting characteristics of Penn Water's hydroelectric generating equipment and the specially designed steam generating equipment of the Holtwood steam plant, as well as the interconnections with [6] the electrical systems of Penn Water's Pennsylvania customers, enable significant load swings, particularly characteristic of Baltimore Company's system's industrial load, to be carried with a minimum of difficulty and of investment expense.

Corporate Relationships

The Respondent, Penn Water, was organized January 13, 1910 under the laws of the Commonwealth of Pennsylvania as successor to McCall Ferry Power Company (McCall Company). The latter company had failed in 1908 while engaged in construction of the present Holtwood dam and power house, and the installation of certain appurtenant hydroelectric generating equipment and facilities. The organization of Penn Water followed a receivership which was accompanied by a foreclosure and sale of the properties of McCall Company and came about as the result of negotiations for the necessary additional financing which had been conducted by a committee representing the bondholders of McCall Company.

The Respondent, Transmission Company, was organized April 19, 1910, under the laws of the State of Maryland as a consolidation of two county pole-line companies. The then outstanding stock of the two predecessor companies was owned by McCall Company (Penn Water's predecessor) and the outstanding 12,055 shares of stock of Transmission Company are entirely owned by Penn Water.

Safe Harbor, also an affiliate of Penn Water, was organized under the laws of the Commonwealth of Pennsylvania, January 6, 1930. Safe Harbor has outstanding a total of 300,000 shares of non-par common stock divided into two classes: Class A, 100,000 shares of non-voting [7] stock, owned entirely by Baltimore Company, and Class B, 200,000 shares of voting stock, owned 50% by Penn Water and 50% by Baltimore Company.

CONTRACTS.

Under a contract with Baltimore Company, dated December 31, 1927, as supplemented on several occasions thereafter, Penn Water is obligated to provide Baltimore Company at all times with all the capacity and energy available to the former (Penn Water) from its own hydro and steam generating plants, and from its Safe Harbor one-third entitlement, referred to below, insofar as such power and energy is not required in connection with contracts to which Penn Water is a party and which Baltimore Company has approved. In turn, Penn Water is entitled to obtain from Baltimore Company steam-generated energy in excess of the latter's own requirements up to the limit of its available generating capacity. This contract, according to its terms, is to continue in force until midnight, April 22, 1980.

Pursuant to the provisions of the supplemental agreement of June 1, 1931, as modified by an agreement of September 29, 1939, Baltimore Company undertakes to pay, on the basis of a formulated power bill, all of Penn Water's operating expenses plus a specified return.

The reference to Penn Water's entitlement from Safe Harbor relates to a fifty-year agreement of June 1, 1931 wherein Safe Harbor agreed with the Baltimore Company and Penn Water (and the latter *inter sese*) that in return for a combined annual payment (in monthly installments which would yield to Safe Harbor, after operating expenses (including taxes and depreciation), a specified rate of return, the latter companies should be entitled to all of the capacity and energy available from the former's [8] six-unit development in the ratio of two-thirds (to Baltimore Company) and one-third (to Penn Water).[8] The foregoing contracts with their amendments are sometimes referred to as system foundation contracts.

8. The payment constituting the obligation of Baltimore Company and Penn Water is prorated between those parties in the ratio of their capacity and energy entitlements (the contract proportion) and remains unaffected by

Following a subsequent long-term agreement between Baltimore Company and PEPCO, of June 16, 1932, Penn Water also contracted with Baltimore Company and Safe Harbor to deliver or have delivered to PEPCO at the latter's Takoma Park (Md.) Substation, such power and energy as might be delivered to Penn Water for the purpose, and stipulated that the Takoma Park Substation should become an additional delivery point under the agreement of June 1, 1931. This interconnection was designed to provide PEPCO with firm peak service, additional power and energy needed by the Railroad at Benning (D. C.), and hydro and steam economy flow interchange, as well as to provide Baltimore Company with steam economy flow and to enable Baltimore Company and PEPCO to coordinate their system planning and investments in generating and transmission facilities.[9]

[9] Electric power and energy sales to the Railroad are made under a contract dated September 2, 1931, by and between the Railroad, Baltimore Company, Penn Water, and Safe Harbor, PEPCO becoming a party under a supplement of August 15, 1934. The contract covers delivery of the Railroad's entire 25-cycle, single phase, electrification requirements on the latter's main-line from Perryville (Md.) to Washington (D. C.), on its Philadelphia division between Thorndale (Pa.) and Harrisburg (Pa.) and on its Columbia and Port Deposit line from Columbia (Pa.) to Perryville (Pa.), together with the furnishing of certain special equipment and facilities. This contractual supply is delivered at Conestoga Substation (Safe Harbor), Fish-

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the amount of power actually received by either. Safe Harbor later agreed (1939) to install an additional 25-cycle generator and cable to Conestoga Substation, to provide for increased power and energy requirements of the Railroad, the entitlement of two-thirds to Baltimore Company and one-third to Penn Water being applied to the capacity and energy to be available from this unit. Safe Harbor is committed not to contract to supply power and energy from additions to its plant to any other party without the consent of Baltimore Company and Penn Water.

9. The agreement between Baltimore Company and PEPCO is for a term ending September 30, 1960. By supplement of August 15, 1934, the tie-in capacity between the two companies was increased (for greater emergency assistance and increased volume of economy flow interchange) by an additional interconnection over the Railroad right-of-way.

ing Creek (Pa.), Conowingo (Md.), Perryville (Md.), and Benning (D. C.), under the specific terms of the contract and subsequent designation.[10] The Railroad provides transmission facilities between Perryville and Baltimore for supply of its lines south of the Baltimore tunnels and a part of a 110 kv circuit between Baltimore and Benning for the general transmission use of the supplying companies, including Baltimore Company and PEPCO. By a later agreement dated June 22, 1938, between the Railroad, Philadelphia Electric Company (Philadelphia Company), Baltimore Company, Penn Water, and Safe Harbor, provision was made for regular and constantly maintained parallel operation through the power transmission lines of the Railroad and connections therewith at Perryville (Pa.) and Thorndale (Pa.),[11] and for the cooperation of the parties in securing flexibility of power [10] supply, the best utilization of single-phase generating capacity available in the systems of the several contracting electric companies, and the shifting of loads.[12]

Penn Water is further committed to supply firm energy to Metropolitan Edison Company (Metropolitan Company) at York (Pa.) in the amount of 20,000 kw, subject to certain provisions for the increase or decrease of the amount and the limitation of hourly amounts;[13] to supply the entire electrical power and energy requirements of Philadelphia Company within a defined territory in the Coatesville (Pa.) area; to supply, under certain conditions, all of Pennsylvania Power & Light Company's (PP&L's) Lancaster 25-cycle and 60-cycle load requirements (Lancaster Co.,

10. Under the contract the Railroad may be billed for "additional load" upon either a metered or computed basis.

11. Philadelphia Company supplies the Railroad in the Philadelphia area.

12. As of the date of this agreement, June 22, 1938, the firm single phase capacity of Philadelphia Company was 134,350 kw and of the other electric companies, 50,000 kw.

13. The 20,000 cannot be adjusted by more than 10,000 kw either way, and the hourly amount of energy Penn Water is required to deliver is equal to the hourly integrated generation at Holtwood and Safe Harbor in excess of 50,000 kwh per hour, multiplied by the ratio of the foregoing firm power obligation to the rated effective capacity of Holtwood and Safe Harbor, less 50,000 kwh, but never less than Metropolitan Company's requirements above the latter's steam line.

Pa., and adjacent areas),[14] coupled with a contingent obligation to meet a limited deficiency in PP&L's firm load carrying capacity for its Harrisburg area and provide a supplementary secondary capacity service.

[11] Penn Water interchanges energy and capacity with Metropolitan Company on a steam and hydro economy basis as well as for emergency purposes; on an emergency basis with Philadelphia Company in the Coatesville (Pa.) area; and on a steam and hydro economy and an emergency basis with PP&L. Under certain flexible provisions of the contract with PP&L, Penn Water may be required to deliver, during times of high river flow, an additional amount of 25-cycle and 60-cycle power and energy equal to 20% of the Lancaster Load requirement, if Penn Water is able so to do.

Finally, on the bases of an interdependent agreement associated with the Railroad parallel operation agreement, already mentioned, Penn Water exchanges with Philadelphia Company through the Railroad's metering points at Perryville (Pa.) and Thorndale (Pa.) energy, on economy (intentional), unintentional, and emergency bases.

Penn Water's foregoing contracts comprise all of those under which there is transmitted and sold the energy generated by Penn Water or purchased by it, or otherwise acquired by either of the Respondents (Penn Water and Transmission Company) in this proceeding. While Safe Harbor is a party to several of the contracts, its position in the PP&L and Philadelphia Company contracts is a nominal one,[15] involving a legal technical-

14. Since interconnection of the Lancaster area with PP&L's main system, during days of low flow, the on-peak obligation may be reduced 20%. The supply of 4,000 volt service for a portion of the territory of the former Pioneer Electric Light Company is billed separately. What is here set forth is Penn Water's obligation under what is known as Option A.

15. Safe Harbor is not a contract payee under the Railroad agreement, nor under the Coatesville and Lancaster agreements wherein Penn Water is a party with the Philadelphia Company and PP&L respectively; while a party to the parallel operation agreement between the Railroad, Philadelphia Company, Baltimore Company, and Penn Water, no rates as to it are there involved. It is no longer a party to the York contract with Metropolitan Company. Indeed, the Coatesville and Lancaster agreements provide that Philadelphia Company and PP&L, respectively, may deal with Penn Water in all respects as if it were the only party contracting with it.

ity,[16] which has no bearing or effect upon the operations of the system.

[12] JURISDICTION.

Respondents challenge this Commission's authority to regulate any of Penn Water's rates [17] under provisions of Part I which deal with "licensees'" rates, or Part II which deal with those of "public utilities". Certain aspects of that challenge permit a simpler discussion if the Commission's authority under Part II is considered first.

Authority Under Part II.

One of Respondents' contentions is that the Commission is without authority under Part II "because its conditional authority under Part I of the Act is exclusive of its authority under Part II." In substance, the argument is that a Part I "licensee" cannot be a "public utility" under Part II, and that a licensee's interstate wholesale rate may be regulated by the Commission, if at all, only under Part I. The essentials of this argument we considered and rejected in *Safe Harbor Water Power Corporation* (5 FPC 221, 235-237). Our views expressed there remain unchanged and need not be repeated here. We turn then to consider the remaining aspects of the question whether the provisions of Part II apply here.

The rate provisions of Sections 205 and 206 of Part II apply only to a "public utility", defined in Section 201 (e) as "any person who owns or operates facilities subject to the jurisdiction of the Commission under this Part." Such facilities are specified in Section 201 (b) as facilities for "transmission of electric energy in [13] interstate commerce" or for "sale of electric energy at wholesale in interstate commerce", with certain exceptions which need

16. Involving possible savings in the Pennsylvania gross receipts tax.

17. Transmission Company has no separate rates. See *supra*, p. 1.

not be discussed here beyond reiterating that the provision of 201 (b) relating to State authority over the exportation of hydro electric energy is inapplicable. *Safe Harbor Water Power Corporation,* 5 FPC 221, 235. Section 201 (c) provides that "electric energy shall be held to be transmitted in interstate commerce if transmitted from a State and consumed at any point outside thereof * * *." Section 201 (d) defines a "sale of electric energy at wholesale" as "a sale of electric energy to any person for resale."

We must determine, therefore, whether the facilities owned and operated by Respondents bring them within these definitions. The record shows that Respondents own transmission facilities which transmit electric energy from Pennsylvania to Maryland and from Maryland to Pennsylvania, that such electric energy included energy generated in each of such States and consumed outside thereof, and that these facilities are used to effect the sale of electric energy by Penn Water to Baltimore Company. The facilities in Pennsylvania are owned by Penn Water and in Maryland by Transmission Company. Among these facilities are two 220 kv lines from near the Safe Harbor plant to points near Baltimore Company's Riverside and Westport substations and PEPCO's substation at Takoma Park, Maryland, and a 66 kv line from Penn Water's Holtwood plant to Transmission Company's Highlandtown substation at Baltimore, Maryland, where interconnection is made with the facilities of Baltimore Company. Energy generated at the Safe Harbor plant, the Holtwood plant, or obtained by interchange with Penn Water's Pennsylvania customers, is transmitted from within Pennsylvania over these facilities and consumed outside thereof by customers of Baltimore Company and by customers of PEPCO.

[14] Beyond any doubt, the foregoing facilities of both Respondents are "transmission" facilities of the type prescribed in Section 201 (b), and make it unnecessary to enumerate additional facilities of the same nature. It is

equally clear that those facilities are also used for sales by Penn Water for resale.[18]

Whether such sales are sales "in interstate commerce", however, presents a different problem. Nowhere does the Act define what constitutes a "sale in interstate commerce". Nor is there any provision which makes the meaning of that term dependent upon identification of all or a designated percentage of the energy sold, as energy flowing interstate. Congress thus left for determination by the Commission and the courts whether a particular sale is one "in interstate commerce". Although conceding this to be so, Respondents deny that Penn Water's sales to its Pennsylvania customers can be considered sales in interstate commerce because each includes varying amounts of energy which does not cross the State line.

The central fact disclosed by the record about Penn Water's sales in Pennsylvania is that they are not sales of the output of Penn Water's own plant, but sales of output of the integrated and coordinated interstate electric system of which Penn Water's facilities are an integral part. Penn Water's plant contributes to that output, such contribution, like those of Safe Harbor and Baltimore Company, being determined by the best use the system can make of the plant's capabilities.

[15] The record shows that this system operates in the following manner. The Safe Harbor plant generates both 60-cycle energy and 25-cycle single phase energy.[19] The 60-cycle energy is transmitted to Baltimore and to a point near the Takoma Park, Maryland, substation on the two 220 kv lines referred to above and, at times, energy generated by Baltimore Company or PEPCO is transmitted on

18. Such sales are Penn Water's sales to Baltimore Company and to Penn Water's Pennsylvania resale customers. The sale to the Pennsylvania Railroad is not a sale "for resale". Accordingly, our discussion at this point relates only to Penn Water's sales to its Pennsylvania resale customers and to Baltimore Company.

19. The reference to energy of a particular frequency and phase (*e. g.*, "25-cycle single phase") is intended as a convenient method of designating the frequency (cycles per second) at which the energy is transmitted and phase at which the particular circuit is designed to be operated.

these lines in the opposite direction to Safe Harbor. The 60-cycle energy thus received from Maryland, together with that generated at Safe Harbor, is delivered to Penn Water near the Safe Harbor plant and is transmitted by Penn Water over its two 66 kv circuits (Nos. 692 and 693) to Donegal Tap (Pa.) and to Lehman Farm (Pa.) in part for delivery to PP&L's lines and in part for delivery over two 66 kv circuits (Nos. 15 and 16) to Holtwood. The energy so delivered at Holtwood is sometimes, in whole or in part, energy received at Safe Harbor from Baltimore and Takoma Park, Maryland. It is thereafter delivered, with energy ~~operated~~ generated at Holtwood (hydro and steam), to Philadelphia Company (Coatesville, Pa.), Metropolitan Company (York, Pa.) or PP&L (Lancaster, Pa.), via Circuit No. 18. At times it is also in part converted to 25-cycle three phase energy and transmitted and delivered to PP&L (Circuit No. 3) or to Baltimore Company at Highlandtown substation, or to both. Some of the 60-cycle energy received at Safe Harbor from Maryland over the 220 kv circuits is at times converted at Safe Harbor to 25-cycle, singe phase, for Railroad use.

The 25-cycle single phase energy generated at Safe Harbor, and that available through its frequency changers, is delivered at Penn Water's adjacent Conestoga substation, from which it is re-delivered to [16] the Railroad for railroad purposes or for interchange at Thorndale (Pa.) with Philadelphia Company, or is transmitted over Respondents' 132 kv four circuit line for delivery to the Railroad for railroad purposes at Fishing Creek (Pa.), Conowingo (Md.) and Perryville (Md.) or for interchange at Perryville with Philadelphia Company.

Penn Water generates both 60-cycle energy, and 25-cycle three phase energy at its Holtwood plant. The 60-cycle energy, and energy from other system sources, is delivered to Philadelphia Company, Metropolitan Company or PP&L or is converted into 25-cycle three phase energy. Part of the Holtwood 60-cycle energy at times is delivered

through circuits Nos. 15 and 16 to PP&L at Lehman Farm or Donegal Tap; part is at times transmitted to Safe Harbor where it is further transmitted with other energy on the 220 kv lines to Baltimore or Takoma Park, Maryland; and part is at times converted to 25-cycle single phase energy at Safe Harbor and delivered to the Railroad facilities as described above.

Penn Water's 25-cycle generation is delivered to PP&L, some is at times converted to 60-cycle at Holtwood, and the remainder is transmitted over the four 66 kv circuits to Transmission Company's Highlandtown substation at Baltimore where it is delivered to Baltimore Company. The Highlandtown substation at times also receives from Baltimore Company a smaller amount of 25-cycle energy which is transmitted to Holtwood where it is delivered to PP&L or is converted to 60-cycle energy and delivered by Penn Water, to Safe Harbor or to the Pennsylvania customers.

It can be seen from the foregoing description of the operations of the facilities of Penn Water, Transmission Company, Safe Harbor and Baltimore Company that electric energy from the numerous system sources is available for consumption at any point on their combined facilities. Their power resources and transmission facilities are thus operated as an integrated and coordinated electric system, and all of Respondents' [17] facilities are integral parts of that system. The system foundation contracts referred to above (*supra*, pp. 7-8), governing the operation of the system, were designed to facilitate this completely integrated operation of system generating and transmitting facilities. That purpose found expression in the Supplemental Agreement of June 1, 1931, Article VIII of which reads in part as follows:

> "It is the intent among other things of this long term agreement to encourage the maximum cooperative utilization of the power and energy entitlements

and resources and other facilities of the parties hereto to the end that the joint use of their property and equipment shall give the greatest practical benefit to the public, and that all duplication of investment, and all unnecessary operating and maintenance costs, shall be avoided except such as would contribute toward the maintenance and improvement of the high standard of service rendered. The parties hereto shall cooperate to the fullest extent in the selection of the most suitable equipment in the co-ordination of their investment programs for additional generating capacity, transmission and tie-in facilities, etc., and shall so conduct their operations that economic interchange of power and energy during the different hours of the day, the seasons of the year, and over more prolonged periods, shall be encouraged in every possible way."

Contributing to the accomplishment of complete integration and pooling of the system's power resources are the provisions for over-all compensation to Penn Water and Safe Harbor without regard to the amounts delivered or the points at which delivery is made.

As a result, the direction of energy flows crossing the Pennsylvania-Maryland State line is governed principally by the volume of river flow. In general the flow of energy is south from Pennsylvania toward Maryland at all times during the spring months when the river is high. During the rest of the year the practice is to generate energy at the hydro plants of Penn Water and Safe Harbor so as to assist Baltimore Company in carrying its peak loads during the day, but at other hours and during weekends to stop hydro generation so as to allow the [18] ponds to refill. At these times the flow of energy tends to be to the north. However, the direction of the flow on the lines crossing the State boundary may change frequently according to the needs of the consumers in Pennsylvania or Maryland.

In this manner energy crossing the State boundary, with other system energy, is used to fulfill system require-

ments. There result times when system energy generated in Pennsylvania is used, mixed or unmixed, in meeting system requirements in Maryland. Similarly, there are occasions when system energy from Maryland is used, mixed or unmixed, in meeting system requirements in Pennsylvania. Energy flows in, across, and out of the system transmission network as the needs of the interconnected members develop from minute to minute and day to day.

It is accordingly evident that the operations of the unified system enterprise are completely interstate in character, notwithstanding the fact that system energy transactions at some particular times may involve energy never crossing the State boundary. The very purpose of the system foundation contracts was the elimination of artificial barriers, such as State boundaries. In the making of sales of system energy, such as those by Penn Water to its Pennsylvania utility customers, no distinction is made between energy crossing a State boundary and that which does not. Likewise, title to energy flowing on the system is of no significance among the companies comprising the system since they physically function as one enterprise and since the compensation features of the system contracts are so designed as to render considerations of title unimportant.

In the light of the foregoing facts, each of Penn Water's sales in Pennsylvania is clearly a system transaction of a character wholly [19] interstate even though at times it involves varying amounts of energy never crossing the State boundary, sometimes unmixed and sometimes mixed with out-of-state energy. In short, Penn Water is selling interstate system energy to purchasers outside the system. Such sales are sales "in interstate commerce".

The sale by Penn Water to Baltimore Company is also "in interstate commerce", but all of the energy thus sold crosses the State line. This latter sale is an intra-system transaction between two integral corporate parts of the system enterprise, which transaction is ancillary to the con-

summation of sales of system energy by Baltimore Company to purchasers outside the system, such as PEPCO, or in enabling Baltimore Company's use of that energy for delivery and sale to its resale customers.

The principles by which the foregoing conclusions are reached do not differ from those which must be applied in determining the character of Safe Harbor's sale of its output. With respect to that sale, the United States Court of Appeals for the Third Circuit has pointed out that Safe Harbor operates "as part of a large integrated interstate electric system" and sells all of its electric output, which "must be treated as an integrated whole", to "its two parent companies", Baltimore Company and Penn Water (*Safe Harbor Water Power Corporation v. Federal Power Commission*, 124 F. 2d 800, 802-803, 807). The energy sold by Safe Harbor, like that sold by Penn Water to its Pennsylvania resale customers, includes varying amounts of energy which never crosses a state line. All are nevertheless sales "in interstate commerce". And, incidentally, Safe Harbor's sale is like Penn Water's sale to Baltimore Company in that both are intra-system transactions.

[20] From what has been said, it clearly follows that facilities owned and operated by Respondents include facilities used for "the transmission of electric energy in interstate commerce" and for "the sale of electric energy at wholesale in interstate commerce". Each Respondent is thus a "public utility" within the meaning of that term as used in Part II. It is also evident that Penn Water's sales to its Pennsylvania resale customers and its sale to Baltimore Company are all sales "subject to the jurisdiction of the Commission" within the literal terms of Sections 205 and 206.

Respondents nevertheless contend that the Commission is without authority over the rate charged for the sales to PP&L, Philadelphia Company and Baltimore Company, claiming that such rates "are joint rates over which this

Commission has no jurisdiction".[20] This claim apparently rests upon the fact that Safe Harbor is a nominal party to Penn Water's contracts with PP&L and Philadelphia Company and upon the coordinated nature of operations of the integrated system. Both points may be conceded, but it does not follow that the rates involved are "joint" in any sense which removes them from this Commission's regulatory jurisdiction in this proceeding. In the first place, Safe Harbor sells its entire output to Penn Water and Baltimore Company and having received payment therefor constituting its entire revenue, it cannot sell any part of it to Penn Water's Pennsylvania customers. And while the [21] system operations are coordinated, the compensation features of the contracts by which Safe Harbor and Penn Water sell to Baltimore Company clearly refute any suggestion of "joint rate". Indeed, the record is replete with evidence, much of it supplied by Penn Water, which shows this "joint rate" contention to be wholly without substance.

Finally, Penn Water contends that its rates apply not only to energy but, indivisibly, to capacity services, transmission services, frequency control, power-factor cooperation, use of special facilities, and other services, as well as energy, and that this Commission's jurisdiction is limited to rates and charges relating only to the sale of "energy" in a strictly limited, technical sense. But all of these other so-called services are usual incidents of the wholesale sale of energy and many of them involve no segregable costs of service. The rates here involved, however they may be attributed to energy, capacity, and the other incidents referred to, are clearly within the scope of the statutory reference to "rates and charges * * * for or in connection with the * * * sale of electric energy subject to the jurisdiction of the Commission" (Section 205 (a)) and to "any

20. Significantly, Respondents do not contend that Penn Water's rate to Metropolitan Company is "joint". Though Safe Harbor, which was formerly a nominal party to that contract is not now a party, the real situation there is precisely the same as that involved in Penn Water's contracts with PP&L and the Philadelphia Company where Safe Harbor is a nominal party.

rule, regulation, practice or contract affecting such rate, charge, or classification" (Section 206 (a)). We perceive nothing in Respondents' sales for resale to take them outside the scope of the regulation provided by Congress.

Authority under Part I.

Respondents challenge the Commission's authority under Part I, claiming that the facts necessary to exercise of our jurisdiction under [22] Section 19 or Section 20 are not shown of record.[21] Since Section 19 deals with intrastate rates, our attention here may be confined to Section 20. For we have already seen that Penn Water's operations are all integral activities of the unified interstate systems, and its sales are sales in "interstate commerce".[22]

Respondents argue that this Commission has no authority over its interstate wholesale rates, absent a finding that the States [23] directly concerned—Maryland and Pennsylvania—are "unable to agree" on those rates, and that such a finding cannot be made on the record. However, the record shows that the Commissions of both States actively intervened, and during the course of such participation and in the briefs of their respective counsel, clearly demonstrated that their positions are irreconcilable and that they are "unable to agree." Accordingly, we expressly find that the States are "unable to agree."

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21. Respondents apparently take the position that Penn Water must be treated as a licensee under Part I. Our order requiring Penn Water to apply for a license was sustained on review (*Pennsylvania Water & Power Company* v. *Federal Power Commission*, 123 F. 2d 155, *certiorari* denied 315 U. S. 806). Though no license has yet been issued (see *Re Pennsylvania Water & Power Company*, 4 FPC 426; *idem*, 4 FPC 500), it is entirely proper that Penn Water be treated as a licensee for rate-making purposes.

22. We confine our inquiry concerning jurisdiction under Part I to Penn Water's sales to its Pennsylvania resale customers and to Baltimore Company. Although Penn Water's retail deliveries to the Pennsylvania Railroad in Pennsylvania are deliveries in interstate commerce they are made under a contract which provides for deliveries in both Pennsylvania and Maryland by Penn Water and Baltimore Company. By a separate agreement among themselves, to which the Railroad is not a party, Penn Water and Baltimore Company have agreed upon a division, at the State boundary, of their deliveries, and a division of the revenue received. Nevertheless, the record here provides an adequate basis for a determination of Penn Water's costs in performing the service it renders under the contracts. See *infra*, p. 166.

Is Section 20 Repealed by Implication? Here, as in the Safe Harbor proceeding (5 F. P. C. 221), the contention has been advanced that a Part I licensee cannot be regulated under Part II. We have found that Penn Water must be treated as a Part I "licensee" for rate-making purposes, and that it is a "public utility" under Part II. Accordingly, if Section 20 be construed to confer upon the states a priority of jurisdiction over the interstate wholesale rates of a licensee-public utility, the conflicting part of Section 20 must be considered repealed by implication, or it must be given a construction avoiding conflict. We reaffirm and need not repeat our discussion of this problem in the Safe Harbor proceeding (5 F. P. C. 231, 239-243). Here, as there, we conclude that whether Section 20 may be given an interpretation avoiding conflict (p. 242)

> "* * * or whether the conflicting part of that section be deemed repealed by implication, the finding that the States are unable to agree is not a necessary condition precedent to our authority under that section, for the rates here in question, being interstate wholesale rates held beyond the regulatory power of the States in the *Attleboro* case, *supra*, the condition of section 20 would be inapplicable. Our jurisdiction, therefore, would not be dependent upon our finding that the States are unable to agree."

[24] DUE PROCESS.

On reviewing the entire record in this proceeding we think it is clear that Respondents have had a fair hearing on adequate notice.

The scope of the subjects and issues involved were clearly set forth in the Commission's orders instituting and enlarging the investigation herein and fixing the date of hearing. The detailed position of the Staff with respect to these subjects and issues, as developed during the course of the Staff's investigation, were set forth by Staff's counsel in his opening statement, and at other times during the

course of the hearing. There is not the slightest evidence that Respondents were unable to prepare their case because of any alleged vagueness in the specification of issues, and it may be noted that not a single witness presented by them had to or did condition his testimony upon what the position of the Staff might or might not be.

Nor were Respondents deprived of an adequate opportunity to present their evidence or to cross-examine adverse witnesses. Respondents' counsel had from 6 to 11 months, after direct testimony on Staff's case in chief, to prepare cross-examination of Staff's witnesses, and from 1½ weeks to 1 month, after service of Staff's prepared rebuttal testimony, to prepare cross-examination with respect thereto. Further, counsel had from 2 weeks to 11 months, after the date Staff witnesses left the stand, to prepare testimony and evidence in rebuttal of Staff witnesses, as well as ample time in which to prepare and present evidence rebutting Staff's rebuttal.

The exclusion of evidence of reproduction cost, as well as cost in present dollars and cost of a substitute plant, was entirely proper on basis hereinafter stated. Respondents fail to show that they have been prejudiced by any substantial error in any ruling of the Examiner excluding evidence.

The record in this proceeding, therefore does not support Respondents' claim of not having had ample notice and not having had a fair trial.

[25] ELECTRIC PLANT—RATE BASE.

In the determination of a rate base there is involved the investment in property used and useful in public service, consideration of accrued depreciation, and an allowance for working capital.

Evidence was received in this proceeding as to Respondents' electric plant in service as of December 3 (sic) [31], 1945, both as reclassified by Respondents in their original cost studies and as adjusted by the Staff during

the course of the Staff's examination of Respondents' accounts and records in preparation for the hearing herein. Evidence was received later in the proceeding, in the form of exhibits, projecting the foregoing amounts of electric plant in service to December 31, 1946.

Respondents also offered evidence as to (1) the cost of reproducing their properties as of December 31, 1945, (2) the cost as of the same date of producing a modern substitute plant therefor, located at the same place and capable of rendering the same service as Respondents' present facilities, and (3) the original investment in Respondents' properties stated in terms of the purchasing power of the dollar in 1945.

The evidence embraced in the foregoing offers was properly excluded by the Examiner. None of this excluded evidence is necessary for rate making purposes and none of it would aid the Commission in the determination of just and reasonable rates. Further, as all of such evidence was offered to show "fair value" in excess of actual [redacted]itimate original cost, and consequently in excess of "net investment", such evidence, had it been received, would be useless for rate making purposes [26] under Part I of the Act by express provision of Section 20 thereof.[23]

Electric Plant in Service.

Respondents' Electric Plant in Service[24] as of December 31, 1945 totalled (per books) $38,584,232.13. The Staff proposes the exclusion of a net amount of $5,663,493.90 of this total for rate base purposes leaving an adjusted Electric Plant in Service in the amount of $32,920,738.23. During the course of the Staff's field examination and the hearing proceedings, Respondents conceded certain proposed adjustments in the net amount of $2,208,902.08 leaving in issue a balance of $3,454,591.82. Deducting from this balance $75,722.25 proposed by the Staff for reclassification

23. *In the Matter of Safe Harbor Water Power Corporation* (IT-5914, 1946) 5 FPC 220, 243-244.

24. Electric Plant in Service as used in this opinion embraces Electric Plant in Service and in Process of Reclassification as used in the exhibits in this proceeding.

to Plant Held for Future Use but claimed by Respondents for inclusion as a part of the rate base, the amount considered in dispute at this point totals $3,378,869.57 [25] and is composed of the following items:

[27]

1. Claimed value of McCall Company common stock (par $100) issued allegedly for land and water rights or organization:		
Issued to Hutchinson, 18,840 shares @ $25	$ 471,000	
Issued to Harlow-McGaw, 1,000 shares @ $25	25,000	
Issued to C. D. Pullen, 150 shares @ $25	3,750	
Issued for Organization, 10 shares @ $25	250	$ 500,000.00
2. Claimed value of McCall Company stock allegedly issued to Harvey Fisk & Sons for management services (⅜ of value of 1,875 shares preferred and 17,537½ shares common)		199,570.31
3. Stock issue expense:		
Penn Water stock expense	$ 81,906.59	
Alleged McCall Company bond expense claimed applicable to Penn Water stock exchanged for McCall Company bonds	331,703.15	413,609.74

25. I. e. $5,663,493.90 less $2,208,902.08 less $75,722.25 or $3,378,869.57.

4. Claimed value of 5,000 shares of Penn Water common stock at $60 allegedly issued to Aldred for management services (11/1/08 to 11/1/12, prorated to period 11/1/08 to 10/1/11)		218,750.00
5. Interest during construction by McCall Company and Penn Water		1,201,368.57
6. Expenditures during McCall Company's "cessation period"		143,981.46
7. Promotion expense, Penn Water		29,601.59
8. Credit for property transferred by McCall Company		37,063.98
9. Profit on property sold by Penn Water		119,940.20
10. Flashboard development expense		44,961.06
11. Roller dam investigation expense		4,793.91
12. Charges to flowage basin account:		
Period 1910-1924	$150,346.37	
Period 1925-1936	27,283.37	177,630.24
13. Survey of storage reservoir sites		12,420.77
14. Cost of land acquired from affiliate		24,151.83
15. Cost of defending title to Mill tract		1,427.42

16. Conowingo backwater litigation expense	39,301
17. Expense incurred on transmission line built by others	12,459
18. Expense incurred on substation built by others	5,668
19. Loss on materials and supplies	13,033
20. Cash not accounted for	130
21. Susquehanna Contracting Company expense	6,621
22. Construction fee charged Holtwood Power Company (Affil.)	50,194
23. Organization expense of Holtwood Power Company (Affil.)	17,875
24. Tower foundations abandoned	3,595
25. Items previously charged to operating expense or to the depreciation reserve	96,116
26. Contribution to Holtwood Church	1,400
27. River coal marketing expense	6,132
28. Value of McCall Ferry Company stock acquired from Hutchinson	(200.0
29. Miscellaneous items in plant account proposed for elimination by Respondents	(2,731.8
	$3,378,869

[28] *Control of the McCall Company and Distribution of its Stock.*

Before taking up the respective items of claimed cost comprising the total of $3,378,869.57 in dispute, consideration will be given to the questions, common to Items 1, 2 and $331,703.15 of 3, above, of whether certain McCall Company stock was distributed in payment for services and properties, as Respondents claim, and of whether Harvey Fisk & Sons, one of the alleged recipients, obtained exclusive control of the McCall Company so that the distribution of the stock to the other principal alleged recipients, after it obtained such control, can be treated as arm's length transactions not subject to the no-profits-to-affiliates rule. As we have recently reiterated, it is incumbent upon the licensee under the Act to show, with respect to property acquired from an affiliate, that the amount it claims as cost was cost to the affiliate, not profit. *Minnesota Power & Light Company,* decided September 2, 1948, Opinion No. 167, Project No. 346, and cases there cited (p. 8, *et seq.,* mimeographed copy); compare *St. Croix Falls Minnesota Improvement Company, et al.,* 3 F. P. C. 3, 27-29 (dissenting opinion).

The project was conceived by Cary T. Hutchinson, who later acted in the capacities as Director and Chief Engineer of the McCall Company. His preliminary and promotional activities covered a four-year period, culminating, in the Spring of 1905, in the completion of financial arrangements for a 155-foot dam (increased in June 1906 to 165 feet), with 50,000 horsepower installed, and the incorporation of McCall Company on April 14, 1905, to construct, own and operate the development. The McCall Company was organized by the merger of two inactive companies previously incorporated by Hutchinson in 1902, and at the outset had the same incorporators, stockholders, and directors as the predecessor companies, all nominees of Hutchinson and his associates.

[29] Financing activities were initiated before the creation of the McCall Company by the formation of a syndicate

managed by H. F. Dimock (Hutchinson's father-in-law) S. R. Bertron (of Bertron, Storrs & Griscom), and Charle F. [T.] Barney (President of Knickerbocker Trust Com pany), and the issuance of a combined prospectus and un derwriting agreement dated March 1, 1905, under which i was proposed to obtain subscriptions to $8,000,000 princip amount of bonds. The original syndicate, after obtainin subscriptions to approximately $4,000,000 of bonds (prin cipally, or entirely by Lee, Higginson & Company and C. A Coffin), enlisted and obtained the aid of Harvey Fisk Sons. Negotiations with the Fisk firm resulted in the issu ance of a bond and stock purchase agreement dated Marc 25, 1905,[26] which set forth the arrangement between th Fisk firm, as "Bankers", and the subscribers, severally However, any arrangement agreed upon between the synd cate members themselves as to control of the McCall Com pany, distribution of its stock, etc., is unknown as ther is no available document which discloses the terms thereo

There was sold at 90 cents on the dollar a total o $8,075,000 principal amount of bonds, including th $4,000,000 of subscriptions [30] obtained by the origina syndicate and kept in force under the March 25th bond an stock purchase agreement. It was expressly provided in th March 25th agreement that the bonds sold thereunder wer subject to Harvey Fisk & Sons' option to repurchase a or any part of them from the original subscribers at th initial sales price (90), unaccompanied by the bonus stock,

26. The March 25, 1905, bond and stock purchase agreement recites part:

"* * * the Bankers (Harvey Fisk & Sons) have been requested a are willing to aid in financing the said Plan to the extent of taking agre ments from the Subscribers for the purchase of bonds and preferred sto of the Power Company, of acquiring the bonds and stocks for delive under such purchase, and of making or procuring the loans hereinaft mentioned;

* * *

"No partnership or joint relation of any kind results from this agre ment, nor do the Bankers assume any fiduciary relation of any kind, any obligation to cause the plan aforesaid to be undertaken or carri out."

. The subscribers to the $4,000,000 subscriptions sold before executi of the March 25, 1905, agreement apparently received a 50% preferred sto

at any time up to one year after completion of construction. This agreement is the only contemporaneous evidence which refers to compensation to be received by the Fisk firm. None of the records of that firm relating to the McCall Company financing are now in existence, and there is no other contemporaneous evidence showing that the Fisk firm either received, or was entitled to, any compensation other than that hoped to be realized through the resale of the bonds at a price above 90.

The issued and outstanding stock of the McCall Company consisted of 50,000 shares of common and 41,165 shares of preferred. On the basis of executed contracts the distribution to be made of those [31] securities was as follows:

	Common	Preferred
Incorporators' Shares	10	
Issued by Susquehanna Contracting Company[28] in exchange for properties:		
Harlow-McGaw[29]	1,000	
Pullen	150	
Hutchinson	48,840	4,000
Retained by Susquehanna Contracting Company for bond subscriptions		37,165
	50,000	41,165

bonus with the bonds, notwithstanding the fact that the March 25th plan provided for and the other subscribers received only a 45% preferred stock bonus.

28. The Susquehanna Contracting Company, a paper company, was organized on June 12, 1905, and the bond and stock purchase agreement of March 25, 1905, under which the bond subscriptions had been sold, together with the rights, obligations and liabilities of the Fisk firm thereunder, except for the Fisk firm's option to repurchase the bonds at 90 (which it retained), were assigned to the Contracting Company upon its formation. The Fisk firm was appointed agent to carry out the Contracting Company's obligations under the March 25th agreement. There is evidence indicating that the purpose of the Contracting Company was to relieve the Fisk firm "as a partnership, from any liability which might result from the financing."

29. Harvey Fisk & Sons and Bertron, Storrs & Griscom executed contracts for the purchase of the Pullen option and the Harlow-McGaw proper-

[32] Respondents claim that the contract for the purchase of Hutchinson's properties was merely the vehicle for distributing 30,000 shares of common and 1,875 shares of preferred stock to Harvey Fisk & Sons (17,537½ shares of common and 1,875 shares of preferred), Bertron, Storrs & Griscom (7,462½ shares of common) and Lee, Higginson & Company (5,000 shares of common). This claim is supported as to Bertron, Storrs & Griscom and Lee Higginson & Company by the investment records of Bertron, Storrs & Griscom which show that firm's receipt of 12,462½ shares of the McCall Company common, of which 5,000 were transferred to Lee, Higginson & Company under date of December 11, 1906, as its commission for the sale of $2,000,000 principal amount of the McCall Company bonds. Beyond this there is no credible evidence to support Respondents' claimed distribution. Further, since the evidence does not indicate the amount of bonds, if any, sold by Bertron, Storrs & Griscom, there is serious question as to whether it was intended that that firm should retain the 7,462½ shares as compensation for services rendered. Respondents' claim must be rejected insofar as it relates to Harvey Fisk & Sons.

On the question of control, likewise, Respondents' claim that Cary T. Hutchinson lost control of the enterprise in the Spring of 1905 to Harvey Fisk & Sons must be rejected. Such credible evidence as there is leads us to conclude that when the Fisk firm came into the financing, after

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ties on April 27th and 29th, 1905. Upon its creation the Contracting Company executed an agreement with the McCall Company providing for the transfer to the latter of the Hutchinson properties, the Pullen option, the Harlow-McGaw properties and $6,400,000 in cash, which cash had already been provided for through the sale of bond subscriptions and a loan agreement. In return, the McCall Company agreed to issue to the Contracting Company $8,483,000 in bonds ($8,075,000 of which had been sold), 41,165 shares of preferred and 49,990 shares of common stock. To place the Contracting Company in position to carry out its agreement with the McCall Company, the contracts previously executed for the purchase of the Harlow-McGaw properties and the Pullen option were assigned to the Contracting Company, which company also executed an agreement for the purchase of Hutchinson's properties for a stated consideration of $750,000 in cash, 4,000 shares of preferred and 48,840 shares of common stock.

half of the bonds had been sold, the original promoters merely opened their ranks to an additional member and that all thereafter shared control of the McCall Company until it encountered financial difficulties and went into receivership.

[33] We think it is clear that during the period from March, 1905, to December, 1908, control was shared by Hutchinson with Bertron, Storrs & Griscom; Lee, Higginson & Company; C. A. Coffin and Harvey Fisk & Sons as a result of a pooling of their interests. For one thing, all of the McCall Company's stock was deposited under a voting trust. The three trustees constituting the voting trust committee were H. F. Dimock, Hutchinson's father-in-law, who had been associated with Hutchinson from the outset, and was president of the McCall Company; S. R. Bertron, of Bertron, Storrs & Griscom, representative of the bankers in the March 1, 1905, financing syndicate; and W. M. Barnum, a partner in the Fisk firm. Thus, each of the three interests was represented in the voting trust committee. In case of a vacancy on the committee, the remaining two members could have appointed a successor.

Additional evidence indicating that each interest shared in control is to be found in the fact that each was represented on the McCall Company Executive Committee, and, as shown by a letter dated January 19 [July 10,] 1907, the management of the Company was in the hands of a committee on which was a member of each of the three banking firms and "also * * * Mr. C. A. Coffin and Mr. H. F. Dimock who has been interested in the project for a number of years."

Moreover, in a letter dated June 22, 1906, from Hutchinson to Dimock, it is disclosed that Mr. Eddy of the law firm of Simpson, Thatcher & Bartlett had asked Hutchinson "what Board of Directors shall be elected at the annual meeting of the stockholders" and Hutchinson had told him "to re-elect the present Board of Directors, with one [34] possible exception." This indication of at least some voice by Hutchinson in the selection of directors

is unopposed by any showing that the Fisk firm controlled the directors.

We find, therefore, that the McCall Company was not controlled solely by Harvey Fisk & Sons, but that control was shared with Hutchinson and the other interests.

[35] *Claimed Cash Value of McCall Company Common and Preferred Stock.*

Respondents claim $1,031,273.46 (comprised of $500,000, Item 1; $199,570.31, Item 2; and $331,703.15, part of Item 3) as the cash value of common and preferred stock of the McCall Company allegedly issued as part consideration for land and water rights and for services performed by the bankers, such claim being based upon asserted cash values of $25.00 and $50.00, respectively, per share for the common and preferred stock.[30]

None of the issued and outstanding stock of the McCall Company was sold for cash. In the absence of market quotations, Respondents' attempt to substantiate the claimed cash values for the stock through statements, prepared in 1938 and 1939, some thirty-four years after the transactions in which the stock was issued, and signed by or attributed to four individuals,[31] not one of whom states that his assigned values represent the "cash value" of the stock in June, 1905, i. e., the date of the transactions in which the stock was issued, and not one of whom ever sold or purchased any of the McCall Company stock at those valuations, or at any valuation.

[36] While Respondents assert that the statements were "legally admissible as secondary evidence" because "of

30. Both common and preferred stock had a par value of $100 per share.

31. Cary T. Hutchinson; Mr. Pliny Fisk, a former member of the Fisk firm; George C. Lee, a former member of Lee, Higginson & Company; and James E. Hopkins, of the law firm of Coudert Brothers. Their valuations ranged from $18.00 to $30.00 per share for the common stock. We do not think Respondents' selection of $25.00 per share for the common stock, used for the purposes of their original cost claim, is supported by such valuations. The $50.00 valuation for the preferred stock is based upon the opinion of Mr. Pliny Fisk, whose firm is the only one claimed to have rendered services for which preferred stock was issued.

the death'' or ''physical incapacity to testify'' of the four individuals, the record contains no showing that Lee and Hopkins were in fact unavailable because of age, health or other reasons. While it is true that Fisk and Hutchinson were dead at the time of the hearing, Respondents made no effort to produce the attorney who obtained the Fisk affidavit and statement attributed by that attorney to Fisk, the attorney who secured Hutchinson's purported cross mark to ''Hutchinson's affidavit,'' or the physician who, though not present at the time, prepared an affidavit to the effect that Hutchinson, who was then at death's door, had the ability to understand the purport of his actions.

As to the Hopkins affidavit, it need only be further stated that he admits therein that he is ''not qualified to place a value on that stock as such * * *.'' Then, too, in the opinion of Respondents' witness Gunn, of the affidavits and statements obtained, Hopkins' affidavit was the least reliable.

Lee, in his affidavit, admits that it was ''difficult'' at that late date to place a value on the 5,000 shares of common stock received by his firm, but nevertheless was of the opinion that his ''firm would not have participated in the McCall Ferry proposition [37] unless they believed their stock compensation has a total value of at least $125,000 * * *. This would make the stock worth $25.00 per share.'' It was Mr. Gardiner Lane, another partner of Lee, Higginson & Company, who was particularly responsible for that firm's financing activities in connection with the McCall Company. What duties, if any, Lee had in that regard is not shown in the record. The fact that Lee was not presented for cross-examination as to many of the vague and indefinite statements contained in his affidavit; that he valued services and assigned that value to stock, instead of determining the ''cash value'' of the stock, makes his opinion unreliable for the purposes of determining the cash value of the stock involved in Respondents' claim.

In his affidavit, Fisk states that his recollection had been ''dimmed'' as a result of the lapse of so many years,

and that "he had taken very little active interest" in the McCall Company enterprise. Fisk valued alleged services and then assigned such value to the stock he thought his firm might have received as compensation therefor, such method proceeding upon the questionable assumption that if the services had a certain value, the stock exchanged therefor had an equivalent value. Moreover, since there is no merit to the contention that the Fisk firm received stock compensation for either financial or management services, Fisk's $50.00 valuation for the preferred stock and $18.00 for the common were arrived at by valuing non-existent services.

[38] In the "Hutchinson affidavit" it is stated that "the common stock should return a dividend of from 2% to 3% of its par value, which would make it worth from $20.00 to $30.00 per share, based on earnings alone." Such a method of valuation, however, not only starts with an unestablished premise, but is contrary to Section 14 of the Act which expressly provides that "net investment shall not include or be affected by * * * prospective revenues." Furthermore, this assertion as to the value of the common stock is at variance with, and effectively refuted by, a letter written by Hutchinson on January 19, 1906, in which he expressed the hope that 150 shares of common stock of the McCall Company which he was giving to his two associates "before long will be worth something."

Because of the importance which Respondents attach to the document referred to as the "Hutchinson affidavit" it is desirable to set forth its history. That document is dated January 13, 1939, and was prepared at the request of Penn Water's Chief Engineer Gunn, who was in charge of its accounting reclassification, and upon the basis of representations made by him to an attorney in Miami, Florida, on or about January 12, 1939 (Hutchinson died about four days later), or within one or two days after Gunn received word in Baltimore, Maryland, of Hutchinson's "very bad health." Upon his arrival in Miami by

plane, Gunn did not confer with Hutchinson,[32] but rather with Hutchinson's [39] personal attorney, Rhinehart, who, on no previous occasion had conferred with Gunn, and had no knowledge of the early history of the Holtwood development. According to Rhinehart's affidavit dated January 14, 1939, he conferred with Gunn "for several days" in Miami; "prepared an affidavit setting forth in detail information which Mr. Hutchinson was in a position to give"; and on January 13, 1939, "conferred with Mr. Hutchinson in his home * * * at which time he read to him the aforesaid affidavit and after due consideration Mr. Hutchinson endeavored to subscribe his name to the instrument; that he was unable to do so, but then and there did affix his signature in the form of a cross mark * * *." Under these circumstances, some measure of the weight to be given the affidavit can be gained from a consideration of the nature of Gunn's information from which the affidavit was written.

On January 9, 1939, less than four days prior to the preparation of the "Hutchinson affidavit", Gunn had addressed a letter to Mr. Pliny Fisk's attorney requesting that the latter attempt to obtain vital data from Fisk,[33] including information as to the "form of compensation" Harvey Fisk & Sons received "for their services"; the manner in which the Fisk firm looked "upon the arrangement through which they became interested in the McCall Ferry proposition", and [40] whether that firm considered "the transaction a purchase of control from the Hutchinson-Dimock interest". In other words, although Gunn had had several previous conferences with Hutchinson, he still had not ascertained the facts with reference to the points mentioned in his letter. Nevertheless there is contained in the "Hutch-

32. Witness Gunn testified that he had previously conferred with Hutchinson on several occasions with respect to the early history, etc., of the project. Gunn had no "personal knowledge whatever of McCall (Company's) construction nor, indeed, any of the events in the history of the Holtwood Company prior to 1930."

33. In his affidavit dated December 28, 1938, twelve days before, Fisk had stated that he was "unable at this date to give an exact statement of the total compensation to my firm."

inson affidavit" the categorical statement that "the bankers were to receive 30,000 shares (of common stock) and that the remaining shares * * * were to be given Affiant * * *."[34]

[41] As further support for the claimed cash value of the stock, Respondents rely upon the testimony of witness Uhl who expressed the opinion that the fair market value of the properties required for a dam with a crest elevation of 155 feet was $3,300,000 as of March 1, 1905. That valuation was based entirely upon engineering factors designed to reflect power site value and had no relation to cost. It is the type of valuation consistently held by the Commission and the courts to be of no probative value in determining the cost of a project (*Alabama Power Company v. McNinch*, 94 F. 2d 601, 606-609, 614-616; *Alabama Power Company v. Federal Power Commission*, 128 F. 2d 880, cert. den. 317 U. S. 652; *Alabama Power Company v. Federal Power*

34. In his letter dated January 9, 1939, Gunn enclosed a narrative statement he had prepared covering "our story of Harvey Fisk & Sons' connection with the McCall Ferry development." He explained that "Because many essential facts in this story are not now available, we have found it necessary to draw freely upon suppositions and conjectures." The following comparison of excerpts from this narrative statement and an excerpt from the "Hutchinson affidavit" reveals the extent to which Gunn's tentative "story" crystalized into a categorical statement of fact within the brief span of one or two days although apparently he had obtained no further information:

Narrative Statement Enclosed in Letter dated 1/9/39

"From an analysis of the material in our possession, *it appears* that the Hutchinson group not only gave up their syndicate plans but also had to surrender control to Harvey Fisk & Sons. *We have been unable to determine how this control was actually exercised.*

* * *

"* * The fact that these shares came from the 18,840 block *is the basis for the deduction* that this block of stock was owned by the Hutchinson interests. *It would, therefore, appear* that the certificate for 30,000 shares representing 60% of the common stock *probably* went to the Bankers. * *" (Italics supplied)

Hutchinson's Affidavit dated 1/13/39

"* * the Fisk firm * * insisted as consideration for its efforts that a *majority* of the common stock of the proposed development corporation be issued to Harvey Fisk & Sons, or its nominees. Affiant recalls that of the 50,000 shares of common stock to be issued under the * * plan, the bankers were to receive 30,000 shares and that the remaining shares * * were to be given to the Affiant * *." (Italics supplied)

Commission, 134 F. 2d 602, 607), and is entitled to no weight.

Not only have Respondents not sustained the claimed cash values of $25.00 and $50.00, respectively, for the common and preferred stock, but it is clear that the stock could have had no cash value at all. The McCall Company was a newly created company. No contracts for the sale of power [42] had been obtained. The plans and specifications for the development had not been perfected. Not even the exact location of the dam had been determined. Moreover, because the development was a pioneer project, was in fact the first attempt in the United States to erect a hydroelectric project of its type, it was naturally viewed more critically by the investing public than would be the case today.

Contributing to the lack of a cash value for the stock was also the fact that the development involved a large initial investment and heavy prior charges for bond interest which dimmed any immediate prospect for dividends on the stock—particularly on the common stock. Furthermore, the fact that the initial syndicate encountered difficulties in disposing of the prior lien bonds at 90 with a 50% preferred stock bonus, necessitating calling on the Fisk firm for assistance, clearly indicates that the stock could not have been sold for cash.

Further demonstration of the fact that the stock had no cash value is found in the testimony of J. H. Harlow [35] in a condemnation proceeding in 1907 to the effect that the value of the common stock "was practically nothing; you might call it anything you like, it is common stock and may be a long time before it has any value." He had previously testified in the same proceeding that the common stock "has not any market value yet."

[43] Since we conclude that neither the common or preferred stock had any cash value in 1905, the aggregate cash

35. Of the Harlow-McGaw interests which had assembled a large part of the lands ultimately used for this development and had sold it to the McCall Company for bonds and stock of that company and cash.

value claim of $1,031,273.46 must be disallowed. However, because there are several additional grounds for the disallowance of most of the claimed cost sought to be established by the use of that cash value, the individual amounts will now be considered.

[44] a. *Claimed Cash Value of Stock Allegedly Issued to Hutchinson as Compensation for Properties.*

In addition to $750,000 cash paid to Hutchinson under the contract dated June 14, 1905, for his 2,896.54 acres of land and water rights, Respondents contend that $471,000 should be allowed in the rate base as actual legitimate original cost of such land and rights, representing the claimed cash value of 18,840 of the 48,840 shares of the McCall Company common stock issued under that agreement. Since, as already shown, the stock then had no cash value, this claim cannot be allowed. But even assuming, *arguendo,* it had a cash value, the claim would still have to be disallowed.

A cost estimate covering the project, prepared by Hutchinson himself on December 18, 1905, after the transfer of his properties to the McCall Company, lists the cost to McCall Company of his properties at $750,000. Other credible evidence is to the same effect and the March 25, 1905, financing plan provided that the McCall Company "bonds and stock" were to be issued, among other things, "for all *profits* in connection with the bringing together and turning in" of properties. Hutchinson was, as we have shown, at all times in control or sharing control of the McCall Company. Under the Commission's no-profits-to-affiliates rule such profits are not actual legitimate original cost since they did not arise in an arm's length transaction and there is no showing of cost incurred by Hutchinson in excess of the $750,000 cash payment (*Pennsylvania Power & Light Company v. Federal Power Commission,* 138 F. 2d 445, 450, cert. den. 321 U. S. 798; *Niagara Falls Power Company v. Federal* [45] *Power Commission,* 137 F. 2d 787, 792-795, cert. den. 320 U. S. 798; *Puget Sound Power & Light Co.*

v. Federal Power Commission, 137 F. 2d 701, 703; *Alabama Power Company v. Federal Power Commission,* 134 F. 2d 602, 609).

While the staff did not question any portion of the $750,000 cash paid to Hutchinson, which was apparently intended as compensation for all of his efforts, expenditures and obligations, it appears that Hutchinson paid $155,000 for the half (approximately) of his properties which he had acquired from York Furnace Power Company and which he transferred to McCall Company under the June 14, 1905, agreement. While the price he paid for most of the parcels comprising the other half is not shown, it is reasonable to assume from the known prices paid for a few of those parcels that the cost thereof was less than, or at most did not exceed, the $155,000 paid for the York Furnace properties, which would make the total price of all of his properties not more than $310,000. This would leave $440,000 of the $750,000 cash paid to Hutchinson to cover his other expenditures and compensation for his efforts.

Furthermore, not all costs of such efforts would be properly includible here. Merely because Hutchinson incurred expenditures in connection with his promotional and other activities does not mean that they all constitute proper project costs. Thus, such cost as he incurred in connection with his financing activities would be disallowable, in view of the 6% interest allowance hereinafter made (*Northern States Power Co.,* 1 FPC 597, 600). Moreover, expenditures made by Hutchinson in his unsuccessful efforts to secure the enactment of legislation [46] favorable to his promotional plan are likewise disallowable (*Northern States Power Company, supra,* at p. 337). However, there is no means of determining at this late date the aggregate amount and exact nature of all of Hutchinson's expenditures. For this reason, and in order to be abundantly fair to Respondents, we find that a reasonable allowance for actual legitimate cost of this item is $750,000.

b. *Claimed Cash Value of Stock Issued to Harlow-McGaw and Pullen.*

Inasmuch as the McCall Company stock had no cash value when issued, the claim of $28,750 for 1,150 shares of common stock of that company issued under contracts dated April 27th and April 29th, 1905, to the Harlow-McGaw interests (1,000 shares) and C. D. Pullen (150 shares), respectively, as further consideration for lands and rights owned by them, in addition to $210,000 cash and $225,000 cash value of bonds paid to them and not questioned by the staff, must be disallowed.

c. *Claimed Cash Value of Incorporators' Shares Acquired by Hutchinson.*

The McCall Company was formed in April, 1905, by the merger of Hutchinson's two inactive companies, i. e., The Hillside Water and Power Company and Susquehanna Water and Power Company, with ten shares of the McCall Company common stock being given Hutchinson in exchange for the stock of the merged companies. The claimed cash value of this stock, $250.00, has been classified by Respondents in Account 301, as Organization Expense.

Even if the stock had had a cash value, the issuance of the stock was not an organization expense incurred by the merging companies. [47] Moreover, it is reasonable to conclude that the $750,000 payment Hutchinson received for his properties covered all costs previously incurred by him, including the cost of incorporating the predecessor companies. For these reasons, the $250.00 may not be allowed as part of the rate base.

d. *McCall Company Stock Allegedly Issued to Harvey Fisk & Sons for Management Services.*

Respondents contend that Harvey Fisk & Sons, following execution of the March 25, 1905, financing plan, rendered both banking and management services to the McCall

Company. For the alleged management services Respondents claim an amount of $199,570.31, equal to three-eighths of the value Respondents claim for 1,875 shares of preferred and 17,537½ shares of common stock of the McCall Company. The other five-eighths portion of the stock (as hereinafter shown in connection with the amount of $331,703.15 (part of Item 3) claimed as Penn Water stock issue expense) is claimed as compensation paid to the Fisk firm for banking services.[36]

[48] As has been shown, not only did the stock have no cash value when issued, but the claimed distribution thereof to the Fisk firm has not been sustained. It is hereinafter further shown that there is no basis in the evidence for the contention that the Fisk firm rendered management services. But even assuming, *arguendo,* (a) a cash value for the stock, (b) issuance of the stock to the Fisk firm, and (c) rendition of the alleged services, allowance of any portion of the claim either for management or banking services, in the absence of a showing of cost to the Fisk firm, would do violence to the no-profits-to-affiliates rule. This is so irrespective of whether the Fisk firm shared control of McCall Company with other syndicate members, as herein found, or exercised sole control over that company, as alleged by Respondents.

Neither the March 25, 1905, financing plan nor any of the other contemporary evidence of record supports the contention that the Fisk firm managed McCall Company. In fact, the financing agreement provided that the Fisk firm was not even obligated to "cause the * * * plan to be undertaken or carried out." That agreement further provided that the bonds sold thereunder were subject to the Fisk firm's option to repurchase all or any part thereof at

[36] 36. The division between banking and financial services is based upon statements contained in the Fisk affidavit that the value of his firm's banking services was at least $250,000, and his firm's management services was not less than $150,000. It is to be noted, however, that the amount of $199,570.31 claimed for management services exceeds by more than $49,000 the estimate placed thereon in the Fisk affidavit, and such excess lacks any color of support in the Fisk affidavit.

the initial sales price (90), unaccompanied by the bonus stock given with the bonds, at any time up to and including one year after completion of construction, it apparently being contemplated that in the event the development had by that time proved successful, the bonds might then be repurchased and resold by the Fisk firm at a profit. In the absence of evidence indicating to [49] the contrary, it is entirely possible that it was the intention of the syndicate members that the Fisk firm was to be compensated for its services through the repurchase and resale of the bonds. If such was the intention, it could hardly be contended that the Fisk firm was entitled to stock compensation for any purpose.

There is no evidence showing that Harvey Fisk & Sons were consulted on matters of policy, or the construction of the project, the allocation of funds, the expenditures of the McCall Company, the selection of personnel, the negotiation of power contracts, the conduct of law actions, the determination of the ultimate level at which it was decided to build the crest of the dam, or even as to the cessation of construction activities in 1907, when the McCall Company encountered financial difficulties. In fact, the evidence is that Harvey Fisk & Sons had no more to do with management than each of the others participating in promotion of the development, as to whom no claim is made that management services were rendered. Correspondence of Lee, Higginson & Company dated July 19, 1907, obtained from Respondents' files discloses that "The management of the company (McCall Ferry) is in the hands of a committee on which is a member of the firms of Harvey Fisk & Sons, Bertron, Storrs & Griscom, and Lee, Higginson & Company; also on this committee are Mr. C. A. Coffin, and Mr. H. F. Dimock who has been interested in this project for a number of years." And as testified by the Commission's accounting examiner, his search of the Respondents' files failed to disclose even the slightest indication of any management activities on the part of the Fisk firm by W. M.

Barnum (a partner [50] of the Fisk firm through whom the management of McCall Ferry was supposed to have been carried out); that he was unable to find any communication from or to the Fisk firm or Barnum dealing with the management of McCall Company; and that the files revealed that it was to the President of the McCall Company, Mr. Dimock, that reports and communications were addressed.

Respondents' witness Gunn doubted that a formal management agreement with the Fisk firm ever existed, and testified that that firm never received any specific amount of stock for management services as distinguished from financial services. He knew of no contracts negotiated by Barnum, or of any reports or management functions which the McCall Company officers cleared through the Fisk firm or Barnum. Furthermore, he could not point to any matter which Barnum was instructed to investigate or which he introduced at Executive Committee meetings, or to any written orders or communications relating to management or construction issued by the Fisk firm or Barnum to officers of McCall Ferry or to the construction contractors, and could not identify any individual who was employed by Barnum for McCall Ferry.

Not only is there no support for the contention that the Fisk firm rendered management services, but it clearly appears that there was no necessity for the rendition of such services by that firm. The McCall Company had a special Board of Advisory Engineers comprised of "four of the most prominent engineers in the United States and known to practically every engineer." Hutchinson was a member of that Board and as Chief Engineer of the company had a number of capable assistants. [51] Hugh L. Cooper was Hydraulic Engineer and Manager of Construction. Sanderson & Porter superintended the electrical construction and managed the accounts. As testified by Respondents' witness Gunn the McCall Company "was organized by thoroughly capable people in every department of its business.

It was advised by the most eminent engineers in the country. It had capable people in every branch of it."

From the foregoing it is clear that the statements contained in Fisk's affidavit,[37] to the effect that his firm managed the McCall Company, are at variance with the facts established by competent evidence. For example, Fisk asserted that the "primary responsibility for supervising the construction of the project, the selection of personnel, and the selection of experts, engineers and contractors was imposed upon Harvey Fisk & Sons." Actually such responsibility definitely appears to have rested with the Company's officers, [52] its special Board of Advisory Engineers, Hutchinson, Cooper and Sanderson & Porter.[38]

There being no justification for the allowance of the amount of $199,570.31 on any basis, it must be excluded from the rate base.

e. *Claimed Stock Issuance Expense.*

Respondents claim two items of stock issuance expense as part of the organization expense of Penn Water. The first item of $81,906.59 was incurred during the period from 1923 to 1935 in obtaining additional financing through the sale of Penn Water capital stock. This item, erroneously classified by Respondents in Account 301, Organization Expense, is chargeable to Account 151, Capital Stock Expense. Issuance of additional stock in a period from thirteen to twenty-five years after the actual organization of a corporation neither entails organization expense within the meaning of Account 301 of the Commission's Uniform System of Accounts, nor represents an "extension" of the [53] organization of Penn Water (in 1910) as Respondents' witness Gunn theorized.

37. Respondents' Gunn testified that "The records of Harvey Fisk and Sons were never found, and the only knowledge I have of the management services rendered by Harvey Fisk and Sons are those described by Mr. Fisk * * *."

38. Hutchinson arranged for the employment of the Board of Advisory Engineers. The contracts with Hugh L. Cooper and Sanderson & Porter were negotiated by Messrs. Dimock and Coffin.

The second item, in the amount of $331,703.15, is claimed as representing McCall Company bond issuance expense incurred in 1905 which it is contended should be imputed to Penn Water common stock issued in 1910. The theory of this claim is as follows. Upon the incorporation of the McCall Company in 1905 a total of $8,075,000 principal amount of its bonds was sold by bankers. Respondents claim that the bankers received McCall Company common and preferred stock, having a cash value of $644,179.69, as compensation for the sale of the $8,075,000 of bonds. The McCall Company encountered financial difficulty in 1907 and went into receivership. Thereafter, the Bondholders' Committee accepted the plan of J. E. Aldred and his associates (who were in no way connected with the project prior to 1908) for financing completion of the development. The plan was embodied in a memorandum of understanding dated April 24, 1909, and, in accordance therewith, Penn Water was organized in 1910 to acquire from the Committee the assets formerly owned by the McCall Company, which assets had in the meantime been purchased by the Committee at a foreclosure sale. The $8,325,000 of McCall Company bonds then outstanding was paid off, 40% in new bonds ($3,330,000) and 60% in new stock ($4,995,000) of Penn Water.[39] In this process the [54] outstanding common ($4,166,500) and preferred ($5,000,000) stock of the McCall Company (the claimed cash value of a part of which is here in issue) was wiped out completely. Since, under the Aldred plan, the McCall Company bondholders received in return for their bonds 60% of their face value in Penn Water stock, Respondents contend that six-tenths of $552,838.58 ($644,179.69[40] less

39. The Aldred Syndicate, acting for the Committee, raised the new money required to complete the project by the sale of additional Penn Water bonds. Control of Penn Water by the Aldred syndicate was assured under a voting trust agreement in effect until November 1, 1912.

40. The $644,179.69 is the claimed cash value of the McCall Company common and preferred stock assumed to have been issued to Lee, Higginson & Company, (5,000 shares common), Bertron, Storr[s] & Griscom (7,462½ shares common) and Harvey Fisk & Sons (1,875 shares preferred and 17,537½ shares common, three-eighths of the asserted value of which is claimed for management services) as compensation for financing services.

$91,341.11 [41]), or $331,703.15, represents McCall Company bond issue expense now associated with Penn Water stock issue expense.

The amount of $331,703.15 is not includible in the rate base for several reasons, each independently sufficient to require its disallowance. First, the McCall Company stock had no cash value, as already shown. Therefore, no cost was incurred by its issuance which could have been carried forward under the Aldred plan. Second, the claimed distribution to the bankers has not been sustained by credible evidence as we [55] have already concluded. Third, assuming, arguendo, a cash value and distribution as alleged, no part thereof could be allowed, in the absence of a showing of cost to the bankers of any services rendered, as distinguished from profit, because of the no-profits-to-affiliates rule, the bankers being affiliated as we have seen. Fourth, any such cost would be a financing cost, not a cost of physical property, and the 6% interest allowance hereinafter made is in lieu of all other financing costs, as already stated. Fifth, the amount claimed is not properly includible in Account 301, Organization Expense.

Claimed Value of Aldred Management Services.

Respondents assert that J. E. Aldred, who participated in the organization of Pennsylvania Water & Power Company, performed management services with respect to the McCall-Penn Water development in the period from November 1, 1908 to November 1, 1912, and that for such services he was given 5,000 shares of Penn Water common stock. Respondents place a cash value of $60 a share upon this stock (resulting total, $300,000) but contend only that $218,750 with respect thereto should be included in the rate

41. The $91,341.11 is made up of $86,785.32, considered to be bond expense which should have been amortized between June 15, 1905, the date of the McCall bonds, and July 1, 1909, the date when a sufficient number of bonds had been deposited to effect the reorganization, and $4,555.79, considered to represent bond expense deemed applicable to the 66 McCall Company bonds which had not been exchanged for Penn Water securities and had been purchased by J. E. Aldred.

base, determining the latter sum as that proportion of the total value which is applicable to that part of the alleged services assertedly rendered during the claimed period of construction (ending October 1, 1911).

[56] The basis of Respondents' contention is that the voting trust arrangement provided for in the memorandum of understanding on April 24, 1909, between Aldred and the McCall Company bondholders' committee, vested Aldred with powers of management with respect to McCall Company. But it is to be observed that this agreement did not expressly vest Aldred with such powers and there is no credible evidence on the basis of which it can be determined that the parties so construed the agreement.[42]

The evidence does not reveal that prior to the date of the foregoing memorandum of understanding (April 24, 1909) Aldred was otherwise engaged, with respect to the McCall project, than in negotiating a plan of refinancing with the bondholders' committee and attempting to reach an agreement looking to a material reduction of McCall's Company's capitalization and fixed charges as a condition of his taking any part in the refinancing.[43] It was not until April 6, 1909 that he submitted a plan for the refinancing which formed the basis for the later memorandum [57] agreement entered into with the bondholders' committee. It does appear that Aldred had had various surveys made of the McCall project, but these apparently had been made solely for the purpose of informing himself in connection with his negotiations concerning the refinancing. Thus there is no proof that any management services were rendered prior to the date of the memorandum of understanding with the bondholders' committee of April 24, 1909.

At that date Respondents assert the committee stipulated that Aldred would become the active manager of the

42. One of Staff's witnesses testified that he examined the minutes of the bondholders' committee but found no indication that the Committee had arranged for any management services to be rendered by Aldred.

43. Nor, indeed, was he the only party negotiating with the committee at that time in that respect.

company during construction and until the expiration of the proposed voting trust; but it is apparent that, as of the later dates of May 20, 1909 and August 5, 1909, Aldred understood that this phase of the "managership" was to be conducted in his capacity as receiver.

Aldred was appointed receiver of McCall Company, by order of the Circuit Court of the United States for the Eastern District of Pennsylvania on July 17, 1909, with express authority to "have, hold, use, preserve, manage, exercise and enjoy" the property, rights, privileges, franchises and immunities of McCall Company, subject to the supervision of the Court. He entered into possession as receiver for a period of approximately six months, filed a final report as of February 18, 1910, in which he reported [* 3] * cash and receipts of $173,166.27 and disbursements of 33,722.91, including "receivership fee and expense" of $7,000, and was discharged on March 18, 1910.

During the receivership, Aldred had been advanced $600,000 by the bondholders' committee for use in construction. On March 3, 1910, Aldred accounted to the board of directors of Penn Water with respect to the expenditures made out of sums received by him, including principally the $600,000. His accounting stated that, while he had been receiver, "matters and situations were met" by him which could not be dealt with appropriately as receiver, and he listed as items falling in this category track relocation settlements and right-of-way purchases, the acquisition of 66 non-deposited bonds and the retainer of an attorney. However, in connection with the foregoing right-of-way acquisitions Aldred had had to give certain deeds, which he did specifically in his capacity as receiver and in his offer of settlement of his account he stated that all things done in connection therewith had been done without intention of profit or advantage to him.[44]

By this same accounting, Aldred advised the board of directors that, between August 19, 1909 and December 1,

* 2½ lines of duplication omitted in printing.

44. These actions were duly approved and adopted by the board of directors of the company.

1909, he had entered into [59] eight contracts for the purchase of cement, sand and stone, for the purchase of plant equipment, and for engineering services, all in connection with construction.[45] As to at least the five most important contracts, he made it clear, at the various times of execution thereof, either that payment would be by the receiver of the new company, or that he was acting in his capacity as receiver, or else he made contemporaneous arrangement for the assumption of ultimate liability by others. As to none of the eight contracts is it shown that at the time of the execution he had made up his mind to act otherwise than in his capacity as receiver, and nowhere does it appear that he was put to any personal expense in connection with any liability he may have technically assumed under these contracts.

With respect to same eight contracts, Aldred made no assertion in his accounting to the board of directors that the transactions represented "matters and situations" which could not be dealt with appropriately by him as receiver. His later statement in the 1939 affidavit taken by Respondents' witness Gunn to the effect that "to expedite the work . . . it became incumbent on me to enter into a number of contracts, personally" is contrary to what he did.

Therefore, in connection with whatever services Aldred rendered McCall Company during the period of his receivership it [60] must be found, insofar as this record is concerned, that he received adequate compensation in the fee he claimed and was granted by the Court as receiver.

Further, on January 13, 1910, Aldred was elected President of Penn Water at a salary of $10,000 a year, and at the same time he became a director.[46]

Thus there is no period of time during the interval in which he is alleged to have rendered managerial services

45. These contracts were also adopted and assumed by the company, March 3, 1910.

46. One of Staff's witnesses examined the minutes of the board of directors of Penn Water, but discovered no indication that in addition to his duties as president, Aldred was expected to contribute any special management services for which he would be paid additional compensation.

that he was not either under employment as receiver of McCall Company or an officer of Penn Water; and there is no evidence that the term "management", as the parties to the refinancing plan used it, ever meant or was intended to mean anything more than the "control" that he exercised as receiver, or as an officer of Penn Water, or under the voting trust.

It is also clear from the evidence that all of the stock obtained by Aldred for himself, by the bankers, and by the subscribers, was bonus stock. It was expressly bonus stock as to the new money bond purchases, who received 50% of the par value of the new bonds subscribed for in stock, as a "bonus" for which no other payment was made. Aldred himself referred to all of 35,000 shares [61] going to new underwriting as a "bonus". Of these latter shares the bonus to new money bond subscribers involved 20,850 shares, while the participating London bankers received 4,575 shares as "profit", and others, including Aldred, received similar bonuses totalling 4,575 shares. Against this inflation, the additional 5,000 shares which Aldred received, now claimed to be for management services, could have then only represented expectation of an indefinite realization out of the future operating income of the company, especially as Penn Water's stock had no cash value as of issuance and none was then indicated for the immediate future, which last circumstance was, in effect, contemporaneously stated by Aldred. If that stock could be said to represent compensation for anything, assuming arguendo, it had had any cash value, it must have been for financing services, not a part of project cost. Due allowance for such amounts is made in the allowance of 6% interest.

Quotations of sales of such stock made approximately one and one-half years later, after Penn Water had commenced the sale of power in the Baltimore market, are not evidence that Penn Water's stock had a cash value at the time of its issuances. Nor does the conversion of 66 McCall Company bonds (*supra*) afford evidence of value as to

such stock, where, as stated by Aldred, the transaction was effected to avoid litigation.

The $218,750 is, accordingly, disallowed.

[62] *Interest during Construction.*

Respondents contend that interest during construction should be computed on certain balances accumulated by them during a period from April 14, 1905 to October 1, 1911,[47] and that the interest rate should be 6%.[48] Respondents include, however, in the basis for this interest calculation certain items herein excluded from the rate base.[49] The amount thus computed by Respondents and the Staff's corresponding recommendations are:

	Respondents	Staff
Interest on construction balances	$2,505,868.34	$1,047,348.16
Interest on construction working funds	—[50]	78,371.33
Interest eliminated in other adjustments	—	1,642.17
	$2,505,868.34	$1,127,361.66

After a net credit, proposed by Respondents, in the amount of $177,138.11, which gives effect to certain income received and items expensed, Respondents' computation of interest during [63] construction reduces to an amount still $1,201,368.57 higher than that recommended by the Staff.

The staff contends that the construction period should be terminated December 31, 1910, and thus puts in issue both the interest calculations of Respondents and also the proposed credit for income and items previously expensed,

47. October 1, 1911 is the beginning of the period of commercial operation, as claimed by Respondents.

48. That is ½% of monthly balances, less ¼% for additions. The Staff used the same interest rate and followed the same procedure.

49. Such items represent certain of those which originated prior to October 1, 1911, the date fixed by Respondents as the end of the construction period and the beginning of commercial operations.

50. Not claimed by Respondents.

or a total difference of $1,378,506.68 as indicated in the tabulation above.

With respect to the interest period, the Staff contends that interest should be allowed only for the periods April 14, 1905 to October 31, 1907, September 1, 1909 to December 31, 1909, and all of the year 1910, with an additional allowance for interest on investment in hydro units placed in service during 1911. In other words, the Staff recommends that no allowance be made for interest during the so-called cessation period extending from November 1, 1907 to August 31, 1909, and that generally capitalization of interest and taxes be terminated as of December 31, 1910. On the other hand, Respondents contend that work was done from November 1907 to November 1908, which directly contributed to the completion of the McCall development, though admitting that between November 1, 1908 and August 1909 there "was no overt construction activity—solely the result of economic conditions over which the management of McCall Company had no control".

The original underwriting was for an initial plant at McCalls Ferry site to deliver 50,000 hp to the City of Philadelphia (Pa.), and to cost, with steam auxiliary and an allowance for working [64] capital, $7,200,000, and on this basis, $8,000,000 of bonds were underwritten at 90.

On August 7, 1905, the engineers revised the original estimates of cost for a hydro plant with a dam crest at 155 feet (without steam auxiliary) from $5,491,000 to $6,750,000.[51]

On June 20, 1906, the Executive Committee of the Company decided upon a dam height of 165 feet. This entailed an increase of substantially $2,000,000 in the hydraulic work alone. Estimates made at that time disclosed that a 165-foot dam at McCall Ferry, with 7 initial units providing an output of 50,000 hp would cost $8,859,000. On October 3, 1906, $335,000 more was added to cover tailrace improvements, making an estimated total to complete

51. No explanation was given for this increase.

of $9,194,000. On November 30, 1906, the Vice President of the Company stated that the latter would have to raise another $1,646,000 to complete the installation. Approximately five months later officials of McCall Company estimated the final cost at $9,815,000, and the Chief Engineer again noted that the Company would be short of funds for the project.

Beginning in early July, 1907, the original underwriters began to take steps to provide funds. At that time, Bertron, Storrs & Griscom wrote Lee, Higginson & Company that McCall Company would [65] need approximately $500,000 by fall, but that they had about six months in which to make arrangements for an additional $1,000,000.

On October 21, 1907 the Knickerbocker Trust Company failed [52] and within three days McCall Company's manager of construction, by telephone, ordered the manufacturer to suspend work on the production of turbines, and the manufacturers of electrical machinery was directed to stop work on the generators and auxiliary equipment. On November 1, work on the dam ceased, and the work on the tail-race, walls and other parts of the power house stopped. Only such men were retained as were deemed needed to guard the completed work against danger during the winter, put the construction equipment in winter quarters, and for minor work in the power house.[53] The work as a whole was estimated by the Chief Engineer as 80% completed.

In April 1908, provision was made for resuming work on the tail-race, cleaning up around the power house and raising the wing dam. The total amount required was esti-

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52. The nature of the panic of 1907, its effect upon the financial markets, the ability of borrowers to find money, and of lenders to provide it is well known, and of these matters notice is taken.

53. After the first and through the twenty-second of November, never more than 124 men were employed on any one day at the site, and these were employed on concrete and form work, some repairs and miscellaneous minor matters. The work included placing 600 yards of concrete in the power house substructure for protection against water and 130 yards in arches as protection against ice, with some work done by carpenters to render headgates safe and the power house concrete safe against high water and floods. By February 1, none of the hydraulic engineer's construction organization was considered necessary.

mated at approximately $194,000. In October 1908, Susquehanna Company arranged to borrow some [66] additional money for McCall Company, but by November funds available to McCall Company were exhausted. No further work was done until after Aldred became receiver in July 1909.[54]

Prior to his appointment as receiver, Aldred had negotiated an underwriting commitment with London connections, and, shortly after his appointment, by another such agreement with other parties (of Montreal, Canada) he succeeded in perfecting his financial plans to raise approximately $3,800,000 cash [55] for reorganization of McCall Company and completion of construction of the project. Thereafter, securing advances from the bondholders' reorganization committee, and beginning with the date of August 15, 1909, and continuing to December 1, 1909, Aldred entered into contracts with Empire Engineering Corporation for supervision of construction, with material-men for various items of construction materials, and with manufacturers for the completion of machinery and equipment originally ordered by McCall Company. Construction work was resumed approximately on September 1, 1909.

[67] There is no evidence that the 1907-1909 cessation can be attributed to the fact that the lender (Knickerbocker Trust Company) under the contract of November 1, 1905 with Susquehanna Contracting Company, went into a receivership in October 1907, for at the time of the initiation of the receivership of the Trust Company that lender was not obligated on any call for funds for project construction purposes. The general economic situation undoubtedly delayed the procuring of additional funds, but the shortages of finances had not taken the officers of McCall Company by surprise. They were early apprised of the necessity of finding additional money to complete the project. The record discloses that contemporaneously with these events

54. McCall Company defaulted in the payment of bond interest December 15, 1908. A bondholders' committee has been formed prior thereto. And on complaint filed by Knickerbocker Trust Company, as trustees under a mortgage securing the bonds, Aldred was appointed Receiver, July 17, 1909.

55. $4,170,000 in principal amount of bonds at 90.

Hutchinson as chief engineer of McCall Company stated, in effect, that the omission to take steps to provide more money led to the Company's discontinuance of construction. He not only made no reference to market conditions as the primary cause but later, in statements made at the Respondents' request, further stated that it was due to delays that funds became exhausted.[56] Nor can it be said, on the evidence in this proceeding, that the work performed during the cessation period definitely contributed to shortening the construction period.

Therefore, interest during construction will not be allowed for the period November 1, 1907 to August 31, 1909, inclusive.

[68] *End of Construction Period.*

The initial plant (1905-1906) was conceived as a 7-unit project capable of producing 50,000 hp, with provision for the further addition of 3 units capable of producing 25,000 hp more.

The project, as reconsidered in connection with the reorganization of McCall Company, was designed for 5 units to develop approximately 50,000 hp. The available market was not determined at the time the initial plant was first projected, the promoters merely looking to the sale of 50,000 hp in either Baltimore, Philadelphia, or any point within the territory. Contracts for the sale of power, however, were executed prior to the receivership of McCall Company with Baltimore Company (June 4, 1907) for 4,000 kw firm, and with The United Railways and Electric Company of Baltimore (United Company) (June 28, 1907) for 10,000 kw firm. With the reorganization, the development was proceeding without the necessity of immediate negotiation or renewal of contracts for the sale of power, but such contracts were later executed with Baltimore Company (August 29, 1910) for 14,666 kw of firm, and with United Company (February 8, 1911) for 12,000 kw of firm.

56. This statement is found in an affidavit in evidence on Respondents' own motion.

Unit No. 1 went on the line for contract delivery to Baltimore Company on October 23, 1910. Though first subject to a minor bearing defect, this unit was always considered operational and by the end of June had had the advantage of a protracted period of bearing inspection, and bearing overhaul, and work on head and tail gates was almost entirely completed, so that from then on to the end of the year, excepting two outages for unknown causes, one [69] of which occurred during a low flow period, Unit No. 1 experienced just one outage, of a relatively brief character, for governor valve repair.

Unit No. 2 went on the line on February 23, 1911, and Unit No. 3 on March 25, 1911. Unit No. 2 had experienced bearing trouble, and Unit No. 3 had experienced bearing delays and governor trouble prior to going on the line, but these defects were corrected, temporarily or otherwise, by various devices, Unit No. 2 operating on a water thrust bearing, subject to hand control, and Unit No. 3 on a permanent bearing with an adjusted governor, each without further mishap arising from known causes, until a time that lies beyond the date (October 1, 1911) fixed by Respondents as the date of the commencement of commercial operations.

Units Nos. 4 and 5 were assembled (with generators ready to run) on April 29, 1911 and June 30, 1911, respectively, and were put on the line on May 19, 1911 and July 25, 1911, respectively, neither unit experiencing any significant outage prior to the date fixed by Respondent, aforesaid.

The six transformers which became operational between October 21, 1910 and August 17, 1911, were subject to certain outages, Nos. 1, 2 and 3 for brief periods and from unknown causes during the first 6 months of 1911 and not at all thereafter to October 1, 1911. Nos. 4, 5 and 6 suffered considerably from lightning and the damage resulting, but at no time, from June 1, 1911 to October 1, 1911 did Respondents have less than a rated normal trans-

former capacity available of 22,500 kw, which was approximately [70] sufficient to carry the combined Baltimore loads except principally for a part of the Saturday night and Sunday peaks.

On February 24, 1911, Baltimore Company had been advised that it could take on load up to 14,000 kw, and in early March, Respondents were supplying the contract requirements of Baltimore Company from 2 units and expected to be in position within 6 weeks to start the delivery of power to United Company under its contract. Thereafter, for causes not satisfactorily established in the evidence, Baltimore Company's load dropped, but for no month during this period of reduction in Baltimore Company's draft (April, May and June) did that company take less than 89.5% of its so-called monthly prorate of its annual entitlement of 70,000,000 kwh. Further, the allowance of rebates to Baltimore Company by Penn Water for the effect on deliveries of Respondents' initial equipment and service deficiencies ceased with the power bill of the month of March and did not resume thereafter. Approximately mid-May (1911) Penn Water's then chief engineer reported that the delivery of power to Baltimore Company had been going along very well, the maximum peak at the power house having been 18,000 kw and the average deliveries amounting to about 5,000,000 kw per month.

As of April 17, 1911, Respondents were endeavoring to be fully prepared to make delivery of power to United Company by June 1, and on May 18, 1911, the work of preparation was authoritatively stated to be going along in fine shape, the then chief engineer of Penn Water reporting, "We will be ready to deliver power to the Railways Company by June 15". However, [71] that customer was making slower progress with its part of the preparatory work and refusing to agree to the installation of apparatus available that would have expedited the date of readiness. Delivery of power to United Company was first made by mid-July and on July 17, 1911 on a full contract basis, and it is

significant that Respondents' witness Walls recalls that this customer experienced none of the service interruptions that had previously been experienced by Baltimore Company.

An analysis of interruptions experienced in the period of January 1, 1911 to August 24, 1911, made at the time, discloses that of 30 total interruptions, 19 were caused by lightning, 4 by troubles on customers' systems, 4 were due to station troubles or operator's mistake, and the remaining 3 for causes not here significant. All other interruptions (less than total) were caused by customers' systems or were insignificant in effect. Though lightning caused such a high proportion of the interruptions, only 4 out of 5 storms affected Respondents' system, and it was the opinion of Penn Water's then operating superintendent that the proportion of interruptions, considering all storms, was small. Causes other than lightning accounted for interruptions totaling 1 hour and 49 minutes in the first six months of 1911, and 1 hour and 12 minutes during the next four months (to October 1, 1911), while lightning interruptions accounted for a total of 24 hours and 20 minutes during the same total period of time. But this difficulty of lightning was not peculiar to Respondents' system for it was generally "the assailable link in modern hydro-electric power supply" at that time and Respondents were still [72] making extensive improvements to eliminate lightning disturbances in 1913.

The Commission has stated in previous opinions that the determination of the date upon which the capitalization of interest and taxes during construction should cease is not controlled by artificial rules, is not a matter of formula, but is a matter of reasonable judgment based on a consideration of all the pertinent facts. It is true that reasonable time should be allowed for test periods and trials, the correction of defects and adjustments, and time for the plant to become sufficiently completed to be reasonably reliable for service for the purpose for which it was intended. Nevertheless, neither full capacity generation, nor the completion of all construction activities, nor the making of per-

manent installations, as against those of a temporary nature, are a *sine qua non* with respect to this determination. Suspensions of particular machines for certain supplemental construction processes do not necessarily influence the determination, nor outages as merely outages; nor, under the Act, would it be proper to permit the determination to be influenced solely by the fact that revenues received had not equalled interest charges, nor earnings a fair return on the property.

After careful consideration of all the evidence in this proceeding on this subject, it is found that the date of the end of the construction period was June 30, 1911; interest is capitalizable through that date, except for the "cessation period" previously discussed, and net revenues should be credited to cost of plant up to that time.

[73] *Expenditures during the Cessation Period (1907-1908).*

The amount here at issue is a total of $143,981.46 embracing (1) administrative and other expenses from November 1, 1907, the date of suspension of work at the McCall Ferry project, to September 1, 1909, the approximate date on which construction resumed; (2) wages, salaries and incidental expenses charged to "Cessation Expense Account"; and (3) salary of the chief engineer of McCall Ferry and engineering fees. These items consist of the following three categories:

1. Administrative and Other:	
a. Local office accounting, salaries and expenses	$ 4,977.37
b. General office salaries[57]	10,255.94
c. Engineering experts[58]	11,225.00
d. Insurance (fire, compensation, fidelity, etc.)	7,500.00

57. Vice President, treasurer, chief accountant, accountant, secretary, assistant to treasurer, stenographers and clerical, miscellaneous.

58. Resident engineer, assistant resident engineer, assistant engineer, assistant to chief engineer, electrical inspector.

e. General office supplies and expenses	13,851.39
f. Engineering expense	2,053.27
g. Traveling expense	126.39
h. Miscellaneous expenses	2,910.16
	$52,899.52
2. "Cessation Expense Account", Salaries, Materials and Supplies and Other:	
a. Salaries and wages	28,277.12
b. Salaries and wages in arrears	4,624.07
c. Materials; supplies, and tools	2,175.34
d. Freight	750.89
e. Miscellaneous	617.79
	$36,445.21
3. Salary of the Chief Engineer and Engineering Fees:	
a. Hutchinson's salary after Nov. 1, 1907	15,499.94
b. Hugh L. Cooper fee (completion bonus)	29,926.27
c. Sanderson & Porter fee	9,210.52
	$54,636.73

[74] Respondents contend that the expenses in the first category were necessarily incurred in connection with the direct costs of field work and design during the period of cessation, and that since the Staff has taken no exception to the inclusion in the rate base of direct costs incurred in this period, these overheads should be included therein.

Respondents contend that the expenses in the second category were unavoidable costs necessary to carry the project to completion and should be included in the rate base.

Respondents contend that the items in the third category represented salaries and fees paid with respect to

work that contributed to the completion of the project or for contract services to McCall Company which the parties were ready to perform and should be included in the rate base.

With respect to the first two categories, considerable judgment is involved in segregating expenses which contributed directly to construction work and those which did not. In general, the Staff's recommendations have been based upon the principles that (a) general overheads applicable to the period of cessation are not proper construction costs, and (b) overheads which related to construction work, without duplication, are proper.

Respondents' witness Gunn admitted that, but for the cessation, overheads would have been charged over a shorter period and that the contribution of the office work done during this period to the shortening of construction after its resumption cannot be determined. The contention that the salary of the vice president and [75] general manager and the secretary and treasurer of McCall Company should be included as their services related to plant designing during the period is based upon unsupported inferences.

As to the salary of Hutchinson, though as Chief Engineer of McCall Company he issued instructions in April 1908 with respect to the completion of the tailrace excavation and the raising of the wing dam and made further estimates at that time with respect to the cost of completion of the project, he was not, during the cessation period, in direct supervision of construction.

With respect to engineering fees, (1) Cooper, though paid on the basis of his contract, did not complete the work he was under contract to do, Empire Engineering Corporation later completing the work for an additional fee, and (2) Sanderson & Porter, though paid on the basis of their contract with McCall Company which called for their services with respect to the complete installation of electrical equipment, transmission lines and substations, never

did more than prepare certain designs, Penn Water later undertaking to design and make the same installations at its own expense with its own engineering force.

The opinion of Respondents' witness Gunn that general engineering conducted during the cessation period contributed to decrease the time necessary to complete the project after assumption of construction (approximately on September 1, 1909) is patently based upon the witness' speculations.

There is no showing that the general designing, planning and administration of cessation period served actually to shorten [76] the following period of construction; and, therefore, it is found that the foregoing amounts representing expenditures during the cessation period in the sum of $143,981.46 should not be included in the rate base.

Promotion Expense (1911-1914).

Respondents contend that an amount of $29,601.59, consisting of promotion expense, should be included in the rate base. Respondents' contention is that under Account 71 of the Classification of Investment in Road and Equipment of Steam Roads, prescribed by the Interstate Commerce Commission (1914), the capitalization of this item is required, but it is to be noted that Account 71 refers to organization expenses only and such expenses are usually incurred at the inception of a company and not over a period of years subsequent thereto.

These charges, recommended for exclusion from the rate base by Staff, include a portion of the salaries of the president of Penn Water, the vice president and treasurer, the expense of office rent, traveling, booklets, photos, maps, entertainment, special trains, stock certificates, legal expenses, security listing fees, and miscellaneous.

Respondents concede that it is impossible to tell precisely to what these expenses relate. Respondents' witness Gunn could not state the nature of the activities of the officers whose salaries were partly charged under these items,

nor the purpose of charging office rent or traveling expenses. The character of the booklets [77] issued was not known, nor of the photographs, the maps,[59] the entertainment or special trains. An unsegregable amount was thought by Respondents' witness Gunn to be stock issuance expense.[60] Legal expenses represented services performed with respect to (1) subsidiaries that were never active, (2) the listing of securities, and (3) the securing of commission approval of contracts. The nature of the foregoing items indicate that the $29,601.59 is composed in part of operating expenses and in part of stock issuance expense, substantially all of which were incurred subsequent to the date determined herein (July 1, 1911) as the date of commencement of commercial operations.

It is therefore found the expense here involved should not be included in the rate base.

Credit for Property Transferred (1908)

In 1908, McCall Company disposed of certain land below McCall Ferry and Penn Water, as successor, proposes to credit plant account with an amount of $162,936.02, which is less than the amount later realized in connection with this transaction. The staff recommends that the amount of the credit be the same as the amount [78] ultimately realized ($200,000). The difference, $37,063.98, is in dispute.

By agreement dated February 20, 1908, McCall Company agreed to convey its interests along the Susquehanna River below the foot of Cully's Falls at the McCall Ferry dam site (in both Pennsylvania and Maryland) to the Susquehanna Power Company (Md.) and to a subsidiary of Susquehanna Power Company (to be organized in Pennsylvania) for $760,000 of bonds of Susquehanna Power

59. The evidence is that the map was prepared for Moody's Manual (1914)—clearly not a purpose justifying capitalization in plant accounts.

60. A small amount of treasury stock was issued during this period, and the voting trust in respect to Penn Water stock provided by an agreement dated February 7, 1910 terminating in 1912, for the converting of voting trust certificates into stock certificates.

Company and certain shares of stock thereof.[61] The McCall Company properties were conveyed and subsequently under a later agreement dated March 5, 1912, Penn Water agreed to sell to certain purchasers its then remaining $703,000 of bonds of Susquehanna Power Company and its then remaining shares of stock for $200,000 in cash.[62] This latter transaction was consummated in accordance with the agreement.

Penn Water determined the amount of the proposed credit to plant account ($162,936.02) on the basis of a claimed value as of August 11, 1908, the date of sale, which it now places on the interests conveyed in 1908. No direct evidence of value was found by Penn Water, so its witness Gunn derived a value by discounting the $200,000 at 6% from 1912, date of realization, to August 11, 1908. . . .

[79] Under the Commission's Uniform System of Accounts, the land below Cully's Falls should never have been included in plant account (Electric Plant Account Instruction 9-J). Moreover, the lands involved in the above transaction were substantially all acquired as a part of the total of lands and rights purchased from Harlow-McGaw in 1905 for an over-all consideration of $200,000 in cash and $250,000 in bonds at 90%; Penn Water inherently assumes that after this transaction more than a majority of the rights and interests acquired under the Harlow-McGaw contract was retained, an assumption which is not substantiated by the evidence.

It is apparent that the $200,000 is the best evidence of the proper credit to Penn Water's plant account, and it is so found.

Profit on Property Sold (1930).

In June 1930, Penn Water transferred to its affiliate, Safe Harbor, under a sales agreement, and at a total price

61. "Certain shares" refers to the entire stock part of the transaction, i. e., the shares originally received (Susquehanna Power Company, common) and those into which such shares were later converted (Susquehanna Properties Company, a holding company for all shares of Susquehanna Power Company).

62. Certain of the original amount of bonds and certain of the shares of stock had been disposed of in settlement of legal services.

of $193,545.00, certain properties which had been acquired by Penn Water in 1905, including those known as the Witmer and Willson properties, and a portion of the Harlow-McGaw properties.[63] The Witmer properties had been acquired at a cost of $38,985.00, Willson properties at a cost of $5,537.00 and Penn Water has calculated that the value of the transferred Harlow-McGaw properties, as of the date of the beginning of commercial operations as contended [80] for by Respondents (October 1, 1911) was approximately $29,082.80. Accordingly, Penn Water contends that the cost of all three groups of property to McCall Company should now be found to be $73,604.80 and the difference of $119,940.20, between price and cost, restored to Penn Water's plant account.

For the purpose of this proceeding, it is only necessary to inquire whether the amount of the credit reflected in Penn Water's plant accounts at the time of the foregoing sale to Safe Harbor was proper.

By this 1930 transaction, Harlow-McGaw properties, which until then remained in Penn Water's plant accounts at a calculated original cost of $379,824,[64] were divided so that 11.68 miles of canal and 117 acres were transferred to Safe Harbor and 8.32 miles of canal and 28 acres were retained by Penn Water. In the absence of direct evidence to the contrary, this establishes that considerably more than a half of the rights and interests retained up to 1930 by Penn Water, out of the original Harlow-McGaw properties, were transferred to Safe Harbor. One-half of the $379,824 (above) more than equals the amount of the total price of $193,545 less the admitted cost of $44,522 for both the Witmer and Willson properties, and, accordingly, this adjustment contended for by Respondents should not be made in determining cost or the rate base.

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63. The properties had never been used in the McCall project. The contract to sell was dated August 21, 1929, the transfer taking place June 19, 1930 (T. 7863).

64. Additional interest for the 6 months from January 1, 1911, the Staff's recommended date of commercial operations, to July 1, 1911, the date found herein as the date of the commencement of commercial operations, would increase the $379,824 to $388,549.

[81] *Flashboard Development and Roller Dam Investigation Expense (1913-1921).*

Respondents contend that an amount of $49,754.97, representing experimental costs incurred from 1913-1921, inclusive, in connection with the perfecting of a system of flashboards to be used on the crest of the dam to provide additional head for the generation of additional electricity, should be included in cost of plant and in the rate base.

The foregoing amount is composed of items relating to the erection, renewal and testing of flashboards, and items charged to the general hydraulic and main dam account (1914-1916) in connection with an investigation of the possibility of using a roller dam in place of flashboards.

As of September 1912, Penn Water had gotten very satisfactory results from the use of flashboards installed along the crest of the dam to provide additional water storage. The installation of these flashboards had been carefully designed to avoid flooding out certain properties upstream, particularly as an injunction and law suit for such flooding had already been brought against Penn Water. Even as of February 1912, the installation had been ready for use—in fact as early as the last of August 1911, the assistant chief engineer reported on the operation during high water of what he referred to as "weir boards all along the dam".[65]

[82] Penn Water, however, was not satisfied with the original installation, both because of the difficulties of installation and the unsatisfactory manner of operation, the latter being due to the irregular bending of pins which were designed to fail at a certain height of water. Thereupon, Penn Water experimented with the use of sills, panel handles, and panels of various lengths. The substitution of a roller dam in lieu of flashboards was studied from 1914 to 1916, and, because of the expense it would have entailed, was abandoned. The result is that, except for the change

65. Installation started with the drilling of holes for the supporting pins, July 26, 1911.

from solid supporting pins to seamless tube supporting pins, the flashboard system now in use is, in general, the same system in use in 1912.[66]

On the basis of the evidence of record in this proceeding it is found that the flashboard expense incurred during the period 1911-1912 covered the original cost of installation of a system adequate to provide for the additional storage of water required; that all of the other related expenditures Respondents contend should be included in plant relate to either improvements in operation or to experimental improvements tried and abandoned without having been put to permanent use. It is therefore found that the expenditures here in issue, in the amount of $49,754.97, are not a cost of plant and are not includible in the rate base.

[83] *Charges to Flowage Basin Account (1910-1936).*

Respondents contend that certain acquisition expenses and certain expenses relating to legal and engineering services should be included in the rate base in the amount of $177,630.24. These expenses were incurred as follows: *1910-1924:*[67]

Lancaster Office			
Salary (Bushong)	$50,423.24		
Other Expense	27,127.82		
Legal Fees	21,920.00	$99,471.06	
Office Engineering		45,325.71	
Misc. Office Expense		561.65	
River Observations		4,988.45	$150,346.87

66. A wicket gate experiment lasted from 1916 through 1919, flashboards not being used during a part of the time because of an injunction proceeding which was not settled until March, 1916. Flashboards were in use from July 1917 on.

67. The account started in 1910 but the amounts in dispute represent charges that commence with 1911 or later years.

1925-1936:			
Lancaster Office			
Expense (1926-1930)		20,787.41	
Triangulation System			
Extension	3,338.25		
Property Ties	3,157.71	6,495.96	27,283.37
			$177,630.24

The $50,423.24 of Bushong's salary charged to Penn Water's Lancaster office relates only to that part of the 1910-1924 period that follows the opening of the office at Lancaster (Pa.) in March 1916. Respondents state that Bushong was hired in 1912 to devote his full time to the purchase of property required as a result of the use of flashboards on the dam and the consequent flooding of additional lands. From 1912 to March 1916, the date when the Lancaster office was opened, Bushong took a number of options [84] on land and completed a number of purchases;[68] but thereafter, to and including 1924, fewer options were taken and fewer acquisitions made. Of the latter acquisitions only a part was concerned with flowage rights and a significant number of those arose out of previous litigation. It is obvious that the establishment of the Lancaster office in March 1916 was not due solely to the needs of such an office for acquisitions necessary for operations with flashboards. Indeed, Respondents state that after 1915 Bushong's duties included other matters not directly associated with property purchases or plant additions and imply that a reasonably complete identification of expenses connected with such other matters could not be made and could not be segregated. Many of these other duties (1916 et seq.) clearly related to operations and expenses relating thereto are improper items to capitalize.

68. The rate base will include Bushong's salary as charged to subaccount F of Penn Water's "Flowage Basin Account" for the period 1912—March 1916.

With respect to both the amount of Bushong's salary and the other office expense[69] which Respondents propose to capitalize, there is insufficient evidence upon which to make a segregation of allowable items of expense after March 16, 1916.

With respect to Respondent's claim for legal fees as an item of Lancaster office expense, these include fees paid to an [85] attorney, J. E. Malone (1916-1923) in various amounts, totalling $20,750, and fees paid the New York firm of Simpson, Thacher & Bartlett (1915, 1920) in amounts totalling $1,170. Respondents state that Malone was active in all local property matters and litigation from the time of his employment in 1912. The amounts charged to the flowage basin account with respect to Malone's services were apportioned amounts for the years 1916, 1917, 1920, 1922, and 1923, while for the years between the fees were either those paid for full services (1918, 1919) or for additional services (1919, 1921). The amounts for the services of Simpson, Thacher & Bartlett were apportioned for both the years in which they were incurred (1913, 1920). None of the services can be identified with any particular property, and further no properties were acquired from April 1916 to July 1920, except for a foreclosure in 1919 with respect to a single property.

Respondents are unable to state the basis used for the determination or apportionment of fees and the inclusion thereof in plant is unjustified on the record in this proceeding.

Penn Water charged the amounts of $45,325.71 and $561.65, relating to the engineering office, to the Flowage Basin sub-accounts entitled Engineering Salaries and Expenses and Miscellaneous Office Expenses from 1911 to 1924 without explanation of the work done. In support of its contention that the charges related to plant investment and not to operating expenses, Respondents [86] submitted a

69. Direct expenses in connection with the acquisition of properties in the period following 1915, including legal fees and miscellaneous expenses are being included in the rate base.

memorandum prepared by the Assistant Secretary of the Company, giving his opinion as to the nature of the charges based upon an inspection of engineering field notebooks and drawings, the history of the flashboard suits and the recollections of an engineering department employee. Respondents now describe these charges as representing the expenditures for (1) river observations (collecting original data regarding flow characteristics, rates of run-off under varying rainfall conditions, etc.); (2) back-water observations and surveys required for the defense of lawsuits; and (3) property surveys required for information prior to purchase of property and for marking boundaries after acquisition. But Respondents did not relate the engineering work set forth in the field notes and drawings to any specific charges in the Flowage Basin accounts and, in fact, the witness stated he did not know where the cost of the work represented by the engineering data he examined had been charged.

The various items of cost, as described by Respondents, are ordinary operating expenses, except for the cost of the first survey of properties in connection with their acquisition which would be a capital investment. The costs of such surveys have been segregated in another Flowage Basin sub-account entitled "Surveying Property" which we have allowed in full. There is no evidence that the costs of property surveys were improperly classified at the time of the cost distribution. The unsupported reclassification, made many years later, does not justify the [87] inclusion of any portion of the amounts of $45,325.71 and $561.65 in investment in plant.[70]

The item claimed in the amount of $4,988.45 for river observations is subject to the same general conclusions

70. It cannot pass without comment that Penn Water did not call as a witness the one member of its organization (Bortner) more able than any other to testify to the details and nature of the items here involved. This individual was offered as a witness as to the fair value of land and rights-of-way, which testimony was excluded, but not for any other purpose. He was referred to frequently in the testimony of Respondents' witness Gunn and was available in the hearing room but never testified.

applicable to the consideration of similar functions set forth in connection with Respondents' contentions relating to office engineering expense, *supra*.

Lancaster office expense in the amount of $20,787.41 is claimed for the period 1926-1930, consisting of office expense proper, a part of the salary of Bushong, services of sundry persons, liability insurance and distribution of expense accounts.[71] These charges were made under a job order (M-387) which provided for salaries, office expenses, and regular current expenses in connection with the Lancaster office, expressly excepting specific jobs such as the purchasing of real estate. Nevertheless, there is being included in the rate base herein, as plant cost, items [88] relating to title searches, recording, and sundry expenses for the period, which were charged to this work order.[72]

Because of the character of the Lancaster office after 1925, as an office having an exceedingly minor relation to any sort of project cost work, and as Respondents have failed to present any evidence enabling determination of any item of Lancaster office expense as proper for capitalization, none of the amount of $20,787.41 can be included in plant.

Respondents contend that the cost of work done with respect to the extension of its triangulation system (Job order C-791, 1929-1932) and the making of property ties thereto (Job order C-970, 1932-1934) should be included in the rate base.

Items for the triangulation survey and property ties in the total amount of $6,495.96 represent proper plant costs, which should be included in Respondents' rate base.

Survey of Storage Reservoir Sites (1910-1911).

Respondents contend that an expenditure of $12,420.77 for the establishment of gauges for the determination of

71. Beginning January 1926, a fixed percentage of the expense of this office was charged to operations; after 1929, a further change was made in this respect.

72. During this time only one new property was acquired (1927) and there was only one flooding or "flashboard" suit.

river flow should be included in the rate base. However, there is no evidence that the charges represented by this amount were incurred for the purpose. Respondents attempted to get in evidence a statement as to the character of the charges included in this account by offering Schedule F-3 of Exhibit 320, but failing to produce any witness who [89] could testify to the descriptive part of the schedule that much thereof was rejected by the Hearing Examiner.[73]

The Staff's exhibit disclosed that the amount of $12,420.77 is composed of charges to an account entitled "Reservoir Surveys Account" made during the years 1910 and 1911, and which cover survey work, general office charges, automobile expenses, superintendence, Harrisburg office expenses, instruments, salary of W. E. Bennett, and interest. The Staff's witness Newlands testified that he found nothing in his investigation of Respondents' accounts and records to support its claim that the amount represented "the cost of establishing and rating of new gauges, rating of existing gauges and determination of time relation data between gauges".

The Staff has treated this amount as related to surveys made under the supervision of W. E. Bennett, whose name appears in this survey account in connection with a salary item. Contemporary letters between Bennett and Aldred (Receiver), Aldred (President) and Walls (Chief Engineer), Walls and Bennett, and Clarke (Vice President) and Bennett, all show that from 1909 into 1911 Bennett was engaged in a continuing investigation of probable sites for the storage of water on the tributaries of the Susquehanna and in obtaining data for use before the state legislature. He also investigated the branches of the Susquehanna in the vicinity of Harrisburg for similar purposes, and later studied the matter of locating a series of low storage dams on the Susquehanna proper.[74]

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73. Again Respondents could have saved trouble by calling as a witness Penn Water's employee Bortner, who was frequently in the hearing room during the proceedings.

74. Such work continued at least late into 1911.

[90] It further appears that Bennett distributed salaries and expenses of himself and his assistants among classes of work, distinguishing, for example, between the reservoir survey account and the gauges account, as well as various other accounts.

It is found that Respondents have not established the propriety of the inclusion of the amount in question in the rate base.

Cost of Land Acquired from Affiliate (1931).

Respondents contend for recognition as cost of plant an amount of $24,151.83, which the Staff contends was a write-up. The item arose out of a transaction between Transmission Company and The Baltimore Electro Alloys Company.

The Baltimore Electro Alloys Company was organized by Penn Water as a non-utility affiliate in 1915 for metal manufacturing purposes, with a plant in Baltimore adjacent to Transmission Company's Highlandtown substation, in connection with which four tracts of real property were bought in 1915-1918 at a book cost of $30,949.60. After a sale of a portion of this property in 1919, the remainder was carried on the books of the Alloys Company at $24,805.42. The Alloys Company discontinued operations in 1919 or 1920, and later (1931) sold its real property and appurtenances to Transmission Company. On the basis of an appraisal by an employee of Penn Water, Transmission Company entered this acquisition in its plant account at $50,000, or $25,194.58 in excess of its cost to the Alloys Company. After a sale of a small portion of the tract by Transmission Company in 1937, the excess of recorded cost ($25,194.58) was adjusted to $24,151.83, the amount here in issue.

[91] Respondents take the position that under the Uniform System of Accounts of the Commission it is proper to enter the $50,000 as representing cost, contending that the prop-

erty was first devoted to utility service by Transmission Company.

It is found that this transaction is one involving a profit between affiliates, that the amount in question consists of a write-up not properly includible in plant and, therefore, in the rate base.

Cost of Defending Title to Land (Mill Tract, 1932).

Respondents contend that the amount of $1,427.42, representing salaries and expenses of witnesses, legal fees and court costs incurred as a result of defending an ejectment proceeding brought against Penn Water (1932) in a boundary dispute should be included in the rate base. The court held, in the ejectment proceeding, that Penn Water did not have title to the land and thereafter the latter purchased the land. The cost of purchasing the tract was entered in plant account and is not here in issue, but the cost of the legal action was originally charged as an operating expense.

The action at law added nothing to the value of the property as subsequently acquired, and the original accounting with respect to the cost of defending title was correct. The amount of $1,427.42 will not be included as a part of Respondents' rate base.

Conowingo Backwater Litigation or Agreement Expense (1923-1928).

Respondents contend that the sum of $39,301.46 should be included as a part of the rate base, since it is identified with an [92] agreement relating to the adjustment of interests in connection with the construction of a downstream hydro plant (Conowingo, Maryland) and embraces the cost of a study made (1925-1928) as to the anticipated effect of the downstream development on Penn Water's hydro operations, as well as a fee for legal services (1923) and certain travel expenses (1926) with respect thereto.[75]

75. Embraced in: legal expenses, $21,053.30; consulting engineers' services, $2,272.94; distribution of salaries and wages, $12,223.36; miscellaneous, $3,751.86; total, $39,301.46.

In 1925 Penn Water brought suit in equity for an injunction against The Susquehanna Power Company to enjoin the construction by the latter of a dam at Conowingo (Maryland) with a crest exceeding 100 feet, on the ground that a dam of greater height than 100 feet would cause a back flow upon Penn Water's tailrace, which then extended some 7,000 feet below the Holtwood dam to the foot of Cully's Falls. The Susquehanna Power Company, by answer, put in issue rights which allegedly had accrued prior to certain improvements made by McCall Company to the tailrace, consisting, largely, of the excavation of Cully's Falls and the lowering of the foot thereof.

In February 1926 the parties to the suit entered into a 50-year renewable agreement, and the suit was stayed.

The above study was used to establish: (1) that the river fall between Penn Water's forebay and the Conowingo tailrace would be most economically developed by permitting the lower (Conowingo) dam to be built to a height of approximately 108 feet; (2) that in such event Penn Water's average annual loss in energy output and demand value under then existing conditions would be $72,000, exclusive of [93] other losses not evaluated; and (3) that the average annual gain in energy output alone from the Conowingo project would be $195,500. It was thereupon agreed that Penn Water would consent to the construction of such a dam and would receive as compensation for its losses in energy output and demand value $72,000 a year plus $61,750 as its share in the Conowingo project's estimated annual gain of $195,500.[76]

The Staff's contention is that the expenses of $39,301.46 were incurred in the negotiation of an agreement that resulted in no addition to Penn Water's land, rights, or property, but only provided compensation for loss in revenues, and that these expenses are therefore chargeable to operations or surplus. Respondents take the position that the expenses were incurred in connection with a suit to defend

76. For each year after the fourth year from February 20, 1926.

title to its land and water rights and, therefore, should be included in the rate base.

The facts are that this agreement does not settle title claims, as both parties thereto explicitly save their contentions and the proceeding is merely stayed. The sum here in issue is an expense relating to operations. Even if it were originally proper to defer the charge over a period of years, such a long time has elapsed since it was incurred that it should not now be included in the rate base.

[94] *Expense Incurred on Transmission Line Built by Others (1910-1913).*

The Staff proposes that there be excluded from the rate base the amount of $12,459.23 capitalized by Penn Water in connection with the construction of a transmission line from Holtwood to Lancaster (Pa.) which is the property of its customer company, Pennsylvania Power & Light Company (PP&L).

Approximately $9,000 of the amount represents costs connected with surveys made by Penn Water (1910-1911) with respect to its own construction of the line. The latter, however, abandoned the project and allowed options to expire. Later, the then customer, Edison Electric Company (predecessor of Pennsylvania Power & Light Company) built the line. The remainder of the $12,459.23 represents, for the most part, expenditures made during 1912-1913 by Penn Water in assisting the customer company to build the line, for which the customer was never charged.

As a result of this transaction Penn Water acquired no property or facilities and accordingly this expense is not a proper one for inclusion in plant or in the rate base.

Expense Incurred on Substation Built by Others.

The Staff also proposes that there be excluded the amount of $5,668.48 capitalized in connection with the construction of the PEPCO substation at Takoma Park (Md.) resulting in property used and useful to PEPCO.

[95] This expense represents engineering advice relating particularly to the design and selection of 220-kv equipment for the substation, with which the engineers of Respondents had had considerable experience, the latter being anxious that such equipment should be of the same standard as their own as it was to become connected with their transmission system. Respondents have never charged the customer company with the cost of these services.

As in the instance of the preceding "Expense Incurred on Transmission Line Built by Others", Respondents acquired no property by this transaction and possesses nothing with which "cost" can be associated. The amount will not be included in the rate base.

Loss on Materials and Supplies.

Respondents contend that a sum of $13,033.04 representing the difference between the balance in the Material and Supplies Account of McCall Company on July 17, 1909 and the McCall Company materials later inventoried by J. E. Aldred, Receiver, and Penn Water, represents (1) a loss of $8,970.34 because of the spoilage of 7852 barrels of cement written down by the Receiver to a value which was $1.1425 per barrel less than cost, and (2) a further net loss of undetermined material and supplies totaling $4,062.70. Respondents have no supporting detail other than the testified to possibility that most of the spoilage in cement occurred during the cessation period.

The staff's position is that the entire indicated inventory loss of $13,033.04 represents cement which deteriorated during the period of cessation and after December 31, 1908 when all construction activities had ceased.

[96] In support of its contention a staff witness testified that a physical inventory taken by the McCall Company at December 31, 1908 showed a total of 35,736 barrels of good cement on hand which at cost price amounted to $51,653, and that of this old cement the Receiver used only 7852

barrels and Penn Water a further 8626 barrels, leaving a balance of 19,258 barrels unaccounted for.

There is no evidence that the remaining barrels of this old cement were ever used in construction, but contemporary correspondence and staff testimony indicates that it was on hand but had spoiled.

The record supports the conclusion that the entire $13,033.04 here in question represents a loss due to spoilage of cement during the period of cessation and after construction had ceased and, in fact, that the loss probably was much larger. The amount here in dispute was never charged to construction on the books and the Respondents' proposal to now include it in such costs is not approved.

Cash Not Accounted for.

Respondents contend that $130.99 should be included in the rate base as cash lost from the petty cash fund during the period of construction.

This amount represents the difference between the petty cash funds reported on the books of McCall Company as of July 16, 1909, and the amount turned over to the receiver as of July 15, 1909.

This loss, never charged to plant on the books, possibly occurred during the cessation period and cannot, on the evidence in [97] this proceeding, be associated with the cost of constructing the project. It is found that no justification has been shown for including this amount in the rate base.

Susquehanna Contracting Company Expense.

Respondents contend there should be included in the rate base an item of $6,621.85, made up of miscellaneous administrative expenses, including legal fees, New York City and state taxes, referee's services, salaries, and printing and stationery, incurred in the formation, functioning, and dissolution of the Susquehanna Contracting Company, which company is described in the evidence as a "paper"

company incorporated to facilitate the development and financing of the McCall project and also as a corporation organized to provide for the mechanics of legally issuing the McCall Company securities and relieving Harvey Fisk & Sons from any possible future liability which might have resulted from the financing. Respondents have used both descriptions.

The administrative expenses of the Contracting Company could at best only be regarded as financing costs, and therefore [98] not allowable as a separate part of the rate base in view of the 6% interest allowance hereinbefore made.

Construction Fee Charged Holtwood Power Company (Affiliate).

Respondents contend for the retention in the rate base of an item of $50,194.73 which allegedly represents the cost of supervisory engineering services furnished by Penn Water, 1922 to 1924, in the construction of a steam power plant by the latter's affiliate, Holtwood Power Company. The amount of this fee is now in the plant account of Penn Water.[77]

The Staff takes the position that the fee represents a profit on an intercompany transaction.

Respondents' witness Gunn thought that the fee covered supervisory services rendered with respect to matters of preliminary development, design and construction for two and a half years prior to December 31, 1924, such services including those of Penn Water's then [99] assistant chief engineer, four other supervisors or engineers, the purchasing agent, and the accounting department, as well as other employees of Penn Water. This witness did not know how the fee had been determined as to amount. No records of the time, services, or salaries allocated to the steam plant were available to him. Respondents had no details in work-

77. Penn Water purchased the assets of Holtwood Power Company and merged the latter with itself in 1927.

ing papers or other records, and accordingly, he relied on information obtained by consulting Respondents' purchasing agent.[78] Gunn testified that Baltimore Company prepared some of the drawings and was consulted in the selection of equipment.[79] Another of Respondents' witnesses (Gisiger), however, testified that Baltimore Company did the main designing of the steam plant, Respondents' engineers making only minor modifications with respect thereto. The former witness (Gunn) was not in Respondents' employ at the time of this activity, but the latter (Gisiger) was.

There is no indication that this fee represents a distribution of the time of the supervisory employees named by Respondents' witness Gunn as being those whose services were involved in connection with the fee. In its tax return for the year 1924 Penn Water reported the fee as the profit in an intercompany transaction, and on that basis it was not included in taxable income.

It is clear from the evidence that the fee was nothing more than a flat 5% charge, that it constituted a profit between affiliates, and that the amount thereof should not be included in investment in electric plant.

[100] *Organization Expense of Holtwood Power Company (Affiliate)*

Respondents contend that an amount of $17,875.34 should be included in the rate base as the cost of organizing a corporation in 1924 with appropriate powers for the building and operating of a steam plant at the Holtwood site to be an integral part of Respondents' electrical system.[80] This amount is composed of the following items:

78. The agent died before the giving of the testimony with respect to this item.

79. Baltimore Company was paid $82,828.21 for direct expenses plus an amount of $16,565.78 for indirect expenses.

80. Respondent, Penn Water, had received legal advice that probably it did not possess this authority in its own corporate person.

Lancaster office expense (June 1924-August 16, 1925)		
Salary (Bushong)	$9,124.96	
Office salaries and expenses	5,760.53	
		$14,885.49
Legal services		
Fees	2,500.00	
Salaries and travelling (February 1925)	489.85	
		2,989.85
		$17,875.34

The Staff, in recommending that this contention be denied shows that Holtwood Power Company was in fact organized by Penn Water's lawyers (chiefly J. E. Malone and Simpson, Thacher & Bartlett), that the activities of Bushong and the Lancaster office constituted incidental part-time work of a clerical nature, that the claimed cost covered a period for a full year after the Company was organized, and that uncontested expenses contain ample provision for organization.[81]

[101] It has been pointed out in connection with other claims that Bushong was engaged in performing a variety of services during 1924-1925 and these were not limited to

81. The Staff here refers to the following Holtwood Power Company organization expenses which will be included in the rate base:

Promotion		
Record books, stationery and printing	$312.51	
Advertising, recording deeds, etc.	196.71	$ 509.22
Incorporation fees		6,201.12
Counsel fees		
J. E. Malone (Jan. 1, 1924—July 1, 1925)	12,500.00	
W. E. Haskell	310.00	
Stewart & Gerber	300.00	
Simpson, Thacher & Bartlett	3,070.59	
Notary Fee	.75	16,181.34
		$22,891.68

his land acquisition activity or his services in connection with the organization of Holtwood Power Company. He assisted in the organization of Holtwood Power Company and probably on a level higher than a merely clerical one, but such incidental service of operating employees should not be capitalized.

Respondents also fail to identify or explain either the items for office salaries and expenses or those for salaries and travelling as related to the organization of Holtwood Power Company.

The item for legal fees relates to services rendered by an attorney (Zimmerman) in the absence of Penn Water's regular counsel, J. E. Malone. Respondents' witness Gunn did not know the nature of Zimmerman's services, and the Staff's witness testified that the voucher covering these services did not describe them. Compensation for legal services performed in connection with organization are ordinarily allowable, but Respondents have made no showing that all of this attorney's services were rendered in connection with the organization of Holtwood Power Company or what portion of such services related thereto.

On the basis of the foregoing it is found that inclusion in the rate base of the amount of $17,875.34 would be improper.

Tower Foundations Abandoned.

Respondents contend that an amount of $3,595.95, consisting of expenditures incurred in the construction of four unused transmission tower foundations should be included in the rate base.

[102] The tower foundations were among seven the Respondents started to build in 1932 on rights-of-way procured for the projected Riverside line which was not constructed until 1937. Work on these foundations was ordered commenced to take advantage of the availability of a competent construction force in the vicinity at the time.

Respondents' witness Gunn testified that Respondents knew at the time of construction of the foundations that the use of several of them would be temporary. When the line was finally built only three of the tower foundations were used.

This expense essentially relates to abandoned work, and accordingly its inclusion in the rate base would be improper.

Items Previously Charged Operating Expense or Reserve for Depreciation.

Respondents propose to include in the rate base the sum of $96,116.84 obtained by reaccounting for expenditures formerly charged to the depreciation reserve or to operating expenses, after adjusting for certain recalculated overheads. Three categories of items are involved in the reaccounting: betterments in minor items, additions, and replacements including betterments in new units.

(a) *Betterments.*

Respondents contend that in the past there has been incorrect accounting for expenditures concerning 19 items of betterments arising in connection with minor items installed during the period from 1923 to 1931, in that at the time charges were incorrectly made to the depreciation reserve or to operating expenses in amounts of $14,813.34 and $11,339.99, respectively. The proposed adjusting entries consist of the total of the computed excess of the cost of such installations over [103] the cost of the old item trended to the year of installation by means of commodity price indices.

Except for one minor item (a sign) all the items here proposed for correction relate to necessary repair and maintenance work involving individual parts of equipment or structures such as transformer cooling coils, new rail siding, parts of a transformer oil circuit breaker, etc. (all charged to the depreciation reserve) and turbine lower

pedestal and rubber guide vanes, etc. (charged to operating expense). Respondents' witness Eichorn [Eichhorn], an accountant, admitted that, at the time of recording, the classification of such items as are here involved as a betterment was largely a matter of judgment, and the Staff's witness Newlands testified that these matters had been properly treated as repair and maintenance items at the time they were incurred according to then accepted accounting practice.[82]

Respondents' proposals with respect to this category clearly amount to re-accounting and the amounts related thereto should not be included in the rate base.

(b) *Additions.*

Similarly, Respondents contend that with respect to alleged additions there has been charged in error in the past an amount of $10,670.77 to the depreciation reserve, and an amount of $30,870.70 to operating expenses.

Respondents' witness Wetzel, who reclassified these items, testified that the determination of whether the item represented an addition involved the exercise of discretion and judgment. The Staff's witness Newlands testified that the original entries made on the books [104] for these transactions represented accepted accounting practice at the time of entry.[83]

These items were properly treated at the time of the original accounting as repairs and maintenance, and here, also, what Respondents are proposing merely amounts to re-accounting. Accordingly, the amounts proposed will not be included in the rate base.

(c) *Replacements.*

The final group for which Respondents propose to re-account relates to replacements (including betterments in new units) made from 1923 to 1936. The amount here in-

82. The original accounting was done under the State Commission's system of accounts then prescribed.

83. Penn Water was, during most of this period (1912-1935), subject to the accounting system of the Pennsylvania Commission.

volved totals $105,962.02, of which $13,341.75 would come from alleged past erroneous charges to the depreciation reserve and $92,620.27 from alleged erroneous charges to operating expenses.[84] Here, too, it is established in the evidence that the classification as a replacement rests upon judgment.[85]

These items represent the replacement of existing facilities at a time either prior to that when Respondents began recording retirements on their books or while the change to a retirement policy was being effected and Respondents were still charging the cost of replacement to the depreciation reserve or to operating expenses in lieu of the removal of the cost of the old facility from plant and the adding of the cost of the new. This was accepted accounting practice at the time, did not constitute error, and re-accounting at this time would be improper.

[105] (d) *Overheads.*

Respondents' proposed credit in the amount of $27,539.98 to retirements recorded prior to January 1, 1937,[86] includes interest during construction and other overheads which Respondents state that they believe are applicable to such retirements. However, the interest during construction and other overheads embraced in this proposed adjustment relate to amounts included in Respondents' contentions considered hereinbefore in other sections of this opinion and which, for the most part, have been excluded from the rate base. Therefore, it is found that the credit here proposed should not be permitted in connection with the determination of the rate base.

Respondents, in pricing certain unrecorded retirements, have included overheads not capitalized or allowed herein in the amount of $50,000.

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84. The adjustment would involve both debits and credits to the depreciation reserve, the net becoming a credit of $13,341.75.

85. The original accounting had been pursuant to a system promulgated by the Pennsylvania Commission.

86. The effective date of the Commission's Uniform System of Accounts and Respondents' compliance with Electric Plant Instruction 2-D.

It follows that the amount in question should not be treated as a part of the cost of plant retired since it has not been considered a part of the cost of plant in the first instance. Therefore, the proposed credit is eliminated.

Contribution to Holtwood Church.

Respondents propose to include in the rate base an amount of $1,400 contributed in 1913 by Penn Water to the construction of a church at Holtwood (Pennsylvania) and previously accounted for as a charge to surplus.

This donation, made after the commencement of operations, was properly an income or surplus charge and not a proper charge to Penn Water's plant.

[106] *River Coal Investigation Expense.*

Respondents claim as includible in the rate base an amount of $6,132.41 representing "River Coal Investigation Expense", consisting of expenses incurred in connection with obtaining an engineering report on Susquehanna River coal, and in increasing the coal storage area and coal storage facilities of Anthracite Production Corporation.

The expense connected with the engineering report ($2,500) was incurred June 1920 and covered a survey of the history of river coal, its recoverability and marketability, as well as the determination of a location of a plant to be used in the recovery of such coal. Within four months thereafter, Holtwood Coal Company was organized as a wholly-owned subsidiary of Penn Water for the purpose of engaging solely in the commercial marketing of river coal. The coal recovered was dredged by the non-affiliate Anthracite Production Corporation, which located its plant as recommended by the aforesaid engineering report, at Shenk's Ferry (Pennsylvania). Subsequently, the market for the sale of coal by Holtwood Coal Company disappeared, and at the end of 1923 it withdrew from the business.

Although Penn Water expended some $23,000, which is included in the rate base, in an investigation of river coal

deposits, combustion characteristics of river coal, etc., in connection with the construction of its steam plant, it proposes here to charge an additional $2,500 to cost of the steam plant for expenses associated with the earlier report obtained in connection with the 1920 commercial marketing operations of Holtwood Coal Company. This non-utility expense is not a proper rate base item.

The proposal to include as steam station costs expenses ($1,340.98) incurred in connection with labor and material provided [107] Anthracite Production Corporation at the latter's coal storage facilities at Shenk's Ferry in 1921 and 1922, as well as the proposed inclusion of the amounts of reimbursement ($2,291.43) to Anthracite Production Corporation by Penn Water for the cost of moving transformers and a transmission line, and the building of a new office, laboratory and machine shop, also relate to Penn Water's non-utility business and should not be included in the rate base.

Respondents' Proposed Credit Adjustments.

Respondents propose to reduce claimed costs by the amount of $9,187.79, representing the rental income received from Transmission Company's Gunpowder line (Baltimore) during the period prior to the commercial operation thereof.

Penn Water also proposes to eliminate from plant account (1) $941.69 appearing in the flowage basin account (1910-1924), (2) $399.59 appearing in the flowage basin account (1925-1936), (3) a bond interest adjustment made in 1914 in the amount of $587.86, and (4) an item of Holtwood Power Company organization expense in the amount of $799.69, all totalling $2,731.83.

Penn Water further proposes to write off the value of stock of McCall Ferry Company [87] acquired by McCall Company from Hutchinson in the amount of $200.

87. Not to be confused with McCall Ferry Power Company (McCall Company).

The credit for the amount of rental received from the Gunpowder line, as well as the other credits totalling $2,931.83, appear to be proper in determining the rate base.

[108] *Summary.*

The foregoing findings relating to investment in electric plant in service and, therefore, to the rate base are summarized as follows:

Net amount in issue		$3,378,869.57
Less amounts to be included in the rate base:		
Triangulation survey and property ties	$ 6,495.96	
Additional interest during construction (January 1, 1911 to June 30, 1911)	192,789.00	199,284.96
Subtotal		$3,179,584.61
Respondents' proposed credits:		
Gunpowder line	9,187.79	
Other	2,931.83	12,119.62
Subtotal		3,191,704.23
Net exclusions from rate base conceded by Respondents		2,208,902.08
Total adjustments to electric plant in service		$5,400,606.31

This adjustment applied to the book amount of Electric Plant in Service and in Process of Reclassification produces an adjusted book amount, as of December 31, 1945, of $33,183,625.82.[88] This latter amount includes $75,722.25,

88. Electric Plant in Service and in Process of Reclassification, $38,584,232.13, less total adjustments, $5,400,606.31, equals the $33,183,625.82.

representing the book cost of certain real estate held for possible future transmission lines which should not be included in the rate base but should be recorded in Electric Plant Held for Future Use. The $75,722.25 deducted from the above adjusted book amount of $33,183,625.82 leaves a balance of $33,107,903.57.

[109] *Disposition of Amounts Improperly Charged to Plant.*

The amount of $11,946,831.77 was charged to plant account on the books of Penn Water to record the transfer of properties on January 13, 1910 from the Bondholders Committee of McCall Ferry Power Company. The amount recorded represented the face and par value of the securities issued to the Committee, less the net amount of miscellaneous assets and liabilities. The following adjustments are appropriate for disposing of the improper or incorrectly classified items as recorded on the books at December 31, 1945, totalling $5,400,606.31:

131	Materials and Supplies Estimate of the portion of sundry spare machine and equipment parts on hand at December 31, 1945.	$ 14,000.00
151	Capital Stock Expense Expenses in connection with the authorization, issue and sale of capital stock during the period 1923-1935.	82,963.12
250	Reserve for Depreciation of Electric Plant The net amounts of $335,728.20 representing unrecorded retirements and $122,488.49 of plant cost erroneously charged to the reserve for depreciation.	213,239.71

110	Other Physical Property Real estate determined by Penn Water to be outside the claimed project boundary and the investment of Penn Water in the hydraulic testing laboratory.	46,221.15
271	Earned Surplus The net amount of various remaining items representing improper charges and credits to fixed capital accounts.	5,044,182.33
	Total elimination from electric plant	$5,400,606.31

The project boundary claimed by the Respondents has not been investigated by the Staff or passed upon by the Commission. The extent and value of the properties proposed to be transferred herein to Other [110] Physical Property and Electric Plant Held for Future Use represent the Respondents' determination and are subject to future action by the Commission when the project boundary is established.

Construction Work in Progress.

The Staff recommends adding to adjusted plant, and to the rate base, construction work in progress in the amount of $32,119 for 1945 and $64,353 for 1946. Respondents contend that $237,361.79 of construction work was in progress for 1945 [89] and $226,672.07 for the year 1946. The recommendation of the Staff coincides with net additions permitted as an element in the computation of the power bill to Baltimore Company under the contract of June 1, 1931. Respondents' contention relates to a total of annual work orders which may be classified into four groups: (1) non-project property, (2) property held for future use,

89. This represents $205,243.01 recommended for exclusion by the Staff

(3) work in progress not included in the year's power bill, and (4) work in progress included in the year's power bill, as follows: [90]

	1945	*1946*
Non-project property	$ 52,140.33	$ 58,921.19
Property held for future use	67,848.06	67,848.06
Work in progress not included in power bill	85,254.62	35,549.75
Work in progress included in power bill	32,118.78	64,353.07
	$237,361.79	$226,672.07

[111] Non-project property includes the purchase of properties above both the Holtwood and Safe Harbor projects which is being held for use in connection with a future hydro development. Neither the specific location of the future development, nor the design, nor the date of the commencement of construction thereof has yet been determined, nor, in fact, can this development be used as a part of the Holtwood project and may not even be owned by Respondent, Penn Water.

Property held for future use consists principally of land items. The largest item relates to rights-of-way for a proposed line from Lehman Farm to Lancaster with some investment having been made for a line of less definite destination. It has not been decided when construction will begin on these lines and no contract has been closed with a customer requiring their construction.

With respect to the two remaining items contained in the foregoing tabulation, Respondents capitalize interest during construction under a definite policy which has been in effect since 1930, according to which interest is charged at ½% per month on construction expenditures with respect to all jobs estimated to cost $2,000 and to require

90. Non-project property and property held for future use are not included in the power bill.

more than one month in construction. This capitalization continues until the end of the month, during which the addition or facility becomes available for service, whereupon the cost of the work is included in computing the power bill.

According to the evidence, therefore, it is proper to allow as a part of the rate base only those of the foregoing items which are included in the power bill and the remaining items claimed are not to be included in the rate base.

[112] *Property Held for Future Use.*[91]

Respondents contend there should be included in the rate base an amount of $77,918.28 as representing property held for possible future use in respect to the construction of a new Lancaster transmission line and substation, lines parallel to Respondents' Perryville, York and Coatesville lines, a connection with the system of Pennsylvania Power & Light Company (Lancaster), and construction of lines parallel to Respondents' Ellicott City (Maryland) to Takoma Park (D. C.) lines, as well as future additions to the Ellicott City substation. In the testimony the estimated date of placing in service of these facilities varies from 1950 to 1955 to the unknown.

Purchases for the possible future line between Safe Harbor and Lancaster, which represents the major portion of this property, began in 1924 and are still in progress. The date when this line is to be built is undetermined.

Rights-of-way paralleling existing lines of Respondents were acquired at the time the transmission lines were constructed and there are no definite plans as to the date of their use.

Such items relate to matters which are too indefinite to justify consideration of the related amounts as a part of Respondents' rate base.

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91. Other property being acquired currently to be held for future use is disposed of under the previous section, "Construction Work in Progress".

[113] DEPRECIATION.

There are three main aspects of depreciation which must be considered in this proceeding: (1) accrued depreciation to be deducted from cost of plant if a depreciated rate base is used, (2) annual depreciation expense, and (3) whether a depreciated or undepreciated rate base is appropriate.

Accrued Depreciation.

Respondent contends that the accrued depreciation as of the end of 1945 amounted to $6,000,000. The staff claims the amount was approximately the same as the depreciation reserve according to the books (adjusted) of the company, namely, $8,763,118.

The difference between the two foregoing figures represents, in the main, differences in method of determining accrued depreciation. Respondent's witnesses determined so-called actual depreciation of approximately $4,500,000, largely by the observation process, to which was added $1,500,000 as a "safety factor" to cover possible future loss from accidents, failures, floods, ice, hurricanes, sleet, snow, earthquakes, and the like. The staff, on the other hand, estimated accrued depreciation on the age-life, straight-line basis. This involved an estimate of the service lives of the various classes of plant and then a computation of the proper depreciation reserve, sometimes called the reserve requirement, which was taken as the measure of accrued depreciation.

Respondents' witnesses Gunn and Uhl testified that the "actual" depreciation in Respondents' depreciable property as of December 31, 1945 was as follows:

[114]

	Gunn	*Uhl*
Production Plant—Steam	$ 973,310	$ 955,370
Production Plant—Hydro	2,223,880	2,480,350
Transmission Plant	1,147,290	872,050
General Plant	200,420	172,360
	$4,544,900	$4,480,130

The agreement in totals testified to by these two witnesses should not be construed as agreement to details or to procedures. Only by the sheerest of coincidences could the determinations of these two witnesses approximate one another so closely. They disagreed in major respects not only to the presence or absence of functional depreciation, but also as to physical condition. To cite one example, Gunn estimated $326,760 for depreciation in Accessory Electric Equipment, whereas Uhl found only $226,020. Over 50% of Gunn's estimate represented obsolescence, whereas only 15% of Uhl's estimate came within that category.

The witness Gunn's method involved the determination of physical condition and the "comparative economic disadvantage" existing in any unit of property. Physical depreciation was based on studies of plant maintenance, test, inspection and operating records, consultations and studies, and was expressed by a per cent condition. "Economic disadvantage" was determined for individual units of equipment by comparing charges or costs applicable to the existing unit against charges or costs for a substitute unit of the most modern design to provide equivalent capacity, reliability and flexibility. He made substitute plant studies for the hydro and steam stations, the Holtwood and Highlandtown substation[s], the Holtwood-Highlandtown transmission line to Baltimore, and general plant, but not as to the rest of the property which he considered modern. [115] Gunn testified that the greater part of the property of Respondents was of a rugged, long-lived character for which there were few, if any, life statistics, that there were no mortality data available with respect to large hydroelectric equipment and structures, and that he did not use service lives, as in his opinion the results obtained thereby would bear no relation to existing depreciation except by coincidence, even if a series of adjustments were made, from time to time, until life expired.

In determining physical depreciation, however, Gunn used a time discount factor. But, when cross-examined with respect to specific instances in which the factor had entered into his determinations, he was very uncertain and indefinite as to what weight he gave it other than (1) he associated it with future usefulness, which apparently related to a consideration of life expectancy over a possible range of years, and (2) he "observed the effects of interest off of some compound interest curve" assuming that "technological depreciation" would proceed at a certain "rate". He confessed that this "time discount" factor was "far out in the realm of speculation" and depended on the exponent used, but he insisted it was entitled to some consideration and testified that, in fact, he did make estimates of depreciation based upon it and that he could not make an "accurate determination of . . . depreciation" without it.

Gunn's "economic disadvantage" produces a result dependent upon price levels through the effect of prices on current operating expenses of existing property and assumed operating expenses and capital costs of alternative or substitute property. Moreover, it was necessary for the witness, in order to carry out his method, to make judgment [116] determinations of what property was subject to "economic disadvantage" and then to speculate as to what would be the costs of building and operating substitute plants. In this connection, he obtained carrying charges by use of a factor developed 20 years ago, which he did not check for adaptability for current use, and which contained an element of return not appropriate in this proceeding, and an element of depreciation in no way related to his own method of determining depreciation. He estimated suppositious operating and maintenance savings and even assumed a value of power and energy losses that might be saved by modernization of substations.

Such consideration as Gunn gave to the economic aspects of depreciation is included in a method of determin-

ing economic disadvantage which has all of the speculation and faults of "reproduction new". His judgment of physical depreciation, as previously pointed out, is compromised, in major instances at least, by the use of a vaguely defined and vaguely used time-discount factor. It is necessary to conclude, therefore, that this witness' determinations are too speculative to be of real assistance to the Commission in determining accrued depreciation.

The witness Uhl also had available reports of an examination of structures and equipment, inspection and maintenance, maintenance expense history, and data on additions and retirements since the original construction. This witness estimated the per cent condition of structures and equipment, allowing for wear and tear, improvements and replacements, current and deferred maintenance, reflecting the "depreciation" (actually only deferred maintenance) that would be eliminated by Respondents' current maintenance policy, and stated that [117] he considered obsolescence where found. As did Gunn, he considered the mass concrete of the dam, the forebay ramp, the tail-race excavation and deflection wall, and sub-structure excavations as non-depreciable [92] but used the essentials of a service-life calculation to obtain an estimate of the deferred maintenance in the dam.[93]

Witness Uhl gave no real consideration to obsolescence, testifying that the current high cost of replacements made it impossible for him to make a good estimate and that he considered it as a very intangible element, depending, even in power plants, upon style and type as well as upon economic factors.

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92. Also, the railroad relocation, land and flow rights, reservoir clearing, and organization and undistributed fixed capital costs. Deferred maintenance was found in such principal items as the dam, the turbines and gate mechanisms and the windings of generators and transformers and was included as depreciation. He distinguished between current and deferred maintenance, considering maintenace to be deferred if its periodicity was as much as 3 years, but admitted that in some instances, as the operators' village, it became mixed with improvements. He made no determination as to exactly what part of his determination of depreciation related to deferred maintenance alone.

93. Also in determining depreciation in conductors, line towers, the frequency converters, and transformers.

While Uhl stated that he gave consideration to the fact that some depreciation existed due to deterioration that could not be found by visual examination, it is nowhere apparent in the evidence what [118] weight he gave to this factor as it is obvious that he gave principal consideration and weight to "the physical condition of the property", as he found it.[94]

In essence, both Gunn and Uhl determined their so-called actual depreciation by the observation process, although Gunn, in particular, through generalizations and technical descriptions, endeavored to create the impression that his was a scientific study. To this so-called actual depreciation of some $4,500,000 was added the $1,500,000 previously noted and which witness Gunn admitted was not depreciation at all but merely a provision for some kind of contingency in the future.

We have, on many occasions, carefully considered testimony endeavoring to establish observed depreciation as actual accrued depreciation and have condemned that method so many times that it would seem to be futile to repeat what we have already said.[95] Suffice it to state here that the record in this case, just like the record in the *Safe Harbor* case, shows beyond any question of a doubt that such observed depreciation cannot be accepted as a measure of accrued depreciation for rate base purposes.

[119] The staff proceeded to determine accrued depreciation by the use of the straight-line, age-life method which involves the use of service lives, the same method employed by the Company in computing annual depreciation expense since it started depreciation accounting. Since 1931 the

94. The further criticism that physical depreciation cannot be wholly determined by visual inspection is strikingly borne out by Uhl's admissions that important elements of property were not capable of inspection and that he had to return and make a further inspection of the substructure of the hydraulic plant during the course of the hearing.

95. In the matter of

Chicago District Electric Generating Corp., 2 FPC 412, 423 (1941);
Hope Natural Gas Company, 3 FPC 150, 167 (1942);
Safe Harbor Water Power Corporation, 5 FPC 221, 250 (1946).

amounts of depreciation expense accrued in its books have, in effect, been collected from customers inasmuch as the Baltimore Company, under the supplemental agreement of June 30, 1931, was required to assure the company recovery of all of its proper expenses, including depreciation, in addition to a return on investment. Most of the present reserve was built up by accruals for which the company was specifically reimbursed under the foregoing supplemental contract since the depreciation reserve, as of December 31, 1930, amounted to only $2,875,440.89.

The first step in determining accrued depreciation under the straight-line method is a determination of service lives of the various units or classes of plant. The staff witnesses who estimated service lives did so after a field examination of Respondents' properties and a study of Respondents' operation, inspection, maintenance and trouble reports, and a consideration of functional (economic) as well as physical causes of plant retirement. Respondents did not offer any evidence in respect to service lives. We find in the record in this case that the service life estimates of the staff are reasonable and that they are, therefore, approved.

After a determination was made of the service lives, a proper depreciation reserve (reserve requirement) was computed by the staff. This reserve requirement represented, in terms of cost, that part of the service life of the properties which had expired or, in other words, [120] which related to the past. The method was substantially the same as that employed by the company in its accounts since it inaugurated depreciation accounting. The reserve determined by the staff, as of December 31, 1945, amounted to $8,408,373, as compared with the adjusted book reserve of $8,763,118 as previously noted. The book reserve was somewhat higher than the reserve requirement, the difference being primarily due to the fact that the book reserve contains allowances for resurfacing the dam and a few

other deferred maintenance items not included in the staff estimates.

It is now well-established that depreciation expense and accrued depreciation should be determined by the same method in order to do justice to rate payers and the company alike. The use of one method, such as observed depreciation, for determining accrued depreciation, and an age-life method for the purpose of depreciation expense, is the use of dual standards which inevitably results in injustice. We stated in the *Cape Harbor* case, where the issues in respect to depreciation were similar to the issues presented here, the straight-line method is now the generally accepted method of computing depreciation. The staff procedures in this case conformed to our well-established precedent.

There is disagreement between Staff's and Respondents' witnesses as to whether certain plant items (mass concrete of the dam, the forebay ramp, the tail-race excavation and deflection wall, and sub-structure excavations) are depreciable or non-depreciable, but Respondents' own witness Uhl admitted that it is the practice to put a life upon such structures as concrete dams and that he would consider them, and specifically, the Holtwood dam, as depreciable. The [121] Respondents themselves, since 1917, have accrued amounts to the reserve for depreciation for all of its depreciable plant, which included the dam, according to the straight-line method.

It is of evidence in the record of this proceeding that other electric companies treat comparable mass concrete dams as depreciable, some of the companies calculating the accrual on a straight-line basis, giving the dam account a service life ranging from 100 to 141 years.

In our opinion such plant items as are mentioned above have a limited service life and are properly subject to depreciation allowances in order to prevent the impairment of capital. We believe that the general practice of treating such property as depreciable is clearly correct and that the

novel treatment proposed by Respondents is not sound from either the financial or regulatory viewpoint.

Upon a consideration of all of the evidence it is found that reasonable and proper composite service lives for the steam, hydraulic, transmission and general plant classifications are 42, 69, 57 and 35 years, respectively, with corresponding annual depreciation rates of 2.38%, 1.45%, 1.75% and 2.86%. We find that the average accrued depreciation for 1946 was $9,001,873.

Depreciation Expense.

Respondents contend that the required annual charge for depreciation expense is $400,000 for property in service, plus 2½% on subsequent net additions of depreciable property. The Staff contends that for 1946 the proper annual charge for depreciation was $465,413, computed on a straight-line basis.

[122] Respondents' witness Gunn derived his estimate of the adequate annual allowance of $400,000 by applying to the 1945 book allowance for depreciation, $574,245, the ratio of his determination of the proper reserve at the end of 1945, $6,000,000, to the December 31, 1945 book balance in the depreciation reserve, $8,976,358, and increasing the result to $400,000 after consideration of several intangible counteracting factors.[96]

His recommendation of $400,000 is upon an equal annual (straight-line) basis, which he modified to an annuity of $175,000 if the annual allowance were on a 3% compound interest or sinking fund basis. Anticipating a net increase in the property of Respondents in the future, consisting of replacements and miscellaneous minor additions, both of

96. He testified that he verified this annual allowance by reviewing the present physical and economic condition of Respondents' plant, concluding that retirements for the next ten years may approximate $250,000 a year, permitting the retirement of 1/10 of all of Penn Water's depreciable property including such possibilities as the retirement of 2/3 of boiler plant equipment, 1/2 of all coal preparation and handling equipment, and all of the coal dredging and floating equipment, and rewinding all 10 generators in the hydro station, and all transformers in both the Holtwood and Highlandtown substations, etc.

which he expects to consist of units of property more susceptible to depreciation than the average of the property as a whole (i. e., carrying higher rates of depreciation), he added to his $400,000 an allowance of 2½% per annum applicable to net additions of depreciable property, assuming a straight-line basis of accumulation, or an allowance of 1.3% per annum, assuming depreciation be provided on a 3% interest basis. The $400,000 includes no allowance for obsolescence or what the witness called "economic disadvantage" in the future, except that which might be irregularly provided for at the time of the 5- and 10-year review advocated by the witness as a check of the accumulated reserve against then past experience in the way of retirements.

[123] It is apparent that even under Respondents' theories the derivation of the $400,000 can only be sustained by validation of the witness' use of the ratio of his determination of the reserve requirement to the book reserve. Having found that the witness' determination of the reserve requirement cannot be accepted, no basis exists for accepting his determination of the annual allowance.

Moreover, the procedures followed are impracticable and unsound. In our opinion the $400,000 annual allowance would be inadequate to return the investment in presently-owned depreciable property to respondents over the service lives of such properties, but on the other hand, the 2½% of depreciation to be applied to additions appears excessive. The combination of the two figures conceivably might result in a fair allowance over a period of years, but obviously this would be the result of accident rather than of sound practices.

The Staff's computations of the annual allowance conformed to the standard practice of applying the depreciation rates hereinabove found proper to the average of the appropriate plant balances for the year. Making this application to the average plant balances for the year 1946, it is found that the proper annual allowance for that year

is $467,701, including $2,288 applicable to the sums allowed herein with respect to triangulation and property tie surveys, and the allowance of additional interest during construction, less Respondents' proposed credits.

[124] *Depreciated or Undepreciated Rate Base.*

Respondents contend for an undepreciated rate base with a special credit to consumers, computed at 3% on their revised depreciation reserve balance of $6,000,000, plus subsequent net additions thereto.

The evidence relied upon by Respondents in support of this contention consists of the testimony of the witness Dorau, which sums up to the effect that in order for the stated return on investment to be fully realized, there must be a so-called proper correlation between the effect of the reserve deduction, where the deduction is made, in determining the rate base, and an upward adjustment in the allowed rate of return; or, the same result achieved by not deducting accrued depreciation and allowing a credit to consumers, based upon the amount in the reserve and a given interest rate. Thus, with straight-line accrual, deduction of the reserve, and no income from "reserve investments", the witness contends that in order to realize an "intended" fair return at the rate of 6½% (as assumed by him), there would be required an actual rate of return of 9.27%. On the other hand, with 3% earned on the "reserve investment", the rate of return actually realized would be 5.45%; on a 3% sinking-fund basis, with an undepreciated rate base and earnings on the "reserve investment" at 3%, the rate of return realized would be the witness' intended rate of 6.5%.[97]

[125] This concept of maintaining a "reserve investment" as if it were an actual fund is emphasized by Respondents'

97. As this Commission has comparatively recently pointed out in the *Safe Harbor* case, *supra* (5 FPC 22[illegible]248-249), the use of a sinking-fund method with a rate of interest applicable to the sinking fund, lower than the rate of return allowed on the investment, has the effect of not crediting the consumer with the full amount of the investment which is repaid by him in the form of depreciation expense.

contention that (1) reserve assets are in the nature of advances made by the consumers, which cannot be remitted to Respondents' investors until such investments are no longer needed to insure dependable service to the consumer, and further that (2) the deduction of the reserve would operate to effect a lower return, thereby relieving the consumer of paying for a part of the cost of service (the cost of Respondents' custody and management of the reserve) at the same time depriving the investor of a part of his return on the investment.

Dorau's approach is fallacious in several respects. So-called depreciation reserve assets—they are not identified as separate assets at all—are accumulated from rates paid by consumers but they do not in fact or in theory constitute a *corpus* of a trust fund such as is implied in Dorau's testimony. Whatever funds come into the possession of the utility through allowance of depreciation expense belong to the utility absolutely and may be used for all lawful purposes. Such unidentified funds can be used to pay off debt, purchase additional property, etc. If they are invested in utility plant, the plant is included in the rate base but if invested in such things as stocks and bonds, obviously rate regulation does not take them into account.

The trust fund analogy is strained to say the least. Accrued depreciation is not a fund. As previously stated, it represents that part of the cost of plant which relates to the past—expired service life. If it is not deducted in determining the rate base, a cost of past operations becomes the basis for a continuing charge. [126] In addition, accrued depreciation is deducted on equitable grounds. When a consumer has paid for plant consumption (depreciation), it is just as inequitable to charge a return on the amount reimbursed as it would be to charge a return on the cost of coal consumed in a previous year and duly recovered in operating expenses.

Respondents contend that, because of the long-lived character of their property, the depreciation reserve will

tend to accumulate to abnormal proportions, becoming and remaining for years in excess of 50% of the investment in depreciable property under the straight-line method. Assuming such computations to be accurate, the results thereof do not constitute a valid argument, *per se*, against the straight-line method and the employment of a depreciated rate base. The fact is that in the instance of Respondents, whose property is largely long-lived, the use of a sinking-fund method (usually associated with an undepreciated base) would postpone recoupment of a high proportion of their investment to the remote time when the properties are old, maintenance high and obsolescence a greater hazard. This would entail greater financial risks and might result in serious capital impairment.

We discussed in the *Safe Harbor* case the contention that an electric utility like Penn Water should employ the sinking-fund method of depreciation and enjoy an undepreciated rate base. The record in this proceeding does not alter what we there said, but no good purpose would be served by repetition.

[127] It is, therefore, concluded that the use of a depreciated rate base in this proceeding is proper. It is also our opinion that where the book reserve approximates the proper reserve (reserve requirement), the book reserve should be deducted as the measure of accrued depreciation. That is the situation here, the book reserve is only slightly higher than the reserve requirement and even the excess represents payment to Penn Water by its customers for deferred maintenance.

Accordingly, we find that from Respondents' average investment in plant for 1946, $33,126,585, the reserve for depreciation, averaged for the year $9,001,873, should be deducted in arriving at the 1946 rate base.

[128] WORKING CAPITAL.

Respondents contend that an adequate allowance for working capital requires the allowance of an amount of

$977,160, while the Staff contends that an allowance with respect thereto in the amount of $650,000 would be adequate.

Respondents contend that the required amount of the cash component of such an allowance is a sum of $488,092. However, the method used by Respondents in computing the amount claimed for this component is based upon several fallacies. The lag between expenditures and revenue is computed by Respondents on the theory that cash should be on hand the first of a month to meet all of that month's expenses and that revenues are not due until the various contract dates of payment, without any consideration of the fact that bills are not received on the first of the month, that operating expenses are not paid on the first of the month, that payrolls are paid twice a month or bi-weekly with little necessity for interim wage payments, and that bills usually either carry a ten-day discount or a 30-90 day payment provision. Accordingly, Respondents' use of a 48-day lag in terms of weighted dollars in this computation is not acceptable.

Further, Respondents' calculation of the cash component includes an allowance for contingencies such as floods, fires, etc., in the amount of $125,000, though in determining this amount no consideration was given by Respondents to their year-in and year-out actual contingency requirements, nor to the fact that the operating and maintenance element of such a casualty expense would be recouped in the monthly power bill [129] rendered by Respondent to Baltimore Company. Such vague over-all contingencies, however, are not properly provided for in this kind of an allowance.

Again, with respect to this same component, Respondents have included as a part of their operating expenses an allowance for rate case expense in the amount of $126,000, without regard to "periods of repose" or to the fact that, subject to the rights of the parties under the agreement of

June 1, 1931, Penn Water may include rate case expense as a part of the monthly power bill rendered Baltimore Company.

The Staff's contention that an adequate provision for the cash component would be an amount of $256,644 is based on the use of a 45-day period of lag between expenditures and revenue. The actual average period of lag, based upon the dates upon which the Respondent, Penn Water, actually receives payment from its customers, is only 25-35 days. The Staff's contention is also based upon the semi-monthly or bi-weekly character of Respondents' salary and payroll payments, and a ten-day discount period for the payment of materials and supplies. The Staff has excluded from the computation reflecting its contention the cost of purchased power, which is paid for after revenues are received; taxes, which are also paid after revenues are received; and depreciation expense, which does not represent a cash expenditure.

It is found that the amount of $256,644 represents an adequate amount for the cash component of a working capital allowance.

The tolerances provided in the 10-20 day margin between experienced lag and an allowed 45-day lag, and in the fact that Federal [130] income tax expense is an item on the monthly bill rendered Baltimore Company though payable by Penn Water only quarterly in the following year, appear to be sufficient for the maintenance by Respondents of minimum bank balances and for provision for average contingencies.

Respondents contend that an amount of $489,068 is required for the materials and supplies component including river coal in storage. Respondents' computation of the materials and supplies requirement, exclusive of river coal, is based upon a partial write-up of 1945 requirements, made on the basis of an assumed increase of 15% in the cost of purchased goods. The amount Respondents contend is re-

quired to cover river coal in storage is based on the averaging over 5 years of net tons in storage at the close of the annual dredging season, an estimated increase in cost of production in 1946 of 15%, and the addition to allocated general and administrative expense, including all general officers' salaries, rate case expense, and legal expense.[98] Respondents make no allowance for the fact that general and administrative expense is subject to monthly recoupment in the power bills to Baltimore Company. This component, as claimed by Respondents, is inflated, both because of the use of the average amount of coal in storage at the end of the dredging season,[99] and because an improperly computed unit price has been applied to the tonnage of such coal. This determination of the material and supplies component accordingly is not acceptable.

[131] The Staff contends that an allowance for materials and supplies (including coal on hand) of $396,421 is adequate. This is based upon a 12-months' average of total materials and supplies for the year 1946, and includes an average monthly inventory of coal.

The recommendation of the Staff as to the materials and supplies component is reasonable and is supported by the evidence.

The amount of $650,000 is herewith allowed in the rate base as Respondents' working capital requirement.

Net Investment Rate Base.

On the basis of the evidence in this proceeding and the foregoing findings and conclusions it is further found that the consolidated net investment rate base for Respondents for the year 1946 is as follows:

98. Although the full amount of general and administrative expense was previously included in calculating the cash component.

99. Respondents' average of 52,414 net tons in storage at the beginning of the non-productive period (i. e., the closing of the dredging season in December) compares with an average monthly balance of coal in storage, for the same 5 years used by Respondents, of 38,961 tons.

	1945	1946
Plant in Service and in Process of Reclassification (per books)	$38,584,232	$38,525,105
Adjustments to Plant in Service and in Process of Reclassification	5,476,329	5,476,310
As Adjusted	$33,107,903	$33,048,795
Construction work in progress	32,119	64,353
Total	$33,140,022	$33,113,148
Average for 1946		$33,126,585
Average depreciation reserve		9,001,873
Average net investment		$24,124,712
Working Capital		650,000
Net investment rate base for 1946		$24,774,712

[132]

RATE OF RETURN.

Upon a careful review of the extensive evidence of record in this proceeding which deals with the subject of rate of return, and applying the principles controlling the determination of a proper rate for utilities as enunciated by the Supreme Court,[100] it is found that a rate of return of 5¼% for Respondents is fair and reasonable.

Respondents contend that their fair return requirement is a gross figure of $2,450,000, the approximate result of applying a so-called over-all replacement cost rate of 5.6% to an undepreciated original cost rate base adjusted upward for present costs or prices.[101] Respondents further

100. *Federal Power Commission* v. *Hope Natural Gas Co.*, 320 U. S. 591, 603; *Bluefield Water Works & Improvement Co.* v. *Public Service Commission*, 262 U. S. 679, 693; *United Railways* v. *West*, 280 U. S. 234, 251.

101. To determine the amount of the fair return requirement, Respondents' witness Foster applied his current cost of 5.6% to a rate base consisting of (1) Respondents' contended-for consolidated original cost as of December 31, 1946, plus (2) 42.6% (witness' computed present proportion of

contend that if an undepreciated original cost rate base be used, without adjustment for price changes, the rate of return allowed must be 6.5% in order to enable the realization of the required gross amount of $2,450,000. To obtain the same gross amount on the basis of a net investment rate base of $24,774,712, Respondents would have to be permitted to earn an over-all rate of nearly 10%.[102]

[133] The Respondents' witness described two bases of rate making which he indicated would induce the investment of capital in regulated enterprises, one of which he defined as the "competitive replacement basis", the other as the investment cost basis. He relied, however, only upon the former. In his computations he applied a rate which he testified represented the current (competitive) cost of obtaining capital to a base which he testified represented the current (competitive) cost of plant in terms of first a substitute plant and again in terms of the trended cost of Respondents' physical properties. The witness' method involves the attempted injection of speculative reproduction cost through the back door, i. e., rate of return testimony. It cannot be accepted.

Respondents are very little subject to even the ordinary risks of an electric operating utility. Penn Water has a ready market for all of its power, possesses strong power contracts, and is in a very favorable financial position. The contract with Baltimore Company assures Respondents of a stabilized income on a basis prior even to the return to the holders of the common stock of Baltimore Company. The witness Foster conceded that Baltimore

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equity capital) of the difference between original cost and the nominal dollar investment adjusted for changes in purchasing power of the dollar to 1945, plus (3) the Respondents' contended-for working capital allowance ($977,160). The foregoing, though properly excluded from evidence, remained the basis of the witness' determination. The witness also checked by making other similar computations, using 42.6% of the difference between said consolidated original cost and the cost of a substitute plant, and 42.6% of the difference between such consolidated cost and the trended original cost; also making three somewhat similar calculations with a more economical equity capital proportion of 25%.

102. The witness did not concern himself with whether depreciation should be deducted, nor did he give consideration to the matter of giving a credit to consumers.

Company was generally a strong company and was regarded by investors as having better than average prospects so far as income stability was concerned. The degree of Respondent Penn Water's income stability is manifested by the fact that during the depression years following 1929, Respondent, Penn Water, maintained its common stock dividends at $3 per share without change, and Baltimore Company, likewise, avoided having to put into effect any reduction in dividends, while dividends paid by certain other electric operating utilities did decline.

[134] The Respondent, Penn Water, had outstanding, December 31, 1946, $10,068,000 of refunding mortgage and collateral trust bonds (3¼%) issued in 1939 and due in 1964, and $10,245,000 of refunding mortgage and collateral trust bonds (3¼%) issued in 1940 and due in 1970. There was also outstanding at the end of 1946, 21,493 shares of $5 cumulative preferred stock (no par), and 429,848 shares of its common stock (no par).[103]

Respondent's outstanding 3¼% bonds, series of 1964 and 1970, are widely distributed and admitted to unlisted trading on the New York Curb Exchange. The series of 1964, in the principal amount of $10,900,000, offered in 1939, was issued at a premium and on a yield basis of 3.02% and at a cost rate to maturity of 3.20%. The series of 1970, in the principal amount of $10,962,000, offered in 1940, was issued at a premium and on a yield basis of 3% and at a cost rate of 3.14%.

The series of 1964 is now callable at 105.5%, and the series of 1970 at 106.5%. Undoubtedly the possibility of call has prevented the yields on these bonds from following the downward movement of yields on other public utility bonds of comparable quality and Respondents' witness Foster testified that the average yield on Moody's "Aa" bonds during the year 1945 was better evidence of the required yield than the yields on Respondents' own bonds.

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103. As stated hereinabove, Penn Water owns the entire issued capital stock and bonds of Transmission Company.

On the basis of yields to maturity at market price of 30 issues of mortgage bonds of electric and electric-combination utilities offered publicly during the period, April 1, 1945, to March 31, 1946, Respondents' witness Foster determined that 2.78% represented the replacement cost of [135] debt capital, on the basis of a required yield rate of 2.72% and an allowance of 0.6% for the financing spread.[104] He gave consideration to the relationship between the yield rate and, though the margins are generally large, to the prospective coverage of interest requirements, and particular attention to the yield rates of August, September, and October of 1945.

Respondents' preferred stock constitutes an issue relatively small both in amount and in proportion to the total capital structure. Sale prices, and even bid and asked quotations, on a sufficiently continuous and representative basis were not available at the time of the hearing in this proceeding. However, new offerings of electric operating utility preferred stocks in recent years have shown lower average yields to the purchaser.

On the basis of current yields on the preferred stock of 15 electric and electric-combination utility corporations, offered publicly during the period April 1, 1945 to March 31, 1946, Respondents' witness Foster, considering the percent of adjusted gross income required for equal and senior issues, determined that 3.72% represented the replacement cost of preferred stock capital, on the basis of a required yield of 3.60% and a cost of 0.12%.

While the evidence reveals favorable current economic conditions, showing interest rates and yields for corporations generally, and for electric utilities in particular, at low levels, and thus, tends to support witness Foster's 2.78% as the cost of debt capital and 3.72% as the cost [136] of preferred stock, we believe that Foster's results, defer-

104. While the average for "Aa" bonds was 2.70%, on the basis of a comparison with more complete data with respect to yields on outstanding "Aa" bonds he increased the 2.70% by 0.02%. As of March 1947, Penn Water's outstanding bonds of the 1964 and 1970 series were selling above the call price to yield 2.72% and 2.82%, respectively.

mined early in 1946, would not, in view of subsequent market trends, be fair to Respondents. Such trends in the cost of bonds and preferred stock subsequent to his determination indicate that the margin between Penn Water's cost of money and the current cost of money is not so great as to warrant rejection of Penn Water's present cost of bond and preferred stock capital. Accordingly, we find that Respondent Penn Water's cost of bond money for purposes of this rate proceeding is 3.17% and 5.21% for preferred stock.

Respondent, Penn Water, as of December 31, 1946, had outstanding 429,848 shares of no-par common stock with a stated value of $10,868,312.50. This stock has been outstanding over a long period of years and is actively traded.

Respo dent's witness Foster determined the so-called replacement cost of equity capital or common stock to be 9.25%, including 8.5% as the capitalization rate, and 0.75% as a margin for cost of financing. The capitalization rate was obtained by an adjustment of Penn Water's monthly earning-price ratios averaged over a period from August 1939 to December 1945.[105]

[137] Earnings-price ratios on outstanding common stocks of 14 well-known electric operating utilities have declined in recent years, the yields for 1946 being as low as 4.88% (March) with an upward movement in 1947 to 6.89%. The earnings-price ratio for 1,167,397 outstanding shares of Baltimore Company was 4.60% on March 30, 1946, rising

105. There was a sharp increase in the earning-price ratios of Penn Water's common stock subsequent to June 1944, contemporaneous with the initiation of the immediate rate proceeding. The adjustment referred to in the text, *supra*, consisted of a correction for this sharp increase by means of a computation of the average deviation of Penn Water's earning-price ratios from those of the medial four of six selected electric and electric-combination companies, averaged during the preceding period, August 1939 to August 1944. The witness referred to the six companies as representing a homogeneous group of dividend-paying common stocks, the composition of which did not change during the period from 1910 to date, and stated them to be substantially all of such companies that met that qualification. To get an imputed ratio for Respondent he assumed the average deviation could be applied from September 1944 as an addition to the ratios for the medial four. He used the 1939-1944 period as a cycle, though it was one dominated by war conditions.

to 6.84% February 28, 1947. Data with respect to common stocks issued to the public during 1946 showed earnings offering price ratios on an actual earnings basis ranging from 4.58% to 9.56% and on a pro-forma earnings basis from 5.07% to 6.37%. These compare with ratios on earlier issues (1935-1945) ranging from 5.37% to 11.70%. Respondent's witness Foster developed ratios for a group of six electric and electric-combination utilities which included Baltimore Company. These ratios (using the medial four) ranged from 6.7% for a so-called cycle from October 1929 to August 1936, to 7.2% for a so-called cycle from September 1936 to August 1939, to 7.8% for a so-called cycle from September 1939 to January 1946—with an arithmetic mean for the three cycles of 7.2%. Similarly, for a larger group of eleven, which included the six of the previous group, Foster obtained corresponding ratios (medial 5) of 6.3%, 6.7% and 7.1%, respectively. During the same cycles the earnings-price ratios on Penn Water's common stock were 8.0%, 6.9% and 8.5%. During the first nine months of 1946 the earnings-price ratios of the medial four of six varied from a low of 5.44% to a high of 6.25% (September) [138] and of Penn Water from 6.21% to 6.51%.

As of December 31, 1946, and subsequent to the adjustment to surplus which is required in the finding and order herein, Respondents' capitalization consists of 58.19% outstanding debt in the amount of $20,313,000, 6.10% cumulative preferred stock (no par) in the book amount of $2,130,895.50, and 35.71% common stock in the stated amount of $10,868,312.50 with a surplus of $1,598,812.18.

We find, therefore, that a rate of return of 5¼%, applied to the rate base heretofore described ($24,774,712 for 1946) is fair and reasonable. This rate of return which is based upon 3.17% for bonds and 5.21% for preferred stock, allows about 8.64% for common stock and surplus, which is adequate. This return for equity, which takes into consideration cost of floating the stock accords greatest weight to the most recent data and allows for the upward trend in equity investor requirements.

[139] REVENUES AND EXPENSES.

Revenues.

Penn Water's revenues, per books, are classified as follows for the year ended December 31, 1946:

SALES OF ELECTRIC ENERGY	
Sales to other electric utilities	
Consolidated Gas Electric Light and Power Company—	
Net Bill for year	$1,399,331.10
Portion of regulatory expenses and applicable taxes not paid	(294,379.25)
Total	1,104,951.85
Pennsylvania Power & Light Company—	
Lancaster, Pa:	1,944,484.32
Holtwood, Pa.	13,871.33
Total	1,958,355.65
Philadelphia Electric Company—	
Coatesville, Pa.	940,860.95
Edison Light & Power Company—	
York, Pa.	10,331.62
Metropolitan Edison Company—	
York, Pa.	657,123.11
Total sales to other electric utilities	4,679,623.18
Sales to railroads and railways—	
Pennsylvania Railroad Company	1,625,575.45
Total Sales of Electric Energy	6,305,198.63

OTHER ELECTRIC REVENUES:	
Rent from electric property	34.65
Miscellaneous electric revenues—	
Conowingo backwater payment	133,750.00
Other	—
Total	133,750.00
Total Other Electric Revenues	133,784.65
Total Operating Revenues	$6,438,983.28

[140] After adjusting the amount of $1,104,951.85 paid by Baltimore Company by deducting an additional amount of $25,179.56 paid Penn Water as part of the 1946 rate case expenses and adding the increased cost of power purchased from Safe Harbor in the amount of $37,063 for 1946 the adjusted revenue from Baltimore Company becomes $1,116,835.29 and the total revenues become $6,450,832.

Operating Expenses.

Penn Water's operating expenses for the year ended December 31, 1946, per books and as adjusted, are as follows:

	Per Books	As Adjusted
Electric generation—steam	$ 683,567	$ 683,567
Electric generation—hydro	402,895	402,895
Transmission	408,484	408,484
Administrative and general	571,429	571,429
Rate case expenses	319,559	—
Non-operating items	15,293	—
Sub-total Oper. and Maint.	$2,401,227	$2,066,375

Purchased power—Safe Harbor	1,016,501	1,053,564
Interchange power—net	(1,127,699)	(1,127,699)
Depreciation	573,877	467,701
Taxes, except Federal inc.	297,970	264,970
Federal Income tax	892,071	248,513
Total operating expenses	$4,053,947	$2,973,424

The Intervener, Baltimore Company, has petitioned the Commission to determine an allowable amount of rate case expense (with respect to these proceedings) that Respondent, Penn Water, may charge Baltimore Company under the contract between them. It is proper in this proceeding to eliminate from operating expenses and the revenues received from Baltimore Company, the rate case expenses, charged in 1946, as this is a non-recurring item, but Intervener's liability, if any, for such an item relating to past transactions, is a contractual one, which is determinable either under the arbitration procedure provided by the contract, or by proceeding in the courts.

[141] The item of $15,293 represents miscellaneous costs which Penn Water has classified as non-operating and excluded from the power bills to Baltimore Company.

The adjustment of the cost of power purchased from Safe Harbor, an increase of $37,063, has been made to give effect to the rate order of this Commission in the *Safe Harbor* case, supra.[106]

Depreciation expense has been adjusted to conform with the reasonable annual allowance previously discussed and the tax adjustments have been made to reflect the Pennsylvania and Federal income taxes on the basis of a reduction of revenues to yield a fair return of $1,300,672, which is 5.25% of the rate base in the amount of $24,774,712.

106. The Safe Harbor refinancing in 1946 resulted in eliminating income taxes entirely for that year, therefore, the power bill as rendered reflected abnormally low costs.

Excess Revenue.

The excess revenue for the year ended December 31, 1946 is $2,176,736, computed as follows:

Operating Revenues, as adjusted		$6,450,832
Operating Expenses, as adjusted	$2,973,424	
Return at 5.25%	1,300,672	
Deduct		4,274,096
Excess Revenues		$2,176,736

For cost allocation purposes the following reclassifications of revenue and expense items have been made.

[142] Instead of showing the net revenue from interchange power as a credit item to operating expenses, the amount thereof, $1,127,699 has been added to revenues from Baltimore Company. An adjustment of revenue received for special facilities from Pennsylvania Railroad, in the amount of $141,777, in accordance with the allocation of costs of special facilities, has been made by adding the amount to revenues from Baltimore Company and deducting it from revenues from the Pennsylvania Railroad. The item of $133,750 representing the Conowingo backwater payment has been removed from revenues and applied as a reduction of operating costs.

After giving effect to the foregoing adjustments and reclassifications, the gross revenues and cost of service are classified as follows:

Revenues:	
Baltimore Company	$2,386,311
Railroad (in Pa.)	1,483,798
P. P. & L. Co.	1,958,356
Philadelphia Co.	948,861
Metropolitan Co.	667,455
Total Revenues	$7,444,781

Cost of Service:	
Operation and Maintenance	$1,932,625
Purchased power—Safe Harbor	1,053,564
Taxes	513,483
Depreciation	467,701
Return at 5.25%	1,300,672
Cost of Service	$5,268,045

The difference between total revenues and the total cost of service, is therefore, $2,176,736. An allocation of cost has been made to determine the cost of service to each customer and the resulting excess revenue therefrom.

[143] ALLOCATION.

The determination of whether the demand, energy, special facility and other rates and charges paid by those receiving electric power and energy from Penn Water are reasonable is dependent upon the making of a proper allocation of the costs of service between these customers and a comparison of the costs so allocated to each customer with the revenues obtained from the customer.

Respondents contend that the allocation of costs to, and revenues from, Penn Water's Pennsylvania customers, should follow jurisdictional lines, and asserts that a comparison of costs and revenues as to Baltimore Company alone indicates that charges to the latter are actually deficient. The question of jurisdiction of the Commission with respect to the Pennsylvania rates and charges has, however, already been determined herein.

Disagreement as to Division of Cost of Service between Baltomore Company and Pennsylvania Customers.

Staff's witness Davis allocated the total cost of service for capacity, firm energy and special facilities supplied by Respondents. The allocation resulted in charging 96.5% of Respondents' cost of service to Pennsylvania customers and 3.5% to that rendered Baltimore Company, after crediting

the latter with an amount of firm energy and capacity supplied by it for use by Penn Water in serving the latter's customers in Pennsylvania. On the other hand, Respondents' witness Zinder, using a return of 6½% and other bases consistent with Respondents' contentions herein, allocated 41.4% of his total cost of service for 1946 to Baltimore Company.

[144] Respondents' witness Loane, using Davis' method for "illustrative purposes", and making several adjustments to the latter's exhibit, with respect to the credit for Baltimore Company's energy diverted at Safe Harbor and with respect to dependable capacity delivered to Baltimore Company at Highlandtown and capacity diverted by Penn Water at Safe Harbor, allocated 20.6% of the total cost of service to Baltimore Company, and 79.4% to the Pennsylvania customers. Baltimore Company's witness Gibbs, by contrast, submitted results of his revisions to Davis' exhibit, to show, according to that intervener's contentions, that the Pennsylvania customers were not fully paying for the cost of the service rendered but were, in effect, being subsidized by Baltimore Company by an amount of approximately 6.4% of total costs.

By combining recomputed firm power services rendered Baltimore Company by both Penn Water and Safe Harbor, Respondents' witness Spaulding testified that costs applicable to such services exceeded the recomputed billing by the amount of $266,578. Important bases for Spaulding's determination were the assumptions that Safe Harbor and Penn Water render joint services to Baltimore Company, and that Baltimore Company does not have a right or contract entitlement to two-thirds of Safe Harbor's output.

Methods Employed in Analyses of Costs.

Each of the several witnesses first analyzed costs on the basis of the allocation of investment both for special services to specific customers and for general services to all. With respect to special facility service each proceeded to

use a rate base and return [145] method for getting one element of cost,[107] the method of treating depreciation varying according to the contentions of the parties.[108] Davis included Penn Water's cost of purchased power as a part of operating expense to be allocated, but Respondent's witness Spaulding considered the capacity and output of the Penn Water-Safe Harbor plants on a system basis, without regard to Baltimore Company's entitlements under its contracts with Penn Water and Safe Harbor.[109]

The witness Davis based a part of his exhibit upon the pooling of investment or costs for all those facilities which he found were used in rendering a service common to all and not specifically applicable to any one customer, and upon a final allocation thereof according to capacity or energy use by each customer. The witness Spaulding employed a similar principle in [146] making his allocation to Baltimore Company using an undepreciated production plant rate base, and associated expenses, computed separately for Penn Water and Safe Harbor. The witness Zinder's exhibit reflected joint use of property to a very minor degree.

Neither Spaulding nor Zinder made any determination as to cost of service for any other customer than Baltimore Company.

Allocation of Transmission Facilities.

With respect to these facilities, the allocation of three groups are in issue:

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107. The rate base, the allowance for working capital and the rates of return varied; Davis using a 5% rate of return, Spaulding 6½% for Penn Water, and 7% for Safe Harbor.

108. Respondents' witness Loane followed Davis' method of deducting the depreciation reserve, confining his adjustments to the latter's exhibit, to other matters. Davis used an allocation of the reserve which was based on the application of depreciation rates to property groups included in the facilities Davis had already allocated in his Table 1. Spaulding allocated the reserve simply in the ratio of investment (which reserve was not deducted from the rate base but used to obtain a credit to consumers to deduct from return). Zinder allocated the reserve also in direct ratio to investment.

109. Davis allocated depreciation expense between customers on the same basis as depreciable property, income taxes and capital stock taxes by investment ratio, property taxes on the same basis as property, unemployment insurance on the basis of operating expense, and gross receipts tax on the basis of gross revenues.

(d) 220 Kv. 60 Cycle Lines and Switching Stations.

The witness Spaulding allocated the costs associated with these facilities 100% to Baltimore Company, the witness Zinder 85% (except for the Ellicott City-Takoma Park line),[110] and Staff's witness Davis 66 2/3%, which last allocation was concurred in by Baltimore Company's witness Thomas.[111]

The allocation of the witness Spaulding is based upon his view that the transmission of energy from Baltimore to Pennsylvania does not relate to the firm demand requirements of any of the [147] Pennsylvania customers except the Railroad and that the supply to the Railroad is in part a responsibility of Baltimore Company.[112] But it should be observed that the river-run characteristics of Penn Water's hydro plant (and Safe Harbor's) makes it impracticable for Penn Water to serve the firm requirements of the Pennsylvania customers without the availability of the substantial amounts of off-peak energy which it obtains from Baltimore Company. Moreover, the contracts with Pennsylvania customers, providing for economy interchange, are obviously neither designed nor adequate for "firming up" Penn Water hydro for services to the Pennsylvania customers. The very use of the term "economy" in the contracts describing this type of interchange is demonstrative of such inadequacy.

The witness Zinder's allocation of 85% of the cost associated with these facilities to Baltimore Company is a judgment determination based in part upon his computation that, over a five-year period (1941-1945), approximately 81% of the energy flow over these same facilities repre-

110. Allocated 100% to Baltimore Company.

111. As the witness Davis allocated 33-1/3% of these transmission facilities to pool, and his method calls for further allocation of transmission costs to customers from this pool by way of capacity assignments, Baltimore Company would be further charged with an additional portion of these facilities and their costs, depending upon whether it receives capacity from Penn Water.

112. He considers the problem as if Baltimore Company's entitlement to power and energy from Safe Harbor did not exist. This interpretation of the subordination of entitlement is neither necessary nor supportable.

sented deliveries to Baltimore Company. This computation, coupled with his division of all costs into equal demand and energy components, amounts, in effect, to an allocation of 90% of the capacity cost to Baltimore Company.[113] Zinder's allocation does not [148] properly reflect the necessary use of these lines by Penn Water in meeting the firm requirements of the Pennsylvania customers.

Davis, on the other hand, assigned these facilities and their associated costs 66 2/3rd directly to Baltimore Company, giving consideration to the directional dominance of energy flows over the circuits by periods of the year, when, during four or five months of high river flow the great bulk of energy is being transmitted to Baltimore; during two or three months of extreme low river flow the great bulk of energy is being transmitted from Baltimore, to make up the deficiency in Penn Water's firm supply for its Pennsylvania customers; and during the remaining four to six months the facilities are used to transmit energy alternately in either direction, with Penn Water receiving energy from Baltimore Company during off-peak periods of the day, to enable it to store water at such times.[114]

Giving due consideration to the character of services provided to Baltimore Company and to the Pennsylvania customers by the use of these lines, and bearing in mind that Baltimore Company will also share pool costs as to these same facilities in proportion to the capacity service rendered it, Davis' allocation of 66 2/3rd directly to Baltimore Company, and 33 1/3 to the pool, is found to be reasonable.

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113. Accordingly, his judgment of an over-all allocation of 85% of all costs to Baltimore Company is obtained first and the other figures constitute little more than a sequent.

114. His judgment was based on the 1943, 1944 water years, the latter a low-flow year; 1943 was nearer the average but affected by northern requirements for war production purposes. However, this factor alone does not require a specific modification of the proposed allocation. Observe that Intervener's witness Thomas testified that Davis' allocation was supported on the basis of the maximum one-hour supply in each direction in 1944.

[149] (b) *Safe Harbor-Perryville Line, Conestoga Substation and Perryville Switching Station.*

The witness Spaulding considered these 25 cycle, single phase facilities as special facilities for Railroad use in Pennsylvania and Maryland and, on an energy basis, allocated 52.8% of the cost of such facilities to Baltimore Company for services rendered to the Railroad in Maryland, less charges paid PEPCO by Baltimore Company for the use of a frequency-changer at Benning.

The witness Zinder allocated none of the costs associated with these facilities to Baltimore Company, on the ground that he confined his study to services rendered by Penn Water to Baltimore Company alone.

On the other hand, Staff witness Davis allocated the substation 47% to Baltimore Company and 53% to the Railroad in Pennsylvania, and the line and switching station 91% to Baltimore Company and 9% to the Railroad in Pennsylvania, in each instance on the basis of energy flows over the facilities and on the ground that these facilities were used not only for service to the Railroad in Pennsylvania and Maryland, but also for the rendering of interchange services to Philadelphia Company on the behalf of Baltimore Company from the residual of energy to which the latter is entitled under its contract.[115]

[150] Obviously, Spaulding's basis of allocation does not reflect the complete use to which these facilities are put.

The procedure employed by the witness Davis gives weight to the use of such facilities for interchange with Philadelphia Company, and the evidence supports his conclusion as to the ratio of the allocation.

(c) *Holtwood-York Line and Violet Hill Substation.*

Neither the witness Spaulding nor the witness Zinder made any allocation with respect to these facilities. The

115. In its Form 1 reports for 1944 and 1945, Penn Water reported that in the actual accounting for interchange tranasactions by Respondent with Philadelphia Company at Coatesville, Pennsylvania Power & Light at Lancaster, and Edison Light & Power Company at York, such energy was considered to have come from Maryland. With respect to Philadelphia Company, no other interchanges were shown.

witness Davis allocated associated costs 55% to Metropolitan Company and 45% to Baltimore Company, on the basis of the ratio of interchange energy to total energy delivered during the year. The allocation of this line and substation is approved as made by Davis, as proper recognition has been given by him to their use for interchange.

Special Facility Costs.

Based upon the foregoing conclusions and other allocations not contested except on broad general jurisdictional grounds [116] the following allocated special facility costs are obtained for each [151] customer: [117]

	Operating Expense	Bill for Safe Harbor Power	Taxes	Depreciation	Return	Total
P. P. & L.	$ 1,382	$——	$ 7,548	$ 766	$ 1,877	$ 11,573
Philadelphia Company	27,843	——	11,086	6,704	26,095	71,728
Metropolitan Company	14,772	——	7,479	4,744	15,811	42,806
Railroad	24,165	24,581	14,873	13,925	31,810	109,354
Baltimore Company	367,398	21,798	143,096	79,300	305,951	917,543
Total	$435,560	$46,379	$184,082	$105,439	$381,544	$1,153,004

Allocation of 25 Cycle Production Facilities to Pool.

The witness Spaulding, in effect, allocated these facilities on a capacity and energy basis 50.15% to Baltimore

116. There are no issues here raised with respect to Davis' allocation of the Holtwood-Highlandtown 66 kv line, the Highlandtown Substation, and the so-called Gunpowder Line (in the Baltimore area) 100% to Baltimore Company; the Holtwood-Coatesville line and the Newlinsville Substation (Coatesville) to Philadelphia Company; the 25-cycle Holtwood-Lancaster line, and 5 switching and substations to PP&L; the Fishing Creek Substation to the Railroad in Pennsylvania; and the rest of the transmission system, including the 60-cycle Safe Harbor-Holtwood line, to pool. The jurisdictional grounds have already been considered herein.

117. Davis allocated administrative or general expense to the pool. However, it appears from the evidence that because of the nature of the elements constituting administrative and general expense, a modification should be made with respect to this expense. Accordingly, it has been allocated in a manner consistent with the allocation of the other operating expenses, i. e. in the ratio of a facility investment totalling $33,126,585 after net allowances herein of $187,165.

Company and Respondents' witness Zinder 92% to that Company, substantially on an energy basis.[118]

Spaulding's 50.15% determination involves acceptance of his estimate of dependable hydro capacity and also his combining the dependable capacity for both Penn Water and Safe Harbor without regard to the Baltimore Company's entitlement (contract proportion) in [152] determining the capacity service rendered Baltimore Company. Zinder's 92% allocation to Baltimore Company assumes that all, or substantially all, of the capacity and energy delivered by such facilities are used by Baltimore Company at Baltimore and not in conjunction with the system's coordinated operations. However, intervener Baltimore Company's witness Thomas, an operating executive, testified that at times a part of the 25 cycle energy delivered at Highland town is converted through the frequency changers of Baltimore Company in Baltimore, Maryland, to 60 cycle energy either to transmit for use in Pennsylvania or to retain and substitute for energy at Baltimore thus either freeing 60 cycle Baltimore energy for transmission to Safe Harbor or some of Baltimore Company's entitlement at Safe Harbor for use in Pennsylvania.

On the basis of the foregoing testimony of the witness Thomas, and the evidence contained in the record in this proceeding in support thereof, Davis' allocation of these facilities entirely to the pool requires an adjustment.

In charging Pennsylvania customers equitably for energy received, it becomes necessary and proper to first charge Baltimore Company with all of the hydro capacity and energy received and to credit it for all steam capacity and energy supplied by it and all hydro capacity and energy diverted from it. Accordingly, on this basis, there should be charged to Baltimore Company the net Holtwood dependable hydro capacity (84,480 kw), less the Holtwood

118. No classification into demand and energy components was made by Zinder and no account was taken of the net conversion of 25 cycle to 60 cycle energy for the year, as he testified it would have made only an insignificant difference.

60 cycle hydro rating (24,000 kw), the Holtwood 25 cycle capacity supplies PP&L (5,000 kw) at Lancaster, Pennsylvania, and the capability [153] of the two 25-60 cycle frequency changers (14,000 kw) at Holtwood.

Allocation of Pool Costs.

The allocation of costs associated with pool facilities (facilities other than those already allocated to specific customers) involves the utilization of a determination of the dependable capacity available to Penn Water from its own resources and its entitlement with respect to Safe Harbor's resources.

Using a dependable hydro capacity for both Penn Water and Safe Harbor of 295,000 kw, Spaulding allocated a part of general production plant [119] to Baltimore Company on the basis of capacity and energy delivered to the latter after proportioning the dependable capacity and energy components in a 50-50 ratio,[120] because such a proportion gave results in dollars per kw and mills per kwh that appeared to him reasonable on a "competitive basis". Spaulding's 50-50 division of costs between capacity and energy is thus patently a departure from cost determination procedure.

[154] Davis allocated Penn Water's hydro and steam production plants, one-third of the 220 kv, 60 cycle lines and switching stations, a part of the transmission system referred to by him as "balance of transmission system" (including the Safe Harbor-Holtwood 66 kv circuits), intangible plant, and general plant to pool. He allocated production costs, including a part of the Safe Harbor bill, transmission operating expense associated with the foregoing allocation of transmission property to pool, all of ad-

119. Including Penn Water's hydro station, steam station, coal production and preparation plants, service buildings, step-up substations, certain tie circuits, dispatching facilities and the operators' village as well as similar Safe Harbor facilities.

120. He determined Baltimore should be charged with 54.0% of the costs of firm energy and 46.3% of those of capacity, and applied each of these ratios to 50% of the costs associated with the general production plant of Penn Water and Safe Harbor, separately.

ministrative and general expenses, a portion of taxes, depreciation expense and return as pool costs. Using a total dependable capacity of 250,000 kw, as compared with Spaulding's 295,000 kw, Davis then proceeded to develop (1) a total capacity cost by assigning 74.85% [121] of hydro power production cost (including a large part of the power purchased from Safe Harbor) as dependable hydro capacity cost, adding a computation of fixed steam costs, and all of pool transmission cost; and (2) a total energy cost by assigning 25.15% of such hydro power cost as a cost of energy and adding the variable steam cost.[122]

[155] *Dependable Hydro Capacity.*

The most important element in Spaulding's determination of capacity available for supply to Baltimore Company was the determination by Respondent's witness Watchorn of 295,000 kw as the dependable hydro capacity of the Holtwood and Safe Harbor plants. The latter employed a method involving an application of the theory of probability to several different factors bearing on dependability of service. This method of determining dependable capacity was not used by Penn Water in its operations prior to 1944 and is not only highly speculative but is of unproven reliability from an operating standpoint.

Davis' figures of 250,000 kw is based upon an estimate of basic load carrying capability of 167,000 kw increased by a judgment allowance for additional probable capacity totalling 83,000 kw. Davis' basic load-carrying capability represents (1) the use of the minimum recorded river flow for seven consecutive days in December, converted into a week's equivalent generation at both Safe Harbor and Holtwood;

121. Davis' determination of 74.85% as the proportion of production cost to be allocated to capacity is the ratio of total dependable hydro capacity to the total effective installed capacity of both Penn Water and Safe Harbor.

122. Davis obtained unit capacity costs by dividing the total capacity cost of dependable hydro, fixed steam and transmission costs by the Pennsylvania customers total non-coincident demands; and he obtained unit energy costs by dividing total energy cost by Penn Water's total steam and hydro energy resources (including Penn Water's entitlement from Safe Harbor) less certain transmission losses.

(2) the fitting of the total generation thus computed without regard to plant priority [123] in the top of the curve for the 1946 week peak load on the Baltimore-Washington-Holtwood-Safe Harbor system,[124] and (3) finding the maximum reduction [156] in peak that could be accomplished by both hydro plants under the assumed condition of river flow. This reduction in peak amounts to an ability to carry a load of 167,000 kw throughout the week on the basis of no loss of pondage except during the middle of the week.

Respondents object to Davis' determination on the ground that adverse flow conditions occur infrequently and the use of such conditions, as the basis for determining dependable capacity, does not adequately allow for the actual use that can be made of the installed capacity of the plants; that it overlooks the full effect of coordination of steam maintenance with river flows as well as capacity available for spinning reserve; and gives insufficient effect to the fact that during a large part of the year there is actually being utilized on the interconnected system capacity in excess of 300,000 kw.

As to criticism directed by Respondents to the limited amount allowed by Davis (28,000 kw) for pond drawdown for short-time peak loads, it may be said that the Safe Harbor and Holtwood hydro plants operate on a weekly recovery cycle which calls for pond refill over the weekends by every Monday morning. A larger allowance for drawdown than that provided by Davis would not only fail to fit into that program but the departure therefrom during a period of low flow would undoubtedly adversely affect the sustained peak-carrying hydro capacity of the plants. The allowance provided by Davis for drawdown, which is approximately 50% of that claimed [157] by Respondents for the same purpose, was supported by Balti-

123. Putting Holtwood hydro alone at the top of the curve would result in a dependable capacity for that plant approximately equal to its installed capacity

124. December 15-22. He adjusted the load curve by diminishing load requirements by the amount of capacity Metropolitan Edison would forfeit under minimum-flow conditions.

more Company's expert witness Thomas as reasonable from an operating standpoint. Davis makes further provision for additional capacity use in the amount of 55,000 kw. This is an adequate allowance for such intangibles as might inhere in additional use for scheduling of maintenance, short-time emergencies, load swings, expectation of flows better than minimum, etc. In this respect, Davis' determination of over-all dependable capacity (250,000 kw), though more liberal than the 237,000 kw testified to by Baltimore Company's witness, is better supported in the evidence than the latter figure.

It is therefore found that Davis' determination of dependable capacity is reasonable and acceptable for the purposes of this proceeding and that the determination of the witness Watchorn is not sufficiently supported by established or tested procedures to be reliable and here acceptable.

[158] Davis, however, prorated his finding of dependable capacity for both the Holtwood and Safe Harbor hydro plants (250,000 kw) between those plants in the ratio of the installed capacity at each development. Respondents contend that dependable capacity at Holtwood is not related to the proportion of installed capacity at those plants as the hydraulic head and available water at each is approximately the same.

In view of the large amount of idle machine capacity which the evidence shows would be available at each hydro plant during minimum flow conditions, Respondents' contention has merit and a modification should be made in the proration used by Davis. In consideration of the foregoing, and on the basis of the evidence, it is found that it is proper to prorate the 167,000 kw of dependable hydro capacity between the two hydro plants equally, provided weight be given to the fact that the over-all water use at the two plants varies at equivalent station loads. On the basis of water use at approximately 75% station load and water conditions used by the witness Davis, a week's gen-

eration under minimum flow conditions is computed to consist of 1,699,855 kwh produced by Holtwood and 1,861,745 kwh by Safe Harbor. The dependable capacity between the two plants should be prorated on the basis of this computed production of energy, thus assigning 79,705 kw of the 167,000 kw dependable capacity to Holtwood (Penn Water) and 87,295 kw to Safe Harbor.

[159] The remaining 83,000 kw entering into the 250,000 kw [125] found to be the combined total dependable capacity for the two hydro plants, because of the nature of the intangibles upon which it is based, should be prorated between the plants in the ratio of installed capacity at each plant in excess of the allocation of the 167,000 kw.

These adjustments to Davis' method will allocate a total dependable hydro capacity of 91,740 kw to Holtwood and 158,260 kw to Safe Harbor, before deduction for station uses and line losses, as follows:

Davis' Allocation	*Holtwood*	*Safe Harbor*	*Total*
Installed hydro:			
Effective reported	104,000 kw	230,000 kw	334,000 kw
Per cent of total	31.14%	68.86%	100.00%
Davis Allocation of Total Dependable Hydro Capacity (31.14% and 68.86%)	77,844 kw	172,156 kw	250,000 kw
Modified Allocation			
Allocation of Davis' 167,000 kw on basis of low water energy	79,705 kw	87,295 kw	167,000 kw
Excess of installed over minimum flow capacity	24,295	142,705	167,000

125. 167,000 kw basic dependable capacity with a minimum flow for 7 consecutive days in December, plus the 83,000 kw allowance for drawdown and intangible factors.

Per cent of excess to total of 167,000 kw	14.5%	85.5%	100.00%
Allocation of Davis' 83,000 kw allowance for pondage and intangibles (14.5% and 85.5%)	12,035 kw	70,965 kw	83,000 kw
Total dependable hydro capacity as reallocated	91,740 kw	158,260 kw	250,000 kw

[160] *Capacity Available to Baltimore Company.*

The resulting capacity available to Baltimore Company depends on the deductions to be made for Pennsylvania customer loads, including the Railroad's in Pennsylvania. Spaulding deducted from his figure of capacity available at the time of the combined system peak (305,000 kw) 134,000 kw for the Pennsylvania customer loads (including the Railroad's in Pennsylvania) and 20,000 kw as the share of combined system reserve to be carried by Penn Water and Safe Harbor, or a total of 154,000 kw. Davis deducted from his net dependable capacity available for load, a corresponding sum of 153,512 kw. While the two deductions are in practically the same amounts, Respondents object principally to the method used by the witness Davis in determining the demand to be deducted for the Railroad as representative of its Pennsylvania requirements. Davis did not use the actual Railroad requirement at the time of system peak (6 p. m., December 19, 1946) of 24,000 kw, but a resulting figure obtained after averaging the three maximum Railroad peaks in the month of December. The Railroad's load has an uneven fluctuating character and the very contract under which it is billed for demand provides a similar method of calculating that demand. It cannot be seriously contested that an averaging procedure is called for, and it is found that the one used by the witness Davis

has precedent and is fair, both as to the determination of the demand and as to the allocation of a portion [161] of such demand to Pennsylvania on the basis of energy used. Objection by Respondents to Davis' allowance of any amount as reserve for Metropolitan Company is without merit as the nature of the Metropolitan Company's contract in respect to reserve provision is no different from those of the other customers involved.

Davis' allowance of only 10% for reserve capacity is criticized both by Respondents, whose witness Spaulding used 15%, and by Baltimore Company, whose witness Gibbs used 22.5%. In view, however, of the adverse flow conditions assumed, with resulting idle machine capacity, the use of 10% for additional system reserve is an adequate allowance. The 22.5% proposed by the Intervener is not representative of a true operating reserve.

The balance available to Baltimore Company after deducting station use and transmission losses, the demands of Pennsylvania customers on system peak, and Baltimore Company's two-thirds entitlement from Safe Harbor was found by Davis to be a negative 3,200 kw. With the modifications found necessary, above, with respect to the method of treating the allocation of the costs associated with the 25-cycle production facilities and the method of allocating the dependable capacity between the two plants, the capacity considered as supplied to and by Baltimore Company is as follows:

[162]

	Holtwood		Safe Harbor	
	Steam (kw)	Hydro (kw)	Hydro (kw)	Total (kw)
Dependable capacity	28,000	91,740	158,260	278,000
Less prorated station use and line losses	2,216	7,260	12,524	22,000
	25,784	84,480	145,736	256,000

Less Baltimore Co.'s 2/3rds of Safe Harbor's capacity			97,157	97,157
Less 25 cycle to Highlandtown [126]		41,480		41,480
	25,784	43,000	48,579	117,363
Demands in Pennsylvania [127]				153,512
Balance to be supplied by Baltimore Company				36,149

Unit Costs for Capacity and Firm Energy and Further Allocations.

Allocating hydro production costs to capacity in the ratio of dependable to installed hydro capacity (250,000 kw to 334,000 kw), i. e., 74.85%, adding fixed steam production costs, and pool transmission costs, a sum of $2,882,478 is obtained as the total of pool capacity costs. Similarly, the addition of the remainder of the hydro production costs (25.15%) and variable steam production costs produces a sum of $1,232,563 as the total of pool energy costs. The foregoing total capacity cost ($2,882,478) divided by the Pennsylvania customers' maximum non-coincident demands [128] (154,000 kw) plus the net dependable [163]

126. Dependable 25 and 60 cycle capacity at Holtwood (net); 84,480 kw
Capability two Holtwood frequency converters 14,000 kw
Holtwood 60 cycle rated capacity 24,000
PP&L (Lancaster) 25 cycle load 5,000 43,000
41,480 kw

127. Coincident demands of Pennsylvania customers plus allowance for reserve:

P. P. & L.	55,000 kw
P. E. Co.	27,000 kw
Me. [ME] Co.	21,000 kw
Penna. R. R.	36,557 kw
10% Reserve	13,955 kw
Total	153,512 kw

128. To allow for mutual diversity of load benefits.

capacity available for Baltimore Company (5,331 kw) yields a unit capacity cost of approximately $18.09 per kw. This cost applied to an aliquot [129] of the maximum demands of the several Pennsylvania customers on a non-coincident basis and to the 41,480 kw of capacity found proper for allocation to Baltimore Company (*supra*) results in an allocation of the cost of pool capacity as a constituent of total capacity cost as follows:

	Pool Capacity Cost [129]	Baltimore Co. Supply Capacity Cost [130]	Total Capacity Cost
P. P. & L. Co.	$ 927,587	$188,724	$1,116,311
Philadelphia Co.	359,959	73,236	433,195
Metropolitan Co.	318,422	64,788	383,210
Railroad (in Pa.)	526,090	107,040	633,130
Baltimore Co.	750,420	(433,788)	316,632
Total	$2,882,478	—	$2,882,478

Holtwood unit energy costs are obtained by dividing the total energy cost ($1,232,563) by the delivery by Penn Water from its Holtwood hydro and steam plant and from its 1/3rd entitlement to Safe Harbor's output, which for 1946 totaled 992,320 mwh. The resulting Holtwood energy cost is 1.24 mills per kwh. 1946 sales of energy to Pennsylvania customers totaled 937,950 mwh of which 746,286 mwh was sold as firm and 191,664 mwh as net interchange. Of this 937,950 mwh supplied, Penn Water had available 615,636 mwh (992,320 mwh less deliveries of 25 cycle energy to Baltimore Company at Highlandtown) and the remainder required (322,314 mwh) [164] was obtained from Baltimore Company. It is not possible to trace the flow of energy from Baltimore Company to the Pennsylvania customers at all times or to distinguish the use to which such energy is put as between sales of firm and interchange

129. Assuming the Pennsylvania maximum demands are each met by Penn Water's capacity and Baltimore Company's supply in the ratio of 117,851 kw and 36,149 kw to the total of 154,400 kw.

130. Computed at $12 per kw.

energy. For this reason a proration procedure is necessary and, accordingly, using the ratio of Baltimore Company's contribution of 322,314 mwh (34.4%) and Penn Water's of 615,636 mwh (65.6%) to the total of their combined contributions, it is found that Penn Water delivered from its resources 489,835 mwh for firm sales (including the Railroad in Pennsylvania) and 125,801 mwh for interchange sales to Pennsylvania customers and Baltimore Company delivered 256,451 mwh for firm sales and 65,863 mwh for interchange in Pennsylvania. As interchange sales in Pennsylvania are on a when-as-and-if basis, the mwh so supplied by Penn Water comes from Baltimore Company's contract residual entitlement to Penn Water's resources and are therefore deemed to have been made for Baltimore Company's account. On this basis, Baltimore Company received a total of 502,485 mwh at the Holtwood energy cost, made up of deliveries to it at Highlandtown (376,684 mwh) and the amount sold by Penn Water from its own resources as interchange (125,801 mwh). Accordingly, the Pennsylvania customers are deemed to have received 489,835 mwh of firm energy at Holtwood energy cost (1.24 mills/kwh), and 256,451 mwh of firm energy at Baltimore Company's average steam production [165] cost (4.7 mills/kwh), while Baltimore Company is to be credited with the cost to it of supplying such firm energy against the charge made to it for the 502,485 mwh at the Holtwood energy cost. The allocation of these pool energy costs are as follows:

	Firm Energy Supplied			Firm Energy Cost		
TO:	From Holtwood (mwh)	From Baltimore (mwh)	Total (mwh)	From Holtwood ($)	From Baltimore ($)	Total ($)
PP&L	202,533	105,036	308,569	251,567	498,367	749,934
Philadelphia Co.	89,022	46,607	135,629	110,574	219,053	329,627
Metropolitan Co.	58,158	30,448	88,606	72,238	143,107	215,345
Railroad (in Pa.)	140,122	73,360	213,482	174,046	344,793	518,839
Sub-total	489,835	256,451	746,286	608,425	1,205,320	1,813,745
Baltimore Co.	502,485	(256,451)	246,034	624,138	(1,205,320)	(581,182)
Total	992,320	—	992,320	$1,232,563	—	$1,232,563

The amount of residual hydro energy delivered to Baltimore Company by Respondents in 1946 (502,485 kwh) at the Holtwood energy cost (1.24 mills) combines with the firm energy supplied by Baltimore Company (256,451 mwh) in 1946 for the use of Penn Water's Pennsylvania customers to give a net credit to Baltimore Company, for firm energy supplied by it against residual energy received, in the amount of $581,182.

Total Costs, Excess Revenues.

The allocated special facility costs added to the allocated hydro capacity cost and the allocated cost of capacity supplied by Baltimore Company (supra) and to firm energy costs give total allocated costs which compare with total revenues as follows:

[166]

	Total Costs	Total Revenues	Excess Revenues Amount	Percent
PP&L Co.	$1,877,818	$1,958,356	$ 80,538	3.70
Philadelphia Company	834,550	948,861	114,311	5.25
Metropolitan Company	641,361	667,455	26,094	1.20
Railroad (in Pa.)	1,261,323	1,483,798	222,475	10.22
Baltimore Company	652,993 [131]	2,386,311	1,733,318	79.63
Total	$5,268,045	$7,444,781	$2,176,736	100.00

RATE REDUCTION

The above determination of excess revenues demonstrates that Penn Water's rates are excessive, unreasonable and discriminatory. It is accordingly found that Respondent shall revise its rates and charges so as to result in a reduction of $80,538 to P. P. & L. Co., $114,311 to Phila-

131. This cost to Baltimore Company is made up of the charge of $750,420 for hydro capacity of 41,480 kw supplied to it plus a cost of special facilities of $917,543; less the credit to Baltimore Company of $433,788 for 36,149 kw of capacity supplied by it and the net credit of $581,182 for firm energy supplied.

delphia Co., and $26,094 to Metropolitan Company when applied to the demand energy and other charges made during the year ended December 31, 1946. As previously noted (*supra*, note 2 p. 22), we have confined our inquiry to Penn Water's sales to its resale customers. We determine, however, that Penn Water's cost of the service it rendered in 1946 under the contract for the sale to the Railroad was $222,475 less than the revenues it received therefor.

Under the arrangements now in effect the sales to Pennsylvania Power & Light Company, Philadelphia Electric Company and Metropolitan Edison Company are made on a firm basis and Baltimore Company takes what is left. In fact, Baltimore Company in times of severe water shortage may carry the main burden of supplying the foregoing Pennsylvania customers.

[167] It is not feasible, because of the nature of Penn Water's operations, for the latter to assume firm commitments to all its customers, including Baltimore Company. The present arrangement whereby sales to Pennsylvania customers are made on a firm basis on definite rate schedules whereas Baltimore Company takes what is left and assures Respondents of the recovery of all proper operating expenses, depreciation, taxes and a fair return, is the most practicable under the circumstances. That arrangement will, therefore, be continued with, however, such modifications as are necessary to accomplish the reductions mentioned above to Pennsylvania Power & Light, Philadelphia Company, Metropolitan Company and Baltimore Company.

Penn Water's rates and charges to Baltimore Company will be just and reasonable when the power bill is computed by the use of the fair rate of return and the rate base we have found, brought down to date every six months for changes in the plant investment, depreciation reserve and working capital. In computing the power bill to Baltimore Company there shall be added to the fair return all reasonable and necessary operating expenses, taxes and deprecia-

tion computed on the plant investment and at the depreciation rates we have herein found proper; there shall be deducted from such total electric revenues received from others, including the Conowingo backwater payment, and the gross revenues from Metropolitan Co., P. P. & L. Co., and Philadelphia Co., and the gross revenues, except the excess revenues, calculated at $222,475 for the year 1946, and income taxes associated therewith, from Pennsylvania Railroad.

[168] Our specific findings of fact and order will be entered in accordance with this opinion.

Sgd. NELSON LEE SMITH,
Nelson Lee Smith,
Chairman

Sgd. THOMAS C. BUCHANAN,
Thomas C. Buchanan,
Commissioner

Sgd. LELAND OLDS,
Leland Olds,
Commissioner

I concur in the result only.

Sgd. CLAUDE L. DRAPER,
Claude L. Draper,
Commissioner

Dated at Washington, D. C., this 4th day of January, 1949.

Sgd. LEON M. FUQUAY,
Leon M. Fuquay,
Secretary.

UNITED STATES OF AMERICA

FEDERAL POWER COMMISSION

Before Commissioners: Nelson Lee Smith, Chairman, Thomas C. Buchanan, Claude L. Draper and Leland Olds.

January 4, 1949

In the Matter of
PENNSYLVANIA WATER & POWER COMPANY } Docket No. IT-5915

ORDER REDUCING RATES.

Upon consideration of the record in the above-entitled proceeding and the arguments adduced, and having this day issued its Opinion No. 173 in this matter, which hereby is incorporated by reference and made a part hereof—

The Commission further *finds* that:

(1) Penn Water (successor through reorganization under the laws of Pennsylvania, on January 13, 1910, of McCall Ferry Power Company which had been formed by the merger, on April 14, 1905, of [The] Hillside Water & Power Company and Susquehanna Water & Power Company) owns, operates and maintains hydroelectric and steam-electric generating facilities, all located on the Susquehanna River at Holtwood, Pennsylvania, about eight miles below the hydroelectric project of Safe Harbor, about nine miles north of the Pennsylvania-Maryland boundary line, and about 61 miles northeast of the City of Baltimore. Penn Water's hydro plant, comprising 10 main generating units (eight, 25-cycle, and two, 60-cycle), has an effective capacity of 104,000 kw; its steam plant, comprising two 60-cycle generating units, has an effective capacity of 26,000 kw. There are also two 5,000 kw, 25/60 cycle frequency changers.

(2) Safe Harbor Water Power Corporation (Safe Harbor) owns, operates and maintains a hydroelectric plant and certain appurtenant transmission facilities, all located in Pennsylvania on the Susquehanna River about 17 miles north of the Pennsylvania-Maryland boundary line. Safe Harbor's hydro plant, comprising seven main generating units (five, 60-cycle and two, 25-cycle) has an effective capacity of 230,000 kw. Safe Harbor owns, operates, and maintains the afore-described hydroelectric power project under a license for Project No. 1025, first issued April 22, 1930, by this Commission, pursuant to the Federal Power Act, which, as amended, is now Part I of the Federal Power Act (Act).

(3) Consolidated Gas Electric Light and Power Company of Baltimore (Baltimore Company) owns, operates and maintains, among other facilities, steam-electric generating facilities located in and near Baltimore, Maryland. Such facilities include four plants, comprising sixteen generating units (eight, 60-cycle, and eight, 25-cycle), having a total effective capacity of 479,000 kw.

(4) Susquehanna Transmission Company of Maryland (Transmission Company) is a wholly-owned subsidiary of Penn Water, engaged only in the transmission of electric energy in Maryland for Penn Water, Safe Harbor and Baltimore Company. Of the transmission facilities referred to in (5) below, those located in Maryland are owned and operated by Transmission Company.

(5) Penn Water owns and operates transmission facilities in Pennsylvania which have been constructed and are operated and maintained in combination with those of Trasmission Company in Maryland to form a transmission network, including: two 220 kv, 60-cycle, three-phase, single, transmission circuits extending from Safe Harbor to points of connection with Baltimore Company near its Westport and Riverside steam-electric plants in Maryland, and to a point of connection with Potomac Electric Power Company

(PEPCO) near Takoma Park, Maryland; four 132 kv, 25-cycle, single-phase, transmission circuits extending from the Conestoga Substation, near the Safe Harbor hydro plant, to a point of connection with facilities of the Pennsylvania Railroad (Railroad) at Perryville, Maryland; two 66 kv, 60-cycle, three-phase, transmission circuits between the Safe Harbor and Penn Water plants, which are tapped by lines owned and operated by Pennsylvania Power & Light Company (PP&L) extending from the Lehman Farm Substation to Lancaster, Pennsylvania, and from the Donegal tap to Harrisburg, Pennsylvania; two 66 kv, 60-cycle, three-phase, transmission circuits extending from the Holtwood Substation to a point of connection with Metropolitan Edison Company (Metropolitan Company) at York, Pennsylvania; two 66 kv, 60-cycle, three-phase, transmission circuits extending from the Holtwood Substation to a point of connection with Philadelphia Electric Company (Philadelphia Company) at Coatesville, Pennsylvania; two 66 kv, three-phase, transmission circuits (one, 60-cycle, and one, 25-cycle) extending from the Holtwood Substation to a nearby point of connection with a line owned and operated by PP&L which continues to Lancaster, Pennsylvania; and four 66 kv, 25-cycle, three-phase, transmission circuits extending from the Holtwood Substation to a point of connection with Baltimore Company at Transmission Company's Highlandtown Substation in the City of Baltimore.

(6) Penn Water, Baltimore Company, and Safe Harbor are parties to a contract dated June 1, 1931, as amended, which by its terms is to continue in effect until 1980. Under that contract, Baltimore Company purchases two-thirds, and Penn Water one-third of Safe Harbor's entire capacity and output of electric energy, and contributes annual payments to Safe Harbor in the same proportion. Payments under such contract, pursuant to the Commission's rate order of November 4, 1946, *Safe Harbor Water Power Corporation*, 5 F. P. C. 265, are sufficient to allow Safe Harbor.

a 5% rate of return on net investment, after operating expenses, taxes and depreciation. Under this contract, Penn Water provides, maintains, and operates certain transmission facilities, including lines extending from Safe Harbor, Pennsylvania, to Baltimore, Maryland.

(7) Penn Water and Baltimore Company are also parties to a contract dated December 31, 1927, as amended, which continues in effect until 1980, under which Baltimore Company purchases all of the electric capacity and energy, not otherwise disposed of under existing contracts, which are available from Penn Water's own generating facilities, as well as that available to Penn Water through purchase from Safe Harbor, as referred to in (6) above. Under this contract, Baltimore Company pays Penn Water for all of its operating expenses, including taxes, depreciation, and cost of power purchased from Safe Harbor, as well as a return on investment determined by a prescribed method, with a credit for the revenues which Penn Water receives from sales in Pennsylvania.

(8) By means of the transmission circuits referred to in (5) above, electric energy generated in Pennsylvania and consumed in Maryland and the District of Columbia is transmitted from Pennsylvania, and electric energy generated in Maryland and consumed in Pennsylvania is transmitted from Maryland. None of such facilities is used for the generation of electric energy or in local distribution or only for the transmission of electric energy in intrastate commerce, or for the transmission of electric energy consumed wholly by the transmitter.

(9) The transmission circuits referred to in (5) above are facilities for the transmission of electric energy in interstate commerce within the meaning of Section 201 (b) of the Act and are subject to the jurisdiction of this Commission. By reason of ownership and operation of such facilities, Penn Water and Transmission Company are "public utilities" within the meaning of Part II of the Act.

(10) By means of the transmission network referred to in (5) above, the power resources of Penn Water, Safe Harbor, and Baltimore Company referred to in (1), (2) and (3) above, are combined and coordinately operated as an integrated and interconnected electric system (interconnected system) serving areas in the States of Pennsylvania and Maryland as well as electrification requirements of Railroad in Pennsylvania, Maryland, and the District of Columbia.

(11) The interconnected system is designed and operated to supply its power and energy requirements at lowest cost. The output of each of the interconnected generating units flows into the system at such times and in such amounts as will secure maximum utilization of hydroelectric facilities, economy of operation and reliability of service. The contracts referred to in (6) and (7) above, facilitate the achievement of those objectives particularly by the methods of payment which they provide, and by reason of the fact that generation of energy is directed by the coordinated action of load dispatchers in the City of Baltimore, representing the three system companies. The direction of energy flows results from operations governed by consideration of river flow, relative costs of steam generation, and magnitude of loads; and energy moves from generating plants to loads without regard to state boundaries.

(12) The maximum utilization of the interconnected system's hydroelectric generating plants in Pennsylvania, one Penn Water's and one Safe Harbor's, is obtained through their operation in conjunction with the system's steam-electric generating plants, Penn Water's in Pennsylvania and Baltimore Company's four in Maryland. The Penn Water and Safe Harbor ponds impound only 24 hours' supply of water at full draft. During periods of high river flow, which occur principally in the spring months, the hydro plants generate their maximum output continuously, thus saving the maximum amount of fuel in the generation

of electric energy by steam. At other times, they can be so operated only part time, and are operated as peaking plants, to help carry the peak loads of the interconnected system, thus taking the place of steam-generated energy at those hours when the least economical steam generating plants would otherwise have to be used. The coordinated operation of the system makes available a larger useful system output at a lower cost than would result if each company were compelled to supply its requirements from its own generating facilities.

(13) As a result of the operations referred to in (12) above, during periods of high river flow, the flow of energy is south from Pennsylvania towards Maryland and at other times, the flow of energy tends to be to the north, although the direction of the flow on the lines crossing the state boundary may change frequently according to the needs of the consumers in Pennsylvania and Maryland.

(14) The operation of the interconnected system, referred to in (1) through (13) above, and the output of that system are in interstate commerce.

(15) Penn Water alone sells firm power and energy to Metropolitan Company under a 1945 agreement, to supply a part of the latter's requiremnets in York, Pennsylvania; to Philadelphia Company under a 1933 agreement, to supply its requirements in Coatesville, Pennsylvania; and to PP&L, under a 1933 agreement, to supply its requirements in Lancaster, Pennsylvania. In addition, Penn Water alone sells energy to each of these companies in interchange.

(16) Penn Water's sales, referred to in (15) above, are sales for resale in interstate commerce.

(17) Pursuant to the contract referred to in (7) above, Penn Water sells electric energy to Baltimore Company for resale. Energy so sold is transmitted from Pennsylvania to Maryland and is a sale for resale in interstate commerce. Such sale is made possible by the transmission network, re-

ferred to in (5) above, and by the coordinated operation of the interconnected system, referred to in (1) through (13) above.

(18) Each of Penn Water's sales of electric energy referred to in (7) and (15) above is a sale of electric energy at wholesale in interstate commerce subject to the jurisdiction of the Commission under the provisions of Section 201 (b) of the Act. Each rate and charge made, demanded, or received by Penn Water for or in connection with each such sale, including any rate or charge or part thereof, relating to electric energy, power, capacity, frequency control, phase, cycle, special facilities, transmission service, power factor cooperation, or reactive energy, is subject to the rate regulatory provisions of the Act.

(19) A 1939 order of this Commission required Penn Water to apply for a license under the provisions of Part I of the Act for the operation of its hydroelectric project, and the order was affirmed on court review. Thereafter, this Commission entered an order authorizing issuance of a license to Penn Water, but the matter of formal issuance is still pending. In these circumstances, Penn Water, for rate-regulatory purposes, must be treated as a "licensee" within the meaning of the Act.

(20) So much of the electric energy, or "power" within the meaning of Section 20 of Part I of the Act, generated, or developed, by Penn Water's hydroelectric project, as is sold under the contracts referred to in (7) and (15) above, is sold thereunder for sale and distribution in public service by the purchasing companies, or for sale and distribution or use in public service by their customers. By reason of the coordinated operations of the interconnected system referred to in (1) through (13) above, all such electric energy so sold is sold in, and enters, interstate commerce within the meaning of Section 20.

(21) The "States directly concerned" within the meaning of Section 20 are the States of Pennsylvania and Mary-

land. Such States are "unable to agree" through their properly constituted authorities on the rates or charges of payment within the meaning of that Section.

(22) Penn Water's rates and charges of payment provided for in the contracts described in (7) and (15) above, including any rate or charge, or part thereof, relating to electric energy, power, capacity, frequency control, phase, cycle, special facilities, transmission service, power factor cooperation, or reactive energy, are subject to the jurisdiction of this Commission under Section 20.

(23) Penn Water's rates and charges of payment provided for in the contracts described in (7) and (15) above, including any rate or charge, or part thereof, relating to electric energy, power, capacity, frequency control, phase, cycle, special facilities, transmission service, power factor cooperation, or reactive energy, are subject to the jurisdiction of this Commission under Section 20, irrespective of finding (21) above.

(24) For the purpose of determining whether Penn Water's rates or charges to Baltimore Company, Metropolitan Company, Philadelphia Company and PP&L are and will be excessive, unjust or unreasonable, such rates or charges may properly be tested by determining whether the net operating income of Penn Water produced by such rates or charges constitutes a fair return on a proper rate base, and the respective amounts shown by the record in this proceeding for the year 1946 may properly be used for that purpose.

(25) The actual legitimate investment in Penn Water's and Transmission Company's electric plant used and useful was $33,113,148 as of December 31, 1946, for the purposes referred to in (24) above. For the purpose of determining a proper rate base for Penn Water and Transmission Company for the year 1946, it is fair and reasonable to use that year's average actual legitimate investment in electric plant

used and useful, which was $33,126,585. For each of the periods hereinafter specified in (35) below, it is fair and reasonable to use the foregoing amount of $33,113,148, plus the recorded cost of additions less recorded retirements, as the actual legitimate investment in electric plant used and useful at the beginning of such period, if no substantial property addition is put into service during such period.

(26) The accrued depreciation as of December 31, 1946, was $9,240,628, the amount recorded in the books of Penn Water and Transmission Company as of that date, after proper adjustments. For the purpose of determining a proper rate base for Penn Water for the year 1946, it is fair and reasonable to use as accrued depreciation the average amount for that year which is $9,001,873. For each of the periods specified in (35) below, it is fair and reasonable to use the amount of $9,240,628, as of December 31, 1946, plus or minus the changes recorded on Penn Water's and Transmission Company's books between that date and the date hereof in conformity with the method followed by Penn Water and Transmission Company in 1946, and plus or minus the changes recorded on Penn Water's and Transmission Company's books between the date hereof and the periods referred to in (35) below, in conformity with (27) and (28) below.

(27) The service lives as shown in Exhibit 59 are proper and reasonable for the computation of Penn Water's and Transmission Company's annual depreciation allowance.

(28) The straight-line method of depreciation is the proper and adequate depreciation method for the purposes of computing Penn Water's bills for power and energy in accordance with the Commission's order in this case and for the purpose of accruing depreciation on its books.

(29) The proper and reasonable working capital allowance for the purpose of determining a proper rate base for

Penn Water and Transmission Company, for the year 1946, is not more than $650,000, representing the average amount of materials and supplies plus one-eighth of cash operating expenses for the year, not including taxes and purchased power. For each of the periods hereinafter specified in (35) below, it is fair and reasonable similarly to compute the working capital allowance upon the book, recorded amounts for the immediately preceding 12 months' period.

(30) The proper rate base for the year 1946 for the purposes of determining just and reasonable rates and charges to Metropolitan Company, Philadelphia Company, PP&L and Baltimore Company is not more than $24,774,712, as shown by the following tabulation:

Average Gross Investment for 1946	$33,126,585
Less: Average Reserve for Depreciation for 1946	9,001,873
Average Net Investment for 1946	24,124,712
Working Capital Allowance	650,000
Net Investment Rate Base	$24,774,712

and the rate base so computed reflects the actual legitimate net investment in Penn Water's and Transmission Company's electric plant in service as an assembled whole and an established plant in successful operation.

(31) A fair and reasonable annual rate of return to Penn Water and Transmission Company is 5¼%; the fair return for 1946 is $1,300,672 on a rate base of $24,774,712.

(32) Penn Water's and Transmission Company's net operating income, for 1946, exceeded a fair return by not less than $2,176,736.

(33) On the basis of a reasonable and proper allocation of the cost of service rendered by Penn Water and

Transmission Company to Baltimore Company, the rates and charges to Baltimore Company for 1946 are unjust and unreasonable by approximately $1,733,318.

(34) For the year 1946, on the basis of a reasonable and proper allocation, Penn Water's rates and charges to Philadelphia Company exceed the cost of service to that company by approximately $114,311; its rates and charges to Metropolitan Company exceed the cost of service to that company by approximately $26,094; and its rates and charges to PP&L exceed the cost of service to that company by approximately $80,538.

In the test year 1946, Penn Water received revenues amounting to $1,483,798 from the sale to the Pennsylvania Railroad (in Pa.). The proper allocation of Penn Water's and Transmission Company's total cost of service among Penn Water's customers results in the assignment of $1,261,323 thereof to serving the Pennsylvania Railroad (in Pa.). Accordingly, Penn Water's revenues from that service to Pennsylvania Railroad exceeded the cost of service for the test year 1946 by $222,475, which amount is subject to an adjustment for income taxes.

(35) Except as referred to in (38) below, a proper rate base for the purpose of determining the rates and charges to Baltimore Company for each six months' period following each June 30 and December 31, after issuance hereof, is one computed by adding to the gross investment of $33,113,148 (as of December 31, 1946), as referred to in (25) above, the cost of net additions to electric plant in service from the latter date to said June 30 or December 31; by deducting from the total thus determined the amount of the depreciation reserve as of said June 30 or December 31, according to Penn Water's and Transmission Company's books, adjusted as referred to in (26), (27) and (28) above; and adding working capital computed as referred to in (29) above.

(36) The application of a 5¼% per annum rate of return to the rate base determined as referred to in (35) above, will provide a fair return to Penn Water and Transmission Company.

(37) Penn Water's rates and charges to Baltimore Company will be just and reasonable when the power bill to Baltimore Company is computed by adding to the fair return, referred to in (36) above, all reasonable and necessary operating expenses and depreciation expenses, calculated as referred to in (27) and (28) above, and by deducting the Conowingo backwater payment, and all electric revenues received from others, including Metropolitan Company, Philadelphia Company, PP&L and Railroad. *Provided,* however, that the deduction in respect to revenues from Pennsylvania Railroad shall be only the amount calculated at rates which would have yielded $1,261,323, based on volumes and demands for the test year 1946 and, *Provided,* further, that income taxes associated with revenues from the Railroad in excess of such deduction shall not be included in the costs to be reimbursed by Baltimore Company.

(38) If a substantial addition to property is put in service between the dates for determination of the rate base referred to in (35) above, Penn Water may petition the Commission to include the cost thereof in the rate base from the date of its commercial operation.

The Commission *orders* that:

(A) Penn Water's and Transmission's Company's motion to dismiss for want of jurisdiction be and the same hereby is denied.

(B) The petition of Intervenor, Public Service Commission of Maryland, to reopen the record for the purpose of receiving certain additional evidence be and the same hereby is denied.

(C) Within 45 days after the date of issuance of this order, Penn Water shall file, in a form satisfactory to the Commission, new schedules of rates and charges for or in connection with its transmission and sale of electric energy in interstate commerce for resale to Metropolitan Company, Philadelphia Company and PP&L. The new schedules of rates and charges shall be effective on and after February 1, 1949, and shall effect a reduction, based upon Penn Water's and Transmission Company's operations during the test year 1946, of $26,094 to Metropolitan Company, $114,311 to Philadelphia Company and $80,538 to PP&L.

(D) Within 45 days after the issuance of this order Penn Water shall file in a form satisfactory to the Commission, a new schedule of rates and charges for or in connection with its transmission and sale of electric energy in interstate commerce for resale to Baltimore Company. Said schedule of rates and charges shall be such as, together with the Conowingo backwater payment, the revenues from the sales referred to in (C), above, and a credit for service to the Pennsylvania Railroad computed as set forth in (37), above, will provide a 5¼% return to Penn Water and Transmission Company, after operating expenses and depreciation charges, all as set forth in (37), above, on a rate base to be computed in the manner set forth in (G), below, and shall be effective on and after February 1, 1949.

(E) The Commission reserves the right to reject all or any part of the schedules of rates and charges referred to in Paragraphs (C) and (D) hereof and in lieu thereof to prescribe by further order the appropriate rates, charges, classifications, rules, regulations, practices, or contracts.

(F) Penn Water and Transmission Company shall compute annual depreciation expense beginning February 1, 1949, in accordance with the straight-line depreciation method for the purpose of computing its bills for energy and power, using in connection therewith the service lives which are set forth in Exhibit 59.

(G) For the purpose of determining the rates and charges to Baltimore Company, Penn Water and Transmission Company shall compute a rate base as of June 30, 1949, and as of each December 31 and June 30 thereafter in the manner set forth in findings (25) through (30), and (35), by adding to the amount of actual legitimate investment as of December 31, 1946, as found in (25), above, the net claimed cost, to the date of computation, of additions and retirements in its electric plant used and useful; deducting from this amount the depreciation reserve as of that date according to the companies' books in conformity with (F), above; and adding working capital computed for the period in question, in the manner set forth in finding (29) above.

(H) The rate base computed as set forth in (G), above, shall remain unchanged for the six months period beginning with the date as of which it is computed, provided, however, that in the case of substantial addition to property which is put in service between the dates for determination of the rate base, Penn Water and Transmission Company may petition the Commission to include the cost thereof in the rate base from the date of commercial operation.

(I) Penn Water and Transmission Company shall file on or before May 1, 1949, a statement showing the computation of the rate base referred to in (D)

hereof as of December 31, 1948, and thereafter on or before each May 1, for the preceding calendar year, a statement showing the computation of such rate base in accordance with this order, the operating expenses, depreciation, taxes, and return, and the resulting charges to Baltimore Company under said revised rate schedule.

By the Commission. Commissioner Draper concurring in the result only.

Sgd. LEON M. FUQUAY,
Leon M. Fuquay,
Secretary.

(Seal)

Date of Issuance: January 5, 1949.

EXHIBIT E TO PETITION FOR REVIEW.

UNITED STATES OF AMERICA

FEDERAL POWER COMMISSION

In the Matter of
PENNSYLVANIA WATER & POWER COMPANY } Docket No. IT-5915

APPLICATION FOR REHEARING OF ORDER ISSUED

January 5, 1949

(Filed January 28, 1949.)

Pennsylvania Water & Power Company (Penn Water), Respondent in the above proceeding, and Petitioner herein; being aggrieved on its own behalf by the "Order Reducing Rates," issued by the Commission January 5, 1949; and being separately and independently aggrieved by such Order as the owner of one-half of the Class B voting stock of Safe Harbor Water Power Corporation (Safe Harbor), said Safe Harbor being unable to intervene in this proceeding because of the deadlock in its Board of Directors as set forth in the orders of the Pennsylvania Public Utility Commission (Pennsylvania Commission) referred to herein in paragraph II (28) (c), and as agent for and on behalf of Safe Harbor under the provisions of certain contracts with Pennsylvania Power & Light Company (PP&L) and Philadelphia Electric Company (Philadelphia Company); and Susquehanna Transmission Company of Maryland (Transmission Company), Respondent and Petitioner herein, also being aggrieved by said Order; hereby apply to the Federal Power Commission (Commission) for a rehearing as provided by Section 313 (a) of the Federal Power Act (16 U. S. C. 1946 ed. § 825-l (a); 49 Stat. 860), of all of the matters presented or involved in this proceeding and covered or

affected by said Order and the accompanying Opinion No. 173; and pray that said Order and Opinion be abrogated, vacated, set aside, and reversed because of the matters erroneously decided, the errors with respect thereof and the objections of Petitioners to said Opinion and Order to wit: Petitioners respectfully show that in said Opinion and Order the Commission erroneously decided each and all of the following matters and committed each and all of the following errors, and Petitioners object to said Opinion and Order because of each and all of said matters erroneously decided and said errors for each and all of the following reasons; and show that since the record before the Commission was closed there have been substantial changes in the operations and contracts of Petitioner Penn Water, as hereinafter more fully described, so that the bases for the said Order and for many of the findings, conclusions, and requirements contained in said Opinion and Order are destroyed and such findings, conclusions and requirements are not in accord with the facts and the law:

I. The Federal Power Commission has no jurisdiction, authority, or power to issue and enforce said Order for the following reasons:

(1) Section 19 of Part I of the Federal Power Act (16 U. S. C. 1946 ed. § 812; 41 Stat. 1073, 49 Stat. 847) does not authorize or support the issuance of the said Order of the Commission, for the reason that both the States of Pennsylvania and Maryland have each authorized and empowered commissions within each of said States known as the Pennsylvania Public Utility Commission (Pennsylvania Commission) and the Public Service Commission of Maryland (Maryland Commission), respectively, to regulate and control any services to be rendered by Petitioners and the rates and charges of payment therefor, as provided in such Section 19; and there is no substantial evidence of record to the contrary.

(2) Section 20 of Part I of the Federal Power Act (16 U. S. C. 1946 ed. § 813; 41 Stat. 1073, 49 Stat. 847) does

not authorize or support the issuance of the said Order of the Commission, for the reason that the States of Pennsylvania and Maryland, which are directly concerned, have each provided a commission to enforce the requirements of such Section 20 and to regulate and control any services rendered by Petitioners and the rates and charges of payment therefor as therein provided; and that such States are not unable to agree through their properly constituted authorities on the services to be rendered by Petitioners or on the rates and charges of payment therefor; and there is no substantial evidence of record to the contrary.

(3) By its terms the said Order requires the filing of new schedules of rates and charges to be effective within a period of less than thirty days from the date of issuance of such Order, contrary to the requirements of Section 20 of the Federal Power Act insofar as such Section makes applicable the provisions of Section 15 (2) of the Interstate Commerce Act (49 U. S. C. 1946 ed. § 15 (2); 34 Stat. 589, 36 Stat. 551, 41 Stat. 484).

(4) A substantial part of the services rendered by Respondents and Petitioners and the rates and charges of payment therefor do not constitute interstate or foreign commerce, within the meaning of Section 20 of the Federal Power Act; a substantial part of such services and the rates and charges therefor do not constitute the transmission of electric energy in interstate commerce, or the sale of electric energy in interstate commerce, or the sale of electric energy at wholesale, within the meaning of Sections 201 (b), (c), and (d) of Part II of the Federal Power Act (16 U. S. C. 1946 ed. §§ 824 (b), (c), (d); 49 Stat. 847); there is no substantial evidence of record to the contrary; and neither under such Section 20, such Section 201, nor Section 206 (a) of Part II of the Act (16 U. S. C. 1946 ed. § 824 e (a), 49 Stat. 852), nor under any other provision of the Federal Power Act, does the Commission have jurisdiction, authority, or power, to regulate, control, determine,

or fix Petitioners' services or rates, charges, or classifications for services not constituting interstate or foreign commerce, or the rules, regulations, practices, or contracts affecting such rates, charges, or classifications.

(5) None of the provisions of Part II of the Federal Power Act (16 U. S. C. 1946 ed. §§ 824-824 h; 49 Stat. 847) authorize or support the issuance of the said Order of the Commission, for the reason that Penn Water must be treated as a licensee within the meaning of Part I of the Act, and such a licensee is not subject to the rate regulatory provisions of Part II of the Act; for the reasons that:

(a) The services, rates, and charges of Petitioners are completely subject to regulation by the States of Pennsylvania and Maryland under Sections 19 and 20 of the Act, as set forth in paragraph I (1) and I (2) above, within the meaning of Section 201 (a) of the Act (16 U. S. C. 1946 ed. § 824 (a); 49 Stat. 847; and that

(b) Such regulation under Part II of the Act would deprive such States or their respective commissions of their lawful authority now exercised over the exportation of hydroelectric energy which is transmitted across the Pennsylvania-Maryland State line, under Sections 19 and 20 of the Act and under the respective statutes of such States, within the meaning of Section 201 (b) of the Act.

(6) Neither the provisions of Section 206 (a) of the Federal Power Act, nor any other provisions of the Act, authorize or support the issuance of the said Order of the Commission for the reasons that:

(a) Neither Penn Water nor Transmission Company have any rates, charges, or classifications subject to the jurisdiction of the Commission, within the meaning of Section 206 (a) of the Act or of Section 205 of the Act (16 U. S. C. 1946 ed. § 824 d; 49 Stat. 851), in that:

(i) The rendering of services by Penn Water to Metropolitan Edison Company (Metropolitan

Company), and jointly with Safe Harbor to PP&L, and Philadelphia Company, and the rates, charges, and classifications therefor, constitute transactions in intrastate commerce and do not constitute transactions, transmissions, or sales in interstate commerce, within the meaning of Sections 201 (b) and (c) of the Act; and there is no substantial evidence of record to the contrary.

(ii) The rendering of services by Penn Water, jointly with Safe Harbor, Consolidated Gas Electric Light and Power Company of Baltimore (Baltimore Company), and Potomac Electric Power Company (PEPCO) to The Pennsylvania Railroad Company (Railroad), and the rates, charges, and classifications therefor, do not constitute sales of electric energy at wholesale, within the meaning of Sections 206 (a) and 201 (d) of the Act; and there is no substantial evidence of record to the contrary.

(iii) Penn Water has no rates, charges, or classifications for the transmission or sale of electric energy to Baltimore Company, within the meaning of Sections 206 (a) and 201 (b) of the Act.

(iv) Certain of the rates, charges, or classifications of Penn Water, or Penn Water and Safe Harbor jointly, for services rendered to Metropolitan Company, PP&L, and Philadelphia Company are not rates, charges, or classifications for the transmission or sale of electric energy, within the meaning of Sections 206 (a) and 201 (b) of the Act.

(b) The services rendered by Penn Water to PP&L, Philadelphia Company, Railroad Company, and Baltimore Company are rendered jointly with others not made Respondents to these proceedings, and the rates, charges, and classifications therefor are joint; there is no substantial evidence of record to the contrary; and the said Order of the Commission was issued without notice or opportunity for hearing to such other persons jointly obli-

gated to and jointly serving the foregoing customers, contrary to the provisions of Section 206 (a) of the Act and the due process clause of the Fifth Amendment to the Constitution of the United States.

(c) The said Order of the Commission requires Penn Water alone to file new schedules of rates and charges for services to PP&L and Philadelphia Company without requiring Safe Harbor to join or concur in the filing of such schedules, without authority under the Federal Power Act; thereby requiring Penn Water to assume the entire obligations to such customers instead of the joint obligation which exists to the impairment of its ability to render adequate service to its customers, within the meaning of Section 207 of the Act (16 U. S. C. 1946 ed. § 824 f; 49 Stat. 853); and there is no substantial evidence of record to the contrary.

(d) Insofar as the said Order of the Commission undertakes to require a reduction in the revenues of Penn Water alone it constitutes regulation by the Commission of the divisions of revenue received by Penn Water for its participation in the rendering of joint services to each of its customers except Metropolitan Company, without jurisdiction, authority, or power in the Commission to regulate divisions of rates or charges for joint service under the Federal Power Act.

(e) There is no substantial evidence of record to support any finding by the Commission that any of the rates, charges, or classifications, demanded, observed, charged, or collected by Penn Water, or that any rule, regulation, practice, or contract affecting any such rate, charge or classification is unjust, unreasonable, unduly discriminatory or preferential, as required by Section 206 (a) of the Act or by Section 20 of the Act insofar as such Section 20 makes applicable the provisions of Section 15 (1) of the Interstate Commerce Act (49 U. S. C. 1946 ed. § 15 (1); 24

Stat. 384, 34 Stat. 589, 36 Stat. 551, 41 Stat. 484, 48 Stat. 1162, 54 Stat. 911).

(f) The Commission made no finding in its said Order that any of the existing rates, charges, or classifications for service to PP&L, Philadelphia Company, or Metropolitan Company, are unjust, unreasonable, unduly discriminatory or preferential, as required by Section 206 (a) of the Federal Power Act or by Section 20 of the Act insofar as such Section 20 makes applicable the provisions of Section 15 (1) of the Interstate Commerce Act.

(g) The said Order of the Commission was issued without the hearing required by Section 206 (a) of the Act, by Section 20 of the Act insofar as such Section 20 makes applicable the provisions of Section 15 (1) of the Interstate Commerce Act, and contrary to the provisions of the due process clause of the Fifth Amendment to the Constitution of the United States, in that:

(i) Petitioners were given no notice of the terms or substance of the said Order prior to or during proceedings before the Commission, and were given inadequate description of the subjects and issues involved in the proceedings before the Commission prior to and during such proceedings.

(ii) Petitioners were required to proceed first with unspecified evidence and without the aforesaid notice or description, and were required to carry the burden of proof in the proceedings before the Commission despite the fact that they were not the proponents of any rule or order requiring changes in service, rates, charges, classifications, rules, regulations, practices, or contracts.

(iii) Petitioners were effectively prevented from adequate preparation for and from conducting necessary and reasonable cross-examination of the witnesses for the Commission, and other hostile and adverse

witnesses, required for a full and true disclosure of facts deemed material by the Commission in its said Opinion.

(iv) Petitioners were effectively prevented from adequate preparation for and from a reasonable opportunity for presentation of evidence in rebuttal to evidence presented on behalf of the Commission and other adverse parties near the end of the lengthy proceedings before the Commission, which evidence related to facts relied upon by the Commission in coming to its conclusions in said Opinion and Order and material to the validity of such conclusions; and the Commission's Examiner refused to hear Petitioners' counsel's detailed description of the essential and relevant rebuttal evidence Petitioners would have presented if they had been given the opportunity.

(v) The proceedings before the Commission and the functions of the Commission's Examiner were not conducted by him in an impartial manner, to the prejudice of Petitioners in their presentation of facts for the record.

(vi) Petitioners have had no opportunity to inspect an initial decision by the Commission's Examiner, if any, on the evidence received in the record in the proceedings presided over by him; and although the Commission did not preside at the reception of the evidence of record, no recommended decision by the Examiner who did preside has been filed or made available to Petitioners; the decision of the Commission in said Opinion and Order is not tentative, and the Commission made no finding nor is there evidence of record which would support a finding that due and timely execution of the Commission's functions imperatively and unavoidably require the foregoing procedure omitted by the Commission in issuing its said Opinion and Order.

(vii) No opportunity was afforded Petitioners to submit for the consideration of the Commission

exceptions, with supporting reasons for such exceptions, to the decision or recommended decision to the Commission, of the Commission's Examiner.

(viii) The Commission's said Opinion and Order, and the record before the Commission, do not show the ruling upon each finding, conclusion or requested ruling presented by Petitioners in their Briefs heretofore filed with the Commission in this proceeding; and such Opinion, Order, and record does not include a statement of findings and conclusions, as well as the reasons or basis therefor, upon all the material issues of fact and law presented on the record by Petitioners.

(h) Since the record in the proceeding has been closed, the contract of December 31, 1927, providing, among other things, for steam-generated energy service from Baltimore Company to Penn Water at the latter's request, and the purported agreements amendatory and supplemental to said 1927 contract have been terminated as more specifically shown hereinafter in paragraph II (6) (c); and since the closing of such record Penn Water has notified Baltimore Company that it has ceased to receive from Baltimore Company and will not pay for any electric energy or capacity or other electrical services in connection therewith generated in Maryland or elsewhere and transmitted across the Maryland-Pennsylvania State line into Pennsylvania; and that Petitioners' operations have been changed to effect that purpose. As a result of such changes in operations, no such electric energy generated in Maryland, or States other than Pennsylvania has since that date been, nor will be, transmitted from such States of generation into Pennsylvania and consumed in Pennsylvania, except for station uses at Holtwood and Safe Harbor and delivery to the Railroad Company if and when necessary and if given the opportunity on rehearing, Petitioners hereby offer to prove such facts.

(7) If the Federal Power Act can properly be construed otherwise than as described in paragraphs (1), (2), (4), (5), and (6) (a) (i) above, the same is unconstitutional because in violation of the Tenth Amendment to the Constitution of the United States.

(8) The said Order of the Commission requires Petitioners to make changes from time to time in the future in rates and charges for services to Baltimore Company without notice, opportunity for hearing, or findings as of such future times that the then existing rates and charges are unjust, unreasonable, unduly discriminatory, or preferential as of such future times, upon the basis of the facts as of such future times; without authority under the Federal Power Act and contrary to the provisions of Section 206 (a) of the Act; and contrary to Article I, Section 1, of the Constitution of the United States.

(9) The said Order of the Commission, and its Opinion, findings and conclusions, particularly the rates and charges which purport to be thereby determined, fixed, prescribed, and required to be filed, charged, and observed, are unlawful, unconstitutional, unreasonable, arbitrary, capricious, in excess of the Commission's statutory jurisdiction, authority, and limitations under the Federal Power Act and contrary to the provisions of such Act, without observance of the procedure required by law, unsupported by substantial evidence of record; and if enforced would deprive Petitioners of their property without due process of law, in violation of the Fifth Amendment to the Constitution of the United States.

II. Insofar as any of the statements in the Commission's Opinion No. 173, dated January 4, 1949, which was incorporated by reference and made a part of the Commission's Order, issued January 5, 1949; and insofar as the references made in such Opinion No. 173 to discussion or conclusions in the Commission's Opinion No. 143, dated October 25, 1946, in its Docket No. IT-5914, *Re Safe Harbor*

Water Power Corporation; purport to be definite findings of fact or conclusions, or anything more than mere illustrative explanations of the Commission's conclusions, each and all of the following portions thereof are erroneous, unconstitutional, unlawful, arbitrary, capricious, contrary to the evidence of record, unsupported by any substantial evidence of record, and operate to deprive Petitioners of their property without due process of law, in violation of the Fifth Amendment to the Constitution of the United States, and results in exercise of authority in excess of statutory jurisdiction, authority, or limitations; and Petitioners seek rehearing on each and every one of the following portions thereof for the reasons and on the grounds as hereinafter stated:

(1) The statement of the Commission on page 1 of Opinion No. 173 as follows:

> "This is a proceeding under the Federal Power Act * * *"

on the ground that neither in this statement nor anywhere in such Opinion or the record before the Commission has there been any specification as to whether the proceedings or the Commission's said Order are an exercise of authority under Part I or Part II of the Federal Power Act, or any reference to the specific authority of the Commission under which the proceedings were conducted.

(2) The statement of the Commission on page 1 of Opinion No. 173 as follows:

> "* * * The matters at issue involve a determination of * * * the amount, if any, of revenues received by Penn Water in excess of the reasonable cost of service rendered by Penn Water and Transmission Company and of resulting reductions in rates subject to the Commission's jurisdiction."

on the ground that nothing in Section 20, Section 206 (a), or any other provision of the Act authorizes the Commis-

sion to require reductions in rates or charges based upon a determination of an excess of revenues over costs of service when the revenues received by Penn Water are the result of divisions of rates or charges for joint service with others, or when such revenues received by Penn Water are not received under rates or charges for electric energy or electric power service, as more specifically set forth herein in paragaraphs I (6) (a) (iii), I (6) (a) (iv), and I (6) (d) above.

(3) The statement of the Commission on page 4 of Opinion No. 173 as follows:

> "* * * Two 60-cycle generators in Penn Water's steam electric generating plant have a * * * 3-hour peak rating of 28,000 kw.[6] (* * * the base load rating of the steam plant is 26,000 kw at all times.)"

on the ground that if given an opportunity on rehearing Petitioners hereby offer to prove that since the close of the record in the proceeding the 3-hour peak rating of such steam plant has been increased to 30,000 kw and the base load rating has been increased to 28,000 kw.

(4) The statement of the Commission on pages 3 and 4 of Opinion No. 173 as follows:

> "* * * Penn Water, owns and operates * * * that part of an interconnected interstate transmission system * * * located in Pennsylvania. The respondent, Transmission Company, owns and operates that part of the same transmission system * * * located in Maryland."
>
> * * *
>
> "Respondents' interconnected interstate transmission system is a regional network * * *."

on the grounds that:

(a) Such statements are not supported by any substantial evidence of record and are contrary to the evidence of record.

(b) The evidence of record shows that a substantial part of the transmission facilities of Penn Water and Transmission Company are not a part of any interstate transmission system or regional network but are facilities used solely for the transmission and sale of electric energy in intrastate commerce, as more specifically set forth in paragraphs I (4) and I (6) (a) (i); and the Commission failed to so find.

(c) The Gunpowder transmission line owned and operated by Transmission Company in Maryland is not a part of any interconnected system of Penn Water or Transmission Company; and the Commission failed to so find.

(d) As stated in paragraph I (6) (h) above.

(5) The statement of the Commission on page 5 of Opinion No. 173 as follows:

> "Operations of Penn Water, Safe Harbor, and Baltimore Company are closely integrated and coordinated as a matter of economy, efficiency, flexibility, and maximum utilization of hydro capabilities, contracts being carefully worked out for that purpose * * *."

on the ground that the purported contracts referred to in such statement have been terminated since the record in this proceeding has been closed, as more specifically shown hereinafter in paragraphs II (6) (c) and II (7) (c).

(6) The statements of the Commission on pages 2 and 7 of the Opinion No. 173 as follows:

> "Baltimore Company purchases electric power and energy from Penn Water * * *."
>
> * * *
>
> "Under a contract with Baltimore Company, dated December 31, 1927, as supplemented on several occasions thereafter, Penn Water is obligated to pro-

vide Baltimore Company at all times with all the capacity and energy available to the former (Penn Water) from its own hydro and steam generating plants, and from its Safe Harbor one-third entitlement, referred to below, insofar as such power and energy is not required in connection with contracts to which Penn Water is a party and which Baltimore Company has approved. In turn, Penn Water is entitled to obtain from Baltimore Company steam-generated energy in excess of the latter's own requirements up to the limit of its available generating capacity. This contract, according to its terms, is to continue in force until midnight, April 22, 1980.

"Pursuant to the provisions of the supplemental agreement of June 1, 1931, as modified by an agreement of September 29, 1939, Baltimore Company undertakes to pay, on the basis of a formulated power bill, all of Penn Water's operating expenses plus a specified return."

on the grounds that:

(a) There is no substantial evidence of record to support any of such statements, and more particularly the statement that "Penn Water is entitled to obtain from Baltimore Company steam-generated energy in excess of the latter's own requirements up to the limit of its available generating capacity", and that "Baltimore Company undertakes to pay * * * all of Penn Water's operating expenses * * *"; and such statements are contrary to the evidence of record.

(b) The evidence of record shows that the energy which Penn Water was entitled to obtain from Baltimore Company, under the purported contract referred to, was further limited by the requirement that Baltimore Company was not obligated to start up a station which would not otherwise have been operated; and that Balti-

more Company has arbitrarily refused to pay substantial amounts of Penn Water's operating expenses as required under the terms of the purported agreement; and the Commission failed to so find.

(c) Since the record in the proceeding has been closed the purported contract referred to, as supplemented, has been terminated by notice dated December 20, 1948; and if given the opportunity on rehearing Petitioners hereby offer to prove:

(i) The fact of such termination;

(ii) The contract was null, void, and unenforceable because the basic agreements were made at a time when Penn Water and Baltimore Company were affiliated through substantial ownership by Baltimore Company of Penn Water stock and by interlocking directors and officers; the basic agreements were never approved or ratified by the stockholders of Penn Water; the effect of Articles IV and V of the supplemental agreement of June 1, 1931, particularly as construed in practice by Baltimore Company, made the contract *ultra vires* and contrary to public policy; and such supplemental agreement constituted an agreement in unreasonable restraint of trade and in unreasonable restriction of competition in the generation and sale of electrical services, and unreasonably limited the output of electrical energy contrary to the laws of the United States, including Section 1 of the Sherman Antitrust Act of July 2, 1890 (15 U. S. C. 1946 ed. § 1; 26 Stat. 209, 50 Stat. 693), Section 5 of the Federal Trade Commission Act of September 26, 1914 (15 U. S. C. 1946 ed. § 45; 38 Stat. 719), and Section 10 (h) of the Federal Power Act (16 U. S. C. 1946 ed. § 803 (h); 41 Stat. 1068, 49 Stat. 842), and to the laws of Maryland and Pennsylvania;

(iii) Baltimore Company committed material breaches of the contract which justified its termination; and

(iv) The foregoing matters are now in litigation between Penn Water and Baltimore Company on complaint of Penn Water for declaratory and other relief, before the United States District Court for the District of Maryland, Civil Action No. 4179.

(d) The evidence of record shows that under a purported contract between Baltimore Company and Penn Water dated December 31, 1927, as amended on December 28, 1928, June 1, 1931, and September 29, 1939, Baltimore Company agreed to pay specific amounts in accordance with a formula, without regard to the amounts of services received from Penn Water, including the use of specified facilities; and the Commission failed to so find. Since the record in this proceeding has been closed such contract has been terminated, as more specifically shown herein in paragraph (c) above.

(7) The statement of the Commission on pages 7 and 8 of Opinion No. 173 as follows:

> "* * * Penn Water's entitlement from Safe Harbor relates to a fifty-year agreement of June 1, 1931 wherein Safe Harbor agreed with Baltimore Company and Penn Water (and the latter *inter sese*) that * * * the latter companies should be entitled to all of the capacity and energy available from the former's six-unit development in the ratio of two-thirds (to Baltimore Company) and one-third (to Penn Water)."

on the grounds that:

(a) Such statement is not supported by any substantial evidence of record and is contrary to the evidence of record.

(b) The evidence of record shows that under the terms of Articles II and III of the purported three-party agreement referred to Baltimore Company and Penn Water are entitled only to two-thirds and one-third, respectively, of the "total capacity and daily energy avail-

able" from Safe Harbor's hydro development after deduction of any capacity and energy which may be required for the performance of the duty and obligations to serve imposed on Safe Harbor by its charter and otherwise by law including its contractual obligations to Railroad Company, PP&L, and Philadelphia Company.

(c) Since the record in the proceeding has been closed Penn Water has notified Safe Harbor and Baltimore Company that the purported three-party contract referred to, as supplemented, is of no effect, null, void, and unenforceable; and if given the opportunity on rehearing Petitioners hereby offer to prove:

(i) The fact of such notification;

(ii) The contract was null, void, and unenforceable because made at a time when all of the parties were affiliated through stock ownership and interlocking officers and directors, and was part and parcel of the arrangements in connection with which the void two-party contract of June 1, 1931, between Baltimore Company and Penn Water was executed; the effect of the agreements, particularly as construed in practice by Baltimore Company, made the contract *ultra vires* and contrary to public policy; and such agreement constituted an agreement in unreasonable restraint of trade and in unreasonable restriction of competition in the generation and sale of electrical services, and unreasonably limited the output of electrical energy, contrary to the laws of the United States, including Section 1 of the Sherman Antitrust Act, Section 5 of the Federal Trade Commission Act, and Section 10 (h) of the Federal Power Act, and to the laws of Maryland and Pennsylvania;

(iii) Penn Water credits to the account of Safe Harbor an appropriate and reasonable division of revenues received from Pennsylvania customers served jointly by Penn Water and Safe Harbor.

(8) The statement of the Commission on pages 10 and 11 of Opinion No. 173 as follows:

> "Penn Water is further committed • • • to supply the entire electrical power and energy requirements of Philadelphia Company within a defined territory in the Coatesville (Pa.) area; to supply, under certain conditions, all of Pennsylvania Power & Light Company's (PP&L's) Lancaster 25-cycle and 60-cycle load requirements (Lancaster Co., Pa., and adjacent areas), coupled with a contingent obligation to meet a limited deficiency in PP&L's firm load carrying capacity for its Harrisburg area and provide a supplementary secondary capacity service."
>
> • • •
>
> "While Safe Harbor is a party to several of the contracts, its position in the PP&L and Philadelphia Company contracts is a nominal one, involving a legal technicality, which has no bearing or effect upon the operations of the system."

on the grounds that:

(a) Such statements are not supported by any substantial evidence of record and are contrary to the evidence of record.

(b) The evidence of record shows that Safe Harbor is obligated to and does supply jointly with Penn Water the electrical requirements of the Pennsylvania customers referred to; that Safe Harbor's obligations to supply firm services to such customers as well as to Railroad Company are necessary to the rendering of the services required under such contracts, for the reason that the electric capacity and energy available to Penn Water from its own generating resources, plus its purchases from sources other than Safe Harbor, plus only one-third of the available Safe Harbor services, are insufficient to meet the total requirements for firm services required under the contracts

with PP&L, Philadelphia Company, Metropolitan Company, and Railroad Company; and the Commission failed to so find.

(9) The statement of the Commission on page 12 of Opinion No. 173 as follows:

> "* * * Respondents' * * * argument is that a Part I 'licensee' cannot be a 'public utility' under Part II, and that a licensee's interstate wholesale rate may be regulated by the Commission, if at all, only under Part I. The essentials of this argument we considered and rejected in *Safe Harbor Water Power Corporation* (5 FPC 221, 235-237)."

on the grounds that:

(a) Such statement is not supported by any substantial evidence of record and is contrary to the record as shown by the contentions of Petitioners in their Briefs filed on November 14, 1947 and January 15, 1948, which Briefs are made a part hereof by reference.

(b) The record as shown by such Briefs shows that the contention of Petitioners in this respect is that, assuming Petitioners are "public utilities" within the meaning of Part II of the Federal Power Act by reason of ownership or operation of any facilities subject to the jurisdiction of the Commission as specified in the last sentence of Section 201 (b) of the Act, it does not follow that the Commission has jurisdiction, authority, or power to regulate the rates and charges of such a "public utility" under Section 206 (a) of the Act but must do so, if at all, under Part I of the Act (Main Brief, pp. 13-18; Reply Brief p. 2); and the Commission failed to consider such a contention in the *Safe Harbor* case, or in its Opinion No. 173, and failed to so find.

(c) Nothing stated in the Commission's Opinion No. 143, *Safe Harbor Water Power Corporation*, 5 FPC 221, 235-237, shows a valid ground for the Commission's

conclusion that it has jurisdiction, authority, and power to regulate the rates and charges of a licensee under Part II of the Act; and such conclusion reached therein constituted an error of law as it does in its Opinion No. 173.

(10) The statement of the Commission on page 13 of Opinion No. 173 as follows:

"* * * the provision of 201 (b) relating to State authority over the exportation of hydroelectric energy is inapplicable."

on the grounds that:

(a) As stated in paragraph I (5) above.

(b) Nothing stated in the Commission's Opinion No. 143, *Re Safe Harbor Water Power Corporation*, 5 FPC 221, 235, shows a valid ground for the Commission's conclusion that such provision of Section 201 (b) of the Act is inapplicable; and such conclusion reached therein constitutes an error of law as it does in its Opinion No. 173.

(11) The statements of the Commission on pages 13, 14, and 20 of Opinion No. 173 as follows:

"* * * these [transmission] facilities [across Pennsylvania-Maryland State lines] are used to effect the sale of electric energy by Penn Water to Baltimore Company."

* * *

"It is equally clear that those facilities are also used for sales by Penn Water for resale.[18] (Such sales are Penn Water's sales to Baltimore Company and to Penn Water's Pennsylvania resale customers.)"

* * *

"* * * facilities owned and operated by Respondents include facilities used * * * for 'the sale of electric energy at wholesale in interstate commerce.'"

on the grounds that:

(a) Such statements are not supported by any substantial evidence of record and are contrary to the evidence of record.

(b) As stated in paragraph I (6) (a) (i), I (6) (a) (iii), and I (6) (h) above.

(12) The statements of the Commission on pages 14, 16, 17, 18, 19, 20, and 22 of Opinion No. 173 as follows:

"* * * Penn Water's sales in Pennsylvania * * * are * * * sales of output of the integrated and coordinated interstate electric system of which Penn Water's facilities are an integral part."

* * *

"* * * contribution [to sales of output of integrated system] * * * of * * * Baltimore Company, being determined by the best use the system can make of the plant's capabilities."

* * *

"* * * electric energy from the numerous system sources [including Baltimore Company] is available for consumption at any point on their combined facilities. Their [including Baltimore Company] power resources and transmission facilities are thus operated as an integrated and coordinated electric system, and all of Respondents' facilities are integral parts of that system."

* * *

"During the rest of the year [other than spring months] the practice is to generate energy at the hydro plants of Penn Water and Safe Harbor so as to assist Baltimore Company in carrying its peak loads during the day, but at other hours and during weekends to stop hydro generation so as to allow the ponds to refill."

* * *

"* * * energy crossing the State boundary, with other system energy, is used to fulfill system requirements."

* * *

"There result times when system energy generated in Pennsylvania is used, mixed or unmixed, in meeting system requirements in Maryland. Similarly, there are occasions when system energy from Maryland is used, mixed or unmixed, in meeting system requirements in Pennsylvania."

* * *

"It is accordingly evident that the operations of the unified system enterprise are completely interstate in character * * *."

* * *

"In the making of sales of system energy, such as those by Penn Water to its Pennsylvania utility customers * * *."

* * *

"* * * each of Penn Water's sales in Pennsylvania is clearly a system transaction of a character wholly interstate * * *."

* * *

"In short, Penn Water is selling interstate system energy to purchasers outside the system. Such sales are sales 'in interstate commerce'."

* * *

"* * * all of the energy thus sold [to Baltimore Company] crosses the State line. This latter sale is an intrasystem transaction between two integral corporate parts of the system enterprise, which transaction is ancillary to the consummation of sales of system energy by Baltimore Company to purchasers outside the system, such as PEPCO, or in enabling Baltimore Company's use of that energy for delivery and sale to its resale customers."

* * *

"The energy sold by Safe Harbor, like that sold by Penn Water to its Pennsylvania resale customers, includes varying amounts of energy which never crosses a state line. All are nevertheless sales 'in interstate commerce'."

* * * *

"* * * Safe Harbor's sale is like Penn Water's sale to Baltimore Company in that both are intra-system transactions."

* * * *

"It is also evident that Penn Water's sales to its Pennsylvania resale customers and its sale to Baltimore Company are all sales 'subject to the jurisdiction of the Commission' within the literal terms of Sections 205 and 206.

* * *

"* * * Penn Water's operations are all integral activities of the unified interstate systems, and its sales are sales in 'interstate commerce'."

on the grounds that:

(a) Such statements are not supported by any substantial evidence of record and are contrary to the evidence of record.

(b) The Commission has no jurisdiction, authority, or power to regulate the rates, charges or revenues of a y integrated system, but its jurisdiction is confined, if any, to the regulation of so much of the rates, charges or classifications of "licensees" or "public utilities" under the Federal Power Act as are for transmission or sale of electric energy at wholesale or for power service in interstate commerce; and the Commission failed to so conclude.

(c) The evidence of record shows that Baltimore Company has no obligations, contractual or otherwise, in the rendering of service by Penn Water or by Penn Water jointly with Safe Harbor to Metropolitan

Company, PP&L, and Philadelphia Company, and has no tariffs on file with any commission applicable to such service; that neither Penn Water nor Safe Harbor have any obligations, contractual or otherwise, to render service to PEPCO or to any of Baltimore Company's resale customers; that the interconnected system referred to by the Commission is an arbitrarily defined system assumed by the Commission, having no basis in fact; that the interconnections between Safe Harbor and Penn Water with Baltimore Company, and the operations and interchange of energy which formerly existed thereover were no different from similar interconnections, operations and interchanges with PP&L, Metropolitan Company, Philadelphia Electric, PEPCO, and others; and the Commission failed to so find.

(d) The evidence of record in this proceeding does not support the conclusions of the Court in *Safe Harbor Water Power Corp. v. Federal Power Commission,* 124 F. 2d 800, 802-803, 807, or the conclusions of the Commission in *Re Safe Harbor Water Power Corporation,* 5 FPC 221, with respect to the operations of Safe Harbor, made on the basis of the records in such other proceedings.

(e) As stated in paragraphs I (6) (a) (i), I (6) (a) (ii), I (6) (a) (iii), I (6) (h), II (6), and II (7) above.

(13) The statements of the Commission on pages 15, 16, and 18 of Opinio. No. 173 as follows:

> "* * * at times, energy generated by Baltimore Company or PEPCO is transmitted on these lines in the opposite direction to Safe Harbor. The 60-cycle energy thus received from Maryland * * * is transmitted by Penn Water * * * in part for delivery to PP&L's lines and in part for delivery over two 66 kv circuits (Nos. 15 and 16) to Holtwood. The energy so delivered at Holtwood is sometimes, in whole or in part, energy received at Safe Harbor from Baltimore and Takoma Park, Maryland. It is thereafter delivered * * * to

Philadelphia Company (Coatesville, Pa.), Metropolitan Company (York, Pa.) or PP&L (Lancaster, Pa.), via Circuit No. 18. At times it is also in part converted to 25-cycle three phase energy and transmitted and delivered to PP&L (Circuit No. 3) or to Baltimore Company at Highlandtown substation, or to both."

* * *

"The Highlandtown substation at times also receives from Baltimore Company a smaller amount of 25-cycle energy which is transmitted to Holtwood where it is delivered to PP&L or is converted to 60-cycle energy and delivered by Penn Water, to Safe Harbor or to the Pennsylvania customers."

* * *

"Energy flows in, across, and out of the system transmission network as the needs of the interconnected members develop from minute to minute and day to day."

on the ground that to the extent any of such statements were supported by the evidence of record, such statements are no longer in accord with the facts as a result of the material changes in operations and contracts occurring after the record was closed, as stated in paragraphs I (6) (h), II (6) and II (7) above.

(14) The statements of the Commission on pages 17 and 18 of Opinion No. 173 as follows:

"The system foundation contracts * * *, governing the operation of the system, were designed to facilitate this completely integrated operation of system generating and transmitting facilities. That purpose found expression in the Supplemental Agreement of June 1, 1931, Article VIII * * *.

"Contributing to the accomplishment of complete integration and pooling of the system's power resources are the provisions for over-all compensation to

Penn Water and Safe Harbor without regard to the amounts delivered or the points at which delivery is made."

* * *

"The very purpose of the system foundation contracts was the elimination of artificial barriers, such as State boundaries."

* * *

"* * * title to energy flowing on the system is of no significance among the companies comprising the system since they physically function as one enterprise and since the compensation features of the system contracts are so designed as to render considerations of title unimportant."

on the grounds that:

(a) Such statements are not supported by any substantial evidence of record and are contrary to the evidence of record.

(b) As stated in paragraphs I (6) (h), II (6) (c), II (7) (c), and II (12) (c) above.

(15) The statement of the Commission on page 19 of Opinion No. 173 as follows:

"The principles by which the foregoing conclusions [Opinion No. 173, pp. 12-19] are reached do not differ from those which must be applied in determining the character of Safe Harbor's sale of its output."

on the grounds that:

(a) Such statement is not supported by any substantial evidence of record and is contrary to the evidence of record.

(b) As stated in paragraphs I (4), I (6) (a), I (6) (b), I (6) (h), II (5), II (7), II (8), II (12), II (13) and II (14) above.

(16) The statements of the Commission on pages 20 and 21 of Opinion No. 173 as follows:

> "Respondents * * * contend that the Commission is without authority over the rate charged for the sales to PP&L, Philadelphia Company and Baltimore Company, claiming that such rates 'are joint rates over which this Commission has no jurisdiction'. This claim apparently rests upon the fact that Safe Harbor is a nominal party to Penn Water's contracts with PP&L and Philadelphia Company and upon the coordinated nature of operations of the integrated system. * * * it does not follow that the rates involved are 'joint' in any sense which removes them from this Commission's regulatory jurisdiction in this proceeding."
>
> * * *
>
> "* * * the real situation there [under Metropolitan Company contract] is precisely the same as that involved in Penn Water's contracts with PP&L and the Philadelphia Company where Safe Harbor is a nominal party."
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> * * *
>
> "* * * the compensation features of the contracts by which Safe Harbor and Penn Water sell to Baltimore Company clearly refute any suggestion of 'joint rate'. Indeed, the record is replete with evidence, much of it supplied by Penn Water, which shows this 'joint rate' contention to be wholly without substance."

on the grounds that:

(a) Such statements are not supported by any substantial evidence of record, are contrary to the evidence of record, and insofar as they consist of a statement of Respondents' contentions are not supported by the record as shown by Petitioners' Briefs, filed November 14, 1947, and January 15, 1948, referred to above.

(b) Such Briefs show (Main Brief, pp. 20-21, 33-38, Reply Brief, pp. 7-8, 14-16) that Respondents never

contended that the Commission lacks jurisdiction over joint rates, but they did and now contend that where rates for joint services are involved the Commission, having no authority to regulate a division of those rates, must have all the parties to a joint rate before it and evidence relating to the reasonableness of the joint rate, not to the divisions thereof.

(c) As stated in paragraphs I (6) (a) (iii), I (6) (b), I (6) (d), II (2), II (8).

(17) The statement of the Commission on page 21 of Opinion No. 173 as follows:

> "* * * Penn Water contends that its rates apply not only to energy but, indivisably, to capacity service, transmission services, frequency control, power-factor cooperation, use of special facilities, and other services, as well as energy, and that this Commission's jurisdiction is limited to rates and charges relating only to the sale of 'energy' in a strictly limited, technical sense. But all of these other so-called services are usual incidents of the wholesale sale of energy and many of them involve no segregable costs of service. The rates here involved, however they may be attributed to energy, capacity, and the other incidents referred to, are clearly within the scope of the statutory reference to 'rates and charges . . . for or in connection with the . . . sale of electric energy subject to the jurisdiction of the Commission' (Section 205 (a)) and to 'any rule, regulation, practice or contract affecting such rate, charge, or classification' (Section 206 (a)). We perceive nothing in Respondents' sales for resale to take them outside the scope of the regulation provided by Congress."

on the grounds that:

(a) Such statement is not supported by any substantial evidence of record, is contrary to the evidence

of record, and insofar as it consists of a statement of Respondents' contention is not supported by the record as shown by Petitioners' Briefs, filed November 14, 1947, and January 15, 1948, referred to above.

(b) The evidence of record shows that under the contracts for services with PP&L, Philadelphia Company, Metropolitan Company, and Railroad Company, there are rates and charges for capacity services, the use of special facilities, and other services which are separate from, independent of, are not in connection with, and do not affect any rates, charges, or classifications for any transmission or sale of electric energy; that under the former contract between Penn Water and Baltimore Company the revenues paid by Baltimore Company to Penn Water were paid without regard to the amount of any services rendered, and there are no rates, charges or classifications of Petitioners contained in such contract, as supplemented by the agreement of June 1, 1931, for the transmission or sale of electric energy; and that the services rendered all of such customers, other than transmission and electric energy services, are not usual incidents of any wholesale sale of electric energy, and many of the more important of such services involve costs which may be readily and reasonably segregated; and the Commission failed to so find.

(c) Nothing in Section 205 (a) of the Federal Power Act gives the Commission jurisdiction, authority, or power to regulate, determine or fix any rates or charges; nothing in Section 206 (a) of the Act gives the Commission jurisdiction, authority or power to regulate, determine or fix rates or charges "in connection with" the transmission or sale of electric energy subject to the jurisdiction of the Commission; and nothing in Section 206 (a) of the Act gives the Commission jurisdiction, authority, or power to regulate, determine, or fix any rule, regulation, practice, or contract which may affect any rate, charge, or classification which is not for a transmission or sale of electric energy subject to the jurisdiction of the Commission.

(d) As stated in paragraphs I (6) (a) (iii) and I (6) (a) (iv) above.

(18) The statement of the Commission on page 22 of Opinion No. 173 as follows:

"Since Section 19 deals with intrastate rates, our attention here may be confined to Section 20."

on the grounds that:

(a) Nothing in Section 19 of the Act limits its application to intrastate rates; and the jurisdiction of the Commission under Part I of the Act must be determined by the application of the interrelated provisions of Sections 19 and 20; and the Commission failed to so find.

(b) As stated in paragraph I (4) above.

(19) The statement of the Commission on page 22 of Opinion No. 173 as follows:

"* * * Penn Water's retail deliveries to the Pennsylvania Railroad in Pennsylvania are deliveries in interstate commerce * * *".

on the grounds that:

(a) Such statement is not supported by any substantial evidence of record and is contrary to the evidence of record.

(b) As stated in paragraphs I (4), I (6) (a) (i) (as applied to Railroad Company), I (6) (a) (ii), II (6), II (7), and II (13) above.

(20) The statement of the Commission on page 22 of Opinion No. 173 as follows:

"By a separate agreement among themselves, to which the Railroad is not a party, Penn Water and Baltimore Company have agreed upon a division, at the State boundary, of their deliveries * * *".

on the grounds that:

(a) Such statement is not supported by any substantial evidence of record and is contrary to the evidence of record.

(b) The evidence of record shows that by the separate agreement referred to the deliveries to Railroad Company within the States of Pennsylvania and Maryland were used only as an arbitrary measure of the basis for the division of the revenues received under the joint rate with the Railroad Company, and such deliveries do not measure the respective obligations of Penn Water and Baltimore Company, respectively, to the Railroad Company; and the Commission failed to so find.

(21) The statement of the Commission on page 23 of Opinion No. 173 as follows:

> "• • • the record shows that • • • during the course of such participation [by the Commissions of Pennsylvania and Maryland] and in the briefs of their respective counsel, clearly demonstrated that their positions are irreconcilable and that they are 'unable to agree'. Accordingly, we expressly find that the States are 'unable to agree'."

on the grounds that:

(a) Such statement is not supported by any substantial evidence of record and is contrary to the evidence of record.

(b) Such statements are not supported by any findings by the Commission as to the nature of the disagreement by the State Commissions involved.

(c) As stated in paragraph I (2) above.

(22) The statement of the Commission on page 23 of Opinion No. 173 as follows;

> "• • • if Section 20 be construed to confer upon the states a priority of jurisdiction over the interstate

wholesale rates of a licensee-public utility, the conflicting part of Section 20 must be considered repealed by implication, * * *. We reaffirm and need not repeat our discussion of this problem in the Safe Harbor proceeding (5 F. P. C. 231, 239-243). Here, as there, we conclude that whether Section 20 may be given an interpretation avoiding conflict (p. 242)

'. . . or whether the conflicting part of that section be deemed repealed by implication, the finding that the States are unable to agree is not a necessary condition precedent to our authority under that section, for the rates here in question, being interstate wholesale rates held beyond the regulatory power of the States in the *Attleboro* case, *supra*, the condition of Section 20 would be inapplicable. Our jurisdiction, therefore, would not be dependent upon our finding that the States are unable to agree'."

on the grounds that:

(a) Nothing in the Federal Power Act or the legislative history thereof supports the Commission's conclusion that Section 20 is repealed by implication or supports the foregoing statement; and construction of Sections 19 and 20 of the Act, as stated in paragraphs I (1) and I (2) and I (5) above, would avoid conflict between provisions of Parts I and II in the Act.

(b) Nothing in the *Attleboro* case determined that the interstate wholesale rates of licensees for hydroelectric service were beyond the regulatory power of the States when such regulation was authorized by Congress as in Sections 19 and 20 of the Act.

(c) The conclusions reached by the Commission in *Re Safe Harbor Water Power Corporation*, 5 F. P. C. 221, 239-243, constitute erroneous conclusions as a matter of law.

(23) The statement of the Commission on page 24 of Opinion No. 173 as follows:

"• • • Respondents have had a fair hearing on adequate notice.

"The scope of the subjects and issues involved were clearly set forth in the Commission's orders instituting and enlarging the investigation herein and fixing the date of hearing. The detailed position of the Staff with respect to these subjects and issues, as developed during the course of the Staff's investigation, were set forth by Staff's counsel in his opening statement, and at other times during the course of the hearing. There is not the slightest evidence that Respondents were unable to prepare their case because of any alleged vagueness in the specification of issues, • • •.

"Nor were Respondents deprived of an adequate opportunity to present their evidence or to cross examine adverse witnesses."

• • •

"[Respondents'] counsel had • • • ample time in which to prepare and present evidence rebutting Staff's rebuttal.

• • •

"Respondents fail to show that they have been prejudiced by any substantial error in any ruling of the Examiner excluding evidence.

"The record in this proceeding, therefore, does not support Respondents' claim of not having had ample notice and not having had a fair trial."

on the grounds that:

(a) Such statements are not supported by any substantial evidence of record and are contrary to the evidence of record.

(b) As stated in paragraphs I (6) (g) above.

(24) The statement of the Commission on page 139 of Opinion No. 173 as follows:

"Penn Water's revenues, per books, are classified as follows for the year ended December 31, 1946:

SALES OF ELECTRIC ENERGY

* * *

Total Sales of Electric Energy $6,305,198.63"

on the grounds that:

(a) Such statement is not supported by any substantial evidence of record and is contrary to the evidence of record.

(b) As stated in paragraphs I (6) (a) (iii), I (6) (a) (iv), and II (17) (b), above.

(25) The statement of the Commission on page 140 of Opinion No. 173 as follows:

"Penn Water's operating expenses for the year ended December 31, 1946, * * * as adjusted, are as follows:

* * *

Total operating expenses [as adjusted] $2,973,424."

on the grounds that:

(a) Such statements and adjustments are not supported by any substantial evidence of record and are contrary to the evidence of record.

(b) The evidence of record shows that Penn Water's total operating expenses for the year 1946 were not less than $4,053,947, and that such amount reflected the abnormally low operating costs of Safe Harbor for 1946 which were reflected in the abnormally low Safe Harbor power bill of $1,016,501; and that the Commission failed to so find.

(c) There is no substantial evidence of record to support adjustment of the cost of purchased power from

Safe Harbor by $37,063, or justify any failure to find that such adjustment should be substantially further increased.

(d) There is no substantial evidence of record to support the elimination from operating expenses for the year 1946 of the items of rate case expenses ($319,559), "non-operating items" ($15,293), and the adjustment downward of the following items of expense by eliminating the following amounts: Taxes, except federal income taxes ($33,000), Federal income taxes ($643,558); and the Commission has made no findings supporting such eliminations and adjustments.

(26) The statement of the Commission on page 140 of Opinion No. 173 as follows:

> "It is proper in this proceeding to eliminate from operating expenses * * * the rate case expenses, charged in 1946, as this is a non-recurring item, * * *"

on the grounds that:

(a) Such statement is not supported by any substantial evidence of record and is contrary to the evidence of record.

(b) The evidence of record shows that rate case expenses have been incurred in substantial amounts in every year since 1944; and the Commission failed to so find.

(c) If given the opportunity for rehearing, Petitioners hereby offer to prove that since the record of the proceeding was closed substantial amounts for rate case expenses have been incurred in the years 1947 and 1948 and will continue to be incurred in the reasonably foreseeable future.

(d) The amounts of rate case expense incurred for each year should be allowed in total, or in the alternative an average amount for the years 1944 to date should be allowed as representative of a year's operating expenses for this item.

(27) The statement of the Commission on page 141 of Opinion No. 173 as follows:

> "The item of $15,293 represents miscellaneous costs which Penn Water has classified as non-operating * * *."

on the grounds that:

(a) Such statement is not supported by any substantial evidence of record and is contrary to the evidence of record.

(b) The evidence of record shows that such amount represented salaries and insurance premiums actually paid as operating expenses and accounted for as such, and were eliminated from the Baltimore Company bill under a special agreement which expressly did not determine that such amounts were unreasonable or were not proper operating expenses; and the Commission failed to so find.

(28) The statement of the Commission on page 141 of Opinion No. 173 as follows:

> "The adjustment of the cost of power purchased from Safe Harbor, an increase of $37,063, has been made to give effect to the rate order of this Commission in the *Safe Harbor* case, supra."

on the grounds that:

(a) There is no substantial evidence of record to support any reduction in the rates of Safe Harbor or payments by Penn Water to Safe Harbor; such payments by Penn Water were not for "power purchased", but included Safe Harbor's division of revenues received for joint services to the Pennsylvania customers; and when the rate order of the Commission in the *Safe Harbor* case is finally set aside and enjoined by the United States Circuit (sic) Court of Appeals for the Third Circuit, No. 9345, Penn Water will be required to pay sums to Safe Harbor substantially in excess of $1,053,564 annually.

(b) Since the close of the record in the proceeding Penn Water has notified Baltimore Company and Safe Harbor, as stated in Petitioner's offer of proof in paragraph II (7) (c) (iii) above, of additional credits to Safe Harbor as its division of revenues from the Pennsylvania customers, thereby increasing substantially the amounts Penn Water credits or pays to Safe Harbor.

(c) If given an opportunity on rehearing, Petitioners hereby offer to prove that since the close of the record in the proceeding the Pennsylvania Commission has issued its orders dated September 27, 1948, in its Complaint Docket No. 14028, asserting jurisdiction over the intrastate business of Penn Water and Safe Harbor, and requiring Penn Water and Safe Harbor to file tariffs designed to carry into effect the requirements of the orders which have the effect of substantially changing distribution of charges to customers and revenues between Penn Water and Safe Harbor. Copies of the Pennsylvania Commission's Orders are attached hereto and made a part hereof.

(29) The statement of the Commission on page 141 of Opinion No. 173 as follows:

> "* * * the tax adjustments have been made to reflect the Pennsylvania and Federal income taxes on the basis of a reduction of revenues to yield a fair return of $1,300,672 * * *"

on the ground that any such adjustment results in the failure to determine the justness, reasonableness, or lawfulness of existing rates and charges on the basis of existing expenses, as required by Section 206 (a) or Section 20 of the Act.

(30) The statement of the Commission on page 141 of Opinion No. 173 as follows:

> "The excess revenue for the year ended December 31, 1946 is $2,176,736 * * *"

on the grounds that:

(a) Such statement is not supported by any substantial evidence of record and is contrary to the evidence of record.

(b) As stated in paragraphs II (25), II (26), II (27), II (28), II (29) above and II (66).

(31) The statement of the Commission on page 142 of Opinion No. 173 as follows:

> "* * * the amount thereof [net revenues from interchange], $1,127,699 has been added to revenues from Baltimore Company."

on the grounds that:

(a) Such statement and adjustment is not supported by any substantial evidence of record and is contrary to the evidence of record.

(b) The evidence of record shows that all interchange revenues received by Penn Water, net or otherwise, are received from PP&L, Philadelphia Company, and Metropolitan Company and not from Baltimore Company or as revenues from Baltimore Company, and such adjustment increasing revenues from Baltimore Company is wholly arbitrary and capricious; and the Commission failed to so find.

(32) The statement of the Commission on page 142 of Opinion No. 173 as follows:

> "An adjustment of revenue received for special facilities from Pennsylvania Railroad, in the amount of $141,777, in accordance with the allocation of costs of special facilities, has been made by adding the amount to revenues from Baltimore Company and deducting it from revenues from the Pennsylvania Railroad."

on the grounds that:

(a) Such statement and adjustment is not supported by any substantial evidence of record and is contrary to the evidence of record.

(b) The evidence of record shows that Penn Water receives no revenues from the Railroad Company, but its revenues for service to Railroad Company are received as an arbitrary division of the revenues paid Baltimore Company by the Railroad Company, which division was $1,625,575.45 in 1946 and had no basis in the respective costs of Railroad Company service of Penn Water or Baltimore Company; and that such adjustment of Penn Water's division received from Baltimore Company by $141,777, is arbitrary and capricious and without authority under the Federal Power Act; and the Commission failed to so find.

(33) The statement of the Commission on page 142 of Opinion No. 173 as follows:

> "The item of $133,750 representing Conowingo back-water payment has been * * * applied as a reduction of operating costs."

on the grounds that:

(a) Such statement and adjustment is not supported by any substantial evidence of record and is contrary to the evidence of record.

(b) The evidence of record shows that the receipt of such miscellaneous revenues does not operate to reduce the cost of service to Baltimore Company or any other customer; and such reduction in operating expenses by an amount equivalent to such miscellaneous revenues is arbitrary and capricious; and the Commission failed to so find.

(34) The statement of the Commission on page 142 of Opinion No. 173 as follows:

> "* * * the gross revenues and cost of service are classified as follows:

Revenues:	
Baltimore Company	$2,386,311
Railroad (in Pa.)	1,483,798
P. P. & L. Co.	1,958,356
Philadelphia Co.	948,861
Metropolitan Co.	667,455
Total Revenues	$7,444,781
Cost of Service:	
Operation and Maintenance	$1,932,625
Purchased Power—Safe Harbor	1,053,564
Taxes	513,483
Depreciation	467,701
Return at 5.25%	1,300,672
Cost of Service	$5,268,045

"The difference between total revenues and the total cost of service, is therefore, $2,176,736."

on the grounds that:

(a) Such statement is not supported by any substantial evidence of record and is contrary to the evidence of record.

(b) As stated in paragraphs II (30), II (31), II (32), and II (33) above.

(35) The statement of the Commission on page 142 of Opinion No. 173 as follows:

"An allocation of cost has been made to determine the cost of service to each customer and the resulting excess revenue therefrom."

on the grounds that:

(a) Such statement is not supported by the evidence of record or the findings or statements in such

Opinion or the accompanying Order, and is contrary to the evidence of record.

(b) The findings or statements of the Commission show on their face that the resulting "excess revenue" determined by the Commission does not result from the allocation of the total costs of service of Penn Water as found by the Commission, but results from arbitrary and capricious adjustments of revenues and expenses and from arbitrary credits to Baltimore Company for an arbitrarily assumed diversion of capacity and energy without any support in the record by substantial evidence; and the Commission failed to so find.

(c) The evidence of record shows that the costs and revenues compared by the Commission as to each customer are, in fact, not comparable in that the services involved in the determination of costs are not the same services involved in the determination of revenues; and the Commission failed to so find.

(36) The statement of the Commission on page 143 of Opinion No. 173 as follows:

> "Staff's witness Davis allocated the total cost of service * * * supplied by Respondents."

on the grounds that:

(a) Such statement is not supported by the evidence of record and is contrary to the evidence of record.

(b) The evidence of record shows that Mr. Davis deducted from expenses substantial sums which were not allocated by him, and such deductions were arbitrary, capricious, and not supported by any substantial evidence of record or otherwise justified on the record; and the Commission failed to so find.

(c) The evidence of record shows that the allocation of that part of the costs of Penn Water by Mr. Davis represented by payments to Safe Harbor did not re-

flect the total Safe Harbor costs of service to the Pennsylvania customers which costs were substantially larger than the payments by Penn Water; and the Commission failed to so find.

(37) The statement of the Commission on page 143 of Opinion No. 173 as follows:

> "* * * crediting the latter [Baltimore Company] with an amount of firm energy and capacity supplied by it for use by Penn Water in serving the latter's customers in Pennsylvania."

on the grounds that:

(a) Such statement as to the amount of firm energy and capacity supplied by Baltimore Company is not supported by any substantial evidence of record and is contrary to the evidence of record.

(b) The evidence of record shows that Safe Harbor supplied substantial amounts of firm energy and capacity in excess of one-third of its output for use in serving the joint Pennsylvania customers of Penn Water and Safe Harbor; that Baltimore Company had no title or other right to such capacity and energy, and no part of such Safe Harbor supply was supplied by Baltimore Company to Penn Water for use in serving any of the Pennsylvania customers; and the Commission failed to so find.

(c) Since the close of the record in the proceeding Penn Water has notified Baltimore Company and Safe Harbor, as stated in Petitioners' offer of proof in paragraph II (7) (c) (iii) above.

(38) The statement of the Commission on page 145 of Opinion No. 173 as follows:

> "Davis included Penn Water's cost of purchased power as a part of operating expense to be allocated,* * *"

on the grounds that:

(a) Such statement is not supported by any substantial evidence of record and is contrary to the evidence of record.

(b) The evidence of record shows that Mr. Davis did not include any of the costs of purchased interchange power paid by Penn Water as a part of Penn Water's operating expense to be allocated; that not all of the Safe Harbor costs of serving the Pennsylvania customers were included in the costs allocated, as stated in paragraphs II (25) (b), II (25) (c), II (28), II (36) (c) and II (37) (b), above; that the statements and findings of the Commission show that it committed the same errors in its allocation; and the Commission failed to so find.

(39) The statements of the Commission on pages 145 and 150 of Opinion No. 173 as follows:

> "* * * Davis based a part of his exhibit upon the pooling of investment or costs for all those facilities which he found were used in rendering a service common to all and not specifically applicable to any one customer, and upon a final allocation thereof according to capacity or energy use by each customer."
>
> * * * * * *
>
> "There are no issues here raised with respect to Davis' allocation of * * * the rest of the transmission system, * * * to pool."

on the grounds that:

(a) Such statements are not supported by any substantial evidence of record and are contrary to the evidence of record.

(b) The evidence of record shows that a substantial part of the pool costs allocated by Mr. Davis consisted of the investment and associated costs of the 25-cycle substation and hydro production plants at Holtwood,

which is not used in rendering service common to all customers but is specifically applicable primarily to service to Baltimore Company, with a minor amount of service to PP&L; that as a result of such erroneous assumptions by Mr. Davis with respect to the use of such 25-cycle facilities a substantial portion of Penn Water cost properly allocable to Baltimore Company was not so allocated by Mr. Davis; that to the extent the Commission followed the principles and assumptions of Mr. Davis in this respect it committed the same error; and the Commission failed to so find.

(40) The statement of the Commission on page 147 of Opinion No. 173 as follows:

> "* * * the river-run characteristics of Penn Water's hydro plant (and Safe Harbor's) makes it impracticable for Penn Water to serve the firm requirements of the Pennsylvania customers without the availability of the substantial amounts of off-peak energy which it obtains from Baltimore Company."

on the grounds that:

(a) Such statement is not supported by any substantial evidence of record and is contrary to the evidence of record.

(b) Since the close of the record in the proceedings, the operations of the interconnected systems of Penn Water and Safe Harbor have been so changed that no energy will be obtained from Baltimore Company, as stated in Petitioners' offer of proof in paragraph I (6) (h) above.

(41) The statement of the Commission on page 147 of Opinion No. 173 as follows:

> "* * * the contracts with Pennsylvania customers, providing for economy interchange, are obviously neither designed nor adequate for 'firming' up Penn Water hydro for services to the Pennsylvania cus-

tomers. The very use of the term 'economy' in the contracts describing this type of interchange is demonstrative of such inadequacy."

on the grounds that:

(a) Such statement is not supported by any substantial evidence of record and is contrary to the evidence of record.

(b) Since the close of the record in the proceeding, the 1927 agreement with Baltimore Company providing for backfeed energy has been terminated and no such backfeed is now received, as stated in paragraphs I (6) (h) and II (6) (c), above; and if given the opportunity on rehearing, Petitioners further offer to prove that they can, and will obtain from already available sources in Pennsylvania an ample energy supply to supplement the capacity and energy resources of Safe Harbor and Penn Water to fully meet their firm power obligations to the Pennsylvania resale customers.

(42) The statements of the Commission on pages 147 and 148 of Opinion No. 173 as follows:

"Zinder's allocation does not properly reflect the necessary use of these lines [220 kv] by Penn Water in meeting the firm requirements of the Pennsylvania customers.

"Davis * * * assigned these facilities and their associated costs * * * giving consideration to * * * during two or three months of extreme low river flow the great bulk of energy is being transmitted from Baltimore, to make up the deficiency in Penn Water's firm supply for its Pennsylvania customers; and during the remaining four to six months the facilities are used to transmit energy alternately in either direction, with Penn Water receiving energy from Baltimore Company during off-peak periods of the day, to enable it to store water at such times.

"Giving due consideration to the character of services provided * * * to the Pennsylvania customers by the use of these lines, * * * Davis' allocation of 66-2/3rd directly to Baltimore Company * * *, is found to be reasonable."

on the grounds that:

(a) Such statements are not supported by any substantial evidence of record, are contrary to the evidence of record, and allocations based thereon result in a substantial understatement of the costs allocated to Baltimore Company.

(b) As stated in paragraphs I (6) (h), II (11), II (12), and II (13) above.

(43) The statement of the Commission on pages 150 and 151 of Opinion No. 173 showing the allocated special facility costs obtained for each customer on the grounds that:

(a) Such statement is not supported by any substantial evidence of record and is contrary to the evidence of record which shows such costs to be substantially higher.

(b) The evidence of record shows that the operating expenses shown do not include an allocated portion of all of Penn Water's operating expenses, as stated in paragraphs II (25), II (26), and II (27), above; that the amounts shown for "Bill for Safe Harbor Power" do not include an allocated portion of all the costs of Safe Harbor special facilities, as stated in paragraph II (28) above; that the taxes shown do not include an allocated portion of actual taxes paid, as stated in paragraph II (29) above; that the amounts for return shown are insufficient, as stated in paragraph II (66), and in addition are based

upon rate bases which do not include an allocated portion of general and intangible plant, and as stated in paragraphs II (60), II (61), II (62), II (63), II (64), II (65), and II (67); and the Commission failed to so find.

(44) The statement of the Commission on page 152 of Opinion No. 173 as follows:

> "In charging Pennsylvania customers equitably for energy received, it becomes necessary and proper to * * * credit it [Baltimore Company] for all steam capacity and energy supplied by it and all hydro capacity and energy diverted from it."

on the grounds that:

(a) Such statement is not supported by any substantial evidence of record or findings by the Commission, and is contrary to the evidence of record.

(b) The evidence of record shows that no issue was raised in the notice of investigation or otherwise as to the justness, reasonableness, or lawfulness of the rates or charges of Baltimore Company for steam-generated electric capacity and energy service to Penn Water, under Article 6 of the Penn Water-Baltimore Company contract of December 31, 1927, and no such investigation has been made; that any credits to Baltimore Company for any steam-generated electric services, other than at the rates or charges specified in such Article 6, have no basis or support by substantial evidence in the record; that no hydro capacity or energy has been or is diverted from Baltimore Company which would justify any credits on the basis of Baltimore Company steam costs or otherwise, as stated in paragraph II (35) above; and the Commission failed to so find.

(45) The statement of the Commission on pages 152 and 153 of Opinion No. 173 as follows:

> "* * * there should be charged to Baltimore Company the net Holtwood dependable hydro capacity (84,480 kw), less the Holtwood 60 cycle hydro rating (24,000 kw), the Holtwood 25 cycle capacity supplies PP&L (5,000 kw) at Lancaster, Pennsylvania, and the capability of the two 25-60 cycle frequency changers (14,000 kw) at Holtwood."

on the grounds that such statement is not supported by any substantial evidence of record or by any findings or statements of the Commission; is arbitrary, capricious, and contrary to the evidence of record; results in a substantial understatement of the costs allocated to Baltimore Company; there is no justification of record supporting the deduction of the 60-cycle hydro rating (24,000 kw), and such deduction is not an allocation of "dependable hydro capacity" between 25 and 60 cycle services, and such deduction is the deduction of a gross amount before station use and line losses from a net amount after such uses and losses; and there is no justification for deduction of frequency converter capacity in determining dependable hydro capacity at Holtwood available to Baltimore Company.

(46) The statement of the Commission at page 153 of Opinion No. 173 as follows:

> "Spaulding's 50-50 division of costs between capacity and energy is thus patently a departure from cost determination procedure."

on the ground that such statement is not supported by any substantial evidence of record, or by any findings or statements of the Commission, and is contrary to the evidence of record.

(47) The statements of the Commission on pages 155, 156, 157, and 158 of Opinion No. 173 as follows:

"The most important element in Spaulding's determination of capacity available for supply to Baltimore Company was the determination by Respondent's witness Watchorn of 295,000 kw as the dependable hydro capacity of the Holtwood and Safe Harbor plants. * * * This method [Watchorn's] of determining dependable capacity was not used by Penn Water in its operations prior to 1944 and is not only highly speculative but is of unproven reliability from an operating standpoint.

* * *

"A larger allowance for drawdown than that provided by Davis would not only fail to fit into that program [weekly recovery cycle] but the departure therefrom during a period of low flow would undoubtedy adversely affect the sustained peak-carrying hydro capacity of the plants. * * * Davis * * * provision for additional capacity use in the amount of 55,000 kw * * * is an adequate allowance for such intangibles as might inhere. * * *

* * *

"It is therefore found that Davis' determination of dependable capacity is reasonable and acceptable for the purposes of this proceeding and that the determination of the witness Watchorn is not sufficiently supported by established or tested procedures to be reliable and here acceptable."

on the grounds that:

(a) Such statements are not supported by any substantial evidence of record or by any findings or statements of the Commission, are contrary to the evi-

dence, and any allocation based thereon results in a substantial understatement of the costs allocated to Baltimore Company.

(b) If given the opportunity on rehearing Petitioners hereby offer to prove that the testimony of the witness Watchorn, characterized as speculative and of unproven reliability, has been verified and shown to be conservative by operating experience of Penn Water and other companies since the close of the record in the proceeding.

(c) If given an opportunity on rehearing Petitioners hereby offer to prove that using Davis' method of determining "dependable hydro capacity" the amount thereof would be increased substantially under 1948 conditions of operation; that the one-hour integrated generation of the Holtwood and Safe Harbor hydro plants for the peak hours of Area 6 (plus the Pennsylvania customers) were 292,000 kwh and 313,000 kwh for 1947 and 1948, respectively, and the total hydro capacity operating and available was 318,000 kw and 328,000 kw for such years, respectively; and that the 1948 hydro load carrying capability which was actually depended upon during such peak hour was 319,000 kw.

(d) The evidence of record shows that the dependable hydro capacity used by Mr. Spaulding was the result of his independent investigation and determination; and the Commission failed to so find.

(48) The allocation of 91,740 kw of dependable capacity to Holtwood, as shown on page 159 of Opinion No. 173 on the ground that such allocation is not supported by any substantial evidence of record or by any findings or statements of the Commission, is contrary to the evidence of record, and any allocation based thereon results in a substantial understatement of the costs allocated to Baltimore Company.

(49) The statement of the Commission on page 160 of Opinion No. 173 that Mr. Davis' deduction of 153,512 kw as the Pennsylvania customer loads corresponded to the deduction for such loads by Mr. Spaulding; on the ground that such statement is not supported by any substantial evidence of record and is contrary to the evidence of record, in that the deduction made by Mr. Spaulding was made upon different factors of dependable capacity and load requirements; and the Commission failed to so find.

(50) The statement of the Commission on pages 160 and 161 of Opinion No. 173 that the Railroad load deducted by Mr. Davis has precedent and is fair, both as to the determination of the demand and as to the allocation of a portion of such demand to Pennsylvania on the basis of energy used; on the ground that such statement is not supported by any substantial evidence of record and is contrary to the evidence of record; and any allocation based upon such a deduction results in a substantial understatement of the costs allocated to Baltimore Company; and if given an opportunity on rehearing Petitioners hereby offer to prove that the actual one-hour integrated Railroad load at the time of the combined Area 6 (plus Pennsylvania customers) peak load was 56,000 kw and 52,000 kw in 1947 and 1948, respectively.

(51) The statement of the Commission on page 161 of Opinion No. 173 that Respondents' objection to any allowance by Mr. Davis of any amount for reserve for Metropolitan Company is without merit and that:

> "* * * the nature of the Metropolitan Company's contract in respect to reserve provision is no different from those of the other customers involved."

on the ground that such statements are not supported by any substantial evidence of record, are contrary to the evidence of record, and any allocation based thereon results in a substantial understatement of the costs allocated to Baltimore Company; and, if given an opportunity on rehear-

ing, Petitioners hereby offer to prove that Metropolitan Company's report on FPC Form 12 for the years 1946 and 1947 show that Metropolitan Company does not rely on any provision for reserve capacity from Penn Water.

(52) The statement of the Commission on pages 161 and 162 of Opinion No. 173 as follows:

"* * * the capacity considered as supplied to and by Baltimore Company is as follows:

	Holtwood Steam (kw)	Holtwood Hydro (kw)	Safe Harbor Hydro (kw)	Total (kw)
Dependable capacity	28,000	91,740	158,260	278,000
Less prorated station use and line losses	2,216	7,260	12,524	22,000
	25,784	84,480	145,736	256,000
Less Baltimore Co's 2/3 rds of Safe Harbor's capacity			97,157	97,157
Less 25 cycle to Highlandtown [126]		41,480		41,480
	25,784	43,000	48,579	117,363
Demands in Pennsylvania [127]				153,512
Balance to be supplied by Baltimore Company				36,149"

* * * * * * *

"126. Dependable 25 and 60 cycle capacity at Holtwood (net); 84,480 kw

Capability two Holtwood frequency converters	14,000 kw	
Holtwood 60 cycle rated capacity	24,000	
PP&L (Lancaster) 25 cycle load	5,000	43,000
		41,480 kw

"127. Coincident demands of Pennsylvania customers plus allowance for reserve:

P. P. & L.	55,000 kw
P. E. Co.	27,000 kw
M. E. Co.	21,000 kw
Penna. R. R.	36,557 kw
10% Reserve	13,955 kw
Total	153,512 kw"

on the grounds that:

(a) Such statements are not supported by any substantial evidence of record; are not supported by any findings or statements of the Commission, and are contrary to the evidence of record.

(b) The evidence of record shows that the dependable capacity assigned to Holtwood of 91,740 kw is understated, for the reasons as stated in paragraphs II (45), II (46), II (47) and II (48) above; that there is no justification for a deduction of 97,157 kw as "Baltimore Co's 2/3rds of Safe Harbor's capacity", for the reasons as stated in paragraph II (7) above; that the coincident demands in Pennsylvania of 153,512 kw are overstated, for the reasons stated in paragraphs II (49), II (50), and II (51) above, and paragraph (c) hereof; and that Baltimore Company supplies no part of the demands in Pennsylvania, for the reasons stated in paragraphs I (6) (h) and II (44) above; and the Commission failed to so find.

(c) The evidence of record shows that under the contract with PP&L, Penn Water and Safe Harbor have the option to reduce their supply to PP&L by 20% during on-peak periods of days of low flow so that in determining the dependable capacity available to Baltimore Company (under conditions of low flow) the actual demand of PP&L should be reduced by 20% to correctly state the dependable capacity actually available to Baltimore Company; that the amount of 153,512 kw less reserve is substantially in excess of the actual coincident demands of the customers shown; that any allocation based upon the deduction of such amount results in a substantial understatement of the costs to Baltimore Company; and the Commission failed to so find.

(d) The evidence of record shows that the coincident demands of Pennsylvania customers deducted

by the Commission in determining the net dependable capacity available for Baltimore Company (5,331 kw), are not the coincident demands of such customers at the time of the peak demand on the system of Penn Water or the system of Penn Water and Safe Harbor; the dependable capacity determined by the Commission to be available to the Baltimore Company is not coincident with and does not measure the maximum demand by Baltimore Company on the system of Penn Water or the system of Penn Water and Safe Harbor; the peak demands on the system of Penn Water or the system of Penn Water and Safe Harbor are substantially different from and are not coincident with the peak demands on the Area 6 system or the system assumed by the Commission; and the Commission failed to so find.

(e) As stated in paragraph II (3).

(53) The statements of the Commission on pages 162 and 163 of Opinion No. 173 as follows:

> "The foregoing total capacity cost ($2,882,478) divided by the Pennsylvania customers' maximum non-coincident demands (154,000 kw) plus the net dependable capacity available for Baltimore Company (5,331 kw) yields a unit capacity cost of approximately $18.09 per kw. This cost applied to an aliquot of the maximum demands of the several Pennsylvania customers on a non-coincident basis and to the 41,480 kw of capacity found proper for allocation to Baltimore Company (*supra*) results in an allocation of the cost of pool capacity as a constituent of total capacity cost as follows:

	Pool Capacity Cost [129]	Baltimore Co. Supply Capacity Cost [130]	Total Capacity Cost
P. P. & L. Co.	$ 927,587	$ 188,724	$1,116,311
Philadelphia Co.	359,959	73,236	433,195
Metropolitan Co.	318,422	64,788	383,210
Railroad (in Pa.)	526,090	107,040	633,130
Baltimore Co.	750,420	(433,788)	316,632
Total	$2,882,478	—	$2,882,478"

"129. Assuming the Pennsylvania maximum demands are each met by Penn Water's capacity and Baltimore Company's supply in the ratio of 117,851 kw and 36,149 kw to the total of 154,000 kw.

"130. Computed at $12 per kw."

on the grounds that:

(a) Such statements are not supported by any substantial evidence of record and are contrary to the evidence of record.

(b) As stated in paragraphs II (25), II (26), II (27), II (28), II (29), II (33), II (35), II (36), II (37), II (38), II (39), II (44), II (45), II (46), II (47), II (48), II (49), II (50), II (51) and II (52) above; II (60) through II (67), inclusive.

(c) Such allocation is made by the Commission on the non-coincident peak basis instead of the coincident peak responsibility basis, without justification in the record and arbitrarily and capriciously; and the evidence of record shows that the non-coincident demands of the various customers used by the Commission are not comparable peak demands; and the Commission failed to so find.

(54) The statements of the Commission on pages 163, 164 and 165 of Opinion No. 173 as follows:

"Holtwood unit energy costs are obtained by dividing the total energy cost ($1,232,563) by the delivery by Penn Water from its Holtwood hydro and steam plant and from its 1/3rd entitlement to Safe Harbor's output, which for 1946 totaled 992,320 mwh. The resulting Holtwood energy cost is 1.24 mills per kwh. * * * Of this 937,950 mwh supplied [to Pennsylvania customers], Penn Water had available 615,636 mwh (992,320 mwh less deliveries of 25 cycle energy to Baltimore Company at Highlandtown) and the remainder required (322,314 mwh) was obtained from Baltimore Company. * * * * using the ratio of Baltimore Company's contribution of 322,314 mwh (34.4%) and Penn Water's of 615,636 mwh (65.6%) to the total of their combined contributions, it is found that Penn Water delivered from its resources 489,835 mwh for firm sales (including the Railroad in Pennsylvania) and 125,801 mwh for interchange sales to Pennsylvania customers and Baltimore Company delivered 256,451 mwh for firm sales and 65,863 mwh for interchange in Pennsylvania. As interchange sales in Pennsylvania are on a when-as-and-if basis, the mwh so supplied by Penn Water comes from Baltimore Company's contract residual entitlement to Penn Water's resources and are therefore deemed to have been made for Baltimore Company's account. On this basis, Baltimore Company received a total of 502,485 mwh at the Holtwood energy cost, made up of deliveries to it at Highlandtown (376,684 mwh) and the amount sold by Penn Water from its own resources as interchange (125,801 mwh). Accordingly, the Pennsylvania customers are deemed to have received 489,835 mwh of firm energy at Holtwood energy cost (1.24 mills/kwh), and 256,451 mwh of firm energy at Baltimore Company's average steam

production cost (4.7 mills/kwh), while Baltimore Company is to be credited with the cost to it of supplying such firm energy against the charge made to it for the 502,485 mwh at the Holtwood energy cost. The allocation of these pool energy costs are as follows:

	Firm Energy Supplied			Firm Energy Cost		
	From Holtwood	From Baltimore	Total	From Holtwood	From Baltimore	Total
TO:	(mwh)	(mwh)	(mwh)	($)	($)	($)
PP&L	202,533	106,036	308,569	251,567	498,367	749,934
Philadelphia Co.	89,022	46,607	135,629	110,574	219,053	329,627
Metropolitan Co.	58,158	30,448	88,606	72,238	143,107	215,345
Railroad (in Pa.)	140,122	73,360	213,482	174,046	344,793	518,839
Sub-Total	489,835	256,451	746,286	608,425	1,205,320	1,813,745
Baltimore Co.	502,485	(256,451)	246,034	624,138	(1,205,320)	(581,182)
Total	992,320	—	992,320	$1,232,563	—	$1,232,563

"The amount of residual hydro energy delivered to Baltimore Company by Respondents in 1946 (502,485 kwh) at the Holtwood energy cost (1.24 mills) combines with the firm energy supplied by Baltimore Company (256,451 mwh) in 1946 for the use of Penn Water's Pennsylvania customers to give a net credit to Baltimore Company, for firm energy supplied by it against residual energy received, in the amount of $581,182."

on the grounds that:

(a) Such statements are not supported by any substantial evidence of record or by any findings or statements of the Commission, and are contrary to the evidence of record.

(b) As stated in paragraphs I (6) (h), II (25), II (26), II (27), II (28), II (29), II (33), II (35), II (36), II (37), II (38), II (39), and II (44), above; and II (60) through II (67), inclusive.

(c) If given the opportunity on rehearing Petitioners hereby offer to prove that since the close of the

record in the proceeding the generation of steam energy at Holtwood has substantially increased on a normal annual basis, and that the annual net interchange sales of energy to the Pennsylvania customers are substantially decreased on a normal annual basis.

(55) The statement of the Commission on pages 165 and 166 of Opinion No. 173 as follows:

"The allocated special facility costs added to the allocated hydro capacity cost and the allocated cost of capacity supplied by Baltimore Company (supra) and the firm energy costs give total allocated costs which compare with total revenues as follows:

	Total Costs	Total Revenues	Excess Revenues Amount	Percent
PP&L Co.	$1,877,818	$1,958,356	$ 80,538	3.70
Philadelphia Co.	834,550	948,861	114,311	5.25
Metropolitan Co.	641,361	667,455	26,094	1.20
Railroad (in Pa.)	1,261,323	1,483,798	222,475	10.22
Baltimore Company	652,993	2,386,311	1,733,318	79.63
Total	$5,268,045	$7,444,781	$2,176,736	100.00

on the grounds that:

(a) Such statements are not supported by any substantial evidence of record or by any findings or statements of the Commission, and are contrary to the evidence of record.

(b) As stated in paragraphs II (24), II (30), II (31), II (32), II (33), II (34), II (35), II (43), II (53) and II (54); above.

(56) The statement of the Commission on page 166 of Opinion No. 173 as follows:

"The above determination of excess revenues demonstrates that Penn Water's rates are excessive, unreasonable and discriminatory. It is accordingly found that Respondent shall revise its rates and charges so as to result in a reduction of $80,538 to

P. P. & L. Co., $114,311 to Philadelphia Co., and $26,094 to Metropolitan Company * * *."

on the grounds that:

(a) Such statement is not supported by any substantial evidence of record or by any findings or statements of the Commission, and is contrary to the evidence of record.

(b) As stated in paragraph II (55) above.

(c) If given an opportunity on rehearing Petitioners hereby further offer to prove that since the close of the record in the proceeding the orders of the Pennsylvania Commission referred to in paragraph II (28) (c) above, have directed Penn Water and Safe Harbor to change their rates and charges for intrastate services to the Pennsylvania customers referred to, effecting changes in revenues differing substantially from the changes referred to by the Commission and in direct conflict therewith.

(57) The statement of the Commission on page 166 of Opinion No. 173 as follows:

"* * * Baltimore Company in times of severe water shortage may carry the main burden of supplying the foregoing Pennsylvania customers."

on the grounds that:

(a) Such statement is not supported by any substantial evidence of record and is contrary to the evidence of record.

(b) As stated in paragraph I (6) (h) above.

(58) The statement of the Commission on page 167 of Opinion No. 173 as follows:

"It is not feasible, because of the nature of Penn Water's operations, for the latter to assume firm commitments to all its customers, including Baltimore Company. The present arrangement whereby * * * Bal-

timore Company takes what is left and assures Respondents of the recovery of all proper operating expenses, depreciation, taxes and a fair return, is the most practicable under the circumstances. That arrangement will, therefore, be continued • • •"

on the grounds that:

(a) Such statement is not supported by any substantial evidence of record and contrary to the evidence of record.

(b) As stated in paragraphs II (6) (a) and II (6) (c) above.

(59) The statement of the Commission on page 167 of Opinion No. 173 as follows:

"Penn Water's rates and charges to Baltimore Company will be just and reasonable when the power bill is computed by the use of a fair rate of return and the rate base we have found, brought down to date every six months for changes in the plant investment, depreciation reserve and working capital. In computing the power bill to Baltimore Company there shall be added to the fair return all reasonable and necessary operating expenses, taxes and depreciation computed on the plant investment and at the depreciation rates we have herein found proper; there shall be deducted from such total electric revenues received from others, including the Conowingo backwater payment, and the gross revenues from Metropolitan Co., P. P. & L. Co., and Philadelphia Co., and the gross revenues, except the excess revenues, calculated at $222,475 for the year 1946, and income taxes associated therewith, from Pennsylvania Railroad."

on the grounds that:

(a) Such statement is not supported by any evidence of record and is contrary to the evidence of record.

(b) As stated in paragraph II (55) above.

(60) Petitioners seek rehearing of the following statements, findings, and conclusions on pages 128 to 131, inclusive of the Commission's Opinion No. 173.

1. That Petitioners' claim for $488,092 as the cash component of working capital is not acceptable. (page 128)

2. That Petitioners' claim of $125,000 for "contingencies such as floods, fires, etc., in" working capital is not properly allowable. (pages 128, 129)

3. That Petitioners' claim of $126,000 for rate case expense in working capital is not properly allowable. (page 129)

4. That "the amount of $256,644 represents an adequate amount for the cash component of a working capital allowance." (page 129)

5. That Petitioners' claim of $489,068 for the materials and supplies component in working capital is not acceptable. (page 130)

6. That the recommendation of the Staff that an allowance of $396,421 for the materials and supplies component in working capital "is reasonable and is supported by the evidence." (page 131)

7. That "the amount of $650,000 is herewith allowed in the rate base as Respondents' working capital requirement." (page 131)

on the grounds that:

(a) The statements, findings, and conclusions are not supported by substantial evidence, are contrary to the substantial evidence and are contrary to law and the Federal Power Act; and

(b) The statements, findings, and conclusions result in depriving Petitioners of their property without due process of law, in violation of the Fifth Amendment to the Constitution of the United States.

(61) Petitioners seek rehearing of the Commission's Order No. 173 for failure of the Commission to make the following findings and conclusions:

1. That the required cash component in working capital for the year 1946 is $488,092 and an allowance of that amount is proper.

2. That an allowance of $125,000 for 1946 is required as a part of the cash component for "contingencies such as floods, fires, etc."

3. That an allowance of $126,000 for 1946 is required as a part of the cash component for rate case expense.

4. That an allowance of $489,068 is required for the materials and supplies component in working capital and should properly be made.

5. That the amount of $977,160 for working capital for 1946 is required and should be properly allowed.

6. That the Commission's Staff recommendations as to working capital are not supported by the substantial evidence and are contrary to the substantial evidence.

on the grounds that:

(a) The failure to make such findings and conclusions is contrary to law and the Federal Power Act and results in depriving Petitioners of their property without due process of law, in violation of the Fifth Amendment to the Constitution of the United States.

(62) Petitioners herein object to and seek rehearing of the following portions of the Commission's Opinion No. 173, relating to the determination of electric plant, rate base and the original cost of Petitioners' property, on the grounds that the Commission erroneously decided each and all of the following statements, matters, findings and conclusions of law and erred with respect thereto in that said

statements, matters, findings and conclusions of law are not supported by substantial evidence, are contrary to the substantial evidence and contrary to law and the Federal Power Act:

1. That it is incumbent upon the Petitioners to show that the amount they claim as cost was cost to an affiliate and not profit. (page 28)

2. That Cary T. Hutchinson's activities culminated in the completion of financial arrangements for the erection of the dam or the incorporation of McCall Company. (page 28)

3. That the "no-profits-to-affiliates" rule applies in connection with the valuation of McCall Company stock. (page 28)

4. That "the original syndicate" enlisted and obtained the aid of Harvey Fisk & Sons. (page 29)

5. That Lee, Higginson & Company and C. A. Coffin, principally or entirely, secured subscriptions of approximately $4,000,000 of bonds. (page 29)

6. That the stock purchase agreement, dated March 25, 1905, was the result of negotiations with the Fisk firm by the original syndicate. (page 29)

7. That any arrangements agreed upon between the syndicate members themselves as to control of the McCall Company, and distribution of its stock, etc., are unknown. (page 29)

8. That bonds totaling $8,075,000, principal amount, were sold at 90 cents on the dollar. (pages 29, 30)

9. That the March 25th agreement is the only contemporaneous evidence which refers to compensation to be received by the Fisk firm. (page 30)

10. That there is no other contemporaneous evidence showing that the Fisk firm received or was en-

titled to compensation other than that hoped to be realized through the resale of the bonds at a price above 90. (page 30)

11. That Mr. Hutchinson was to receive and retain 48,840 shares of common and 4,000 shares of preferred stock of the McCall Company. (page 31)

12. That there is no credible evidence to support Petitioners' claimed distribution of the stock of McCall Company. (page 32)

13. That it is questionable as to whether it was intended that the firm of Bertron, Storrs & Griscom should retain 7,462½ shares as compensation for services rendered. (page 32)

14. That Petitioners' claim must be rejected insofar as it relates to Harvey Fisk & Sons. (page 32)

15. That on the question of control of the McCall Company, Petitioners' claim that Mr. Hutchinson lost control of the enterprise to Harvey Fisk & Sons should be rejected. (page 32)

16. That credible evidence exists to furnish a basis for the Commission to conclude that when the Fisk firm came into the financing, the original promoters merely opened their ranks to an additional member and thereafter all shared control of the McCall Company until it encountered financial difficulties and went into receivership. (page 32)

17. That during the period, March 1905 to December 1908, control of McCall Company was shared by Mr. Hutchinson with Bertron, Storrs & Griscom; Lee, Higginson & Company; C. A. Coffin, and Harvey Fisk & Sons as a result of a pooling of their interests. (page 33)

18. That each of three interests was represented on the voting trust committee. (page 33)

19. That the fact that each interest was represented on the McCall Company Executive Committee indicates each interest shared in control. (page 33)

20. That the letter of January (July) 19, 1907 indicates that the management of the McCall Company was in the hands of a committee on which was a member of each of three banking firms. (page 33)

21. That the letter dated June 22, 1906 from Mr. Hutchinson to Mr. Dimock indicates that control of the McCall Company was jointly shared. (page 33)

22. That Petitioners failed to show that the Fisk firm controlled the directors and the McCall Company. (page 34)

23. That the McCall Company was not controlled solely by Harvey Fisk & Sons but that control was shared with Hutchinson and the other interests. (page 34)

24. That the affidavits of Messrs. Hutchinson, Fisk, Lee and Hopkins fail to state (1) that their respective valuations of the common stock represent cash value of the stock in June 1905 and (2) that those parties purchased any of the McCall Company stock at the valuations set forth by them in said affidavits. (page 35)

25. That Petitioners' selection of $25.00 per share for the common stock and $50 per share of (sic) [for] preferred stock of McCall Company is unsupported by the valuations of Messrs. Hutchinson, Fisk, Lee and Hopkins. (pages 35, 36)

26. That the record contains no showing that Mr. Lee was in fact unavailable to testify because of age, health or other reasons. (page 36)

27. That Petitioners' failure to produce the attorney who obtained the Fisk affidavit or the physician who prepared an affidavit to the effect that Mr. Hutchinson had the ability to understand the purport of his actions had

any adverse effect upon the weight to be accorded to the affidavits of Messrs. Fisk and Hutchinson. (page 36)

28. That the record fails to show what duties, if any, Mr. Lee had in connection with the firm of Lee, Higginson & Company's financing activities with regard to the McCall Company. (page 37)

29. That the fact that Mr. Lee was not presented for cross-examination makes his opinion unreliable for the purposes of determining the cash value of the stock involved in Petitioners' claim. (page 37)

30. That the fact that Mr. Fisk stated his recollection had been dimmed by a lapse of years and that he had taken very little active interest in the McCall enterprise indicated his valuation of the stock was entitled to no weight. (page 37)

31. That Mr. Fisk's method of valuing the stock proceeded upon a questionable assumption. (page 37)

32. That there is no merit to the contention that the Fisk firm received stock compensation for either financial or management services or that Mr. Fisk's $50.00 valuation for preferred and $18.00 valuation for common stock of McCall Company were arrived at by valuing non-existent services. (page 37)

33. That Mr. Hutchinson's method of valuing the common stock of McCall Company starts with an unestablished premise and is contrary to Section 14 of the Federal Power Act providing that "net investment shall not include or be affected by * * * prospective revenues." (page 38)

34. That the letter of January 19, 1906 written by Mr. Hutchinson refutes or is at variance with Mr. Hutchinson's or Petitioners' claimed value for the stock of McCall Company. (page 38)

35. That the Hutchinson affidavit was prepared upon the basis of representations made by Petitioners witness Gunn to an attorney in Miami, Florida. (page 38)

36. That Mr. Hutchinson had only four days to consider the facts before he executed his affidavit. (page 38)

37. That Petitioners witness Gunn did not ascertain the facts with reference to the points mentioned in his letter of January 9, 1939, prior to that date. (pages 39, 40)

38. That the information in the possession of Mr. Hutchinson at the time he signed his affidavit was insufficient to permit him to recall the true facts. (page 39)

39. That the weight to be given to Mr. Hutchinson's affidavit is adversely affected by the fact that Petitioners witness Gunn had not secured complete information from Mr. Fisk before securing Mr. Hutchinson's affidavit. (page 40)

40. That Messrs. Fisk and Hutchinson did not have sufficient information nor sufficient time to study the facts prior to the time they executed their affidavits. (pages 38, 39, 40)

41. That a comparison of excerpts from the letter, dated January 9, 1939, with Mr. Hutchinson's affidavit "reveals the extent to which Gunn's tentative 'story' crystalized into a categorical statement of fact within the brief span of one or two days, although, apparently, he had obtained no further information". (page 40)

42. That Petitioners witness Uhl's valuation was based entirely upon engineering factors designed to reflect power site value and had no relation to cost. (page 41)

43. That Petitioners witness Uhl's method of valuation has been held either by the Commission or the

courts to be of no probative value in determining the costs of a project. (page 41)

44. That Petitioners have not sustained their claimed cash values of $25.00 and $50.00, respectively, for the common and preferred stock of the McCall Company. (page 41)

45. That it is clear that the stock of McCall Company could have had no cash value at all at the time Petitioners claimed a $25.00 and $50.000 value. (page 41)

46. That Petitioners' claimed value for the stock of McCall Company was erroneous because that company was at the time in question a newly created company, had no formal contracts for the sale of power, had not perfected finally the specifications for the development of the project, the development was a pioneer project, and because the exact location of the dam had not been determined. (pages 41, 42)

47. That the fact that the development had a large initial investment and heavy prior charges for bond interest contributed in some way to a lack of cash value for the stock of McCall Company. (page 42)

48. That the financial difficulties encountered which necessitated calling in the Fisk firm indicated that the stock of the McCall Company could have not been sold for cash. (page 42)

49. That the testimony of Mr. J. H. Harlow indicated that the stock of the McCall Company had no cash value at the time Petitioners claim a value for same. (page 42)

50. That the common and preferred stock of the McCall Company had no cash value in 1905 and the aggregate cash value claimed by Petitioners should be disallowed. (page 43)

51. That there are additional grounds for the disallowance of most of Petitioners' claimed cost sought

to be established by the use of the cash value claimed for the common and preferred stock of McCall Company. (page 43)

52. That the common stock of McCall Company had no cash value. (page 44)

53. That assuming for purposes of argument McCall Company's stock received by Mr. Hutchinson in payment for his land, water rights, services, etc., had a cash value, Petitioners' claim would still have to be disallowed. (page 44)

54. That Mr. Hutchinson was paid $750,000 cash for 2896.54 acres of land and water rights. (page 44)

55. That the cost estimate prepared by Mr. Hutchinson on December 18, 1905 lists the cost to McCall Company of his properties as $750,000. (page 44)

56. That there is other credible evidence that the cost to McCall Company of Mr. Hutchinson's properties was $750,000. (page 44)

57. That Mr. Hutchinson was at all times in control or sharing in control of the McCall Company. (page 44)

58. That the "no-profits-to-affiliates" rule applies in connection with Mr. Hutchinson's transactions with McCall Company. (page 44)

59. That in Mr. Hutchinson's transactions with McCall Ferry Power Company there was a lack of an arm's-length transaction and that there was no showing of costs incurred by Mr. Hutchinson in excess of the $750,000 cash payment. (page 44)

60. That Mr. Hutchinson paid $155,000 for half of his properties which he had acquired from York Furnace Power Company. (page 45)

61. That it is reasonable to assume from the known prices paid for a few of Mr. Hutchinson's parcels

of land that the cost of the other half of his land and water rights was less than or did not exceed the $155,000 paid for the York Furnace properties. (page 45)

62. That the total price of all of Mr. Hutchinson's properties was not more than $310,000 or that $440,000 was paid to Mr. Hutchinson to cover his other expenditures and as compensation for other efforts. (page 45)

63. That Mr. Hutchinson's expenditures in connection with acquiring his land and water rights are not proper project costs. (page 45)

64. That Mr. Hutchinson's costs which he incurred in connection with his activities should be disallowed in view of the 6% interest allowance made by the Commission to Petitioners. (page 45)

65. That expenditures made by Mr. Hutchinson to secure the enactment of legislation favorable to his plan are disallowable. (pages 45, 46)

66. That it was abundantly fair to Petitioners to allow as actual legitimate original cost only the $750,000 cash paid to Mr. Hutchinson. (page 46)

67. That the McCall Company stock had no cash value when issued. (page 46)

68. That Petitioners' claim of $28,750 for 1,150 shares of common stock issued by McCall Company to the Harlow-McGaw interests and C. D. Pullen must be disallowed. (page 46)

69. That 10 shares of McCall Company's common stock was given Mr. Hutchinson in exchange for the stock of the merged companies. (page 46)

70. That the ten incorporators' shares of common stock of the McCall Company issued to Mr. Hutchinson in exchange for the stock of merged companies, had no value. (page 46)

71. That the issuance of the ten incorporators' shares of common stock of the McCall Company was not proper organization expense. (page 46)

72. That it is reasonable to conclude that the $750,000 cash payment Mr. Hutchinson received for his properties covered all costs previously incurred by him including the cost of incorporating the predecessor companies. (page 47)

73. That the $250.00 valuation for the ten incorporators' shares of McCall [Ferry] Power Company common stock should not be allowed as part of Petitioners' rate base. (page 47)

74. That "such excess [$49,000] lacks any color of support in the Fisk affidavit". (page 47)

75. That the McCall Company stock had no cash value when issued and the distribution claimed by Petitioners to the Fisk firm was not sustained by the evidence. (page 48)

76. That there is no basis in the evidence for the contention that the Fisk firm rendered management services. (page 48)

77. That allowance of any portion of the claim of the Fisk firm for management or banking services would do violence to the "no-profits-to-affiliates" rule. (page 48)

78. That allowance of any portion of the claim for Fisk management or banking services would do violence to the "no-profits-to-affiliates" rule irrespective of whether the Fisk firm shared control of the McCall Company or exercised control singly over that company. (page 48)

79. That neither the March 25, 1905 financing plan nor any other contemporary evidence of record supports the contention that the Fisk firm managed the McCall Company. (page 48)

80. That it was contemplated in the event that the development proved successful, bonds might be repurchased and resold by the Fisk firm at a profit. (page 48)

81. That there is an absence of evidence indicating the Fisk firm performed management and banking services. (page 49)

82. That it is entirely possible that it was the intention of the syndicate members that the Fisk firm was to be compensated for its services through the repurchase and resale of the bonds. (page 49)

83. That there is no evidence showing that Harvey Fisk & Sons were consulted on matters of policy, the construction of the project, the allocation of funds, the expenditures of the McCall Company, the selection of personnel, the negotiation of power contracts, the conduct of law actions, the determination of the ultimate level at which it was decided to build the crest of the dam, the cessation of construction activities in 1907. (page 49)

84. That the evidence is that Harvey Fisk & Sons had no more to do with management than each of the others participating in promotion of the development. (page 49)

85. That correspondence of Lee, Higginson & Company, dated July 19, 1907, discloses that Harvey Fisk & Sons was not in sole control of the management of the enterprise. (page 49)

86. That Staff accounting witness Newlands was competent to testify. (page 49)

87. That the fact that Staff accounting witness's search of Petitioners' files failed to disclose to him any indication of management activities on the part of Harvey Fisk & Sons proves lack of management services rendered by that firm. (page 49)

88. That the absence of management services was indicated by the fact that Staff witness Newlands was unable to find any communication from or to the Fisk firm or Mr. Barnum dealing with management of McCall Company. (page 50)

89. That the lack of management services by the Fisk firm was indicated by the fact that Staff witness Newlands' examination of the files indicated to him that it was the President of the McCall Company to whom reports and communications were addressed. (page 50)

90. That Petitioners witness Gunn testified that the Fisk firm never received any amount of stock for management services as distinguished from financial services. (page 50)

91. That Petitioners witness Gunn testified that he knew of no contracts negotiated by Mr. Barnum or of any reports or management functions which the McCall Company officers cleared through the Fisk firm or Mr. Barnum. (page 50)

92. That the fact that Petitioners witness Gunn could not point to any matter, which Mr. Barnum was instructed to investigate or which he introduced at Executive Committee meetings or to any written orders or communications relating to management or construction issued by the Fisk firm or Mr. Barnum to officers of McCall Company or to the construction contractors and could not identify any individual who was employed by Mr. Barnum for McCall Company indicates lack of control by the Fisk firm. (page 50)

93. That there is no evidence to support the contention that the Fisk firm rendered management services. (page 50)

94. That the evidence shows that there was no necessity for the rendition of management services by the Fisk firm. (page 50)

95. That the statements contained in the Fisk affidavit are at variance with the facts established by any evidence. (page 51)

96. That the responsibility for management rested with the Company officers, its special Board of Advisory Engineers or someone else, to the exclusion of the Fisk's firm sole management prerogative. (pages 51, 52)

97. That there exists no justification for the allowance of the amount of $199,570.31 and that this amount must be excluded from Petitioners' rate base. (page 52)

98. That the item of $81,906.59 claimed by Petitioners was erroneously classified in Account 301, Organization Expense, and that this amount is chargeable to Account 151, Capital Stock expense. (page 52)

99. That issuance of additional stock after actual organization neither entails organization expense within the meaning of Account 301 nor represents an "extension" of the organization of Penn Water. (pages 52, 53)

100. That Hutchinson arranged for the employment of the Board of Advisory Engineers and that contracts with Mr. Cooper and Sanderson & Porter were negotiated by Messrs. Dimock and Coffin. (page 52)

101. That Petitioners' claim that the bankers received McCall Company's stock as compensation for the sale of $8,075,000 of bonds. (page 53)

102. That the amount of $331,703.15 is not properly includible in Petitioners' rate base. (page 54)

103. That the McCall Company stock had no cash value. (page 54)

104. That Petitioners' claimed distribution of stock to the bankers was not sustained by credible evidence. (page 54)

105. That, therefore, no cost was incurred by its issuance which could have been carried forward under the Aldred Plan. (page 54)

106. That no part of the claim for McCall Company's stock could be allowed because of the "no-profits-to-affiliates" rule. (page 55)

107. That there was an absence of a showing of cost to the bankers of services rendered by them. (page 55)

108. That the bankers were affiliated. (page 55)

109. That any such cost would be a financing cost, not a cost to physical property and the 6% interest allowance hereinafter made is in lieu of all other financing costs. (page 55)

110. That the amount claimed by Petitioners for stock issuance expense is not properly includible in Account 301, Organization Expense. (page 55)

111. That the agreement between Mr. Aldred and the McCall Company Bondholders Committee did not expressly vest Mr. Aldred with management powers. (page 56)

112. That there is no credible evidence on the basis of which it can be determined that the parties so construed the agreement between Mr. Aldred and the McCall Company Bondholders Committee. (page 56)

113. That the failure of Staff witness Newlands to find in Petitioners' files any indication that the Bondholders Committee had arranged for management services to be rendered by Mr. Aldred indicates the lack of such management services. (page 56)

114. That surveys made by Mr. Aldred were solely for the purpose of informing himself in connection with his negotiations concerning the refinancing. (page 57)

115. That there is no proof that any management services were rendered by Mr. Aldred prior to the date of the memorandum of understanding with the Bondholders Committee of April 24, 1909. (page 57)

116. That it is apparent that as of May 20, 1909 and August 5, 1909, Mr. Aldred understood that his phase of the managership was to be conducted in his capacity as receiver. (page 57)

117. That as to none of the eight contracts is it shown that at the time of the execution, Mr. Aldred had made up his mind to act otherwise than in his capacity as receiver. (page 59)

118. That nowhere does it appear that Mr. Aldred was put to any personal expense in connection with any liability he may have technically assumed under these contracts. (page 59)

119. That Mr. Aldred's statement in his affidavit that "to expedite the work * * * it became incumbent on me to enter into a number of contracts, personally" is contrary to what he did. (page 59)

120. That Mr. Aldred received adequate compensation for his management services in the fee he claimed and was granted by the court as receiver. (page 60)

121. That there was no period of time during which Mr. Aldred rendered management services that he was not either under employment as receiver of McCall Company or an officer of Penn Water (page 60)

122. That the fact that Mr. Aldred was at one time a receiver of McCall Company and later an officer of Penn Water indicates he failed to perform the management services claimed by Petitioners. (page 60)

123. That there is no evidence that the term, "management," as the parties to the refinancing plan used

it, ever meant or was intended to mean anything more than the "control" that Mr. Aldred exercised as receiver or as an officer of Penn Water or under the voting trust. (page 60)

124. That Staff witness Newlands' failure to find that Mr. Aldred was to perform any duties in addition to those for which he was paid compensation as receiver and as an officer of Penn Water indicates that Mr. Aldred failed to perform valid management services for which he was entitled to the compensation claimed by Petitioners. (page 60)

125. That the 5,000 shares of Penn Water stock which Mr. Aldred received could only have represented an expectation of an indefinite realization of the future operating income of the Company. (page 61)

126. That Penn Water stock had no cash value as of the time of its issuance and that no cash value was indicated for the immediate future for Penn Water stock. (page 61)

127. That Mr. Aldred stated that Penn Water stock had no cash value. (page 61)

128. That the 5,000 shares of stock issued to Mr. Aldred was for financing services and not a part of the project cost. (page 61)

129. That due allowance for Petitioners' claimed management services in behalf of Mr. Aldred was made by the Commission in the allowance of 6% interest by them. (page 61)

130. That quotations of sales of Penn Water stock proved by Petitioners are not evidence that the stock had a cash value at the time of its issuance. (page 61)

131. That the conversion of 66 McCall Company bonds afforded no evidence as to the value as to McCall stock. (page 61)

132. That the sum of $218,750 is properly disallowed by the Commission. (page 61)

133. That estimates made at that time (June 20, 1906) disclosed that a 165 ft. dam at McCall Ferry with 7 initial units providing an output of 50,000 hp. would cost $8,859,000. (page 64)

134. That on November 1, 1907 work on the dam ceased and the work on the tailrace, walls and other parts of the powerhouse stopped. (page 65)

135. That only such men were retained as were deemed needed to guard the completed work against danger during the winter, put the construction equipment in winter quarters and for minor work in the powerhouse. (page 65)

136. That the work, as a whole, was estimated 80% completed. (page 65)

137. That in April 1908, provision was made for resuming work on the tailrace, cleaning up around the powerhouse and raising the wing dam. (page 65)

138. That after the first and through the 22nd of November 1907, there were never more than 124 men employed on any one day at the site, and these were employed on concrete and form work, some repairs and miscellaneous minor matters, and that the work included placing of only 600 yards of concrete in the powerhouse substructure for protection against water, and 130 yards in arches as protection against ice. (page 65)

139. That by February 1, 1908 none of the hydraulic engineer's construction organization was considered necessary. (page 65)

140. That from November 1908, no further work was done at the site until after Mr. Aldred became receiver in July 1909. (page 66)

141. That construction work was resumed approximately on September 1, 1909. (page 66)

142. That there is no evidence that the 1907-1909 cessation can be attributed to the fact that the Knickerbocker Trust Company went into receivership in October 1907. (page 67)

143. That the Knickerbocker Trust Company was not obligated on call for funds for project construction purposes as of October 1907. (page 67)

144. That the shortages of finances had not taken the officers of McCall Company by surprise. (page 67)

145. That Mr. Hutchinson stated, in effect, that the omission to take steps to provide more money led to the Company's discontinuance of construction. (page 67)

146. That Mr. Hutchinson stated that cessation was due to delays and not the economic depression. (page 67)

147. That the evidence fails to prove that the work performed during the cessation period contributed to shortening the construction period. (page 67)

148. That interest during construction should not be allowed for the period November 1, 1907 to August 31, 1909, inclusive. (page 67)

149. That the initial plant was conceived as a 7-unit project. (page 68)

150. That the available market was not determined at the time the initial plant was first projected. (page 68)

151. That Unit No. 1 was first subject to a minor bearing defect. (page 68)

152. That Unit No. 1 was always considered operational. (page 68)

153. That Units Nos. 2 and 3 operated without outages arising from known causes until after October 1, 1911. (page 69)

154. That Unit No. 4 experienced no outages prior to October 1, 1911. (page 69)

155. That transformers Nos. 1, 2 and 3 experienced outages for only brief periods during the first six months of 1911. (page 69)

156. That from June 1 to October 1, 1911, Petitioners did not have less than a rated normal transformer capacity available of 22,500 kw., which was approximately sufficient to carry the combined Baltimore load. (pages 69, 70)

157. That early in March 1911, Petitioners were supplying the contract requirements of Baltimore Company from two units. (page 70)

158. That for causes not satisfactorily established in the evidence, Baltimore Company's load dropped. (page 70)

159. That the evidence indicates that the delivery of power to Baltimore Company was going along very well in mid May 1911. (page 70)

160. That the work of preparation for delivery of power to United Railways Company was going along in fine shape. (page 70)

161. That Petitioners were ready to deliver power to the United Company by June 15, 1911. (page 70)

162. That it was significant that the United Company experienced none of the service interruptions previously experienced by the Baltimore Company. (page 71)

163. That the remaining three causes of total interruption to service in 1911 were "causes not here significant". (page 71)

164. That all other interruptions were caused by customers' systems, or were insignificant in effect. (page 71)

165. That interruptions stated in total elapsed time of 1 hr.-49 minutes and 1 hr.-12 minutes indicate that Petitioners' service was reliable. (page 71)

166. That Petitioners' difficulty with lightning was not peculiar to their system. (page 71)

167. That the Commission considered all of the pertinent facts in determining the date of the beginning of commercial operation of the project. (page 72)

168. That suspension of machines for supplemental construction does not influence the determination of the date of beginning of commercial operation. (page 72)

169. That outages do not influence the determination of the date of beginning of commercial operation. (page 72)

170. That the date of the end of the construction period was June 30, 1911 and that interest is capitalizable only through that date except for the "cessation period" and net revenues should be credited to cost of plant up to that time. (page 72)

171. That Petitioners witness Gunn admitted that the contribution of the office work done during the cessation period, to the shortening of construction after the resumption of work, cannot be determined. (page 74)

172. That Petitioners' contention that the salary of the Vice President and General Manager and the Secretary and Treasurer of McCall Company should be included in the rate base because their services related to plant designing during the period, is based upon unsupported inferences. (page 75)

173. That Mr. Hutchinson was not during the cessation period in direct supervision of construction. (page 75)

174. That Mr. Cooper was paid for work he did not do. (page 75)

175. That Sanderson & Porter never did more than prepare certain designs. (page 75)

176. That Petitioners witness Gunn's opinion that general engineering conducted during the cessation period contributed to decrease the time necessary to complete the project after assumption of construction is based upon speculation. (page 75)

177. That there is no showing that the general designing, planning and administration of the cessation period served to shorten the following period of construction. (pages 75-76)

178. That the amounts claimed by Petitioners representing expenditures during the cessation period should not be included in the rate base. (page 76)

179. That organization expense generally or as referred to in Account 71 of the ICC Classification of Investment in Road and Equipment of Steam Roads are usually incurred at the inception of a company and not over a period of years subsequent thereto. (page 76)

180. That Petitioners conceded that it is impossible to tell what the so-called promotion expenses incurred from 1911 to 1914 represent. (page 76)

181. That Petitioners witness Gunn stated that the item of stock issuance expense represented an unsegregatable amount. (page 77)

182. That Petitioners witness Gunn could not state the nature of the activities of the officers whose salaries were partly charged as promotion expense, nor the purpose of charging office rent or traveling expense. (page 76)

183. That the nature of the items making up the claimed promotion expense from 1911 to 1914 indicates

that such expenses are composed in part of operating expenses and in part of stock issuance expenses and that Petitioners are unable to identify same. (page 77)

184. That the promotion expenses claimed by Petitioners in the amount of $29,601.59 should not be included in Petitioners' rate base. (page 77)

185. That the costs claimed by Petitioners for the preparation of a map for Moody's manual are not proper capital expense. (page 77)

186. That the land below Cully's Falls should never have been included in plant account. (page 79)

187. That Petitioners assumed that after 1905 more than a majority of the rights and interests acquired under the Harlow-McGaw contract were retained. (page 79)

188. That Petitioners' assumption that after 1905 a majority of the rights and interests acquired under the Harlow-McGaw contract were retained is not substantiated by the evidence. (page 79)

189. That the $200,000 is the best evidence of the proper credit to Penn Water's plant account. (page 79)

190. That it is improper for Petitioners to credit plant account with the amount of $162,936.02 instead of $200,000. (pages 77-79)

191. That considerably more than a half of the rights and interests retained up to 1930 by Penn Water, out of the original Harlow-McGaw properties, were transferred to Safe Harbor. (page 80)

192. That the adjustment contended for by Petitioners in the amount of $119,940.20 should not be made in determining Petitioners' cost or rate base. (page 80)

193. That Petitioners' plant accounts indicated that the original cost of the Harlow-McGaw properties was $379,824. (page 80)

194. That the Harlow-McGaw properties were divided so that 11.68 miles of canal and 117 acres were transferred to Safe Harbor, and 8.32 miles and 28 acres were retained by Penn Water. (page 80)

195. That Petitioners as of September 1912 had gotten very satisfactory results from the use of the flashboards. (page 81)

196. That except for the change from solid supporting pins to seamless tube supporting pins, the same flashboard system in use in 1912 is now in use. (page 82)

197. That the flashboard expense incurred by Petitioners during the period 1911-1912 adequately covered the original cost of installing a system adequate to provide for the additional storage of water required. (page 82)

198. That all of the other claimed expenditures of Petitioners relate to either improvements in operations or to experimental improvements tried and abandoned without having been put to permanent use. (page 82)

199. That the expenditures here in issue in the amount of $49,754.97 are not proper cost of plant and are not properly includible in Petitioners' rate base. (page 82)

200. That from March 1916 to and including 1924 only a part of the acquisitions were concerned with flowage rights and a significant number of those arose out of previous litigation. (page 84)

201. That Petitioners implied by their evidence that a reasonably complete identification of expenses connected with such other matters could not be made and could not be segregated. (page 84)

202. That many of these other duties clearly related to operations and expenses relating thereto and are improper items to capitalize. (page 84)

203. That there is insufficient evidence upon which to make a segregation of allowable items of expense after March 16, 1916. (page 84)

204. That none of the services can be identified with any particular property and further no properties were acquired from April 1916 to July 1920 except for foreclosure in 1919 with respect to a single property. (page 85)

205. That Petitioners are unable to state the basis used for the determination or apportionment of fees and the inclusion thereof in plant is unjustified on the record in this proceeding. (page 85)

206. That Petitioners charged the amount of $45,325.71 and $561.65 to the Flowage Basin sub-accounts without explanation of the work done. (page 85)

207. That Petitioners did not relate the engineering work set forth in the field notes and drawings to any specific charges in Flowage Basin accounts. (page 86)

208. That the items of cost (referred to by the Commission on page 86 of the Opinion) are ordinary operating expenses. (page 86)

209. That the cost of such surveys (described on page 86 of the Opinion) have been segregated in another Flowage Basin sub-account entitled "Surveying Property" which the Commission has allowed in full. (page 86)

210. That there was no evidence that the costs of property surveys were improperly classified at the time of the cost distribution. (page 86)

211. That Petitioners' reclassification of costs was unsupported by evidence. (page 86)

212. That the inclusion in plant account of $45,325.71 and $561.65 is not justified. (page 87)

213. That the item in the amount of $4,988.45 for river observations is subject to the Commission's general conclusions applicable to the consideration of similar functions set forth in connection with Petitioners' contentions relating to office engineering expense. (page 87)

214. That because of the character of the Lancaster office after 1925 as an office having a minor relation to any sort of project cost work and as Petitioners have failed to present any evidence enabling determination of any item of Lancaster office expense as proper for capitalization none of the amount of $20,787.41 can be included in plant. (page 88)

215. That there is no evidence that the charges in the account, survey of storage reservoir sites, represented the establishment of gauges for the determination of river flow. (page 88)

216. That during the period 1926 to 1930 only one new property was acquired by Petitioners and there was only one flooding or flashboard suit. (page 88)

217. That Staff witness Newlands' failure to find in Petitioners' accounts, records and files, supporting data is an indication that the amount of $12,420.77 should not be allowed as proper capital cost. (page 89)

218. That the evidence shows that Mr. Bennett was engaged from 1909 to 1911 in a continuing investigation of probable sites for the storage of water on the tributaries of the Susquehanna River and in obtaining data for use before the state legislature. (page 89)

219. That such work continued at least late into 1911. (page 89)

220. That Petitioners have not established the propriety of the inclusion of $12,420.77 in their rate base. (page 90)

221. That the transaction concerning the cost of land acquired from the Baltimore Electro Alloys Company is one involving a profit between affiliates. (pages 90, 91)

222. That the amount of $24,151.83 consists of a write-up and is not properly includible in plant account or in the rate base. (page 91)

223. That the action at law added nothing to the value of the property as subsequently acquired and the original accounting with respect to the cost of defending title was correct. (page 91)

224. That the amount of $1,427.42 should not be included as part of Petitioners' rate base. (page 91)

225. That Petitioners contend that the sum of $39,301.46 should be included as part of the rate base because it is identified with an agreement relating to the adjustment of interests in connection with the construction of a downstream hydro plant and embraces the cost of the study made as to the anticipated effect of the downstream development on Penn Water's hydro operations as well as a fee for legal services and certain travel expenses with respect thereto. (pages 91, 92)

226. That the facts are that the agreement of February, 1926 does not settle title claims, as both parties thereto explicitly save their contentions and the proceeding is merely stayed. (page 93)

227. That the sum of $39,301.46 is an expense relating to operations. (page 93)

228. That the item of $39,301.46 should not be included in the rate base because such a long time has elapsed since said item was incurred. (page 93)

229. That Petitioners abandoned the project concerning the construction of a transmission line from Holtwood to Lancaster, Pennsylvania or allowed the options to expire. (page 94)

230. That because Petitioners acquired no property or facilities as a result of the expenditure of the sum of $12,459.23 the same is not a proper one for inclusion in plant or rate base of petitioners. (page 94)

231. That the amount of $5,668.48 should not be included in Petitioners' rate base because Petitioners

acquired no property and possessed nothing with which "cost" can be associated. (page 95)

232. That Petitioners have no supporting detail other than the testified to possibility that most of the spoilage in cement occurred during the cessation period. (page 95)

233. That Staff witness Newlands' testimony indicates that the item of $13,033.04 should be eliminated from Petitioners' rate base. (page 96).

234. That a physical inventory in 1908 showed a total of 35,736 barrels of good cement on hand, the cost price of which amounted to $51,653, and that of this old cement the receiver used only 7,852 barrels and Petitioners a further 8,626 barrels, leaving a balance of 19,258 barrels unaccounted for. (page 96)

235. That there was no evidence that the remaining barrels of old cement were ever used in construction or that contemporary correspondence and Staff testimony indicates that such cement was on hand but had spoiled. (page 96)

236. That the record supports the conclusion the $13,033.04 should be eliminated from Petitioners' rate base. (page 96)

237. That Petitioners' proposal to include the sum of $13,033.04 in its rate base as proper original cost is not approved. (page 96)

238. That the loss of $130.99 cannot on the evidence in this proceeding be associated with the cost of constructing the project. (pages 96, 97)

239. That no justification has been shown for including the amount of $130.99 in Petitioners' rate base. (pages 96, 97)

240. That the Susquehanna Contracting Company is described in the evidence as a "paper" company. (page 97)

241. That the administrative expenses of the Susquehanna Contracting Company could at best only be regarded as financing costs. (page 97)

242. That the amount of $6,621.85 is not allowable as a part of the rate base in view of the 6% interest allowance hereinbefore made. (pages 97, 98)

243. That there is no indication that the fee of $50,194.73 represents the distribution of the time of supervisory employees named by Petitioners witness Gunn as being those whose services were involved in connection with said fee. (page 99)

244. That it is clear from the evidence that the fee of $50,194.73 constituted a profit between affiliates and that the amount thereof should not be included in investment in electric plant by Petitioners. (page 99)

245. That Petitioners witness Gunn did not know how the fee of $50,194.73 was determined. (page 99)

246. That Petitioners had no records of the time, services or salaries allocated to the Steam Plant. (page 99)

247. That Petitioners witness Gisiger testified that Petitioners' engineers made only minor modifications in the plans for the design of the Steam Plant. (page 99)

248. That the Staff showed that Holtwood Power Company was in fact solely organized by Penn Water's lawyers. (page 100)

249. That the activities of Mr. Bushong and the Lancaster office constituted incidental part time work of a clerical nature. (page 100)

250. That uncontested expenses allowed by the Commission and its Staff contain ample provision for organization expense of the Holtwood Power Company. (page 100)

251. That Mr. Bushong's services were of an incidental nature in organizing Holtwood Power Company and should not be capitalized. (page 101)

252. That Petitioners have failed to identify or explain the items for office salaries and expenses or those for salaries and traveling as relating to the organization of Holtwood Power Company. (page 101)

253. That Petitioners witness Gunn did not know the nature of Mr. Zimmerman's services. (page 101)

254. That Petitioners have made no showing that all of the attorney's services were rendered in connection with the organization of Holtwood Power Company or what portion of such services related thereto. (page 101)

255. That inclusion in Petitioners' rate base of the amount of $17,875.34 would be improper. (page 101)

256. That work on the tower foundations was ordered commenced solely to take advantage of the availability of a competent construction force in the vicinity at the time. (page 101)

257. That the expense of $3,595.95 relates to abandoned work and is improperly included in Petitioners' rate base. (page 102)

258. That Petitioners proposal to include in their rate base the sum of $96,116.84 represents reaccounting for expenditures. (page 102)

259. That except for one minor item all these items here proposed for correction relate to necessary repair and maintenance work involving individual parts of equipment or structures. (page 103)

260. That Staff witness Newlands' opinion that the items of betterment had been properly treated as repair and maintenance items by Petitioners at the time

they were incurred according to then accepted accounting practice indicates that said items were not betterments but were repair and maintenance items. (page 103)

261. That Petitioners witness Eichhorn stated that it was a matter of judgment in determining whether the items in question were maintenance and repair or betterments. (page 103)

262. That Petitioners' proposal to adjust the entries of $14,813.34 and $11,339.99 respectively amount to reaccounting and said sums should not be included in the rate base. (page 102)

263. That Petitioners witness Wetzel testified that a determination of whether particular items represented an addition or maintenance and repair involved the exercise of discretion and judgment. (page 103)

264. That Petitioners' original accounting of the items of betterments was done under or pursuant to the state commission's system of accounts then prescribed. (page 103)

265. That Staff witness Newlands' testimony that Petitioners' original entries as to the additions made on their books represented accepted accounting practice at the time of entry indicates that said entries were in accord with proper accounting practice at the time. (page 104)

266. That the items of additions were properly treated at the time of the original accounting as repairs and maintenance and that what Petitioners are proposing merely amounts to reaccounting. (page 104)

267. That the proposed items of additions should not be included in Petitioners' rate base. (page 104)

268. That Petitioners' proposals as to items of replacements amount to reaccounting. (page 104)

269. That it was established by the evidence that the classification as a replacement as distinct from maintenance or repair rests upon judgment. (page 104)

270. That the original accounting as to replacements had been pursuant to or in accord with a system promulgated by the Pennsylvania Commission. (page 104)

271. That Petitioners' original recording of the items of replacements was pursuant to accepted accounting practice at the time, did not constitute error, and reaccounting therefore at this time would be improper. (page 104)

272. That the Petitioners' proposed credit in the amount of $27,539.98 should not be permitted in connection with the determination of the Petitioners' rate base. (page 105)

273. That overheads in the amount of $50,000 should not be included or allowed herein. (page 105)

274. That the amount of $27,539.98 should not be treated as part of the cost of plant retired. (page 105)

275. That Petitioners' proposed credit of $27,539.98 should be eliminated. (page 105)

276. That Petitioners' donation of $1,400 to the construction of the Holtwood church was properly an income or surplus charge and not a proper capital charge. (page 105)

277. That $6,132.41 representing "river coal investigation expense" was a non-utility expense and is not a proper part of Petitioners' rate base. (page 106)

278. That the expenses of $1,340.98, $2,291 43 relate to Penn Water's non-utility business and should not be included in the rate base. (pages 106, 107)

279. That Petitioners' claimed original cost should be reduced by $3,191,704.23. (page 108)

280. That the amount of $75,722.25 representing the book cost of real estate held for possible future use should not be included in the rate base. (page 108)

281. That "the following adjustments are appropriate for disposing of the improper or incorrectly classified items as recorded on the books at December 31, 1945, totaling $5,400,606.31". (page 109)

282. That neither the specific location of the future development, nor the design, nor the date of the commencement of construction thereof has yet been determined, nor, in fact, can this development be used as a part of the Holtwood project and may not even be owned by Penn Water. (page 111)

283. That it has not been decided when construction will begin on these lines and no contract has been closed with the customer requiring their construction. (page 111)

284. That according to the evidence it is proper to allow as a part of the rate base only those of the foregoing items which are included in the power bill and the remaining items claimed are not to be included in the rate base. (page 111)

285. That the date when the proposed new Lancaster transmission line is to be built is undetermined. (page 112)

286. That there are no definite plans as to the date of the use of rights of way paralleling existing lines of Petitioners. (page 112)

287. That such items relate to matters which are too indefinite to justify consideration of the related amounts as a part of Petitioners' rate base. (page 112)

288. That on the basis of the evidence and the findings of facts and conclusions of law in the opinion the consolidated net investment rate base for Petitioners for

the year 1946 is as set forth on page 131 of the Opinion. (page 131)

289. That the total investment rate base for Petitioners for the year 1945 is $33,140,022 and for the year 1946 $33,113,148. (page 131)

290. That the average investment rate base for Petitioners for the year 1946 is $33,126,585. (page 131)

291. That the average net investment of Petitioners for the year 1946 is $24,124,712. (page 131)

292. That Petitioners' net investment rate base for the year 1946 is $24,774,712. (page 131)

(63) Petitioners herein object to and seek rehearing of Opinion No. 173 of the Commission because of its failure to find the following facts and make the following conclusions of law. Said failure to find the following facts being contrary to the substantial evidence in the record and the failure to determine the following conclusions of law being contrary to law and the Federal Power Act and resulting in depriving Petitioners of their property without due process of law:

1. That Staff witness Newlands was unqualified as a witness and his testimony should be rejected.

2. That Commission Staff had no independent evidence as to any of the disputed original cost items and simply limited itself to endeavoring to pick flaws in the positive evidence of Petitioners.

3. That the Staff failed to introduce on the subject of original cost a witness who had the proper engineering, valuation, investment or legal knowledge necessary to support his conclusions.

4. That it was proper for Petitioners to value the common and preferred stock of the McCall Company on the basis of property received and services rendered therefor.

5. That Petitioners' claim that original cost arising out of the stock of McCall Company amounts to $1,031,273.46, represents proper capital cost and should be included in Petitioners' rate base.

6. That purchasers of McCall Company bonds paid $900 for a $1,000 bond with either $450 or $500 par value of preferred stock.

7. That Petitioners accurately proved the distribution of the McCall Company stock to Bertron, Storrs & Griscom; Harvey Fisk & Sons; Mr. Hutchinson; Lee, Higginson & Co., and Coudert Bros.

8. That the banking firm of Bertron, Storrs & Griscom received McCall Company common stock in return for banking services rendered.

9. That Harvey Fisk and Sons and Cary T. Hutchinson received 17,537½ and 18,840 shares respectively of McCall Company common stock in return for services rendered and property conveyed.

10. That of the total shares of the common stock issued, 18,840 shares having a cash value of $471,000 went to Mr. Hutchinson as part consideration for the purchase of his land, water rights, engineering and legal investigations, etc.; of the balance 1,150 shares having a cash value of $28,750 were transferred to other individuals as part consideration for land and water rights owned by them. Of the remaining, 10 shares having a cash value of $250 were issued to incorporators. All of the foregoing total $500,000 which is proper original cost and should be included in Petitioners' rate base.

11. That the affidavits of Messrs. Fisk, Hutchinson, Lee, Hopkins and Aldred were made after lengthy consideration of the facts by each and are of controlling weight in determining the facts stated therein.

12. That Mr. Griscom of the firm of Bertron, Storrs & Griscom stated the stock of McCall Company had value.

13. That Petitioners witness Gunn furnished adequate documentary evidence to Messrs. Fisk and Hutchinson for their consideration long prior to the date of their affidavits.

14. That Mr. Hutchinson's receipt of 18,840 shares of common stock of McCall Company was not inconsistent with the agreement of June 14, 1905.

15. That the stock paid to Mr. Hutchinson was for land, water rights and services rendered and represented no profit to him.

16. That Mr. Hutchinson transferred more than 2,896.54 acres of land and water rights to the McCall Company in return for the cash and stock paid to [redacted].

17. That it is improper to compare the land and water rights transferred by Mr. Hutchinson to the McCall Company on an acreage basis.

18. That the common and preferred stock issued to Harvey Fisk & Sons; Lee, Higginson & Co., and Bertron, Storrs & Griscom was for services rendered.

19. That Staff witness Newlands admitted he knew nothing about the distribution of McCall Company stock.

20. That the McCall Company common stock had a cash value of $25.00 per share and the preferred stock of $50.00 per share at the time it was accepted by Messrs. Fisk and Hutchinson, and Lee, Higginson & Co.; Bertron, Storrs & Griscom; Harlow-McGaw and Pullen in return for services rendered and property conveyed.

21. That aside from a value created by actual buying and selling on the market, the value of stock depends upon the value of the net corporate assets behind it.

22. That Petitioners witness Uhl properly valued the land and water rights received by McCall Company at $3,300,000.

23. That Petitioners witness Uhl's valuation clearly supports Petitioners' claimed value of $25.00 and $50.00 per share for the common and preferred stock of McCall Company.

24. That Mr. Hutchinson's and Petitioners witness Uhl's valuations of the McCall Company stock were not based upon a capitalization of prospective earnings.

25. That prospective earnings afford a proper element for valuing stock if they are considered by a person who actually traded in the stock at the time in question.

26. That Petitioners witness Uhl valued the land and water rights in question by considering the value of other similar lands and water rights necessary for the construction and operation of other similar hydroelectric projects which method is followed by all reputable real estate experts in valuing property.

27. That Petitioners witness Uhl's valuation has no relation whatever to capitalization of earnings but is based upon the expert judgment of this witness who has had a lifetime of experience in valuing for the purpose of purchase and sale of land and water rights for hydroelectric use.

28. That the affidavits of Messrs. Hutchinson, Fisk, Lee, Hopkins and Aldred are entitled to conclusive weight in respect to the facts therein contained.

29. That Mr. Lee was prevented from testifying in this case because of his age and physical condition.

30. That the evidence relied upon by the Commission in refusing to allow a cash value for the McCall Company stock is entirely circumstantial and equally supports either of two or more opposed or inconsistent infer-

ences and cannot of itself be deemed to furnish support for one of such inferences to the exclusion of the other.

31. That the transaction between Mr. Hutchinson and McCall Ferry Power Company pursuant to which Mr. Hutchinson conveyed land and water rights to the McCall Ferry Power Company was an arm's-length transaction.

32. That Mr. Hutchinson received no profit in the transaction pursuant to which he conveyed land and water rights to the McCall Ferry Power Company.

33. That the banking firm of Harvey Fisk & Sons dominated the McCall Ferry enterprise from the time of that firm's first connection with said enterprise to the exclusion of all other interested persons.

34. That there was no substantial evidence in the record to support the conclusion that the stock of the McCall Company was not worth $25.00 and $50.00 per share for the common and preferred respectively at the time Petitioners claimed a value therefor.

35. That at March 1905 the value of McCall Company securities agreed to be issued amounted to $10,764,375.00 and things of value supporting their cash value amounted to $10,554,750.00.

36. That Petitioners are entitled to capitalize the cost of the common and preferred stock of the McCall Company at $25.00 and $50.00 per share respectively whereever this stock was given or exchanged for properties or services received.

37. That the banking firm of Harvey Fisk & Sons performed management services for the McCall Company and that it is proper for Petitioners to capitalize $199,570.31 as representing three-eighths of the total value of the common and preferred stock at $25.00 and $50.00 respectively of the McCall Ferry Power Company received

by Harvey Fisk & Sons as compensation for both management and banking services.

38. That the firm of Harvey Fisk & Sons performed essential management services contributing to the McCall Company enterprise.

39. That pursuant to the agreement between Mr. Aldred and the Bondholders Committee, Mr. Aldred was to finance and manage the project and receive a total of 35,000 shares of common stock of which 5,000 shares were to be compensation for management services.

40. That Mr. Aldred in fact rendered management services to the enterprise and was entitled to receive 5,000 shares of stock as compensation therefor.

41. That said 5,000 shares of stock of Penn Water which Mr. Aldred received as compensation for his management services represented proper cost to the extent of $60.00 per share for the portion applicable to the construction period and was the result of an arm's-length transaction.

42. That Petitioners are entitled to capitalize $218,750.00 as representing payment to Mr. Aldred for management services performed by him for the development from November 1, 1908 to October 1, 1911.

43. That Petitioners are entitled to capitalize and include in their rate base $331,703.15 of McCall Company bond issuance expense as Penn Water stock issuance expense.

44. That Petitioners are entitled to capitalize and include in their rate base $81,906.59 of stock issuance expense incurred for the issuance of Penn Water's capital stock from 1923 to 1935.

45. That the Interstate Commerce Commission Classification of Investment in Road and Equipment of Steam Roads attached to and made a part of the Federal

Power Commission Uniform System of Accounts, Account 71, requires the inclusion in plant account of the items of $31,703.15 and $81,906.59.

46. That Petitioners are entitled to capitalize and include in their rate base interest during construction or accumulated Construction balances for the period November 1, 1907 to September 1, 1909 at 6% per annum.

47. That there was no mismanagement or lack of due diligence on the part of representatives of McCall Ferry Power Company in securing finances for the continuation of construction.

48. That representatives of McCall Company made timely arrangements to secure additional funds necessary to continue construction but the financial panic of 1907 prevented the securing of these funds.

49. That at the time of the occurrence of the financial panic of 1907 funds were available to carry on the project to the end of the year but the McCall Company representatives were prevented from securing these funds as a result of said panic.

50. That the financial panic of 1907 prevented McCall Company from securing additional capital theretofore arranged for and temporarily tied up funds from the original financing due to the failure of the Knickerbocker Trust Company and was the factor which accounted for the so-called cessation period.

51. That the management of McCall Ferry Power Company is presumed to have acted properly and without negligence until the contrary is established by competent evidence and there was no evidence indicating that management failed to act with due diligence.

52. That there was work of a substantial nature done during the cessation period and said work contributed to the expeditious completion of the development.

53. That the initial development was not in commercial operation until October 1, 1911.

54. That during the construction period all costs are proper and must be allowed unless there is a showing of lack of due diligence on the part of management responsible for the construction work.

55. That at the close of the construction period reliable commercial operation is considered to begin when (1) construction is substantially complete, all major work contemplated for the time done, (2) the power units and related property have been generating and transmitting for a sufficient time to iron out operating difficulties and mistakes in setting up and (3) they have been delivering steady power long enough that further unexpected stoppage is improbable.

56. That commercial operation begins when in the course of due diligence the project has been sufficiently completed to be reasonably reliable and available for service. Not merely its technical physical functioning but the nature of the use for which it is designed and its adequacy to meet the burdens ~~such use~~ entails are factors to be considered.

57. That the initial development consisted of 50,000 hp. accomplished by the installation of 5 units.

58. That no portion of the construction period should be deleted in computing interest during construction unless a rate of interest greater than 6% is used.

59. That Petitioners are entitled to capitalize and include in their rate base the amount of $1,008,579.57, which has been eliminated by the Commission, as proper interest during construction.

60. That the capitalization of administrative and other overhead expenses by Petitioners during "Cessation Period" amounting to $52,899.52 is proper, and said

items represent proper original cost and should be included in Petitioners' rate base.

61. That costs totalling $36,445.21 incurred during the cessation period are proper capital costs and Petitioners are entitled to include them as a part of the rate base.

62. That the cessation account expenses totalling $36,445.21 contributed to the completion of the project and are proper original costs.

63. That engineering salaries and fees totalling $54,636.73 are proper capital items and Petitioners are entitled to include them in their rate base.

64. That Petitioners have properly determined the nature of the promotion expenses in the amount of $29,691.59 and the said expenses are properly includible in Petitioners' rate base.

65. That Petitioners are entitled to correct their books of account by charging $37,063.98 to plant account.

66. That the sale price of the bonds and stocks of Susquehanna Power and Susquehanna Properties Companies in 1912 is not evidence as to their value in 1908.

67. That the proper original cost of the lands acquired by McCall Company from Harlow-McGaw and Willson and Witmer was $119,940.20 less than the fair value thereof as found by the Commission in 1930.

68. That Petitioners can properly transfer the amount of $119,940.20 from electric plant land account to surplus.

69. That it was proper for Petitioners to capitalize the amount of $49,754.97 as representing proper experimental costs incurred from 1913 to 1921 in connection with the perfecting of a system of flashboards to be used on the crest of the dam for the purpose of providing

additional head which in turn, would permit the generation of additional electricity.

70. That experiments in the use of flashboards properly covered the period from 1911 to 1921 before the use of said flashboards had been substantially perfected and Petitioners' costs as to this experimental period are a proper part of their rate base.

71. That it was proper for Petitioners to capitalize and include in their rate base the sum of $209,134.30 representing proper acquisition costs, cost of establishing gauges, cost of property acquired from the Baltimore Electro Alloys Company and acquisition costs of property described as the Boyd Mill tract.

72. That acquisition expenses and necessary legal and engineering services totalling $171,134.28 represent proper, original cost and are properly includible in Petitioners' rate base.

73. That Petitioners have identified the items in connection with the acquisition expenses and necessary legal and engineering studies in the amount of $171,134.28.

74. That the amount of $12,420.77 is a proper capital item and is properly includible in Petitioners' rate base. Said amount relates to the establishment of gauges up river from the Holtwood pond.

75. That the item of $24,151.83 represents the cost of property acquired by Petitioners from the Baltimore Electro Alloys Company and is a proper item to be included as original cost in Petitioners' rate base.

76. That the property acquired by Petitioners from Baltimore Electro Alloys Company was first devoted to public service when acquired by Petitioners.

77. That the meaning of the phrase "devoted to public service" is the setting aside for public use.

78. That the item of $1,427.42 represents expenses in defense of title to land described as the Boyd Mill tract charged in error to operating expenses when incurred and is properly includible by Petitioners in their rate base.

79. That every expenditure made by Petitioners must be assumed to have been made with the exercise of sound reasonable judgment unless the contrary is shown by the evidence and the contrary has not been shown by the evidence in this case.

80. That Petitioners witness Bortner was on several occasions offered for cross-examination at the hearing and counsel for the Commission refused to cross-examine this witness.

81. The amount of $39,301.46 properly represents legal and engineering fees incurred by Petitioners in defending their title to land and water rights located below the dam and powerhouse.

82. That the amount of $39,301.46 represents proper original cost and should be allowed in Petitioners' rate base.

83. That the amounts of $12,459.23 and $5,668.48 represent costs incurred by Petitioners in connection with the construction of a transmission line from Holtwood to Lancaster, Pennsylvania, and the construction of the Takoma Park Substation, both of which facilities are used in rendering service to the public.

84. That the amounts of $12,459.23 and $5,668.48 are properly includible in Petitioners' rate base.

85. That unless Petitioners are permitted to include the amounts of $12,459.23 and $5,668.48 in their rate base as proper original cost the consumers will enjoy the benefits arising from the use of property without payment of any kind therefor.

86. That the amount of $13,033.04 represents materials and supplies unaccounted for during construction

and is a proper capital item and properly includible in Petitioners' rate base.

87. That the amount of $130.99 represents cash unaccounted for during the construction period and is a proper item of original cost to be included in Petitioners' rate base.

88. That the item of $6,621.85 properly includes miscellaneous administrative expenses, including legal fees, New York City and state taxes, salaries, printing and stationery, etc. incurred in the formation, operation and dissolution of the Susquehanna Contracting Company.

89. That the item of $6,621.85 represents proper original cost and is properly includible in Petitioners' rate base.

90. That $50,194.73 represents the cost of supervisory engineering services furnished by Petitioners during the years 1922 to 1924 in the construction of the Holtwood Power Company steam station and represents proper original cost and is properly includible in the Petitioners' rate base.

91. That $17,875.34 represents money expended for legal fees and supervisory expenses in connection with the formation of Holtwood Power Co. and is properly includible in Petitioners' rate base.

92. That the item of $3,595.95 represents expenditures incurred by Petitioners in the construction of unused tower foundations and is proper original cost and properly included in Petitioners' rate base.

93. That the Commission cannot substitute its judgment for that of management.

94. That $96,116.84 represents physical items of property which were originally charged in error to operating expenses or depreciation reserve on Petitioners'

books and the Commission is without power to prevent Petitioners from correcting their books to accurately reflect the cost of their property.

95. That the sum of $96,116.84 represents proper original cost and is properly includible in Petitioners' rate base.

96. That $1,400.00 represents a contribution by Petitioners to the trustees of the Holtwood Presbyterian Church for the purpose of assisting said trustees to construct a church on land owned by Petitioners and represents proper original cost and should be included in Petitioners' rate base.

97. That $6,132.41 represents the cost of experiments made by Petitioners to determine the question of the economy of using river coal for steam generation of electricity, represents proper original costs and should be included in the Petitioners' rate base.

98. That $77,918.28 represents the amount of property held by Petitioners for future use and is properly includible in Petitioners' rate base as proper original cost.

99. That the sum of $237,361.79 represents construction work in progress and is properly includible in Petitioners' rate base as of December 31, 1945.

100. That the undisputed amount of construction work in progress as of December 31, 1945 which was in service as of December 31, 1946 was $110,676.08.

101. That there is no duplication in connection with the inclusion by Petitioners of uncompleted construction work in progress in the rate base because Petitioners have not capitalized interest on any of the jobs in progress amounting to $126,685.71.

102. That where the use to which property is to be put is definite and the time of use is specified it should be included in the rate base as property held for future use.

103. That Petitioners are entitled to capitalize a total of $3,476,859.81, disallowed by the Commission, as representing proper original cost and said amount is properly includible in their rate base.

104. That the rate base of Petitioners as computed and determined by the Commission is less than the "net investment" of the Petitioners in their project as the term "net investment" is defined in Section 3 (13) of Part I of the Federal Power Act.

105. That the Petitioners' rate base as computed by the Commission has not been determined in accordance with the terms and provisions of the Federal Power Act but in violation thereof.

106. That the term "net investment" as defined in Section 3 (13) of the Act means "the actual legitimate original cost thereof (the project) as defined and interpreted in the 'classification of investment in road and equipment of steam roads, issue of 1914, Interstate Commerce Commission', plus similar costs of additions thereto and betterments thereof, minus the sum of the following items properly allocated thereto, if and to the extent that such items have been accumulated during the period of the license from earnings in excess of a fair return on such investment: (a) Unappropriated surplus, (b) aggregate credit balances of current depreciation accounts, and (c) aggregate appropriations of surplus or income held in amortization, sinking fund, or similar reserves, or expended for additions or betterments or used for the purposes for which such reserves were created." The term "net investment" as used by the Commission in its Opinion and its "Order Reducing Rates" is not "net investment" as defined in Section 3 (13) of the Federal Power Act.

107. That there is no evidence upon which the Commission could find that any deduction of depreciation reserve, or other deduction, should be made in the determination of net investment in Petitioners' property.

(64) Petitioners herein object to and seek rehearing of the following portions of the Commission's Opinion No. 173 relating to depreciation and net investment in Petitioners' property; on the grounds that the Commission erroneously decided each and all of the following statements, matters, findings and conclusions of law and erred with respect thereto in that said statements, matters, findings and conclusions of law are not supported by substantial evidence, are contrary to the substantial evidence, contrary to law, the Federal Power Act and deprive Petitioners of property without due process of law in violation of the Fifth Amendment to the Constitution of the United States:

1. That Petitioners contend that accrued depreciation in their properties at the end of 1945 amounted to $6,000,000. (page 113)

2. That Petitioners' method of determining actual depreciation was largely by the observation process. (page 113)

3. That the Staff estimated accrued depreciation on the age-life straight-line basis. (page 113)

4. That the Staff made an estimate of the service lives of the various classes of plant of Petitioners. (page 113)

5. That the Staff made a proper computation of depreciation reserve or reserve requirement. (page 113)

6. That the Staff's method of determining depreciation reserve or the reserve requirement represents the proper measure of determining accrued depreciation. (page 113)

7. That the agreement in total by Petitioners witnesses Gunn and Uhl should not be construed as an agreement as to details or to procedures. (page 114)

8. That it was only by the sheerest of coincidences that the determination of Petitioners witnesses

Uhl and Gunn approximated one another so closely. (page 114)

9. That the Petitioners witnesses Gunn and Uhl disagreed in major respects. (page 114)

10. That over 50% of Petitioners witness Gunn's estimate for depreciation in accessory electric equipment represented obsolescence whereas only 15% of Petitioners witness Uhl's estimate came within that category. (page 114)

11. That Petitioners witness Gunn stated that he did not use service lives as in his opinion the results obtained thereby would bear no relation to existing depreciation except by coincidence, even if a series of adjustments were made from time to time until life expired. (page 115)

12. That Petitioners witness Gunn was very uncertain and indefinite as to what weight he gave to a time discount factor. (page 115)

13. That Petitioners witness Gunn's use of a time discount factor apparently related to a consideration of life expectancy over a possible range of years. (page 115)

14. That Petitioners witness Gunn assumed that depreciation in Petitioners' property would proceed at a certain rate. (page 115)

15. That Petitioners witness Gunn stated he could not make an accurate determination of depreciation without the use of a time discount factor. (page 115)

16. That Petitioners witness Gunn's determination of economic disadvantage produced a result dependent upon price levels through the effect of prices on current operating expenses of existing property and assumed operating expenses and capital costs of alternative

17. That all of Petitioners witness Gunn's studies as to depreciation involved the exercise of judgment without factual basis. (pages 115, 116)

18. That Petitioners witness Gunn speculated as to what would be the cost of building and operating substitute plants. (page 116)

19. That Petitioners witness Gunn obtained carrying charges by use of a factor developed twenty years ago which he did not check for adaptability for current use and which contained an element of return not appropriate in this proceeding, and an element of depreciation in no way related to his own method of determining depreciation. (page 116)

20. That Petitioners witness Gunn's studies contained supposititious operating and maintenance savings. (page 116)

21. That Petitioners witness Gunn assumed a value of power and energy losses that might be saved by modernization of substations. (page 116)

22. That the studies or testimony of Petitioners witness Gunn had "all of the speculation and faults of reproduction new". (page 116)

23. That Petitioners witness Gunn's judgment of depreciation is compromised by the use of a vaguely defined and vaguely used time discount factor. (page 116)

24. That Petitioners witness Gunn's determinations are too speculative to be of real assistance to the Commission in determining accrued depreciation. (page 116)

25. That Petitioners witness Uhl's determination of depreciation actually represented only deferred maintenance. (page 116)

26. That Petitioners witnesses Gunn and Uhl used essentials of a service life calculation to obtain an estimate of the deferred maintenance and depreciation. (page 117)

27. That Petitioners witness Uhl gave no real consideration to obsolescence. (page 117)

28. That it is nowhere apparent in the evidence what consideration Petitioners witness Uhl gave to depreciation existing due to deterioration that could not be found by visual examination. (pages 117, 118)

29. That it is obvious that Petitioners witness Uhl gave principal consideration and weight to the physical condition of the property as he found it. (page 118)

30. That both Petitioners witnesses, Gunn and Uhl, determined their so-called actual depreciation by the observation process. (page 118)

31. That Petitioners witness Gunn endeavored to create the impression that his was a scientific study through generalizations and technical descriptions. (page 118)

32. That Petitioners witness Gunn stated that the $1,500,000 was merely a provision for some kind of contingency in the future. (page 118)

33. That Petitioners method of determining depreciation was "observed depreciation". (page 118)

34. That prior decisions of the Commission are an indication that Petitioners' method of determining depreciation is unlawful or improper. (page 118)

35. That the record in this case shows that Petitioners' method of determining depreciation cannot be accepted as a measure of accrued depreciation for rate base purposes. (page 118)

36. That the decision in the Safe Harbor Water Power Corporation case indicates in some way that

Petitioners' method of determining depreciation in this case is unlawful or improper. (page 118)

37. That the Safe Harbor Water Power Corporation case decided by this Commission is a precedent for this case. (page 118)

38. That the Safe Harbor Water Power Corporation case heretofore decided by this Commission correctly decides the issues therein determined. (page 118)

39. That Petitioners witnesses determined depreciation in Petitioners' property wholly by visual inspection. (page 118)

40. That Commission Staff determined accrued depreciation. (page 119)

41. That Petitioners have employed a method in computing annual depreciation expense similar to the Staff's method of determining accrued depreciation by the use of straight-line, age-life method in this case. (page 119)

42. That since 1931 amounts of depreciation expense accrued in Petitioners' books have been collected from customers. (page 119)

43. That most of Petitioners' reserve was built up by accruals for which Petitioners were specifically reimbursed under the purported Agreement of June 1, 1931. (page 119)

44. That Petitioners' use of service lives in computing annual depreciation expense for accounting purposes is evidence in and of itself of the existence of actual depreciation. (page 119)

45. That Commission Staff properly determined service lives of the various units or classes of Petitioners' property. (page 119)

46. That Commission Staff witnesses estimated service lives. (page 119)

47. That Commission Staff witnesses made a field examination or study of Petitioners' operation, inspection, maintenance and trouble reports in considering functional (economic) as well as physical causes of plant retirement. (page 119)

48. That Petitioners did not offer any evidence in respect to service lives. (page 119)

49. That the service life assumptions (estimates) of the Staff are reasonable and that they should be approved. (page 119)

50. That the Commission or its Staff made a determination of service lives. (page 119)

51. That the Commission Staff witnesses made a proper determination of depreciation reserve (reserve requirement). (page 119)

52. That the reserve requirement assumed (estimated) by Commission Staff witnesses represented that part of the service life of Petitioners' property which had expired or in other words, which related to the past. (pages 119, 120)

53. That Commission Staff witnesses' method of determining depreciation reserve was substantially the same as that employed by Petitioners in their accounts since they inaugurated depreciation accounting. (page 120)

54. That a method of accounting for depreciation in and of itself is evidence of depreciation. (page 120)

55. That the Staff of the Commission properly determined Petitioners' reserve requirement as of December 31, 1945 in the amount of $8,408,373. (page 120)

56. That the book reserve of Petitioners was somewhat higher than the reserve requirement. (page 120)

57. That the difference between Petitioners' book reserve and actual depreciation is represented by the fact that the book reserve contains allowances for resurfacing the dam and a few other deferred maintenance items not included in the Staff's estimates. (page 120)

58. That it is now well established that depreciation expense and accrued depreciation should be determined by the same method in order to do justice to rate payers and the company alike. (page 120)

59. That Petitioners used dual standards in determining accrued depreciation or depreciation expense which inevitably resulted in injustice. (page 120)

60. That Petitioners' method of determining depreciation was by "observed depreciation". (page 120)

61. That the straight-line method is now the generally accepted method of computing actual depreciation. (page 120)

62. That the issues in the Safe Harbor case are the same as the issues in this case. (page 120)

63. That the Safe Harbor case heretofore decided by the Commission properly decides the issues contained therein. (page 120)

64. That the procedure of the Commission Staff in determining depreciation expense and accrued depreciation conformed to a well established precedent. (page 120)

65. That Petitioners witness Uhl admitted that it is the practice to put a life upon such structures as concrete dams and that he would consider them and specifically, the Holtwood dam, as depreciable. (page 120)

66. That methods of accounting for depreciation are in and of themselves evidence of actual accrued depreciation or actual annual depreciation expense. (page 121)

67. That Petitioners accrue amounts to the reserve for depreciation according to the straight-line method. (page 121)

68. That the evidence offered by the Commission Staff in this proceeding as to how certain electric companies treat mass-concrete dams furnishes a basis for concluding that Petitioners' concrete dam is depreciable. (page 121)

69. That the plant items of the electric companies referred to by Commission Staff in the record are comparable to Petitioners' plant. (page 121)

70. That "such plant items as are mentioned above have a limited service life and are properly subject to depreciation allowances in order to prevent the impairment of capital". (page 121)

71. That there is a general practice of treating long-life properties such as mass concrete in dams as depreciable. (page 121)

72. That the treating of the property which Petitioners claim as non-depreciable as depreciable property is clearly correct. (page 121)

73. That Petitioners' proposal to treat certain items of property as non-depreciable is a novel treatment and is not sound from either the financial or regulatory viewpoint. (page 121)

74. That "Upon a consideration of all the evidence it is found that reasonable and proper composite service lives for the steam, hydraulic, transmission and general plant classifications are 42, 69, 57 and 35 years, respectively, with corresponding annual depreciation rates of 2.38%, 1.45%, 1.75%, and 2.86%". (page 121)

75. That the average accrued depreciation in Petitioners' property for the year 1946 was $9,001,873. (page 121)

76. That Petitioners "witness Gunn derived his estimate of the adequate annual allowance of $400,000 by applying to the 1945 book allowance for depreciation, $574,245, the ratio of his determination of the proper reserve at the end of 1945, $6,000,000, to the December 31, 1945 book balance in the depreciation reserve, $8,976,358, and increasing the result to $400,000 after consideration of several intangible counteracting factors". (page 122)

77. That Petitioners witness Gunn's recommendation of $400,000 is upon the straight-line basis. (page 122)

78. That Petitioners witness Gunn assumed a straight-line basis of accumulation in his determinations of depreciation. (page 122)

79. That Petitioners witness Gunn included no allowance for obsolescence in his $400,000 annual allowance for depreciation. (page 122)

80. That Petitioners witness Gunn's derivation of the $400,000 annual allowance can only be sustained by validation of his use of the ratio of his determination of the reserve requirement to the book reserve. (page 123)

81. That Petitioners witness Gunn's determination of the reserve requirement cannot be accepted. (page 123)

82. That no basis exists for accepting Petitioners witness Gunn's determination of annual allowance for depreciation. (page 123)

83. That procedures followed by Petitioners witness Gunn were impractical or unsound. (page 123)

84. That Petitioners witness Gunn's $400,000 recommended annual allowance would be inadequate to return the investment in presently owned depreciable property to Petitioners over the service lives of such property. (page 123)

85. That Petitioners witness Gunn's 2½% of depreciation to be applied to additions is excessive. (page 123)

86. That the fact that Petitioners witness Gunn's annual allowance for depreciation and determination of accrued depreciation would result in a fair allowance over a period of years is the result of accident rather than sound practices. (page 123)

87. That the Staff's computation of annual allowance conformed to standard practice. (page 123)

88. That the depreciation rates assumed by the Commission Staff witnesses are proper. (page 123)

89. That Commission Staff witnesses were correct in applying the depreciation rates found by the Commission to be proper here to the average of the appropriate plant balances for the year. (page 123)

90. That the proper annual allowance for the year 1946 is $467,701. (page 123)

91. That Petitioners witness Dorau's testimony is the only evidence in the support of their contention that their rate base should be undepreciated. (page 124)

92. That the use of the sinking-fund method with a rate of interest applicable to the sinking fund, lower than the rate of return allowed on the investment, has the effect of not crediting the consumer with the full amount of the investment which is repaid by him in the form of depreciation expense. (page 124)

93. That depreciation expense represents a repayment of investment by the consumers. (page 124)

94. That Petitioners witness Dorau's contention as to the validity of an undepreciated rate base is that the reserve investment is "an actual fund". (page 125)

95. That Petitioners witness Dorau's testimony is fallacious. (page 125)

96. That depreciation reserve assets do not in fact or theory constitute a trust fund. (page 125)

97. That funds coming into the possession of a utility through allowance of depreciation expense belong to the utility absolutely and may be used for all purposes. (page 125)

98. That funds coming into the hands of the utility through allowance of depreciation expense can be used to pay off all debts. (page 125)

99. That if assets reflected by the depreciation reserve are invested in stocks and bonds, rate regulation does not take them into account. (page 125)

100. That Petitioners witness Dorau's trust fund analogy is strained. (page 125)

101. That accrued depreciation represents "that part of the cost of plant which relates to the past—expired service life". (page 125)

102. That if accrued depreciation is not deducted in determining rate base a "cost of past operations becomes the basis for a continuing charge". (page 125)

103. That there are equitable grounds for deducting accrued depreciation from cost to determine Petitioners' rate base. (page 126)

104. That consumers pay for plant consumption. (page 126)

105. That "it is just as inequitable to charge a return on the amount reimbursed as it would be to charge a return on the cost of coal consumed in a previous year and duly recovered in operating expenses". (page 126)

106. That the results of Petitioners witnesses' computations "do not constitute a valid argument, *per se*,

against the straight-line method and the employment of a depreciated rate base". (page 126)

107. That the use of the sinking-fund method would postpone recoupment of a high portion of Petitioners' investment to the remote time when the properties are old, maintenance high and obsolescence a greater hazard. (page 126)

108. That "this would entail greater financial risks and might result in serious capital impairment". (page 126)

109. That the Safe Harbor Water Power Corporation case hereinbefore decided by the Commission correctly determines the issues raised therein. (page 126)

110. That the Safe Harbor Water Power Corporation case is a precedent for the instant use. (page 126)

111. That the record in this proceeding does not alter what was said by the Commission in the case of Safe Harbor Water Power Corporation. (page 126)

112. That the use of a depreciated rate base in this proceeding is proper. (page 127)

113. That Petitioners' book reserve approximates a proper reserve requirement. (page 127)

114. That a reserve requirement as computed by the Staff represents a proper reserve. (page 127)

115. That the book reserve of Petitioners should be deducted as a measure of accrued depreciation in Petitioners' property. (page 127)

116. That Petitioners' book reserve is only slightly higher than its reserve requirement, and even the excess represents payment to Penn Water by its customers for deferred maintenance. (page 127)

117. That "we find that from Respondents' (Petitioners) average investment in plant for 1946,

$33,126,585, the reserve for depreciation, averaged for the year $9,001,873, should be deducted in arriving at the 1946 rate base". (page 127)

Whenever in the Opinion or "Order Reducing Rates" in this case the Commission has adopted or referred to the record or Opinion No. 143 in the case of Safe Harbor Water Power Corporation, Docket IT-5914, Petitioners adopt and make a part hereof all of the points set forth in the application for rehearing in that case filed with the Commission on December 4, 1946.

(65) Petitioners herein object to and seek rehearing of Opinion No. 173 of the Commission because of its failure to find the following facts and make the following conclusions of law, said failure to find the following facts being contrary to the substantial evidence in the record and the failure to determine the following conclusions of law being contrary to law, the Federal Power Act and results in depriving Petitioners of their property without due process of law in violation of the Fifth Amendment to the Constitution of the United States:

1. That the accrued depreciation in Petitioners' property amounted to approximately $4,500,000 as of December 31, 1945 and an adequate depreciation reserve as of the same date amounted to $6,000,000.

2. That the testimony of Petitioners witnesses Gunn and Uhl was based upon comprehensive engineering and economic studies of Petitioners' property and is substantial, uncontradicted evidence as to the proper amount of actual depreciation on December 31, 1945.

3. That Staff witness Roland was incompetent to determine service lives of Petitioners' property and his testimony and exhibits should be rejected.

4. That the service lives assigned to Petitioners' properties by Commission Staff are arbitrary and unsupported by substantial evidence.

5. That property is non-depreciable when there are no causes, physical or non-physical, in current operation which will bring about its retirement and when the property will continue in use, substantially unchanged, as long as the enterprise exists.

6. That the following property of Petitioners is properly classified as non-depreciable: the forebay ramp, the mass concrete in the dam and tailrace deflection wall, and the excavation for the tailrace, dam and powerhouse.

7. That if the forebay ramp, the mass concrete in the dam and tailrace deflection wall, the excavation for the tailrace, dam and powerhouse are classified as depreciable and assigned the Staff's recommended lives, it will result in the accumulation of a grossly excessive reserve for depreciation.

8. That the service lives used by the Staff were erroneous and the amount of the depreciation determined thereby is erroneous.

9. That the use of the straight-line method of depreciation with the service lives recommended by Commission Staff is not proper and deprives Petitioners of property without due process of law and results in a method which is unlawful, unjust and discriminatory to Petitioners.

10. That the actual depreciation in Petitioners' property should as a matter of law and can as a matter of fact be determined by comprehensive engineering and economic studies of such property based upon the same principles that govern the installation and retirement of property.

11. That Petitioners witnesses Gunn and Uhl possess the necessary qualifications to make such engineering and economic studies to determine actual depreciation in Petitioners' property and said witnesses employed proper methods in their studies.

12. That a determination of actual depreciation, proper reserve balance and the annual allowance for Petitioners' property, simply by accounting methods, is unsound and must yield to the facts developed by comprehensive engineering and economic studies of such property made by Petitioners' witnesses.

13. That depreciation is the loss of service value which is manifested in property because it is property which depreciates, not the money which has been used to acquire property, nor the accounts in which it is recorded.

14. That depreciation is factual in nature and occurs at the time and to the extent of the incidence and progression of its causes.

15. That depreciation does not occur by reason of the mere expiration of time, nor in the absence of causes actually operating to bring about the retirement of property.

16. That depreciation, as applied to electric plant of Petitioners, means the loss in service value not restored by current maintenance, incurred in connection with the consumption or prospective retirement of electric plant in the course of service from causes which are known to be in current operation and against which the utility is not protected by insurance. Among the causes to be given consideration are wear and tear, decay, action of the elements, inadequacy, obsolescence, changes in the art, changes in demand and requirements of public authorities.

17. That a study by competent persons of the effect of causes of depreciation is essential, to determine the proper amount of the depreciation reserve as well as a proper annual allowance for Petitioners' property.

18. That it is correct to determine physical depreciation through a comparison of the property under

consideration with the condition of the property when new and also with its condition when it will be replaced.

19. That it is correct to determine economic depreciation through a comparison of the property under consideration with the most economical practical property that will give the same quantity and quality of service.

20. That the size of the depreciation reserve should be governed by the amount of depreciation actually existing in the property.

21. That the size of the depreciation reserve should be greater than the depreciation existing in the property by an adequate factor of safety to cover unforeseen contingencies.

22. That Commission Staff, in its use of the straight-line method of computing depreciation erroneously assumes that actual depreciation occurs in equal annual amounts.

23. That Staff witness Roland fixed service lives of Petitioners' property as a result of speculation, and guesswork, and his service lives must be rejected.

24. That the inspection of Petitioners' property and records by Staff witness Roland was cursory and wholly inadequate for the purpose of accurately determining depreciation in Petitioners' property or a proper annual allowance.

25. That the so-called life tables of other companies utilized by Staff witness Roland were clearly inapplicable to Petitioners' property which was recognized by him to be unique.

26. That an adequate reserve for Petitioners' property as of December 31, 1945 was $6,000,000 rather than the adjusted book reserve for depreciation figure of $8,763,118.

27. That the annual charge for depreciation to be applied to Petitioners' property at the present time should be $400,000 plus 2½% per annum applied to net additions of depreciable property subsequent to December 31, 1945.

28. That depreciation does not occur in equal annual amounts.

29. That the annual allowance for depreciation in Petitioners' property should be so determined as to provide for large items of deferred maintenance.

30. That the testimony and exhibits of Petitioners witness Gunn constitute substantial and uncontradicted evidence that the amount of $400,000 plus 2½% per annum on net additions of depreciable property subsequent to December 31, 1945 is a fair and reasonable annual charge for depreciation in Petitioners' property.

31. That the straight-line method used by Commission Staff is based on assumed service lives which are fundamentally erroneous and the annual charge for depreciation, based thereon, is also erroneous.

32. That a fair and reasonable annual depreciation charge cannot be determined by an arbitrary choice of accounting method.

33. That it is necessary as a matter of law to make thorough and exhaustive studies of actual depreciation by qualified and experienced engineers to determine the proper charges to depreciation expense and Commission Staff witnesses failed to make such studies.

34. That Petitioners witness Gunn is a qualified and experienced engineer and his testimony and exhibit as to the proper annual depreciation charge for Petitioners' depreciable property constitute substantial and uncontradicted evidence.

35. That an annual charge for depreciation of $467,781 for Petitioners' depreciable property for the year 1946, as well as similarly computed amounts for future years, is improper and unlawful.

36. That the amount of annual depreciation allowance recommended by Commission Staff is the result of its witnesses arbitrarily applying an accounting formula unrelated to the actual facts of depreciation and is excessive.

37. That the purpose of accounting, including accounting for depreciation, is to record the facts and the legal effect of business transactions and occurrences; and accounting methods unrelated to the true facts determine nothing.

38. That the facts as to actual depreciation should determine and control the accounting; and the accounting should not be permitted to distort the facts or their legal consequences.

39. That Mr. Roland did not base his service lives for Petitioners' property on the only factual basis available, i. e., actual existing depreciation.

40. That Mr. Roland did not give proper consideration to the causes of depreciation in determining service lives for Petitioner.

41. That the use of an equal annual charge for depreciation with a substantially risk-free credit or the sinking-fund method of accounting with an interest rate equal to that which is actually earnable from investments which are substantially risk-free, will not do any injustice to consumers, but, on the contrary will result in equality and justice to both consumers and investors.

42. That the use of an equal annual charge for depreciation with a substantially risk-free credit or the sinking-fund method of accounting with an interest rate

equal to that which is actually earnable from investments which are substantially risk-free, will not result in the investors earning more than a fair return on their investment.

43. That the use of an equal annual charge for depreciation with a rate of return credit or a sinking-fund method of accounting for depreciation with an interest rate equal to the rate of return will discriminate against the investors and in favor of the consumers and will be unfair, unjust, unreasonable and confiscatory to the investors.

44. That Petitioners showed by substantial evidence that deduction of the reserve balance would result in a declining rate base and in a failure to earn the rate of return intended, and that the only circumstances under which the enterprise would actually earn the intended fair rate of return are those in which an undepreciated rate base is employed in conjunction with a consumer credit on depreciation reserve balances equal to the income actually earned upon the investment of the assets reflected by such balance without added risks, hazards and uncertainties.

45. That Petitioners have showed by substantial evidence that the regulatory procedure recommended by Commission Staff would result in a declining rate base and a failure of the enterprise to earn the intended fair rate of return in the future.

46. That under the straight-line method with a reserve balance deduction it is impossible for Petitioners to earn a predetermined rate of return on their investment unless the enterprise assumes additional risks, uncertainties and responsibilities in the employment of the funds generated by the reserve accrual and thus no predetermined fair rate of return can actually be earned under this method.

47. That there cannot be full employment of every dollar accrued for depreciation from the time of its accrual.

48. That the testimony of Staff witness Dunn must be rejected because his conclusions are erroneous and are based upon assumed service lives which in and of themselves are fundamentally erroneous.

49. That Commission Staff desiring to deduct the greatest possible amount from Petitioners' original cost to arrive at their rate base computed a composite rate of depreciation that would result in a reserve requirement of approximately the same amount as Petitioners' excessive book reserve by dividing the total of the past accruals to the depreciation reserve by the total accumulated average annual balances of what the Staff considered depreciable electric plant.

50. That Staff witness Roland was given by Commission's accounting staff a predetermined average depreciation rate of 1.73%, for the purpose of designing a life table which would appear to justify that rate.

51. That Commission Staff predetermined the average depreciation rate for Petitioners' property which it desired prior to the time Staff witness Roland began his studies for the purpose of fixing service lives.

52. That the determination of just and reasonable rates for Petitioners under Section 206 (a) of the Federal Power Act requires the application of a fair utility rate of return to an undepreciated rate base.

53. That a credit of 3% on a depreciation reserve balance of $6,000,000 as of December 31, 1945 plus a credit of 3% on all subsequent net increases of the depreciation reserve should be granted to Petitioners' customers.

54. That the use of a depreciated rate base would constitute a deprivation of Petitioners' property without due process of law in violation of the 5th Amendment of the Federal Constitution and the Federal Power Act.

55. That Petitioners, by virtue of their status as licensees, are entitled, whenever their rates and charges are regulated or controlled by the Federal Power Commission, to have such rates and charges regulated and controlled in accordance with the provisions of the Federal Power Act. Under the general provisions of licenses and the provisions of said Act, Petitioners are entitled to a fair return upon their "net investment" and their "net investment" is:

> "the actual legitimate original cost thereof (the project) as defined and interpreted in the 'classification of investment in road and equipment of steam roads, issue of 1914, Interstate Commerce Commission,' plus similar costs of additions thereto and betterments thereof, minus the sum of the following items properly allocated thereto, if and to the extent that such items have been accumulated during the period of the license from earnings in excess of a fair return on such investment: (a) Unappropriated surplus, (b) aggregate credit balances of current depreciation accounts, and (c) aggregate appropriations of surplus or income held in amortization, sinking fund, or similar reserves, or expended for additions or betterments or used for the purposes for which such reserves were created."

The Petitioners' "net investment" as determined by the Commission does not accord with and is contrary to the statutory definition contained in Section 3 (13) of the Federal Power Act.

56. That the use of an undepreciated rate base together with the granting of a credit of 3% to customers on an adequate depreciation reserve balance is fair and equitable to both investors in and customers of Petitioners.

57. That the use of a depreciated rate base would illegally impose upon Petitioners' investors the re-

sponsibility for the custody and management of the assets reflected by the depreciation reserve balance without compensation to the investors for this burden.

58. That the assets accumulated from advances by consumers for depreciation expense are not a return of capital to investors because they are not free assets but must be retained in the business and thus remain devoted to public use.

59. That the advances made with respect to depreciation do not constitute a return of the investment to the investors and in no real and economically meaningful sense do they even return the investment to the enterprise because such funds are collected and retained for restricted purposes; in effect, the enterprise does not come into a full and unincumbered ownership of such assets until its rights in them have been matured by a retirement.

60. That Petitioners' investors are entitled to earn and receive a fair return upon the money prudently invested by them and used in rendering public service, until such time as their investment is returned to them as free capital.

61. That it is the duty of Petitioners to render efficient, dependable and continuous service to the public until relieved of that obligation by proper regulatory authorities and the consumers have the obligation to pay the total cost thereof.

62. That it is the duty of Petitioners to accumulate and maintain an adequate depreciation reserve, the primary purpose of which is to enable Petitioners to maintain their plant in proper condition for efficient operation.

63. That it is the duty of Petitioners to retain within the business the assets reflected by the depreciation reserve and Petitioners may not return these assets to their investors as free capital.

64. That the nature of hydroelectric property employed in the public service requires the collection of large sums on account of depreciation long in advance of the time when they will be needed for the purposes which justified their collection.

65. That Petitioners' property is relatively static and is long lived, and abnormally large sums must be collected on account of depreciation and held for unusually long periods with little or no opportunity to invest with regularity such funds in utility property.

66. That the assets reflected by the depreciation reserve balance of a public utility must be held in the enterprise to replace property retired and maintain the integrity of the investment, and cannot legally be returned to the investors.

67. That the measurement by engineering studies of actual existing depreciation is more accurate and reliable than assumptions of service lives of Petitioners' property and should govern and control the amount of the depreciation reserve balance.

68. That the assets reflected by the depreciation reserve balance remain devoted to the public service and are not free capital which can be returned by the company to the investors.

69. That the net cost of the retention of the assets reflected by the depreciation reserve balance in a utility enterprise is an unavoidable part of the cost of the service and should be borne by the customers.

70. That the use of an undepreciated rate base is proper since Petitioners are required to have an amount of assets in excess of capital stock, debts and other liabilities sufficient to equal the reserve for depreciation or their capital will be impaired.

71. That the capital invested in Petitioners is not and cannot be returned to the investors until the regu-

latory authorities determine that such capital is no longer needed in the business and may be disinvested.

72. That Petitioners' investors are entitled to receive the utility rate of return upon their undepreciated investment for the reason that no part of it has been returned to them.

73. That the customers of Petitioners are entitled to receive the benefit of whatever return may be obtained from the investment of the assets reflected by the reserve for depreciation in securities which are substantially risk-free which return is deemed to be for the present 3%.

74. That the requirement of a 3% credit to consumers, even though not actually earned on the reserve assets, furnishes the incentive and obligation for management to economically utilize such fund.

75. That the net cost of the retention of the assets reflected by the depreciation reserve balance is measured by the difference between the utility rate of return and the rate which is earnable on substantially risk-free capital.

76. That part of the cost of service which arises from the retention in the enterprise of the assets reflected by the depreciation reserve balance should be borne by the consumers just as all other parts of the cost of service.

77. That in computing the net cost of the retention of the assets reflected by the depreciation reserve balance, the consumers are entitled to a credit of no more than is actually earnable on substantially risk-free capital because they assume no risk and in the event of loss, the absolute and undivided responsibility for the loss must be borne by the investors.

78. That the net cost to Petitioners of the custody and management of the assets reflected by the reserve

for depreciation is a cost of rendering public utility service not substantially different from the recognition and allowance of the cost of necessary Working Capital and Materials and Supplies.

79. That if by any regulatory procedure the consumers are allowed any greater reduction of the depreciation burden such allowance can only be made at the expense of the investors who will either receive less than a fair return on their investment or will be compelled to assume additional risks, uncertainties and responsibilities for which they will not receive adequate compensation.

80. That investment of assets reflected by the reserve for depreciation in government bonds would improperly compel Petitioners to sustain a loss of income represented by the difference between a fair rate of return for a public utility and the yield on such government bonds.

81. That investment of the assets reflected by the reserve for depreciation in bonds of other companies would improperly impose upon Petitioners a loss of income represented by the differential between a fair rate of return for a public utility and the yield on such bonds.

82. That investment of the assets reflected by the reserve for depreciation in stocks of other companies would result in the investment of funds originally dedicated to public use in alien enterprises and ventures over which Petitioners would have no control.

83. That investment of the assets reflected by the reserve for depreciation in stocks of other companies would impose upon Petitioners the risk of other enterprises, which risks would be different and additional to that of operating Petitioners' property.

84. That the investment of the assets reflected by the reserve for depreciation in retirement of Petitioners' own bonds would improperly require Petitioners to lose the income derived from the employment of their

capital represented by the difference between a fair rate of return for a public utility and the interest payable on their bonds.

85. That a depreciated rate base is not appropriate when investment is the standard for rate base determination.

86. That the historical practice of deducting actual depreciation in order to arrive at "fair value" does not warrant the deduction of actual depreciation from original cost in the instant case.

87. That the deduction of the reserve for depreciation from Petitioners' original cost to determine the rate base illegally and inequitably relieves Petitioners' customers of the obligation to pay any return on that portion of the investment reflected by the reserve for depreciation.

88. That the assumption of Commission Staff witnesses that the use of the straight-line method of accounting for depreciation necessarily requires the use of a depreciated rate base for the purpose of determining a fair return is without foundation.

89. That the testimony and exhibits of Petitioners' witness Dorau furnish substantial evidence which is controlling.

90. That Petitioners' witness Dorau has established that the deduction of the reserve balance from original cost in determining Petitioners' rate base would result in a declining rate base and in a failure to earn the rate of return intended.

91. That the straight-line method of computing depreciation results in the retention in the enterprise of the largest amount of assets for the longest period of time and therefore results in the greatest total actual cost of the service.

92. That if depreciation is to be deducted in determining a rate base, only the adequate reserve balance of $6,000,000 should be so deducted.

That the Petitioners seek rehearing of the Opinion and Order for the purpose of proving that the adjusted reserve balance of $9,240,628 as determined by the Commission as of December 31, 1946 was excessive when compared to the total depreciable plant of $26,651,886 as of December 31, 1946, resulting in a ratio of adjusted reserve balance to depreciable plant of 34.67%. That this ratio has become increasingly excessive as evidenced by the fact that as of December 31, 1948 the adjusted reserve balance was $10,258,925 and the total depreciable plant was $27,161,528 resulting in a ratio of adjusted reserve balance to depreciable plant of 37.77%. or an increase of approximately 9%.

(66) Petitioners seek rehearing of the statement, findings, and conclusions on pages 132, 133, 138, and 141 of the Commission's Opinion No. 173, which read as follows:

"Upon a careful review of the extensive evidence of record in this proceeding which deals with the subject of rate of return, and applying the principles controlling the determination of a proper rate for utilities as enunciated by the Supreme Court, it is found that a rate of return of 5¼% for Respondents is fair and reasonable."

* * *

"Respondents are very little subject to even the ordinary risks of an electric operating utility. Penn Water * * * possesses strong power contracts, and is in a very favorable financial position. The contract with Baltimore Company assures Respondents of a stabilized income on a basis prior even to the return of the holders of the common stock of Baltimore Company."

* * *

"We find, therefore, that a rate of return of 5¼%, applied to the rate base heretofore described ($24,774,712 for 1946) is fair and reasonable. This rate of return which is based upon 3.17% for bonds and

5.21% for preferred stock, allows about 8.64% for common stock and surplus, which is adequate. This return for equity, which takes into consideration cost of floating the stock accords greatest weight to the most recent data and allows for the upward trend in equity investor requirements."

• • •

That the fair return is $1,300,672. (page 141) on the grounds that:

(a) A rate of return of 5¼% does not adequately compensate Petitioners for existing hazards and risks including among others, damage from flood, ice and storms, the progress of other methods of electric generation at lower cost thus presaging more competitive conditions, government competition, Petitioners' lack of a territory in which they enjoy a monopoly and the risks incident to variations in river flow; and

(b) The return provided of $1,300,672 does not reasonably assure confidence in Petitioners' financial soundness and is not adequate to assure Petitioners' ability to maintain their credit and to enable them to raise the capital necessary for the discharge of their public duties; and

(c) The return of $1,300,672 provided by the order is less than the return enjoyed by other invested capital in the same territory subject to corresponding risks and uncertainties; and

(d) The Commission's Order will result in depriving Petitioners of their property without due process of law, in violation of the Fifth Amendment to the Constitution of the United States; and

(e) The statements, findings and conclusions are not supported by substantial evidence of record, are contrary to the substantial evidence of record and are contrary to law and the Federal Power Act; and

(f) The Commission failed to find that 6½% is the fair and reasonable rate of return; and

(g) The Commission failed to find that the return resulting from the 6½% fair rate of return applied to original cost undepreciated is the fair and reasonable return; and

(h) The Commission failed to find that the minimum fair return required by Petitioners, after appropriate treatment for depreciation, is $2,270,000; and

(i) The Commission failed to find that 9.25% is the capitalization rate of and is the proper and fair allowance for return on the equity capital.

(j) As stated in paragraph II (6) (c) above.

(67) Petitioners seek rehearing of the statements, findings, and conclusions on pages 25, 26 and 133 of the Commission's Opinion No. 173, as follows:

> That Petitioners' evidence as to (1) reproduction cost, (2) the cost of a substitute plant and (3) original cost stated in terms of the purchasing power of the dollar in 1945, was properly excluded and that such evidence is unnecessary and useless for rate making purposes and would not aid in the determination of just and reasonable rates. (pages 25, 26)
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> • • •
>
> "The witness' method involves the attempted injection of speculative reproduction cost through the back door, i. e., rate of return testimony. It cannot be accepted."

on the grounds that:

(a) The statements, findings, and conclusions are not supported by substantial evidence, are contrary to the substantial evidence and are contrary to law and the Federal Power Act; and

(b) The Commission's failure to find that such evidence is admissible and is essential to the determination of the proper rate base and the fair and reasonable return results in depriving Petitioners of a fair and reasonable return and of their property without due process of law.

(68) Petitioners seek rehearing of the statements, findings, and conclusions made on pages 134 and 136 of the Commission's Opinion No. 173, referring to Penn Water's outstanding bonds, which read as follows:

> "The series of 1964, in the principal amount of $10,900,000, offered in 1939, was issued at a premium and on a yield basis of 3.02% and at a cost rate to maturity of 3.20%. The series of 1970, in the principal amount of $10,962,000, offered in 1940, was issued at a premium and on a yield basis of 3% and at a cost rate of 3.14%."
>
> * * *
>
> "Accordingly, we find that Respondent Penn Water's cost of bond money for purposes of this rate proceeding is 3.17% * * *."

on the grounds that:

(a) The statements, findings, and conclusions are not supported by substantial evidence of record and are contrary to the substantial evidence of record; and

(b) The Commission failed to find that the cost rates of the 1964 series and 1970 series are 3.21% and 3.83%, respectively, and that the cost of bond money to Penn Water for the purpose of this proceeding is 3.505%.

(69) Petitioners seek rehearing of the statements, findings, and conclusions on page 138 of the Commission's Opinion No. 173, which read as follows:

> "As of December 31, 1946, and subsequent to the adjustment to surplus which is required in the finding

and order herein, Respondents' capitalization consists of 58.19% outstanding debt in the amount of $20,313,000, 6.10% cumulative preferred stock (no Par) in the book amount of $2,130,895.50, and 35.71% common stock in the stated amount of $10,868,312.50 with a surplus of $1,598,812.18."

on the grounds that:

(a) The statements, findings, and conclusions are not supported by substantial evidence of record and are contrary to the substantial evidence of record; and

(b) The adjustment to surplus is contrary to law, is not supported by substantial evidence of record and is contrary to the substantial evidence of record; and

(c) The Commission failed to find that Petitioners' capitalization consists of 52% outstanding debt, 5.4% cumulative preferred stock (no par) and 42.6% common stock and surplus.

III. The Commission's statements, findings, and conclusions in its "Order Reducing Rates", issued January 5, 1949, as referred to below are contrary to the evidence, are unsupported by any substantial evidence, unsupported by adequate subsidiary findings, are unlawful, erroneous, arbitrary, capricious, and unconstitutional and operate to deprive Petitioners of their property without due process of law, in violation of the Fifth Amendment to the Constitution of the United States, and result in an exercise of authority in excess of statutory jurisdiction, authority, or limitations; and Petitioners seek rehearing on each and every one of the following purported findings on the grounds hereinafter stated:

(1) Finding No. (1) on the grounds as stated in paragraph II (3) herein.

(2) Finding No. (2), to the extent that it finds that Safe Harbor owns, operates, and maintains transmis-

sion facilities on the grounds that such statement is not supported by any substantial evidence and is contrary to the evidence.

(3) Finding No. (5) on the grounds herein specifically set forth in paragraphs I (6) (h), I (9), II (4), II (12), II (13), and II (14).

(4) Finding No. (6) on the grounds herein specifically set forth in paragraphs I (6) (a) (iii), I (6) (a) (iv), I (6) (b), I (6) (h), I (9), II (5), II (7), II (12), II (13), II (14), II (16), II (28).

(5) Finding No. (7) on the grounds herein specifically set forth in paragraphs I (6) (a) (iii), I (6) (a) (iv), I (6) (b), I (6) (h), I (9), II (5), II (6), II (12), II (13), II (14), II (16), II (17), II (20), II (25), II (26), II (27), II (28), II (58).

(6) Finding No. (8) on the grounds herein specifically set forth in paragraphs I (4), I (6) (h), I (9), II (4), II (5), II (6), II (7), II (11), II (12), II (13), II (14), II (15), II (19), II (57).

(7) Finding No. (9) on the grounds herein specifically set forth in paragraphs I (4), I (6) (h), I (9), II (4), II (5), II (6), II (7), II (11), II (12), II (13), II (14), II (15), II (19), II (57).

(8) Finding No. (10) on the grounds herein specifically set forth in paragraphs I (4), I (6) (h), I (9), II (4), II (5), II (6), II (7), II (11), II (12), II (13), II (14), II (15), II (19), II (57).

(9) Finding No. (11) on the grounds herein specifically set forth in paragraphs I (4), I (6) (a) (iii), I (6) (a) (iv), I (6) (b), I (6) (h), I (9), II (4), II (5), II (6), II (7), II (11), II (12), II (13), II (14), II (16), II (17), II (19), II (20), II (25), II (26), II (27), II (28), II (57), II (58).

(10) Finding No. (12) on the grounds herein specifically set forth in paragraphs I (6) (h), II (4), II (5), II (6), II (7), II (11), II (12), II (13), II (14), II (15), II (19), II (57).

(11) Finding No. (13) on the grounds herein specifically set forth in paragraphs I (6) (h), II (4), II (5), II (6), II (7), II (11), II (12), II (13), II (14), II (15), II (19), II (57).

(12) Finding No. (14) on the grounds herein specifically set forth in paragraphs III (1) through III (11), inclusive.

(13) Finding No. (15) on the grounds herein specifically set forth in paragraphs I (4), I (6) (a) (i), I (6) (a) (iv), I (6) (b), I (6) (h), I (9), II (8), II (11), II (12), II (13), II (16), II (17), II (41), II (44), II (51), II (57).

(14) Finding No. (16) on the grounds herein specifically set forth in paragraphs I (4), I (6) (a) (i), I (6) (a) (iv), I (6) (b), I (6) (h), I (9), II (8), II (11), II (12), II (13), II (16), II (17), II (41), II (44), II (51), II (57).

(15) Finding No. (17) on the grounds herein specifically set forth in paragraphs III (1) through III (11).

(16) Finding No. (18) on the grounds herein specifically set forth in paragraphs III (1) through III (15).

(17) Finding No. (20) on the grounds herein specifically set forth in paragraphs III (1) through III (16).

(18) Finding No. (21) on the grounds herein specifically set forth in paragraphs I (1), I (2), II (18), II (21).

(19) Finding No. (22) on the grounds herein specifically set forth in paragraphs I (1), I (2), II (18), II (22), III (1) through II (sic) [III] (18).

(20) Finding No. (23) on the grounds herein specifically set forth in paragraphs I (1), I (2), II (18), II (22), III (1) through III (19).

(21) Finding No. (24) on the grounds herein specifically set forth in paragraphs I (4), I (6), I (7), I (9), II (2), II (8), II (11), II (12), II (13), II (16), II (17), II (35), II (41), II (44), II (51), II (53), II (54), II (60) to II (67), inclusive.

(22) Finding No. (25) on the grounds herein specifically set forth in paragraphs II (60) to II (65) inclusive, and II (67).

(23) Finding No. (26) on the grounds herein specifically set forth in paragraphs II (60) to II (65), inclusive, and II (67).

(24) Finding No. (27) on the grounds herein specifically set forth in paragraphs II (64), II (65).

(25) Finding No. (28) on the grounds herein specifically set forth in paragraphs II (64), II (65).

(26) Finding No. (29) on the grounds herein specifically set forth in paragraphs II (60), II (61).

(27) Finding No. (30) on the grounds herein specifically set forth in paragraphs I (4), I (5), I (6), I (7), I (9), II (2), II (56), II (59), II (60) to II (67), inclusive.

(28) Finding No. (31) on the grounds herein specifically set forth in paragraphs II (66) to II (69), inclusive.

(29) Finding No. (32) on the grounds herein specifically set forth in paragraph II (30).

(30) Finding No. (33) on the grounds herein specifically set forth in paragraph II (55).

(31) Finding No. (34) on the grounds herein specifically set forth in paragraphs II (55), II (56).

(32) Finding No. (35) on the grounds herein specifically set forth in paragraphs II (60) to II (65), inclusive, and II (67).

(33) Finding No. (36) on the grounds herein specifically set forth in paragraphs II (66) to II (69), inclusive.

(34) Finding No. (37) on the grounds herein specifically set forth in paragraphs I (8), I (9), II (6), II (58), II (59), II (62) to II (69), inclusive.

(35) Finding No. (38) on the grounds that such finding is contrary to law and without authority under the Federal Power Act.

IV. The Commission's orders or requirements in its "Order Reducing Rates" as set forth below are erroneous in law and fact, are contrary to the evidence, and are unsupported by any substantial evidence, unsupported by findings, and are unlawful, erroneous, arbitrary, capricious and unconstitutional, operate to deprive Petitioners of their property without due process of law, in violation of the Fifth Amendment to the Constitution of the United States and result in an exercise of authority in excess of statutory jurisdiction, authority or limitations; and Petitioners seek rehearing on each and every one of the following orders or requirements:

(1) Paragraph (A) of the Order on the grounds herein specifically set forth in paragraphs I, II and III.

(2) Paragraphs (C) and (D) of the Order on the grounds herein specifically set forth in paragraphs I, II and III.

(3) Paragraph (E) of the Order on the ground that the Commission has no jurisdiction, authority, or power, under the Federal Power Act to reject any schedules of rates or charges or any rules, regulations, practices, or contracts affecting any such rates or charges, except after following the procedure prescribed by Section 205 (e) of the Act (16 U. S. C. 1946 Ed., Sec. 824d (e), 49 Stat. 851).

(4) Paragraph (F) of the Order on the grounds herein specifically set forth in paragraphs II (64), II (65).

(5) Paragraph (G) of the Order on the grounds herein specifically set forth in paragraphs I, II, III.

(6) Paragraph (H) of the Order on the grounds herein specifically set forth in paragraph I (8).

(7) Paragraph (I) of the Order on the grounds herein specifically set forth in paragraphs I, II, III.

V. Petitioners seek rehearing of the Commission's "Order Reducing Rates" on the ground that the Commission failed to affirm the Petitioners' following requests for findings:

"1. Pennsylvania Company (Penn Water) owns and operates a project, as defined in Section 3 (11) of the Federal Power Act, and develops, transmits and distributes power for sale or use in public service in the State of Pennsylvania.

• • •

"3. Pennsylvania Company receives power from Safe Harbor, a licensee under the Federal Power Act, and transmits, distributes, sells and uses in public service such power within the State of Pennsylvania.

"4. The States of Pennsylvania and Maryland have each authorized and empowered commissions within such States to regulate and control the services to be rendered by Respondents and the rates and charges of payment therefor.

"5. The States of Pennsylvania and Maryland have each authorized and empowered commissions within such States to enforce the requirements of Section (sic) 19 and 20, or any provisions of the Federal Power Act which commit authority to the States.

"6. The Pennsylvania Public Utility Commission is now actively engaged in the regulation and control of the rates and charges of Pennsylvania Company.

• • •

"8. There is no evidence of record that the States of Pennsylvania and Maryland are unable to agree through

their properly constituted authorities on the services to be rendered or on the rates or charges of payment therefor of Respondents.

"9. The rate regulatory provisions of Part II of the Federal Power Act are not applicable to the rates or charges of Respondents which are subject to regulation and control under the provisions of Part I of the Act.

"10. Respondents demand, observe, charge, or collect no rates, charges or classifications which are for a transmission of electric energy in interstate commerce or for a sale of electric energy at wholesale in interstate commerce.

"11. The rates or charges, participated in by Pennsylvania Company, for joint services to the Pennsylvania Railroad Company (Railroad) are not for sales of electric energy at wholesale.

"12. All revenues received by Pennsylvania Company for its participation in joint service to the Pennsylvania Railroad Company are its division of the joint rates or charges demanded, observed, charged and collected from the Railroad by Baltimore Company, and such revenues are not all retained by Pennsylvania Company.

"13. Firm power revenues are received by Pennsylvania Company, acting for itself and as agent for Safe Harbor, from Pennsylvania Power & Light Company (PP&L) and Philadelphia Electric Company (Philadelphia Company), for joint service to such companies by Pennsylvania Company and Safe Harbor, and all of such revenues are not retained by Pennsylvania Company.

"14. Revenues received by Pennsylvania Company from Baltimore Company are independent of the services rendered to Baltimore Company and are its division of the total payments by Baltimore Company to Pennsylvania Company and Safe Harbor for the joint services rendered

by the latter companies; and include compensation for services rendered the Pennsylvania Railroad Company.

"15. The Commission has no authority, under the provisions of the Federal Power Act, to regulate, control or fix any divisions of joint rates received by Pennsylvania Company.

"16. The Commission has no authority, under the provisions of the Federal Power Act, to regulate, control or fix any joint rates, charges, classifications, rules, regulations, practices or contracts participated in by Pennsylvania Company without according a hearing on adequate notice to all participants in such joint rates, charges, classifications, rules, regulations, practices or contracts.

"17. The Commission has no authority, under the provisions of the Federal Power Act, to regulate, control or fix any rates, charges, classifications, rules, regulations, practices or contracts of Respondents because they have not been afforded a fair hearing or adequate notice.

"18. The Commission has no authority, under the provisions of the Federal Power Act, to regulate, control or fix any rates, charges, classifications, rules, regulations, practices or contracts of Respondents because there is no evidence of record which will support a finding that any existing rates, charges, classifications, rules, regulations, practices or contracts are unjust, unreasonable, or unduly discriminatory or preferential.

"19. The allocations of costs and revenues testified to by Commission Staff witness Davis will not support any findings with respect to the reasonableness of any rates, charges or classifications of Respondents, and such allocations have no support by the evidence of record.

"20. This proceeding should be dismissed.

* * *

"Assuming, without conceding, that the Commission has jurisdiction in this proceeding, it is requested that the following additional findings and conclusions be made:

"A. The total amount of original cost as of December 31, 1945, of the property of Pennsylvania Water & Power Company and Susquehanna Transmission Company of Maryland (Transmission Company), is $36,605,700.08.

"B. The facts and conclusions stated in each of the original cost points in Respondents' brief are true and correct.

"C. The proper allowance for working capital is, at least, $977,160.

"D. The proper depreciation reserve balance as of December 31, 1945 is $6,000,000, which covers the depreciation actually existing in the property as of that date and an adequate margin of safety.

"E. There is no competent evidence of record to support the service-life assumptions of Commission Staff witness Roland.

"F. Deferred maintenance should be reflected in the annual charge for depreciation every year, with the deferred maintenance expense charged to the depreciation reserve when the expenditure is made.

"G. The proper annual allowance for depreciation and deferred maintenance for the property in service as of December 31, 1945 is $400,000, with an additional 2½% on net additions of depreciable property after 1945.

"H. The depreciation reserve should not be deducted from original cost in arriving at the rate base.

"I. If an investment rate base is to be used, it should be an undepreciated rate base with a 3% credit

to the consumers on the proper depreciation reserve balance, which as of December 31, 1945 was $6,000,000.

"J. If an investment rate base is to be used, the Commission must, in determining the fair return, give consideration to changing price levels in fixing the fair rate of return.

"K. In determining the fair return, the Commission must give consideration to changing price levels either in the fair rate of return or in the rate base.

"L. There is no evidence of record which will support a finding that any existing rates, charges, classifications, rules, regulations, practices or contracts are unjust, unreasonable, or unduly discriminatory or preferential.

"M. The rulings of the Trial Examiner, in the respects specified in Respondents' brief, were in error."

The substantial evidence in the record supports such findings and there is no substantial evidence in the record to justify the failure of the Commission so to find.

VI. The Petitioners do not waive but expressly reaffirm and renew each and all of their objections and exceptions to the jurisdiction of the Commission or the admission or exclusion of evidence, as shown in the record, including particularly (without limiting the generality of the foregoing) their objections and exceptions to the jurisdiction of the Commission and exceptions to the exclusion of evidence relating to present value or cost of reproduction or current cost of the Petitioners' property.

Respectfully submitted,

F. G. Awalt,
Raymond Sparks,
Daryal A. Myse,
Preston G. King, Jr.,
Counsel for Petitioners.

Dated at Washington, D. C.
January 28, 1949.

DISTRICT OF COLUMBIA, *ss.:*

The undersigned, being first duly sworn, states that he is counsel for the applicants in the foregoing application; that he has read said application and knows the contents thereof; and that all of the statements contained therein are true and correct to the best of his knowledge, information or belief.

(s) RAYMOND SPARKS.
Raymond Sparks.

Sworn to and subscribed before me, a notary public, in and for said District of Columbia, this 28th day of January, 1949.

(s) FLORA A. MYERS.

(SEAL)

My commission expires Oct. 14, 1953.

CERTIFICATE OF SERVICE.

I hereby certify that I have this day served the foregoing document upon all parties of record in this proceeding by mailing a copy thereof properly addressed to:

HOWARD E. WAHRENBROCK, Assistant General Counsel;
and REUBEN GOLDBERG, Attorney,
Federal Power Commission,
Hurley Wright Building,
Washington 25, D. C.

CHARLES D. HARRIS, General Counsel,
The Public Service Commission of Maryland,
Munsey Building,
Baltimore, Maryland.

CHARLES E. THOMAS, Counsel, and ARTHUR J. DISKIN, Attorney,
Pennsylvania Public Utility Commission,
Harrisburg, Pennsylvania.

G. KENNETH REIBLICH, Counsel for
Consolidated Gas Electric Light and Power,
Company of Baltimore,
Baltimore, Maryland.

Dated at Washington, D. C., this 28th day of January, 1949.

(s) RAYMOND SPARKS.
Raymond Sparks.

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Complaint Docket No. 14028

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PENNSYLVANIA WATER & POWER COMPANY

and

SAFE HARBOR WATER POWER CORPORATION

ORDER.

By THE COMMISSION, SEPTEMBER 27, 1948:

This proceeding is an inquiry and investigation to determine the fairness, reasonableness and justness of the rates and charges of Pennsylvania Water & Power Company, and Safe Harbor Water Power Corporation, sometimes hereinafter referred to as PW&P and SHWP respectively.

On December 5, 1944, our order instituted the inquiry and investigation against PW&P. That order directed that the inquiry and investigation include consideration of the imposition of temporary rates under the provisions of Section 310 of the Public Utility Law, the act of May 28, 1937, P. L. 1053, as amended. Under authority of the Public Utility Law, a questionnaire containing 21 questions was directed to PW&P for answer. The answers were admitted into the record at the initial hearing held October 9, 1946. Subsequently, seven additional days of hearings were held at which further testimony was introduced by PW&P, and it completed its case in chief, except for possible redirect examination, at the hearing on September 19, 1947. The record then included well over 100 exhibits and 986 pages of oral testimony. The record includes evidence of original cost, book cost, reproduction cost, accrued depreciation, annual depreciation, operating revenues, operating ex-

penses, rate of return, and allocation of plant to the respective uses in serving the several customers.

PW&P submitted testimony and exhibits with respect to Susquehanna Transmission Company of Maryland, a wholly owned subsidiary, which owns the transmission facilities in Maryland used by PW&P, and also with respect to SHWP. The record as a whole portrays an operation conducted to a great extent on a joint basis by PW&P and SHWP. The operation of the two companies is so intertwined that efficient and just regulation required that SHWP be joined as a respondent in this proceeding. Accordingly, on October 6, 1947, we instituted an inquiry and investigation of Safe Harbor Water Power Corporation to determine the fairness, reasonableness and justness of that company's rates and charges. SHWP was joined as a respondent in this proceeding and the order directed that the inquiry include consideration of the imposition of temporary rates under the provisions of Section 310 of the Public Utility Law.

A hearing was scheduled on November 6 and 7, 1947, among other things, for the purpose of affording SHWP the opportunity of appearing and offering evidence in support of its burden of proof. However, no appearance was entered for SHWP. In lieu of that, the President of SHWP under oath made a statement of position with respect to SHWP to the effect that PW&P and Consolidated Gas Electric Light and Power Company of Baltimore (Baltimore Company) are the only stockholders of SHWP, each having equal voting power and that the Board of Directors of SHWP comprises 10 members, five being nominees of each of the two stockholders. It further appears from that statement that the stockholders have at this time irreconcilable differences concerning the position which SHWP should take with respect to our order of October 6, 1947, by which SHWP was made a respondent in this proceeding. Because of this statement in voting control between equal stockholders the statement points out that the respective

stockholders will petition us for permission as stockholders to intervene in this proceeding so that each stockholder may present its contentions and submit such evidence as it may consider necessary to protect the interests of SHWP.

The capital structure of SHWP consists of 200,000 shares of Class B voting common stock, 100,000 shares of which are owned by PW&P and 100,000 shares by Baltimore Company; and 100,000 shares of Class A non-voting common stock, all owned by Baltimore Company. All of these shares are of no par value and have a stated value of $30.00 per share.

PW&P is a Pennsylvania public utility owning and operating a hydro-electric plant at Holtwood, Lancaster County, on the Susquehanna River, and transmission facilities located in Pennsylvania. At the site of the hydro plant, the company also owns and operates a steam electric plant, coal for which is obtained by dredging from the pond of the hydro-electric plant. The hydro plant has a capacity of 104,000 kilowatts; the steam plant a capacity of 26,000 kilowatts. In 1946, 181 million kilowatt-hours were generated by steam and 629 million kilowatt-hours by hydro.

This development had its inception in construction studies made prior to 1905 in which year construction was begun. Commercial operation began in 1911. All of the property owned and operated by PW&P is located within Pennsylvania. In 1910 a wholly and (sic) [owned] subsidiary, Susquehanna Transmission Company of Maryland, hereinafter sometimes referred to as STCo, was created for the purpose of owning those transmission facilities utilized by PW&P in Maryland.

By 1914, eight of the generating units were in place with the final two being placed in 1924 bringing the hydro capacity to 104,000 KW. In 1924 and 1925 the steam electric generating plant was constructed.

The development at Safe Harbor had its inception in studies which began in 1916, culminating in the formation in 1930 of Safe Harbor Water Power Corporation, a Penn-

sylvania public utility, a combination of two predecessor companies formed in 1927. The plant of SHWP on the Susquehanna River, eight miles upstream from Holtwood, the site of the plant of PW&P, was constructed in 1930-1932 and placed in commercial operation in 1932. The plant has an installed capacity of 230,000 KW and in 1946 produced 877 million KWH.

PW&P itself, or through its wholly owned subsidiary STCo, owns all the transmission system connecting SHWP and PW&P with Metropolitan Edison Company at York, Pennsylvania Power & Light Company's lines leading to Harrisburg and Lancaster, Philadelphia Electric Company at Coatesville, Baltimore Company at Baltimore, Potomac Electric Power Company near Washington, D. C., and transmission facilities to provide service to The Pennsylvania Railroad Company in Pennsylvania and in Maryland. PW&P owns those transmission facilities in Pennsylvania, STCo owns those in Maryland.

PW&P has power contracts with Metropolitan Edison, Pennsylvania Power & Light and Philadelphia Electric. SHWP is likewise a party to those contracts with Pennsylvania Power & Light and Philadelphia Electric. PW&P, SHWP, Baltimore Company and Potomac Electric Power Company have a joint contract with Pennsylvania Railroad to provide certain of the railroad company's electric power requirements. PW&P has a contract with Baltimore Company to receive a guaranteed income which does not fluctuate with the amount of power delivered to Baltimore Company and others. PW&P and Baltimore Company have a similar contract with SHWP guaranteeing the latter company a fixed income.

In short, PW&P and SHWP sell power at wholesale to five customers. Four of these, namely, Metropolitan Edison, Philadelphia Electric, Pennsylvania Power & Light and Pennsylvania Railroad receive service within Pennsylvania. Pennsylvania Railroad and Baltimore Company receive service within the confines of Maryland.

The record contains estimates of reproduction cost for PW&P, STCo and SHWP, of the plant extant December 31, 1946, at average prices for the five year period 1942-1946. Estimates of "actual" depreciation against these reproduction cost estimates have likewise been submitted. Further, the record contains statements of original cost of property extant December 31, 1946 of the three companies, together with estimates of "actual" depreciation against such cost, and of "adequate" depreciation reserves. Cross-examination by Commission Counsel has not been completed on the testimony and exhibits adduced.

The record contains several exhibits and extensive testimony from which PW&P contends that a rate of return of 6.8 per cent on an undepreciated original cost rate base should be provided for PW&P and STCo, and that a rate of return of 6¼ per cent on such rate base should be provided for SHWP. However, Exhibit 82 shows a rate of return of 5.6 per cent on an undepreciated original cost rate base for SHWP. In calculating cost of service PW&P applies the rates of 6.8 per cent and 6¼ per cent to the respective undepreciated original cost rate base, but offsets the resulting amounts by a credit of 3 per cent on what it considers "adequate" depreciation reserves.

Exhibit 84 was presented at the hearing on September 19, 1947 to show cost of firm power service supplied by PW&P, STCo and SHWP to the three Pennsylvania customers above recited and Pennsylvania Railroad, within Pennsylvania. To arrive at such cost, the exhibit considers the operations of PW&P, STCo and SHWP in rendering service in Pennsylvania and Maryland as a coordinated system and from this system cost ascertains the cost of service to the several customers within Pennsylvania.

Exhibit 84 ascertains the rate base of the three involved companies using original cost as of December 31, 1946, adding thereto the net authorized major additions to be constructed in 1947-1948, and further adding allowances for working capital. The exhibit further contains esti-

mates of "adequate" depreciation reserve as of December 31, 1947. The information is summarized in Table I as follows:

Table I

Rate Base and Depreciation Reserve
(from Exhibit 84)

	PW&P ($1,000)	STCo ($1,000)	SHWP ($1,000)
Original Cost (Dec. 31, 1946)	30,941	5,595	30,240
Authorized Major Additions 1947-48	857	9	108
Adj. for Genl. & Intang. Plant	(162)	162	—
Total Original Cost	31,636	5,766	30,348
Working Capital	835	142	315
Total Rate Base	32,471	5,908	30,663
"Adequate" Depr. Resv. Dec. 31, 1947	5,602	976	2,727

The exhibit allocates the original cost of plant and depreciation as set out above in Table I on the principle of use as between, first, the specific facilities which are used by the five customers with the allocation to PRR divided between Pennsylvania and Maryland; and, second, all of the remaining plant being allocated to production plant and plant used commonly by all of the customers, described in short as Production and Common. With the plant and depreciation allocated to these respective uses the exhibit ascertains the required operating income, calculating a return of 6.8 per cent on the rate base for PW&P and STCo, and 6¼ per cent for SHWP, offset by a credit of 3 per cent on "adequate" depreciation reserve in all three in-

stances. This information is summarized in Table II as follows:

Table II

Allocation of Rate Base, Depreciation and Income
(from Exhibit 84)

	PW&P ($1,000)	STCo ($1,000)	SHWP ($1,000)
Rate Base Allocated to			
Production & Common	27,611	251	28,708
Penna. Customers	1,716	—	—
PRR in Penna.	1,056	125	1,383
in Md.	822	391	572
Baltimore Co.	1,266	5,141	—
Total Rate Base	32,471	5,908	30,663
"Adequate" Depreciation Reserve Allocated to			
Production & Common	4,981	35	2,553
Penna. Customers	189	—	—
PRR in Penna.	145	17	123
in Md.	113	54	51
Baltimore Co.	174	870	—
Total Reserves	5,602	976	2,727
Required Operating Income			
Production & Common	1,727	16	1,718
Penna. Customers	111	—	—
PRR in Penna.	68	9	82
in Md.	53	25	35
Baltimore Co.	81	323	—
Totals	2,040 (1)	373 (1)	1,835 (2)

Notes: (1) Return 6.8% on Rate Base, less credit of 3% on depreciation.

(2) Return 6.25% on Rate Base, less credit of 3% on Depreciation.

The Susquehanna River, across which the hydro plants of respondents are constructed, like all natural streams, is subject to the vagaries of rainfall with resulting variation in stream flow throughout the years. In a year of drought, when stream flow is low, the quantity of hydro energy which can be generated is correspondingly small; in periods of high river flow, due to higher than average rainfall, the quantity of hydro energy which can be generated is correspondingly high. Accordingly, it is necessary to fix the charges for service by respondents on the average river flow, that is upon a "normal" year.

Exhibit 84 accordingly estimates the capacity which is capable of being furnished to the several customers, and the energy, based on past experience, which the several customers require, and which is capable of being furnished. It is estimated that a total of 332 thousand KW of firm capacity can be supplied by the two respondents and ascribed to the several customers to meet their demands, as summarized in Table III as follows:

Table III

Capacity to Several Customers
(from Exhibit 84)

		1,000 KW Capacity Normal Year
Metropolitan Edison	27	
Philadelphia Electric	30	
Pennsylvania Power & Light	80	
Total		137
PRR in Pennsylvania		48
Total for Penna.		185
Baltimore Co. (incl. PRR in Md.)		147
Total Capacity		332

The firm energy which Exhibit 84 estimates can be furnished in a "normal" year is summarized in Table IV as follows:

Table IV

Energy to Several Customers
(from Exhibit 84)

		Million KWH of Firm Energy—Normal Year
Metropolitan Edison	113	
Philadelphia	158	
Pennsylvania Power & Light	349	
Total		620
PRR—in Pennsylvania		227
Total for Penna.		847
Baltimore Co. (incl. PRR in Md.)		826
Total Energy		1,673 (1)

Note: (1) In addition to this quantity of Firm Energy there is 100 million KWH of Interchange Energy delivered to Penna. Customers and 15 million KWH of Interchange Energy delivered to Baltimore Co. and received from Penna. Customers.

Based upon operating experience and present cost of operation, Exhibit 84 estimates the cost of operation in a "normal" year. With all inter-company transactions eliminated such costs total 11,548 thousand dollars and are summarized in Table V as follows:

Table V

Annual Costs

(eliminating inter-company transactions)

(from Exhibit 84)

	Normal Year Annual Cost ($1,000)
PW&P	
Operating Expenses	3,234
Depreciation Expense	354
Income Taxes	937
Operating Income (Table II)	2,040
Total for PW&P	6,565
STCo	
Operating Expenses	435
Depreciation Expense	72
Income Taxes	161
Operating Income (Table II)	373
Total for STCo	1,041
SHWP	
Operating Expenses	876
Depreciation Expense	352
Income Taxes	879
Operating Income (Table II)	1,835
Total for SHWP	3,942
Total for the three companies	11,548

These total annual costs are allocated in Exhibit 84 to production and common facilities, to special facilities utilized by the respective customers and to interchange power. These costs as appear in Exhibit 84 are summarized in Table VI, as follows:

Table VI

Allocation of Annual Costs—Normal Year (from Exhibit 84)

	FW&P ($1,000)	STCo ($1,000)	SHWP ($1,000)	Total ($1,000)	Adjusted Total ($1,000)
Production & Common					
Capacity	2,105	19	1,839	3,963(2)	3,963(2)
Energy	3,185	20	1,839	5,044(1)	5,016(1)
Special Facilities					
Penna. customers	246	—	—	246	246
PRR—in Penna.	167	20	185	372	372
PRR—in Md.	132	61	79	272	272
Baltimore Company	186	921	—	1,107	1,107
Interchange	544	—	—	544(1)	572(1)
Totals	6,565	1,041	3,942	11,548	11,548

Notes: (1) 10 million KWH of hydro and PW&P steam energy sold as interchange reduces 5,044 to 5,016(3) and increases 544 to 572.

(2) The 3,963 of capacity cost for 332 thousand KW from Table III above results in a firm capacity cost of $11.94 per KW per year.

(3) The 5,016 energy cost as above in foot note (1) for 1,673 million KWH as in Table IV above results in a unit cost of energy of 2.998 mills per KWH.

In making allocations of operating expense, depreciation expense, income taxes and operating income, the principle of use has been followed in Exhibit 84, at least as viewed by PW&P. Those elements of cost which relate to special facilities used directly by any one of the five customers of respondents have been so allocated. Likewise, costs directly attributable to interchange power have been so allocated. Such elements of cost as fuel and purchased power have been allocated directly against energy costs. All remaining costs have been allocated to production and common plant and divided 50-50 between capacity and energy costs. With the principles which have been used in the preparation of Exhibit 84 we find ourselves in general agreement, but in prescribing temporary rates it is unnecessary for us to pass upon each individual allocation in particular.

The several elements of cost of service derived in Exhibit 84 are summarized in Table VI above, and these costs represent the combined cost of PW&P, STCo and SHWP for all service rendered by those companies in Pennsylvania and Maryland. We now direct our attention to that service rendered by respondents within Pennsylvania alone. This service covers the special facilities and capacity and energy furnished to Metropolitan Edison, Pennsylvania Power & Light, Philadelphia Electric and Pennsylvania Railroad. The cost of the service furnished these four customers within Pennsylvania in a normal year as set out in Exhibit 84, is summarized in Table VII as follows:

Table VII
Cost of Service Within Pennsylvania
(from Exhibit 84)

		Normal Year Annual Cost ($1,000)
Firm Power		
Pennsylvania Customers		
Special Facilities (Table VI)	246	
Capacity (Tables III & VI)		
137,000 KW @ $11.94	1,636	
Energy (Tables IV & VI)		
620 million KWH @ 2.998 mills	1,859	3,741
PRR		
Special Facilities (Table VI)	372	
Capacity (Tables III & VI)		
48,000 KW @ $11.94	573	
Energy (Tables IV & VI)		
227 million KWH @ 2.998 mills	681	1,626
Total		5,367

The cost of service being furnished by respondents within Pennsylvania for a normal year as determined in

Exhibit 84, and shown above in Table VII, totals 5,367 thousand dollars. Under existing tariffs respondents' customers are paying for this service, in a normal year, a total of 6,011 thousand dollars. Accordingly, based on the derivations in Exhibit 84, revenues exceed costs by 644 thousand dollars. This information is summarized in Table VIII as follows:

Table VIII

Comparison of Revenues and Costs
within Pennsylvania
(from Exhibit 84)

	NORMAL YEAR		
	Revenues (Present Rates) ($1,000)	Annual Cost (Table VII) ($1,000)	Excess ($1,000)
Firm Power Pennsylvania			
Customers	4,197	3,741	456
PRR (in Penna.)	1,814	1,626	188
Total	6,011	5,367	644

From this it would appear that existing revenues for service within Pennsylvania, as furnished by respondents, should be reduced 644 thousand dollars, annually, and the respondents would still be provided a return of 6.8 per cent on the undepreciated original cost rate base of the facilities utilized by PW&P and STCo in furnishing service within Pennsylvania and a return of 6¼ per cent on the undepreciated original cost rate base of facilities utilized by SHWP in furnishing service within Pennsylvania; such amounts of return being offset by 3 per cent on what PW&P considers to be "adequate" depreciation reserves applicable to such original cost figures. Such reduced revenues, in addition to providing the above described amounts of return, would fully reimburse the three companies for all elements of operating expenses, depreciation expense

and income taxes attributable to the service furnished within Pennsylvania.

We are here in this order fixing temporary rates in accordance with Section 310 of the Public Utility Law. The orders by which this proceeding was instituted specifically included consideration of the imposition of such temporary rates.

This proceeding has been pending since 1944, and the record now contains adequate information upon which we can base temporary rates. Exhibit 84 itself indicates, on an undepreciated original cost rate base, that a reduction in charges should be made for service rendered in Pennsylvania. To delay until the final completion of the record in this proceeding works an injustice upon the customers in Pennsylvania taking service from respondents and accordingly the imposition of temporary rates is indicated and is in order.

Section 310 of the Public Utility Law provides that we may, if it is our opinion that the public interest so requires, prescribe temporary rates pending final determination of a rate proceeding, and that such temporary rates shall

> "be sufficient to provide a return of not less than five per centum upon the original cost, less accrued depreciation, of the physical property (when first devoted to public use) of such public utility, used and useful in the public service, and if the duly verified reports of such public utility to the commission do not show such original cost, less accrued depreciation, of such property, the commission may estimate such cost less depreciation and fix, determine, and prescribe rates as hereinbefore provided."

From this it is noted that temporary rates are authorized to provide a return of as low as 5 per cent upon depreciated original cost of the physical property used and useful in the public service. PW&P contends for a return

of 6.8 per cent on undepreciated original cost rate base for PW&P and STCo and 6¼ per cent on undepreciated original cost rate base for SHWP, partially offset however by a credit of 3 per cent on what PW&P contends are "adequate" depreciation reserves applicable to original cost. While contending for these rates of return, Exhibit 82 sets forth a return on undepreciated original cost of SHWP of but 5.6 per cent. For the purposes of fixing temporary rates, we shall provide a return of 6 per cent on the depreciated original cost rate base as hereinafter defined. In fixing such a return we are well above the minimum prescribed in Section 310 of the Public Utility Law quoted above in part.

The depreciation reserves on the books of PW&P and STCo approximating nine million dollars are described in the record as ". . . an amount which has been accumulated in the depreciation reserve out of the Companies' past operations." Opposed to this PW&P estimates that an "adequate" reserve for PW&P and STCo as of December 31, 1947 totals six million dollars of which 5,160 thousand dollars is for PW&P and 840 thousand dollars is for STCo. For SHWP the book depreciation reserve of 2,399 thousand dollars is considered by PW&P to be an "adequate" reserve as of December 31, 1946. As set out above in Table I, these "adequate" reserves become as of December 31, 1947, 5,602 thousand dollars for PW&P, 976 thousand dollars for STCo and 2,727 thousand dollars for SHWP.

While PW&P contends that the depreciation reserves on the books of PW&P and STCo are more than is considered adequate, they are stated to be something which has been accumulated out of the operations of those two companies. To this extent the actual reserve represents a return of capital by the customers through the medium of payment of charges for services received from the utilities. The same comment would appear to apply to the book reserve of SHWP. These are the reserves which appear on

the books of respondents and STCo and with respect to respondents are the figures in the annual reports of those utilities to us. However, at this time we shall not resolve the question of accrued depreciation but shall use the "adequate" reserves as contended for by PW&P, rather than the book reserves.

The original cost of PW&P and SHWP as set out in the record has not been reviewed by us or accepted for accounting purposes under our original cost requirements. Accordingly, we are in no position to state whether the original cost is as it will be determined finally. However, we shall use the figures as submitted by PW&P, which are summarized above in Table I, and we will combine them with the "adequate" depreciation reserves as of December 31, 1947 and as in Table I, in the preparation of Table IX which follows. In this table we allow a return of 6 per cent on the depreciated original cost rate base.

Table IX

Allocation of Rate Base, "Adequate" Depreciation Reserves and Return
(by Commission)

	PW&P ($1,000)	STCo ($1,000)	SHWP ($1,000)
Undepreciated Original Cost Rate Base Allocated to			
Production & Common	27,611	251	28,708
Penna. Customers	1,716	—	—
PRR in Penna.	1,056	125	1,383
in Md.	822	391	572
Baltimore Co.	1,266	5,141	—
Totals	32,471	5,908	30,663

Exhibit E to Petition for Review 357

"Adequate" Depreciation Reserves Allocated to			
Production & Common	4,981	35	2,553
Penna. Customers	189	—	—
PRR in Penna.	145	17	123
in Md.	113	54	51
Baltimore Co.	174	870	—
Totals	5,602	976	2,727
Return (1)			
Production & Common	1,358	13	1,569
Penna. Customers	92	—	—
PRR in Penna.	55	6	76
in Md.	42	20	31
Baltimore Co.	65	257	—
Totals	1,612	296	1,676

Note: (1) Return is 6% on Original Cost less "Adequate" Depreciation Reserves.

Because of reduced return occasioned by a lower rate base and a lower rate of return, we have decreased the allowances for income taxes as appear in Exhibit 84. With respect to the subject of income taxes it is to be noted that at the present time, by reason of the form of contract which respondents have with Baltimore Company, Federal Income Tax is at a lower rate than would be experienced if the companies did not have this contractual arrangement. The Federal Income Taxes set out in Column 6, page 5 of Exhibit 84 are based upon the higher rate. While we have calculated the Federal Income Taxes at the higher rate it is to be noted that such taxes will not be experienced while the present contracts with Baltimore Company continue in force. We leave this point for the final determination in this proceeding.

Using the same operating expenses and depreciation expense for the three companies as in Exhibit 84 and summarized above in Table V, the income taxes as above described and the return as set out in Table IX, we summarize below in Table X, eliminating all intercompany transactions, the annual cost of furnishing service by respondents and STCo.

Table X

Annual Costs

(*eliminating intercompany transactions*)

(by Commission)

	Normal Year Annual Cost ($1,000)
PW&P	
Operating Expenses	3,234
Depreciation Expense	354
Income Taxes	661
Return (Table IX)	1,612
Total for PW&P	5,861
STCo	
Operating Expenses	435
Depreciation Expense	72
Income Taxes	112
Return (Table IX)	296
Total for STCo	915
SHWP	
Operating Expenses	876
Depreciation Expense	352
Income Taxes	776
Return (Table IX)	1,676
Total for SHWP	3,680
Total for the three companies	10,456

Following the same allocation principles used in Exhibit 84, the annual costs as shown in Table X are allocated to the respective uses made of the several parts of the plant of respondents and STCo with resultant figures as summarized below in Table XI. It is noted that compared with capacity costs of $11.94 per KW per year and energy costs of 2.998 mills per KWH as in Exhibit 84, summarized above in Table VI, our findings are $10.65 per KW per year and 2.742 mills per KWH. Costs for special facilities are reduced in our findings as compared with those in Exhibit 84 and as in Table VI.

Table XI

Allocation of Annual Cost—Normal Year

(by Commission)

	PW&P ($1,000)	STCo ($1,000)	SHWP ($1,000)	Total ($1,000)	Adjusted Total ($1,000)
Production & Common					
Capacity	1,805	15	1,717	3,537(2)	3,537(2)
Energy	2,883	17	1,716	4,616(1)	4,588(1)
Special Facilities					
Penna. Customers	211	—	—	211	211
PRR in Penna.	145	17	174	336	336
in Md.	114	53	73	240	240
Baltimore Company	159	813	—	972	972
Interchange	544	—	—	544(1)	572(1)
Totals	5,864	915	3,680	10,456	10,456

Notes: (1) 10 million KWH of hydro and PW&P steam energy sold as interchange reduces 4,616 to 4,588(3) and increases 544 to 572.

(2) The 3,537 of capacity cost for 332 thousand KW from Table III above results in a form (sic) [firm] capacity cost of $10.65 per KW per year.

(3) The 4,588 energy cost as above in footnote (1) for 1,673 million KWH as in Table IV above results in a unit cost of energy of 2.742 mills per KWH.

These are the costs of rendering service by the consolidated system of respondents and STCo. In applying these costs to the service within Pennsylvania to the Pennsylvania customers, namely, Metropolitan Edison, Penn-

sylvania Power and Light and Philadelphia Electric, and Pennsylvania Railroad, the following results, as set out in Table XII. These costs as determined by us of 4,841 thousand dollars compare with the costs as in Exhibit 84 summarized above in Table VII of 5,367 thousand dollars.

Table XII

Cost of Service within Pennsylvania
(by Commission)

		Normal Year Annual Cost ($1,000)
Firm Power		
Pennsylvania Customers		
Special Facilities (Table XI)	211	
Capacity (Tables III & XI)		
137,000 KW @ $10.65	1,460	
Energy (Tables IV & XI)		
620 million KWH @ 2.742 mills	1,700	3,371
PRR		
Special Facilities (Table XI)	336	
Capacity (Tables III & XI)		
48,000 KW @ $10.65	511	
Energy (Tables IV & XI)		
227 million KWH @ 2.742 mills	623	1,470
Total		4,841

A comparison of the revenues for services rendered within Pennsylvania under present contracts and the foregoing costs as determined by us is summarized as follows in Table XIII from which it appears that revenues exceed costs by 1,170 thousand dollars per year for a normal year.

Table XIII

Comparison of Revenues and Costs within Pennsylvania
(by Commission)

	NORMAL YEAR		
Firm Power	Revenues Present Rates ($1,000)	Annual Cost (Table XII) ($1,000)	Excess ($1,000)
Pennsylvania Customers	4,197	3,371	826
PRR (in Penna.)	1,814	1,470	344
Total	6,011	4,841	1,170

Accordingly, we shall direct respondents to file new tariffs for the service rendered by them within Pennsylvania designed to produce for such service in a normal year a total of $4,841,000.

The tariffs shall contain specific charges for special facilities to the respective three Pennsylvania customers totaling 211 thousand dollars, annually, with appropriate clauses providing for changes up or down to meet changes in depreciated original cost rate base of plant utilized for the respective customers and changes in direct operating expenses with respect to those facilities. For Pennsylvania Railroad (in Pennsylvania) the tariffs shall include specific charges for special facilities totaling 336 thousand dollars, annually, apportioned between PW&P, STCo and SHWP as shown above in Table XI for the facilities specifically used in rendering service to the railroad in Pennsylvania, with clauses to modify these figures up or down to meet changes in depreciated original cost rate base of facilities so used and changes in actual operating expenses with respect to those facilities. The tariffs shall be designed to result in an annual charge of $10.65 per KW of demand of the three Pennsylvania customers and Pennsylvania Railroad (in Pennsylvania) for the respective capacities shown in Exhibit 84 for a normal year, and to

result in a charge of 2.742 mills per KWH for the energy for a normal year as in Exhibit 84.

Of the charges made for the service within Pennsylvania, the charges for the special facilities shall be apportioned to PW&P, STCo and SHWP in accordance with the figures set out above in Table XI adjusted in future years with modifications in accordance with the formula used in the preparation of that table.

With respect to capacity charges, distribution among the participants will be 51.03 per cent to PW&P, 0.42 per cent to STCo and 48.55 per cent to SHWP. For energy charges distribution among the participants will be 62.46 per cent to PW&P, 0.37 per cent to STCo and 37.17 per cent to SHWP. These ratios among the three companies, ascertained from Table XI above, represent the proportions attributable to a normal year. These proportions will vary from year to year, but the formula by which they are determined shall be the same formula as used by us in the preparation of the allocation shown in Table XI.

In fixing the temporary rates, as hereinbefore set out, there are several features of this proceeding which at this time we have not resolved. In summary, these features are (a) the original cost of PW&P and SHWP used in this proceeding is as submitted by PW&P and as yet no determination has been made as to whether it meets our original cost requirements. The final determination may be somewhat lower than as contended for by PW&P. (b) PW&P contends for "adequate" depreciation reserves which figures are $3,420,000 less than the book depreciation reserves as of December 31, 1947. (c) We have used a rate of return of 6 per cent on a depreciated original cost rate base. This rate is well above the 5 per cent minimum fixed by The Public Utility Law for temporary rates but is not to be considered the rate which we will finally determine. (d) While we have accepted operating expenses as contended for by PW&P for the three companies in ascertaining system costs, we leave for final determination whether

such operating expenses contain higher than average charges. (e) Likewise have we accepted the depreciation expense as is estimated by PW&P and leave for final determination the propriety of the several amounts. (f) We have accepted the estimates for Federal Income Taxes based upon the filing of individual returns by PW&P and SHWP even though this allowance is upwards of 220 thousand dollars, annually, more than the companies experience under their present contractual arrangement with Baltimore Company.

Thus, it is apparent that temporary rates herein prescribed are well above the minimum required by the Public Utility Law, will assure respondents ample funds to enable them to provide adequate service to their several customers in Pennsylvania and are at such a level as to be considered fair; THEREFORE

IT IS ORDERED: That on or before November 1, 1948, Pennsylvania Water & Power Company and Safe Harbor Water Power Corporation file, to become effective November 15, 1948, tariffs designed to carry into effect our order as above set out, namely, to produce within a normal year the revenue of $4,841,000 for firm power service within Pennsylvania as in Table XII above, together with complete detailed supporting explanation to show that the tariffs will comply with our order.

PENNSYLVANIA PUBLIC UTILITY COMMISSION

(signed) JOHN SIGGINS, JR.
Chairman

ATTEST:

(SEAL)

(signed) J. A. WALTER
Secretary

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Complaint Docket No. 14028

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PENNSYLVANIA WATER & POWER COMPANY

and

SAFE HARBOR WATER POWER CORPORATION

ORDER

By THE COMMISSION, SEPTEMBER 27, 1948:

The Commission on December 5, 1944 instituted an inquiry and investigation into the rates of Pennsylvania Water & Power Company (PW&P) at Complaint Docket No. 14028. Hearings were held in that proceeding and testimony was taken which indicated a coordinated operation and rendering of joint services by PW&P and Safe Harbor Water Power Corporation (SHWP) to their several customers.

Thereafter, on October 6, 1947, the Commission issued an inquiry and investigation into the rates of SHWP and joined SHWP as a respondent at Complaint Docket No. 14028. Hearing was held November 6, 1947 to give SHWP an opportunity to be heard. At the hearing on November 6, 1947, the president of SHWP appeared and recited the division of voting control between PW&P and Consolidated Gas Electric Light and Power Company of Baltimore (Baltimore Company), and stated that the Board of Directors of SHWP consisted of 10 members, five of whom were nominees of PW&P and five nominees of Baltimore Company, and that irreconcilable differences between the two parent companies made it impossible for SHWP to take any affirmative action at that time.

At said hearing Baltimore Company filed a petition to intervene as a stockholder of SHWP and presented therewith, conditional upon allowance of such intervention, a motion to dismiss the proceedings as to SHWP for want of jurisdiction. By order of May 25, 1948, the Commission permitted Baltimore Company to intervene for the sole purpose of questioning this Commission's jurisdiction and fixed July 16, 1948, for filing of briefs and oral argument. At said oral argument, counsel for PW&P appeared in opposition to the motion to dismiss. Thus, the matter is now before the Commission on the question of our jurisdiction over the rates and charges of SHWP.

Baltimore Company's motion to dismiss is based upon two principal arguments

1. The Federal Power Commission instituted its own proceeding against the rates and charges of SHWP on September 1, 1944, and, on November 4, 1946 issued its order reducing said rates and charges. SHWP has presently pending an appeal from said order taken to the Circuit Court of Appeals of the United States for the Third Circuit, which appeal has not been heard or disposed of, and the FPC order is presently in full force and effect.

2. The exercise by the FPC of jurisdiction over the rates and charges of SHWP excludes any state regulatory power or jurisdiction thereover so long as the exercise of such jurisdiction by the FPC is in full force and effect, and the courts of Pennsylvania and a fortiori the Public Utility Commission have no power to review such FPC action either directly or collaterally.

In support of these contentions, Baltimore Company's brief contains references to various cases, which, in our opinion, do not control the present situation.

We do not believe that a sovereign state must appear before a federal administrative agency to determine whether its law or a related federal law governs a given situation. Nor can the decision of a federal administra-

tive agency in interpreting a state statute be considered binding upon the state. We feel that these principles of law are basic and founded in the long established division of powers between state and federal governments.

We have asserted jurisdiction over the rates of SHWP and PW&P according to the powers and duties imposed upon us by the Pennsylvania Public Utility Law. The field in which we have acted is intrastate commerce, and the FPC cannot, by its mere assertion, oust our jurisdiction. The Federal Power Act does not confer such jurisdiction upon the FPC, and it would be unconstitutional if it did so. We are of the opinion that the attempt of the FPC to exercise jurisdiction over SHWP does not deprive this Commission of its jurisdiction, nor does it prevent us from exercising jurisdiction over the rates and charges of SHWP in our own proceeding.

SHWP was created under the laws of the Commonwealth of Pennsylvania. On February 11, 1929, at Application Docket No. 17675, the Pennsylvania Public Service Commission issued a certificate of public convenience approving the incorporation, organization and creation of Safe Harbor Water Power Company (sic) [Corporation] for the purpose of supplying, storing and transporting water and water power for commercial and manufacturing purposes in the Township of Manor, Lancaster County, Pennsylvania. On December 23, 1929, the Commission issued a certificate of public convenience at Application Docket No. 21579, approving the consolidation and merger of Safe Harbor Water Power Company [Corporation] and Chanceford Water Power Corporation, forming a new corporation to be known as Safe Harbor Water Power Corporation.

Following the issuance of the aforementioned certificate of public convenience, SHWP was granted authority by the Public Service Commission to acquire land located in York and Lancaster counties, Pennsylvania, by eminent domain proceedings, in some 49 separate cases.

Subsequently, the Public Service Commission approved several transactions involving the sale of real estate owned by SHWP to various parties, and the Public Service Commission, further, gave permission to SHWP to keep its books, records and accounts in its office in Baltimore, Maryland. SHWP has filed annual reports with this Commission and its predecessor, the Public Service Commission, continuously since the year 1930. It has paid annual assessments, commencing from the time said assessments were first begun by the Public Utility Commission in 1937.

It has kept its tariffs on file in accordance with Commission rules. As a certificated public utility, SHWP has complied with the various rules and regulations of the Commission with respect to its rates and charges and the filing of various reports, tariffs and other data required from time to time.

SHWP owns and operates a hydroelectric power development at Safe Harbor, Pennsylvania, on the Susquehanna River. It is solely a hydroelectric development, having a presently rated capacity of 230,000 kw. Its plant is electrically connected only to the primary inter-connected transmission system of PW&P at Safe Harbor. SHWP's stock has been owned only by PW&P and Baltimore Company, with 50 per cent of the voting stock being owned by each of said companies.

From a review of the facts on record, it is apparent that SHWP is a Pennsylvania Corporation with all of its facilities in Pennsylvania, filing tariffs with this Commission and rendering electric services in Pennsylvania. Furthermore, it is clear that the electric services of SHWP rendered to Pennsylvania customers for resale in Pennsylvania and directly to the Pennsylvania Railroad Company in Pennsylvania is intrastate commerce. Although SHWP admittedly does interstate as well as intrastate business, the two types of service are readily separable for the pur-

poses of regulation. Ample evidence appears of record for us to make such separation.

The record discloses an integrated and coordinated system operated by PW&P and SHWP, and since these unified operations result in intrastate commerce in Pennsylvania this Commission is bound to exercise jurisdiction over such intrastate activities.

From its inception, SHWP has been subject to the jurisdiction of this Commission as fully and completely as could be possible under any circumstances. Any attempted exercise of jurisdiction by any other agency, whether state or federal, over the rates and charges of SHWP, could have no effect to oust the jurisdiction of this Commission. The rates and charges for the output of electrical energy sold in Pennsylvania by SHWP are subject to our jurisdiction.

After consideration of the motion to Baltimore Company to dismiss the proceedings as to Safe Harbor Water Power Corporation, we are of the opinion that the said motion should be denied; THEREFORE,

IT IS ORDERED: That the motion of Consolidated Gas Electric Light and Power Company of Baltimore to dismiss the proceedings at Complaint Docket No. 14028 against Safe Harbor Water Power Corporation be and is hereby denied,

PENNSYLVANIA PUBLIC UTILITY COMMISSION

(signed) John Siggins, Jr.
Chairman

ATTEST

(Seal)

(signed) J. A. Walter
Secretary

EXHIBIT F TO PETITION FOR REVIEW.

UNITED STATES OF AMERICA

FEDERAL POWER COMMISSION

Before Commissioners: Nelson Lee Smith, Chairman; Thomas C. Buchanan, Claude L. Draper, Leland Olds and Harrington Wimberly.

January 31, 1949

In the Matter of
Pennsylvania Water & Power Company } Docket No. IT-5915

ORDER GRANTING STAY.

On January 18, 1949, Pennsylvania Water & Power Company and Susquehanna Transmission Company of Maryland, respondents in the above-entitled proceeding, filed an application for a stay of the effective date of the Commission's order entered January 4, 1949, and issued January 5, 1949. On January 25, 1949, the Public Service Commission of Maryland advised this Commission of its opposition to respondents' application.

The respondents request that the effective date be stayed "for a period of thirty days from February 1, 1949, or until such time as the Commission shall act upon the Application for Rehearing which will be filed" by respondents, "plus an additional period of sixty days thereafter, being the statutory period allowed" for respondents "to obtain a review" of the Commission's order.

Subsequently, on January 28, 1949, the respondents filed their application for rehearing as to the order issued January 5. That application we retain under consideration at this time.

The rate reduction was made effective February 1, 1949. Respondents now allege that they will "sustain and

suffer serious, substantial, and irreparable injury, loss and damage" unless the operation of the Commission's order is stayed. The "injury, loss, and damage" refers to the difference between the revenues respondents will receive under the terms of the Commission's order and the revenues respondents would receive if the Commission's order were not effective.

Respondents further assert that in the event the Commission's order is set aside respondents will have lost forever the revenues they would have been authorized to collect at the higher rates. Respondents say that this result will follow because "the Commission has no authority and can make no provision for the recouping by and reimbursement to" the respondents "of the very substantial loss" they will have sustained "without means of recouping such loss."

We do not agree with this view which implies that we may only stay our orders unconditionally. If that were so, that fact would be a sound reason for denying a stay because such a stay would permit respondents to continue to charge rates which we have held to be unreasonable and to retain the excessive revenues as though our order had never been entered, even though it may ultimately be affirmed by the courts. To do that would make our use of the stay power an instrument for accomplishment of the very result which it was the purpose of the Act to prevent when it provided in Section 205 that such rates as are here involved "shall be just and reasonable and any such rate or charge that is not just and reasonable is hereby declared to be unlawful" and in Section 206 that we should determine the just and reasonable rate "to be thereafter observed and in force." We believe that our power to grant or deny a stay necessarily carries with it the power to grant the stay on such conditions as will maintain the status quo and save respondents harmless if and to the extent our order may be set aside or modified, and protect the interests of those entitled to the benefits of the rate

reduction from and after February 1, 1949, if and to the extent our order is affirmed.

Furthermore we think it clear, and we find that the condition hereinafter prescribed is necessary and appropriate under Section 309 of the Federal Power Act to carry out the provisions of that Act.

The Commission therefore *orders:*

The effective date provided for in the order issued January 5, 1949, be and the same hereby is stayed, but only upon the condition hereinafter provided, pending expiration of the period in which the application for rehearing thereon may be acted upon and petition for judicial review may be filed. Such stay shall be upon condition that the difference between the payments received by respondents under existing rates or arrangements and those which would be required under the Commission's order issued January 5, 1949, during the period of the stay, together with earnings thereon, shall be clearly earmarked, separately accounted for and retained by respondents in a segregated reserve solely for the purposes hereinafter specified. If and to the extent that the Commission's order issued January 5 shall finally become effective, respondents shall pay such difference, together with the earnings thereon, to customers, in the proportions their payments would have been reduced if the Commission's order had not been stayed, for the benefit of the ultimate consumers, or such other persons as may be shown to be entitled thereto. If and to the extent that the Commission's order shall be modified or set aside on rehearing or review, such difference, together with the earnings thereon, shall be freed of the restrictions hereby imposed.

By the Commission.

(Signed) LEON M. FUQUAY,
Leon M. Fuquay,
Secretary.

(Seal)

Date of Issuance: January 31, 1949

EXHIBIT G TO PETITION FOR REVIEW.

[1]* UNITED STATES OF AMERICA

FEDERAL POWER COMMISSION

In the Matter of Pennsylvania Water & Power Company	Docket No. IT-5915

OPINION NO. 173-A

By THE COMMISSION:

Applications for rehearing on our Opinion No. 173 and order, issued January 5, 1949, were filed January 28, 1949, by the Respondents, Pennsylvania Water & Power Company and Susquehanna Transmission Company of Maryland, and on January 31, 1949, by the Intervenor, Pennsylvania Public Utility Commission. The Respondents' application objects to virtually every statement, finding and requirement of that opinion and order. With few exceptions, those objections simply repeat the arguments advanced during the course of the hearings and in the briefs filed subsequently to the close of the hearings. No useful purpose would be served in setting them forth here again. We considered them carefully and fully before issuing our original opinion and order and we do not believe they offer any basis for a rehearing.

The objections presenting new points have also received our careful consideration. Thus Respondents properly call our attention to the fact that we omitted to find, in the language of Sections 20 and 206, that Penn Water's existing rates and charges to Pennsylvania Power & Light Company, Philadelphia Electric Company and Metropolitan Edison are "unjust" and "unreasonable". That was an inadvertence as indicated by the fact that, in sub-

* Figures in brackets represent page numbers of opinion in typewritten form.

stance, we found the existing rates and charges to those Pennsylvania customers (Finding No. 34) exceed a reasonable cost of service. For that cost of service [2] includes an allowance of a fair return, based upon the fair rate of return, which we found to be 5¼%. We will, accordingly, amend our order issued January 5, 1949, to include this finding in specific statutory terms.

None of the other new points made by Respondents has substantial merit, although one of them may warrant a further modification of our order by inclusion of an additional finding.

Thus Respondents assert that the Commission "has no jurisdiction, authority, or power to issue and enforce" its order issued January 5, 1949, because the order requires the new schedule of rates and charges "to be effective within a period of less than thirty days from the date of issuance of such Order, contrary to the requirements of Section 20 of the Federal Power Act insofar as such Section makes applicable the provisions of Section 15 (2) of the Interstate Commerce Act"; and because, it is contended, the hearing and the Commission's findings regarding the unreasonableness of Penn Water's rates and charges are not in accordance with the requirements of Section 15 (1) of the Interstate Commerce Act insofar as the provisions thereof are made applicable by Section 20. (Application for Rehearing, pp. 3, 7-8) Thus by a technicality Respondents seek to postpone yet longer the already long overdue rate reduction.

Not only are these objections inapplicable to the extent that our rate order is viewed as based on our rate-making authority Under Part II of the Act, but they are also without merit even to the extent that our order is viewed as based upon Part I of the Act. [3] *Pennsylvania Power & Light Co. v. Federal Power Commission*, 139 F. 2d 445, 453 (C. C. A. 3), *cert.* denied 321 U. S. 798; *Safe Harbor Water Power Corporation v. Federal Power Commission*, 124 F. 2d 800 (C. C. A. 3), *cert.* denied 316 U. S.

663. In the first case, the Court held that a licensee has no vested right in a procedural provision of Part I of the Act, and in the second, that the review provisions of Part I were repealed by the later enactment of the conflicting review provisions of Part II. While Section 15 (2) of the Interstate Commerce Act, referred to in Section 20 of the Federal Power Act, provides that orders shall take effect within not less than thirty days, all orders of this Commission (including those issued under Section 20) are now governed by the subsequently enacted Section 309, which provides:

> "Orders of the Commission shall be effective on the date and in the manner which the Commission shall prescribe."

Furthermore, insofar as the objections stated above rest on the provisions of Section 15 (1) of the Interstate Commerce Act, we fail to perceive the significance of the objection or that the practice and procedure followed in this case were not in accord with the terms of that Section. The procedural provisions of that Section, insofar as they appear to be relevant, only stipulate that a rate order may be entered "after full hearing" and appropriate findings. Respondents have had ample notice of the issues and a full hearing with opportunity to adduce evidence, cross-examine and argue. They also have had full opportunity to point out specifically any deficiencies [4] in our findings. If some other objection is intended, Respondents' references to Section 15 (2) and 15 (1) are too unspecific, vague and indefinite to be susceptible to any more detailed consideration, and in either event, must be over-ruled.

In their Application for Rehearing, Respondents also allege "that since the record before the Commission was closed there have been substantial changes in the operations and contracts of Petitioner Penn Water, * * * so that the bases for the said Order and for many of the findings, conclusions, and requirements * * * are destroyed and * * * are not in accord with the facts and the law" (page 2

of Application for Rehearing). On the basis of the claimed changes exception is taken to many of the Commission's statements and findings as no longer true, if ever true. (E. g., see pages 46, 47, 58 of Application for Rehearing.)

More particularly it is alleged in the Petition for Rehearing that since the record has been closed the agreement of December 31, 1927, as supplemented, between Penn Water and Baltimore Company has been terminated by Penn Water; that Penn Water has notified Baltimore Company that it was ceasing to receive from the latter and ceasing to pay for any electric energy or capacity generated in Maryland, or elsewhere, and transmitted across the Maryland State line into Pennsylvania; that the operations of the Respondents were being changed to effect that purpose; that if given the opportunity they will prove the fact of such termination; that the contract was null, void and unenforceable; that Baltimore Company has committed material [5] breaches of the contract which justify its cancellation; and that these matters are now in litigation between Penn Water and Consolidated on Penn Water's complaint for declaratory judgment and other relief before the District Court of the United States for the District of Maryland (pages 10-11, 17-18 of Application for Rehearing).

Similarly, it is alleged that since the record in this proceeding has been closed, Penn Water has notified Safe Harbor and Baltimore Company that the three-party contract of June 1, 1931, between the aforesaid is of no effect, null, void and unenforceable. Respondents state that if afforded the opportunity on rehearing, they will prove the fact of such notification; that the contract was null, void and unenforceable, and that Penn Water credits to the account of Safe Harbor an appropriate and reasonable division of revenues received from Pennsylvania customers served jointly by Penn Water and Safe Harbor, which credits have increased substantially the amounts Penn Water credits or pays to Safe Harbor (pages 19-20, 39, 45 of Application for Rehearing).

The contracts which Penn Water by the *ex parte* action thus alleged has sought to terminate are the fifty-year foundation contracts referred to in our former opinion. Under those contracts the steam and hydroelectric generating capacity and transmission facilities of Baltimore Company, Penn Water, Susquehanna, and Safe Harbor, were designed and constructed, and for up to 17 years and more operated, so as to achieve close integration and coordination [6] among all of the companies. We pointed out in our opinion that such pooling of Baltimore Company's steam capacity with the hydro capacity of the other companies resulted in a much more economical supply of the combined power requirements of all the companies, including supply to Pepco in the Washington area.[1]

Penn Water has consistently in its representations to its stockholders and to regulatory authorities explained and emphasized the results and importance of the pooling arrangements. Thus in its 1941 Report to Stockholders it said:

> "Coordinated operation of this pool of power means that each member not only has available in emergency the combined resources of the interconnected systems, but also derives through daily and seasonal interchange arrangements the benefit which arises from the use of the most economic sources of generation for supplying the power requirements of the pool. A further benefit flows from the possibility of planning generating-capacity additions of the most economic type and size with consequent reduction in the amount of unused reserve capacity that would occur were the systems uncoordinated. Thus the regional transmission network of the Pennsylvania Water & Power Company has multiple purposes, and energy continually flows in, across, and out of it as

1. See Opinion No. 173, p. 17, for some of the most pertinent language from one of the contracts.

the needs of the interconnected members develop from minute to minute and day to day."

• • •

"The System had its origin 32 years ago.

"It arose from the necessity of finding a solution to the problem of providing, without large and expensive reservoirs, a uniform supply of power while utilizing the unharnessed energy of a drainage [7] area subject to severe droughts and floods. The average daily flow at Holtwood has varied from as little as 1700 cubic feet per second up to 756,000 cubic feet per second since the Company began operations. Nevertheless, out of this difficult situation, an important and reliable power pool has been developed.

"The answer to the problem was combined hydro and steam supply; not the substitution of hydro for steam, but from the outset the integration and coordination of hydro and steam in the planning for the capacity needed and in the operation and maintenance of the facilities."

• • •

"Favorably located in regard to harnessing the river, the Holtwood plant is also strategically situated for serving through short transmission lines the major load centers of one of America's chief industrial and agricultural regions.

"Through long range planning and cooperation with its customers—cooperation which found expression in the design as well as the operation of the plants—the Company so developed its transmission system that from the original transmission line to provide standby steam or supplementary hydro power, as the needs might be, there evolved a comprehensive network supplying power and interchanging power on a regional basis for utility companies supplying a

population of 2,600,000 in the 4,600 square mile area served by the interconnected companies.

"This network is wholly within the two adjoining states of Pennsylvania and Maryland, the supply to Washington being over an interconnection with the Potomac Electric Power Company's own system near the District of Columbia line."

Repeated statements to the same effect have been made by Penn Water's officers and witnesses in the record in this proceeding, with substantiating detail.

By the terms of those contracts the installation of additional facilities by Penn Water is subject to approval by Baltimore [8] Company,[2] to assure coordinated planning and investment to meet the growing power needs of the system as a whole with resulting additional economies and consumer benefits.

The regional integration and coordination of facilities, the resulting economies, and the utilization and conservation of natural resources thus achieved are precisely what was sought to be encouraged and fostered by the Federal Power Act and established as a part of the criterion of the public interest to be served by regulation thereunder (Cf. Section 202 (a)). If there are questions as to the legality of the foundation contracts which are in litigation, as Respondents' application for rehearing indicates, the validity of our order is not dependent upon the decision of those questions. In our opinion and order we took care to leave the continuation of the operation of the integrated and in-

2. Thus Article V of the June 1, 1931, amendment to the December 31, 1927 agreement reads:

"So far as possible consistently with the performance of any duty or obligation aforesaid, Power shall obtain the approval of Electric (1) before incurring any single commitment for investment (except for renewals or replacements) in excess of $50,000.00 on the basis of which Electric shall make payment under Article III (b) hereof, and (2) before alienating or disposing of in any one year any property, plant, or equipment, other than stores and construction equipment, having a total value in excess of $50,000.00 and included in the investments of Power and/or subsidiaries of Power in plant, property or power development devoted to the generation, transmission, or distribution of electrical power and energy."

terconnected system in full effect, merely changing the rates, as shown by our statement wherein we specifically stipulated that

[9] "The present arrangement whereby sales to Pennsylvania customers are made on a firm basis on definite rate schedules whereas Baltimore Company takes what is left and assures Respondents of the recovery of all proper operating expenses, depreciation, taxes and a fair return, is the most practicable under the circumstances. That arrangement will, therefore, be continued with, however, such modifications as are necessary to accomplish the reductions mentioned above to Pennsylvania Power & Light, Philadelphia Company, Metropolitan Company and Baltimore Company."

Now, by the changes referred to in Penn Water's application for rehearing, all of the carefully built-up benefits of pool design, investment, construction and operation apparently are intended to be sacrificed by Penn Water. Penn Water's non-receipt of steam generated energy from outside Pennsylvania for sale to resale customers would destroy the pool economies under the established method of operation.

We have heretofore recognized, in cases not involving regulation of rates or service, that, conformably to its contract obligations, a company which is subject to regulation as a "public utility" under the Federal Power Act, may terminate the operations which cause it to be such a "public utility" and remove itself from such regulation (The Connecticut Light and Power Company, Opinion No. 151, Docket No. IT-5665, decided May 28, 1947). Here, however, interstate operations, insofar as they involve the transmission and sale at wholesale of electric energy transmitted from Pennsylvania and consumed at points in Maryland or the District of Columbia, are not alleged to have been terminated and no new question is raised by any of the changes as to our jurisdiction over such operations or over the Respondents.

[10] Furthermore, our rules (Section 35.5) require that when a rate or service which has been filed with the Commission, as these foundation contracts have been, "is proposed to be cancelled and no new rate schedule is filed in its place * * * each public utility required to file the schedule shall formally notify the Commission of the proposed cancellation" 30 days in advance and shall submit a statement of the reasons therefor and that notice has been served upon the other parties to the schedule or contract. A copy of such notice to the Commission is required to be duly posted.

Compliance with filing requirements is particularly important in a case like the present where the filings cover, not a single sale and delivery by one party to the other, but interchange of energy and capacity between and among the parties to the contracts and numerous other obligations and rights which are required to be filed as changes under Section 35.3 (c).

In this case refusal of Penn Water to receive energy originating outside of Pennsylvania from Baltimore Company would not be merely a termination of the purchase and sale of that energy (i. e., a cancellation subject to Section 35.5 of the Rules) but would constitute a change in rates and service in several aspects which cannot be accomplished except in compliance with requirements prescribed under Section 205 of the Federal Power Act. (1) It substantially changes the consideration to be paid by Baltimore Company for the energy received by it from Penn Water and Safe Harbor (i. e., effects a change in rate required to be filed under Section 35.3 of our Rules). [11] (2) It will remove the Baltimore Company's outlet for surplus steam generated power heretofore supplied by it to Penn Water whereby it has been enabled to make fuller use of its generating facilities and achieve substantial economies (i. e., effect a change in that service, required to be filed under Section 35.3 of our Rules). (3) It may affect the service to Baltimore Company by impairing Penn

Water's ability to provide peaking capacity in low water seasons when its non-receipt of out-of-state steam generated energy from Baltimore Company may force it to draw down its pond in off-peak hours in order to supply the power needs of its Pennsylvania customers, thereby leaving insufficient water in its pond to operate at full capacity during peaking hours so as to serve Baltimore Company's needs for peaking capacity (i. e., effect a change in service also required to be filed under Section 35.3 of our rules). (4) It will affect the contractual rights of Baltimore Company to maintenance of long-term assured capacity and supply of energy under conditions of coordinated planning, design and construction of additional generating and transmitting facilities to take care of its load growth (i. e., effect a further change in the effective rate to the Baltimore Company, a change also required to be filed under Section 35.3 of our rules).

If such changes insofar as they affect rates charged Baltimore Company by Penn Water are to be legally effectuated under Section 205 (d) of the Act, that can only be done by filing as prescribed in our rules. This will afford 30 days opportunity for examination [12] of the changes before they become effective. If questionable, they are subject to suspension pending hearing and decision, under Section 205 of the Act. If at such a hearing it should appear that the changed rates to Baltimore Company are unjust or unreasonable (as a result of Penn Water's failure to utilize the more economical modes of operation previously followed or for any other reason), or that they are unduly discriminatory or preferential (because of an unreasonable difference between localities, or otherwise), the Commission may refuse to permit them to become effective insofar as they cover the services continued to be rendered by Penn Water to Baltimore Company.

Insofar as such changes affect service, compliance with the Rule referred to would enable the Baltimore Company, the Maryland Public Service Commission, or any other in-

terested electric utility or state commission, before such changes are put into effect to make application under Section 202 (b) for an order "to sell energy * * * or exchange energy" from and after the time of the proposed change or termination of service, or a complaint under Section 207 as to the adequacy of the service to be rendered.

None of these alleged changes having been made or proposed in the only way they could lawfully become effective, Respondents are in no position in this or any other proceeding to urge any objection or claim in reliance thereon. An unlawful attempt to avoid putting into effect the rate reduction we ordered affords no valid basis for objecting to that order.

[13] The only other alleged change since the record was closed is Respondents' offer to prove, if given an opportunity to do so on rehearing, that since the close of the record the Pennsylvania Commission has issued a rate order against Penn Water and Safe Harbor which is in conflict with this Commission's rate order (pages 39, 60 of Application for Rehearing). We do not perceive how that fact, if shown, would alter any of the grounds for our determination of our jurisdiction.

Furthermore, there is no allegation by Respondents in their application for rehearing that any of the changes occurred after the issuance of the order, or that they are of continuing effect. If they occurred before our order was issued Respondents cannot, on the allegations they have made, complain in this proceeding of our failure to hear matters which they failed to bring to our attention by timely application.

The failure to allege that the changes continue may be of consequence. If necessary we might notice the Pennsylvania Commission has been temporarily enjoined by the District Court of the United States for the Middle District of Pennsylvania in *Consolidated Gas Electric Light and Power Company of Baltimore v. John Siggins, et al.*, Civil Action No. 3274, from enforcing the order of that Com-

mission to which Respondents' allegations refer, and the companies subject thereto from complying therewith; also that the changes in operations sought to be put into effect by Respondents here have been temporarily enjoined by the District Court of the United States for the District [14] of Maryland in *Pennsylvania Water & Power Company v. Consolidated Gas Electric Light and Power Company of Baltimore,* Civil Action No. 4179, which is, presumably, the case referred to in Respondents' Application for Rehearing.

Finally, Respondents assert that the rate base does not conform to the requirements of Section 3 (13) of the Act. Although they do not specify in which respects, if any, that is true, we may point out that the standard for rate-making under Part I, which is found in Section 20, prescribes the customary statutory standard ("reasonable, nondiscriminatory and just") which the Supreme Court has construed to free the regulatory commission from adherence to any particular formula. *E. g., Federal Power Commission v. Natural Gas Pipeline Co.,* 315 U. S. 575; *Federal Power Commission v. Hope Natural Gas Co.,* 320 U. S. 591.

We have heretofore, in another proceeding (*Safe Harbor Water Power Corporation,* 5 F. P. C. 221) had occasion to deal with a contention that our deduction of accrued depreciation in computing a rate base was improper because Section 3 (13) defines "net investment" as "actual legitimate original cost" minus "aggregate credit balances of current depreciation accounts" "if and to the extent • • • accumulated during the period of the license from earnings in excess of a fair return on such investment". If such a contention is intended by the general allegation here made, it must be rejected. What we have already said concerning the controlling provisions of Section 20 is a complete answer to such contention. Moreover, even [15] if Section 3 (13) applied, it would apply only "during the period of the license", which in Penn Water's case begins January 1, 1938 (*Metropolitan Edison Co. v. Federal Power*

Commission, 169 F. 2d 719, 723 (C. C. A. 3)), and from 1938 through 1946 Penn Water has earned all of its recurring operating expenses, including depreciation and taxes, plus a fair return.

This is convincingly shown by the evidence in the record. During the years 1938 to 1945, inclusive, Penn Water earned an average return on its net investment (including working capital) of 10.4%. The returns earned ranged from 9.9% in 1943 to 11.8% in 1938.[3] It is therefore evident that during the period 1938 to 1946 Penn Water earned more than a fair return after depreciation, taxes, and all operating expenses. Because the license period begins with 1938 we confine our finding to those years.

If the Respondents here intend by their reference to Section 3 (13) to urge any other contention, we reject it for the further reason that it is not urged with sufficient particularity to be considered.

[16] The Pennsylvania Public Utility Commission's application for rehearing is based upon contentions which involve matters already carefully considered by this Commission and discussed in Opinion No. 173. Further consideration of these matters will serve no useful purpose. The Pennsylvania Commission's application will, therefore, be denied.

There is one respect in which our stay order of January 31, 1949, should be modified to facilitate the discharge of our duties in enforcing the provisions of the Act, and that is to require filing of certified copies of the bills rendered by Respondents to Metropolitan Company, Philadel-

3. These returns have permitted Penn Water after depreciation, to meet the interest and dividend requirements on its outstanding bonds and preferred stock and have provided an average return during the same period of 19.1% on the adjusted common stock equity (a high of 21.7%, in 1942, and a low of 17.6% in 1939 and 1940). The dividends paid on common stock during the period 1938 to 1945, inclusive, averaged 15.4% on the adjusted common stock equity. These common stock earnings may be compared to the earnings price ratios of the common stocks of fourteen typical electric operating companies during the period 1940-1945, inclusive, which the record shows ranged from a low in November, 1945, of 5.09% to a high of 12.92% in March, 1942, the average being 7.9%. The range of the medial four of six electric utilities used by Respondents' own witness Foster was a low of 5.16% in November, 1945, to a high of 11.20% in May, 1942, with an average during this period of 7.6%.

phia Company, PP&L, and Baltimore Company while the stay we ordered is in effect, and certified copies of the journal entries effectuating compliance with the conditions of the stay order.

Appropriate findings and order will be entered in accordance with this opinion.

(Signed) NELSON LEE SMITH,
Nelson Lee Smith,
Chairman

(Signed) THOMAS C. BUCHANAN,
Thomas C. Buchanan,
Commissioner

(Signed) CLAUDE L. DRAPER,
Claude L. Draper,
Commissioner

(Signed) LELAND OLDS,
Leland Olds,
Commissioner

(Signed) HARRINGTON WIMBERLY,
Harrington, Wimberly,
Commissioner

Dated at Washington, D. C., this 26th day of February, 1949.

(Signed) LEON M. FUQUAY,
Leon M. Fuquay,
Secretary

Date of Issuance: February 28, 1949.

UNITED STATES OF AMERICA

FEDERAL POWER COMMISSION

Before Commissioners: Nelson Lee Smith, Chairman; Thomas C. Buchanan, Claude L. Draper, Leland Olds and Harrington Winberly.

February 26, 1949

In the Matter of PENNSYLVANIA WATER & POWER COMPANY	Docket No. IT-5915

ORDER DENYING APPLICATIONS FOR REHEARING, AMENDING RATE REDUCTION ORDER ISSUED JANUARY 5, 1949, AND AMENDING ORDER ISSUED JANUARY 31, 1949, CONDITIONALLY STAYING EFFECTIVE DATE OF RATE REDUCTIONS

Upon consideration of the application for rehearing filed January 28, 1949, by Pennsylvania Water & Power Company and Susquehanna Transmission Company of Baltimore (Respondents), the application for rehearing filed by the Pennsylvania Public Utilities Commission on January 31, 1949, and the record in this proceeding and having this day issued its Opinion No. 173A in this matter, which is incorporated by reference and made a part hereof.

The Commission further *finds* that:

(1) On the basis of a reasonable and proper allocation of the cost of service rendered by Penn Water and Transmission Company, Respondents, as of January 4, 1949, the rates and charges to Philadelphia Company, Metropolitan Company, and PP&L are unjust and unreasonable, the excess over just and reasonable rates for the year 1946 being

approximately $114,311, $26,094 and $80,538, respectively.

(2) The accrued depreciation referred to in finding (26), recorded and to be recorded as there set forth, insofar as it was accrued during the period from 1938 through 1946 was accumulated from earnings in excess of a fair return, and will continue to be so accumulated.

(3) It is necessary and appropriate to carry out the provisions of the Federal Power Act that Respondents be ordered to file certified copies of bills and accounting entries as provided for in paragraphs (B) and (C), below.

The Commission further *orders* that:

(A) The applications for rehearing are denied.

(B) Respondents shall file certified copies of every bill rendered to Philadelphia Company, Metropolitan Company, PP&L, and Baltimore Company for any service rendered during any part of the time the stay ordered January 31, 1949, remains in effect, within one week from the date each such bill is rendered, respectively.

(C) Respondents shall file certified copies of each accounting entry reflecting their accounting for all payments received from Philadelphia Company, Metropolitan Company, PP&L, and Baltimore Company for any service rendered during any part of the time the stay ordered January 31, 1949, remains in effect, and effectuating compliance with the terms of the conditions of that stay, such entries to be filed within one week from the date each such entry is made, respectively, and to be accompanied by such explanation and supporting data as

necessary to show that the steps taken do constitute compliance.

(D) The effective date of this order and Opinion No. 173A is February 26, 1949.

By the Commission.

(Signed) LEON M. FUQUAY,
Leon M. Fuquay,
Secretary.

(Seal)

Date of Issuance: February 28, 1949

EXHIBIT H TO PETITION FOR REVIEW.

UNITED STATES OF AMERICA

FEDERAL POWER COMMISSION

In the matter of PENNSYLVANIA WATER & POWER COMPANY	Docket No. IT-5915

APPLICATION FOR REHEARING OF ORDER ISSUED FEBRUARY 28, 1949

(Filed March 11, 1949.)

Pennsylvania Water & Power Company (Penn Water), Respondent and Petitioner herein; being aggrieved on its own behalf by the Order issued by the Commission February 28, 1949; and being separately and independently aggrieved by such Order as the owner of one-half of the Class B voting stock of Safe Harbor Water Power Corporation (Safe Harbor), said Safe Harbor being unable to intervene in this proceeding because of the deadlock in its Board of Directors as set forth in Petitioners' Application for Rehearing of the Commission's Order issued January 5, 1949, filed in this proceeding on January 28, 1949, and Penn Water also being separately and independently so aggrieved as agent for and on behalf of Safe Harbor under the provisions of certain contracts with Pennsylvania Power & Light Company (PP&L) and Philadelphia Electric Company (Philadelphia Company); and Susquehanna Transmission Company of Maryland (Transmission Company), Respondent and Petitioner herein, also being aggrieved by such Order; hereby apply to the Federal Power Commission (Commission) for a rehearing of said Order issued February 28, 1949, as provided by Section 313 (a) of the Federal Power Act (16 U. S. C. § 825-1 (a); 49 Stat. 860) of all of the matters

presented or involved in this proceeding and covered or affected by said Order and the accompanying Opinion No. 173-A; and pray that said Order and Opinion, the Commission's Order issued January 5, 1949, and the accompanying Opinion No. 173, be abrogated, vacated, set aside, and reversed because of the matters erroneously decided, the errors with respect thereof, and the objections of Petitioners to said Opinions and Orders to wit: Petitioners respectfully show that in said Opinion No. 173-A and said Order issued February 28, 1949, the Commission erroneously decided each and all of the following matters and committed each and all of the following errors, and Petitioners object to said Opinion and Order because of each and all of said matters erroneously decided and said errors for each and all of the following reasons:

I

The application of Petitioners for rehearing of the Commission's Order issued January 5, 1949 was erroneously denied for each and all of the reasons specified in Petitioners' Application for Rehearing of Order issued January 5, 1949, filed herein on January 28, 1949; and by reason of the new facts of continuing effect stated in such Application as offers of proof, and as stated herein.

II

Insofar as any of the statements in the Commission's Opinion No. 173-A, dated February 26, 1949, which was incorporated by reference and made a part of the Commission's Order issued February 28, 1949, purport to be definite findings of fact or conclusions, or anything more than mere illustrative explanations of the Commission's conclusions, each and all of the following portions thereof are erroneous, unconstitutional, unlawful, arbitrary, capricious, contrary to the evidence of record, unsupported by any substantial evidence of record, and operate to de-

prive Petitioners of their property without due process of law, in violation of the Fifth Amendment to the Constitution of the United States, and results in exercise of authority in excess of statutory jurisdiction, authority, or limitations; and Petitioners seek rehearing on each and every one of the following portions thereof for the reasons and on the grounds as hereinafter stated:

(1) The statements of the Commission on page 1 of Opinion No. 173-A as follows:

> "With few exceptions, those objections [of Respondents] simply repeat the arguments advanced during the course of the hearings and in the briefs filed subsequently to the close of the hearings. No useful purpose would be served in setting them forth here again. We considered them carefully and fully before issuing our original opinion and order, and we do not believe they offer any basis for a rehearing."

on the grounds that:

(a) Such statements are not supported by the record and the Commission's Opinions No. 173 and 173-A and Order issued January 5, 1949 on their face demonstrate the error of such statements.

(b) With particular reference to the objections of Petitioners contained in paragraph II of their Application for Rehearing of Order issued January 5, 1949, filed January 28, 1949, it is apparent on the face of many of such objections that Petitioners had had no prior opportunity to object to or to offer proof of facts in rebuttal of many of the specific statements of the Commission contained in its Order issued January 5, 1949.

(c) Insofar as such statements represent a refusal or failure on the part of the Commission to make a ruling upon each finding, conclusion, or exception presented by Petitioners, or to give the reasons or basis for

its decisions on all of the material issues of fact or law presented on the record, the Commission's Orders issued January 5, 1949, and February 28, 1949, operate to deprive Petitioners of their property without due process of law in violation of the Fifth Amendment to the Constitution of the United States, and without a fair hearing in violation of said Amendment and of the provisions of the Federal Power Act.

(2) The statements of the Commission on pages 1 and 2 of Opinion No. 173-A as follows:

> "* * * in substance, we found the existing rates and charges to those Pennsylvania customers (Finding No. 34) exceed a reasonable cost of service. For that cost of service includes an allowance of a fair return, based upon the fair rate of return, which we found to be 5¼%."

on the grounds as specified in paragraphs III (31) and III (33) of Petitioners' said Application for Rehearing of Order issued January 5, 1949.

(3) The statement of the Commission on page 2 of Opinion No. 173-A as follows:

> "None of the other new points made by Respondents has substantial merit * * *"

on the grounds that such statement is not supported by the record; and Petitioners' said Application for Rehearing of Order issued January 5, 1949, on its face raises new points of substantial merit and contains offers of proof of new facts of continuing effect requiring substantial revision of statements deemed by the Commission to be decisive in its Opinions No. 173 and 173-A, and requiring abrogation of the Commission's Orders issued January 5, 1949, and February 28, 1949; and the Commission failed to consider all of such new points and offers of proof, and failed to make the revisions and changes required thereby.

(4) The statements of the Commission on pages 2 and 3 of Opinion No. 173-A as follows:

"Thus by a technicality Respondents seek to postpone yet longer the already long overdue rate reduction.

"Not only are these objections [objection to failure to make order effective after thirty days' time prescribed by statute] inapplicable to the extent that our rate order is viewed as based on our rate-making authority under Part II of the Act, but they are also without merit even to the extent that our order is viewed as based upon Part I of the Act. * * * all orders of this Commission (including those issued under Section 20) are now governed by the subsequently enacted Section 309, * * *."

on the grounds that:

(a) Such statements are not supported by the record; and there is no substantial evidence of record or findings of the Commission which would support any conclusion that any rate reduction by the Commission is due or overdue.

(b) Section 20 of the Act was re-enacted by the same legislation enacting Section 309 of the Act, so that insofar as rate regulatory orders of the Commission affect licensees under Part I of the Act both the provisions of Section 20 and Section 309 are applicable. The right to interpose the defense that the Commission's Order issued January 5, 1949, did not designate a lawful date for its effectiveness, under the provisions of Section 15 (2) of the Interstate Commerce Act, is not a mere technicality or procedural provision of Section 20 of the Federal Power Act but it is a statutory right of defense enforcing a statutory limitation on the power of the Commission to issue its orders, under Section 309 of the Act, with respect to their effective dates.

(c) Nothing in Section 309 of the Act, as limited by the rights to defenses contained in Section 20 of the Act and the provisions of Section 15 (2) of the Interstate Commerce Act, authorized or empowered the Commission to issue its Order of January 5, 1949, effective on February 1, 1949; and since the effective date designated in such Order is not a lawful one, the order did not become operative and was wholly ineffective and invalid; and no subsequent action by the Commission can lawfully make effective the requirements of such order of January 5, 1949, retrospectively from February 1, 1949, or any other past date, without being in excess of the statutory authority granted by the Federal Power Act and in violation of Section 1, Article III and the Fifth Amendment to the Constitution of the United States.

(5) The statement of the Commission on page 3 of Opinion No. 173-A as follows:

> "Respondents have had ample notice of the issues and full hearing with opportunity to adduce evidence, cross examine and argue."

on the grounds that:

(a) Such statement is not supported by any substantial evidence of record and is contrary to the evidence of record; and Petitioners have had no opportunity to rebut with evidence many of the erroneous and unsupported statements of the Commission contained in its Opinions No. 173 and 173-A and its Orders issued January 5, 1949, and February 28, 1949, of which statements Petitioners had no notice until made.

(b) As stated in paragraph I (6) (g) of Petitioners' Application for Rehearing of Order issued January 5, 1949.

(c) The refusal or failure of the Commission to grant a rehearing on each and all of the matters as prayed in Petitioners' said Application for Rehearing of

Order issued January 5, 1949, deprives Petitioners of the hearing required by Section 206 (a) of the Act, by Section 20 of the Act insofar as such Section makes applicable the provisions of Section 15 (1) of the Interstate Commerce Act, and contrary to the provisions of the due process clause of the Fifth Amendment to the Constitution of the United States.

(6) The statement of the Commission on pages 7 and 8 of Opinion No. 173-A as follows:

> "By the terms of those ['foundation'] contracts the installation of additional facilities by Penn Water is subject to approval by Baltimore Company, to assure co-ordinated planning and investment to meet the growing power needs of the system as a whole with resulting additional economies and consumer benefits."

on the grounds that:

(a) Such statement is not supported by any substantial evidence of record.

(b) There is no substantial evidence of record to support any conclusion that maintenance of the "foundation" contracts is essential to the derivation of economies or benefits arising out of coordinated planning and investment or out of pooling arrangements, or that any of such terms is essential to the encouragement or fostering of regional integration and coordination of facilities with resulting economies and the utilization and conservation of natural resources; what evidence there is of record is to the contrary; and if relevant and material to any issues in this proceeding, and if given an opportunity on rehearing, Petitioners hereby further offer to prove that such conclusions are in error, and that the maintenance of such "foundation" contracts results in inability on the part of Penn Water and Safe Harbor to integrate and coordinate their facilities with their Pennsylvania customers, and such integration and coordination is necessary to promote the greatest possible economies and benefits to the public and

achieve the most proper utilization and conservation of natural resources; and maintenance of such "foundation" contracts results in their inability to render adequate and sufficient service to their customers and to freely compete in the generation and rendering of electrical services by reason of the restrictive actions taken by Baltimore Company ostensibly under the terms of such contracts.

(7) The reliance by the Commission, on page 8 of Opinion No. 173-A, on the provisions of Section 202 (a) of the Act as support for continuation of the "foundation" contracts; the illegality of which is about to be determined in the Federal Courts on the ground that nothing in Section 202 (a) authorizes or supports any action by the Commission requiring involuntary interconnection or coordination of facilities for the generation, transmission, or sale of electric energy; and nothing in the Federal Power Act requires or authorizes the Commission to require the continuation of any integration or coordination of such facilities for the purpose of maintaining the Commission's regulatory jurisdiction, or to support any rate regulatory conclusions or order of the Commission; and the Commission has no authority to encourage, foster, or require any arrangements in violation of the public policy or the antitrust laws of the United States or the States.

(8) The statement of the Commission on page 8 of Opinion No. 173-A as follows:

> "* * * the validity of our order is not dependent upon the decision of those questions [decision of the legality of the 'foundation' contracts]."

on the ground that such statement is not supported by the record and is contrary to the record.

(9) The statements of the Commission on page 9 of Opinion 173-A as follows:

> "Now, by the changes referred to in Penn Water's application for rehearing, all of the carefully built-up

benefits of pool design, investment, construction and operation apparently are intended to be sacrificed by Penn Water. Penn Water's non-receipt of steam generated energy from outside Pennsylvania for sale to resale customers would destroy the pool economies under the established method of operation."

on the grounds that:

(a) Such statements are not supported by any substantial evidence of record and are contrary to the evidence of record.

(b) If not already apparent on the record, and if given an opportunity on rehearing, Petitioners hereby offer to prove that such statements are not in accord with the present facts, and that such present facts are of continuing effect; and that, in accordance with the offer of proof contained in paragraph II (41) (b) of Petitioners' said Application for Rehearing of Order issued January 5, 1949, and other facts of continuing effect ascertained by Petitioners since the issuance of the said Order, all or any of the benefits and economies of pool design, investment, construction and operation will be retained, enhanced, supplemented, and increased by integration and coordination with utility systems located and conducting operations entirely within the State of Pennsylvania; and that under present facts and circumstances of continuing effect the involuntary requirement for or maintenance of any integration and coordination between the systems of Penn Water and Safe Harbor and the system of Baltimore Company will not result in the greatest possible economy or in the most proper or feasible utilization or conservation of natural resources, to the detriment of the public interest.

(10) The statements of the Commission on pages 10, 11 and 12 of Opinion No. 173-A as follows:

"Furthermore, our rules (Section 35.5) require that when a rate or service which has been filed with

the Commission, as these foundation contracts have been, 'is proposed to be cancelled and no new rate schedule is filed in its place * * * each public utility required to file the schedule shall formally notify the Commission of the proposed cancellation' 30 days in advance and shall submit a statement of the reasons therefor and that notice has been served upon the other parties to the schedule or contract. A copy of such notice to the Commission is required to be duly posted.

"Compliance with filing requirements is particularly important in a case like the present where the filings cover, not a single sale and delivery by one party to the other, but interchange of energy and capacity between and among the parties to the contracts and numerous other obligations and rights which are required to be filed as changes under Section 35.3 (c).

"In this case refusal of Penn Water to receive energy originating outside of Pennsylvania from Baltimore Company would not be merely a termination of the purchase and sale of that energy (i. e., a cancellation subject to Section 35.5 of the Rules) but would constitute a change in rates and service in several aspects which cannot be accomplished except in compliance with requirements prescribed under Section 205 of the Federal Power Act. (1) It substantially changes the consideration to be paid by Baltimore Company for the energy received by it from Penn Water and Safe Harbor (i. e., effects a change in rate required to be filed under Section 35.3 of our Rules). (2) It will remove the Baltimore Company's outlet for surplus steam generated power heretofore supplied by it to Penn Water whereby it has been enabled to make fuller use of its generating facilities and achieve substantial economies (i. e., effect a change in that service, required to be filed under Section 35.3 of our Rules). (3) It may affect the service to Baltimore Company by

impairing Penn Water's ability to provide peaking capacity in low water seasons when its non-receipt of out-of-state steam generated energy from Baltimore Company may force it to draw down its pond in off-peak hours in order to supply the power needs of its Pennsylvania customers, thereby leaving insufficient water in its pond to operate at full capacity during peaking hours so as to serve Baltimore Company's needs for peaking capacity (i. e., effect a change in service also required to be filed under Section 35.3 of our rules). (4) It will affect the contractual rights of Baltimore Company to maintenance of long-term assured capacity and supply of energy under conditions of coordinated planning, design and construction of additional generating and transmitting facilities to take care of its load growth (i. e., effect a further change in the effective rate to the Baltimore Company, a change also required to be filed under Section 35.3 of our rules).

"If such changes insofar as they affect rates charged Baltimore Company by Penn Water are to be legally effectuated under Section 205 (d) of the Act, that can only be done by filing as prescribed in our rules. This will afford 30 days opportunity for examination of the changes before they become effective. If questionable, they are subject to suspension pending hearing and decision, under Section 205 of the Act. If at such a hearing it should appear that the changed rates to Baltimore Company are unjust or unreasonable (as a result of Penn Water's failure to utilize the more economical modes of operation previously followed or for any other reason), or that they are unduly discriminatory or preferential (because of an unreasonable difference between localities, or otherwise), the Commission may refuse to permit them to become effective insofar as they cover the services continued to be rendered by Penn Water to Baltimore Company.

"Insofar as such changes affect service, compliance with the Rule referred to would enable the Baltimore Company, the Maryland Public Service Commission, or any other interested electric utility or state commission, before such changes are put into effect to make application under Section 202 (b) for an order 'to sell energy * * * or exchange energy' from and after the time of the proposed change or termination of service, or a complaint under Section 207 as to the adequacy of the service to be rendered.

"None of these alleged changes having been made or proposed in the only way they could lawfully become effective, Respondents are in no position in this or any other proceeding to urge any objection or claim in reliance thereon. An unlawful attempt to avoid putting into effect the rate reduction we ordered affords no valid basis for objecting to that order."

on the grounds that:

(a) Such statements are not supported by any substantial evidence of record; and to the extent such statements constitute conclusions of law they are in error.

(b) The evidence of record shows that the contract between Penn Water and Baltimore Company, dated December 31, 1927, as amended, referred to in such statement, contains no rates or charges for any transmission or sale subject to the jurisdiction of the Commission, within the meaning of Sections 205 (c) and 201 (b) of the Act; and that such contract is not a schedule and is not required to be filed with the Commission under said Section 205 (c).

(c) Nothing in Section 205 (d) requires, authorizes or empowers the Commission to require by rule or otherwise, the filing with the Commission or posting of any notice of the changes in operations referred to in paragraph I (6) (h) of Petitioners' said Application for Re-

hearing of Order issued January 5, 1949, or any notice of the changes referred to in paragraphs II (6) (c) and II (7) (c); and to the extent that the Commission's rules purport to make any such requirement, and in addition make other or different requirements, such rules are invalid and unlawful and in excess of any statutory jurisdiction or authority of the Commission contained in the Federal Power Act.

(d) Nothing in Section 205 (e) or otherwise in the Act authorizes or empowers the Commission to suspend the termination of any service or the cancellation of any schedules applicable to any service; and nothing therein authorizes or empowers the Commission to suspend or enter upon a hearing concerning the lawfulness of the changes referred to in paragraphs I (6) (h), II (6) (c), or II (7) (c) of Petitioners' said Application for Rehearing of Order issued January 5, 1949.

(e) There is no substantial evidence of record to support any action by the Commission under Section 202 (b) or 207 of the Act; and if relevant and material to any issues in this proceeding, and if given an opportunity on rehearing, Petitioners hereby offer to prove that any action by the Commission compelling Penn Water to exchange energy with Baltimore Company would impair Penn Water's ability to render adequate service to its other customers, within the meaning of the provisos to such Sections.

(f) Nothing in Sections 205 (c) or 205 (d) or any other provision of the Federal Power Act, or any lawful provision of the Commission's rules prescribed thereunder, requires or authorizes and empowers the Commission to require Penn Water to file with the Commission any schedule or contract containing rates, charges, rules, or regulations for any service by Baltimore Company to Penn Water; and to the extent that the Commis-

sion's rules or orders prescribe any such a requirement they are unlawful and in excess of the Commission's statutory authority; but any such schedule or contract for such service by Baltimore Company, should be filed by that company.

(g) The evidence of record shows that under the terms of Article 6 of the parported agreement between Penn Water and Baltimore Company, energy service by Baltimore Company to Penn Water was received only "upon request" of Penn Water; that the refusal of Penn Water to receive any such energy from Baltimore does not constitute a termination or change of the contract terms of such purchase and sale but constitutes a permissible change within the terms of such contract; that such refusal of Penn Water does not constitute any change in any service by Penn Water to Baltimore Company, and has no relevancy to any issue of the reasonableness or lawfulness of any rates or charges of Penn Water for such service to Baltimore Company; and that, if such refusal by Penn Water to receive energy from Baltimore Company has any effect on the consideration to be paid by Baltimore Company for the energy received by it from Penn Water and Safe Harbor, it has such an effect only by the arbitrary, capricious, and unlawful action of the Commission by its Opinion No. 173 and its Order issued January 5, 1949, in determining excess revenues of Penn Water from service to Baltimore Company primarily by a determination of an increase in the rates or charges of Baltimore Company in the form of credits to it for purported service by Baltimore Company to Penn Water.

(h) There is no substantial evidence of record that the refusal of Penn Water to receive any energy from Baltimore Company will have any effect on (i) the ability of Baltimore Company to make fuller use of its generating facilities and achieve substantial economies;

(ii) the service to Baltimore Company by impairing Penn Water's ability to provide peaking capacity in low water seasons to supply Baltimore Company's needs for peaking capacity; or (iii) any contractual rights of Baltimore Company; and that, if given an opportunity on rehearing, Petitioners hereby offer to prove that such refusal by Penn Water has none of the effects or "affects" as stated by the Commission, and that any requirement that Penn Water continue to receive energy from Baltimore Company will prevent Penn Water and its Pennsylvania customers from achieving substantial economies by fuller use of their integrated and coordinated generating facilities, and will affect the services of Penn Water and Safe Harbor to their Pennsylvania customers by impairment of their ability to integrate and coordinate their respective systems for maximum utilization and conservation of natural resources and greatest possible economy and benefits in the public interest.

(i) Petitioners hereby complain pursuant to Section 306 of the Federal Power Act, and if given an opportunity on rehearing, hereby offer to prove that under present facts and conditions the credits allowed by the Commission to Baltimore Company as its rates or charges for its purported services to Penn Water are excessive, unreasonable, and unlawful, and in violation of Section 205 (a) of the Federal Power Act, (i) in that such credits result in revenues to Baltimore Company for such service which are substantially in excess of its operating expenses reasonably apportionable to such service plus a reasonable return on either the fair value or original cost-less-depreciation of its electric plant used and useful in such service, separately and apart from and without consideration of any expenses or plant used or useful by it in its gas or other business and (ii) in that Baltimore Company's accounts showing the net amount of electric plant in service contain substantial write-ups, fictitious paper increments and other amounts which do not constitute origi-

nal cost of such plant, as defined and applied by the Commission in this proceeding.

(11) The statements of the Commission on page 13 of Opinion No. 173-A as follows:

> "Furthermore, there is no allegation by Respondents in their application that any of the changes occurred after the issuance of the order, or that they are of continuing effect. If they occurred before our order was issued Respondents cannot, on the allegations they have made, complain in this proceeding of our failure to hear matters which they failed to bring to our attention by timely application."

on the grounds that:

(a) Such statements are not supported by the record, and are erroneous on the face of Petitioners' allegations by way of offers of proof in their Application for Rehearing of Order issued January 5, 1949.

(b) If given an opportunity for rehearing, Petitioners hereby offer to prove that the changes referred to in paragraphs I (6) (h) and II (7) (c) of Petitioners' said Application for Rehearing took place after the issuance of the Commission's Order of January 5, 1949; and that to the extent any of the facts alleged by way of offers of proof in said Application for Rehearing were known to Petitioners prior to the issuance of the Commission's Opinion No. 173 and its Order of January 5, 1949, Petitioners had reasonable grounds for failing to bring such matters to the attention of the Commission, in that:

(i) Petitioners had no reason to believe, at any time after the close of the hearings herein and prior to the issuance of such Opinion and Order, that the Commission would make any of the statements alleged in said application to be arbitrary, capricious, unlawful, or without support in the evidence, and which were the subject of offers of further proof, and

(ii) The Commission had notice in fact of the rate orders of the Pennsylvania Commission referred to on or about October 1, 1948, and Petitioners had no reason to believe that the Commission would ignore the effect of such Pennsylvania Commission Orders and the findings of fact contained therein which have a direct effect upon the validity of and are in conflict with many of the Commission's statements and conclusions in its opinions and orders in this proceeding or that the Commission would fail to confer with the Pennsylvania Commission with respect to such conflict, as authorized by Section 209 (b) of the Federal Power Act, and in accordance with published statements of the Commission offering to cooperate with such a State Commission.

(12) Petitioners herein object to and seek rehearing of the following portions of Opinion No. 173-A, relating to depreciation and net investment in Petitioners' property, on the grounds that the Commission erroneously decided each and all of the following statements, matters, findings and conclusions of law and erred with respect thereto in that said statements, matters, findings and conclusions of law are not supported by substantial evidence, are contrary to the substantial evidence, contrary to law, the Federal Power Act and deprive Petitioners of property without due process of law in violation of the Fifth Amendment to the Constitution of the United States;

(a) That Petitioners do not specify in what respects the rate base determined by the Commission does not conform to the requirements of Section 3 (13) of the Act. (page 14)

(b) That the Commission is free to disregard any of the requirements of Section 3 (13) of the Federal Power Act. (page 14)

(c) That Petitioners' contention that the Commission is bound by Section 3 (13) of the Federal Power Act must be rejected. (page 14)

(d) That what the Commission has said in the Safe Harbor Water Power Corporation case, or in any other case, is an answer to Petitioners' contention that the provisions of Section 3 (13) of the Federal Power Act are binding upon the Commission. (page 14)

(e) That Section 3 (13) applies only "during the period of the license" which in Penn Water's case begins January 1, 1938. (page 15)

(f) That the case of *Metropolitan Edison Co.* vs. *Federal Power Commission* is a precedent for the instant case. (page 15)

(g) That "from 1938 through 1946 Penn Water has earned all of its recurring operating expenses, including depreciation and taxes, plus a fair return". (page 15)

(h) That "During the years 1938 to 1945, inclusive, Penn Water earned an average return on its net investment (including working capital) of 10.4%." (page 15)

(i) That "The returns earned ranged from 9.9% in 1943 to 11.8% in 1938". (page 15)

(j) That "These returns have permitted Penn Water after depreciation to meet the interest and dividend requirements on its outstanding bonds and preferred stock and have provided an average return during the same period of 19.1% on the adjusted common stock equity (a high of 21.7%, in 1942 and a low of 17.6%, in 1939 and 1940)". (page 15)

(k) That "The dividends paid on common stock during the period 1938 to 1945, inclusive, averaged 15.4% on the adjusted common stock equity". (page 15)

(l) That the alleged common stock earnings of Penn Water may be compared to the earnings price ratios of the common stocks of other companies. (page 15)

(m) That "It is therefore evident that during the period 1938 to 1946 Penn Water earned more than a fair return after depreciation, taxes, and all operating expenses". (page 15)

(n) That "Because the license period begins with 1938 we confine our finding to those years". (page 15)

(o) That Petitioners have failed to allege with particularity their contentions as to Section 3 (13) of the Federal Power Act. (page 15)

(p) That there is substantial evidence to show Petitioners have, during the license period, earned in excess of a fair return upon their net investment as determined pursuant to Section 3 (13) of the Federal Power Act. (pages 14 and 15)

(q) That the Commission has properly determined Petitioners' "net investment" or the existence of alleged excess earnings pursuant to Section 3 (13) of the Federal Power Act.

(r) That the reasonableness of Petitioners' rates or charges can be determined by the use of a depreciated rate base without regard to a proper determination of excess earnings pursuant to Section 3 (13) of the Federal Power Act.

(s) The Commission has failed to make a finding, pursuant to Section 3 (13) and other provisions of Part I of the Act, of the fair return during the period of the license on the "investment" as determined under the provisions of that Section, as a basis for any determination of whether any aggregate credit balances of current depreciation accounts have been accumulated during the period of the license from earnings in excess of such a fair return so determined and should be deducted in determining "net investment" for rate base purposes; there is no substantial

evidence of record to support any such finding or subsequent determination; and in the absence of such evidence or findings it is unlawful for the Commission to determine the reasonableness of Petitioners' rates or charges upon the basis of any rate base determined by deducting any amounts accumulated in Petitioners' depreciation reserve accounts or any other accounts.

(t) That "the standard for rate making under Part I" of the Federal Power Act as found in Section 20 is other than "Net Investment". (page 14)

(u) That Section 20 of the Federal Power Act "prescribes the customary statutory standard ('reasonable, nondiscriminatory and just')" as the proper rate base under Part I of the Act. (page 14)

(v) That the Supreme Court has construed the customary statutory standard of "reasonable, nondiscriminatory and just" as applicable to licensees under Part I of the Act. (page 14)

III.

The Commission's statements, findings, and conclusions in its Order denying Petitioners' Application for Rehearing, issued February 28, 1949, as referred to below are contrary to the evidence, unsupported by any substantial evidence, unsupported by adequate subsidiary findings, are unlawful, erroneous, arbitrary, capricious, and unconstitutional and operate to deprive Petitioners of their property without due process of law, in violation of the Fifth Amendment to the Constitution of the United States, and result in an exercise of authority in excess of statutory jurisdiction, authority, or limitations; and Petitioners seek rehearing on each and every one of the following purported findings on the grounds hereinafter stated:

(1) Finding No. (1) on the grounds that:

(a) Such finding is not supported by any substantial evidence of record.

(b) As stated in paragraphs II (55), II (56), and III (31) of Petitioners' said Application for Rehearing of Order issued January 5, 1949.

(2) Finding No. (2) on the grounds that:

(a) Such finding is not supported by any substantial evidence of record or by the findings required by Section 3 (13) of the Act necessary for such a determination.

(b) As stated in paragraph II (12) above.

(3) Finding No. (3) on the grounds that:

(a) Such finding is not supported by any substantial evidence of record.

(b) Nothing in the Federal Power Act makes it necessary or appropriate that Petitioners be required to file any of the information referred to.

IV.

The Commission's orders or requirements in its Order issued February 28, 1949, are erroneous in law and fact, are contrary to the evidence, and are unsupported by any substantial evidence, unsupported by findings, and are unlawful, erroneous, arbitrary, capricious and unconstitutional, operate to deprive Petitioners of their property without due process of law, in violation of the Fifth Amendment to the Constitution of the United States and result in an exercise of authority in excess of statutory jurisdiction, authority or limitations; and Petitioners seek rehearing on each and every one of the said orders or requirements as follows:

(1) Paragraph (A) of the Order on the grounds herein specifically set forth in paragraphs I, II, III, V and VI.

(2) Paragraphs (B) and (C) of the Order on the grounds that:

(a) As stated in paragraph III (3) above.

(b) Such requirements are unjust, unreasonable, burdensome, and unnecessary or inappropriate to the carrying out of any provisions of the Federal Power Act or for any lawful purpose within the jurisdiction or authority of the Commission under such Act.

V.

Since the filing of Petitioners' said Application for Rehearing of Order issued January 5, 1949, Petitioners have newly discovered evidence relating to the statement of the Commission on page 11 of Opinion No. 173, and footnote 16 in connection therewith, which was the subject of paragraph II (8) of such Application for Rehearing. If given an opportunity on rehearing, Petitioners hereby further offer to prove that the position of Safe Harbor in the contracts with PP&L, Philadelphia Company, and Pennsylvania Railroad is more than that of a nominal party; that it became such a party for important and material reasons other than any legal technicality involving possible Pennsylvania gross receipts tax savings; and that it became such a party at the insistence of the customers for the purpose of reliance by them upon the resulting obligation of Safe Harbor to render service from its available capacity.

VI.

The Commission's Order issued February 28, 1949, and to the extent that it incorporates its Opinion No. 173-A therein, extends or modifies its Order issued January 5, 1949, its Opinion No. 173, and its Order issued January 31, 1949, adversely against Petitioners without further hearing, without authority under the Federal Power Act, in excess of the authority contained in Section 313 (a) of the Act, and in violation of Section 206 (a) of the Act, and deprives Petitioners of their property without due process

of law in violation of the Fifth Amendment to the Constitution of the United States.

Respectfully submitted,

F. G. Awalt,
Raymond Sparks,
Daryal A. Myse,
Preston C. King, Jr.,
Counsel for Petitioners.

Dated at Washington, D. C.,
March 11, 1949.

DISTRICT OF COLUMBIA, *ss.:*

The undersigned, being first duly sworn, states that he is counsel for the applicants in the foregoing application; that he has read said application and knows the contents thereof; and that all of the statements contained therein are true and correct to the best of his knowledge, information or belief.

(Signed) RAYMOND SPARKS.
Raymond Sparks.

Sworn to and subscribed before me, a notary public, in and for said District of Columbia, this 11th day of March, 1949.

(Signed) FLORA A. MYERS.

(SEAL)

My commission expires Oct. 14, 1953.

CERTIFICATE OF SERVICE.

I hereby certify that I have this day served the foregoing document upon all parties of record in this proceeding by mailing a copy thereof properly addressed to:

HOWARD E. WAHRENBROCK, Assistant General Counsel;
and REUBEN GOLDBERG, Attorney,
Federal Power Commission,
Hurley Wright Building,
Washington 25, D. C.

CHARLES D. HARRIS, General Counsel,
The Public Service Commission of Maryland,
Munsey Building,
Baltimore, Maryland

CHARLES E. THOMAS, Counsel, and ARTHUR J. DISKIN, Attorney,
Pennsylvania Public Utility Commission,
Harrisburg, Pennsylvania.

G. KENNETH REIBLICH, Counsel for
Consolidated Gas Electric Light and Power Company of Baltimore,
Baltimore, Maryland.

Dated at Washington, D. C., this 11th day of March, 1949.

(Signed) RAYMOND SPARKS.
Raymond Sparks.

EXHIBIT I TO PETITION FOR REVIEW.

UNITED STATES OF AMERICA

FEDERAL POWER COMMISSION

Before Commissioners: Nelson Lee Smith, Chairman; Thomas C. Buchanan, Claude L. Draper and Leland Olds.

March 15, 1949

In the Matter of PENNSYLVANIA WATER & POWER COMPANY	Docket No. IT-5915

ORDER DENYING APPLICATION FOR REHEARING OF ORDER ISSUED FEBRUARY 28, 1949

On March 11, 1949, Pennsylvania Water & Power Company and Susquehanna Transmission Company of Maryland filed an application "for a rehearing of (the) Order issued February 28, 1949 * * * of all of the matters presented or involved in this proceeding and covered or affected by said Order and the accompanying Opinion No. 173-A * * * ". That order was one entered on an application for rehearing.

Assuming, without deciding, that a second application for rehearing is proper, and without waiving the right to insist that any petition for judicial review must be filed within 60 days after our order upon the first application for rehearing, the application filed March 11 has been carefully considered and, upon such consideration, the Commission *finds:*

No new facts have been presented or alleged and no principles of law have been set forth which either were not fully considered by the Commission before it entered the order issued February 28, 1949, or which,

having now been considered, warrant further hearing, modification, or abrogation of the Commission's order.

The Commission *orders:*

The application for rehearing filed March 11, 1949, be and the same is hereby denied.

By the Commission.

(Signed) LEON M. FUQUAY,
Leon M. Fuquay,
Secretary.

(Seal)

Date of Issuance: March 17, 1949

Vol. XVII

TRANSCRIPT OF RECORD

(Pages 5222 to 5321)

Supreme Court of the United States

OCTOBER TERM, 1951

No. 428

PENNSYLVANIA WATER AND POWER COMPANY AND SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND, PETITIONERS,

vs.

FEDERAL POWER COMMISSION ET AL.

No. 429

PENNSYLVANIA PUBLIC UTILITY COMMISSION, PETITIONER,

vs.

FEDERAL POWER COMMISSION

ON WRITS OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

PETITIONS FOR CERTIORARI FILED NOVEMBER 16, 1951

CERTIORARI GRANTED FEBRUARY 4, 1952

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IN THE

United States Court of Appeals

FOR THE DISTRICT OF COLUMBIA CIRCUIT.

No. 10,531.

PENNSYLVANIA WATER & POWER COMPANY, A CORPORATION, AND SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND, A CORPORATION,
Petitioners,

v.

FEDERAL POWER COMMISSION,
Respondent,

PETITION FOR REVIEW.

(Filed February 8, 1950.)

To the Honorable, the Judges of the United States Court of Appeals for the District of Columbia Circuit:

Petitioners, PENNSYLVANIA WATER & POWER COMPANY (Penn Water), and SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND (Transmission Company), being aggrieved by an "Order Rejecting Proposed 'FPC Electric Tariff' and prescribing Rate Schedules", issued by the Federal Power Commission (the Commission) October 27, 1949 in its Docket No. IT-5915, and being aggrieved by an "Order Denying Application for Rehearing of Order issued October 27, 1949" issued by the Commission December 15, 1949 in the same proceeding, hereby file their Petition for Review under Section 313 (b) of the Federal Power Act (16 U. S. C. § 825-1 (b); 49 Stat. 860), and pursuant to Rule 38 of this Court, to review, hold unlawful, and set aside such orders of October 27, 1949 and December 15, 1949, and certain findings and conclusions incorporated therein, in accordance with the provisions of Section 10 of the Adminis-

trative Procedure Act (5 U. S. C. § 1009; 60 Stat. 243); and Petitioners represent and show to the Court:

The Nature of the Proceedings as to Which Review Is Sought.

I. Penn Water is a corporation organized and existing under the laws of the Commonwealth of Pennsylvania. It owns and operates a hydro-electric generating plant and a steam-electric generating plant on the Susquehanna River at Holtwood, Pennsylvania. It is engaged in the generation, transmission and distribution of hydro- and steam-electric power and renders other services for use in public service.

II. Transmission Company is a corporation organized and existing under the laws of the State of Maryland and is a wholly owned subsidiary of Penn Water. It owns transmission lines wholly within the State of Maryland, some of which are connected to the transmission lines of Penn Water at the Pennsylvania-Maryland State line.

III. On September 1, 1944, the Commission issued in its Docket IT-5915, a general Order of investigation to determine whether any rates, charges, classifications, rules, regulations, practices, or contracts of Penn Water, subject to the jurisdiction of the Commission, were unjust, unreasonable, unduly discriminatory, or preferential. By Order dated October 3, 1944, the proceeding was enlarged to include Transmission Company as a respondent. Hearings commenced on April 15, 1946, and were concluded on July 16, 1947.

IV. On January 5, 1949, the Commission issued its Order and accompanying Opinion No. 173 which provided in part for a reduction in Penn Water's revenues derived from services rendered to Pennsylvania Power & Light Company (PP & L), Philadelphia Electric Company (Philadelphia Company), Metropolitan Edison Company (Metro-

politan Company), and Consolidated Gas Electric Light and Power Company of Baltimore (Baltimore Company). The Order contained no provision regulating Penn Water's revenues from its only other customer, The Pennsylvania Railroad Company, and the opinion disclaimed any intention to regulate such revenues. By paragraphs (C) and (D) of said Order Penn Water was required to file tariffs effecting specified reductions in revenues from PP & L, Philadelphia Company and Metropolitan Company, and effecting a reduction in revenue from Baltimore Company in accordance with a specific formula contained in such paragraph (D). A copy of the Commission's Order issued January 5, 1949, is attached hereto and made a part hereof as Exhibit A.

V. Petitioners filed an application with the Commission for a rehearing of said Order of January 5, 1949, which was denied by a subsequent Order of the Commission issued February 28, 1949, also accompanied by a Commission Opinion No. 173-A.

VI. On April 22, 1949, Petitioner filed in this Court their Petition for Review of, among others, the Commission's Orders of January 5, 1949 and February 28, 1949 (No. 10,236) and on April 28, 1949, this Court issued an Order staying the effectiveness of the Commission's order of January 5, 1949, insofar as it required a reduction in Penn Water's rates and charges to the aforesaid customers but requiring Penn Water to file with the Commission the rate schedules required by its Order of January 5, 1949.

VII. On May 31, 1949, Penn Water filed with the Commission its "FPC Electric Tariff, Original Volume I", consisting in part of four rate schedules for services to PP & L, Philadelphia Company, Metropolitan Company and Baltimore Company and providing for the reduction in Penn Water's revenues ordered in paragraphs (C) and (D) of the Commission's Order of January 5, 1949. A copy of such

tariff is attached hereto and made a part hereof as Exhibit B.

VIII. On June 2, 1949, the Commission certified and filed with this Court the transcript of the record of the proceedings in its Docket No. IT-5915 and thereupon exclusive jurisdiction to affirm, modify or set aside the Order of January 5, 1949 vested in this Court.

IX. On October 27, 1949, the Commission issued its Order amending and modifying its Order of January 5, 1949 and rejecting Penn Water's rate schedules filed on May 31, 1949 on the alleged ground that the said schedules failed to comply with its Opinions and Orders in its Docket No. IT-5915 and also prescribing its own rate schedules for Penn Water's services to PP & L, Philadelphia Company, Metropolitan Company and Baltimore Company.

X. The Commission's Order of October 27, 1949 amends and modifies its Order of January 5, 1949 in the following respects:

(a) It requires the rate schedule for services to Baltimore Company to include an annual credit to Baltimore Company in an amount of $141,777 in excess of the credits required by paragraph (D) of the Order of January 5, 1949.

(b) It requires the rate schedule for services to Baltimore Company to include a credit to Baltimore Company for fuel cost adjustment in connection with services to The Pennsylvania Railroad Company in accordance with a formula specified in said Order which credit was not required by or even referred to in the Commission's Order of January 5, 1949.

(c) It requires the rate schedules for services to PP & L, Philadelphia Company and Metropolitan Company to include a provision for fuel cost adjustment in accordance with a formula specified in said order which provision for

fuel cost adjustment was not required by or even referred to in the Commission's Order of January 5, 1949.

(d) It requires a reduction in the revenues of Penn Water which has the effect of reducing Penn Water's rate of return from its public utility business which the Commission seeks to regulate below the 5¼% rate, which the Commission has found to be a fair rate of return in its Order of January 5, 1949.

A copy of the Commission's Order of October 27, 1949, is attached hereto and made a part hereof as Exhibit C.

XI. On November 25, 1949, Petitioners filed with the Commission their application for rehearing of the Order issued October 27, 1949. A copy of such application for rehearing is attached hereto and made a part hereof as Exhibit D.

XII. On December 15, 1949, the Commission issued its Order denying Petitioner's application for rehearing of the Order issued October 27, 1949. A copy of the said Order of December 15, 1949 is attached hereto and made a part hereof as Exhibit E.

XIII. Petitioners are here before this Honorable Court for review of the Commission's Orders of October 27, 1949 and December 15, 1949, and the actions and rulings of the Commission in connection therewith in its Docket No. IT-5915.

The Facts and Statutes Upon Which Jurisdiction Is Based.

I. The final Orders of the Commission of which review is sought were issued October 27, 1949, and December 15, 1949, purportedly under the provisions of the Federal Power Act (16 U. S. C. § 791a *et seq.*; 41 Stat. 1063; 46 Stat. 797; 49 Stat. 838, 847). Petitioners have applied to the Commission for a rehearing of the Order of October 27, 1949, within the thirty days prescribed by Section 313 (a) of the Act (16 U. S. C. § 825-l (a), 49 Stat. 860), as shown

by Exhibit D hereto. By its Order of December 15, 1949, the Commission denied rehearing of its Order of October 27, 1949. This Petition for Review is filed within sixty days after the Order of the Commission denying rehearing; and a copy of this Petition for Review is being served forthwith upon a member of the Commission; as required by Section 313 (b) of the Act (16 U. S. C. § 825-l (b); 49 Stat. 860).

II. Section 313 (b) of the Federal Power Act provides for judicial review of Orders of the Commission in this Court by written petition to review praying that the Orders of the Commission be modified or set aside in whole or in part. Section 313 (b) also provides that if any party shall apply to the Court for leave to adduce additional evidence and shall show to the satisfaction of the Court that such additional evidence is material and that there were reasonable grounds for failure to adduce such evidence in the proceedings before the Commission, the Court may order such additional evidence to be taken before the Commission and to be adduced upon the hearing in such manner and upon such terms as to the Court may seem proper.

III. Section 10 (a) of the Administrative Procedure Act (5 U. S. C. § 1009 (a); 60 Stat. 243) entitles Petitioners to judicial review of the Commission's Orders as persons suffering legal wrong because of such actions and as persons adversely affected and aggrieved by such actions. Section 10 (b) of such Act (5 U. S. C. § 1009 (b)) specifies the form of proceeding for such review to be that provided by the Federal Power Act, and in the event of inadequacy thereof, any applicable form of legal action. Section 10 (c) of such Act (5 U. S. C. § 1009 (c)) makes reviewable each of the Orders sought to be reviewed herein, and all preliminary, procedural, and intermediate orders, actions, and rulings of the Commission in its Docket No. IT-5915. Section 10 (e) of such Act (5 U. S. C. § 1009 (e)) provides

for the scope of judicial review and the authority of the Court in connection therewith.

The Relief Prayed.

Petitioners pray that:

I. The said Commission Orders of October 27, 1949 and December 15, 1949 be reviewed by this Court; and that said Orders be held unlawful and set aside, or modified as may be necessary to the extent such Orders are held unlawful; or that such other Orders may be made herein as to this Court may seem just;

II. All preliminary, procedural, and intermediate orders, actions, and rulings of the Commission in its Docket No. IT-5915 be reviewed and held unlawful by the Court to the extent necessary to render complete judicial relief from the actions of the Commission;

III. Petitioners hereby apply to the Court for leave to adduce additional evidence as specified in the offers of proof contained in paragraphs II (1) (b) (ii), II (1) (b) (iii), and II (1) (b) (iv) of Petitioners' Application for Rehearing of Order issued October 27, 1949, attached hereto as Exhibit D; and as a showing to the Court that such additional evidence is material and that there were reasonable grounds for failure to adduce such evidence in the proceedings before the Commission, Petitioners state: that on their face all of such facts sought to be proved are material as facts showing the monetary effect of the requirements of the said Order of October 27, 1949, as such Order amended and modified the requirements of the Commission's Order of January 5, 1949, and that the Commission, by its Order of December 15, 1949, refused to give Petitioners any opportunity to adduce such evidence; and

IV. This Court grant such further relief as may seem just and proper in the premises.

The Points on Which Petitioners Intend to Rely.

I. The Federal Power Commission had no jurisdiction, authority or power to issue its said Orders of October 27, 1949 and December 15, 1949, for the following reasons:

(A) Pursuant to Section 313 (b) of the Federal Power Act, exclusive jurisdiction to amend or modify the Commission's Orders of January 5, 1949 and related Orders in its Docket No. IT-5915, vested in this Court, upon the filing with this Court of the transcript of the record in such Docket on June 2, 1949. The Commission's Order of October 27, 1949 modifies the Order of January 5, 1949 and related Orders, and requires additional reductions in Petitioners' revenues to the extent indicated in paragraph X of the statement of the Nature of the Proceedings hereinabove.

(B) The effect of the Commission's Order of October 27, 1949, if enforced, would be to reduce Penn Water's rate of return from its public utility business which the Commission seeks to regulate below the 5¼% rate, which the Commission has found to be a fair rate of return in its Order of January 5, 1949.

(C) The Commission's Order of October 27, 1949 requires the introduction of fuel cost adjustment clauses into Penn Water's rate schedules for services to PP & L, Philadelphia Company and Metropolitan Company without prior notice to Penn Water and without affording Penn Water or its said three customers an opportunity to be heard thereon or to present evidence with respect thereto, in violation of Sections 20 (16 U. S. C. § 813; 41 Stat. 1073) and 206 (16 U. S. C. § 824e; 49 Stat. 852) (to the extent, if any, that such section may be applicable to Penn Water) of the Federal Power Act, Sections 4 and 5 of the Administrative Procedure Act (5 U. S. C. §§ 1003, 1004; 60 Stat. 238, 239) and the Fifth Amendment to the Constitution of the United States.

(D) The rate schedules prescribed by said Order of October 27, 1949, insofar as the additional amount of $141,777 required to be credited to Baltimore Company is concerned, constitute an adjustment or revision of the divisional agreement between Penn Water and Baltimore Company for division of revenues received from The Pennsylvania Railroad, without authority under the Federal Power Act to regulate such division of rates.

(E) The said Order of October 27, 1949 constitutes an attempt to prescribe rate reductions in excess of the reductions prescribed by the Commission's Order of January 5, 1949, effective retroactively to February 1, 1949, without authority under the Federal Power Act to require retroactive rate adjustments.

II. The said Commission Orders of October 27, 1949 and December 15, 1949, the statements, findings and conclusions contained therein, all preliminary, procedural, and intermediate orders, actions, and rulings of the Commission, and the rate schedules prescribed thereby, are unlawful and unconstitutional in that they are unreasonable, arbitrary, capricious, discriminatory, in excess of the Commission's statutory jurisdiction, authority, and limitations under the Federal Power Act and contrary to the provisions of such Act, without observance of the procedure required by law, unsupported by substantial evidence, contrary to the substantial evidence, and result from consideration by the Commission of matters presented *ex parte* by other parties and from the failure of the Commission to make proper findings and determine proper facts and conclusions of law; and if enforced would deprive Petitioners of their property without due process of law and without just compensation, in violation of the Fifth Amendment to the Constitution of the United States; all as set forth in Petitioners' Applications for Rehearing and in Petitioners' Petition for Review of the Commission's Order of January 5, 1949 and related Orders filed with this Court April 22,

1949 in Case No. 10,236, which Petition for Review is incorporated herein by reference.

Respectfully submitted,

Sgd. RANDALL J. LEBOEUF, JR.,
Randall J. LeBoeuf, Jr., rs
Sgd. CRAIGH LEONARD,
Craigh Leonard, rs
15 Broad Street,
New York 5, New York,
Sgd. F. G. AWALT,
F. G. Awalt, rs
Sgd. RAYMOND SPARKS,
Raymond Sparks,
Sgd. DARYAL A. MYSE,
Daryal A. Myse, rs
822 Connecticut Avenue, N. W.,
Washington 6, D. C.,
Sgd. PRESTON C. KING, JR.,
Preston C. King, Jr., rs
Munsey Building,
Washington 4, D. C.,
Counsel for Petitioners.

Dated at Washington, D. C.
February 8, 1950.

DISTRICT OF COLUMBIA,
CITY OF WASHINGTON, } *ss.:*

The undersigned, being first duly sworn, states that he is counsel for the Petitioners in the foregoing Petition; that he has read said Petition and knows the contents thereof; and that all of the statements contained therein are true and correct to the best of his knowledge, information or belief.

Sgd. RAYMOND SPARKS.
Raymond Sparks.

Sworn to and subscribed before me, a notary public, in and for the said District of Columbia, this 8th day of February, 1950.

Sgd. FLORA A. MYERS,
Notary Public.
My commission expires October 14, 1953.

EXHIBIT A.

UNITED STATES OF AMERICA
FEDERAL POWER COMMISSION

Before Commissioners: Nelson Lee Smith, Chairman, Thomas C. Buchanan, Claude L. Draper and Leland Olds.

January 4, 1949

In the matter of Pennsylvania Water & Power Company } Docket No. IT-5915

ORDER REDUCING RATES

Upon consideration of the record in the above-entitled proceeding and the arguments adduced, and having this day issued its Opinion No. 173 in this matter, which hereby is incorporated by reference and made a part hereof—

The Commission further *finds* that:

(1) Penn Water (successor through reorganization under the laws of Pennsylvania, on January 13, 1910, of McCall Ferry Power Company which had been formed by the merger, on April 14, 1905, of Hillside Water & Power Company and Susquehanna Water & Power Company) owns, operates and maintains hydroelectric and steam-electric generating facilities, all located on the Susquehanna River at Holtwood, Pennsylvania, about eight miles below the hydroelectric project of Safe Harbor, about nine miles north of the Pennsylvania-Maryland boundary line, and about 61 miles northeast of the City of Baltimore. Penn Water's hydro plant, comprising 10 main generating units (eight, 25-cycle, and two, 60-cycle), has an effective capacity of 104,000 kw; its steam plant, comprising two 60-cycle generating units, has an effective capacity of 26,000 kw. There are also two 5,000 kw, 25/60 cycle frequency changers.

(2) Safe Harbor Water Power Corporation (Safe Harbor) owns, operates and maintains a hydroelectric plant and certain appurtenant transmission facilities, all located in Pennsylvania on the Susquehanna River about 17 miles north of the Pennsylvania-Maryland boundary line. Safe Harbor's hydro plant, comprising seven main generating units (five, 60-cycle and two, 25-cycle) has an effective capacity of 230,000 kw. Safe Harbor owns, operates, and maintains the afore-described hydroelectric power project under a license for Project No. 1025, first issued April 22, 1930, by this Commission, pursuant to the Federal [Water] Power Act, which, as amended, is now Part I of the Federal Power Act (Act).

(3) Consolidated Gas Electric Light and Power Company of Baltimore (Baltimore Company) owns, operates and maintains, among other facilities, steam-electric generating facilities located in and near Baltimore, Maryland. Such facilities include four plants, comprising sixteen generating units (eight, 60-cycle, and eight, 25-cycle), having a total effective capacity of 479,000 kw.

(4) Susquehanna Transmission Company of Maryland (Transmission Company) is a wholly-owned subsidiary of Penn Water, engaged only in the transmission of electric energy in Maryland for Penn Water, Safe Harbor and Baltimore Company. Of the transmission facilities referred to in (5) below, those located in Maryland are owned and operated by Transmission Company.

(5) Penn Water owns and operates transmission facilities in Pennsylvania which have been constructed and are operated and maintained in combination with those of Transmission Company in Maryland to form a transmission network, including: two 220 kv, 60-cycle, three-phase, single, transmission circuits extending from Safe Harbor to points of connection with Baltimore Company near its Westport and Riverside steam-electric plants in Maryland, and to a point of connection with Potomac Electric Power

Company (PEPCO) near Takoma Park, Maryland; four 132 kv, 25-cycle, single-phase, transmission circuits extending from the Conestoga Substation, near the Safe Harbor hydro plant, to a point of connection with facilities of the Pennsylvania Railroad (Railroad) at Perryville, Maryland; two 66 kv, 60-cycle, three-phase, transmission circuits between the Safe Harbor and Penn Water plants, which are tapped by lines owned and operated by Pennsylvania Power & Light Company (PP&L) extending from the Lehman Farm Substation to Lancaster, Pennsylvania, and from the Donegal tap to Harrisburg, Pennsylvania; two 66 kv, 60-cycle, three-phase, transmission circuits extending from the Holtwood Substation to a point of connection with Metropolitan Edison Company (Metropolitan Company) at York, Pennsylvania; two 66 kv, 60-cycle, three-phase, transmission circuits extending from the Holtwood Substation to a point of connection with Philadelphia Electric Company (Philadelphia Company) at Coatesville, Pennsylvania; two 66 kv, three-phase, transmission circuits (one, 60-cycle, and one, 25-cycle) extending from the Holtwood Substation to a nearby point of connection with a line owned and operated by PP&L which continues to Lancaster, Pennsylvania; and four 66 kv, 25-cycle, three-phase, transmission circuits extending from the Holtwood Substation to a point of connection with Baltimore Company at Transmission Company's Highlandtown Substation in the City of Baltimore.

(6) Penn Water, Baltimore Company, and Safe Harbor are parties to a contract dated June 1, 1931, as amended, which by its terms is to continue in effect until 1980. Under that contract, Baltimore Company purchases two-thirds, and Penn Water one-third of Safe Harbor's entire capacity and output of electric energy, and contributes annual payments to Safe Harbor in the same proportion. Payments under such contract, pursuant to the Commission's rate order of November 4, 1946, *Safe Harbor Water Power Corporation*, 5 F. P. C. 265, are sufficient to allow Safe Harbor a 5% rate of return on net investment, after operating ex-

penses, taxes and depreciation. Under this contract, Penn Water provides, maintains, and operates certain transmission facilities, including lines extending from Safe Harbor, Pennsylvania, to Baltimore, Maryland.

(7) Penn Water and Baltimore Company are also parties to a contract dated December 31, 1927, as amended, which continues in effect until 1980, under which Baltimore Company purchases all of the electric capacity and energy, not otherwise disposed of under existing contracts, which are available from Penn Water's own generating facilities, as well as that available to Penn Water through purchase from Safe Harbor, as referred to in (6) above. Under this contract, Baltimore Company pays Penn Water for all of its operating expenses, including taxes, depreciation, and cost of power purchased from Safe Harbor, as well as a return on investment determined by a prescribed method, with a credit for the revenues which Penn Water receives from sales in Pennsylvania.

(8) By means of the transmission circuits referred to in (5) above, electric energy generated in Pennsylvania and consumed in Maryland and the District of Columbia is transmitted from Pennsylvania, and electric energy generated in Maryland and consumed in Pennsylvania is transmitted from Maryland. None of such facilities is used for the generation of electric energy or in local distribution or only for the transmission of electric energy in intrastate commerce, or for the transmission of electric energy consumed wholly by the transmitter.

(9) The transmission circuits referred to in (5) above are facilities for the transmission of electric energy in interstate commerce within the meaning of Section 201 (b) of the Act and are subject to the jurisdiction of this Commission. By reason of ownership and operation of such facilities, Penn Water and Transmission Company are "public utilities" within the meaning of Part II of the Act.

(10) By means of the transmission network referred to in (5) above, the power resources of Penn Water, Safe Harbor, and Baltimore Company referred to in (1), (2) and (3) above, are combined and coordinately operated as an integrated and interconnected electric system (interconnected system) serving areas in the States of Pennsylvania and Maryland as well as electrification requirements of Railroad in Pennsylvania, Maryland, and the District of Columbia.

(11) The interconnected system is designed and operated to supply its power and energy requirements at lowest cost. The output of each of the interconnected generating units flows into the system at such times and in such amounts as will secure maximum utilization of hydroelectric facilities, economy of operation and reliability of service. The contracts referred to in (6) and (7) above, facilitate the achievement of those objectives particularly by the methods of payment which they provide, and by reason of the fact that generation of energy is directed by the coordinated action of load dispatchers in the City of Baltimore, representing the three system companies. The direction of energy flows results from operations governed by consideration of river flow, relative costs of steam generation, and magnitude of loads; and energy moves from generating plants to loads without regard to state boundaries.

(12) The maximum utilization of the interconnected system's hydroelectric generating plants in Pennsylvania, one Penn Water's and one Safe Harbor's, is obtained through their operation in conjunction with the system's steam-electric generating plants, Penn Water's in Pennsylvania and Baltimore Company's four in Maryland. The Penn Water and Safe Harbor ponds impound only 24 hours' supply of water at full draft. During periods of high river flow, which occur principally in the spring months, the hydro plants generate their maximum output continuously, thus saving the maximum amount of fuel in

the generation of electric energy by steam. At other times, they can be so operated only part time, and are operated as peaking plants, to help carry the peak loads of the interconnected system, thus taking the place of steam-generated energy at those hours when the least economical steam generating plants would otherwise have to be used. The coordinated operation of the system makes available a larger useful system output at a lower cost than would result if each company were compelled to supply its requirements from its own generating facilities.

(13) As a result of the operations referred to in (12) above, during periods of high river flow, the flow of energy is south from Pennsylvania towards Maryland and at other times, the flow of energy tends to be to the north, although the direction of the flow on the lines crossing the state boundary may change frequently according to the needs of the consumers in Pennsylvania and Maryland.

(14) The operation of the interconnected system, referred to in (1) through (13) above, and the output of that system are in interstate commerce.

(15) Penn Water alone sells firm power and energy to Metropolitan Company under a 1945 agreement, to supply a part of the latter's requirements in York, Pennsylvania; to Philadelphia Company under a 1933 agreement, to supply its requirements in Coatesville, Pennsylvania; and to PP&L, under a 1933 agreement, to supply its requirements in Lancaster, Pennsylvania In addition, Penn Water alone sells energy to each of these companies in interchange.

(16) Penn Water's sales, referred to in (15) above, are sales for resale in interstate commerce.

(17) Pursuant to the contract referred to in (7) above, Penn Water sells electric energy to Baltimore Company for resale. Energy so sold is transmitted from Pennsylvania to Maryland and is a sale for resale in interstate commerce. Such sale is made possible by the transmission

network, referred to in (5) above, and by the coordinated operation of the interconnected system, referred to in (1) through (13) above.

(18) Each of Penn Water's sales of electric energy referred to in (7) and (15) above is a sale of electric energy at wholesale in interstate commerce subject to the jurisdiction of the Commission under the provisions of Section 201 (b) of the Act. Each rate and charge made, demanded, or received by Penn Water for or in connection with each such sale, including any rate or charge or part thereof, relating to electric energy, power, capacity, frequency control, phase, cycle, special facilities, transmission service, power factor cooperation, or reactive energy, is subject to the rate regulatory provisions of the Act.

(19) A 1939 order of this Commission required Penn Water to apply for a license under the provisions of Part I of the Act for the operation of its hydroelectric project, and the order was affirmed on court review. Thereafter, this Commission entered an order authorizing issuance of a license to Penn Water, but the matter of formal issuance is still pending. In these circumstances, Penn Water, for rate-regulatory purposes, must be treated as a "licensee" within the meaning of the Act.

(20) So much of the electric energy, or "power" within the meaning of Section 20 of Part I of the Act, generated, or developed, by Penn Water's hydroelectric project, as is sold under the contracts referred to in (7) and (15) above, is sold thereunder for sale and distribution in public service by the purchasing companies, or for sale and distribution or use in public service by their customers. By reason of the coordinated operations of the interconnected system referred to in (1) through (13) above, all such electric energy so sold is sold in, and enters, interstate commerce within the meaning of Section 20.

(21) The "States directly concerned" within the meaning of Section 20 are the States of Pennsylvania and

Maryland. Such states are "unable to agree" through their properly constituted authorities on the rates or charges of payment within the meaning of that Section.

(22) Penn Water's rates and charges of payment provided for in the contracts described in (7) and (15) above, including any rate or charge, or part thereof, relating to electric energy, power, capacity, frequency control, phase, cycle, special facilities, transmission service, power factor cooperation, or reactive energy, are subject to the jurisdiction of this Commission under Section 20.

(23) Penn Water's rates and charges of payment provided for in the contracts described in (7) and (15) above, including any rate or charge, or part thereof, relating to electric energy, power, capacity, frequency control, phase, cycle, special facilities, transmission service, power factor cooperation, or reactive energy, are subject to the jurisdiction of this Commission under Section 20, irrespective of finding (21) above.

(24) For the purpose of determining whether Penn Water's rates or charges to Baltimore Company, Metropolitan Company, Philadelphia Company and PP&L are and will be excessive, unjust or unreasonable, such rates or charges may properly be tested by determining whether the net operating income of Penn Water produced by such rates or charges constitutes a fair return on a proper rate base, and the respective amounts shown by the record in this proceeding for the year 1946 may properly be used for that purpose.

(25) The actual legitimate investment in Penn Water's and Transmission Company's electric plant used and useful was $33,113,148 as of December 31, 1946, for the purposes referred to in (24) above. For the purpose of determining a proper rate base for Penn Water and Transmission Company for the year 1946, it is fair and reasonable to use that year's average actual legitimate investment in electric plant used and useful, which was $33,126,585. For each of

the periods hereinafter specified in (35) below, it is fair and reasonable to use the foregoing amount of $33,113,148, plus the recorded cost of additions less recorded retirements, as the actual legitimate investment in electric plant used and useful at the beginning of such period, if no substantial property addition is put into service during such period.

(26) The accrued depreciation as of December 31, 1946, was $9,240,628, the amount recorded in the books of Penn Water and Transmission Company as of that date, after proper adjustments. For the purpose of determining a proper rate base for Penn Water for the year 1946, it is fair and reasonable to use as accrued depreciation the average amount for that year which is $9,001,873. For each of the periods specified in (35) below, it is fair and reasonable to use the amount of $9,240,628, as of December 31, 1946, plus or minus the changes recorded on Penn Water's and Transmission Company's books between that date and the date hereof in conformity with the method followed by Penn Water and Transmission Company in 1946, and plus or minus the changes recorded on Penn Water's and Transmission Company's books between the date hereof and the periods referred to in (35) below, in conformity with (27) and (28) below.

(27) The service lives as shown in Exhibit 59 are proper and reasonable for the computation of Penn Water's and Transmission Company's annual depreciation allowance.

(28) The straight-line method of depreciation is the proper and adequate depreciation method for the purposes of computing Penn Water's bills for power and energy in accordance with the Commission's order in this case and for the purpose of accruing depreciation on its books.

(29) The proper and reasonable working capital allowance for the purpose of determining a proper rate base for Penn Water and Transmission Company, for the year 1946,

is not more than $650,000, representing the average amount of materials and supplies plus one-eighth of cash operating expenses for the year, not including taxes and purchased power. For each of the periods hereinafter specified in (35) below, it is fair and reasonable similarly to compute the working capital allowance upon the book, recorded amounts for the immediately preceding 12 months' period.

(30) The proper rate base for the year 1946 for the purposes of determining just and reasonable rates and charges to Metropolitan Company, Philadelphia Company, PP&L and Baltimore Company is not more than $24,774,712, as shown by the following tabulation:

Average Gross Investment for 1946	$33,126,585
Less: Average Reserve for Depreciation for 1946	9,001,873
Average Net Investment for 1946	24,124,712
Working Capital Allowance	650,000
Net Investment Rate Base	$24,774,712

and the rate base so computed reflects the actual legitimate net investment in Penn Water's and Transmission Company's electric plant in service as an assembled whole and an established plant in successful operation.

(31) A fair and reasonable annual rate of return to Penn Water and Transmission Company is 5¼%; the fair return for 1946 is $1,300,672 on a rate base of $24,774,712.

(32) Penn Water's and Transmission Company's net operating income, for 1946, exceeded a fair return by not less than $2,176,736.

(33) On the basis of a reasonable and proper allocation of the cost of service rendered by Penn Water and Transmission Company to Baltimore Company, the rates

and charges to Baltimore Company for 1946 are unjust and unreasonable by approximately $1,733,318.

(34) For the year 1946, on the basis of a reasonable and proper allocation, Penn Water's rates and charges to Philadelphia Company exceed the cost of service to that company by approximately $114,311; its rates and charges to Metropolitan Company exceed the cost of service to that company by approximately $26,094; and its rates and charges to PP&L exceed the cost of service to that company by approximately $80,538.

In the test year 1946, Penn Water received revenues amounting to $1,483,798 from the sale to the Pennsylvania Railroad (in Pa.). The proper allocation of Penn Water's and Transmission Company's total cost of service among Penn Water's customers results in the assignment of $1,261,323 thereof to serving the Pennsylvania Railroad (in Pa.). Accordingly, Penn Water's revenues from that service to Pennsylvania Railroad exceeded the cost of service for the test year 1946 by $222,475, which amount is subject to an adjustment for income taxes.

(35) Except as referred to in (38) below, a proper rate base for the purpose of determining the rates and charges to Baltimore Company for each six months' period following each June 30 and December 31, after issuance hereof, is one computed by adding to the gross investment of $33,113,148 (as of December 31, 1946), as referred to in (25) above, the cost of net additions to electric plant in service from the latter date to said June 30 or December 31; by deducting from the total thus determined the amount of the depreciation reserve as of said June 30 or December 31, according to Penn Water's and Transmission Company's books, adjusted as referred to in (26), (27) and (28) above; and adding working capital computed as referred to in (29) above.

(36) The application of a 5¼% per annum rate of return to the rate base determined as referred to in (35)

above, will provide a fair return to Penn Water and Transmission Company.

(37) Penn Water's rates and charges to Baltimore Company will be just and reasonable when the power bill to Baltimore Company is computed by adding to the fair return, referred to in (36) above, all reasonable and necessary operating expenses and depreciation expenses, calculated as referred to in (27) and (28) above, and by deducting the Conowingo backwater payment, and all electric revenues received from others, including Metropolitan Company, Philadelphia Company, PP&L and Railroad. *Provided,* however, that the deduction in respect to revenues from Pennsylvania Railroad shall be only the amount calculated at rates which would have yielded $1,261,323, based on volumes and demands for the test year 1946 and, *Provided,* further, that income taxes associated with revenues from the Railroad in excess of such deduction shall not be included in the costs to be reimbursed by Baltimore Company.

(38) If a substantial addition to property is put in service between the dates for determination of the rate base referred to in (35) above, Penn Water may petition the Commission to include the cost thereof in the rate base from the date of its commercial operation.

The Commission *orders* that:

(A) Penn Water's and Transmission's Company's motion to dismiss for want of jurisdiction be and the same hereby is denied.

(B) The petition of Intervenor, Public Service Commission of Maryland, to reopen the record for the purpose of receiving certain additional evidence be and the same hereby is denied.

(C) Within 45 days after the date of issuance of this order, Penn Water shall file, in a form satisfactory to the Commission, new schedules of rates and charges for or in connection with its transmission

and sale of electric energy in interstate commerce for resale to Metropolitan Company, Philadelphia Company and PP&L. The new schedules of rates and charges shall be effective on and after February 1, 1949, and shall effect a reduction, based upon Penn Water's and Transmission Company's operations during the test year 1946, of $26,094 to Metropolitan Company, $114,311 to Philadelphia Company and $80,538 to PP&L.

(D) Within 45 days after the issuance of this order Penn Water shall file in a form satisfactory to the Commission, a new schedule of rates and charges for or in connection with its transmission and sale of electric energy in interstate commerce for resale to Baltimore Company. Said schedule of rates and charges shall be such as, together with the Conowingo backwater payment, the revenues from the sales referred to in (C), above, and a credit for service to the Pennsylvania Railroad computed as set forth in (37), above, will provide a 5¼% return to Penn Water and Transmission Company, after operating expenses and depreciation charges, all as set forth in (37), above, on a rate base to be computed in the manner set forth in (G), below, and shall be effective on and after February 1, 1949.

(E) The Commission reserves the right to reject all or any part of the schedules of rates and charges referred to in Paragraphs (C) and (D) hereof and in lieu thereof to prescribe by further order the appropriate rates, charges, classifications, rules, regulations, practices, or contracts.

(F) Penn Water and Transmission Company shall compute annual depreciation expense beginning February 1, 1949, in accordance with the straight-line depreciation method for the purpose of computing its bills for energy and power, using in

connection therewith the service lives which are set forth in Exhibit 59.

(G) For the purpose of determining the rates and charges to Baltimore Company, Penn Water and Transmission Company shall compute a rate base as of June 30, 1949, and as of each December 31 and June 30 thereafter in the manner set forth in findings (25) through (30), and (35), by adding to the amount of actual legitimate investment as of December 31, 1946, as found in (25), above, the net claimed cost, to the date of computation, of additions and retirements in its electric plant used and useful; deducting from this amount the depreciation reserve as of that date according to the companies' books in conformity with (F), above; and adding working capital computed for the period in question in the manner set forth in finding (29) above.

(H) The rate base computed as set forth in (G), above, shall remain unchanged for the six months period beginning with the date as of which it is computed, provided, however, that in the case of substantial addition to property which is put in service between the dates for determination of the rate base, Penn Water and Transmission Company may petition the Commission to include the cost thereof in the rate base from the date of commercial operation.

(I) Penn Water and Transmission Company shall file on or before May 1, 1949, a statement showing the computation of the rate base referred to in (D) hereof as of December 31, 1948, and thereafter on or before each May 1, for the preceding calendar year, a statement showing the computation of such rate base in accordance with this order, the operating expenses, depreciation, taxes, and

return, and the resulting charges to Baltimore Company under said revised rate schedule.

By the Commission. Commissioner Draper concurring in the result only.

Leon M. Fuquay,
Secretary.

Date of Issuance: January 5, 1949.

EXHIBIT B.

FPC ELECTRIC TARIFF
ORIGINAL VOLUME NO. 1

OF

PENNSYLVANIA WATER & POWER COMPANY

issued on behalf of itself and

SAFE HARBOR WATER POWER CORPORATION

and

CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE.

(Filed May 31, 1949)

Issued to comply with Order of Federal Power Commission, Docket No. IT-5915, issued January 5, 1949, as modified by order issued January 31, 1949.

Communications Covering Rates Should be Addressed to:

G. W. Spaulding, Executive Vice-President,
Pennsylvania Water & Power Company,
Lexington Building,
Baltimore, Maryland.

Pennsylvania Water & Power Company
FPC Electric Tariff, Original Volume No. 1

Original Sheet No. 1

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Issued by:
G. W. Spaulding, Executive Vice-Pres.
Pennsylvania Water & Power Company
Baltimore, Maryland
Issued on: May 27, 1949.

Effective:
Not effective under stay order of U. S. C. A. for D. C. Circuit, dated April 29, 1949 (No. 10236, April Term, 1949).

Pennsylvania Water & Power Company
FPC Electric Tariff, Original Volume No. 1

Original Sheet No. 2

PRELIMINARY STATEMENT

This tariff is filed under protest by Pennsylvania Water & Power Company in compliance with an order of the Federal Power Commission, in its Docket No. IT-5915, issued January 5, 1949, the effective date of which was stayed until April 29, 1949, by the Commission's order issued January 31, 1949, in the same Docket. It is filed by Pennsylvania Water & Power Company on behalf of itself with respect to Rate Schedules A, B, C and D; on behalf of itself and Safe Harbor Water Power Corporation with respect to Rate Schedules A, B, and D; and, on behalf of Consolidated Gas Electric Light & Power Company of Baltimore with respect to Rate Schedule E. It is effective and applicable to the joint services rendered by Safe Harbor Water Power Corporation and the issuing company, and to the services rendered by Consolidated Gas Electric Light and Power Company to Pennsylvania Water & Power Company only in the event appropriate concurrences to the above specified rate schedules are filed by such companies.

By order of the United States Court of Appeals for the District of Columbia Circuit, filed April 29, 1949 (Case No. 10236, April Term, 1949), the effectiveness of the rate schedules required to be filed by the Commission's order of January 5, 1949, were stayed and suspended pending final disposition of proceedings to review the Commission's orders and actions in its Docket No. IT-5915. In the event that the Commission's order of January 5, 1949, is modified or set aside in whole or in part in the aforementioned review proceedings, this tariff shall be null and void and of no effect.

Issued by:
G. W. Spaulding, Executive Vice-Pres.
Pennsylvania Water & Power Company
Baltimore, Maryland
Issued on: May 27, 1949.

Effective:
Not effective under stay order of U. S. C. A. for D. C. Circuit, dated April 29, 1949 (No. 10236, April Term, 1949).

Pennsylvania Water & Power Company
FPC Electric Tariff, Original Volume No. 1

Original Sheet No. 3

Neither the filing of this tariff, nor the inclusion herein of any particular rates, charges, or classifications for any service, are to be construed as a voluntary initiation of any rate, charge, or classification for any transmission or sale of electric energy, or as an admission by the issuing company that the Commission has any jurisdiction or statutory authority to regulate, control, determine, or fix any of such rates, charges, or classifications, or any of the rules, regulations, practices, or contracts affecting such rates, charges, or classifications.

Pennsylvania Water & Power Company generates hydroelectric and steam-electric power, energy, and other electric services at its plant at Holtwood, Pennsylvania. It also owns and operates certain distribution facilities and a number of electric transmission lines in Pennsylvania connecting its plant at Holtwood and the hydroelectric plant of Safe Harbor Water Power Corporation, an affiliate, at Safe Harbor, Pennsylvania, with electric utility distribution companies in Pennsylvania and with the Pennsylvania Railroad Company in Pennsylvania. Susquehanna Transmission Company of Maryland, a wholly owned subsidiary of Pennsylvania Water & Power Company, owns transmission and distribution facilities within Maryland. Certain of the transmission lines of Susquehanna Transmission Company of Maryland connect certain of the transmission lines of Pennsylvania Water & Power Company, at the Maryland-Pennsylvania state line, with electric utility distribution companies in Maryland and the District of Columbia, and with the Pennsylvania Railroad Company in Maryland.

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Pennsylvania Water & Power Company
Baltimore, Maryland
Issued on: May 27, 1949.

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Pennsylvania Water & Power Company
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Original Sheet No. 4

Electric energy, capacity, and other services rendered under this tariff are rendered jointly by Pennsylvania Water & Power Company and Safe Harbor Water Power Corporation to such customers as are so indicated herein. Such electric energy service as may be rendered by Consolidated Gas Electric Light & Power Company of Baltimore to Pennsylvania Water & Power Company under this tariff is the subject of a rate shcedule herein for Backfeed Service solely by reason of the requirements under the Commission's order of January 5 1949, and would not otherwise be included in this tariff, but would be contained in a separate tariff filed by Consolidated Gas Electric Light & Power Company of Baltimore. Such Backfeed Service to Pennsylvania Water & Power Company is the only service of Consolidated Gas Electric Light & Power Company of Baltimore included in this tariff.

Services by Pennsylvania Water & Power Company and Safe Harbor Water Power Corporation, under this tariff, are rendered solely to electric utility distribution companies for use by such customers in distribution to their ultimate consumers. Services rendered to the Pennsylvania Railroad Company are not subject to any of the provisions of this tariff. It is the policy and practice of Pennsylvania Water & Power Company and Safe Harbor Water Power Corporation to hold themselves out to serve such electric utility distibution companies and such other customers who have entered or who may in the future enter into valid and lawful service contracts with them.

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Pennsylvania Water & Power Company
Baltimore, Maryland
Issued on: May 27, 1949.

Effective:
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Pennsylvania Water & Power Company
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The provisions of this tariff supersede only the rate provisions and adjustments thereof of service contracts or arrangements with customers of Pennsylvania Water & Power Company and Safe Harbor Water Power Corporation existing as of the effective date of this tariff. The rate provisions of this tariff are applicable to no interchange services other than the Backfeed Services of Consolidated Gas Electric Light & Power Company. The filing of this tariff is without prejudice to the contentions of Pennsylvania Water & Power Company with respect to the non-existence or invalidity of any purported contracts between Pennsylvania Water & Power Company and Consolidated Gas Electric Light & Power Company of Baltimore, and between Pennsylvania Water & Power Company, Safe Harbor Water Power Corporation, and Consolidated Gas Electric Light & Power Company of Baltimore.

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Pennsylvania Water & Power Company
Baltimore, Maryland
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Pennsylvania Water & Power Company
FPC Electric Tariff, Original Volume No. 1

Original Sheet No. 6

RATE SCHEDULE A, Pennsylvania Power & Light Company.

Availability

Service is available to Pennsylvania Power & Light Company, under this rate schedule from Pennsylvania Water & Power Company and Safe Harbor Water Power Corporation to the extent that there is available to them for joint service the electric resources of energy, capacity, and other services from their hydroelectric and steam-electric plants at Holtwood and Safe Harbor, and from such electric interchange services obtained by them from Pennsylvania Power & Light Company and others.

Applicability and Character of Service

The application of this rate schedule and the character and terms and conditions of the service are as set forth in the service contract between Pennsylvania Water & Power Company, Safe Harbor Water Power Corporation, and Pennsylvania Power & Light Company, dated May 1, 1933, as amended by letter agreement dated April 28, 1939, as supplemented by letter dated February 19, 1946; and as set forth in the service contract between Pennsylvania Water & Power Company and Edison Electric Company of Lancaster, Pa., dated October 9, 1912, as amended under date of October 19, 1923, to the extent that the provisions thereof were continued in effect by the foregoing service contract between Pennsylvania Water & Power Company, Safe Harbor Water Power Corporation, and Pennsylvania Power & Light Company.

Issued by:
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Pennsylvania Water & Power Company
Baltimore, Maryland
Issued on: May 27, 1949.

Effective:
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Pennsylvania Water & Power Company
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Rates

The rates for service under this rate schedule are as follows:

Demand Charge:

$1.38 per month per kilowatt of Billing Demand.

Energy Charge:

2.5 mills per kilowatthour for all energy except 4,000 volt service at Holtwood.

6.0 mills per kilowatthour for 4,000 volt service at Holtwood.

Reactive Charge:

0.2 mills per lagging reactive kilovolt-ampere-hour for all such kilovolt-ampere-hours supplied per month numerically in excess of 50% of the kilowatt hours of energy supplied under this rate schedule in that month.

Special Facilities Charge:

$965.00 per month.

The Billing Demand in any month shall be an amount equal to the maximum power requirement of the services specified in the existing service contract (excluding Excess Energy under Article IV of the contract dated May 1, 1933 and excluding interchange service), measured on a clock one-hour integrated basis in units of 1,000 kilowatts (1,000 kwh. per hour) during that month or the preceding eleven months. The 4,000 volt service at Holtwood is excluded in the determination of the Billing Demand.

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Pennsylvania Water & Power Company
Baltimore, Maryland
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Pennsylvania Water & Power Company
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RATE SCHEDULE B, Philadelphia Electric Company

Availability

Service is available to Philadelphia Electric Company, under this rate schedule, from Pennsylvania Water & Power Company and Safe Harbor Water Power Corporation to the extent that there is available to them for joint service the electric resources of energy, capacity, and other services from their hydroelectric and steam-electric plants at Holtwood and Safe Harbor, and from such electric interchange services obtained by them from Philadelphia Electric Company and others.

Applicability and Character of Service

The application of this rate schedule and the character and terms and conditions of the service are as set forth in the service contract between Pennsylvania Water & Power Company, Safe Harbor Water Power Corporation, and Philadelphia Electric Company, dated August 1, 1933, as supplemented by agreement dated December 13, 1938; and by letters between the parties dated August 5, 1947 and August 19, 1947.

Rates

The rates for service under this rate schedule are as follows:

Demand Charge:

$1.38 per month per kilowatt of Billing Demand.

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Baltimore, Maryland
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Energy Charge:

2.5 mills per kilowatthour.

Reactive Charge:

0.2 mills per lagging reactive kilovolt-ampere-hour for all such kilovolt-ampere-hours supplied per month numerically in excess of 50% of the kilowatt hours of energy supplied under this rate schedule in that month.

Special Facilities Charge:

$6,559.00 per month.

The Billing Demand in any month shall be an amount equal to the maximum power requirement of the services specified in the existing service contract (excluding emergency supply under Article II, Section 2 of the contract dated August 1, 1933), measured on a clock one-hour integrated basis in units of 1,000 kilowatts (1,000 kwh. per hour) during that month or the preceding eleven months.

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RATE SCHEDULE C, Metropolitan Edison Company

Availability

Service is available to Metropolitan Edison Company, under this rate schedule, from Pennsylvania Water & Power Company in accordance with the provisions of Article IV of the service contract between Pennsylvania Water & Power Company and Metropolitan Edison Company, dated November 15, 1945, as supplemented by letter dated November 24, 1948.

Applicability and Character of Service

The application of this rate schedule and the character and terms and conditions of the service are as set forth in such service contract dated November 15, 1945.

Rates

The rates for service under this rate schedule are as follows:

Demand Charge:

$1.38 per month per kilowatt of specified firm power.

$0.40 per 1,000 kilowatts of spinning reserve capacity for each clock hour in which such capacity is provided.

Energy Charge:

(a) 3.5 mills per kilowatt hour for energy supplied in any month in the portion of the customer's total requirements above its steam line.

(b) 2.75 mills per kilowatt hour for energy supplied in any month, between the hours of 7 a. m. and 9 p. m.

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Eastern Standard Time, or Daylight Saving Time when in effect, on all days except Sundays and Holidays in the customer's specified area, in excess of energy billed under Section (a) above.

(c) 2.0 mills per kilowatt hour for all additional energy supplied in any month in excess of energy billed under Sections (a) and (b) above.

Reactive Charge:

0.2 mills per lagging reactive kilovolt-ampere-hour for all such kilovolt-ampere-hours supplied per month numerically in excess of 50% of the kilowatt hours of energy supplied under this rate schedule plus kilowatt hours use of spinning reserve capacity in that month.

Special Facilities Charge:

$2,751.00 per month.

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RATE SCHEDULE D, Consolidated Gas Electric Light & Power Company of Baltimore

Availability

Service is available to Consolidated Gas Electric Light & Power Company of Baltimore under this rate schedule from Pennsylvania Water & Power Company in coordination with joint service from Safe Harbor Water Power Corporation.

Service to such customer is available only to the extent that there is electric capacity and energy available to Pennsylvania Water & Power Company at its hydroelectric and steam-electric generating plants, and from the hydroelectric plant of Safe Harbor Water Power Corporation to which Pennsylvania Water & Power Company may be entitled, and not otherwise disposed of in performance of now existing contracts or arrangements, new contracts or arrangements, or obligations to serve imposed by charter or otherwise by law.

Applicability and Character of Service

The application of this rate schedule and the character and terms and conditions of service are as were set forth in a purported contract between Pennsylvania Water & Power Company and Consolidated Gas Electric Light & Power Company of Baltimore, dated December 31, 1927, as amended December 27, 1928, June 1, 1931, and September 29, 1939; and as were set forth in a purported contract between Pennsylvania Water & Power Company, Safe Harbor Water Power Corporation, and Consolidated Gas Electric Light & Power Company of Baltimore,

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dated June 1, 1931, as amended August 1, 1932, and November 22, 1939; without prejudice to the position of Pennsylvania Water & Power Company that such contracts, as amended, are unlawful, void, and non-existent. In the event that either or both of such contracts, as amended, or any part thereof are determined by any court to be unlawful, void, or non-existent this rate schedule shall cease to be effective.

Rates

The annual charge for all services and facilities under this rate schedule, without regard to the amount of energy, capacity, or other services or facilities actually furnished, shall be computed in accordance with the following formula:

(A) Add the following items:

(1) An amount equal to the return allowed, computed in accordance with paragraphs (35) and (36) of the findings contained in the order of the Federal Power Commission, issued January 5, 1949, in its Docket No. IT-5915.

(2) An amount equal to all operating expenses, taxes (other than Federal and State taxes in respect to income), and depreciation expense (depreciation calculated in accordance with paragraphs (27) and (28) of such findings in such order).

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(Continued)

(3) An amount equal to all payments by Pennsylvania Water & Power Company for energy, capacity or other electric services purchased from Safe Harbor Water Power Corporation, Consolidated Gas Electric Light & Power Company of Baltimore, and others.

(4)-(a) An amount determined by applying the then current rates of Federal and State taxes in respect to income to the amount equal to the return allowed under paragraph (1)

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after adjustment of such amount of return for interest deductions on account of outstanding debt, amortization charges or credits on such debt and any credits for dividends paid as are allowable under the then current tax laws.

(b) Any tax incurred in respect to the amounts determined in paragraph (4)-(a) above and in this paragraph.

(B) Deduct the following items from the sum of items in paragraph (A) above:

(1) An amount equal to the Conowingo backwater payment.

(2) An amount equal to all electric revenues received from others, including Metropolitan Edison Company, Philadelphia Electric Company, Pennsylvania Power & Light Company, but excluding any revenues received from the Pennsylvania Railroad Company.

(3) An amount, to the extent Pennsylvania Water & Power Company receives any revenue from the Pennsylvania Railroad, computed as the sum of;

(a) 2.43 mills per kilowatt hour times the portion of the annual energy supplied in Pennsylvania to the Pennsylvania Railroad, under a contract dated September 2,

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1931, as amended by agreements dated August 15, 1934 and June 22, 1938, between The Pennsylvania Railroad Company, the issuing company, Safe Harbor Water Power Corporation and others.

(b) $16.61 per kilowatt per year times the portion of the total billing demand of the Pennsylvania Railroad supply under the contract referred to in paragraph (a), which portion of the demand is to be the annual maximum among the products for each month of the year of the monthly billing demand and the ratio for that month of the energy supplied to the Pennsylvania Railroad in Pennsylvania to the total energy supplied to the Pennsylvania Railroad under such contracts.

(c) An annual amount of $109,289.

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(C) The net sum of the above amounts to be paid annually by Consolidated Gas Electric Light & Power Company of Baltimore to Pennsylvania Water & Power Company shall be estimated by Pennsylvania Water & Power Company in advance, and shall be paid as nearly as possible in equal monthly installments, the payment for any month to be made not later than the fifteenth day of the next succeeding month, with subsequent adjustment to the correct yearly payment.

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Rate Schedule E, Backfeed Service

Availability

Upon request of Pennsylvania Water & Power Company, Backfeed Service is available to it under this rate schedule from Consolidated Gas Electric Light & Power Company of Baltimore up to the limit of the latter's available generating capacity in excess of the requirements of Consolidated Gas Electric Light & Power Company provided, however, that Consolidated Gas Electric Light & Power Company is not obligated to start up a station which would not otherwise be operated.

Applicability and Character of Service

Backfeed Service consists of the furnishing of electric energy by Consolidated Gas Electric Light & Power Company of Baltimore to Pennsylvania Water & Power Company, upon request of the latter. The amount of such service shall be measured by the net hourly infeed from the system of Consolidated Gas Electric Light & Power Company of Baltimore to the Highlandtown Substation and the net hourly infeed at Safe Harbor on the Westport and Riverside Circuits.

Rates

The rate for Backfeed Service is 10.67 mills per kilowatt hour.

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EXHIBIT C.

UNITED STATES OF AMERICA
FEDERAL POWER COMMISSION

Before Commissioners: Nelson Lee Smith, Chairman; Thomas C. Buchanan, Claude L. Draper and Harrington Wimberly.

October 25, 1949

In the Matter of Pennsylvania Water & Power Company } Docket No. IT-5915

ORDER REJECTING PROPOSED "FPC ELECTRIC TARIFF" AND PRESCRIBING RATE SCHEDULES

On May 31, 1949, Pennsylvania Water & Power Company (Penn Water) in purported compliance with the requirements of Paragraphs (C) and (D) of the Commission's order issued January 5, 1949,[1] filed "FPC Electric Tariff, Original Volume No. 1"[2] consisting of a Prelim-

1. Paragraphs (C) and (D) require Penn Water to file, in a form satisfactory to the Commission, new schedules of rates and charges for or in connection with Penn Water's transmission and sale of electric energy in interstate commerce for resale to Pennsylvania Power and Light Company, Metropolitan Edison Company, Philadelphia Electric Company, and Consolidated Gas Electric Light and Power Company of Baltimore. These schedules were to be effective on and after February 1, 1949. On April 22, 1949, Penn Water and its wholly-owned subsidiary, Susquehanna Transmission Company of Maryland, filed a Petition for Review in the United States Court of Appeals for the District of Columbia Circuit (No. 10236) of the Commission's order, among others, issued January 5, 1949. At the same time they filed a Motion for Stay of the requirements of that order. On April 29, 1949, the Court stayed "the effectiveness of paragraphs (C) and (D) * * * insofar as they provide that the rate schedules shall be effective on and after February 1, 1949, * * * pending conclusion of the review proceedings". The Court however refused to stay the requirement that the rate schedules be filed. Pursuant to oral stipulation the filing date was extended to May 31, 1949.

2. Penn Water's designation is not altogether proper since the proposed filing does not in all respects follow the form of a "tariff" as that term is commonly used and understood. For example, Penn Water's proposed "tariff" contains neither a statement of General Terms and Conditions nor Form of Service Contract.

inary Statement and four rate schedules designated Rate Schedules "A" to "D", inclusive, for service to Pennsylvania Power and Light Company (PP&L), Philadelphia Electric Company (Philadelphia Company), Metropolitan Edison Company (Metropolitan Company) and Consolidated Gas Electric Light and Power Company of Baltimore (Baltimore Company), respectively, and Rate Schedule "E" for service by Baltimore Company to Penn Water.

Upon receipt of that filing, in accordance with the Commission's usual practice, copies thereof were served on interested parties (here the customer companies named above, the Maryland Public Service Commission, the Pennsylvania Public Utility Commission and the City of Baltimore) and their comments or suggestions invited. All responded.

PP&L, Metropolitan Company and Philadelphia Company stated they had no comments or suggestions to offer, the former two companies qualifying their replies as being "without prejudice" to their legal rights in the premises. The Pennsylvania Commission objected to the filing on the ground that it presupposed "jurisdiction over the rates and charges of" Penn Water and declined to comment on the "form or contents of the tariff itself". The Maryland Commission, the City of Baltimore and Baltimore Company urged rejection of the proposed filing as in violation of the Commission's opinions and orders in this case and urged the Commission to prescribe proper rate schedules pursuant to Paragraph (E) of the order issued January 5, whereby the Commission reserved the right to reject all or any part of the schedules of rates and charges filed by Penn Water and in lieu thereof to prescribe by further order the appropriate rates, charges, classifications, rules, regulations, practices or contracts.

Consideration of Penn Water's "FPC Electric Tariff" impels the conclusion that in many respects it fails to comply with the Commission's opinions and orders in this case; that it should be rejected; and that proper rate schedules should be prescribed by the Commission.

On the basis of the record in this case, the Commission found in Opinion No. 173 and accompanying order issued January 5, 1949 that Penn Water *alone* sells firm power and energy in interstate commerce to PP&L, Metropolitan Company, Philadelphia Company, and Baltimore Company. Consistently with such finding, the Commission ordered Penn Water (alone) to file the rate schedules for such sales. The Commission thereby expressly rejected Penn Water's contention that the rates involved are "joint" and stated "* * * the record is replete with evidence, much of it supplied by Penn Water, which shows this 'joint rate' contention to be wholly without substance."

But the "tariff" which Penn Water has submitted states that it is filed "on behalf of" Penn Water and Safe Harbor Water Power Corporation (Safe Harbor) with respect to the rate schedules for service to PP&L, Philadelphia Company, and Baltimore Company and is "effective and applicable to the joint services rendered by" them "only in the event appropriate concurrences" to such rate schedules are filed by Safe Harbor.

Thus, Penn Water disregards the Commission's order that Penn Water (not Penn Water jointly with someone else not a party to the proceeding) file schedules of its rates for services the Commission has determined Penn Water alone renders, by filing, as one of purported joint sellers, schedules of joint rates for joint services. This is neither a sole filing nor a joint filing. It expressly announces it is not a sole filing. And as a purported joint filing it is ineffective because it is not joined in by both of the parties purportedly jointly rendering the services, but is expressly contingent on concurrences which have not been received.

This failure to comply with the terms of the Commission's order can scarcely be explained as resulting from a misunderstanding of the Commission's findings and orders in this case. Reference need be made only to the Petition for Review filed April 22, 1949, by Penn Water and Susquehanna Transmission Company of Maryland in

the Court of Appeals for the District of Columbia Circuit and their allegations of error therein,[3] predicated on the very fact that the Commission had found the rates and services were not joint and had made its order applicable to Penn Water, alone.

Nor is Penn Water's violation excused by any necessity for protecting its position on review, that protection being fully afforded by the Court's stay order of April 29, 1949, which stayed the effectiveness of the rate schedules but left in force the requirement that they be filed *as ordered by the Commission.*

The schedules filed by Penn Water for service to PP&L and Philadelphia Company also violate the order of January 5, in that they provide for service only to "the extent that there is available", capacity, energy and other services. By so limiting the availability of service under these rate schedules "the present arrangements whereby sales to Pennsylvania customers are made on a firm basis" would be materially altered, contrary to the Commission's order which required that the obligation of Penn Water to these

3. Penn Water's Petition for Review alleges:

"(2) The services rendered by Penn Water to PP&L, Philadelphia Company, Railroad Company, and Baltimore Company are rendered jointly with others not made Respondents to these proceedings, and the rates, charges, and classifications therefor are joint; there is no substantial evidence of record to the contrary; and the said Commission Orders were issued without notice or opportunity for hearing to Safe Harbor jointly obligated to and jointly serving the foregoing customers, contrary to the provisions of Section 206(a) of the Act and the due process clause of the Fifth Amendment to the Constitution of the United States.

"(3) *The said Commission Order of January 5, 1949, requires Penn Water alone* to file new schedules of rates and charges for services to PP&L and Philadelphia Company *without requiring Safe Harbor to join or concur in the filing of such schedules,* without authority under the Federal Power Act; thereby requiring Penn Water to assume the entire obligations to such customers instead of the joint obligation which exists to the impairment of its ability to render adequate service to its customers within the meaning of Section 207 of the Act (16 U. S. C. 1946 ed. § 841f; 49 Stat. 853); and there is no substantial evidence of record to the contrary.

"(4) Insofar as the said Commission Order of January 5, 1949, undertakes to require a reduction in the revenues of Penn Water alone it constitutes regulation by the Commission of the divisions of revenue received by Penn Water for its participation in the rendering of joint services to each of is customers except Metropolitan Company, without jurisdiction, authority, or power in the Commission to regulate divisions of rates or charges for joint services under the Federal Power Act." (Emphasis supplied)

customers for firm supply of energy at the rates required by the Commission's rate reduction be continued in effect.

As for the rate schedule for service to Baltimore Company, it is not in accord with the requirements of the opinion and order because it fails to provide for a credit to Baltimore Company in the net amount of $141,777, which amount resulted from the reallocation of revenues (between Penn Water and Baltimore Company) received by Penn Water from the Pennsylvania Railroad for special facilities, which, we found, were in fact provided, in whole or in part, by Baltimore Company. The allocation of costs of service for special facilities, the excess revenues from sales by Penn Water to its customers, and the rate reductions ordered by the Commission are predicated on this credit to Baltimore Company of $141,777, as the opinion clearly states.

Penn Water's treatment of the $141,777 in its rate filing is paralleled in its segregation of excess revenues under the stay orders. The statements submitted by Penn Water to the Commission pursuant to the requirements of the Commission's temporary stay order, reporting on its earmarking and segregation of the difference between the payments received under existing rates or arrangements and those which would be required under the Commission's order issued January 5, 1949, show that Penn Water has not given effect to this adjustment of revenues in complying with the stay order. As a result of improper computations, the proper amounts have not been segregated in the required reserve. The order herein, accordingly, requires Penn Water to compute the amounts correctly and to adjust its reserve for the period covered by the Commission's stay order issued January 31, 1949.

The schedule for service to the Baltimore Company contains a further violation of the Commission's order issued January 5, 1949, since Paragraph A (2) of the rate schedule provides for a charge to Baltimore Company of an "Amount equal to all operating expenses" whereas find-

ing (37) of said order limits the charges to "reasonable and necessary operating expenses".

Although the Commission's opinions and orders will be searched in vain for any finding or order justifying or requiring a rate schedule to be filed by Penn Water, or Baltimore Company, for the supply of electric energy by Baltimore Company to Penn Water, Penn Water has purported to file rate schedule "E" as part of its tariff, "on behalf of" Baltimore Company. This filing is by its own terms ineffective, for it provides that it is to be "effective and applicable" only "in the event appropriate" concurrence is filed by Baltimore Company. Baltimore Company has protested the issuance of rate schedule "E" as a violation of its existing contractual arrangements with Penn Water, advising that it had no advance notice thereof and has not consented thereto. Thus Penn Water has attempted to file with the Commission a rate schedule which is not its own, for a service it does not render, in a "tariff" containing a number of rate schedules filed by Penn Water in purported compliance with the Commission's order.

Under the presently existing service arrangements and pool operations, Baltimore Company's energy is used by Penn Water to meet its firm power obligations in Pennsylvania. Furthermore, the existing mode of operation permits energy requirements to be supplied from the most economical sources. Such operations require Baltimore Company to generate energy in its steam electric plants for transmission to Pennsylvania.[4] No billing is made for this supply of energy by Baltimore Company because under the contractual arrangement in effect and the Commission's opinions and orders in this case, Penn Water's expenses for energy purchased are passed on to Baltimore Company. No rate is, therefore, necessary for the supply of Baltimore Company's energy. The Commission has explicitly taken "care to leave the continuation of (this)

4. This supply was referred to by Penn Water throughout the hearings in this case as "backfeed" in a transparent attempt to belittle the importance of the energy flows from Maryland to Pennsylvania.

operation of the integrated and interconnected system in full effect, * * *."

Penn Water's filing, in this respect, appears to be part of its effort to disrupt the presently coordinated operations of the pool,[5] and certainly not an effort to comply with the Commission's decision. Under rate schedule "E", the energy supplied by Baltimore Company is to be delivered only *upon request* of Penn Water. That means that Penn Water can refuse to receive any supply from Baltimore Company. As we stated in Opinion No. 173-A, "Penn Water's non-receipt of steam-generated energy from outside Pennsylvania for sale to resale customers would destroy the pool economies under the established method of operation". Moreover, a fixed rate for such energy will tend to defeat the purposes of the pooling arrangements in that the most economical sources of energy may not be utilized to meet the over-all energy requirements of Penn Water's Pennsylvania customers.

Finally, we find that no provision is made by Penn Water in its "Tariff" for adjustment of rates for variations in the cost of fuel. A consideration of the necessity for such an adjustment may conveniently be combined with an explanation of the nature of the clause embodied in the schedules we shall prescribe.

With the exception to the sale to PP&L, all existing contracts for Penn Water's sales to its Pennsylvania customers contain fuel cost adjustment clauses. Those clauses, however, are not uniform. The absence of any fuel cost adjustment clause in the contract with PP&L resulted in rates which were unduly preferential and discriminatory between PP&L and the other Pennsylvania customers.

To the extent that the supply of Pennsylvania customers' energy requirements depends upon utilization of Baltimore Company's steam generation (as the Commis-

5. In Opinion No. 173-A we have discussed Penn Water's efforts in this regard and the litigation it initiated in the United States District Court for the District of Maryland to accomplish this disintegration of the power pool.

sion recognized in Opinion No. 173 and accompanying order when it took into account an allocated part of the expense of that generation in determining the cost of service to the Pennsylvania customers), proper fuel cost adjustment clauses in the rates charged those customers are necessary to avoid undue discrimination against Baltimore Company by imposing on it any increased costs of serving the Pennsylvania customers due to increase in fuel costs, and to avoid undue preference to Baltimore Company by giving it any savings due to decrease in fuel costs, as compared with the test year 1946.

Therefore a proper fuel cost adjustment clause uniformly applicable to all Pennsylvania customers is necessary to avoid an undue preference or discrimination among the Pennsylvania customers and between them, on the one hand, and the Baltimore Company, on the other.

In the case of the service to the Pennsylvania Railroad, the fuel cost adjustment clause must, of course, be applied in computing the cost of that service to be credited to Baltimore Company. Inasmuch as the rate to the Railroad is being left unreduced by the Commission, the cost of that service (instead of the revenues from the service, as in the case of the other Pennsylvania customers) will, under the Commission's previous orders and opinions, be used in computing the credit. (Otherwise, the non-reduction in the rates to the Railroad would be rendered nugatory to Penn Water, being offset by the greater reduction in the rates to Baltimore Company due to the larger credit.)

A fuel cost adjustment clause applicable to the portion of the kilowatt-hours sold as firm energy to the Pennsylvania customers which is supplied by Baltimore Company, based upon variations from the average cost of fuel per kilowatt-hour in the year 1946 at all stations (excluding Pratt Street) of Baltimore Company and calculated as follows, is reasonable and proper (the energy supplied from Baltimore Company's energy includes the part of its two-

thirds entitlement from Safe Harbor which is used to supply Pennsylvania customers):

$$\text{Total adjustment in dollars for fuel costs} = \frac{(A + B - C) \cdot S \cdot z}{A}$$

A=Total firm and net interchange energy sales to Pennsylvania customers in kilowatt-hours

B=Energy deliveries to Baltimore Company at Highlandtown in kilowatt-hours

C=Energy available to Penn Water, at points of delivery to others, from own generation and its entitlement to 1/3 Safe Harbor generation in kilowatt-hours

S=Firm energy sales to Pennsylvania customers in kilowatt-hours

z=Baltimore Company's average cost of fuel in dollars per kilowatt-hour in immediately preceding month minus the average cost in dollars of fuel per kilowatt-hour in the year 1946 (.003408 in 1946)

The cost of fuel per kilowatt-hour shall be computed from the amounts properly chargeable by Baltimore Company to Account 703 of the Uniform System of Accounts and the net generation of its fuel-burning stations (excluding Pratt Street Station).[6] For the year 1946, factor *z* would have been zero. The Federal Power Commission, by its Opinion No. 173 and order issued January 5, 1949, in the Matter of Pennsylvania Water & Power Company, Docket No. IT-5915, found that for the year 1946 factors A, B, and C, above, were as follows:

A=937,950 mwh
B=376,684 mwh
C=992,320 mwh

6. Omitted because its operation is determined by the need for steam to supply steam heating customers.

Special facilities charges in Penn Water's "tariff" differ from the costs of service allocable thereto as set forth in the Commission's opinions and orders and must therefore be rejected.

For the foregoing reasons, the Commission finds that "FPC Electric Tariff, Original Volume No. 1", filed by Penn Water on May 31, 1949, does not comply with the requirements of the Commission's Opinions Nos. 173 and 173-A and accompanying orders, and does not set forth rates which would be just, reasonable and not unduly discriminatory or preferential.

The Rkvah charges set forth in connection with the power factor clause in the several schedules of the "tariff", and the differentiations in charges for the several described classes of service to Metropolitan Edison, and the spinning reserve capacity charge, set forth in Schedule C of the "tariff", are not supported by evidence of record showing corresponding allocable costs for such elements of service or differentiations in service. In the absence of any protest, however, we think there is justification in the record for allowing some discretion to Penn Water on those aspects of the rates, subject to further order of the Commission if on protest or the Commission's own motion they shall be found in operation to be unduly discriminatory or preferential, or to produce revenues not effectuating the reduction contemplated by our prior orders and opinions. With this reservation we shall, therefore, adopt Penn Water's proposals on those aspects of the rates.

With that reservation, and with the changes necessary to eliminate the foregoing objections, the schedules hereinafter prescribed substantially conform to the proposals set forth in Penn Water's "tariff".

The Commission, upon further consideration of the record in the above-entitled proceedings, including the filing made in purported compliance with its orders and opinions and reports filed with the Commission pursuant

to the requirements of the Commission's stay order, further *finds*:

(1) The attached rate schedules, as hereinafter prescribed, effectuate the requirements of Opinions Nos. 173 and 173-A and accompanying orders and set forth rates which are just, reasonable, and not unduly discriminatory or preferential.

(2) Penn Water did not properly compute and segregate the difference between the payments received by Penn Water under existing rates or arrangements and those required under Commission Opinion No. 173 and order issued January 5, 1949, while the Commission's stay order remained in effect.

The Commission *orders*:

(A) The "FPC Electric Tariff, Original Volume No. 1" filed by Penn Water on May 31, 1949, be and the same is hereby rejected.

(B) The accompanying rate schedules, hereby made a part hereof by reference, are prescribed as the schedules of rates and charges for the indicated services by Penn Water, effective February 1, 1949, with the reservation hereinabove set forth with respect to the charges for Rkvah and spinning reserve and differentiated services to Metropolitan Edison, and subject to the terms and conditions of the stay order issued April 29, 1949, by the United States Court of Appeals for the District of Columbia Circuit in "Pennsylvania Water & Power Company, et al. v. Federal Power Commission, No. 10236," (of which we take notice for this purpose), the several schedules applying to service to the customers shown, respectively, as follows:

Designation	Customer
Pennsylvania Water & Power Company, FPC Prescribed Rate Schedule A	Baltimore Company
Pennsylvania Water & Power Company, FPC Prescribed Rate Schedule B	PP&L
Pennsylvania Water & Power Company, FPC Prescribed Rate Schedule C	Philadelphia Company
Pennsylvania Water & Power Company, FPC Prescribed Rate Schedule D	Metropolitan Company

(C) Within 120 days from the date of issuance of this order Penn Water shall file a statement showing a computation of the total amount by which the amounts earmarked, separately accounted for, and retained in a segregated reserve pursuant to the conditions of the Commission's stay order issued January 31, 1949, differed from the amounts representing the difference between the payments received by Penn Water under existing rates or arrangements and those which would have been received under the rate schedules hereinabove prescribed. Penn Water shall adjust such reserve to make it equal to the amount of the difference between payments actually received and those which would have been received under the rate schedules hereinabove prescribed while the Commission's stay order remained in effect, and shall file certified copies of the accounting entries effectuating such adjustment with its statement.

By the Commission.

Leon M. Fuquay,
Secretary.

Date of Issuance: October 27, 1949

PENNSYLVANIA WATER & POWER COMPANY

F. P. C. Prescribed Rate Schedule A

Effective on and after February 1, 1949, subject only to the terms and conditions of the stay order issued April 29, 1949, by the United States Court of Appeals for the District of Columbia Circuit, in "Pennsylvania Water & Power Company, et al., v. Federal Power Commission, No. 10236", the amount to be paid to Pennsylvania Water & Power Company (Penn Water) by Consolidated Gas Electric Light and Power Company of Baltimore (Baltimore Company) for power and energy service as heretofore rendered pursuant to Pennsylvania Water & Power Company Rate Schedule F. P. C. No. 1, as supplemented, and for transmission service as heretofore rendered by Penn Water and Susquehanna Transmission Company of Maryland to Baltimore Company pursuant to Article VII of Pennsylvania Water & Power Company, F. P. C. Rate Schedule No. 8, shall be the net sum of the following charges and credits:

(A) Gross annual charges:

(1) RETURN

Return shall be computed at 5¼% of the consolidated (Penn Water and Susquehanna Transmission Company of Maryland—Transmission Company—) net investment rate base, determined as of December 31, 1948, and as of each June 30 and December 31 thereafter for the succeeding six months' period, by adding to the actual legitimate investment ($33,113,148) determined by the Commission as of December 31, 1946, Opinion No. 173, the cost of additions of used and useful electric plant to the respective dates indicated less the cost of electric plant retired, and by deducting the consolidated depreciation reserves according to the books of the respective companies after a downward adjustment of $213,239.71 as determined by the Commission, Opinion No.

173, and by adding an allowance for working capital consisting of the average monthly balance of electric utility materials and supplies for the 12-month period immediately preceding the date as of which the computation is made and one-eighth of the necessary operating and maintenance expenses, exclusive of purchased power and taxes, for the same period; provided however, that in the case of a substantial addition to property which is put in service between the dates for determination of the rate base, Penn Water may petition the Commission to include the cost thereof in the rate base from the date of commercial operation.

(2) EXPENSES

Expenses shall be computed as the total of the following:

(a) The reasonable and necessary consolidated operation, maintenance, and general expenses.

(b) The cost of the electric power and energy purchased from Safe Harbor and from other sellers with whom Penn Water may now have contracts, or may hereafter contract for such purchase.

(c) Annual depreciation expense of Penn Water and Transmission Company computed in conformity with the Commission's Opinion No. 173 and order issued January 5, 1949, in the Matter of Pennsylvania Water & Power Company, Docket No. IT-5915.

(d) Taxes of Penn Water and Transmission Company, properly allocable to Account 507 of the Commission's Uniform System of Accounts applicable to their electric plant and operations, including income taxes, but not including any income taxes on revenues received from Pennsylvania Railroad in excess of the cost to serve

that Company as described in (B) (4) hereinafter.

(B) Gross annual credits:

(1) The Conowingo backwater payment.

(2) All of Penn Water's electric revenues, other than those derived from Pennsylvania Railroad (Railroad) and those derived under this rate schedule.

(3) $141,777 per year in adjustment of revenue received by Penn Water from Pennsylvania Railroad for special facilities provided by Baltimore Company as found in Opinion No. 173.

(4) The cost of the services rendered Railroad under a contract dated September 2, 1931, as amended by agreements dated August 15, 1934 and June 22, 1938 with Pennsylvania Railroad, computed as the sum of the following:

(a) 2.43 mills per kilowatt-hour multiplied by the annual energy supplied in Pennsylvania to the Pennsylvania Railroad.

(b) $16.66 per kilowatt per year times the portion of the total billing demand of the Pennsylvania Railroad supply under contracts referred to in paragraph (B) (4), which portion of the demand is to be the annual maximum among the products for each month of the year of the monthly billing demand and the ratio for that month of the energy supplied to the Pennsylvania Railroad in Pennsylvania to the total energy supplied to the Pennsylvania Railroad.

(c) $109,354 per year for special facilities provided by Penn Water.

(d) A debit or credit monthly adjustment in the 2.43 mill rate fixed in (a) above for variations from the average cost of fuel per kilowatt hour

in the year 1946 at all steam stations of Baltimore Company, excluding Pratt Street Station; applicable only to the portion of kilowatt-hours sold to Pennsylvania Railroad ((4) (a) above) in the current billing month supplied from Baltimore Company's energy, determined as indicated hereinafter (Baltimore Company's energy includes the part of its two-thirds entitlement from Safe Harbor which is used to supply Pennsylvania customers). The monthly adjustment shall be computed as follows:

$$\text{Total adjustment in dollars for fuel costs} = \frac{(A + B - C) \cdot s \cdot z}{A}$$

A=Total firm and net interchange energy sales to Pennsylvania customers in kilowatt-hours

B=Energy deliveries to Baltimore Company at Highlandtown in kilowatt-hours

C=Energy available to Penn Water, at points of delivery to others, from its own generation and its entitlement to 1/3 of Safe Harbor's generation in kilowatt-hours

s=Firm energy sales in kilowatt-hours to Pennsylvania Railroad computed as determined under (4) (a) above

z=Baltimore Company's average cost of fuel in dollars per kilowatt-hour in the immediately preceding month minus the average cost of fuel in dollars per kilowatt-hour in the year 1946 (.003408 in 1946).

The cost of fuel per kilowatt-hour shall be computed from the amounts properly chargeable

by Baltimore Company to Account 703 of the Uniform System of Accounts and the net generation of its fuel-burning stations, excluding Pratt Street Station. For the year 1946, factor z would have been zero. The Federal Power Commission, by its Opinion No. 173 and accompanying order, issued January 5, 1949, in the matter of Pennsylvania Water & Power Company, Docket No. IT-5915, found that for the year 1946 factors A, B and C, above, were as follows:

A=937,950 mwh

B=376,684 mwh

C=992,320 mwh.

The net annual billing to Baltimore Company shall be determined as the difference between the sum of the charges under (A), above, and the sum of the credits under (B), above. Settlement for the difference between annual charges and the annual credits shall be made on a monthly basis, using estimated data wherever necessary, with subsequent adjustment to the correct annual settlement effected by February 15 of the following year.

The foregoing provisions supersede only the rates and charges heretofore made, demanded, collected or assessed against Baltimore Company by Penn Water and Transmission Company. All other provisions of the aforementioned contracts, in and of themselves lawful prescribing or defining the power, energy and transmission services to be furnished, or any classification, practice, regulation or rule affecting such services, which several provisions are incorporated herein by reference, shall be observed and be in force.

PENNSYLVANIA WATER & POWER COMPANY

F. P. C. Prescribed Rate Schedule B

Effective on and after February 1, 1949, subject only to the terms and conditions of the stay order issued April 29, 1949, by the United States Court of Appeals for the District of Columbia Circuit, in "Pennsylvania Water & Power Company, et al., v. Federal Power Commission, No. 10236", the amount to be paid to Pennsylvania Water & Power Company by Pennsylvania Power & Light Company for firm power and energy service rendered to Pennsylvania Power & Light Company under agreement dated May 1, 1933, as amended by letter agreements dated June 11, 1934 and April 28, 1939, and as set forth in the service contract between Pennsylvania Water & Power Company and Edison Electric Company of Lancaster, Pennsylvania, dated October 9, 1912, as amended under date of October 19, 1923 to the extent that the provisions thereof are continued in effect by the foregoing service contract as amended, shall be the sum of the following charges:

Demand charge:

$1.38 per month per kw of Billing Demand as hereinafter defined

Energy charge:

2.5 mills per kwh for all kilowatt-hours except for 4,000 volt service at Holtwood, and

6.0 mills per kwh for 4,000 volt service at Holtwood, all subject to the fuel cost adjustment hereinafter provided.

Special facility charge:

$965 per month

Fuel cost adjustment:

The rates for energy are subject to monthly adjustment for variations from the average cost of fuel per kilowatt-hour in the year 1946 at all steam stations of

Consolidated Gas Electric Light and Power Company of Baltimore (Baltimore Company) except Pratt Street Station; but such adjustment shall apply only to the portion of kilowatt-hours sold hereunder in the current billing month which has been supplied from Baltimore Company's energy, determined as indicated hereinafter (Baltimore Company's energy includes the part of its two-thirds entitlement from Safe Harbor which is used to supply Pennsylvania customers). The adjustment shall be computed as follows:

$$\text{Total adjustment in dollars for fuel costs} = \frac{(A + B - C) \cdot s \cdot z}{A}$$

A=Total firm and net interchange energy sales to Pennsylvania customers in kilowatt-hours

B=Energy deliveries to Baltimore Company at Highlandtown in kilowatt-hours

C=Energy available to Penn Water, at points of delivery to others, from its own generation and its entitlement to 1/3 of Safe Harbor's generation in kilowatt-hours

s=Firm energy sales under this rate schedule in kilowatt-hours.

z=Baltimore Company's average cost of fuel in dollars per kilowatt-hour in the immediately preceding month minus the average cost of fuel in dollars per kilowatt-hour in the year 1946 (.003408 in 1946).

The cost of fuel per kilowatt-hour shall be computed from the amounts properly chargeable by Baltimore Company to Account 703 of the Uniform System of Accounts and the net generation of its fuel-burning stations, excluding Pratt Street Station. For the year 1946, factor *z* would have been zero. The Federal Power Commission, by its Opinion No. 173 and accompanying order, issued January

5, 1949, in the matter of Pennsylvania Water & Power Company, Docket No. IT-5915, found that for the year 1946, factors A, B and C, above, were as follows:

A=937,950 mwh
B=376,684 mwh
C=992,320 mwh

Billing Demand:

The Billing Demand in any month shall be the maximum power requirements of the services specified in the existing service contract (excluding the Excess Energy under Article IV of the Contract dated May 1, 1933 and excluding interchange service), measured on a clock one-hour integrated basis in units of 1,000 kilowatts (1,000 kwh per hour) during such month or the preceding eleven months. 4,000 volt service at Holtwood is excluded in the determination of Billing Demand.

Power Factor:

0.2 mills per lagging reactive kilovolt-ampere-hour for all such kilovolt-ampere-hours supplied per month numerically in excess of 50% of the kilowatt-hours of energy supplied under this rate schedule in that month.

The foregoing provisions supersede the rates and charges, together with any adjustments thereof, heretofore in effect under Article VI, Article XI and Appendix A of the aforementioned agreement of May 1, 1933, paragraph 7 of the aforementioned agreement of June 11, 1934, and paragraphs (5), (7), option B of (9) and (13) of the aforementioned agreement of April 28, 1939. All other provisions of the aforementioned agreements, not inconsistent with the rates and charges prescribed herein, shall remain in full force and effect.

PENNSYLVANIA WATER & POWER COMPANY

F. P. C. Prescribed Rate Schedule C

Effective on and after February 1, 1949, subject only to the terms and conditions of the stay order issued April 29, 1949, by the United States Court of Appeals for the District of Columbia Circuit, in "Pennsylvania Water & Power Company, et al., v. Federal Power Commission, No. 10236", the amount to be paid to Pennsylvania Water & Power Company by Philadelphia Electric Company, for firm power and energy service rendered to Philadelphia Electric Company under agreement dated August 1, 1933, as supplemented by agreement dated December 13, 1938, shall be the sum of the following charges:

Demand charge:

$1.38 per month per kw of Billing Demand as hereinafter defined

Energy charge:

2.5 mills per kwh, subject to the fuel cost adjustment hereinafter provided

Special facility charge:

$5,977 per month

Fuel cost adjustment:

The rate for energy is subject to monthly adjustment for variations from the average cost of fuel per kilowatt-hour in the year 1946 at all steam stations of Consolidated Gas Electric Light and Power Company of Baltimore (Baltimore Company) excluding Pratt Street Station; but such adjustment shall apply only to the portion of kilowatt-hours sold hereunder in the current billing month which has been supplied from Baltimore Company's energy, determined as indicated hereinafter. (Baltimore Company's energy includes the part of its two-thirds en-

titlement from Safe Harbor which is used to supply Pennsylvania customers). The adjustment shall be computed as follows:

$$\text{Total adjustment in dollars for fuel costs} = \frac{(A + B - C) \cdot s \cdot z}{A}$$

A=Total firm and net interchange energy sales to Pennsylvania customers in kilowatt-hours

B=Energy deliveries to Baltimore Company at Highlandtown in kilowatt-hours

C=Energy available to Penn Water, at points of delivery to others, from its own generation and its entitlement to 1/3 of Safe Harbor's generation in kilowatt-hours

s=Firm energy sales under this rate schedule in kilowatt-hours

z=Baltimore Company's average cost of fuel in dollars per kilowatt-hour in the immediately preceding month minus the average cost of fuel in dollars per kilowatt-hour in the year 1946 (.003408 in 1946).

The cost of fuel per kilowatt-hour shall be computed from the amounts properly chargeable by Baltimore Company to Account 703 of the Uniform System of Accounts and the net generation of its fuel-burning stations, excluding Pratt Street Station. For the year 1946, factor *z* would have been zero. The Federal Power Commission, by its Opinion No. 173 and accompanying order, issued January 5, 1949, in the matter of Pennsylvania Water & Power Company, Docket No. IT-5915, found that for the year 1946 factors A, B and C, above, were as follows:

A=937,950 mwh

B=376,684 mwh

C=992,320 mwh

Billing Demand:

The Billing Demand in any month shall be the maximum power requirements of the services specified in the existing service contract (excluding emergency supply under Article II, Section 2 of the contract dated August 1, 1933), measured on a clock one-hour integrated basis in units of 1,000 kilowatts (1,000 kwh per hour) during such month or the preceding eleven months.

Power Factor:

0.2 mills per lagging reactive kilovolt-ampere-hour for all such kilovolt-ampere-hours supplied per month numerically in excess of 50% of the kilowatt-hours of energy supplied under this rate schedule in that month.

The foregoing provisions supersede the rates and charges, together with any adjustments thereof, heretofore in effect under Sections 1, 2, 4 and 5 of Article III and Article V of the agreement of August 1, 1933 and the Supplement to Coatesville Power Supply Contract RE Night Service Rider dated August 1, 1933 and under the letter agreements dated February 8, 1944 and February 9, 1944. All other provisions of the aforementioned agreements, not inconsistent with the rates and charges prescribed herein, shall remain in full force and effect.

PENNSYLVANIA WATER & POWER COMPANY

F. P. C. Prescribed Rate Schedule D

Effective on and after February 1, 1949, subject only to the terms and conditions of the stay order issued April 29, 1949, by the United States Court of Appeals for the District of Columbia Circuit, in "Pennsylvania Water & Power Company, et al., v. Federal Power Commission, No. 10236", the amount to be paid to Pennsylvania Water & Power Company by Metropolitan Edison Company for firm power and energy service rendered to Metropolitan Edison Company under agreement dated November 15, 1945, shall be the sum of the following charges:

Demand charge:

$1.38 per month per kw of specified firm power
$0.40 per hour per 1,000 kw of spinning reserve capacity for each clock hour in which such capacity is provided

Energy charge:

(a) 3.5 mills per kilowatt-hour for energy supplied in any month in the portion of the customer's total requirements above its steam line,

(b) 2.75 mills per kilowatt hour for energy supplied in any month, between the hours of 7 a. m. and 9 p. m., Eastern Standard Time, or Daylight Saving Time when in effect, on all days except Sundays and holidays in the customer's specified area, in excess of energy billed under Section (a) above, and

(c) 2.0 mills per kilowatt hour for all additional energy supplied in any month in excess of energy billed under Sections (a) and (b) above,

all subject to the fuel cost adjustment hereinafter provided.

Special facility charge:

$3,567 per month

Fuel cost adjustment:

The rates for energy are subject to monthly adjustment for variations from the average cost of fuel per kilowatt-hour in the year 1946 at all steam stations of Consolidated Gas Electric Light and Power Company of Baltimore (Baltimore Company) excluding Pratt Street Station; but such adjustment shall apply only to the portion of kilowatt-hours sold hereunder in the current billing month which has been supplied from Baltimore Company's energy, determined as indicated hereinafter (Baltimore Company's energy includes the part of its two-

thirds entitlement from Safe Harbor which is used to supply Pennsylvania customers). The adjustment shall be computed as follows:

$$\text{Total adjustment in dollars} = \frac{(A+B-C) \cdot s \cdot z}{A}$$

A=Total firm and net interchange energy sales to Pennsylvania customers in kilowatt-hours

B=Energy deliveries to Baltimore Company at Highlandtown in kilowatt-hours

C=Energy available to Penn Water, at points of delivery to others, from its own generation and its entitlement to 1/3 of Safe Harbor's generation in kilowatt-hours

s=Firm energy sales under this rate schedule in kilowatt-hours

z=Baltimore Company's average cost of fuel in dollars per kilowatt-hour in the immediately preceding month minus the average cost of fuel in dollars per kilowatt-hour in the year 1946 (.003408 in 1946).

The cost of fuel per kilowatt-hour shall be computed from the amounts properly chargeable by Baltimore Company to Account 703 of the Uniform System of Accounts and the net generation of its fuel-burning stations, excluding Pratt Street Station. For the year 1946, factor *z* would have been zero. The Federal Power Commission, by its Opinion No. 173 and accompanying order, issued January 5, 1949, in the Matter of Pennsylvania Water & Power Company, Docket No. IT-5915, found that for the year 1946 factors A, B and C, above, were as follows:

A=937,950 mwh

B=376,684 mwh

C=992,320 mwh

Power Factor:

0.2 mills per lagging reactive kilovolt-ampere-hour for all such kilovolt-ampere-hours supplied per month numerically in excess of 50% of the kilowatt-hours of energy supplied under this rate schedule plus kilowatt hours use of spinning reserve capacity in that month.

The foregoing provisions supersede the rates and charges, together with any adjustments thereof, heretofore in effect under Sections 1, 2, 3, 4, 5, 6 of Article V and Article VI of the agreement of November 15, 1945. All other provisions of the aforementioned agreement, not inconsistent with the rates and charges prescribed herein, shall remain in full force and effect.

EXHIBIT D.

UNITED STATES OF AMERICA
FEDERAL POWER COMMISSION

In the Matter of

PENNSYLVANIA WATER & POWER COMPANY } Docket No. IT-5915

APPLICATION FOR REHEARING OF ORDER ISSUED OCTOBER 27, 1949

(Filed November 25, 1949)

Pennsylvania Water & Power Company (Penn Water), Respondent and Petitioner herein; being aggrieved on its own behalf by the Order issued by the Commission on October 27, 1949; and being separately and independently aggrieved by such Order as the owner of one-half of the Class B voting stock of Safe Harbor Water Power Corporation (Safe Harbor), said Safe Harbor being unable to intervene in this proceeding because of the deadlock in its Board of Directors as set forth in Petitioners' Application for Rehearing of the Commission's Order issued January 5, 1949, filed in this proceeding on January 28, 1949; and Penn Water being also separately and independently so aggrieved as agent for and on behalf of Safe Harbor under the provisions of certain contracts with Pennsylvania Power & Light Company (PP&L) and Philadelphia Electric Company (Philadelphia Company); and Susquehanna Transmission Company of Maryland (Transmission Company), Respondent and Petitioner herein, also being aggrieved by such Order; hereby apply to the Federal Power Commission (Commission) for a rehearing of said Order issued October 27, 1949, as provided by Section 313 (a) of the Federal Power Act (16 U. S. C. § 825-l (a); 49

Stat. 860) and of all of the matters presented or involved in this proceeding and covered or affected by said Order; and pray that the said Order be abrogated, vacated, set aside, and reversed because of the matters erroneously decided, the Commission's lack of jurisdiction and errors with respect thereto, and the objections of Petitioners to said Order to wit: Petitioners respectfully show that in and by said Order issued October 27, 1949, the Commission erroneously and without jurisdiction decided each and all of the following matters and committed each and all of the following errors, and Petitioners object to said Order because of each and all of said matters so decided and said errors for each and all of the following reasons:

STATUS OF THIS PROCEEDING

On January 5, 1949 the Commission, in its Docket No. IT-5915, issued its "Order Reducing Rates" and accompanying Opinion No. 173 pursuant to which Penn Water was required, among other things, to file new schedules of rates and charges for or in connection with its services to PP&L, Philadelphia Company and Metropolitan Edison Company to provide for the reductions specified in paragraph (C) of such Order and pursuant to which Penn Water was also required to file a new schedule of rates and charges for its services to Consolidated Gas Electric Light & Power Company of Baltimore (Baltimore Company) which, together with revenues from the Conowingo backwater payment, sales to PP&L, Philadelphia Company and Metropolitan Edison Company, and the alleged cost of service to the Pennsylvania Railroad, would provide a 5¼% return to Penn Water and Transmission C npany after operating expenses and depreciation, all as set forth in paragraph (D) of said Order.

On January 28, 1949 Penn Water and Transmission Company filed with the Commission their application for rehearing of the Commission's Order issued January 5, 1949.

On February 28, 1949 the Commission issued its Order and accompanying Opinion No. 173-A denying the Petitioners' application for rehearing of the Order issued January 5, 1949 and in addition amending its former Order in certain respects.

On March 11, 1949 Petitioners filed with the Commission their application for rehearing of the Commission's Order issued February 28, 1949 which was denied by the Commission by its Order issued on March 17, 1949.

On April 22, 1949 Petitioners filed in the Court of Appeals for the District of Columbia Circuit their petition for review of the Commission's Orders of January 5, 1949, January 31, 1949, February 28, 1949 and March 17, 1949.

On April 28, 1949 the Court of Appeals for the District of Columbia Circuit issued an Order staying the effectiveness of paragraphs (C) and (D) of the Commission's Order of January 5, 1949 but requiring Penn Water to file the rate schedules required by said paragraphs (C) and (D) of said Order.

On May 31, 1949 Penn Water filed certain rate schedules with the Commission in compliance with the said Order of the Court of Appeals.

On June 2, 1949 the Commission filed with the Court of Appeals for the District of Columbia Circuit the transcript of the record of the proceedings upon which its Orders were based.

On October 27, 1949, after exclusive jurisdiction to alter, amend, modify or set aside said Orders had vested in the Court of Appeals by reason of the filing of the transcript as provided in Section 313 (b) of the Federal Power Act (16 U. S. C. § 825-l (b); 49 Stat. 860), the Commission issued its Order rejecting the rate schedules filed by Penn Water and inaugurating its own rate schedules for Penn Water's services to PP&L, Philadelphia Company, Metropolitan Edison Company and Baltimore Company.

SPECIFICATIONS OF ERROR

Petitioners believe and, therefore, respectfully allege, that the Commission's Order of October 27, 1949 is issued in violation of its statutory authority and is, therefore, illegal, null and void pursuant to Section 313 (b) of the Federal Power Act, which vests exclusive authority in the Court of Appeals to alter, amend, modify or set aside the Commission's Orders in its Docket No. IT-5915 upon the filing of the record of the proceedings with said Court of Appeals, because said Order of October 27, 1949 amends and modifies the Commission's previous Orders in the following respects:

(1) It requires the rate schedule for services to Baltimore Company to include a credit to Baltimore Company in the amount of $141,777, which credit is not required by the Order of January 5, 1949 as amended by the Order of February 28, 1949.

(2) It requires that the rate schedule for services to Baltimore Company include a credit to Baltimore Company for fuel cost adjustment (Pennsylvania Railroad), which said credit was not required by the Order of January 5, 1949 as amended by the Order of February 28, 1949.

(3) It requires that the rate schedule to PP&L include a provision for fuel cost adjustment, which said provision is not required by the Order of January 5, 1949 as amended by the Order of February 28, 1949.

(4) It requires that the rate schedules for services to Philadelphia Company and Metropolitan Edison Company include a provision for fuel cost adjustment in accordance with a formula specified in said Order, which formula is not required by the Order of January 5, 1949 as amended by the Order of February 28, 1949.

Petitioners also believe and, therefore, respectfully allege, that the Commission's said Order of October 27, 1949

was erroneously issued for each and all of the reasons specified in Petitioner's application for rehearing of Order issued January 5, 1949 filed herein on January 28, 1949 and in Petitioner's application for rehearing of Order issued February 28, 1949 filed herein on March 11, 1949.

Petitioners also believe and, therefore, respectfully allege that assuming *arguendo* the Commission's authority to issue any order altering, amending or modifying its previous Orders in this proceeding, after the filing of the transcript of the record with the Court of Appeals for the District of Columbia Circuit, said Order of October 27, 1949 is further illegal, null and void in that it requires an adjustment of Penn Water's rate schedules and introduces new matters therein without prior notice to Penn Water and without affording Penn Water an opportunity to be heard thereon or to present evidence with respect thereto, in violation of Sections 20 (15 U. S. C. §§ 813; 41 Stat. 1073) and 206 (15 U. S. C. 824e; 49 Stat. 852) (to the extent, if any, that such section may be applicable to Penn Water) of the Federal Power Act, Sections 4 and 5 of the Administrative Procedure Act (5 U. S. C. §§ 1003, 1004; 60 Stat. 238, 239) and the Fifth Amendment to the Constitution.

Petitioners also believe and, therefore, respectfully allege that the rate schedules prescribed by said Order of October 27, 1949, insofar as the amount of $141,777 required to be credited to Baltimore Company is concerned, constitute an adjustment or revision of the divisional agreement between Penn Water and Baltimore Company for division of Pennsylvania Railroad revenues, without authority or jurisdiction in the Commission under the Federal Power Act to regulate such divisions.

Petitioners also believe and, therefore, respectfully allege that paragraph (B) of said Order of October 27, 1949 is unlawful in that it constitutes an attempt to prescribe a rate reduction in excess of that prescribed by the Commission's Order of January 5, 1949, effective retroactively to

February 1, 1949, without authority under the Federal Power Act.

Petitioners also believe and, therefore, respectfully allege that assuming *arguendo* the Commission's authority to issue any order altering, amending or modifying its previous Orders in this proceeding, after the filing of the transcript of the record with the Court of Appeals for the District of Columbia Circuit, said Order of October 27, 1949 is further illegal, null and void in that it is not based upon substantial evidence.

Petitioners file this application for rehearing of the Commission's Order of October 27, 1949 pursuant to Section 313 (a) of the Federal Power Act (16 U. S. C. § 825-l (a); 49 Stat. 860) without conceding the authority of the Commission to issue said Order and without prejudice to the rights of Petitioners to maintain that said Order is illegal, null and void and of no effect whatever inasmuch as said Order attempts to alter, amend or modify the previous Orders of the Commission in this proceeding after the filing of the transcript of the record with the Court of Appeals for the District of Columbia Circuit, upon which filing exclusive jurisdiction to take any action affecting the prior Orders of the Commission in this proceeding vested in said Court of Appeals pursuant to Section 313 (b) of the Federal Power Act (16 U. S. C. § 825-l (b); 49 Stat. 860).

In support of the foregoing allegations, Petitioners respectively submit their detailed specifications of error in respect of the findings and Order of the Commission issued October 27, 1949 and the statements in the accompanying opinion therewith.

I—Opinion of the Commission

Insofar as any of the preliminary statements in the Commission's Order issued October 27, 1949, purport to be definite findings of fact or conclusions, or anything more than mere illustrative explanations of the Commission's

conclusions in said Order of October 27, 1949, each and all of the following portions thereof are erroneous, unconstitutional, unlawful, arbitrary, capricious, contrary to the evidence of record, unsupported by any substantial evidence of record; and operate to deprive Petitioners of their property without due process of law, in violation of the Fifth Amendment to the Constitution of the United States, and constitute and result in exercise of authority in excess of statutory jurisdiction, authority, or limitations; and Petitioners seek rehearing on each and every one of the following portions thereof for the foregoing reasons and on the grounds as hereinafter stated:

(1) The statement of the Commission on page 2 of said Order as follows:

> "Consideration of Penn Water's 'FPC Electric Tariff' impels the conclusion that in many respects it fails to comply with the Commission's opinions and orders in this case; that it should be rejected; and that proper rate schedules should be prescribed by the Commission."

on the grounds that such statement is not supported by the record; that the FPC Electric Tariff filed herein by Penn Water effects the reduction in Penn Water's rates and charges required by paragraphs (C) and (D) of the Commission's Order issued January 5, 1949; that said FPC Electric Tariff does not fail to comply with any essential element of the requirements of the Commission as contained in paragraphs (A) to (I) of said Order and in fact follows the language and terms of the Commission's requirements as nearly as it is practicable to do so; and that such variances as there may be from the terms of said Order are matters of form and do not affect the dollar amounts involved.

(2) The statement of the Commission on pages 2 and 3 of said Order as follows:

"• • • the Commission ordered Penn Water (alone) to file the rate schedules for such sales [To PP&L, Philadelphia Company and Baltimore Company]. • • •.

"• • • Penn Water disregards the Commission's order that Penn Water (not Penn Water jointly with someone else not a party to the proceeding) file schedules of its rates for services the Commission has determined Penn Water alone renders, by filing, as one of purported joint sellers, schedules of joint rates for joint services."

on the grounds that such statements are not supported by the record; and paragraphs (A) to (I) of the Commission's Order issued January 5, 1949, do not prohibit or prevent Penn Water from filing rate schedules thereunder on behalf of itself and Safe Harbor subject to the voluntary concurrence of Safe Harbor applicable to service which Safe Harbor has an obligation to continue until relieved of such obligation in a lawful manner.

(3) The statements of the Commission on page 4 of said Order as follows:

"The schedules filed by Penn Water for service to PP&L and Philadelphia Company also violate the order of January 5, in that they provide for service only to 'the extent that there is available', capacity, energy and other services. By so limiting the availability of service under these rate schedules 'the present arrangements whereby sales to Pennsylvania customers are made on a firm basis' would be materially altered, contrary to the Commission's order which required that the obligation of Penn Water to these customers for firm supply of energy at the rates required by the Commission's rate reduction be continued in effect."

on the grounds that:

(a) Such statements are not supported by the record; and nothing in paragraphs (A) to (I) of the Commission's Order issued January 5, 1949, required that any obligations of Penn Water be continued in effect as its sole obligation, or could require Penn Water to file tariffs for services it might not physically be able to render alone; and

(b) The conditions, in the FPC Electric Tariff filed by Penn Water herein, as to availability of service limited to the resources of energy, capacity, and other services of the suppliers is a reasonable provision and essential to maintain the ability of Penn Water and Safe Harbor or Penn Water alone to render adequate service to their customers. The record shows by uncontradicted evidence that it is an impossibility for Penn Water, without the joint obligation of Safe Harbor, to meet the requirements of PP&L and Philadelphia Company, from the resources of energy, capacity, and other services available to it under existing contracts, and at the same time meet the requirements of its obligations to Metropolitan Edison Company and The Pennsylvania Railroad Company. Any requirement by the Commission that Penn Water assume the sole obligation of serving PP&L and Philadelphia Company, and relieving Safe Harbor of its joint obligation to such customers, without a qualification as to availability of service such as contained in Penn Water's FPC Electric Tariff herein, will of necessity impair its ability to render adequate service to its other customers, contrary to the provisions of Section 207 (to the extent said section may be applicable to Penn Water) of the Federal Power Act (16 U. S. C. § 841 f; 49 Stat. 853) and contrary to the Pennsylvania Public Utility Law.

(4) The statements of the Commission on pages 4 and 5 of said Order as follows:

"* * * the rate schedule for service to Baltimore Company * * * is not in accord with the requirements

> of the opinion and order because it fails to provide a credit to Baltimore Company in the net amount of $141,777 * * *. The allocation of costs of service for special facilities * * * and the rate reductions ordered by the Commission are predicated on this credit to Baltimore Company of $141,777 * * *."

on the grounds that such statements are not supported by the record; and nothing in paragraphs (A) to (I) of the Commission's Order issued January 5, 1949, required that any such credit be given Baltimore Company in computing the charges to be paid by Baltimore Company to Penn Water; nor were the allocations of costs of service for special facilities or the rate reductions ordered by such paragraphs in such Commission's Order predicated on such credit to Baltimore Company.

(5) The statements of the Commission on page 5 of said Order as follows:

> "As a result of improper computations, the proper amounts have not been segregated in the required reserve. The order herein, accordingly, requires Penn Water to compute the amounts correctly * * *."

on the grounds that such statements are not supported by the record; that Petitioner has segregated in the required reserve amounts representing not less than the difference between payments received by Penn Water under existing rates or arrangements and those which would have been received under the provisions of paragraphs (A) to (I) of the Commission's Order issued January 5, 1949; and that the amounts required by the Commission's Order issued October 27, 1949, to be computed and segregated in the required reserve are in excess of the amounts required to be segregated by the Commission's Order issued January 31, 1949 and by the Order of the Court of Appeals for the District of Columbia filed April 29, 1949.

(6) The statements of the Commission on pages 5 and 6 of said Order as follows:

"Although the Commission's opinions and orders will be searched in vain for any finding or order justifying or requiring a rate schedule to be filed by Penn Water, or Baltimore Company, for the supply of electric energy by Baltimore Company to Penn Water, Penn Water has purported to file rate schedule "E" as part of its tariff, 'on behalf of' Baltimore Company. * * *

"Under the presently existing service arrangements and pool operations, Baltimore Company's energy is used by Penn Water to meet its firm power obligations in Pennsylvania. * * * Such operations require Baltimore Company to generate energy in its steam electric plants for transmission to Pennsylvania. * * * No rate is, therefore, necessary for the supply of Baltimore Company's energy. * * *

"Penn Water's filing, in this respect, appears to be part of its effort to disrupt the presently coordinated operations of the pool, and certainly not an effort to comply with the Commission's decision. * * * Moreover, a fixed rate for such energy will tend to defeat the purposes of the pooling arrangements in that the most economical sources of energy may not be utilized to meet the over-all energy requirements of Penn Water's Pennsylvania customers."

on the grounds that such statements are not supported by any substantial evidence of record; that the Commission's Order of January 5, 1949 purported to regulate and fix the rates and charges for service by Baltimore Company to Penn Water and thus made necessary the filing of a schedule containing such rates and charges for the supply of such service by Baltimore Company; that unless such separate schedules for service by Baltimore Company to Penn Water are filed, any rate schedules required to be filed under the Commission's Order of January 5, 1949 for the combined services of Penn Water to Baltimore Company and Baltimore Company to Penn Water could result in

payments by Penn Water to Baltimore Company for service rendered by Penn Water to Baltimore Company; and that the provision of rate schedule "E", providing that energy supplied by Baltimore Company be delivered only upon request of Penn Water, would not disrupt coordinated operations and would not tend to defeat the purposes of any such arrangements, but on the contrary, is a necessary provision whereby Penn Water may obtain supplemental energy from the most economic or advantageous source in meeting the over-all energy requirements of its Pennsylvania customers.

(7) The statements of the Commission on pages 6 and 7 of said Order as follows:

"Finally, we find that no provision is made by Penn Water in its 'Tariff' for adjustment of rates for variations in the cost of fuel. * * *

"* * * The absence of any fuel cost adjustment clause in the contract with PP&L resulted in rates which were unduly preferential and discriminatory between PP&L and the other Pennsylvania customers.

"To the extent that the supply of Pennsylvania customers' energy requirements depends upon utilization of Baltimore Company's steam generation * * * proper fuel cost adjustment clauses in the rates charged those customers are necessary to avoid undue discrimination against Baltimore Company * * * and to avoid undue preference to Baltimore Company * * *.

"Therefore a proper fuel cost adjustment clause uniformly applicable to all Pennsylvania customers is necessary to avoid an undue preference or discrimination among the Pennsylvania customers and between them, on the one hand, and the Baltimore Company, on the other.

"In the case of service to the Pennsylvania Railroad, the fuel cost adjustment clause must, of course,

be applied in computing the cost of that service to be credited to Baltimore Company."

on the grounds that:

(a) such statements are not supported by any substantial evidence of record;

(b) nothing in the Commission's Order of January 5, 1949 required that any provision be made by Penn Water in its Tariff for adjustment of rates for variations in the cost of fuel;

(c) the differences in service requirements and characteristics between the various Pennsylvania customers, as shown by the evidence of record, justifies differences in rates, charges, and the regulations applicable thereto so that the presence or absence of fuel cost adjustments does not thereby result in unlawful preference or discrimination within the meaning of the Federal Power Act;

(d) the FPC Electric Tariff filed by Penn Water does not contain rates, charges or fuel cost adjustment clauses which are unduly preferential or discriminatory as between any of the Pennsylvania customers whose rates or charges the Commission purported to regulate by its Order of January 5, 1949 (except as required by the provisions of said Order); and nothing in such Tariff results in undue preference or discrimination as between such Pennsylvania customers and Baltimore Company (except as required by the provisions of said Order);

(e) there is no requirement for the application of a fuel cost adjustment in computing the cost of service to the Pennsylvania Railroad to be credited to Baltimore Company under paragraph (D) of the Commission's Order issued January 5, 1949; and such an adjustment results in the computation of the cost of service to be credited to Baltimore Company, under such paragraph, substantially in excess of the cost to be so credited without such adjustment.

(8) The statements of the Commission on pages 7 and 8 of said Order as follows:

"A fuel cost adjustment clause applicable to the portion of the kilowatt-hours sold as firm energy to the Pennsylvania customers which is supplied by Baltimore Company, based upon variations from the average cost of fuel per kilowatt-hour in the year 1946 at all stations (excluding Pratt Street) of Baltimore Company and calculated as follows, is reasonable and proper (the energy supplied from Baltimore Company's energy includes the part of its two-thirds entitlement from Safe Harbor which is used to supply Pennsylvania customers):

$$\text{Total adjustment in dollars for fuel costs} = \frac{(A + B - C) \cdot S \cdot z}{A}$$

A=Total firm and net interchange energy sales to Pennsylvania customers in kilowatt-hours

B=Energy deliveries to Baltimore Company at Highlandtown in kilowatt-hours

C=Energy available to Penn Water, at points of delivery to others, from own generation and its entitlement to 1/3 Safe Harbor generation in kilowatt-hours

S=Firm energy sales to Pennsylvania customers in kilowatt-hours

z=Baltimore Company's average cost of fuel in dollars per kilowatt-hour in immediately preceding month minus the average cost in dollars of fuel per kilowatt-hour in the year 1946 (.003408 in 1946)

"• • • For the year 1946, factor *z* would have been zero." on the grounds that such statements are not sup-

ported by any substantial evidence of record, and no opportunity was given Penn Water to present any evidence with respect to such formula or to object thereto; that such formula is in error because it is applicable to electric energy other than energy generated by Baltimore Company at its steam stations in Baltimore and transmitted to Pennsylvania; that such formula is not applicable to steam generated energy supplied from Penn Water's own or from other sources, which energy is used by Penn Water in meeting the requirements of its Pennsylvania customers; and that application of such formula on a monthly basis for 1946 shows that the factor z would not have been zero.

(9) The statement of the Commission on page 8 of said Order as follows:

> "Special facilities charges in Penn Water's 'tariff' differ from the costs of service allocable thereto as set forth in the Commission's opinions and orders and must therefore be rejected".

on the grounds that the differences in the special facilities charges contained in Penn Water's Tariff were necessary in order that the reductions in revenues to be received from each of the Pennsylvania customers under the schedules contained in such Tariff would be equal to the reductions ordered by paragrapn (C) of the Commission's Order of January 5, 1949; and, in particular, the revenues which would be received from Metropolitan Edison Company under the Penn Water Tariff are less than the amount of $641,361 cost found by the Commission to be allocable to Metropolitan Edison Company in its opinion accompanying its Order of January 5, 1949, by reason of the fact that included in such costs are the costs associated with the Violet Hill Substation, which was sold by Penn Water early in 1946.

(10) The statement of the Commission on page 8 of said Order as follows:

"For the foregoing reasons, the Commission finds that 'FPC Electric Tariff, Original Volume No. 1', filed by Penn Water on May 31, 1949, does not comply with the requirements of the Commission's Opinions Nos. 173 and 173-A and accompanying orders, and does not set forth rates which would be just, reasonable and not unduly discriminatory or preferential."

on each of the grounds stated in this paragraph I above.

II—The Findings of the Commission

The Commission's statements, findings, and conclusions in its Order issued October 27, 1949, as referred to below are contrary to the evidence, unsupported by any substantial evidence, unsupported by adequate subsidiary findings, are unlawful, erroneous, arbitrary, capricious, and unconstitutional and operate to deprive Petitioners of their property without due process of law, in violation of the Fifth Amendment to the Constitution of the United States, and constitute and result in the exercise of authority in excess of statutory jurisdiction, authority, or limitations; and Petitioners seek rehearing on each and every one of the following purported findings for the foregoing reasons and on the grounds hereinafter stated:

(1) Finding No. (1) on the grounds that:

(a) As stated in paragraph I above.

(b) The rate schedules prescribed by the said Order of October 27, 1949, if effective, would accomplish a further reduction in Penn Water's rates and charges for services to Baltimore Company, than that prescribed by the Commission's Order of January 5, 1949, in the following respects:

(i) Rate Schedule (A) for services to Baltimore Company provides for a reduction in Penn Water's annual charge to Baltimore Company to an amount which is $141,777 less than the annual charge ordered in the Com-

mission's Order of January 5, 1949. Said reduction in revenues is required under Rate Schedule (A) to be made in the form of a credit to Baltimore Company without provision for any offsetting credit to Penn Water for such taxes as may be payable by Penn Water on said amount of $141,777. If taxed at a Federal rate of 38%, Federal taxes alone would amount to over $53,000. Said reduction in revenues is not required by the Commission's Order of January 5, 1949, or in the findings and opinion issued in conjunction therewith.

(ii) Rate Schedule (A) also requires as a credit to Baltimore Company a fuel cost adjustment, pursuant to a formula therein set forth, for variations from the average cost of fuel per kilowatt hour in the year 1946 at steam stations of Baltimore Company, to be applicable to the kilowatt hours sold to The Pennsylvania Railroad Company. The amount of said credit so required to be made by Penn Water is estimated at $51,400 for the eleven months period ended December 31, 1949; which facts Petitioners hereby offer to prove. No provision for such monthly fuel cost adjustment is made in the Commission's Order of January 5, 1949 or in its findings and opinion issued in conjunction therewith.

(iii) Rate Schedule (B) for Penn Water's services to PP&L requires a fuel cost adjustment for variations from the average cost of fuel per kilowatt hour in the year 1946 at steam stations of Baltimore Company. For the eleven months period ended December 31, 1949, the increased cost to PP&L by reason of said fuel cost adjustment is estimated at $109,500, an amount equal to which will be credited to Baltimore Company; and Petitioners hereby offer to prove such facts. Said fuel cost adjustment is not required by the Commission's Order of January 5, 1949 or its findings and opinion issued in conjunction therewith.

(iv) Rate Schedules (C) and (D) for Penn Water's services to Philadelphia Company and Metropolitan Edison Company prescribe a formula, originated by the Commission for fuel cost adjustment. For the eleven months period ended December 31, 1949 the increased costs to Philadelphia Company and Metropolitan Edison Company by reason of said fuel cost adjustment are estimated at $34,000 and $22,800, respectively, amounts equal to which will be credited to Baltimore Company; and Petitioners hereby offer to prove such facts. Said formula is not required by the Commission's Order of January 5, 1949 or its findings and opinion issued in conjunction therewith.

(c) The effect of the rate schedules prescribed by the said Order of October 27, 1949 is to reduce Penn Water's revenues below the amount required by the Commission's Order of January 5, 1949 and its findings and opinion issued in conjunction therewith, by (i) the amount of $141,777 required to be credited annually to Baltimore Company as set forth in paragraph (b) (i) above, and (ii) an amount, estimated at $51,400 for the eleven months period ended December 31, 1949, to be credited to Baltimore Company on account of the additional fuel cost adjustment required in the alleged cost of service to The Pennsylvania Railroad Company in Pennsylvania, as set forth in paragraph (b) (ii) above.

(d) The rate schedules prescribed by said Order of October 27, 1949, insofar as the amount of $141,777 required to be credited to Baltimore Company is concerned, constitutes an adjustment or revision of the divisional agreement between Penn Water and Baltimore Company for division of Pennsylvania Railroad revenues, without authority or jurisdiction in the Commission under the Federal Power Act to regulate such divisions.

(2) Finding No. (2) on the grounds as stated in paragraph I (5) above.

III—The Commission's Order

The Commission's orders or requirements in its Order issued October 27, 1949, are erroneous in law and fact, are contrary to the evidence, and are unsupported by any substantial evidence, unsupported by findings, and are unlawful, erroneous, arbitrary, capricious, and unconstitutional, operate to deprive Petitioners of their property without due process of law, in violation of the Fifth Amendment to the Constitution of the United States and constitute and result in an exercise of authority in excess of statutory jurisdiction, authority or limitations; and Petitioners seek rehearing on each and every one of said orders or requirements as follows:

(1) Paragraphs (A), (B) and (C) of the said Order on the grounds specifically set forth in this Application.

(2) Paragraphs (B) and (C) of the said Order constitute an unlawful attempt to amend and revise the Commission's Order of January 5, 1949, as amended by the Commission's Orders of January 31, 1949 and February 28, 1949, after the filing of Petitioners' Petition for Review in the United States Court of Appeals for the District of Columbia Circuit (No. 10,236) and after certification and filing with that Court of the transcript of the record upon which the order complained of was entered. The Commission was and is wholly without jurisdiction, power, or authority to amend or modify its Order of January 5, 1949, as amended, by reason of the provisions of Section 313 (b) of the Federal Power Act, which vest exclusive jurisdiction in the Court under such circumstances.

(3) The Commission's order of October 27, 1949 is further illegal, null and void by reason of the fact that the specified fuel cost adjustments and annual credit of $141,777 were ordered by the Commission without notice to Petitioners or the Pennsylvania customers and without affording Petitioners or the Pennsylvania customers any oppor-

tunity to be heard thereon or of presenting evidence with respect thereto in violation of Sections 20 and 206 (to the extent, if any that such section may be applicable to Penn Water) of the Federal Power Act, Sections 4 and 5 of the Administrative Procedure Act and the Fifth Amendment to the Constitution.

(4) Paragraph (B) of said Order of October 27, 1949 is unlawful in that it constitutes an attempt to prescribe a rate reduction in excess of that prescribed by the Commission's Order of January 5, 1949, effective retroactively to February 1, 1949, without authority under the Federal Power Act.

WHEREFORE, Petitioners respectfully pray that the Commission grant a rehearing in respect of its Order of October 27, 1949 and accompanying opinion and findings to the end that it forthwith enter an Order abrogating and annulling its said opinion and findings and Order in entirety.

Respectfully submitted,

Randall J. LeBoeuf, Jr.,
Lauman Martin,
Craigh Leonard,
F. G. Awalt,
Raymond Sparks,
Daryal A. Myse,
Preston C. King, Jr.
Counsel for Petitioners

Dated at Washington, D. C.
November 25, 1949.

DISTRICT OF COLUMBIA, *ss:*

The undersigned, being first duly sworn, states that he is counsel for the applicants in the foregoing application; that he has read said application and knows the contents thereof; and that all of the statements contained therein are true and correct to the best of his knowledge, information or belief.

Raymond Sparks

Sworn to and subscribed before me, a notary public, in and for said District of Columbia, this 25th day of November, 1949.

Flora A. Myers
Notary Public

(SEAL)

My commission expires October 14, 1953

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon all parties of record in this proceeding by mailing a copy thereof properly addressed to:

HOWARD E. WAHRENBROCK, Assistant General Counsel,
and REUBEN GOLDBERG, Attorney,
Federal Power Commission,
Hurley Wright Building
Washington 25, D. C.

CHARLES D. HARRIS, General Counsel
The Public Service Commission of Maryland
Munsey Building
Baltimore, Maryland

CHARLES E. THOMAS, Counsel, and ARTHUR J. DISKIN,
Attorney,
Pennsylvania Public Utility Commission
Harrisburg, Pennsylvania

G. KENNETH REIBLICH, Counsel for
Consolidated Gas, Electric Light and Power
Company of Baltimore,
Baltimore, Maryland.

Dated at Washington, D. C., this 25th day of November, 1949.

Raymond Sparks

EXHIBIT E

UNITED STATES OF AMERICA
FEDERAL POWER COMMISSION

Before Commissioners: Nelson Lee Smith, Chairman; Thomas C. Buchanan and Claude L. Draper.

December 14, 1949

In the Matter of Pennsylvania Water & Power Company	Docket No. IT-5915

ORDER DENYING APPLICATION FOR REHEARING OF ORDER ISSUED OCTOBER 27, 1949

On November 25, 1949, Pennsylvania Water & Power Company and Susquehanna Transmission Company of Maryland (hereinafter referred to as "Respondents"), filed an application for rehearing of the Commission's order issued October 27, 1949. That order rejected rate schedules proffered by Respondents on May 31, 1949, and prescribed rate schedules, which we found would effectuate the requirements of the Commission's order issued January 5, 1949, doing so subject to the terms and conditions of the stay order issued April 29, 1949, by the United States Court of Appeals for the District of Columbia Circuit.[1]

We have carefully reviewed Respondents' specifications of error of fact and of law and find nothing which warrants the granting of rehearing of the order issued October 27. We may, however, briefly notice several of the specifications of error.

Respondents allege that the rate schedules prescribed by our October 27 order effect reductions different from

1. This stay was issued in connection with the Petition for Review of the January 5 order filed by Respondents on April 22, 1949, in *Pennsylvania Water & Power Company, et al. v. FPC*, No. 10,236.

those contemplated by our January 5 order. This, it is alleged by Respondents, is accomplished by the inclusion in the rate schedule preseribed for service to Consolidated Gas Electric Light and Power Company of Baltimore ("Baltimore Company") of a credit of $141,777 to Baltimore Company, which, it is asserted, was not required by our January 5 order, and by the inclusion in the rate schedules of fuel cost adjustment clauses, whereas, it is asserted, the January 5 order contains no requirement therefor. Respondents allege that the Commission has thereby modified its January 5 order without authority since exclusive jurisdiction to affirm, modify or set aside the January 5 order vested in the Court of Appeals on June 2, 1949, when we filed with that Court the transcript of the record of the proceedings upon which the January 5 order was based (Section 313 (b), Federal Power Act).[2] Of course, it was not and is not our intention to modify the January 5 order in prescribing rate schedules.

The requirement, in the schedules prescribed by our order of October 27, 1949, that Penn Water credit to Baltimore Company the amount of $141,777 annually is necessary to effectuate our order of January 5, 1949, according to the terms of the January 5 order and the terms of our Opinion No. 173 which was incorporated as a part of that order.

As that opinion made plain, an error in the division between Penn Water and Baltimore Company of revenues received from the Pennsylvania Railroad, which previously had been of no importance, became important with our order of January 5, and required correction in the new rate schedules, in order to prevent evasion of the rate re-

2. On November 18, 1949, Respondents filed a motion in the Court to stay the order issued October 27, on the ground that it modified the order of January 5 in violation of Section 313(b) of the Federal Power Act for the reasons stated above. On November 25, 1949, we filed objections to that motion and, on November 29, 1949, Respondents filed a reply to our objections. Thereafter, on November 30, Respondents applied for oral hearing on their motion and, on December 1, 1949, we filed an answer to the motion for oral argument. The Court has yet taken no action on either motion.

duction we had prescribed. Under the arrangements prevailing prior to our order of January 5, Baltimore Company was entitled, in the computation of the payment to be made by it to Penn Water, to a credit for all other revenues received by Penn Water, including those for service to the Pennsylvania Railroad in Pennsylvania. That is to say, Baltimore Company paid to Penn Water whatever residual amount was necessary to bring Penn Water's total revenues up to the figure necessary to provide Penn Water with a contractually formulated total cost of service for all its operations. But, we found, Penn Water had been treating as revenue to it from the Railroad an amount which was excessive by $141,777. This excess was the amount paid by the Railroad for certain special facilities, the costs of which were borne by Baltimore Company and which we specifically held should be treated as revenue to Baltimore Company. The companies' assignment of this revenue to Penn Water had been the result of an improper division between Penn Water and Baltimore Company of the lump sum payments received from the Railroad for service rendered to it by Penn Water in Pennsylvania and by Baltimore Company in Maryland. This error in the division was, however, immaterial to the companies because of the fact we have referred to, that Baltimore Company only paid Penn Water for energy the residual amount necessary to bring its total revenues to the predetermined level. Thus the excess revenues mistakenly assigned to Penn Water were merely an additional amount deducted in determining the residual amount paid by Baltimore Company, and Baltimore Company's loss of $141,777 revenue from the Railroad was off-set by a $141,777 reduction in cost to it of its energy and power from Penn Water.

However, when we confined our inquiry to the rates Penn Water charges its resale customers, we could not consistently require that, in computing the charge to Baltimore Company, a credit be given that Company for all of Penn Water's revenues from the Railroad, because to do

so would deprive Penn Water of its excess revenues under the rates it charged the Railroad. "We then were faced with the necessity of leaving in Penn Water's hands the amount by which the charge to the Railroad exceeded the cost of serving it, and had to determine the proper amount of that excess to be left untouched. Accordingly in our order of January 5 (mimeographed opinion, p. 142), we made "an adjustment of revenues received for special facilities from Pennsylvania Railroad, in the amount of $141,777 * * * by adding the amount to revenues from Baltimore Company and deducting it from revenues from the Pennsylvania Railroad." As a result of this adjustment the excess revenues from the Railroad were found to be $222,475, and the excess revenues from Baltimore Company, $1,733,318 (*ibid.*, pp. 139, 142, 166), and we stated (*ibid.*, p. 167) that in "computing the power bill to Baltimore Company * * *, there shall be deducted * * * electric revenues received from others, * * * except the excess revenues, calculated at $222,475 for the year 1946, and income taxes associated therewith, from Pennsylvania Railroad." By thus excluding the $141,777 in computing Penn Water's excess revenues derived from the Railroad, we made it unmistakably clear that the $141,777 was not to be retained by Penn Water. Hence the provisions of our order of October 27, in prescribing schedules which prevent Penn Water from retaining that $141,777, did no more than effectuate the requirements of the January 5 order.

That our order of January 5 was plainly understood as requiring this result is manifest from Respondents' petition for court review of our January 5 order, for they there assign as one of the objections to that order that we had improperly made the division of revenues between Baltimore Company and Respondents for service to the Railroad which involves the $141,777 adjustment; also from Respondents' designation of Exhibit 433 for printing on that review, that exhibit relating solely to the nature and propriety of the $141,777 adjustment.

As to the inclusion of fuel cost adjustment clauses, if by their specifications of error Respondents mean to say that the January 5 order does not, in so many words, spell out the details of the rate schedules required to be filed in the first instance by Respondents, of course, that is the case. The order of January 5 did not undertake to spell out the details of the rate schedules. If it had, there would have been no need to afford Respondents an opportunity in the first instance to file the schedules. The design of rate schedules to effectuate the general level of revenues prescribed is a separate step of the rate making process which permits some latitude as to details, provided the resulting rate schedules effectuate the reduction in rate level on a just, reasonable, nondiscriminatory and not unduly preferential basis. Examples of such latitude are found in the provisions with respect to charges for Rkvah and for differentiation in charges for different categories of power supplied Metropolitan Edison Company, which Penn Water proposed in the rate schedules it filed and which we adopted in those we prescribed. Similarly, in prescribing a fuel cost adjustment clause formula we took as a basis for measuring changes in costs of fuel the average cost of fuel for the year 1946, and required an adjustment to reflect the amount by which average fuel cost in the billing month varied from the average for the year 1946.

Penn Water omitted from the schedules it filed fuel cost adjustment clauses which had existed in some of its prior rate schedules. Penn Water's proposals in this regard were rejected because they resulted in rate schedules which would be discriminatory and unduly preferential, as fully explained in the October 27 order. To eliminate discrimination and unfairness in effectuating the requirements of the January 5 order we included in the schedules we prescribed fuel cost adjustment clauses which would provide rates and charges on a nondiscriminatory and nonpreferential basis. Respondents have not alleged that the effect of the fuel cost adjustment clause would be to reduce the re-

turn on investment, after operating expenses, below the 5¼% which we prescribed for their business subject to our jurisdiction.

The Commission, therefore, *orders:*

The application for rehearing of the order issued October 27, 1949, be and the same is hereby denied.

By the Commission.

(s) LEON M. FUQUAY
Leon M. Fuquay
Secretary.

Date of Issuance: December 15, 1949.

UNITED STATES OF AMERICA
FEDERAL POWER COMMISSION

OPINION NO. 173

In the Matter of Pennsylvania Water & Power Company	Docket No. IT-5915

NOTICE

Please note that the last sentence of the last paragraph on page 140 of Opinion No. 173 should read as follows:

"It is proper in this proceeding ———— etc."

Due to difficulty in reproducing page 140 the words "It is" became illegible in some of the copies printed.

(s) LEON M. FUQUAY
Leon M. Fuquay
Secretary.

Vol. XVIII

TRANSCRIPT OF RECORD

(Pages 5322 to 5419)

Supreme Court of the United States

OCTOBER TERM, 1951

No. 428

PENNSYLVANIA WATER AND POWER COMPANY AND SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND, PETITIONERS,

vs.

FEDERAL POWER COMMISSION ET AL.

No. 429

PENNSYLVANIA PUBLIC UTILITY COMMISSION, PETITIONER,

vs.

FEDERAL POWER COMMISSION

ON WRITS OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

PETITIONS FOR CERTIORARI FILED NOVEMBER 16, 1951

CERTIORARI GRANTED FEBRUARY 4, 1952

SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, 1951

No.

PENNSYLVANIA WATER & POWER COMPANY AND SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND, PETITIONERS,

vs.

FEDERAL POWER COMMISSION, AND CONSOLIDATED GAS, ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE AND PUBLIC SERVICE COMMISSION OF MARYLAND, INTERVENORS

ON PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

VOL. XVIII

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IN THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

APPENDIX TO MOTION TO POSTPONE DATE OF ORAL ARGUMENT, ETC.—Filed November 21, 1950

UNITED STATES COURT OF APPEALS FOR THE FOURTH CIRCUIT

No. 6102

PENNSYLVANIA WATER & POWER COMPANY, a Pennsylvania Corporation, and Pennsylvania Public Utility Commission, Appellants,

vs.

CONSOLIDATED GAS, ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE, a Maryland Corporation, and Public Service Commission of Maryland, Intervener, Appellees

Appeals from the United States District Court for the District of Maryland, at Baltimore, Civil

(Argued June 26, 1950. Decided September 30, 1950.)

Before Parker, Soper and Dobie, Circuit Judges

James Piper, Wilkie Bushby and Charles E. Thomas (R. Dorsey Watkins, William J. Grove and Lloyd S. Benja- [fol. 5384] min on brief) for Appellants, and Harry N. Baetjer, Alfred P. Ramsey and Charles D. Harris (G. Kenneth Reiblich, Norwood B. Orrick and John Henry Lewin on brief) for Appellee.

SOPER, Circuit Judge:

The subject matter of this suit is a wholesale electric power agreement between Consolidated Gas, Electric Light & Power Company of Baltimore, a Maryland utility corporation, and Pennsylvania Water & Power Company, a Pennsylvania utility corporation. Penn Water seeks a declaratory judgment that the agreement is not a valid contract principally on the grounds that it violates the federal anti-trust laws and is contrary to the public policy and the laws of Pennsylvania.

Differences between the parties led Consolidated on September 1, 1948 to invoke arbitration provisions contained in Article X of the contract. Shortly thereafter, Penn Water instituted this suit and asked the court to declare that Article X is unenforceable and to enjoin Consolidated from proceeding with the arbitration. During the course of the proceeding, Penn Water notified Consolidated that it had terminated the agreement because of breaches on the part of Consolidated, and filed an amended complaint asking that the agreement be struck down in its entirety and also that the arbitration be enjoined.

Penn Water notified Consolidated that it would immediately cease to receive from Consolidated and pay for any electric energy generated in Maryland or the District of Columbia and transmitted to Pennsylvania, and that its opera- [fol. 5385] tions would be changed to effect this purpose. It declared that it would receive energy via its transmission lines for the limited purpose of delivery to the Pennsylvania Railroad; and announced that these changes would have no effect on the amount of electrical services rendered by Penn Water to Consolidated. Thereupon Consolidated applied to the court for a restraining order and on February 9, 1949 the court restrained Penn Water, pending the final determination of the issues, from doing anything in respect to the generation, transmission and disposition of power covered by the agreement between the parties in any manner different from the procedure theretofore followed in the performance of the contract. Thereafter Consolidated answered the amended complaint denying that the agreement is invalid for any reason, or that it had broken the agreement in any way, and asserted that the alleged breaches were proper subjects of arbitration under the contract.

The attorney for the Public Service Commission of Maryland was granted leave to appear on behalf of the Commission as intervener, and filed an explanatory statement of its position in support of Consolidated. The Pennsylvania Public Utility Commission intervened and charged that the contract between the two utilities is invalid because it constitutes a surrender of the powers and franchises of Penn Water to Consolidated without the approval of the Commission.

The court held that the contract was valid and that the

parties should proceed to arbitration and continued the restraining order in effect until the decision of this court on appeal.

Penn Water is a Pennsylvania utility corporation which was incorporated in 1910. It is the owner of hydro [fol. 5386] and steam electrical generating plants, capable of producing 104,000 kilowatts and 30,000 kilowatts respectively, at Holtwood, Pennsylvania, on the Susquehanna River. It also owns transmission lines, including those owned by its subsidiary, Susquehanna Transmission Company of Maryland, which connect with other utilities in Pennsylvania, Maryland and the District of Columbia. The area between the Potomac River on the southwest and the Hudson River on the northeast and south of the Pennsylvania-New York State line is interlaced with electric transmission lines connecting various utility systems. Penn Water's lines are interconnected with these systems which include the systems of Consolidated in Maryland and the Potomac Electric Power Company in the District of Columbia.

In 1910 Penn Water built two transmission lines from Holtwood to Baltimore, and subsequently added various other lines. Today there are in addition a transmission line running northeasterly from Holtwood to Coatesville for the supply of power to the Chester Valley Electric Company, now merged with the Philadelphia Electric Company; a transmission line running northwesterly from Holtwood to York to supply power to the Edison Light & Power Company; a transmission line from the hydro-electric plant of the Safe Harbor Water Power Corporation* at Safe Harbor on the Susquehanna, ten miles above Holtwood, to the western part of Baltimore; and a transmission line from Safe Harbor to the eastern part of Baltimore; an extension of the westerly one of these lines from Ellicott City, Maryland, to a point near the District of Columbia, to supply Potomac Electric, which serves the District of Columbia; and a transmis- [fol. 5387] sion line from Safe Harbor to Perryville, Maryland, along the eastern shore of the Susquehanna River which supplies power to the Pennsylvania Railroad at Perryville. That portion of these lines which is in Maryland

* This plant was built and is controlled by Consolidated and Penn Water.

RECORD

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is owned by the Susquehanna Transmission Company of Maryland.

Penn Water sells its electric energy and services in bulk to five customers. It has a contract with Metropolitan Edison Company, which operates in the central and eastern part of Pennsylvania; a contract under which it supplies electric services to the Philadelphia Electric Company at Coatesville, which serves an area around Chester, Pennsylvania; a contract with Pennsylvania Power & Light Company for the supply of power in the Lancaster territory extending from the Maryland line north to Harrisburg and eastward to Reading. These three public utility companies are the Pennsylvania customers of Penn Water. In addition Penn Water has a contract with Consolidated to supply power and energy over transmission lines to Baltimore, and also in connection with another contract of the Pennsylvania Railroad. Most of the energy supplied to the Railroad is delivered from Safe Harbor to Perryville, but there is another source of supply to the Railroad in Washington. It will be seen that the greater part of the energy produced by Penn Water is sold at wholesale to four customers, while the remaining portion is sold at retail to the Pennsylvania Railroad as a consumer.

Prior to entering into the agreement in suit, Penn Water sold electricity at retail to the street system of Baltimore, which is now a customer of Consolidated; and also to an electric furnace company in Baltimore. The lines of Penn Water connect directly with those of Potomac Electric and it could sell and deliver electric power directly to Po- [fol. 5388] tomac Electric if it were not for its contract with Consolidated which now buys electric power from Penn Water and resells it to Potomac Electric.

Penn Water, in order to supplement its own supply of energy, buys energy generated by Consolidated, Metropolitan Edison, Pennsylvania Power & Light, and Philadelphia Electric for resale, and also buys through Consolidated energy generated by Potomac Electric.

Consolidated has four large steam generating plants with a capacity of 538,000 kilowatts and distribution facilities in and around Baltimore, and also has extensive transmission lines which connect with Penn Water's network of transmission lines and with the Bethlehem Steel Company's electric generating plant in the Baltimore area.

It thus appears that both Penn Water and Consolidated are engaged in the generation, transmission and sale of electric power and energy. Both companies have charter rights for the sale of electric energy to the public at wholesale or retail. Penn Water's charter rights are derived from the State of Pennsylvania, insofar as its lines in that state are concerned, and through the Susquehanna Transmission Company in Maryland it has similar charter rights to operate in Maryland, Consolidated has similar charter rights for the purchase and sale of electric energy in Maryland.

If it were not for the agreement between the parties which is the subject of this suit, the parties would be potential competitors in the generation and sale of electric energy through their present facilities or other facilities that might be constructed; and would also be potential competitors in the purchase of power from others for resale. The power re- [fol. 5389] quired by Potomac Electric to supply the wants of consumers in the District of Columbia could be purchased by Potomac Electric either from Consolidated or Penn Water and could be supplied by their present facilities or additional facilities that might be built, or by purchases from others. Similarly, Penn Water and Consolidated would be potential competitors for the supply of electric energy in and around Baltimore at wholesale or retail to customers with their present lines or an extension thereof to be approved by the public authorities.

The electric power which is now distributed in and near Coatesville, Pennsylvania, by Philadelphia Electric could be supplied from the facilities now owned or additional facilities to be built by Penn Water or could be supplied from the facilities of Consolidated.

The electric power which is now distributed in and near Coatesville, Pennsylvania, by Philadelphia Electric could be supplied from the facilities now owned or additional facilities to be built by Penn Water or could be supplied from the facilities of Consolidated.

Similarly, Penn Water and Consolidated would be potential competitors with respect to energy taken from Penn Water by Metropolitan Edison and Pennsylvania Fuel & Light which is used in York and Lancaster areas.

Penn Water and Consolidated would be potential competitors for the sale of power to Potomac Edison at Fred-

erick, Maryland, whose lines at that point are only a short distance from the lines of Penn Water so that they could easily be connected.

Free and unrestricted competition between the two utilities is, however, impossible by reason of their contractual relations. The basic agreement between them was made on June 1, 1931. For a number of years prior thereto Penn Water had supplied electricity to Consolidated. On December 31, 1927 the parties entered into an agreement covering the period from January 1, 1927 to December 31, 1970 for the cooperative use of their power resources and the sale of electric energy by Penn Water to Consolidated on [fol. 5390] a unit rate or calculated value of service basis. Thereafter the two companies cooperated in the financing and construction of a hydro-electric plant at Safe Harbor and on June 1, 1931 entered into two forty-nine year contracts. One of these contracts provided that Penn Water should buy one-third and Consolidated two-thirds of Safe Harbor's output. The other contract is the basic agreement in suit which altered substantially the prior arrangement between the parties. It provided that Consolidated should be entitled to all the electric capacity and energy available to Penn Water from its Holtwood plants and from Safe Harbor and not otherwise disposed of in the performance of existing contracts or new contracts entered into by Penn Water with Consolidated's approval or any obligation imposed upon Penn Water by its charter or by-laws. In return Consolidated agreed to pay to Penn Water an amount equal to the latter's operating expenses, a specified rate of return on existing facilities and a specified rate of return on the cost of new facilities, including an allowance for depreciation; and Consolidated was allowed a credit for the amount of the sales of energy by Penn Water to other persons. This agreement involved the payment by Consolidated of the annual sum of $2,832,259.75 for power and $355,146.73 for depreciation, which represented the revenue received by Penn Water in 1930 under the previous agreement, 10.25% per annum of the cost of plant additions between 1930 and 1938, and 9.5% per annum of the cost of additions after December 31, 1938. This annual payment was reduced by the sum of $600,000 under a supplemental agreement of September 29, 1939, pursuant to the request of the Public [fol. 5391] Service Commission of Maryland.

When this agreement was executed, Penn Water was receiving more than half of its revenue from consumers other than Consolidated and was selling them 40% of its energy. At the present time, more than 50% of this energy is sold to others than Consolidated and in 1948 Consolidated's payment amounted to less than 12% of Penn Water's operating revenue.

The restrictions which are imposed upon the activity of Penn Water by the agreement and give rise to the contention of invalidity are contained in Articles IV and V as follows:

> Article IV. So far as possible consistently with the performance of any duty or obligation to serve imposed on Power by its charter or otherwise by law, Power shall obtain the approval of Electric before entering into any agreement or agreements with any other person or corporation for the sale and/or purchase and/or interchange of electrical and hydraulic power and energy, or before making any substantial modifications in the existing contracts now in force between Power and its customers other than Electric.
>
> Article V. So far as possible consistently with the performance of any duty or obligation aforesaid, Power shall obtain the approval of Electric (1) before incurring any single commitment for investment (except for renewals or replacements) in excess of $50,000.00 on the basis of which Electric shall make payment under Article III(b) hereof, and (2) before alienating or disposing of in any one year any property, plant, or equipment, other than stores and construction equipment, having a total value in excess of $50,000.00 and included in the investments of [fol. 5392] Power and/or subsidiaries of Power in plant, property or power development devoted to the generation, transmission, or distribution of electrical power and energy.*

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* Article VIII of the agreement declares that it is the intent of the parties to encourage the maximum utilization of the resources of the parties by joint use of their property and equipment and by avoiding duplication of investment and unnecessary operating costs. For this purpose it is pro-

The basic agreement was not submitted to or approved by the Public Utility Commission of either Pennsylvania or Maryland before its execution. It was made possible by the close relationship between the two utilities, which grew out of the fact that both corporations were controlled by a group of stockholders of whom John E. Aldred, an important figure in the utility field, was the dominating personality. He and his associates acquired control of both corporations in 1910. He became president of both and both continued under his direction until his resignation in 1938. Thereafter the same close cooperation between the two corporations persisted until the retirement in 1946 of the officials who had participated with him in the formulation of his policies; but disagreements subsequently arose which culminated in the present litigation.

The District Judge found and it is not disputed that the effect of the quoted provisions of Articles IV and V of the contract is to confer upon Consolidated the power to control (1) the prices at which Power may sell its product; (2) the extent to which Power may extend its plant; (3) the territory [fol. 5393] in which Power may sell its product; and (4) the amount of back feed energy which Power must purchase from Consolidated.

We are in agreement with this interpretation of the contract. It expressly forbids plant expansion or development by Penn Water without Consolidated's consent; and also forbids the sale of electric energy by Penn Water without Consolidated's approval, and accordingly empowers Consolidated to fix Penn Water's prices. Hence the effect of the contract was to divide between two large power companies a

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vided that each party shall appoint one representative to serve on an operating committee to investigate and advise on operating matters and, in case of inability to agree, to submit the questions in dispute to the presidents of their respective companies.

Article X provides that if any dispute arises between the parties, it shall be referred to a Board of Arbitration consisting of one member to be chosen by each party and the third member to be chosen by the others with further provision for the selection of members of the Board of Arbitration in case of failure to act or disagreement, the determination of the Board to be final and conclusive.

trade territory wherein they would otherwise have been competitors; and to give one of them the power to fix prices for the other and to forbid plant expansion by the other, however beneficial to the other or to the public interest it might be.

Consolidated has actually exercised its restrictive powers in approving or disapproving Penn Water's contracts and by prohibiting Penn Water's proposals for plant expansion, notably, a proposal by Penn Water in 1948 for plant expansion at Holtwood whereby coal from the river could be salvaged and power economically produced. At the same time Consolidated erected a new steam plant for itself at Riverside, Maryland.

It follows that the contract is invalid because it violates Section I of the Sherman Act, 15 U.S.C.A. §1, which provides that every contract in restraint of trade or commerce among the several states is illegal. While the statute has been held to apply only to those restraints which are unreasonable in character, it has been repeatedly adjudged that price fixing agreements are unlawful *per se*. In *U. S.* v. *Socony-Vacuum Oil Co.*, 310 U. S. 150, 221, 222, the court said:

> "* * Any combination which tampers with price structures is engaged in an unlawful activity. [fol. 5394] Even though the members of the price-fixing group were in no position to control the market, to the extent that they raised, lowered, or stabilized prices they would be directly interfering with the free play of market forces. The Act places all such schemes beyond the pale and protects that vital part of our economy against any degree of interference. Congress has not left with us the determination of whether or not particular price-fixing schemes are wise or unwise, healthy or destructive. It has not permitted the age-old cry of ruinous competition and competitive evils to be a defense to price-fixing conspiracies. It has no more allowed genuine or fancied competitive abuses as a legal justification for such schemes than it has the good intentions of the members of the combination. If such a shift is to be made, it must be done by the Congress. Certainly Congress has not left us with any such choice. Nor has the Act created or authorized the creation of

> any special exception in favor of the oil industry. Whatever may be its peculiar problems and characteristics, the Sherman Act, so far as price-fixing agreements are concerned, establishes one uniform rule applicable to all industries alike."

In *U. S.* v. *Masonite Corp.*, 316 U. S. 265, 276, it was also said:

> "* * Since there was price-fixing, the fact that there were business reasons which made the arrangements desirable to the appellees, the fact that the effect of the combination may have been to increase the distribution of hardboard, without increase of price to the consumer, or even to promote competition between dealers, or the fact that from other points of view the arrangements might be deemed to have desirable consequences would be no more a legal justification for price-fixing than were the 'competitive [fol. 5395] evils' in the Socony-Vacuum case."

See also *U. S.* v. *Paramount Pictures*, 334 U. S. 131, 143; *U. S.* v. *Real Estate Boards*, 339 U. S. 485, 489; *Norfolk-Southern Bus Corp.* v. *Va. Trans. Co.*, 4 Cir., 159 F. 2d 306.

So also does an agreement violate the statute which forecloses competitors from a substantial market since the statute is broken as well by the prevention as by the destruction of competition. *International Salt Co.* v. *U. S.* 332 U. S. 392, 396; *American Federation of Tobacco Growers, Inc.* v. *Neal*, 4 Cir., (July 29, 1950).

Similarly illegal is any agreement for the division of territory between competitors which in this case was effectuated by permitting Consolidated to determine to what customers and in what territory Penn Water might sell. *U. S. v. Aluminum Co.*, 2 Cir., 148 F. 2d 416; *U. S. v. Addyston Pipe & Steel Co.*, 6 Cir., 85 F. 271, 291.

The agreement is also violative of the Third Section of the Clayton Act, 15 U.S.C.A. § 14, insofar as it requires Penn Water's purchases of power to be approved by Consolidated from whom it purchases back feed or supplemental energy in order to meet the requirements of its outstanding contracts. Thereby Penn Water is prohibited from purchasing power from Consolidated's competitors. See *Standard Oil Co.* v. *U. S.*, 337 U. S. 293.

The contract is not one which involves the acquisition in legitimate business expansion of the plant of a competitor, such as was upheld in *U. S.* v. *Columbia Steel Co.*, 334 U. S. 495, where the United States Steel Corporation acquired the assets of a large independent steel fabricator on the west coast. It was there found that the purchase would not unreasonably lessen competition and was not entered into with the [fol. 5396] intent to monopolize, and that therefore Sections I and II of the Sherman Act were not violated. The court held that so-called vertical integration is not illegal *per se*, but must be judged by its effect on competition, and the purpose for which the combination is entered into. The court said: (p. 522)

> "* * A restraint may be unreasonable either because a restraint otherwise reasonable is accompanied with a specific intent to accomplish a forbidden restraint or because it falls within the class of restraints that are illegal *per se*. For example, where a complaint charges that the defendants have engaged in price fixing, or have concertedly refused to deal with non-members of an association, or have licensed a patented device on condition that unpatented materials be employed in conjunction with the patented device, then the amount of commerce involved is immaterial because such restraints are illegal *per se*."

In view of these well established rules, it is idle to consider the contentions of Consolidated that the contract was beneficial to the public and to the stockholders of Penn Water since it enabled Penn Water to meet its contractual obligations by supplementing its water power product at Holtwood by Consolidated's steam produced energy, and by guaranteeing to Penn Water stockholders a return on their investment; or that Consolidated was entitled to exercise the restrictive powers in order to protect itself from the risks involved in the obligation which it assumed to pay Penn Water's running expenses; or that the agreement was expressly designed to encourage the maximum cooperative utilization of their power and energy resources to the end that the joint use of their property and equipment should give the greatest practical benefit to the public [fol. 5397] and avoid duplication of investment and un-

necessary costs of maintenance, and thus contribute toward the rendition of a high standard of service. The decisions we have cited conclusively demonstrate that the prohibitions of the statute apply even though the parties to a contract indulge the belief that the agreement may have beneficial results and actually show that in some respects the public is benefited thereby. Congress has determined that the greater good is served by the maintenance of free competition and its decision in the field of interstate commerce must control. See *U. S.* v. *Aluminum Co.*, 2 Cir. 148 F. 2d 416, 426; *U. S.* v. *Reading Co.*, 226 U. S. 324, 326, 358.

It has been suggested that although regulated industries are not *per se* exempt from anti-trust laws,* the statutes do not have the same application to publicly regulated industries as they do to private enterprises and that in the actual situation existing in this case, the statutes were not violated. It is urged that the parties to the basic contract are not competitors in the same field since Consolidated sells its product mainly at retail to customers, while Penn Water sells electric power primarily at wholesale to Consolidated and other retail distributors, and has only one retail customer, the Pennsylvania Railroad Company which buys in large quantities. It is said that each utility has a legal monopoly in its own field and that there is no proof that the purpose or effect of the agreement has been to raise or fix unreasonably the prices of electric energy in the area served by the parties or that the customers have been deprived of [fol. 5398] any of the advantages of free competition.

This argument cannot be sustained. It does not give sufficient weight to the decisions, in which the anti-trust acts have been applied to utilities, or to the potential services which Penn Water might render to the public if it were relieved of the contractual restrictions upon its activities. It was held in *Georgia* v. *Pa. R. R. Co.*, 324 U. S. 429, in accord with many previous decisions, that railroad carriers are subject to the anti-trust laws although their rates are controlled by the Interstate Commerce Commission; and hence an agreement by carriers to fix rates may be illegal although the rates are reasonable; and that the agreement of a carrier to subject rates to the control of other carriers is in-

* *U. S.* v. *Borden Co.*, 308 U. S. 188; *Georgia* v. *Pa. R. R. Co.*, 324 U. S. 439.

valid since it deprives the carrier of the power to perform the duty imposed upon it to initiate its own rates. That is precisely the vice of the present contract. Penn Water has surrendered the right to propose its own rates, to extend its own plant, and to enter into new fields of activity; and it is impossible to say that the public interest has not been or will not be jeopardized by its failure to perform the duty to furnish adequate services at reasonable rates involved in its charter privilege to operate.

In short, the grant of monopolistic privileges, subject to regulation by governmental bodies, does not carry an exemption, unless one be expressly granted, from the anti-trust laws, or deprive the courts of jurisdiction to enforce them. This principle of law has been applied not only to public carriers, see U. S. Terminal W. Ass'n, 224 U. S. 383; *U. S.* v. *Reading Co.*, 253 U. S. 26; but in the insurance field, *U. S.* v. *Southeastern Underwriters Ass'n*, 322 U. S. 533, 559, 561; in the telephone field, *U. S. Tel. Co.* v. *Central Union Tele-*
[fol. 5399] *phone Co.*, 6 Cir., 202 F. 66; and also in the field of gas and electric energy, In re American Fuel & Power Co., 6 Cir., 122 F. 2d 223.* **

On this appeal Consolidated presents for the first time in this case the contention that the District Court was without jurisdiction to decide whether the basic agreement violates the Sherman Act because exclusive primary jurisdiction to determine that question has been conferred upon the Federal Power Commission by the Federal Power Act,† 16 U.S.C.A. §§ 791 to 825. That question was submitted to the District Court not only by the complaint of Penn Water but also by the answer of Consolidated, and the court

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* It may be noted in passing that the legal monopoly of a patent does not exempt the patentee from the provisions of the Sherman Act. *Williston on Contracts*, §1647; *Standard Sanitary Mfg. Co.* v. *U. S.*, 226 U. S. 20; See, *U. S.* v. *General Electric Co.*, 272 U. S. 476, 485; *Standard Oil Co.* v. *U. S.*, 283 U. S. 163, 169.

** Since we reach the conclusion that the basic agreement is invalid on its face, we have not found it necessary to consider certain excluded evidence offered by Penn Water which tended to show that the purpose and effect of the agreement was to bring about an unlawful restraint of trade. Much of the evidence is documentary in character and should have

[fol. 5400] took jurisdiction of the issue with the express approval of both parties. Nevertheless Consolidated now contends that exclusive primary jurisdiction to consider the question was lodged in the Federal Power Commission by the statute.

Penn Water is subject to the Federal Power Act as a licensee under Part I of the Act, 16 U.S.C.A. §§791 to 823, and as a public utility under Part II of the Act, 16 U.S.C.A. §§824 to 824h. Under Section 4(g) of Part I of the statute the Commission has power to investigate and issue orders in the public interest to conserve and utilize

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been admitted insofar as it related to circumstances which occurred at or prior to the execution of the agreement, and tended to show its illegal purpose, or insofar as it pertained to acts of Consolidated which gave effect to that purpose. The evidence related to the period of Aldred's control. It tended to show that the purpose of the contract was to destroy the power of Penn Water to compete with Consolidated in case Penn Water should fall into unfriendly hands; that Consolidated refused to allow Penn Water to contract with the Potomac Electric Power Company in 1932 for the purchase and sale of power at wholesale; that in 1946, when differences between the parties occurred, Consolidated forbade Penn Water to enter into negotiations with the Philadelphia Electric Company for the extension of contracts between them; and in 1947 after Philadelphia Electric withdrew a notice of termination of its contract with Penn Water, Consolidated objected to the acceptance of this withdrawal; in 1947, when Metropolitan Electric was in need of larger supplies of power, Consolidated objected to Penn Water exercising an option to increase its power to furnish the supplies. Again in 1947 Consolidated directed Penn Water to terminate its contract with Pennsylvania Power & Light on the ground that the rates were too low. In 1947 Penn Water proposed an expansion of its transmission system to meet the needs of its Pennsylvania customers but Consolidated refused. During this period there was a great expansion of the facilities of other electric utility companies in the Pennsylvania area amounting to a total of $520,400,000 with no expansion by Penn Water or Safe Harbor at the same time.

†41 Stat. 1063, 49 Stat. 838.

power sites of the country. (16 U.S.C.A. §797(g)). It also has power under Section 4(e) to issue licenses upon certain conditions for the construction and maintenance of works for the development, transmission and utilization of power in bodies of water which are subject to the authority of Congress to regulate interstate commerce. (16 U.S.C.A. §797 (e)). These conditions are set out in Section 10, 16. U.S.C.A. §803 and include Section 10(h), 16 U.S.C.A. §803(h), which is as follows:

> *Monopolistic Combinations prohibited.*
>
> (h) Combinations, agreements, arrangements, or understandings, express or implied, to limit the output of electrical energy, to restrain trade, or to fix, maintain, or increase prices for electrical energy or service are hereby prohibited.

Section 20 of the Act, 16 U.S.C.A. §813, provides that when power enters into interstate commerce, the rates charged and services rendered by a licensee shall be reasonable and non-discriminatory; and whenever any of the states directly concerned has not provided a commission to enforce [fol. 5401] this requirement within the state, or such states are unable to agree through their properly constituted authorities on the services to be rendered and the rates to be paid, jurisdiction is conferred upon the Commission to regulate and control services and rates.

Section 26, 16 U.S.C.A. §820, provides that the Attorney General may on request of the Commission or the Secretary of the Army proceed in equity in a District Court of the United States for the purpose of revoking any license for the violation of its terms or to prevent any act of commission or omission in violation of the statute; and the District Courts are expressly given jurisdiction over the proceedings.

Part II of the Act, Sections 201-209, 16 U.S.C.A. §824, authorizes the Commission to regulate the transmission of electric energy in interstate commerce and the sale of such energy at wholesale, provided such regulation shall extend only to those matters which are not subject to the regulation by the states. The duty is imposed upon the Commission to encourage the interconnection and coordination of facilities for the generation and sale of electric energy be-

tween regional districts which the Commission is empowered to set up; and the Commission may by order direct a public utility to establish physical connection of its facilities with the facilities of others engaged in the transmission or sale of electric energy. (Section 202(b), 16 U.S.C.A. §824a (b)). No public utility may sell, lease or dispose of facilities subject to the jurisdiction of the Commission without applying to it for authority so to do. (§203(a), 16 U.S.C.A. §824b(a)). All rates and charges for such transmission or sale of electric energy, as well as contracts which affect such rates or services subject to the jurisdiction of the Commis- [fol. 5402] sion, may be determined by the Commission. (§205(c), 16 U.S.C.A. §824d(c); (206(a), 16 U.S.C.A. §824e (a)).

Part III (§§300-320, 16 U.S.C.A. §825) relates to administrative and procedural matters. The Commission is given the duty to investigate complaints and power to investigate violations of the Act, and hold hearings. (§§307-8, 16 U.S.C.A. §§825 f, 825 g). It may issue orders and regulations to carry out the statutory provisions; (§309, 16 U.S.C.A. § 825 h); and persons aggrieved by any order may obtain judicial review in the Circuit Court of Appeals. (§313, 16 U.S.C.A. §825 L). Section 314, 16 U.S.C.A. §825 m, of the Act empowers the Commission to bring an action in the United States District Court to enjoin violations of the statute and to enforce compliance therewith, and further provides that the Commission may transmit evidence of illegal practices to the Attorney General who, in his discretion, may institute criminal proceedings under the Act. The District Courts of the United States are given exclusive jurisdiction of violations of the Act, or of rules or orders thereunder, and of all suits to enforce any duty created by the Act or enjoin any violation thereof. (§317, 16 U.S.C.A. §825 p).

It is contended that these enactments contemplate prior administrative determination by the Commission, and that until this action is taken, the District Courts do not have jurisdiction to revoke licenses under Section 26, 16 U.S.C.A. §820, or to restrain violations of the statute under Section 314, 16 U.S.C.A. §825m. It is also suggested that since public utilities like Penn Water were subject to the Sherman Act at the time that the Federal Power Act was passed, there could have been no other reason for the insertion of

[fol. 5403] the prohibitions of the Sherman Act in Section 10(h), 16 U.S.C.A. §803(h), except to shift the forum in which restraints of trade of public utilities could be ascertained and corrected, from the District Courts to the Commission.

The argument does not carry conviction. The prohibition against monopolistic combinations was included among the conditions upon which the Power Commission may issue licenses for the construction and maintenance of power projects—not to deprive the courts of jurisdiction to enforce the anti-trust acts, but to make it perfectly clear that no licensee can legally agree to limit output, restrain trade or fix prices. The condition was a reaffirmance of the Sherman Act and was designed to restrict rather than to enlarge the Commission's authority.

That the condition was not inserted in the Act to shift the forum for the trial of anti-trust questions affecting power companies from the District Courts to the Power Commission is shown by the failure of Congress to empower the Commission in Section 10(h), 16 U.S.C.A. §803(h), to entertain proceedings before it to enforce the condition against monopolistic combinations. This omission is in marked contrast with the authority expressly conferred upon the Commission in respect to all the other conditions of the license to take steps to make them effectual. For example, in Condition (a) which provides that the project shall be such as is best adapted in the judgment of the Commission to utilization and improve the waterway involved, the Commission is given authority to require modification of the plans and specifications.

It is true that Section 26, 16 U.S.C.A. §820, of the Federal Power Act empowers the Commission to take action when [fol. 5404] the terms of a license are violated, but the manner in which the Commission is directed to proceed makes it very clear in the light of decisions in analogous cases that Congress did not intend to oust the District Courts of jurisdiction over violations of the Sherman Act. The Commission's function is merely to request the Attorney General to institute suit to control the offending licensee and thereafter, if the Attorney General sees fit to act, the District Court has jurisdiction to determine whether the terms of the license have been violated and to apply the proper

remedy. This procedure, however, falls far short of making the jurisdiction of the District Court contingent upon prior administrative action of the Commission, and there is nothing in the section which contemplates that the Commission must first determine administratively whether the grounds of revocation exist before the Attorney General may institute proceedings against the offender. The Commission may request court action in a proper case and the Attorney General may comply or refuse in his discretion, but there is nothing to show that the Attorney General may not act upon his own motion precisely as he did before the statute was passed.*

The case is closely analogous to the decision in *U. S. Alkali Ass'n* v. *U. S.*, 325 U. S. 196, which related to the provisions of the Webb-Pomerene Act that exempted associations engaged in export trade from the prohibitions of the Sherman Act, provided the Association acted in accordance with [fol. 5405] certain conditions. The Federal Trade Commission was empowered to investigate if it had reason to believe that the activities of an export association were not in accordance with the provisos and, if violations of the Sherman Act were found, to make recommendations to the Association for readjustment of its business in accordance with law; and if the Association should fail to comply with the recommendations, to send the findings and recommendations of the Commission to the Attorney General for such action as he should deem proper. It was held that the exercise of these powers by the Commission was not a prerequisite to a suit by the United States against an export association to restrain violations of the Sherman Act. The court showed that the grant of power to the Commission did not repeal *pro tanto* the authority conferred upon the Attorney General by the Sherman Act to enforce its provisions and that although the Commission might render useful service by bringing violations to the attention of the Attorney General, the enforcement of the statute is in his hands and the Com-

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* The power conferred upon the commission by Section 825m to bring suit on its own initiative in the District Court to enjoin violations of the Federal Power Act or enforce compliance therewith obviously does not deprive the District Court of jurisdiction to enjoin complaints instituted by the Attorney General or other parties.

mission's authority is exhausted when it refers its findings to him. The court took notice of the fact that the provisions of the Sherman Act with reference to enforcement through the Attorney General were not expressly repealed by the Webb-Pomerene Act as to export associations and emphasized the principle that repeals by implication are not favored.

In *U. S.* v. *Borden Co.*, 108 U. S. 188, a similar decision was made. An indictment against certain producers and distributors of milk for violation of the Sherman Act was sustained notwithstanding the provisions of the Capper-Volstead Act whereby dairymen were authorized to act in concert in marketing their goods, and the Secretary of Agri- [fol. 5406] culture was authorized to determine, subject to judicial review, whether a cooperative corporation restrained trade to such an extent that the price of the product was unduly enhanced, and if so, to issue a cease and desist order. This procedure was held not to replace or prevent a criminal prosecution under the Sherman Act without prior action by the Secretary of Agriculture. See also *Hinton* v. *Columbia River Packers Ass'n*, 9 Cir., 131 F. 2d 88, where a similar construction was given to the statutes respecting Fishermen's Cooperatives, which empowered the Secretary of the Interior to issue cease and desist orders to any association which should seek to monopolize trade in any aquatic project. In these cases the principle laid down in *Myers* v. *Bethlehem Corp.*, 303 U. S. 41, that one who seeks relief in equity must first exhaust his administrative remedy was held inapplicable.

The argument of the appellee completely ignores these decisions and rests principally upon *U. S. Navigation Co.* v. *Cunard S/S Co.*, 284 U. S. 474 and similar cases. That suit was brought by a shipping company in the United States District Court to enjoin a combination of shipping companies alleged to be engaged in monopolistic practices in violation of the anti-trust acts, and it was held that the court was without jurisdiction since Congress had afforded an exclusive remedy in a proceeding before the United States Shipping Board under the Shipping Act of 1916 and the Merchant Marine Act of 1920. Section 14(a) of the statute authorized the Shipping Board, upon its own initiative, or upon a complaint to determine whether any person had violated the prohibitions of the Act against rebates or un-

fair discrimination or the suppression of competition, and Section 22 empowered the Board to direct payment of repa- [fol. 5407] ration for injuries caused by violations of the Act. Jurisdiction to enforce the orders of the Board was conferred upon the District Courts by Sections 29 and 30. The court followed the line of decisions with respect to the preliminary jurisdiction of the Interstate Commerce Commission over carriers by rail and held that the case was remedied under the Shipping Act, and that the matter was within the exclusive primary jurisdiction of the Shipping Board and to that extent the anti-trust laws were superseded. Decisions in the kindred field of railroad transportation reach the similar result that complaints in respect to the rates and charges by carriers subject to the jurisdiction of the Interstate Commerce Commission must be submitted to the Commission for preliminary administrative action in order to give jurisdiction to the federal court. *Tex. & Pac. R. Co.* v. *Abilene Cotton Oil Co.*, 204 U. S. 426; *Keogh* v. *C. & N. W. Ry. Co.*, 260 U. S. 156; *Terminal Warehouse Co.* v. *Penn. R. Co.*, 297 U. S. 500.

A comparison of the provisions of the Interstate Commerce Act and the Shipping Act, on the one hand, with the provisions of the Federal Power Act, on the other, demonstrate that the present case is ruled by the line of decisions of which *U. S. Alkali Ass'n* v. *U. S., supra,* is a notable example, rather than by the cases last cited. The maintenance of uniformity of regulation and the control of the activities of an industry of national scope by a specialized body are as important in the field of electric power as in the field of transportation by rail or water; but the control of the Federal Power Commission over the power sites of the country and over the interstate transmission of electric energy is not disturbed by the retention of the jurisdiction of the courts to enforce the anti-trust acts. Indeed the Federal [fol. 5408] Power Commission itself has indicated that in its opinion it possesses the power to regulate the rates for the transmission of electric energy by Penn Water in Pennsylvania to Consolidated in Maryland, and to maintain the interconnection of their facilities, even if the basic contract between them is invalid.*

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* Even if it should be held that the Federal Power Act requires a preliminary determination by the Federal Power

We are referred to four proceedings conducted by the Federal Power Commission in respect to the activities of Penn Water in which its relations to Consolidated and Safe Harbor were involved and the coordination of their facilities in the transmission of electric energy were approved. The first proceeding originated on September 2, 1938 in a show cause order of the Commission to compel Penn Water to take a license under Part I of the Act, and finally resulted in an issuance of the license after an unsuccessful appeal in *Penn. Water & Power Co.* v. *F.P.C.*, C.A.D.C., 123 F. 2d 155; see 2 F.P.C. 61, 4 F.P.C. 426. The basic agreement of 1931 had been on file with the Commission since January 13, 1936, as a rate schedule of Penn Water under Section 824d(c) of the Federal Power Act, but there was no mention of the agreement in the proceeding although the Commission in issuing the license stated that the project was best adapted to a comprehensive plan for developing the Susquehanna River for the use and benefit of interstate or [fol. 5409] foreign commerce.

The second and third proceedings involved investigations into the wholesale rates charged by Safe Harbor under a tripartite contract among Safe Harbor, Penn Water and Consolidated, which complemented the basic agreement of 1931. In the second proceeding the Commission issued an order reducing the Safe Harbor's rates, 2 F.P.C. 182; but the order was set aside on appeal in *Safe Harbor Water Power Corp.* v. *F.P.C.*, 3 Cir., 124 F. 2d 800, on the ground that the jurisdiction of the Commission was dependent upon the inability of the Maryland and Pennsylvania Utility Commissions to agree, which had not been shown. This

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Commission in order to clothe a District Court with jurisdiction to entertain a suit to revoke a license or enjoin an act of a utility in violation of the anti-trust acts, it would not necessarily follow that such a determination is necessary to give jurisdiction to the District Court in a case of this kind. The instant suit was not brought to enforce the anti-trust acts, but to secure a judgment declaring that the basic agreement violates these acts and is therefore void. See the Declaratory Judgment Act, 28 U.S.C.A., Section 2201. However, in view of the conclusions stated in our opinion, it is not necessary for us to determine the weight to be given to this distinction.

defect was cured in the third proceeding, 5 F.P.C., 221, and on appeal the rate order of the Commission was upheld. *Safe Harbor Water Power Corp. v. F.P.C.*, 3 Cir., 179 F. 2d 179. The activities of the interconnected systems were commended by the Commission as producing electric energy at the lowest cost as well as insuring reliability of service. The Commission described the provisions of the basic agreement in regard to the right of the Maryland Company to all the electric capacity of Penn Water not otherwise disposed of, the right of Penn Water to a supply of steam generated energy from Consolidated and the agreement of Consolidated to reimburse the Pennsylvania Company for its operating expenses, as well as a return on its investment. The restrictive provisions of the agreement were not mentioned and their legal validity was not discussed.

The fourth proceeding was instituted by the Commission to investigate the reasonableness and legality of the charges of Penn Water for wholesale energy sold to Consolidated under the basic agreement. Consolidated and both state [fol. 5410] commissions intervened. On January 4, 1949 the Commission filed its opinion and order reducing the rates, *In the Matter of Pennsylvania Water & Power Co.*, F.P.C. Docket No. IT-5915, opinion No. 173. An appeal from this order is now pending in the Court of Appeals of the District of Columbia. Penn Water filed a petition for rehearing alleging amongst other reasons that the basic agreement was null and void in that it violated the Sherman Act and Section 803(h) of the Federal Power Act, but this application was denied in an opinion filed on February 28, 1949, *In the Matter of Pennsylvania Water & Power Co.*, Docket No. IT-5915, opinion No. 173 A. In this opinion the Commission referred to the economies resulting from the combined power requirements of the three companies and referred to the basic contracts in the following terms:

> "By the terms of those contracts the installation of additional facilities by Penn Water is subject to approval by Baltimore Company, to assure coordinated planning and investment to meet the growing power needs of the system as a whole with resulting additional economies and consumer benefits.
>
> "The regional integration and coordination of facilities, the resulting economies, and the utilization

and conservation of natural resources thus achieved are precisely what was sought to be encouraged and fostered by the Federal Power Act and established as a part of the criterion of the public interest to be served by regulation thereunder (cf. Section 202 (a)). *If there are questions as to the legality of the foundation contracts which are in litigation, as Respondents' application for rehearing indicates, the validity of our order is not dependent upon the decision of those questions.* In our opinion and order we took care to leave the continuation of the opera-
[fol. 5411] tion of the integrated and interconnected system in full effect, merely changing the rates, as shown by our statement wherein we specifically stipulated that 'The present arrangement whereby sales to Pennsylvania customers are made on a firm basis on definite rate schedules whereas Baltimore Company takes what is left and assures Respondents of the recovery of all proper operating expenses, depreciation, taxes and a fair return, is the most practicable under the circumstances. That arrangement will, therefore, be continued with, however, such modifications as are necessary to accomplish the reductions mentioned above to Pennsylvania Power & Light, Philadelphia Company, Metropolitan Company and Baltimore Company.' (Italics supplied)

"Now, by the changes referred to in Penn Water's application for rehearing, all of the carefully built-up benefits of pool design, investment, construction and operation apparently are intended to be sacrificed by Penn Water. Penn Water's non-receipt of steam generated energy from outside Pennsylvania for sale to resale customers would destroy the pool economies under the established method of operation."

This view of expert government authority is entitled to respect and we do not venture to say that the physical connection of the facilities of the two utilities, and the interchange of electric power produced by water in Pennsylvania and by steam in Maryland is not a desirable utilization of their combined resources. Nor do we undertake to gainsay the view of the Commission that even if the restrictive con-

ditions of the basic contract are invalid, as to which the Commission expressed no opinion, it still has the duty and authority under the Federal Power Act to encourage and es-
[fol. 5412[tablish the interconnection of electrical facilities of regional districts if it finds that such action is necessary and appropriate in the public interest, and will not interfere with the lawful authority of the state commissions in respect to the generation and distribution of electrical energy in intrastate commerce. §§ 202, 202(a)(b), 16 U.S.C.A. §§ 824, 824a(a)(b).

We are brought by these considerations to the contention of the Pennsylvania Public Utility Commission, an intervener in this case, that the basic agreement is invalid not only because it violates the anti-trust acts but also because it disables Penn Water from performing its proper function as a public utility under the public utility laws of Pennsylvania. The regulation is based upon the provisions of Section 3 of the Public Service Company Law of Pennsylvania, approved July 26, 1913, Pamphlet Laws 1374,* which was in effect when the basic agreement was executed in 1931 and also upon Sections 202(d) and 202(e) of Public Utilities Law, approved May 28, 1936, 66 Purdon's Pennsylvania Statutes Ann. §1101 *et seq.* which are set out in the mar-
[fol. 5413] gin.**

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* Section 3. Upon like approval of the commission first had and obtained, as aforesaid, and upon compliance with existing laws, and not otherwise, it shall be lawful * * *

(c) For any public service company to sell, assign, transfer, lease, consolidate or merge its property, powers, franchises, or privileges, or any of them, to or with any other corporation or person.

** Section 202. *Enumeration of Acts Requiring Certificates.* Upon approval of the commission, evidenced by its certificate of public convenience first had and obtained, and upon compliance with existing laws, and not otherwise, it shall be lawful * * *

(d) For any public utility to dissolve, or to abandon or surrender, in whole or in part, any service, right, power, franchise, or privilege * * *

(e) For any public utility, except a common carrier by railroad subject to the Interstate Commerce Act, to acquire

There can be no doubt that the freedom of action of Penn Water as a public utility of the State has been and is restricted by the provisions of Articles IV and V of the basic agreement whereby Penn Water is required to get the approval of Consolidated before making any agreement for the purchase or sale of electric power or making any investment or disposition of any property in excess of $50,000. In other words, Penn Water's power to propose prices and improvements and extend its services has been surrendered to Consolidated, and there can be no doubt that this surrender amounts to a transfer *pro tanto* of its powers and franchises to the Maryland utility without approval of the Pennsylvania Commission in violation of the Pennsylvania statute.

Indeed such restrictions upon the freedom of a public utility cannot be sustained irrespective of statutory prohibition. It was so held in *Gibbs* v. *Baltimore Gas Co.*, 130 U. S. 396, in considering a contract between two competing Baltimore gas companies which was made in 1884 prior not only to the Pennsylvania Public Utility Acts but also the Sherman Act of 1890. The companies agreed to sell their product at a fixed price which could not be changed except by mutual consent except that the larger company in case of competition on the part of another company might reduce its price. They also agreed that one of the companies should lay no more pipes for the supply of gas. In denying recovery upon the contract because of invalidity, the Supreme Court said (pp. 410-411):

> "It is also too well settled to admit of doubt and a corporation cannot disable itself by contract from performing the public duties which it has undertaken, and by agreement compel itself to make public [fol. 5414] accommodation or conveniences subservient to its private interests.
>
> "'Where,' says Mr. Justice Miller, delivering the opinion of the court in Thomas v. Railroad Co., 101

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from, or to transfer to, any person or corporation, including a municipal corporation, by any method or device whatsoever, including a consolidation, merger, sale or lease, the title to, or the possession or use of, any tangible or intangible property used or useful in the public service." * * *

U. S. 71, 83, 'a corporation like a railroad company has granted to it by charter a franchise intended in large measure to be exercised for the public good, the due performance of those functions being the consideration of the public grant, any contract which disables the corporation from performing those functions, which undertakes without the consent of the State to transfer to others the rights and powers conferred by the charter, and to relieve the grantees of the burden which it imposes, is a violation of the contract with the State and is void as against public policy'."

See also *Central Transportation Co.* v. *Pullman's Car Co.*, 139 U. S. 24, 48, 51; *U. S. Tel. Co.* v. *Central Union Tel. Co.*, 6 Cir., 202 F. 66, 72, 73.

One of the most important duties of a public utility, inherent in its franchise to serve the public, is the duty to take the initiative in proposing reasonable rates and rendering adequate services, taking into account changing conditions; and the utility is not relieved from this duty because its activities are subject to governmental regulation, for a regulatory commission is not clothed with the responsibility or qualified to manage the utility's business.* The decisions in respect to this matter, both before and after the establishment of regulatory commissions, are in accord [fol. 5415] with the principles laid down in *Gibbs* v. *Baltimore Gas Co., supra.* See *Arizona Grocery Co.* v. *A. T. & S. Fe Ry. Co.*, 284 U. S. 370, 384; *Ga.* v. *Pa. R. Co.*, 324 U. S. 439, 458-460; *U. S. Tel. Co.* v. *Cent. Union Tel. Co.*, 6 Cir., 202 F. 66, 71-2; see also *Magaha* v. *City of Hagerstown*, 95 Md. 62. The conclusion is inescapable that the contractual restrictions upon the power of Penn Water to perform its functions as a utility under the Pennsylvania statute are invalid.

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* "It must never be forgotten that while a State may regulate, with a view to enforce reasonable rates and charges, it is not the owner of the property of public utility companies and is not clothed with the general power of management incident to ownership." *S. W. Tel. Co.* v. *Pub. Serv. Comm.*, 262 U. S. 276, 289. See also *N. Pa. Power Co.* v. *Pa. P. U. C.*, 132 Pa. Super., 178, 333 Pa. 265.

This conclusion is not avoided by the fact that Penn Water is a public utility under Part II of the Federal Power Act, and subject as such to the regulation of the Federal Power Commission. There is, however, a limitation upon the jurisdiction of the Federal Power Commission over public utilities subject to Part II of the Federal Act, §§ 201 to 209, which is set forth as follows in Section 201(b), 16 U.S.C.A. 824(b), as follows:

> "(b) The provisions of sections 824-824h of this title shall apply to the transmission of electric energy in interstate commerce and to the sale of electric energy at wholesale in interstate commerce, but shall not apply to any other sale of electric energy or deprive a State or State commission of its lawful authority now exercised over the exportation of hydroelectric energy which is transmitted across a State line. The Commission shall have jurisdiction over all facilities for such transmission or sale of electric energy, but shall not have jurisdiction, except as specifically provided in sections 824-825r of this title, over facilities used for the generation of electric energy or over facilities used in local distribution or only for the transmission of electric energy in intrastate commerce, or over facilities for the transmission of electric energy consumed wholly by the trans-
> [fol. 5416] mitter."

This langauage has been held to mean what it says. *Connecticut Light & Power Co.* v. *Power Commission*, 324 U. S. 515, 527; cf. *Jersey Cent. Power & Light Co.* v. *F.P.C.*, 319 U. S. 61; and hence there is a field in which the Pennsylvania Utility Commission is qualified to act. The evidence in this case shows that Penn Water is engaged in the production and local distribution of electrical energy to local utilities which distribute power to consumers in Pennsylvania, and in respect to this business, it seems clear that the state commission possesses regulatory power. The restrictive provisions of the basic agreement apply to all of the activities of Penn Water, including not only the transmission and sale of electric energy interstate but the local distribution within the State of Pennsylvania, and the surrender to Consolidated of Penn Water's duties obviously affects its local

as well as its interstate activities. Viewed in this light it is clear that the contention of the Pennsylvania Commission as to the invalidity of the basic agreement is well founded.

It is not our function in this case to decide how far the activities of Penn Water and Consolidated under the basic contract are subject to the regulations of the Federal Power Commission or the Pennsylvania Public Utility Commission, either or both. It has been held that the purchase by one Pennsylvania utility of the securities of another must be approved by both commissions. See *N. Pa. Power Co.* v. *Pa. P.U.C.*, 132 Pa. Super. 178, 333 Pa. 265. It may well be, although the present arrangement between the Maryland and Pennsylvania utilities is invalid for the reasons set forth, that an interconnection of facilities and an interchange of electrical energy between them may be continued [fols. 5417-5457] by some method that would meet with the approval of the appropriate regulatory authority and will not offend either the anti-trust laws or the utility laws of Pennsylvania. That question is not before us. We hold merely that the benefits that have heretofore flowed from the basic contract do not protect it from the impact of the Sherman Act; and that the contract is invalid since it violates that statute and disables Penn Water from performing its proper function as a public utility under the public utility laws of Pennsylvania; and that the District Court had jurisdiction in the premises.

In view of these conclusions we have not found it necessary to consider the contentions of Penn Water that the basic agreement was beyond the powers of Penn Water under the Pennsylvania law, or that Penn Water has properly terminated the agreement because of breaches thereof by Consolidated.

The case will be remanded to the District Court with instructions to enter a declaratory judgment in accordance with this opinion.

Reversed and Remanded.

[fol. 5458] [File endorsement omitted]

IN THE UNITED STATES COURT OF APPEALS

EXHIBIT "A"—TO MOTION TO SET ASIDE ORDERS OF THE FEDERAL POWER COMMISSION, ETC.—Filed December 29, 1950

UNITED STATES COURT OF APPEALS.
FOR THE FOURTH CIRCUIT

No. 6102

PENNSYLVANIA WATER & POWER COMPANY, A Pennsylvania Corporation, and Pennsylvania Public Utility Commission,
Appellants,

vs.

CONSOLIDATED GAS, ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE, A MARYLAND CORPORATION, and PUBLIC SERVICE COMMISSION OF MARYLAND, Intervener,
Appellees.

MANDATE

Baltimore, Maryland

Oct. 27, 1950, order staying mandate pending application in Supreme Court for writ of certiorari filed.

Dec. 14, 1950, certified copies (2) of orders denying petitions for writs of certiorari filed.

[fol. 5459] [File endorsement omitted]

UNITED STATES OF AMERICA, ss:
The President of the United States of America:

[SEAL — UNITED STATES COURT OF APPEALS FOR THE FOURTH CIRCUIT]

To the Honorable Judge of the United States District Court for the District of Maryland.

GREETING:

WHEREAS, lately in the United States District Court for the District of Maryland, before you or some of you, in a cause between Pennsylvania Water & Power Company, A

Pennsylvania Corporation, 16th Floor Lexington Building, Lexington and Liberty Streets, Baltimore, Maryland, Plaintiff, and Consolidated Gas, Electric Light and Power Company of Baltimore, A Maryland Corporation, 19th Floor Lexington Building, Lexington and Liberty Streets, Baltimore, Maryland, Defendant; Civil No. 4179; wherein the Pennsylvania Public Utility Commission and Public Service Commission of Maryland were allowed to intervene; and wherein the judgment and order of the said District Court, entered in the said cause on the 18th day of March, 1950, as in the words following, to-wit:

"This Court by its order of September 20, 1949 made pursuant to this Court's opinion rendered the same day, having determined (1) that the only question subject to determination by this Court was the validity of the so-called basic agreement of June 1, 1931 and (2) that if the basic agreement is valid, then all other questions raised by the Amended and Supplemental Bill of Complaint are subject to arbitration under Article X of the agreement; and the issues of validity having subsequently been heard in open [Vol. 5460] court and considered upon the evidence, oral argument and briefs, now, for the reasons and upon the findings of fact and conclusions of law set forth in the Court's written opinion filed February 28th, 1950, it is

"ORDERED AND ADJUDGED, this 18th day of March, 1950, that:

"1. The Agreement between Consolidated Gas Electric Light and Power Company of Baltimore and Pennsylvania Water and Power Company which is made up of the following instruments:

"Agreement as of December 31, 1927, Supplemental Agreement as of December 27, 1928, Supplemental Agreement as of June 1, 1931 (the Basic Agreement), and Supplemental Agreement as of September 29, 1939,

is a valid contract in accordance with its terms.

"2. The parties shall in due course proceed to arbitration of the issues listed in the Defendant's Notice of Arbitration of September 1, 1948.

"3. All prayers for relief contained in the Amended and Supplemental Complaint are denied and said Amended and Supplemental Complaint is dismissed; however, the temporary restraining order granted by this Court on February 9, 1949, shall remain in full force and effect until the final determination of the questions raised by the Amended and Supplemental Bill of Complaint, that is, until the final appellate decision with respect to this order and to all other orders of this Court heretofore passed in this proceeding and from which an appeal has been or shall be preferred and until the final determination of the issues listed in Defendant's Notice of Arbitration as of September 1, 1948, and which by its order passed on the 20th of September, 1949, this Court held to be subject to arbitration, including the final appellate decision with re-
[fol. 5461] spect to any appeal, if an appeal there be and it be prosecuted, from the award of the arbitrators. And it is further ordered that the right is hereby reserved to any party to this cause to make application for a further order modifying, supplementing or dissolving said restraining order.

WILLIAM C. COLEMAN
Chief Judge
U. S. District Court."

as by the inspection of the record of the said District Court, which was brought into the United States Court of Appeals for the Fourth Circuit, by virtue of the appeals of the said Pennsylvania [illegible]er & Power Company, A Pennsylvania Corporation, [illegible]Pennsylvania Public Utility Commission, agreeably to the act of Congress, in such case made and provided, fully and at large appears.

AND WHEREAS, in the term of June, in the year of our Lord one thousand nine hundred and fifty, the said cause came on to be heard before the said United States Court of Appeals for the Fourth Circuit, on the said record, and was argued by counsel.

ON CONSIDERATION WHEREOF, It is now here ordered, adjudged and decreed by this Court that the judgment and order of the said District Court appealed from, in this cause be, and the same is hereby, reversed with costs; and that

this cause be, and the same is hereby, remanded to the United States District Court for the District of Maryland, [fols. 5462-5583] at Baltimore, with instructions to enter a declaratory judgment in accordance with the opinion of the Court filed herein.

JOHN J. PARKER
Chief Judge, Fourth Circuit.
MORRIS A. SOPER
U. S. Circuit Judge.
ARMISTEAD M. DOBIE
U. S. Circuit Judge.

Endorsed:

"Filed and Entered
September 30, 1950.
Claude M. Dean Clerk,
U. S. Court of Appeals for
the Fourth Circuit."

You, therefore, are hereby commanded that such further proceedings be had in said cause, in accordance with the opinion and the decree of this Court, as according to right and justice, and the laws of the United States, ought to be had, the said appeals notwithstanding.

WITNESS the Honorable FRED M. VINSON, Chief Justice of the United States, the 14th day of December, in the year of our Lord one thousand nine hundred and fifty.

CLAUDE M. DEAN
Clerk of the U. S. Court of
Appeals for the Fourth Circuit.

Costs of appellants:

Docketing Fee $25.00

Plus cost of printing briefs and appendices at not exceeding $1.50 per printed page.

[fol. 5584] IN THE
UNITED STATES COURT OF APPEALS

No. 10,236

PENNSYLVANIA WATER & POWER COMPANY and SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND,
Petitioners,

v.

FEDERAL POWER COMMISSION,
Respondent.

No. 10,239

PENNSYLVANIA PUBLIC UTILITY COMMISSION,
Petitioner,

v.

FEDERAL POWER COMMISSION
Respondent.

No. 10,531

PENNSYLVANIA WATER & POWER COMPANY and SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND,
Petitioners,

v.

FEDERAL POWER COMMISSION,
Respondent.

PARTIAL REPLY TO ANSWERS TO PETITIONERS' MOTION TO SET ASIDE ORDERS OF THE FEDERAL POWER COMMISSION, ETC.—Filed January 15, 1951

To the Honorable the Judges of the United States Court of Appeals for the District of Columbia:

In the Court's Order of December 19, 1950, fixing times for the Petitioners to file motions and supporting briefs and for Respondent and Intervenors to answer and for

other purposes, no provision was made for the service by Petitioners of reply briefs in connection with [fol. 5885] such motion. Consequently, counsel will on oral argument make such reply as seems appropriate to the arguments contained in the brief of the Staff of the Federal Power Commission, Respondent, and the joint brief of the Public Service Commission of Maryland and the Consolidated Gas Electric Light and Power Company of Baltimore, Intervenors.

However, in such briefs, counsel for Respondent and Intervenors interpret the Opinion of the United States Court of Appeals for the Fourth Circuit in the Case 6102, *Pennsylvania Water & Power Company* v. *Consolidated Gas Electric Light and Power Company of Baltimore, et al.*, as holding invalid only Articles IV and V of the contract between those Companies, dated June 1, 1931. On a Motion to Interpret Mandate, decided, with Opinion, on January 10, 1951, the Court of Appeals directed the District Court to issue a declaratory judgment, among other things, "declaring that the agreements of December 31, 1927, June 1, 1931 and September 29, 1939 are void and of no effect". In view of the fact that this Opinion disposes of the question of interpretation of said contract as urged by counsel for Respondent and Intervenors and that the Opinion will not be available in the official reports at the time of the argument in these proceedings, a copy of such Opinion as transmitted to counsel by the Clerk of the Court is printed and filed herewith.

Respectfully submitted,

RANDALL J. LEBOEUF, JR.,
CRAIGH LEONARD,
WILKIE BUSHBY,
RAYMOND SPARKS,
Counsel for Petitioners.

January 15, 1950.

[File endorsement omitted.]

[fol. 5586] IN UNITED STATES COURT OF APPEALS

UNITED STATES COURT OF APPEALS FOR THE FOURTH CIRCUIT

No. 6102

PENNSYLVANIA WATER & POWER COMPANY,
a Pennsylvania Corporation,

and

PENNSYLVANIA PUBLIC UTILITY COMMISSION,
Appellants,

versus

CONSOLIDATED GAS, ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE, a Maryland Corporation,

and

PUBLIC SERVICE COMMISSION OF MARYLAND, *Intervener,*
Appellees.

APPEALS FROM THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF MARYLAND, AT BALTIMORE.

ON MOTION OF APPELLANTS TO INTERPRET MANDATE—Filed January 15, 1951

(Argued January 6, 1951. Decided January 10, 1951.)

Before PARKER, SOPER and DOBIE, Circuit Judges.

Wilkie Bushby and Charles E. Thomas (James Piper, R. Dorsey Watkins, William J. Grove and Lloyd S. Benjamin on brief), for Appellants, and Alfred P. Ramsey, Harry N. Baetjer and Charles D. Harris (G. Kenneth Reiblich, Norwood B. Orrick and John Henry Lewin on brief), for Appellees.

[fol. 5587] SOPER, Circuit Judge:

By a decision rendered upon the appeal in this case on September 30, 1950, we reversed the judgment of the District Court and held that an agreement for the sale and delivery of electric energy by Pennsylvania Water and Power Company, a Pennsylvania corporation, to Consolidated Gas, Electric Light & Power Company of Baltimore, a Maryland corporation, is invalid in that it violates the federal anti-

trust laws and is contrary to the public policy and laws of Pennsylvania; and the case was remanded to the District Court to enter a declaratory judgment in accordance with our opinion. Thereafter a controversy arose in the District Court as to whether the invalidation of the agreement revived an earlier agreement between the parties for the interstate sale and delivery of electric energy and entitled Consolidated to continued deliveries by Penn Water, in accordance with the terms set forth therein; and by motion of Penn Water we were asked to interpret the mandate of this court and settle the controversy. The matter was accordingly set for hearing, briefs were filed and counsel for the parties were heard at length.

The invalid agreement, which has been called the "basic agreement" throughout this litigation was executed on June 1, 1931. In effect it superseded an earlier agreement of December 31, 1927 for the sale of electric energy from January 1, 1927 to December 31, 1970, which Consolidated now desires to reinstate. There were in fact four agreements in this series between the parties as follows: Agreement of December 31, 1927; Supplemental Agreement of December 27, 1928; Supplemental Agreement of June 1, 1931; and Supplemental Agreement of September 29, 1939. Little need be said of the agreement of December 27, 1928 and the agreement of September 29, 1939, since they have no bear- [fol. 5588] ing on the point in issue. The agreement of December 27, 1928 transferred title to nine cables in Baltimore City from Penn Water to Consolidated in consideration of the payment of $105,000. This transaction was finally settled and closed and there is no attack upon its legality. The agreement of September 29, 1939, which was made at the request of the Public Service Commission of Maryland, reduced by $600,000 the annual payments of Consolidated to Penn Water under the 1931 agreement, as well as the amounts to be paid by Consolidated with respect to plant additions by Penn Water after December 31, 1938. There is no controversy about these provisions and the agreement throws no light upon the matter in dispute.

Attention may therefore be confined to the 1927 and 1931 agreements. The 1931 agreement is spoken of as supplemental to that of 1927, but in fact the later agreement took the place of the earlier one so completely that it has governed the relations between the parties for the past twenty

years and has been uniformly considered and called herein the "basic agreement" between the parties. It is of great significance that prior to the decision of this court on appeal and the refusal of certiorari by the Supreme Court it never occurred to any one to suggest that if the 1931 agreement were stricken down, the 1927 agreement would spring into life. Indeed the opposite assumption has been made. Heretofore Consolidated at no time made the contention that even if the 1931 contract were invalidated the 1927 agreement would remain in effect; and no such contention was made in the District Court, as appears from the concluding paragraph of its opinion where it was suggested that the invalidation of the basic agreement would enable Penn Water to withdraw completely from the interstate transportation and sale of electric energy.
[fol. 5589] It is obvious that this common assumption of the parties rather than the afterthought of Consolidated presents the true situation prevailing between the parties and the only reasonable answer to the question before the court. A comparison of the provisions of the two agreements clearly shows the correctness of this conclusion, because the 1931 agreement made such fundamental changes that thereafter it completely dominated the interparty transactions. In 1927 Penn Water agreed to sell approximately 400,000,000 kwh of 25 cycle electricity annually to Consolidated until 1970, and Consolidated agreed to pay for it on a unit rate basis. It was an ordinary utility contract for the supply of capacity and energy on a unit rate basis and placed no restrictions on Penn Water's operations.

The 1931 agreement, on the other hand, provided that Consolidated should be entitled to all the electric capacity and energy available to Penn Water and not otherwise disposed of in the performance of existing contracts, and in consideration thereof, Consolidated agreed to pay Penn Water an amount equal to its operating expenses, a specified rate of return on existing facilities, and on the cost of new facilities less depreciation, and Consolidated was allowed a credit for the amount of the sales of energy by Penn Water to other persons. Closely associated with these provisions were the illegal restrictions on the future activities of Penn Water which resulted in the invalidation of the whole contract. Therein Penn Water was required to obtain the approval of Consolidated before entering into any agree-

ment for the sale or purchase of electric power and energy and to obtain the approval of Consolidated before making any investment or disposing of its property having a value in excess of $50,000. These restrictive conditions were included in order to safeguard Consolidated in the perform-
[fol. 5590] ance of its promises and it is conceded that without them the contract would have been impracticable and would not have been made. When the sweeping nature of these changes is considered with the fact that they have controlled the business transactions between the parties for twenty years, it is easy to understand why the contract of 1931 has been treated as the basic agreement and the 1927 agreement has been given little thought.*

It is true that the 1931 contract grew out of the prior contractual relationship between the parties and in that sense was supplemental to the 1927 agreement. Indeed the latter document contains the seed from which the subsequent illegal transaction has grown. It recited the prior sales of electric energy to Consolidated and the express purpose to broaden the scope of the cooperative use of the resources and facilities of the parties so as to benefit the public and avoid unnecessary duplication of investment, and it declared that no major investments affecting facilities should be undertaken by either party without informing the other and granting it under equal conditions the position of preferred customer or seller, as the case may be.

The 1931 agreement referred to those recitals and declared it to be the intent of the parties to accomplish a more complete coordination by the sale to Consolidated of all Penn Water's power and energy available for sale and by paying therefor on the basis of an annual charge sufficient to yield an equivalent revenue to that theretofore received by Power plus a reasonable income on its additional investments there-
[fol. 5591] after made. Obviously it was the intent of the parties to abandon the old relationship and to accept a new

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* The 1931 agreement states that it supplements the agreement of 1927 and reaffirms the consistent provisions thereof; but a comparison of the documents shows that all of the substantial parts of the earlier agreement have been supplanted in the latter leaving only incidental provisions that do not affect the conclusions herein reached.

one and in furtherance of this purpose, to consolidate and merge the two agreements in one, the later agreement supplanting the earlier in all substantial respects and becoming the guide for their future actions. Unfortunately, in carrying out this purpose, Penn Water gave up its independent status as a producer and seller of electric energy and subjected itself so completely to the dominance of Consolidated as to violate the controlling statutes and hence the 1931 agreement must be stricken down. With it must also go the 1927 contract even though it be assumed to be lawful in its inception, for it is obvious that the parties never intended in any event to go back to their early relation. Indeed it would be unjust after the long lapse of time to require them to do so. Consolidated, having broken the law, is in no position to ask the relief of this court. See Virginia Dare Transp. Co. v. Norfolk Southern Bus Corp., 4 Cir., 176 F. 2d 354; Reynolds Metals Co. v. Metals Disintegrating Co., 3 Cir., 176 F. 2d 90; Duane v. Merchants Legal Stamp Co., 231 Mass. 113, cert. denied 249 U. S. 613.

The case here is not one where there has been merely an invalid amendment of a prior valid contract. If it were, there would be force in the suggestion that the declaration of invalidity of the amendment leaves the original contract in force. Here the prior contract has been merged in and its nature changed by the subsequent unlawful agreement, and as so changed, it has resulted in an unlawful relationship which has continued for twenty years. When the illegality of such relationship is declared, it is idle to contend that the court can withdraw the original contract from the illegal relationship and give it validity, certainly after it [fol. 5592] has been buried therein for so long a period. It must perish along with the relationship of which it has been made an inseparable part.

We repeat, as we said in our opinion, that it is not our function to decide how far the activities of Penn Water and Consolidated are subject to the regulations of the Federal Power Commission or the Pennsylvania Public Utility Commission. "It may well be, although the present arrangement between the Maryland and Pennsylvania utilities is invalid for the reasons set forth, that an interconnection of facilities and an interchange of electrical energy between them may be continued by some method that would meet with the approval of the appropriate regulatory authority and

will not offend either the anti-trust laws or the utility laws of Pennsylvania."

Throughout the trial of this case and in the argument of the pending motion, Penn Water has reiterated its desire to continue to supply electric energy to Consolidated; and in view of the close relationship between the parties, the existence of interconnecting equipment and the control over its rates by the regulatory bodies, there is no reason to fear that the interests of consumers of electricity in Maryland will suffer through the invalidation of the existing contract between the two utilities.

The District Court should issue a declaratory judgment (1) setting aside its judgment and order of March 18, 1950; (2) declaring that the agreements of December 31, 1927, June 1, 1931 and September 29, 1939 are void and of no effect; and (3) dissolving the restraining order of February 9, 1949.

[fols. 5593-5612] Certificate of Service omitted in printing.

[fol. 5613] [File endorsement omitted]

IN UNITED STATES COURT OF APPEALS

EXHIBIT "A"—TO MOTION FOR PERMISSION TO FILE A SUPPLEMENTAL BRIEF, ETC.—Filed July 6, 1951

IN THE
UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MARYLAND

Civil 5253

PENNSYLVANIA WATER AND POWER CO.
et al

v.

CONSOLIDATED GAS ELECTRIC LIGHT AND POWER CO. *et al*

MEMORANDUM BY THE COURT

Pattern for decision here is prescribed by Pennsylvania Water & Power Co. v. Consolidated Gas Electric Light and Power Co., 4 Cir. 184 F. 2d 552, from which it follows that

summary judgment must go for the plaintiffs on their motion. The instant or 3-party contract of June 1, 1931, designs a restraint violative of the Sherman Act, 15 USCA 1 *et seq.*, and in the process breaks the Pennsylvania laws by reducing Safe Harbor Water Power Corporation from a public utility to an impotent agency of the other parties. This conclusion is reached from an examination of the agreement in the light of the following indisputable and environing facts: that generation of electricity for wholesale is the business of each of the parties; that the geographical and relative location of their generating plants, of Penn's and [fol. 5614] Consolidated's transmission lines and inter-connections, and of the territory and patrons served by all of them, are as shown upon the map now in the record; and that the 2-party agreement, Safe Harbor's corporate papers, its certificate of convenience, the orders of the Pennsylvania Utility Commission thereon, and the pertinent statutes of that State, are as pleaded.

I. Two of the contracting parties, Penn and Consolidated, are conclusively found to be potential competitors in the Penn Water Case, *supra*. That the third party, Safe Harbor, is also a latent competitor is manifest from the location of its plant in reference to Penn Water's, from the easy deliverability of its power to the customers of Consolidated, notably in the Washington area, as well as to the patrons of Penn Water, albeit at present needing the transmission lines of the latter for such purposes. The opinion in the Penn Water Case recounts the routing of all their generated power, including Safe Harbor's, and thereby clearly proves its competition with the current of the others.

It might almost be said that the judgment in the Penn Water Case struck down the 3-party agreement as well as the 2-party contract, so closely are the agreements tied together by their terms. The nexus is declared amain by the recitals in the second and third paragraphs of the 2-party agreement, virtually avowing the 2-party to be the master agreement operating the 3-party contract. Article II expressly incorporates Safe Harbor power as an item of the 2-party agreement. The supplement, dated August 1, 1932, to the 3-party contract reaffirms the terms of the latter but in its section Fourth adopts some of the terms of the 2-party agreement. As will be evident upon their discussion, the play of the restrictive covenants in the 3-party agreement

reveals this contract as a furtherance of the 2-party plan, [fol. 5615] extending the 2-party circumscription to the source of the Safe Harbor energy. Nevertheless the Court will construe the 3-party agreement *de novo*.

Examining the agreement, we find its affront to the Act consists of the investiture of Penn and Consolidated with the absolute power to restrict the other, in the use and enjoyment by such other, of its rightful entitlement in Safe Harbor's production, as well as to restrict Safe Harbor in its freedom of contract and action generally. The principal restrictions are contained in Articles III and IV.

Under Article III(a) "additional machinery or equipment" shall be installed by Safe Harbor at the request of Consolidated or Penn at the expense and for the use of the requesting party, but only with the consent of the other. By the same Article no current from "additions" to the Safe Harbor Plant may be supplied to anyone other than Penn and Consolidated without the consent of both of them. As an over-all restraint, Article IV forbids Safe Harbor to "enter into other agreements with either receiving company without the approval of the other."

These stipulations are strangulations. They choke each of the recipients in its full exercise of its ownership in the power purchased of Safe Harbor; they choke Safe Harbor too. They do not merely limit one party from impinging the other's rights; their reach is more than defensive.

No mechanical appliances, if and when available, could be furnished by Safe Harbor for Penn Water, though at Penn Water's expense, say to multiply, preserve or improve Penn Water's share, without Consolidated's approval, or vice versa. By forbidding the sale of power from such additions to anyone else, plant additions by Safe Harbor are effectually banned unless approved by *both* of the other two—even an addition for the benefit, and at the cost, of only one of them.

[fol. 5616] As Safe Harbor may not contract *in any manner* as to the generation and supply of energy, with Penn or Consolidated without the assent of the other, neither Penn nor Consolidated could establish any other outlets, than those originally fixed at the plant to draw off its purchase of power, without the nod of the other. Consolidated having no direct connection with Safe Harbor could never obtain one if Penn objected. Article XII fixes the points of delivery from

the Safe Harbor plant and makes any change dependent on the approval of both Penn and Consolidated. The supplemental agreement of August 1, 1932, exemplifies the enforcement of Article XII.

Penn or Consolidated could not by its sole direction release any part of its contract share to allow any portion to be sold and diverted elsewhere by Safe Harbor, notwithstanding Article III(c) contemplates such sales.

Similarly Safe Harbor is barred from selling any power to others, assuming such power to become available through expansion of its plant, because under the contract it cannot sell, save to Penn and Consolidated, energy derived from additions.

Threat of injury to the public from a contract of this kind is obvious, without reference to legislation, such as the Sherman Act, outlawing restraints.

Of similar stipulations in the Penn Water Case the Court of Appeals declared their effect "forbids plant expansion or development," prevents the sale of electric energy by one corporation without the approval of the other, and thereby empowers the one to fix the prices of the other. 184 F. 2d 557, 558. No other authority is requisite to justify the conclusion that the instant stipulations *per se* violate the Sherman Act and are not saved by the "rule of reason." [fol. 5617] It is no answer to argue that in fact additions are not possible at Safe Harbor and the contract restriction thereof is consequently only of academic interest. When the contract was executed, and that is the time as of which its validity must be judged, expansion was admittedly practicable. Indeed, the supplemental agreement of November 22, 1939, authorized such an extension and at the same time evinced the parties' familiarity with the assailed restriction. It is dangerous to prophesy what science may do towards expansion. However, no factual issue is here presented—on the feasibility of additions—because the restriction is by its breadth and sweep condemning in and of itself. Then, too, the restraint includes "additional machinery or equipment" as well as "additions to its plant" and the possibility of its installation is surely not moot.

The enumerated consequences of Articles III(a) and IV are not hypercritical suppositions of remote possibilities; they are the immediate potentialities of those stipulations.

No less objectionable are the restrictions when the ar-

rangement devised by the contract is viewed as solely a plan for joint ownership and operation of the Safe Harbor plant by the Penn Water and Consolidated, that is, if Safe Harbor Corporation be treated as merely an instrument for holding and operating the plant for the other two. If this were legally possible, or if the joint ownership and operation had been accomplished without the intervention of another corporation, the restrictions of the contract would be just as obnoxious. They would still enable each corporation unwarrantably to control the use and enjoyment by the other of its share of the joint product.

That the plan was simply one of joint ownership and operation is refuted by the actualities. The parties saw fit to adopt the present means. They have brought into the [fol. 5618] scheme a live, separate, and independent public service corporation, the Safe Harbor Water Power Corporation. The latter is a real party to the contract, with definite obligations and liabilities. Consolidated and Penn Water may not now ignore its reality. Schenley Corp. *v.* U. S., 326 U. S. 432, 437. It is not a wholly owned subsidiary of either. Its individuality at once appears when we recall that its capital stock may at any time become the property of others than Penn Water and Consolidated, or that the stockholders might disagree, as apparently they have now. Safe Harbor's independence is starkly accentuated in the realization that it owes important duties to the public, for which it must account through the appropriate governing bodies of the State of Pennsylvania. But, even so, the status of Safe Harbor is not decisive of this case; it may be classed as a non-entity, a subsidiary of the other parties, or their creature, *n'importe*, and yet the agreement would still be vitiated by the mutually constricting covenants between Penn and Con.

II. Again, the agreement in suit as plainly transgresses the laws of the State of Pennsylvania as did the 2-party contract in the Penn Water Case, *supra*. Just as the agreement there disabled Penn Water from the performance of its public duties, so here the present contract, through the restraints effected by Articles III and IV in the manner already pointed out, has caused Safe Harbor to contravene the Pennsylvania statutes proscribing the surrender to another, without the approval of its Public Utility Commission, of any of its powers, franchises or privileges. Judge

Soper's discussion of this subject fully and featly disposes of it. Pp. 566-568.

The aim of the 3-party agreement is to place the internal control of Safe Harbor in the hands of Penn Water and Con- [fol. 5619] solidated. It does so not only by the restrictions of Articles III and IV but also through the Operating Committee established by Article XIV. This Article constitutes the Committee as both advisory and regulatory of Safe Harbor. The board of directors of Safe Harbor are deposed from their place of guidance and responsibility. In few, the contract destroys the corporate virility of Safe Harbor and subjugates it as a mandate of Penn Water and Consolidated, depriving Safe Harbor of the discretion and initiative necessary to respond and be alive to its public obligations. This is intolerable under the common law and statutes of the State of Pennsylvania.

In the briefs and oral argument the defendants, while insisting that the restrictions of the contract were not invalid, urged that they were severable from the contract, and if unlawful, they could be stricken without violence to the remainder of the agreement. Whether or not contract provisions are separable must be determined from the face of the agreement where the agreement is clear and complete. Study of the 3-party contract convinces the Court that the objectionable provisions cannot be severed from the whole; that the agreement is entire and indivisible, its covenants dependent; and that the restrictive terms are of the warp and weft of the agreement and, if taken out, the residual could not be said to represent the agreement of the parties. U. S. *v.* Bethlehem Steel Corp., 315 U. S. 289, 298.

The Court has no doubt of its jurisdiction of this case, and its right to consider the non-federal ground of the cause of action; that there is no genuine issue of fact in the foundation upon which the motion for summary judgment is made; and that it is an appropriate instance for the entry of a summary declaratory judgment.

Finally, the Court observes that in determining whether the contract violates the Sherman Act or the common [fols. 5620-5694] and statute law of Pennsylvania, it must be read objectively and impersonally, and must be measured against the public interest evidenced by the Sherman Act, the public utility laws of Pennsylvania, and the policy of the common law; if *in posse* it is offensive to either, the contract

must fall, irrespective of the pure intention or good faith of the parties.

After submission to opposing counsel for comment as to form, counsel for the plaintiffs will present a decree declaring invalid and inoperative the 3-party agreement of June 1, 1931 with its two supplements.

(Sgd.) ALBERT V. BRYAN
United States District Judge

Alexandria, Virginia
May 3rd, 1951.

[fol. 5695] UNITED STATES COURT OF APPEALS

No. 10236

PENNSYLVANIA WATER & POWER COMPANY, a Corporation, and SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND, a Corporation, *Petitioners*

v.

FEDERAL POWER COMMISSION, *Respondent.*

No. 10239

PENNSYLVANIA PUBLIC UTILITY COMMISSION, *Petitioner*

v.

FEDERAL POWER COMMISSION, *Respondent.*

No. 10531

PENNSYLVANIA WATER & POWER COMPANY, a Corporation, and SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND, a Corporation, *Petitioners*

v.

FEDERAL POWER COMMISSION, *Respondent.*

On Petition for Review of Orders of the Federal Power Commission and on Motions to Set Aside Orders of the Federal Power Commission.

OPINION

Decided July 3, 1951

Mr. Randall J. LeBoeuf, Jr., with whom *Messrs. Craigh Leonard, Wilkie Bushby, Raymond Sparks, F. G. Awalt, Preston C. King, Jr.*, and *Daryal S. Myse* were on the brief,

for petitioners Pennsylvania Water & Power Company and Susquehanna Transmission Company of Maryland.

Mr. Charles E. Thomas, Counsel, Pennsylvania Public Utility Commission, *pro hac vice*, by special leave of Court, [fol. 5696] with whom *Mr. Thomas M. Kerrigan*, Assistant Counsel, Pennsylvania Public Utility Commission, was on the brief, for petitioner Pennsylvania Public Utility Commission.

Messrs. Howard E. Wahrenbrock, Assistant General Counsel, Federal Power Commission, and *Reuben Goldberg*, Attorney, Federal Power Commission, with whom *Mr. Bradford Ross*, General Counsel, Federal Power Commission, was on the brief, for respondent.

Mr. Charles D. Harris, General Counsel, Public Service Commission of Maryland, for intervenor Public Service Commission of Maryland.

Messrs. G. Kenneth Reiblich and *Alfred P. Ramsey* for intervenor Consolidated Gas Electric Light and Power Company of Baltimore.

Before WILBUR K. MILLER, BAZELON and FAHY, Circuit Judges.

BAZELON, *Circuit Judge:* In 1944, the Federal Power Commission received two petitions—one from the Mayor and City Council of Baltimore and others, the other from the Public Service Commission of Maryland—requesting that it institute an investigation of the justness and reasonableness of the rates and charges of Pennsylvania Water and Power Company and Susquehanna Transmission Company of Maryland[1] with regard to such of their sales or transmission of electric energy as are subject to the Federal Power Act. By orders issued in September and October of 1944, the Commission assumed jurisdiction and began its investigation of petitioners' rates and charges. Intervention was requested by the Pennsylvania Public Utilities Commission, the Maryland Commission, and Consolidated Gas Electric Light and Power Company of Baltimore,[2] all of whom were permitted to and did participate in the hearings before the Commission. Those hearings, which began on April 15, 1946, and continued until July 16, 1947, were

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[1] Hereinafter referred to as petitioners or Penn Water.

[2] Hereinafter referred to as Baltimore Company.

extensive in nature and produced a voluminous record. In January 1949, the Commission issued its order requiring Penn Water to reduce its rates and charges in accordance with the Commission's findings. The revised schedules submitted in an attempt to comply with the Commission's order were considered unsatisfactory and, on October 27, 1949, the Commission prescribed its own schedules for Penn Water's services. Petitioners seek review of both the January and the October orders, as does the Pennsylvania Public Service Commission which intervened before the Commission. In addition, the same parties have moved to set aside the orders or to obtain appropriate alternative relief.

The various proceedings before the Commission present a picture of petitioners' operations which is essential to an understanding of the issues now before us. Penn Water owns and operates both a hydroelectric and a steam generating plant at Holtwood, Pennsylvania, which is on the Susquehanna River, some nine miles north of the Pennsylvania-Maryland border. In addition, Penn Water and the Transmission Company together constitute an interconnected interstate transmission system—with Penn Water owning and operating that part of the system which is located in Pennsylvania and Transmission Company, its wholly-owned affiliate, operating the Maryland facilities. A [fol. 5697] third company, Safe Harbor Water Power Corporation,[3] owns and operates a hydroelectric development at Safe Harbor, Pennsylvania, the transmission facilities of which also interconnect with Penn Water and Transmission Company.

The interest of Baltimore Company in these proceedings stems from certain system foundation contracts which have, for the past twenty years, tied its operations to those of petitioners and of Safe Harbor. Under these contracts, Penn Water is required to provide Baltimore Company at all times with the capacity and energy available at its hydro and steam plants, beyond that part of it which is needed to fulfill its own commitments to customers. Those customers must, however, have been previously approved by Baltimore Company. Baltimore Company is also entitled, by contract,

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[3] Hereinafter referred to as Safe Harbor. This company is affiliated with Penn Water and Baltimore Company, each of which owns fifty per cent of its voting stock.

to receive two thirds of Safe Harbor's output and such part of the remaining one third which is left after Penn Water's needs are satisfied. In turn, Penn Water is entitled to receive from Baltimore Company steam energy to the extent that it is available after Baltimore Company's requirements have been met. Nor do the contractual entitlements of Baltimore Company necessarily represent power used by it. Its hydro entitlement is at the disposal of the entire system in order to permit the lowest incremental cost energy to be used as needed at the various parts thereof. In return for the rights granted it under its contract with Penn Water, Baltimore Company assures Penn Water of revenues sufficient to cover all of its operating expenses and a specified return on its investment. Similarly, both Penn Water and Baltimore Company assure Safe Harbor of a combined annual payment which yields a specified return above operating expenses. The function of these contracts and of the interconnection of facilities which they accomplish is, in the words of the Commission, to achieve operations which are "closely integrated and coordinated as a matter of economy, efficiency, flexibility, and maximum utilization of hydro capabilities * * *"[4] of a river which has a very variable flow.[5]

I

Before considering the various challenges to the Commission's rate order, we will address ourselves to petitioners' motions to set aside and annul that order. These were filed with us on December 29, 1950, shortly after the United States Court of Appeals for the Fourth Circuit had issued a judgment declaring certain phases of the contractual arrangements between Penn Water and Baltimore Company illegal under the federal antitrust laws and the laws of Pennsylvania.[6] The illegality of these system foundation contracts was first raised by petitioners in their petition for rehearing of the January 1949 order, about nineteen months before the

[4] Opinion No. 173 of the Federal Power Commission, Appendix to Petitioners' Brief, p. 43.

[5] See discussion, *infra*, pp. 11-12.

[6] *Pennsylvania W. & P. Co.* v. *Consolidated G., E. L. & P. Co.*, 184 F. 2d 552 (4th Cir., 1950), cert. denied 340 U. S. 906 (1950).

Fourth Circuit decision was handed down. The Commission denied the request for rehearing, ruling *inter alia,* that the [fol. 5698] validity of the Commission's order is not dependent upon the legality of the contracts under the antitrust laws. Petitioners' position here is that the Fourth Circuit's decision requires us to invalidate the Commission's rate order.

The problem raised by the motions is one of the interrelation of two statutory schemes—each of which reflects different historical pressures and different conceptions of the public interest. The Sherman Act and related laws represent an attempt to keep the channels of competition free so that prices and services are determined by the workings of a free market. They derive from the conviction that the greatest good to the greatest number will be attained by preventing monopoly, monopolizing and combinations in restraint of trade. In marked contrast is a statute such as Part II of the Federal Power Act.[7] It evidences congressional recognition that competition can assure protection of the public interest only in an industrial setting which is conducive to a free market and can have no place in industries which are monopolies because of public grant, the exigencies of nature, or legislative preference for a particular way of doing business. In place of competition as a generalized and indirect regulator of prices and services in the field of interstate transmission of electric energy at wholesale, Congress has substituted a regulatory agency authorized to supervise almost every phase of the regulated company's business.[8] Rates charged by such utilities, as well as the services and contractual provisions affecting them, must be "just and reasonable." And what is "just and reasonable"

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[7] 15 U.S.C. §§ 824 *et seq.*

[8] "In the relationship of government to most private businesses competition is relied upon to control prices in the interests of consumers, but such is not the case with private electric utilities. Competition implies two or more sellers offering their products or services to the same public, and two sellers of electricity in the same territory would mean duplication and wasteful investment. Regulation, therefore, in a general sense may be said to act as a substitute for competition." Twentieth Century Fund, *Electric Power and Government Policy* 45 (1948).

is not determined by the pressures of competition but by the adequacy of the service to the public, the fairness of the return allowed upon the investment in the company, and the degree to which the congressional objective of efficient use of the nation's power resources is served. Nor was Congress unmindful of the problems of undue concentration of power in this field, characterized as it is by local monopolies. In the Public Utility Holding Company Act, it provided antitrust-like remedies to assure that integration of power companies be limited in scope and confined to an efficient power area.[9]

These contrasting objectives indicate that the antitrust laws can have only limited application to industries regulated by specific statutes. Those laws, though quite properly viewed as having been intended "to make of ours * * * a competitive business economy,"[10] are not constitutional mandates which freeze all aspects of our economic system for all time into the pattern of "laissez-faire." We think it obvious that they may not be extended beyond that part of the economy which Congress intended to leave to the operation of the free market. "Certainly what Congress has forbidden [fol. 5699] by the Sherman Act it can modify. * * * [It] is not impotent to deal with what it may consider to be dire consequences of laissez-faire."[11]

Courts have given effect to considerations such as those outlined above by confining the operation of the antitrust laws to those matters which are not the product of state action or which fall outside the reach of power vested in a regulatory agency. Thus, Congress or the states may authorize arrangements among producers even though such action without governmental sanction and enforcement would violate the antitrust laws.[12] Similarly, states may au-

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[9] See Trienens, *The Utility Act as a Solution to Sherman Act Problems*, 44 Ill. L. Rev. 31 (1949); Comment, *Section 11(b) of the Holding Company Act*, 59 Yale L. J. 1088 (1950).

[10] *United States* v. *South-Eastern Underwriters Ass'n*, 322 U. S. 533, 559 (1944).

[11] *Sunshine Coal Co.* v. *Adkins*, 310 U. S. 381, 396 (1940).

[12] *Parker* v. *Brown*, 317 U. S. 341, 350-352 (1943); *United States* v. *Rock Royal Co-op.*, 307 U. S. 533, 560 (1939); *United States* v. *Borden*, 308 U. S. 188, 201-202 (1939).

thorize monopolies[13] and Congress may substitute direct price fixing by a public agency for competition.[14] But when the practice complained of is not protected by legislative sanction, either directly or by being committed to a commission empowered to deal with it, the antitrust laws have been relied upon as a minimal means of protecting the public interest. The net effect of what we have already said is that, though regulated industries are not *per se* exempt from the antitrust laws and repeals by implication are not favored, the antitrust laws are superseded by more specific regulatory statutes *to the extent* of the repugnancy between them.[15] That is not to say that competitive considerations may not be components of the public interest sought to be served by a particular regulatory statute, and hence a guide to a commission's exercise of its authority when the question is properly before it. Thus, it has been said that the Federal Communications Act "recognizes that the field of broadcasting is one of free competition. The sections dealing with broadcasting demonstrate that Congress has not, in its regulatory scheme, abandoned the principle of free competition, as it has done in the case of railroads, in respect of which regulation involves the suppression of wasteful practices due to competition, the regulation of rates and charges, and other measures which are unnecessary if free competition is to be permitted."[16] But where a statute provides for compre-

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[13] *Olsen* v. *Smith*, 195 U. S. 332, 344-345 (1904); *Lowenstein* v. *Evans*, 69 Fed. 908, 911 (Cir. Ct. S. Car., 1895).

[14] *Sunshine Coal Co.* v. *Adkins*, 310 U. S. at 395-396.

[15] *U. S. Navigation Co.* v. *Cunard S. S. Co.*, 284 U. S. 474, 485 (1932); *Terminal Warehouse* v. *Pennsylvania R. Co.*, 297 U. S. 500, 514 (1936); *United States* v. *Borden*, 308 U. S. at 198-201; *Georgia* v. *Pennsylvania R. Co.*, 324 U. S. 439, 455-457 (1945); *U. S. Alkali Ass'n* v. *United States*, 325 U. S. 196, 205-206 (1945).

[16] *Federal Communications Commission* v. *Sanders Radio Station*, 309 U. S. 470, 474-475 (1940); *Mansfield Journal Co.* v. *Federal Communications Commission*, — U. S. App. D. C. —, 180 F. 2d 28 (1950). But cf. *Mackay Radio & Tel. Co.* v. *Federal Communications Commission*, 68 App. D. C. 336, 338, 97 F. 2d 641, 643 (1938); ("Though the Communications Act forbids the licensing of concerns which violate the anti-

hensive and detailed regulation of a particular industry, as do the Interstate Commerce Act and the Federal [fol. 5700] Power Act [17] there is, as we have indicated, only a limited area for application of antitrust considerations to Commission decisions.[18]

Applying those general propositions to the problem before us, we find that the Fourth Circuit's decision,[19] like that of the Supreme Court in *Georgia* v. *Pennsylvania R. Co.*,[20] seeks to assure public utility companies of freedom to exercise their private initiative in promulgating rates, services and changes therein. This limited freedom of action is an important condition precedent to proper operation of the rate-making process. Without it, the rates proposed and approved may tend to find themselves in the upper reaches of the zone of reasonableness within which rates may properly fall. The antitrust laws have been the means of assuring that such initiative remains unchecked by conspiracies or other illegal arrangements with which the regulatory commission is powerless to deal.[21] That is not to say, however, that if otherwise illegal arrangements are permitted or required by a valid statute, they are not shorn of their illegality to that extent.

We construe the Fourth Circuit's decision as having done no more than declare illegal under the antitrust laws cer-

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trust laws, it does not apply to the radiotelegraph business the policy of free competition, but a contrary policy. Free competition means that all are free to compete. The Communications Act forbids competition by all who cannot prove that their entry will serve the 'public interest, convenience or necessity'."); *Yankee Network* v. *Federal Communications Commission*, 71 App. D. C. 11, 22, 107 F. 2d 212, 223 (1939).

[17] "The plan or scheme of the Federal Power Act is analogous to that of the Interstate Commerce Act * * *." *Northwestern Pub. Serv. Co.* v. *Montana-Dakota Util. Co.*, 181 F. 2d 19, 22 (8th Cir., 1950), aff'd — U. S. —, 19 L. W. 4278 (1951).

[18] See *McLean Trucking Co.* v. *United States*, 321 U. S. 67, 84-87 (1944).

[19] 184 F. 2d at 560.

[20] 324 U. S. at 459-462.

[21] *Georgia* v. *Pennsylvania R. Co.*, 324 U. S. at 455, 460.

tain restraints exercised by Baltimore Company upon Penn Water—such as requiring its approval before it could take on new customers or expand generating facilities. Those restraints had been privately agreed upon by the parties and submitted to the Commission as an accomplished fact. The court was careful to avoid using language which might be interpreted in such fashion as to affect any rate proceeding then in process. This approach followed the lead of the Supreme Court in *Georgia* v. *Pennsylvania R. Co.*, 324 U. S. at 461-462. It was pointed out in the *Georgia* case that issuance of an injunction under the antitrust laws against the conspiracy there charged would in no way affect any rate proceedings. It would merely enable the parties to exercise their initiative with regard to future rate proceedings.

In our view, the Fourth Circuit's opinion neither purported to nor did relieve Penn Water from its obligation under the Federal Power Act to continue the then-existing services and rates. It is those services and rates, reflecting underlying operations, which were the subject of the Commission's order. "A rate is not necessarily illegal because it is the result of a conspiracy in restraint of trade in violation of the Anti-Trust Act. What rates are legal is determined by" the regulatory statute.[22] The validity of Commission action in this proceeding must be determined in light of the criteria furnished by the Federal Power Act, as applied to the operations and arrangements under scrutiny. If jurisdiction was properly assumed by the Commission, if its rate order is "just and reasonable" within the meaning of the Federal Power Act,[23] and if its findings are [fol. 5701] supported by substantial evidence,[24] Penn Water can have no complaint and our review is at an end. If petitioners, as a result of the Fourth Circuit's decision, wish to make any changes in operations, contracts, arrangements, etc., within the jurisdiction of the Federal Power Commission, they must do so in accordance with the Federal Power

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[22] *Keogh* v. *Chicago & N. W. Ry. Co.*, 260 U. S. 156, 162 (1922).

[23] Federal Power Act, § 205(a), 16 U.S.C. 824(a).

[24] Section 313(b), 16 U.S.C. § 825 l (b).

Act.[25] Under § 205(d) thereof, "Unless the Commission otherwise orders, no change shall be made by any public utility in any such rate, charge, classification, or service, or in any rule, regulation, or contract relating thereto, except after thirty days' notice to the Commission and to the public."[26] Pursuant to that section, petitioners may submit new arrangements and rates based thereon to the Commission. And the Commission "either upon complaint or upon its own initiative without complaint" may "enter upon a hearing concerning the lawfulness of such rate, charge, classification, or service * * *."[27] If Penn Water feels itself aggrieved after such proposed changes have been acted upon by the Commission, it may at that time bring a new petition for review. In short, a "rate established in the mode prescribed should be deemed the legal rate and obligatory alike upon carrier and shipper until changed in the manner provided" by the statute.[28]

To grant petitioners' motions and set aside the order at this time would be to substitute antitrust criteria for those of the Federal Power Act, a substitution which would be at cross-purposes with the intent of Congress. It would result in the reopening of a rate proceeding begun in 1944 because of an issue raised for the first time on rehearing in 1949 and a decision handed down in a suit between private parties under a non-controlling statute in 1951. In view of this chronology, we think the Supreme Court's statement in *Interstate Commerce Commission* v. *Jersey City*, 322 U. S. 503, 514 (1944), is especially pertinent: "If upon the coming down of the order litigants might demand rehearings as a matter of law because some new circumstance has arisen, some new trend has been observed, or some new fact discovered, there would be little hope that the administrative process could ever be consummated in an order that would not be subject to reopening."[29] The effect of granting peti-

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[25] Cf. *Michigan Consol. Gas Co.* v. *Panhandle Eastern Pipe L. Co.*, 173 F. 2d 784, 788-789 (6th Cir., 1949).

[26] 16 U.S.C. § 824d(d).

[27] Section 205(e), 16 U.S.C. § 824d(e).

[28] *Robinson* v. *Baltimore & Ohio R. R.*, 222 U. S. 506, 510 (1912).

[29] See *United States* v. *Pierce Auto Lines*, 327, U. S. 515, 535-536 (1946).

tioners' motions would be to disrupt a pattern of regulation which was carefully drawn to meet the problems of a complex industry.

Petitioners rely for their position not only on the effect of the antitrust laws upon a regulated industry but also upon the fact that Penn Water, as a licensee under Part I of the Federal Power Act,[30] is subject to § 10(h) which is [fol. 5702] said to incorporate Sherman Act standards into the Federal Power Act.[31] Section 10(h) does indeed virtually restate the Sherman Act. But it is found only in Part I of the Federal Power Act, which deals with water-power licensees, and not in Part II, dealing with public utilities selling electric energy in interstate commerce at wholesale. This fact alone would indicate that Congress did not intend to make licensees which are also Part II companies, such as Penn Water,[32] subject to § 10 (h).

But there is a more fundamental reason for holding § 10 (h) inapplicable to Part II companies. The very thing which that section prohibits, the combination of licensees with others to limit the output of electrical energy, is made one of the primary objectives of Part II. Section 202(a)[33] thereof imposes the duty upon the Commission to encourage public utilities to combine for the interconnection of facilities. Under certain circumstances, the Commission may even order such interconnections and regulate the rates and contractual arrangements involved therein.[34] The end thus sought to be achieved and, in the Commission's view,

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[30] Penn Water was ordered to apply for a license under Part I in 1939. See *Pennsylvania Water & P. Co.* v. *Federal Power Commission*, 74 App. D. C. 351, 123 F. 2d 155 (1941). According to the Commission's opinion here, no license has yet been issued. See Opinion No. 173, Federal Power Commission, Appendix to Petitioners' Brief P. 58, n. 21.

[31] That section, 16 U.S.C. § 803(h), provides: "Combinations, agreements, arrangements, or understandings, express or implied, to limit the output of electrical energy, to restrain trade, or to fix, maintain, or increase prices for electrical energy or service are hereby prohibited."

[32] See Discussion, *infra*, pp. 8-11.

[33] 16 U.S.C. § 824a(a).

[34] *Id.* § 824a(b).

served by the present arrangement between Penn Water and Consolidated, is the most efficient use of the nation's resources consistent with the public interest in cheap power and in conservation. We are unable to accept the proposition that Congress intended to have § 10(h) prevent that which is contemplated by Part II, a statute which is later in time and more specific in application. Our view is supported by the fact that § 10(h) is found in that part of the Act which establishes a limited federal regulatory scheme—one which does not come into play unless (1) the state in which the licensee is located has no regulatory commission, or (2) the state commissions involved are unable to agree upon rates for interstate sales.[35] It seems entirely likely that Congress believed that, in the absence of detailed federal regulation such as that in Part II, licensees should be required to adhere to antitrust standards. This is, in effect, saying no more than what we have already said about the antitrust laws and regulated industries. The prohibitions of § 10(h) would apply to a licensee which is also regulated under Part II only to the extent that the prior statute is not repealed by the clear repugnancy between it and the later statute.

The motions to set aside or remand the Commission's orders on the basis of the Fourth Circuit's decision and the other points referred to above are denied.

II

The Federal Power Commission assumed jurisdiction of petitioners' rates and services pursuant to both Parts I and II of the Act. Petitioners challenge this assumption of jurisdiction on the ground that licensees may be regulated only under Part I and that the Commission's finding that [fol. 5703] the states involved are unable to agree, which is a condition precedent to federal jurisdiction under Part I, is not supported by the evidence.

Part I applies to all federal water-power licensees, whether operating in intra- or interstate commerce. It makes Federal Power Commission regulation of the interstate operations dependent upon either (1) the non-existence of a state regulatory commission in the licensee's state,

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[35] Federal Power Act, §§ 19, 20, 16 U.S.C. §§ 812, 813.

or (2) the inability of the states involved in the licensee's interstate activities to agree.[36] Part II is not so qualified. It confers broad authority upon the Commission to regulate the rates, services, etc., of all public utilities which own and operate facilities engaged in the "transmission of electric energy in interstate commerce" and in "the sale of electric energy at *wholesale* in interstate commerce."[37]

If the Commission is correct in its view that petitioners' present operations are interstate in nature and involve the transmission and sale of electric energy at wholesale, a question we will discuss *infra*,[38] then they are drawn within the express language of Part II unless the existence of Part I requires that we read an implied exception for licensees into Part II. Such a construction might appear more plausible if § 201(f)[39] of Part II did not specify those to whom that Part was not intended to apply. That section conspicuously makes no reference to Part I licensees. It seems unlikely that Congress would not have included so important a group as federal water-power licensees among the specific exceptions to Part II if it had actually intended to except them.

The only judicial utterances cited to us in this regard are to the effect that "'Part II, as added in 1935, gives the Commission jurisdiction over the transmission and sale of electricity at wholesale in interstate commerce, whether or not by licensees'"[40] and that the Safe Harbor Company "is not only a *licensee* under Part I but it is also a *public utility* under Part II."[41] Neither *Alabama Power Co.* v. *Federal Power Commission*[42] nor *Niagara Falls Power Co.* v. *Federal Power Commission*,[43] both of which contain language which might be thought to run counter to Part II jurisdic-

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[36] Section 20, 16 U.S.C. § 813.

[37] Section 201(b), 16 U.S.C. § 824(b). (Emphasis supplied.)

[38] See pp. 11-13.

[39] 16 U.S.C. § 824(f).

[40] *Safe Harbor Water Power Corp.* v. *Federal Power Commission*, 124 F. 2d 800, 804 n. 4 (3d Cir., 1941).

[41] *Safe Harbor Water Power Corp.* v. *Federal Power Commission*, 179 F. 2d 179, 185 (3d Cir., 1949), cert. denied 339 U. S. 957 (1950).

[42] 75 U. S. App. D. C. 315, 328, 128 F. 2d 280, 293 (1942).

[43] 137 F. 2d 787, 792-793 (2d Cir., 1943).

tion over a licensee, was a rate case. Neither involved Part II and the possibility of conflict between Parts I and II was not discussed.

Legislative history bearing directly on the point also supports application of Part II to licensees. For example, Representative Rayburn, Chairman of the House Committee reporting the bill, pointed out that there was no need to make certain prohibitions contained in § 305(a), 16 U. S. C. § 825d(a), specifically applicable to licensees because they had already been made applicable to "public utilities" generally. He said, "The Senate bill includes licensees within the provisions of this section, but inasmuch as such [fol. 5704] licensees when interstate operating public-utility companies will be subject to the provisions of the section in any event, licensees have been omitted from the bill as reported, because of the lack of public interest in those companies which are not public utilities."[44]

We consider Part II to have occupied the field with regard to interstate wholesale rates of electric companies. It filled a gap in state regulation of electric companies which had been created by the Supreme Court's decision in the *Attleboro* case.[45] That case made it clear that interstate wholesale rates, as distinguished from interstate retail rates,[46] were beyond the reach of state regulatory Commissions.[47] The new legislation required to bring such rates under federal control, Part II, was drawn in 1935 with an eye to the peculiar problems of wholesale electric companies and in light of the considerable experience with such companies which had been gleaned in the fifteen years since the Federal Water Power Act had been drafted in 1920. It was

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[44] H. R. Rep. No. 1318, 74th Cong., 1st Sess., p. 31 (June 24, 1935).

[45] *Public Utilities Commission* v. *Attleboro Co.*, 273 U. S. 83 (1927). See *Jersey Central Co.* v. *Federal Power Commission*, 319 U. S. 61, 67-68 (1943); *Hartford Electric Light Co.* v. *Federal Power Commission*, 131 F. 2d 953, 964 (2d Cir., 1942).

[46] *Pennsylvania Gas Co.* v. *Public Service Commission*, 252 U. S. 23 (1920).

[47] See discussions in *Illinois Gas Co.* v. *Public Service Co.*, 314 U. S. 498, 504-505 (1942); *Panhandle Pipe Line Co.* v. *Federal Power Commission*, 332 U. S. 507, 514-515 (1947).

apparent to Congress that application of this later scheme of regulation to the interstate wholesale rates of non-licensees alone would have created disparate regulatory treatment of licensees and non-licensees engaged in similar activities. Since this would have conflicted with the objective of Part I, which places primary emphasis upon state regulation in order to make treatment of licensees as much like that of ordinary state public service companies as possible, Congress conferred authority upon the Federal Power Commission to occupy the entire field of regulation of interstate wholesale rates, whether those of licensees or non-licensees. All other rates of licensees, whether engaged solely in intrastate activities or in interstate retail selling, were left to the regulatory scheme provided in Part I. Thus, even if Part I was intended to confer jurisdiction upon the states or the Federal Power Commission to regulate interstate wholesale rates, it was to that extent repealed by Part II.

The only problem suggested to us which may arise from such a construction is that, in the event of recapture by the United States of the site awarded to a licensee, which is also a public utility, payment would have to be made pursuant to a valuation formula contained in Part I, which is said to differ from that used for rate-making in Part II. We hardly think that the intention of Congress to reach all public utilities, whether licensees or non-licensees, under Part II can be ignored in order to eliminate the possibility that there may some day be an occasion for valuation of the property in a manner different from that provided for in Part II. The applicability of Part II to licensees would create no greater effect than would the usual pre-Part II situation, under which a state commission would ordinarily have been regulating the licensee's activities under its own regulatory statute prior to recapture.[48] We note, how-
[fol.5705] ever, that the Third Circuit has pointed out the essential sameness of the valuation formulas of Parts I and II.[49]

In view of our position with regard to the applicability of Part II, it is unnecessary for us to examine the sufficiency of the evidence in the record to support the Commis-

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[48] See *Safe Harbor Water Power Corp. v. Federal Power Commission*, 179 F. 2d at 187.

[49] *Id.* at 188.

sion's finding under Part I that the Maryland and Pennsylvania commissions are unable to agree. But in the event that the Part I question should arise on appeal from our decision, we note that we have examined the record and find substantial evidence to support the Commission's finding on this point.

III

Rejection of petitioners' view that Part I furnishes the sole authority for federal regulation of their operations brings us to the contention that all or almost all their sales are intrastate in nature and hence may not be regulated under Part II. It is said that (1) Penn Water's sales to its Pennsylvania customers for resale are sales of electric energy produced and sold in Pennsylvania; (2) the back-feed energy generated by Baltimore Company to Penn Water and sold by it to its Pennsylvania customers loses its interstate character when it is received by Penn Water and commingled with the Pennsylvania-produced energy. Even if these sales of back-feed are considered interstate, it is suggested that they constitute so negligible a portion of Penn Water's total sales to Pennsylvania customers that they cannot furnish the basis of federal regulation, or that federal regulation may extend only to an allocable portion of interstate sales.

Section 201(b) of the Federal Power Act[50] makes Part II applicable.

> * * * to the transmission of electric energy in interstate commerce and to the sale of electric energy at wholesale in interstate commerce, but shall not apply to any other sale of electric energy or deprive a State or State commission of its lawful authority now exercised over the exportation of hydro-electric energy which is transmitted across a State line. The Commission shall have jurisdiction over all facilities for such transmission or sale of electric energy, but shall not have jurisdiction, except as specifically provided in sections 824-825r of this title, over facilities used for the generation of electric energy or over facilities used in local distribution or only for the transmission of electric energy in intrastate commerce, or

[50] 16 U.S.C. § 824(b).

over facilities for the transmission of electric energy consumed wholly by the transmitter.

We are convinced from an examination of the voluminous materials submitted to us that the Commission properly found Penn Water to be part of an "integrated and coordinated interstate electric system."[51] Energy generated at Safe Harbor and Holtwood flows south to Baltimore and, at times, Baltimore-generated energy moves north along the same line to Safe Harbor and Holtwood where it, together with energy generated there, is delivered to Penn Water's Pennsylvania customers. This movement to and fro is made necessary by the varying electric loads which [fol. 5706] must be supplied at various times of the day. The flow of the Susquehanna River, which is the source of Penn Water's hydro power, is too irregular to carry unaided the large utility loads it is often called upon to handle. Thus, during the river's low periods, hydro power is scarce and Baltimore Company's steam generators are used to "firm up" or keep constant the output of the hydro plants. At such times, the hydroelectric generators are operated only at the peak of the load and, during off-peak hours, the river flow is impounded in plant reservoirs for subsequent use at peak periods. Conversely, during the periods when the river is high, Penn Water's hydroelectric plants are used to supply the heavy loads in both Pennsylvania and Maryland which would otherwise have to be supplied by the more expensive steam generation.

As a result of the carefully coordinated operations of the participants in this interstate energy pool, Penn Water reaps the benefit of Baltimore's considerable and constantly available steam capacity while Baltimore Company enjoys the benefits of the cheaper hydro-electric energy. The activities of each are so meshed that the peak demands of the customers of each can be met easily at all times and with the most economic source of power then available. As the Commission has pointed out, the arrangements now in existence have been "carefully worked out" to meet the needs of the interstate system "as to firm energy requirements, while operations involving firm, interchange and emergency en-

[51] Opinion No. 173, Federal Power Commission, Appendix to Petitioners' Brief, p. 51.

ergy are conducted at all times by a dispatching system controlled by a dispatcher's office in coordination with various operating committees. * * * the constituent companies of this interconnected system plan and coordinate far in advance steam maintenance schedules which are based largely upon the predicted flows of the Susquehanna River and the determination of the availability of hydro energy during periodic steam maintenance outages."[52] Because such an energy pool, drawing upon the extensive steam and hydro capacities of Penn Water, Safe Harbor and Baltimore Company now exists, both Penn Water and Baltimore Company have been able to satisfy commitments which would otherwise be outside their individual capacities, as they are now constituted. Given such interconnected and integrated interstate wholesale operations, there can be no such thing as assigning a particular sale solely to operations within Pennsylvania. Each sale is in effect a pool sale drawn from the integrated interstate system and hence interstate in nature.

The same conclusion was reached by the Third Circuit with regard to another of the participants in this pool, Safe Harbor. The court pointed out that Safe Harbor is "part of a large integrated interstate electric system" and that its electric output "must be treated as an integrated whole."[53] In the second *Safe Harbor* case, the court again held that Safe Harbor's sales "constitute in fact wholesale sales in interstate commerce" because they are delivered to an integrated interstate electric system."[54]

[fol. 5707] We find substantial evidence in the record to support the Commission's factual findings with regard to the interstate nature of Penn Water's sales. It is the nature of the operations underlying the sales which furnishes the basis for Commission action rather than legalistic niceties of

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[52] *Id.* at p. 43.

[53] *Safe Harbor Water Power Corp.* v. *Federal Power Commission*, 124 F. 2d at 802, 807.

[54] 179 F. 2d at 185 n. 9. See also *Jersey Central Co.* v. *Federal Power Commission*, 319 U. S. 61 (1943); *Hartford Electric Light Co.* v. *Federal Power Commission*, 131 F. 2d 953, 956-958 (2d Cir., 1942).

title and place of sale.[55] Those operations bring petitioners' rates and services within the reach of Part II of the Federal Power Act. The Commission did not assume jurisdiction over any direct consumer sales. It "was meticulous to take in only territory which this Court had held the States could not reach"[56]—interstate sales at wholesale.

IV

Penn Water challenges the Commission's determination of rate of return and its calculations of the rate base on both legal and evidentiary grounds. Ever since *Hope Natural Gas*[57] was decided, such challenges have become increasingly difficult to sustain. That case established the proposition that the Federal Power Commission is "'not bound to the use of any single formula or combination of formulae in determining rates,' so long as the 'total effect,' 'impact' or 'end result' of the rate order 'cannot be said to be unjust or unreasonable.' The limits set by the Court are deliberately broad, resulting both from notions of special competence and the conception of rate-making as a primarily legislative process. So long as the public interest—i.e., that of investors and consumers—is safeguarded, it seems that the Commission may formulate its own standards."[58] The "Commission may adopt any method of valuation for rate base purposes so long as the end result of the rate order 'cannot be said to be unjust and unreasonable'."[59] If a rate order produces "adequate revenues above operating expenses (including depreciation), to pay interest on the bonds, dividends on the stock and, in general, maintain the

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[55] *Illinois Gas Co.* v. *Public Service Co.*, 314 U. S. 498, 503-504 (1942); *Jersey Central Co.* v. *Federal Power Commission*, 319 U. S. 61, 69 *et seq.* (1943).

[56] Cf. *Panhandle Pipe Line Co.* v. *Federal Power Commission*, 332 U. S. 507, 519 (1947).

[57] *Federal Power Commission* v. *Hope Natural Gas Co.*, 320 U. S. 591 (1944).

[58] *Washington Gas Light Co.* v. *Baker*, —— U. S. App. D. C. ——, 188 F. 2d 11, 14-15, cert. denied 340 U. S. 952 (1951).

[59] *Id.* at p. 18.

financial integrity of the enterprise,"[60] it will not be disturbed. It still remains for us, however, to examine the theory upon which the Commission purported to act and to assure that its action was within the realm of allowable discretion and supported by substantial evidence.

a. Rate of return

Turning first to that part of Penn Water's petition which is addressed to rate of return, we find it argued that the 5¼ per cent allowed by the Commission on that part of the bonds and stock representing actual investment does not satisfy the test established in *Hope* and referred to above. Determination of the fairness of a rate of return requires "a study of the capital costs of the business, such as service on the debt and dividends on the stock, in the light [fol. 5708] of returns on investments in other enterprises having a similar risk factor. Only upon such evidence can the Commission determine what is required 'to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital'."[61] This "standards of finance resting on stubborn facts"[62] was satisfied by 324 U. S. 581, 605 (1945).
the Commission which carefully investigated Penn Water's position in relation to that of other utilities and concluded that it was less subject to risk than are most other utility companies. The assurance it receives from Baltimore Company, under presently existing arrangements, of revenues sufficient to cover operating expenses and a fair return on its investment removes much of even the small amount of risk ordinarily found in public utility companies. To refer, as Penn Water does, to the extraordinary risk involved in the abatement of Baltimore Company's payments to it if it fails to deliver energy because of acts of God is to illustrate how carefully insulated Penn Water really is from any substantial risk. Nor is the variability of the flow of the Susquehanna a substantial risk factor at present since Baltimore Company's payments to Penn Water are not dependent upon the latter company's output.

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[60] *Id.* at p. 15.
[61] *Id.* at p. 16.
[62] *Colorado Interstate Co.* v. *Federal Power Commission*,

It does not prove Penn Water's case to point to the higher than 5¼ per cent return earned by the average utility. Safe Harbor, for example, was allowed only a five per cent return by the Commission. On review, the Third Circuit said, "* * * It would be difficult to conceive of a more secure hydroelectric project"[63] and affirmed the rate order. In view of the similarity of their market and financial arrangements, it would seem that Penn Water's risks approximate Safe Harbor's more than they do those of the "average" utility. "Each utility presents an individual problem."[64] Stability of market and income, proximity of the company to the capital markets, a long history of satifactory earnings—all these are factors which go into the complex of fair return. Under the circumstances of this company, the Commission thought a 5¼ per cent return applied to the rate base and designed to provide 3.17 per cent for bonds, 5.21 per cent for preferred stock and 8.64 per cent for common stock and surplus was "fair." We think the Commission had substantial evidence before it to support its findings of fact on this phase of the case and that the rates allowed meet the test laid down in the *Hope* case. Nor do we think that a rate of return based upon the historical cost of capital or petitioners' milder approximation thereof, the competitive cost of capital, is a necessary part of that test. We think it sufficient to point out that cost of capital studies such as the one presented to the Commission have withstood judicial review in too many cases for us to reject the one now before us as a proper criterion of rate of return.

b. Rate base.

Petitioners contend that the Commission improperly excluded more than two million dollars from the amount found fol. 5709] by it to be the gross investment in property used and useful in the public service. Commission deduction of the reserve for depreciation from the gross investment in arriving at the net investment rate base is also challenged. The propriety of such a deduction under a regulatory formula like that in Part II is too well settled to warrant our discussing it at this time. Nor would Part I, if applicable,

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[63] 179 F. 2d at 199.

[64] *Driscoll* v. *Edison Co.*, 307 U. S. 104, 119-120 (1939).

require a different conclusion.[65] As to the items excluded from the rate base, we think the Commission acted properly and upon substantial evidence. We will discuss only the more important of them:

1. *Flashboard development costs*—The Commission included in the rate base the cost incurred in 1911 and 1912 in connection with the original installation of the project flashboard system but excluded almost $50,000 expended from 1913 to 1921. Such expenditures were for renewal of flashboards or for experimentation and testing in regard to improvement of flashboards, which experiments were ultimately abandoned. The record discloses that flashboards must be replaced so often, as a result of being carried away in whole or in part by high water, that expenditures in connection therewith are properly treated as operating expense and hence not includible in the rate base. Nor need the Commission include in the rate base abandoned experiments which do not manifest themselves in property useful in the public service.[66] There is ample evidence in the record to demonstrate that these experiments neither were necessary to nor contributed to the flashboard improvement ultimately adopted.

2. *Interest during construction*—The Commission allowed 6 per cent interest on construction costs during the period of construction to be included in the rate base on the theory that "during the period of construction 'there is no operating income available with which to meet these necessary charges incident to construction'."[67] But Penn Water disputes the finding that there was a cessation of construction for 22 months during the more than six year period of construction and the attendant exclusion from the rate base of interest for that period, amounting to over $700,000. Penn Water also objects to exclusion of other losses found by the Commission to be traceable to the cessation of construc-

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[65] *Safe Harbor Water & Power Corp.* v. *Federal Power Commission*, 179 F. 2d at 194.

[66] *Pennsylvania Power & Light Co.* v. *Federal Power Commission*, 139 F. 2d 445, 452 (3d Cir., 1944).

[67] *Puget Sound Power & Light Co.* v. *Federal Power Commission*, 78 U. S. App. D. C. 143, 144, 137 F. 2d 701, 702 (1943).

tion. "To justify allowance of interest during construction as part of the cost of the project it must appear that the licensee carried out his obligation * * * to prosecute the construction with due diligence'."[68] Here, the cessation of construction was due to the inability of Penn Water to obtain funds after it found that its financing was inadequate. Even if it be conceded that the financial market at the time of cessation of construction was as unsettled as Penn Water says, it does not follow that rate payers should now bear the burden of its failure to provide adequate financing in advance of construction to sustain the entire project. Such losses are as much due to a risk of the business as were the losses excluded from the rate base in the *Puget Sound* case. [fol. 5710] We agree with the Commission's view, expressed in its brief, that "Interest on the idle investment and other losses due to financial inability to go into operation as soon as the physical conditions of normal construction would permit are no more to be recouped from rate payers in later years than past losses in operation * * *."[69]

3. *Claimed costs from issuance of common stock for properties*—Twenty thousand shares of common stock in Penn Water's predecessor, McCall Ferry Power Company, were issued as part payment for certain properties. These shares are said to represent $500,000 in plant cost which should be included in the rate base. There was substantial evidence to support the Commission's conclusion that almost all the shares were acquired by one Hutchinson in a transaction which was not at arm's length and represented a profit beyond the cost of the properties to him. Hutchinson was part of a group which pooled properties and banking services necessary for the project and issued stock to itself beyond what the Commission found to be proper compensation for properties and services. Under such circumstances, especially since "neither party had any interest to reduce the nominal capitalization,"[70] the stock represented paper capitalization of anticipated profits rather than actual corporate assets. Commission exclusion of the 20,000 shares

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[68] *Ibid.*

[69] Respondent's Brief, pp. 71-72.

[70] *Niagara Falls Power Co. v. Federal Power Commission*, 137 F. 2d 787, 793 (2d Cir., 1943).

resulting from this transaction was merely an elimination of the water in the stock as measured by the estimated original cost of the plant.

4. *Expenditures previously charged to operating expense or to depreciation reserve*—These expenditures total almost $100,000. They were properly excluded from the rate base because they have already been recovered by investors in the form of annual charges to operating expenses and depreciation reserve.[71]

V

The Commission found that Baltimore Company was entitled to $1,733,318 of the total rate reduction of $1,954,261 ordered by it, based on 1946 operations. This allocation is challenged by petitioners who argue, *inter alia*, that it is based upon (1) an incorrect reading of certain governing contract provisions; (2) an incorrect measure of the cost of steam generated energy and capacity supplied by Baltimore Company and Penn Water; (3) an improper overstatement of revenues due to Baltimore Company from Penn Water. In view of what we have already said about the effect of the Fourth Circuit decision upon this rate proceeding, *supra*, pp. 3-8, there is no need to consider whether the various contracts involved herein are part of an arrangement declared illegal under the antitrust laws.

(1) Penn Water's generating capacity alone is inadequate to meet its commitments to its Pennsylvania customers. It makes up the deficiency in part through use of its contractual entitlement to one third of Safe Harbor's output and, to the extent of a deficiency thereafter, by diversion of part of Baltimore's two-thirds entitlement to Safe Harbor's output. The Commission included this diversion from [fol. 5711] Baltimore Company's entitlement as energy supplied by Baltimore to Penn Water for which Baltimore was entitled to a credit against Penn Water's cost of services to it. Penn Water argues, however, that the 2:1 entitlement to Safe Harbor's output does not arise until *after* Safe Harbor has met obligations, which it shares *jointly* with Penn Water, to certain of Penn Water's Pennsylvania customers.

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[71] See *Federal Power Commission* v. *Natural Gas Pipeline Co.*, 315 U. S. 575, 591 (1942); *Washington Gas Light Co.* v. *Baker*, 188 F. 2d at 20.

Such a reading of the contract would mean that the energy said to be diverted from Baltimore Company by Penn Water to satisfy those customers was not Baltimore's at all and hence that no credit would be due to it. Penn Water's view proceeds from its assumption that since Safe Harbor is a party to the contracts referred to, it is obligated thereunder and that such contracts are obligations "to serve imposed on [it] * * * by law" which are specifically exempted from the 2:1 entitlement arrangement.

We think the evidence before the Commission amply disclosed that Safe Harbor was merely a nominal party to the contracts with the Pennsylvania companies and that it was made such as part of a short-lived attempt to obtain certain tax advantages. That attempt was never brought to fruition. If it had been, it would have resulted in a change of the three-way contract to provide that Baltimore and Penn Water "would purchase the *balance* of the Safe Harbor output in the proportion of two-thirds and one-third respectively." This contemplated change, which was never made, would have accomplished what Penn Water would like us to do even without the change. The three-way contract has consistently been interpreted by Safe Harbor and Penn Water in reports to stockholders and to various regulatory agencies as making a 2:1 division of Safe Harbor's entire output between Baltimore Company and Penn Water. And the same construction of the contract was referred to in the second *Safe Harbor* case when the court said, "Safe Harbor's output is delivered to an integrated interstate electric system under the terms of the so-called '1931 contract,' two-thirds of the energy being sold to the Maryland Company [Baltimore Company] and the remaining one-third going to the Pennsylvania Company [Penn Water]."[72]

The materials before the Commission were hardly consistent with the interpretation now sought by Penn Water. They pointed instead to the view, adopted by the Commission, that Baltimore Company had a two-thirds entitlement from Safe Harbor which was diverted by Penn Water in order to satisfy its Pennsylvania commitments.

(2) Penn Water contends that, even if Baltimore Company's energy was diverted by it for use in fulfilling its

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[72] 179 F. 2d at 184-185 n. 9.

Pennsylvania commitments, the Commission erred in the basis used by it for computing the resultant credit owing from Penn Water to Baltimore. Pointing to Article VII of Safe Harbor's Rate Schedule, Penn Water says that the credit should be based upon Safe Harbor's hydro costs rather than Baltimore Company's steam generated costs. We agree with the Commission's view that Article VII does not apply to voluntary diversions of energy such as are involved here. It applies only to failure of Penn Water, through impairment of its transmission facilities, to transmit Safe Harbor energy to Baltimore Company. There was no such impairment here but instead, there was a diversion at Penn Water's request and with Baltimore's consent, of [fol. 5712] part of the latter company's entitlement. If Penn Water's view were to prevail and it were to pay Baltimore only the hydro costs, Baltimore Company would have no incentive to permit diversion of its hydro entitlement. Such diversion requires it to use its more expensive steam generating facilities, a use for which it is compensated by Penn Water's payment of the cost of such steam generation to the extent it replaces Baltimore's hydro entitlement. This arrangement benefits Penn Water because it is enabled to satisfy commitments it could not otherwise undertake by paying the cost of the least expensive steam energy available at the time of need. Similarly, it is beneficial to Baltimore Company because it brings the less expensive hydro power into its system. The conclusions of the Commission on this point are proper and are supported by substantial evidence.

(3) The Commission included as part of Penn Water's cost of service to Baltimore Company the cost of energy sold by Penn Water as economy interchange—energy generated at a lower cost plant and used to replace generation at a higher cost plant—to certain of its Pennsylvania customers. And as part of what Penn Water owed to Baltimore Company, the excess revenues derived from such sales "for Baltimore's account" were included. The evidence supports the Commission's view that Baltimore Company is entitled to all of Penn Water's output and of Penn Water's one-third Safe Harbor entitlement remaining after Penn Water's firm power obligations to its Pennsylvania customers are met. The sales of interchange energy were sales of energy diverted from Baltimore Company's entitlement

and, as such, Baltimore was entitled to the revenues therefrom less, as we have indicated, payment to Penn Water for its cost of service.

VI

Penn Water raises many other points which, in its view, constitute error requiring us to reverse in part or to remand. Many of these points involve just the sort of weighing of evidence and making of pragmatic adjustments which fall within the special competence of an expert agency and which should not be interfered with by a court unfamiliar with day-to-day operations and complex technological and financial materials. Our review is designed to leave to the Commission the flexibility which is necessary if it is satisfactorily to discharge its function of protecting the public interest, and yet to prevent arbitrary action outside the scope of the Commission's authority. We have examined all the points raised and are convinced that the Commission's treatment of each one was within the range of its statutory authority and was supported by substantial evidence.

The motions to set aside or to remand the Commission's orders are denied and those orders are

Affirmed.

WILBUR K. MILLER, *Circuit Judge*, dissents and will file an opinion setting forth his views at a later date.

[fol. 5713] (File endorsement omitted)

UNITED STATES COURT OF APPEALS, APRIL TERM, 1951

PENNSYLVANIA WATER & POWER COMPANY, a Corporation and Susquehanna Transmission Company of Maryland, a Corporation, *Petitioners*,

v.

FEDERAL POWER COMMISSION, *Respondent*,

No. 10,236

[File endorsement omitted]

No. 10,239

PENNSYLVANIA PUBLIC UTILITY COMMISSION, *Respondent*

v.

FEDERAL POWER COMMISSION, *Respondent*,

No. 10,531

PENNSYLVANIA WATER & POWER COMPANY, a Corporation, and Susquehanna Transmission Company of Maryland, a Corporation, *Petitioners*,

v.

FEDERAL POWER COMMISSION, *Respondent*

On Petitions for Review of Orders of the Federal Power Commission and on Motions to Set Aside Orders of the Federal Power Commission.

Before: Wilbur K. Miller, Bazelon and Fahy, Circuit Judges.

JUDGMENT AND DECREE—Filed July 3, 1951

The above-entitled cases came on to be heard on the transcript of the record from the Federal Power Commission, and were argued by counsel.

ON CONSIDERATION WHEREOF, it is ORDERED [fols. 5714-5720] by this court that the motions of petitioners filed herein December 29, 1950, to set aside the orders of the Commission on review herein or to remand these pro-

ceedings to the Commission be, and the same are hereby, denied.

IT IS FURTHER ORDERED by this Court that the orders of the Federal Power Commission on review herein be, and the same are hereby, affirmed.

Per Circuit Judge Bazelon.

Dated: July 3, 1951.

Circuit Judge Wilbur K. Miller dissents and will file an [fols. 5721-5739] opinion setting forth his views at a later date.

UNITED STATES COURT OF APPEALS

[Title omitted]

Before Wilbur K. Miller, Bazelon and Fahy, Circuit Judges

ORDER—Filed July 6, 1951

On consideration of the motion of the petitioners, Pennsylvania Water and Power Company and Susquehanna Transmission Company of Maryland, for leave to file a memorandum decision of the United States District Court for the District of Maryland, for leave to file a supplemental brief, and for oral hearing on the contentions urged in said supplemental brief, of the response of the respondent, of the answer of the intervenors, and of the replies thereto, it is

ORDERED by the Court as follows:

(1) That the motion for leave to file a memorandum decision be granted, and that the Clerk be, and he is hereby, directed to file forthwith the memorandum decision heretofore lodged with him;

(2) That the motion for leave to file a supplemental brief be, and it is hereby, denied;

(3) That the motion for oral hearing be, and it is hereby, denied.

Per Curiam.

Dated: July 6, 1951.

[fol. 5740] (File endorsement omitted)

IN UNITED STATES COURT OF APPEALS

EXHIBIT "A"—TO PETITION FOR REHEARING—Filed July 18, 1951

UNITED STATES DISTRICT COURT
DISTRICT OF MARYLAND

PENNSYLVANIA WATER & POWER COMPANY, *Plaintiff*,
PENNSYLVANIA PUBLIC UTILITY COMMISSION, INTERVENER,

v.

CONSOLIDATED GAS, ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE, *Defendant*,

PUBLIC SERVICE COMMISSION OF MARYLAND, *Intervener*

Civil Action

No. 4179

JUDGMENT AND ORDER ON MANDATE

Appeals having heretofore been taken to the United States Court of Appeals for the Fourth Circuit by the plaintiff, Pennsylvania Water & Power Company, and the intervener, Pennsylvania Public Utility Commission, from the judgment and order made in the United States District Court for the District of Maryland on the 18th day of March, 1950, dismissing the amended and supplemental complaint in this action; and said appeals having been duly heard by said Court of Appeals and that Court having on September 30, 1950 made and entered its judgment reversing said judgment and order appealed from with costs in favor of the plaintiff, Pennsylvania Water & Power Company, and of intervener, Pennsylvania Public Utility Commission, and [fol. 5741] with instructions to this Court to enter a declaratory judgment in accordance with the opinion and judgment of said Court of Appeals; and an order having been entered by the United States Court of Appeals, upon motion of the defendant, on October 26, 1950, staying the mandate and execution and enforcement of said judgment pending application by defendant to the Supreme Court of the United

States for a writ of certiorari within thirty days thereof, and such petition having been filed, and a petition for certiorari also having been filed by the Public Service Commission of Maryland, and said petitions for certiorari having been denied by the Supreme Court on December 11, 1950; and said Court of Appeals having duly issued its mandate on the 14th day of December, 1950, commanding that such proceedings be had in this cause, in conformity with the opinion and judgment of said Court of Appeals, as according to right and justice, and the laws of the United States, ought to be had, and said mandate having been duly filed in the office of the Clerk of this Court on the 15th day of December, 1950; and said Court of Appeals having filed an opinion on January 10, 1951, interpreting its said mandate;

Now, upon said appeal and all the papers and proceedings with respect thereto, and upon said mandate, it is

ORDERED AND ADJUDGED in favor of the plaintiff, Pennsylvania Water & Power Company, and the intervener, Pennsylvania Public Utility Commission, and against the defendant, Consolidated Gas Electric Light and Power Company of Baltimore, and the intervener, Public Service Commission of Maryland, this 17th day of January, 1951, that:

1. Said judgment and order of March 18, 1950, be, and the same hereby is, reversed and set aside, with costs, to be taxed by the Clerk;

[fol. 5742] 2. The following agreements between the plaintiff, Pennsylvania Water & Power Company, and the defendant, Consolidated Gas, Electric Light and Power Company of Baltimore:

Agreement as of December 31, 1927,
Supplemental Agreement as of June 1, 1931, and
Supplemental Agreement as of September 29, 1939,

are declared to be void and of no effect.

3. The temporary restraining order granted herein on February 9, 1949 is hereby dissolved.

/s/ WILLIAM C. COLEMAN,
Chief Judge,
U. S. District Court.

[fol. 5743] In United States Court of Appeals for the District of Columbia Circuit

Exhibit "B"—To Petition For Rehearing—Filed July 18, 1951

In the United States District Court for the District of Maryland—

Civil No. 5253

Pennsylvania Water & Power Company, *Plaintiff*,
Pennsylvania Public Utility Commission,
Plaintiff-Intervenor

v.

Consolidated Gas Electric Light and Power Company of Baltimore and Safe Harbor Water Power Corporation,
Defendants,

Public Service Commission of Maryland, *Defendant-Intervenor*

Judgment

This action having come on for hearing on April 20, 1951 on motion of plaintiffs Pennsylvania Water & Power Company and Pennsylvania Public Utility Commission for summary judgment declaring that the agreement between Pennsylvania Water & Power Company, Consolidated Gas Electric Light and Power Company of Baltimore and Safe Harbor Water Power Corporation dated June 1, 1931, and the agreements supplementary thereto dated August 1, 1932 and November 22, 1939, are illegal and invalid under the antitrust laws and the laws of Pennsylvania covering public utilities and are contrary to public policy and *ultra vires* Safe Harbor Water Power Corporation, and coun-[fol. 5743] sel for the parties having been heard, and due consideration having been given, and the Court having filed its memorandum opinion herein dated May 3rd, 1951, it is this 21st day of May, 1951, by the United States District Court for the District of Maryland,

Ordered and Adjudged, that:

1. Plaintiffs' motion for summary judgment is hereby granted; and

2. The agreement between Pennsylvania Water & Power Company, Consolidated Gas Electric Light and Power Company of Baltimore and Safe Harbor Water Power Corporation dated June 1, 1931, and the agreements supplementary thereto dated August 1, 1932 and November 22, 1939, are on their face invalid and illegal; said agreements contain restrictive and other provisions which are *per se* in violation of the Sherman Anti-Trust Act; said agreements violate the laws of Pennsylvania governing public utilities and are therefore illegal; said agreements are contrary to public policy, and the common law and therefore invalid; and said agreements place the internal control of Safe Harbor Water Power Corporation in the hands of others and destroy the corporate virility of said Corporation and are therefore *ultra vires* and invalid; and accordingly said agreements are hereby declared to be void and of no effect.

/s/ Albert V. Bryan,
United States District Judge,
Specially Designated to Sit in a District
Court for the District of Maryland.

Norfolk, Va.

Filed 22nd May 1951.

(File endorsement omitted)

UNITED STATES COURT OF APPEALS

(Title omitted)

[File endorsement omitted]

Before: Wilbur K. Miller, Bazelon and Fahy, Circuit Judges.

Order Denying Petitions for Rehearing—Filed September 6, 1951

On consideration of the petitions for rehearing filed in the above-entitled cases and of the intervenors' answer thereto, it is

ORDERED by the Court that the petitions for rehearing be, and they are hereby, denied.

Dated: September 6, 1951.

Per Curiam.

Circuit Judge Wilbur K. Miller is of the opinion that the [fol. 5745-5833] petitions for rehearing should be granted.

[fol. 5834] SUPREME COURT OF THE UNITED STATES

October Term, 1951

No.

PENNSYLVANIA WATER & POWER COMPANY AND SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND, *Petitioners*,

v.

FEDERAL POWER COMMISSION, and CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE and PUBLIC SERVICE COMMISSION OF MARYLAND, INTERVENORS, *Respondents*

STIPULATION

IT IS HEREBY STIPULATED AND AGREED by and between counsel for the respective parties in the above entitled cause that:

For the purpose of the petition for a writ of certiorari, and in the event the petition be granted, for the purpose of hearing and determining the case on the merits, the printed record shall consist of the following:

1. Joint Appendix, Vols. 1 to 15, inclusive, Docketed September 19, 1950, as printed for use in the court below.

2. Index to Joint Appendix (1 volume), Docketed September 19, 1950, as printed for use in the court below.

3. Appendix to Petitioners' brief, Docketed September 19, 1950, as printed for use in the court below.

4. Supplemental Appendix to Petitioners' brief, Docketed September 19, 1950, as printed for use in the court below.

5. Appendix attached to Petitioners' motion to postpone date of oral argument and to postpone time for filing reply brief, Docketed November 21, 1950.

6. Exhibit to Petitioners' motion to set aside order of the Federal Power Commission and for further or alternative relief, Docketed December 29, 1950.

[fol. 5835] 7. Petitioners' partial reply to objection to motion to set aside orders of the Federal Power Commission, Docketed January 15, 1951.

8. Exhibit to Petitioners' motion for leave to file a supplemental brief and for further relief, Docketed May 8, 1951.

9. Opinion by Circuit Judge Bazelon, Circuit Judge Miller dissenting, Docketed July 3, 1951.

10. Judgment affirming orders of the Federal Power Commission, Docketed July 3, 1951.

11. Per Curiam order directing Clerk to file memorandum decision of United States District Court for the District of Maryland and denying motion of Petitioners for leave to file supplemental brief and denying Petitioners' motion for oral hearing, Docketed July 6, 1951.

12. Exhibits A and B to Petitioners' petition for rehearing, Docketed July 18, 1951.

13. Order denying Petitioners' petition for rehearing, Docketed September 6, 1951.

IT IS FURTHER STIPULATED AND AGREED that any of the parties may refer in their briefs and argument to the record filed in the Supreme Court of the United States, including any part thereof which has not been printed.

Counsel for Petitioners also stipulate that they will move in the United States Court of Appeals for the District of Columbia Circuit to have the original transcript of record (74 volumes), docketed in that court on June 2, 1949, sent to the Supreme Court.

(Sgd.) Raymond Sparks, Counsel for Petitioners, Pennsylvania Water & Power Company and Susquehanna Transmission Company of Maryland. (Sgd.) Thomas M. Kerrigan, Ass't Counsel for Pennsylvania Pubulic Utility Commission. (Sgd.) Philip B. Perlman, Solicitor General of the United States. (Sgd.) Bradford Ross, General Counsel of Federal Power. (Sgd.) Alfred P. Ramsey, Counsel for Consolidated Gas Electric Light and Power Company of Baltimore, Intervenor-Respondent. (Sgd.) Charles D. Harris, Counsel for Public Service Commission of Maryland, Intervenor-Respondent.

September, 1951.

[fol. 81] [Stamp:] United States Court of Appeals for the District of Columbia Circuit. Filed Oct. 4, 1951, Joseph W. Stewart, Clerk.

UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

No. 10236

PENNSYLVANIA WATER & POWER COMPANY, a Corporation, and SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND, a Corporation, Petitioners,

v.

FEDERAL POWER COMMISSION, Respondent

No. 10239

PENNSYLVANIA PUBLIC UTILITY COMMISSION, Petitioner,

v.

FEDERAL POWER COMMISSION, Respondent

No. 10531

PENNSYLVANIA WATER & POWER COMPANY, a Corporation, and SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND, a Corporation, Petitioners,

v.

FEDERAL POWER COMMISSION, Respondent

On Petition for Review of Orders of the Federal Power Commission and on Motions to Set Aside Orders of the Federal Power Commission.

Dissenting Opinion by Circuit Judge Wilbur K. Miller to Opinion of Court Filed July 3, 1951

Filed October 4, 1951

WILBUR K. MILLER, Circuit Judge, *dissenting*: It is my view that this court should have granted petitioners' motions to annul the rate reduction orders of the Federal

Power Commission. The decision of the United States Court of Appeals for the Fourth Circuit, which held null and void the contractual arrangement between Pennsylvania Water & Power Company and Consolidated Gas [fol. 82] Electric Light and Power Company of Baltimore, to which the orders were intended to apply prospectively, imperatively required that the case before us be remanded to the Commission to work out with the utilities some different plan for interchange of energy which would not violate any state or federal law and which would not be contrary to public policy. This should have been done because the Commission's orders stood in a vacuum after the Fourth Circuit held the contract invalid; the only service to which they can have application may not lawfully be continued.

But the Commission has ordered the two companies to continue to observe and be governed by all the provisions of the old contract which are "in and of themselves lawful," —a qualification which overlooks the fact that the Fourth Circuit condemned the contract in its entirety. And the majority of this court apparently hold that the Power Commission has authority to cause the *whole* contract to remain in effect, since they conclude that federal anti-trust laws do not apply to utilities regulated under Part II of the Federal Power Act. Relying on that theory, my brethren say,

> "The motions to set aside or to remand the Commission's orders on the basis of the Fourth Circuit's decision and the other points referred to above are denied."

It is thus clear that, despite the voluminous record in this case,[1] the numerous and sometimes lengthy briefs, and three days of oral argument, the basic issue is a simple one. Has the Federal Power Commission authority to order a combination of these two utilities under terms and conditions which, if arranged by private contract between them,

[1] The Power Commission filed with us a transcript in 75 volumes containing an aggregate of 26,876 pages. Appendices prepared by the parties abbreviated that bulk to 17 volumes containing 5,338 printed pages.

would clearly violate the federal anti-trust laws and the public utility laws of Pennsylvania? If the Commission has such power, the majority have correctly denied the motions to annul and remand. If not, then those motions should have been granted. Before discussing what I regard as the basic question, it may be well to review somewhat in detail the proceeding before the Power Commission and the litigation in the Fourth Circuit.

I

The Commission instituted in September, 1944, an investigation of the rates and charges of Penn Water, following which it entered an order on January 5, 1949, requiring a large reduction in Penn Water's annual revenue. The major portion of the reduction was allocated to Consolidated; indeed, the reduction ordered in Penn Water's charges against that company exceeded by approximately $500,000 the sum which Consolidated had paid Penn Water during the "test year" of 1946. The Commission interpreted the 1931 contract as entitling Consolidated to all Penn Water's energy except that required to meet its firm commitments to other customers; as a result of that interpretation the Commission concluded that very substantial sales by Penn Water to others had really been for the account of Consolidated, and allocated the reduction accordingly.

The rate order was accompanied by a lengthy opinion which makes it clear that the Commission assumed the [fol. 83] continuance of the 1931 contract and based its order, which was to operate prospectively, upon the relationship created by that instrument as it construed it.

For example: (a) The Commission's jurisdictional findings as to the use of Penn Water's facilities for the transmission of electric energy at wholesale in interstate commerce were based upon the assumption that the method of operation required by the contract of 1931 would continue. (b) The allocation of cost of service which the Commission made was premised upon its interpretation of Consolidated's entitlements and Penn Water's obligations under the 1931 contract. (c) The rate of return which the Commission allowed Penn Water was largely based upon the

financial security which the Commission thought Penn Water enjoyed under the 1931 contract. Moreover, the form of rate schedule later prescribed followed the residual-entitlement, specified-return formula of the 1931 contract.

Having observed the patent fact that the rate reduction order was based upon, and applied only to, the combination of facilities and interchange of energy set up by the 1931 contract, Penn Water applied to the Power Commission on January 28, 1949, for a rehearing. It sought to show that the order ought not to be premised upon a contractual relation which it regarded as illegal and which, if judicially found unlawful, could not continue to exist.

Among other things, Penn Water pointed out to the Commission that on December 20, 1948, after the record in the Commission's proceeding had been closed, it had terminated the 1931 contract by notice to Consolidated; and that it had sued Consolidated in the United States District Court for the District of Maryland for a declaration that the contract was invalid and unenforceable.[2] Apparently this was

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[2] In the course of its application for rehearing, Penn Water stated to the Commission:

> "(c) Since the record in the proceeding has been closed the purported contract referred to as supplemented, has been terminated by notice dated December 20, 1948; and if given the opportunity on rehearing Petitioners hereby offer to prove:
>
> "(i) The fact of such termination;
>
> "(ii) The contract was null, void, and unenforceable because the basic agreements were made at a time when Penn Water and Baltimore Company [Consolidated] were affiliated through substantial ownership by Baltimore Company of Penn Water stock and by interlocking directors and officers; the basic agreements were never approved or ratified by the stockholders of Penn Water; the effect of Articles IV and V of the supplemental agreement of June 1, 1931, particularly as construed in practice by Baltimore Company, made the contract *ultra vires* and contrary to public policy; and such supplemental agreement constituted an agreement

[fol. 84] the first time the Federal Power Commission had been officially informed that Penn Water had given notice of termination of what the Commission calls the "system foundation contracts," and that Penn Water considered them violative of the anti-trust laws and the utility laws of Pennsylvania and had sued for a declaration to that effect.

On February 26, 1949, the Power Commission denied the application for rehearing and filed an opinion in response to it, in the course of which it said:

". . . If there are questions as to the legality of the foundation contracts which are in litigation, as Respondents' application for rehearing indicates, the validity of our order is not dependent upon the decision of those questions. In our opinion and order *we took care to leave the continuation of the operation of the integrated and interconnected system*[3] *in full*

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in unreasonable restraint of trade and in unreasonable restriction of competition in the generation and sale of electrical services, and unreasonably limited the output of electrical energy contrary to the laws of the United States, including Section 1 of the Sherman Anti-trust Act of July 2, 1890 (15 U. S. C. 1946 ed. § 1; 26 Stat. 209, 50 Stat. 693), Section 5 of the Federal Trade Commission Act of September 26, 1914 (15 U. S. C. 1946 ed. § 45; 38 Stat. 719), and Section 10(h) of the Federal Power Act (16 U. S. C. 1946 ed. § 803(h); 41 Stat. 1068, 49 Stat. 842), and to the laws of Maryland and Pennsylvania.

"(iii) Baltimore Company committed material breaches of the contract which justified its termination; and

"(iv) The foregoing matters are now in litigation between Penn Water and Baltimore Company on complaint of Penn Water for declaratory and other relief, before the United States District Court for the District of Maryland, Civil Action No. 4179."

[3] This refers, of course, to the two sets of facilities as operated under the contract.

effect, merely changing the rates, as shown by our statement wherein we specifically stipulated that

"'The present arrangement whereby sales to Pennsylvania customers are made on a firm basis on definite rate schedules whereas Baltimore Company takes what is left and assures Respondents of the recovery of all proper operating expenses, depreciation, taxes and a fair return, is the most particable under the circumstances. *That arrangement will, therefore, be continued* with, however, such modifications as are necessary to accomplish the reductions mentioned above to Pennsylvania Power & Light, Philadelphia Company, Metropolitan Company and Baltimore Company.'" (My emphasis.)

Later in 1949—on October 27—the Commission prescribed a rate schedule for Penn Water's service to Consolidated which was designed to effectuate the reduction in Penn Water's revenue which it had ordered on January 5. The last paragraph of the October order is as follows:

"The foregoing provisions supersede only the rates and charges heretofore made, demanded, collected or assessed against Baltimore Company by Penn Water and Transmission Company. All other provisions of the aforementioned contracts, in and of themselves lawful prescribing or defining the power, energy and transmission services to be furnished, or any classification, practice, regulation or rule affecting such services, which several provisions are incorporated herein by reference, shall be observed and be in force."

The revenue reduction order of January 5, 1949, and the rate order of October 27, 1949, are those which this court was asked to review.

II

While the proceeding before the Power Commission, which has just been described, was in progress, the litigation in the Fourth Circuit began. As of June 1, 1931, Penn [fol. 85] Water and Consolidated, which were then under common dominance, had drastically amended a previously existing contract between them so as to form a combination

of their utility facilities under terms which made Penn Water a virtual vassal of Consolidated. Fifteen years later the two corporations ceased to be under common control and thereafter each was managed independently. But the basic contract of 1931, burdensome and restrictive as to the Pennsylvania company, not only continued to define and govern the relationship between the two utilities, but by its terms was to endure until 1980,—a bleak prospect indeed for Penn Water.

Due to differences and disputes which developed, Consolidated invoked the arbitration provisions of the contract on September 1, 1948. Shortly thereafter, Penn Water instituted suit in the United States District Court at Baltimore, asking that the arbitration provisions be declared unenforceable and that Consolidated be enjoined from proceeding thereunder. It gave notice of termination to Consolidated and in an amended complaint asked that the 1931 agreement be struck down in its entirety.

Thereupon Consolidated applied to the District Court for a restraining order and on February 9, 1949, the court restrained Penn Water, pending final determination of the issues, from doing anything in respect to the generation, transmission and disposition of power covered by the 1931 agreement in any manner different from the procedure theretofore followed in the performance of the contract. The District Court filed an opinion [4] on February 29, 1950, declaring the 1931 contract valid, and directing arbitration to proceed.

Penn Water appealed to the United States Court of Appeals for the Fourth Circuit and that court, on September 30, 1950, handed down an exhaustive opinion [5] reversing the judgment of the District Court. The appellate court held the 1931 contract invalid as contrary to public policy and as violative of the Sherman and Clayton Acts and the

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[4] *Pennsylvania Water & Power Co.* v. *Consolidated Gas Electric Light & Power Co.*, 89 F. Supp. 452.

[5] *Pennsylvania Water & Power Co.* v. *Consolidated Gas, Electric Light & Power Co.*, 184 F. (2d) 552.

public utility laws of Pennsylvania. In the course of the opinion, the Fourth Circuit said (at page 568):

> ". . . It may well be, although the *present arrangement* between the Maryland and Pennsylvania utilities is invalid for the reasons set forth, that an interconnection of facilities and an interchange of electrical energy between them may be continued by some method that would meet with the approval of the appropriate regulatory authority and will not offend either the anti-trust laws or the utility laws of Pennsylvania." (Emphasis supplied.)

Consolidated's petition for *certiorari* was denied by the Supreme Court on December 11, 1950,[6] as a result of which the case went back to the District Court for entry of a declaratory judgment in accordance with the opinion of the Court of Appeals for the Fourth Circuit. After the remand, a controversy arose in the District Court as to [fol. 86] whether the invalidation of the 1931 agreement had revived an agreement of 1927 between the parties for the interstate sale and delivery of electric energy so that Consolidated was enttiled to continued deliveries by Penn Water, in accordance with the terms set forth therein, regardless of the invalidity of the amendatory contract of 1931. In response to a motion by Penn Water that the Fourth Circuit interpret its mandate and settle the controversy, that court delivered a second opinion on January 10, 1951.[7]

The court held the earlier agreement of 1927 was not revived when the amendatory contract of 1931 was declared illegal, and reiterated in unmistakeable terms its former holding that the 1931 contract was invalid in its entirety. In the course of the opinion, the Fourth Circuit said (186 F.

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[6] *Consolidated Gas Electric & Power Co.* v. *Pennsylvania Water & Power Co.* and *Hessey et al., Constituting the Public Service Commission of Maryland* v. *Pennsylvania Water & Power Co.* (two cases), 340 U. S. 906.

[7] *Pennsylvania Water & Power Co.* v. *Consolidated Gas, Electric Light & Power Co.*, 186 F. (2d) 934.

(2d) at 937) that by entering into the amendatory contract

"... Penn Water gave up its independent status as a producer and seller of electric energy and subjected itself so completely to the dominance of Consolidated as to violate the controlling statutes and *hence the 1931 agreement must be stricken down.*

"... Here the prior contract has been merged in and its nature changed by the subsequent unlawful agreement, and as so changed, it has resulted in *an unlawful relationship which has continued for twenty years.* When the illegality of such relationship is declared, it is idle to contend that the court can withdraw the original contract from the illegal relationship and give validity, certainly after it has been buried therein for so long a period. *It must perish along with the relationship* of which it has been made an inseparable part.

* * * * * * *

"Throughout the trial of this case and in the argument of the pending motion, Penn Water has reiterated its desire to continue to supply electric energy to Consolidated; and in view of the close relationship between the parties, the existence of interconnecting equipment and the control over its rates by the regulatory bodies, there is no reason to fear that the interests of consumers of electricity in Maryland will suffer through *the invalidation of the existing contract* between the two utilities.

"The District Court should issue a declaratory judgment (1) setting aside its judgment and order of March 18, 1950; (2) *declaring that the agreements of December 31, 1927, June 1, 1931 and September 29, 1939 are void and of no effect;* and (3) dissolving the restraining order of February 9, 1949." (Emphasis supplied.)

Presumably the District Court at Baltimore then entered a judgment declaring the agreements between Penn Water and Consolidated to be void and of no effect, as it had been directed to do. There was no equivocation or limitation in the Fourth Circuit's directive. It did not simply hold

void the restrictive provisions, but condemned the 1931 agreement in its entirety. This was obviously because the [fol. 87] court considered that the whole arrangement depended upon the restrictions which fettered Penn Water and that the paragraphs containing the restrictions, therefore, were not severable from the remainder of the contract. This appears from the following excerpt from the Fourth Circuit's opinion (186 F. 2d) at 936):

> "The 1931 agreement, on the other hand, provided that Consolidated should be entitled to all the electric capacity and energy available to Penn Water and not otherwise disposed of in the performance of existing contracts, and in consideration thereof, Consolidated agreed to pay Penn Water an amount equal to its operating expenses, a specified rate of return on existing facilities, and on the cost of new facilities less depreciation, and Consolidated was allowed a credit for the amount of the sales of energy by Penn Water to other persons. Closely associated with these provisions were the illegal restrictions on the future activities of Penn Water which resulted in the invalidation of the whole contract. Therein Penn Water was required to obtain the approval of Consolidated before entering into any agreement for the sale or purchase of electric power and energy and to obtain the approval of Consolidated before making any investment or disposing of its property having a value in excess of $50,000. These restrictive conditions were included in order to safeguard Consolidated in the performance of its promises and it is conceded that without them the contract would have been impracticable and would not have been made."

Although a final judgment of a court of competent jurisdiction had thus invalidated the entire contract between Penn Water and Consolidated, the Federal Power Commission still regarded it as desirable and in the public interest that the facilities of the two companies be operated as one integrated and interconnected system. Being of that opinion, the Commission was understandably anxious that the co-operative use of facilities and interchange of energy be continued. I think it should have called the parties in and

required them to work out immediately a new contract in conventional form which would accord with the opinions of the Court of Appeals for the Fourth Circuit. The Commission thought, however, that the Fourth Circuit meant only to condemn the two paragraphs of the 1931 agreement which prohibited Penn Water from selling or buying energy and from increasing or reducing its plant investment without Consolidated's consent. It reasoned that it could require the continuance of the old contract if those paragraphs were eliminated. This would leave in effect the contractual definition of Consolidated's residual entitlements and the residual payment type of rate. But the Fourth Circuit said those provisions were so closely associated with the illegal restrictions on the future activities of Penn Water that the whole contract was invalid. The court's opinions make abundantly clear its intention to strike down the entire arrangement,—not just the restrictive provisions.

It is significant that Penn Water and Consolidated conceded that, without the unlawful restraints on the former, the 1931 contract would have been impracticable and would not have been made. That was an admission that the restrictions and the remainder of the contract were so "closely associated" that illegality of the restrictions resulted in complete invalidity. Even if the unlawful paragraphs of the agreement were severable, the remaining provisions [fol. 88] would be incompatible with the Fourth Circuit's decision because under them free and unrestrained competition would still be impossible. Welding the facilities of the two companies into one integrated system—the Commission's objective—is not conducive to competition.

III

After the "system foundation contracts" had been held null and void, Penn Water entered a motion in this court on December 29, 1950, asking that we

> ". . . set aside, annul and dismiss the orders of the Commission sought to be reviewed in these proceedings, or, in the alternative, remand these proceedings to the Commission with instructions to annul and set aside its orders herein sought to be reviewed . . ."

The Pennsylvania Public Utility Commission also moved this court on December 29, 1950,

> "To annul and dismiss the orders of the Federal Power Commission sought to be reviewed in Case No. 10,239 on the ground that the decision of the United States Court of Appeals for the Fourth Circuit in *Pennsylvania Water & Power Company and Pennsylvania Public Utility Commission* v. *Consolidated Gas Electric Light and Power Company of Baltimore and Public Service Commission of Maryland*, 184 F. 2d 552 (1950), *cert.* denied December 11, 1950, renders invalid, null, void and of no effect the orders of the Federal Power Commission and the proceedings before it pursuant to which said orders were issued."

The question presented by these motions was what I have called the basic issue: can the Federal Power Commission lawfully establish between Penn Water and Consolidated a relationship which constituted a violation of the anti-trust statutes when established by contract between them? One who considers that question should bear in mind three indisputable propositions: 1. Regulated industries are not *per se* exempt from the Sherman Act. 2. Part II of the Power Act does not give the Commission power to lift the ban of the anti-trust laws. 3. As repeals by implication are not favored, only a clear repugnancy between the old law and the new results in the former giving way and then only *pro tanto* to the extent of the repugnancy. *Georgia* v. *Pennsylvania Railroad Company*, 324 U. S. 439; 456-7 (1945); *United States* v. *Borden Company*, 308 U. S. 188, 198 *et seq.* (1939).

In denying the motions and holding that the Commission has such power, the majority of the court necessarily first concluded that Part II of the Federal Power Act had impliedly repealed or superseded the anti-trust statutes so as to exempt from their prohibitions the combination between Penn Water and Consolidated which the Commission ordered to continue.

In order to show in bold relief the thinking of my brothers

of the majority which led them to that conclusion, I have skeletonized the pertinent portion of their opinion:

"The problem raised by the motions is one of the interrelation of two statutory schemes—each of which reflects different historical pressures and different con- [fol. 8] ceptions of the public interest. The Sherman Act and related laws represent an attempt to keep the channels of competition free so that prices and services are determined by the workings of a free market. . . . In marked contrast is a statute such as Part II of the Federal Power Act. It evidences congressional recognition that competition can assure protection of the public interest only in an industrial setting which is conducive to a free market and can have no place in industries which are monopolies because of public grant. . . .

"These contrasting objectives indicate that the anti-trust laws can have only limited application to industries regulated by specific statutes. . . .

". . . The net effect of what we have already said is that, though regulated industries are not *per se* exempt from the anti-trust laws and repeals by implication are not favored, the anti-trust laws are superseded by more specific regulatory statutes *to the extent* of the repugnancy between them . . . where a statute provides for comprehensive and detailed regulation of a particular industry, as do the Interstate Commerce Act and the Federal Power Act, there is, as we have indicated, only a limited area for application of anti-trust considerations to Commission decisions."

These generalities boil down to the thesis that Part II of the Federal Power Act is repugnant to the anti-trust laws and therefore supersedes them to the extent of the repugnancy; and that the repugnancy extends so far as to exempt from the anti-trust laws the combination of utilities ordered by the Commission which is otherwise clearly illegal under those statutes.

The majority do not point out with particularity the repugnancy upon which they rely. They seem to find it in the "contrasting objectives" of the anti-trust acts and

Part II of the Power Act, saying the first was designed to obtain the benefit of free competition, and the other to eliminate competition as having no place in the utility field and to substitute for it a regulatory agency. This being the only repugnancy suggested by the majority, their holding necessarily is that the anti-trust laws are superseded by Part II of the Power Act to the extent that the *objectives* of the two forms of legislation are in contrast. Let us see if there is really any repugnancy between the Sherman Act and Part II of the Power Act.

The first section of the former, which is 15 U. S. C. § 1, declares illegal every contract, combination or conspiracy in restraint of trade or commerce. The 1931 contract between Penn Water and Consolidated was held violative of that section.

Section 202, found in Part II of the Power Act, empowers the Commission to require the interconnection and co-ordination of the facilities of the two utilities. But neither that section nor any other section of Part II authorizes the Commission to require interconnection and co-ordination of facilities under terms and conditions which will result in a violation of the Sherman Act. The Commission can exercise its power under § 202 and under all of Part II without setting up an arrangement which is unlawful under anti-trust statutes. The Fourth Circuit intimated as much when it suggested that the interconnection of facilities and interchange of energy be continued "by [fol. 90] some method which would meet with the approval of the appropriate regulatory authority and will not offend either the anti-trust laws or the utility laws of Pennsylvania." The majority opinion does not suggest any reason why that cannot be done by the Commission.

Since the Power Commission can perform all its functions under Part II without creating a violation of the Sherman Act, there is no repugnancy between the two statutes, and no room for the court to say that Part II superseded the anti-trust statutes.

I have said, as did the Fourth Circuit, that neither Part I nor Part II of the Federal Power Act purports to suspend the anti-trust statutes with respect to licensees and utilities regulated thereunder. On the contrary, § 1 of the Sherman

Act is substantially repeated in § 10(h), found in Part I of the Power Act, 16 U. S. C. § 803(h), which is as follows:

> "Combinations, agreements, arrangements, or understandings, express or implied, to limit the output of electrical energy, to restrain trade, or to fix, maintain, or increase prices for electrical energy or service are hereby prohibited."

Penn Water is a licensee under Part I of the Act and so is subject to the prohibitions of § 10(h). The majority considers that the omission of that section from Part II not only repealed § 10(h) but also amounted to a repeal of the prohibitions of the Sherman Act as far as regulated companies are concerned. That amounts to saying that the anti-trust laws do not apply to any regulated industry unless their provisions are substantially repeated in the regulatory statute. Just the opposite is true: the anti-trust laws apply to regulated industries unless exemption therefrom is expressly provided in the regulatory statute, or must inevitably be implied from provisions of the regulatory act which are clearly repugnant to anti-trust prohibitions.

It must be noted, too, that Penn Water does not lose its status as a licensee under Part I simply because it is regulated also under Part II. It continues, nevertheless, to be a licensee and so continues to be forbidden by § 10(h) to engage in the combinations or arrangements made illegal thereby. It follows that, when the Commission required Penn Water and Consolidated to remain in the combination which had been condemned by the courts, it not only did not act under the authority of Part II which gives it no such power, but also affirmatively violated § 10(h) of its own basic act.

The majority opinion says, however, that when a Part I licensee is also a Part II company, as Penn Water is, it is no longer subject to the anti-trust provisions of § 10(h), simply because the language of that section does not appear in Part II. Then the notion that § 10(h) was repealed by Part II is thus stated in the opinion:

> ". . . The prohibitions of § 10(h) would apply to a licensee which is also regulated under Part II only to

the extent that the prior statute is not repealed by the clear repugnancy between it and the later statute."

I suppose the court meant to say that Part II is clearly repugnant to § 10(h) because it does not contain similar language and therefore repealed that section by implication. But Part II is not repugnant to § 10(h) for the same reasons that it is not repugnant to the anti-trust laws: it is [fol. 91] not necessary for the Commission to cause a violation of § 10(h) in order fully to exercise its regulatory power under Part II over a Part I licensee which is subject to Part II regulation.

One other phase of the portion of the court's opinion which denies the motions remains to be noticed. It is that in which the court purports to give another reason for denying the motions to annul, in addition to the fallacious theory that the anti-trust laws do not apply to regulated industries. On examination, however, the additional ground is seen to rest upon the same erroneous idea. It is thus stated in the opinion:

"To grant petitioners' motions and set aside the order at this time would be to substitute antitrust criteria for those of the Federal Power Act, . . ."

By this the court meant that it would be improper to annul the Commission's orders on the mere ground that "a decision handed down in a suit between private parties under a non-controlling statute" had destroyed the only arrrangement to which they could possibly have application. If Penn Water "wishes," because of the Fourth Circuit's decision, to make some change in the old contractual arrangement which the Commission has ordered to be retained, the majority say the only thing it can do is to submit its proposed new arrangement. Then, after the Commission has disposed of the proposal, Penn Wafer can file a new petition for review if it feels aggrieved. That would be true if Penn Water wanted to change an existing *legal* arrangement.

The key error in the court's reasoning is revealed by its allusion to the decision of the Fourth Circuit as one "handed

down in a suit between private parties under a non-controlling statute." It shows that in assigning this additional reason for denying the motions to annul, the court is still assuming that the Commission can lawfully require these utilities to form a combination which they cannot legally form by their own contract.

I think I have shown sufficiently already that the Sherman Act *is* the controlling statute which the Commission is not empowered to override. That the judgment invalidating the existing arrangement was handed down in a suit between private parties is, of course, immaterial. It is binding on those private parties, yet this court has required them to disobey it. It has done so upon the erroneous idea that the Sherman Act has been superseded by Part II of the Federal Power Act and so is not the "controlling statute."

In the portion of the majority opinion now being discussed, the court says it is the existing "services and rates, reflecting underlying operations, which were the subject of the Commission's orders." The implication is that all the Commission has done is to prescribe rates for service actually being rendered; that if the rates are just and reasonable for that service, and if the Commission's findings in that respect are supported by substantial evidence, "our review is at an end." I suggest that the "underlying operations" were the subject of the Commission's orders and therein lies the vice in them. They did not deal with rates alone but ordered the contractual "underlying operations" to continue.

It is a boot-strap argument to say that, because the Commission has power to prescribe rates for existing service so [fol. 92] long as it is being rendered, it can therefore require continued rendition of the service no matter if it is unlawful.

For the reasons given, I think the motions to annul the Commission's order should have been granted, and so I dissent. My brothers of the majority, having denied the motions, then proceeded to explore the merits of the rate reduction order and the implementing rate schedule which the Commission prescribed, and affirmed those orders. I dissent also from that action, as I think the orders should have

been set aside as improper. But I do not prolong this dissent by discussing the merits of the orders, as I think it perfectly clear that they should have been set aside as being without basis or applicability after the Fourth Circuit's judgment became final.

[fol. 93] SUPREME COURT OF THE UNITED STATES, OCTOBER TERM, 1951

No. 428

[Title omitted]

ORDER ALLOWING CERTIORARI—Filed February 4, 1952

The petition herein for a writ of certiorari to the United States Court of Appeals for the District of Columbia Circuit is granted.

And it is further ordered that the duly certified copy of the transcript of the proceedings below which accompanied the petition shall be treated as though filed in response to such writ.

[fol. 94] SUPREME COURT OF THE UNITED STATES, OCTOBER TERM, 1951

No. 429

[Title omitted]

ORDER ALLOWING CERTIORARI—Filed February 4, 1952

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And it is further ordered that the duly certified copy of the transcript of the proceedings below which accompanied the petition shall be treated as though filed in response to such writ.

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IN THE

Supreme Court of the United States

OCTOBER TERM, 1951.

No. 428

PENNSYLVANIA WATER & POWER COMPANY and SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND,

Petitioners,

v.

FEDERAL POWER COMMISSION, and CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE and PUBLIC SERVICE COMMISSION OF MARYLAND, Intervenors,

Respondents.

PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT.

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PETITION FOR WRIT OF CERTIORARI.

Petitioners, Pennsylvania Water & Power Company, a Pennsylvania corporation (Penn Water), and its wholly owned subsidiary, Susquehanna Transmission Company of Maryland, a Maryland corporation (Transmission Company), pray that a writ of certiorari be issued to review the judgment and orders of the United States Court of Appeals for the District of Columbia Circuit (D. C. Circuit) entered in these cases on July 3 and 6, and September 6, 1951 (Printed Record (R.) Vol. 18, pp. 73, 74 and 78). The judgment and orders denied motions to set aside or remand, and instead affirmed, orders of the Federal Power Commission (FPC) directing continuance of, and premised on, substantive provisions of two power contracts which have been adjudged illegal. Such judgment and orders of the D. C. Circuit were entered on the decisions of a divided Court and were in direct conflict with the unanimous decision of the United States Court of Appeals for the Fourth Circuit (R., Vol. 18, p. 1) as to which this Court denied certiorari,* and the related decision of the United States District Court for Maryland (R., Vol. 18, p. 40),** declaring illegal the same two power contracts and holding that the FPC had no authority to validate them by the orders here involved.

Opinions Below.

The opinions and orders of the FPC of January 5, 1949, February 28, 1949 and October 27, 1949 are found at R., Vol. 16, pp. 39, 372 and Vol. 17, p. 46. The majority opinion of the D. C. Circuit (R., Vol. 18, p. 46) per Bazelon, Circuit Judge, in which Fahy, Circuit Judge, joined (the D. C. majority), and the dissenting opinion of Wilbur K. Miller,

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* *Pennsylvania Water & Power Co., Pennsylvania Public Utility Commission* v. *Consolidated Gas Electric Light & Power Company of Baltimore, Public Service Commission of Maryland*, 184 F. 2d 552 (1950), cert. den. 340 U. S. 906 (1950).

** *Pennsylvania Water & Power Co., Pennsylvania Public Utility Commission* v. *Consolidated Gas Electric Light & Power Co., Safe Harbor Water Power Corporation, Public Service Commission of Maryland*, 97 F. Supp. 952 (May 3, 1951) and Docket No. 5253 (Op. March 12, 1951 and Order March 19, 1951).

Circuit Judge, are not yet officially reported. The dissenting opinion, filed October 4, 1951, too late to be printed in the record, appears as Appendix B hereto. The order denying rehearing, to which Judge Miller also dissented, is found at R., Vol. 18, p. 78.*

Jurisdiction.

The jurisdiction of this Court is invoked under Section 1254(1) of the Judicial Code (62 Stat. 928, 28 U. S. C. §1254) and Section 313(b) of the Federal Power Act (49 Stat. 860, 16 U. S. C. §825 l).**

State Statutes Involved.

The pertinent state corporate statutes are set forth in Appendix C and the pertinent state utility laws are set forth in the Appendix to the petition of the Pennsylvania Commission.***

Statement.

The primary issue raised by this petition is whether the FPC (in the absence of any express authority in the

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* While there was a voluminous record below, the basic issue here is a simple one as Judge Miller said (App. B., p. 2a), and all that is needed are the power contracts (R., Vol. 15, pp. 4554-4603, 4606-4621), opinions of the Fourth Circuit (R., Vol. 18, pp. 1, 35), and District Court for Maryland (R., Vol. 18, p. 40), judgments entered on such opinions (R., Vol. 18, pp. 75, 77), opinions of the D. C. Circuit (R., Vol. 18, p. 46, and Appendix B hereto,) and portions of the opinions and orders of the FPC (R., Vol. 16, pp. 39-59, 146-191, 372-388; Vol. 17, pp. 46-71); Petitioners were, however, unable to obtain from respondents' counsel a stipulation thus limiting the printed record.

** The judgment of the D. C. Circuit was entered on July 3, 1951 (R., Vol. 18, p. 73). Petitioners' motion for rehearing was denied September 6, 1951 (R., Vol. 18, p. 78). Application for a stay of certification to the FPC of the opinion and judgment (in lieu of mandate) of the D. C. Circuit pending application to this Court for a writ of certiorari was duly made, and the order granting the stay was entered (Transcript of Record (Tr.) p. 5750) and the stay extended to and including November 16, 1951.

*** The Pennsylvania Commission is also petitioning for certiorari to review the judgment and orders of the D. C. Circuit. Petitioners herein adopt the points in that petition.

Federal Power Act such as is found in certain other Federal regulatory statutes) may compel electric utilities to perform, and may base its rate orders upon continued performance of, contracts which have been adjudged by the courts to violate Federal antitrust laws, public policy and the laws of the utilities' state of incorporation.

The FPC orders, which the D. C. Circuit affirmed, were issued in proceedings to determine the rates to be charged for the services of Penn Water (and Transmission Company) to intervenor, Consolidated Gas Electric Light and Power Company of Baltimore (Consolidated) and three other electric utility customers located in Pennsylvania.* Penn Water's rates to Consolidated were contained in an illegal contract between Penn Water and Consolidated (the Baltimore contract)** which was linked to a companion contract (the Safe Harbor contract)**, also illegal, between Penn Water, Consolidated and Safe Harbor Water Power Corporation, a Pennsylvania electric generating utility (Safe Harbor). The FPC by these orders not only required a reduction in such rates but also required the continuance of substantive provisions of the illegal Baltimore contract, and based the critical features of the orders (such as the amount and allocation of the reduction, and the determination of jurisdiction over Penn Water's wholesale sales in Pennsylvania) upon the assumed existence and continuance of the illegal Baltimore and Safe Harbor contracts. The FPC termed these contracts the "system foundation contracts" (R., Vol. 16, pp. 45, 376).

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* Pennsylvania Power & Light Company (PP&L), Philadelphia Electric Company (PE) and Metropolitan Edison Company (ME).

** The Baltimore contract consisted of three agreements dated December 31, 1927, June 1, 1931 and September 29, 1939 between Penn Water and Consolidated (R., Vol. 15, pp. 4577-4603, 4606-4621). The Safe Harbor contract consisted of three agreements dated June 1, 1931, August 1, 1932 and November 22, 1939 between Safe Harbor, Consolidated and Penn Water (R., Vol. 15, pp. 4554-4576). In the case of each contract the basic agreement was the one dated June 1, 1931.

The Baltimore contract was held illegal by unanimous decision of the Fourth Circuit, Parker, Soper and Dobie, JJ. (R., Vol. 18, p. 1). The Safe Harbor contract was held illegal in a subsequent related case by the District Court for Maryland, Bryan, J. (R., Vol. 18, p. 40). Those Courts held the two contracts illegal and void *ab initio* in their entirety under the Federal antitrust laws, Pennsylvania statutes, common law and public policy. Those Courts also held that the FPC had no authority to validate such contracts and that the FPC orders did not have that effect. This Court denied certiorari from the decision of the Fourth Circuit.

The contract litigation in the Fourth Circuit, begun December 21, 1948,* shortly prior to the first FPC order (January 5, 1949) here involved, was formally brought to the attention of the FPC in a petition for rehearing thereof (January 28, 1949),** but the FPC held that even if the courts determined the contracts to be illegal, such illegality would be immaterial to its orders. The decision of the Fourth Circuit, with certiorari denied by this Court, and the decision of the District Court for Maryland, were both rendered while the review of the FPC orders was pending in the D. C. Circuit. They were brought to the attention of that Court by formal motions, but the D. C. majority denied the motions and affirmed the FPC orders despite the decisions in the Fourth Circuit.

As was pointed out both to the FPC and the D. C. Circuit, Penn Water's objectives in the cases in the Fourth Circuit were (1) to be free to compete with Consolidated, particularly as regards sales and purchases at wholesale, without the illegal restrictive controls by Consolidated and illegal pooling of revenues provided for in the contracts, and (2) to have its policies, contracts and expansion, and the exercise of initiative with respect to its rates, services, operating economies and new business, controlled by its

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* The litigation was precipitated by Consolidated refusing to permit Penn Water, by letter of November 23, 1948 given under the Baltimore contract, to build a new steam electric generating plant.

** Thus Penn Water called the contract litigation to the attention of the FPC at the earliest practicable moment and while the rate case was still pending before it.

own Board of Directors as required by the laws of its state of incorporation.*

The Fourth Circuit held that the antitrust laws apply to Penn Water in the absence of an *express* statutory provision for exemption, and that the application of the antitrust laws was reaffirmed by reenactment in 1935 of Section 10(h) (16 U. S. C. §803(h))** of the Federal Power Act, but the D. C. majority held that the antitrust laws and Section 10(h) were *impliedly* repealed by the simultaneous enactment in 1935 of Part II of the Federal Power Act.

The Fourth Circuit held that the interchange of electricity must be by some method which "will not offend either the [Federal] anti-trust laws or the utility laws of Pennsylvania," (R., Vol. 18, p. 28) but the D. C. majority held in effect that "antitrust criteria" (R., Vol. 18, p. 55) do not apply to orders of the FPC, and that the FPC could order continuance of contractual arrangements judicially declared illegal and could base the critical features of its orders thereon. The D. C. majority did not even refer to the adjudicated invalidity of the contracts under state law and public policy or to any authority in the FPC to grant exemption therefrom.

The D. C. dissenting opinion agreed with the Fourth Circuit on all these points including the requirement of compliance with state law.

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* Contrary to assertions which have been made in these cases by Penn Water's opponents, the record is clear, as the Fourth Circuit said in a passage quoted in the D. C. dissenting opinion (App. B., p. 9a), that Penn Water is not trying to stop electric service to Consolidated and thereby to withdraw from interstate commerce and thus escape from whatever regulatory system Congress has imposed on such interstate electric business. What Penn Water seeks is to require the FPC to make its decisions as to rates and jurisdictional matters on the basis of physical deliveries of power and not on the basis of illegal and therefore non-existent contracts.

** "Section 10. All licenses issued under this Part shall be on the following conditions: * * *

"(h) That combinations, agreements, arrangements, or understandings, express or implied, to limit the output of electrical energy, to restrain trade, or to fix, maintain, or increase prices for electrical energy or service are hereby prohibited."

The decision of the D. C. majority is in direct conflict, on important questions of Federal law, with the unanimous decision of the Fourth Circuit and other courts and, if it should stand, would mean that all Federal regulatory bodies, even in the absence of express Congressional authority such as is given to the Interstate Commerce Commission, could claim authority to exempt transactions from any Federal or State laws.

The D. C. Circuit also held, contrary to statements made by the Court of Appeals for the Second Circuit* and another panel of the D. C. Circuit,** that a licensee (such as Penn Water) subject to regulation under Part I of the Federal Power Act, is also subject to the different regulatory system of Part II of that Act. The asserted applicability of Part II was, in turn, essential to the D. C. Circuit's holding that the antitrust laws were repealed by implication.

The Contracts.

The invalidated Baltimore and Safe Harbor contracts provided until 1980 for payments by Consolidated for power, not on the basis of a unit rate for capacity and energy, but on a basis which would provide for the sellers' operating expenses including taxes and a specified return on investment, regardless of the amount of power delivered or services rendered, with a credit to Consolidated for revenues received from sales of power to others. This is nothing more than a *revenue* pooling arrangement,*** a type of provision which has always been deemed illegal under the antitrust laws and public policy because it removes incentive to compete, obtain new business or effect operating economies. This type of arrangement similarly violates applicable Pennsylvania statutes. The contracts contained closely associated provisions providing for control by Consolidated over the contracts, sales, purchases, prices, output

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* *Niagara Falls Power Co.* v. *FPC*, 137 F. 2d 787, 792, 793 (1943).

** *Alabama Power Co.* v. *FPC*, 128 F. 2d 280, 293 (1942).

*** Petitioners are not here referring to pooling of power resources which results from interconnection.

and expansion of both Penn Water and Safe Harbor. The contracts were made at a time when Consolidated and Penn Water were under the common control of banking interests headed by J. E. Aldred (R., Vol. 18, p. 8).*

The contracts surrendered control of Penn Water and Safe Harbor to Consolidated, stifled their initiative with respect to rates, services, operating economies and new business and destroyed the independent corporate character of these Pennsylvania corporations, making Penn Water a "virtual vassal of Consolidated" (App. B, p. 6a) and Safe Harbor an "impotent agency" (R., Vol. 18, p. 41). For example, the provisions of the contracts had been used by Consolidated to interfere with Penn Water's and Safe Harbor's contracts with Pennsylvania customers** and, in 1948, to prohibit Penn Water from building a large new steam electric generating plant using coal deposited in the Susquehanna River (free but for the cost of dredging and processing) which would otherwise go to waste and from which plant power could have been economically produced this year, when power is greatly needed (R., Vol. 18, p. 914).***

The Corporations Involved and Their Businesses.

Penn Water and Safe Harbor are Pennsylvania electric utility corporations owning hydroelectric generating plants on the Susquehanna River. Penn Water also owns a steam electric generating plant and transmission lines in Pennsylvania and, through Transmission Company, transmission lines in Maryland. The present business of such companies is the sale and transmission of electric energy at wholesale and in bulk. Penn Water and Safe Harbor are licensees under Part I of the Federal Power Act.

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* There is at the present time no common control of Penn Water and Consolidated (R., Vol. 18, p. 8; App. B., p. 6a).

** PP&L, PE and ME. The contracts with these customers are all on the customary unit rate basis, i.e., payment based on amount of capacity or energy supplied and without managerial control by any purchaser over the seller.

*** The program, including attendant transmission lines and other facilities, involved about $20,000,000.

Consolidated is a Maryland electric utility corporation with steam electric generating, transmission and distribution facilities in and around the City of Baltimore, Maryland. Consolidated has generating capacity several times that of Penn Water or Safe Harbor and is in the business of selling electric energy at wholesale and in bulk as well as at retail.

Power generated by Penn Water, Safe Harbor and Consolidated is in competition or potential competition everywhere in the region, as held by the Fourth Circuit and the District Court for Maryland (R., Vol. 18, pp. 5-6, 9 and 41).*

The FPC Orders Required Continuance of Contractual Arrangements Adjudged Illegal.

In its opinion denying rehearing (Feb. 28, 1949, R., Vol. 16, p. 372) the FPC stated that it was immaterial to its rate orders that the Baltimore and Safe Harbor contracts might be illegal and directed continuance of illegal arrangements of the Baltimore contract as follows:

> "In our opinion and order we took care to leave the continuation of the integrated and interconnected system in full effect, merely changing the rates, as shown by our statement wherein we specifically stipulated that
>
> > "'The present arrangement whereby sales to Pennsylvania customers are made on a firm basis on definite rate schedules whereas Baltimore Company [Consolidated] takes what is left and assures Respondents [Penn Water and Transmission Company] of the recovery of all proper operating expenses, depreciation, taxes and a fair return, is the most practicable under the circumstances. *That arrangement will, therefore, be continued* * * *'" (R., Vol. 16, pp. 378-9). (Italics and matter in brackets added.)

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* The location of the generating plants and transmission lines of these companies and other companies in the region is shown on a map attached hereto as Appendix A.

This requirement was also contained (as indicated in the quotation above) in the FPC's first opinion (Jan. 5, 1949), (R., Vol. 16, p. 175), and in finding 37 and par. (D) of its first order (R., Vol. 16, pp. 188, 189).

The first FPC opinion (No. 173) was incorporated in, and made a part of, its first order (Jan. 5, 1949), and the second order (Feb. 28, 1949) did the same with the second opinion (No. 173A) (R., Vol. 16, pp. 177, 386).

In paragraph (11) of its first order the FPC said:

> "The contracts referred to in (6) and (7) above [the Baltimore and Safe Harbor contracts], facilitate the achievement of those objectives *particularly by the methods of payment which they provide,* and by reason of the fact that generation of energy is directed by the coordinated action of load dispatchers in the City of Baltimore, representing the three system companies." (R., Vol. 16, p. 181). (Italics supplied).

It is thus clear that the FPC specifically ordered the continuance of the illegal revenue pooling provisions of the Baltimore contract.

While the Fourth Circuit did not specifically refer to these provisions in declaring the contract illegal, it did declare the entire contract invalid, and these provisions *are* illegal as shown in Point I (c) below. Furthermore, in directing their continuance the FPC apparently contemplated that the closely associated illegal restrictive provisions* which *were* specifically alluded to by the Fourth Circuit would be continued since (a) the FPC opinions and

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* The Fourth Circuit, in its second opinion, 186 F. 2d 934, 936 (R., Vol. 18, p. 37), holding that the invalidation of the 1931 Baltimore agreement did not reinstate the prior 1927 agreement, stated that the restrictions of the Baltimore contract were "closely associated" with the revenue pooling provisions, pointing out that it was conceded that without the restrictions the 1931 agreement would have been impracticable and would not have been made. The District Court for Maryland, holding that the restrictions of the Safe Harbor contract were inseparable from the remainder of that contract, stated, 97 F. Supp. 952, 955 (R., Vol. 18, p. 45), that they were the "warp and weft" of the contract. Both the Baltimore and Safe Harbor contracts were invalidated in their entirety.

orders are clearly based on that assumption (R., Vol. 16, pp. 45, 53-56, 179-180, 376-382), and (b) *the FPC stated in its brief (filed October, 1951 in the Fourth Circuit, attempting to intervene on appeal from the Maryland District Court's decision invalidating the companion Safe Harbor contract) that "the Commission's order prescribed the June 1, 1931, contract, as supplemented [the Safe Harbor contract], including the terms which the District Court viewed as in restraint of trade."* In the Penn Water rate orders and opinions the FPC praised and commended *all* of the restrictive provisions of the Penn Water contract.

For example, in its opinion denying rehearing, the FPC said:

> "By the terms of those contracts the installation of additional facilities by Penn Water is subject to approval by Baltimore Company[2] [fn. 2 quotes in full Article V of the Baltimore contract, the provision for restraint on plant expansion expressly held illegal by the Fourth Circuit], to assure coordinated planning and investment to meet the growing power needs of the system as a whole with resulting additional economies and consumer benefits." (R., Vol. 16, p. 378).

In that opinion the FPC further said:

> "In this case refusal of Penn Water to receive energy originating outside of Pennsylvania from Baltimore Company would not be merely a termination of the purchase and sale of that energy (i. e., a cancellation subject to Section 35.5 of the Rules) but would constitute a change in rates and service in several aspects which cannot be accomplished except in compliance with requirements prescribed under Section 205 of the Federal Power Act." (R., Vol. 16, p. 380).

Here the FPC is referring to the power of Consolidated under Article IV of the Baltimore contract (R., Vol. 15, p. 4612), which the Fourth Circuit specifically held to be in violation of Section 3 of the Clayton Act (R., Vol. 18, p. 10), to require Penn Water to purchase needed supple-

mental energy from Consolidated by prohibiting Penn Water from purchasing such energy from others.

Again, in its order of October 27, 1949, the FPC (rejecting rate schedules filed by Penn Water pursuant to the first FPC order) prescribed allegedly proper rate schedules which called for the residual specified return formula contained in the Baltimore contract. In addition the FPC stated:

> "The foregoing provisions supersede only the rates and charges heretofore made, demanded, collected or assessed against Baltimore Company by Penn Water and Transmission Company. All other provisions of the aforementioned contracts, in and of themselves lawful prescribing or defining the power, energy and transmission services to be furnished, or any classification, practice, regulation or rule affecting such services, which several provisions are incorporated herein by reference, shall be observed and be in force." (R., Vol. 17, p. 62.)

FPC counsel has claimed that the phrase "in and of themselves lawful" in this paragraph is a qualification limiting the continued provisions to such as are legal, but these rate schedules were prescribed by the FPC (October, 1949) before even the trial court decision was rendered (February, 1950) and months before the Fourth Circuit decision declaring the Baltimore contract illegal (September, 1950). The phrase could not therefore have had any relation to the Fourth Circuit decision. Others have argued that the phrase is an affirmance of the FPC's opinion that all of the provisions of the contract are lawful. It is to be noted that the FPC, in its opinion denying rehearing referred to above, commended the restrictive provisions and also stated (R., Vol. 16, p. 378) "If there are questions as to the legality of the foundation contracts which are in litigation, as Respondents' application for rehearing indicates, the validity of our order is not dependent upon the decision of those questions." Furthermore the FPC expressly stated in its brief in the court below that the rate schedule which it

prescribed for Penn Water "permits Penn Water's facilities to be operated as though they were under common ownership with Baltimore Company's facilities" (Tr., p. 5574).*

In any event, since the D. C. majority has upheld the FPC orders on the ground that "antitrust criteria" are not applicable,** the FPC may use the decision to claim that it has, even in the absence of express statutory provision, the authority to ignore the antitrust and other laws.

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* The ambiguity of the requirement that the provisions of the Baltimore contract "in and of themselves lawful" should be observed is further indicated by the fact that the restrictive provisions of the contracts are not isolated ones but are reaffirmed and reflected throughout the contracts. Thus, in addition to the specific provisions requiring Consolidated's approval of substantial plant additions and contracts of Penn Water and Safe Harbor (R., Vol. 15, pp. 4557-9, 4612-3), there were additional provisions (R., Vol. 15, pp. 4567, 4613-4) preventing any action with respect to operating, engineering and accounting matters without the concurrence of a representative of Consolidated; and the payment provisions themselves (R., Vol. 15, pp. 4560, 4608-12) as already indicated, removed any incentive to take action without the concurrence of Consolidated.

** The D. C. majority attempted to distinguish the decision of the Fourth Circuit as to the illegality of the Baltimore contract by stating that the Fourth Circuit held illegal only certain restraints imposed upon Penn Water by Consolidated under the Baltimore contract. But it nowhere states that the FPC orders do not require continuance of the contractual arrangements under which these restraints were imposed. In fact it refers to the scope of the FPC's action as governing "the operations and arrangements under scrutiny" and states (making no exception as to the restrictive provisions) that Penn Water can only change its operations, contracts, arrangements, etc., in accordance with the Federal Power Act and with the consent of the FPC (R., Vol. 18, pp. 54-55).

The FPC Based Critical Features* of its Orders Upon the Assumed Existence and Continuance of the Illegal Contracts.

A. The prescribed rate of return was based on the assumption that Penn Water would receive the "stabilized income" provided by the Baltimore contract until 1980.

The FPC, prospectively, (i.e., from and after February 1, 1949, the specified operative date of the FPC orders), reduced the amounts payable by Penn Water's utility customers, for the purpose of limiting Penn Water's rate of return to only 5¼% per annum, on the express basis that "The contract with Baltimore Company [Consolidated] assures Respondents [Penn Water and Transmission Company] of a stabilized income" (R., Vol. 16, p. 147). The Baltimore contract gave Penn Water a "stabilized income" until 1980, irrespective of the periods of low flow in the Susquehanna River when Penn Water might not be able to generate and sell a normal amount of electricity. Without such long term continuing contractual obligation there was obviously no basis for the low return allowed. The D. C. majority states (R., Vol. 18, p. 66) that the FPC had "substantial evidence before it to support its findings" with respect to rate of return, but the central aspect of the "evidence" referred to by the D. C. Circuit (R., Vol. 18, p. 65) was that Penn Water is "insulated" from any "substantial risk" by the illegal Baltimore contract. Since the Baltimore contract has been adjudicated illegal there is no obligation whatsoever of Consolidated to Penn Water to continue to take or pay for any power at all. For example, Consolidated could stop taking power and paying a fixed rate at the end of a period of high flow when a large amount of power had been generated and delivered, leaving Penn Water to sell the relatively small amount of power coming from the river in low flow as best it could, thus receiving

* The dissenting opinion points out (App. B, p. 3a) that each of the critical features of the FPC's orders (discussed in paragraphs A, B and C below), namely (a) the rate of return, (b) the jurisdictional findings and (c) the allocation of cost of service is based respectively upon the financial security, operations, entitlements and obligations provided for by the Baltimore contract and the assumed continuance thereof until 1980.

much less than the allowed return. The fact is that the FPC order, in fixing the abnormally low rate of return, was clearly not based on operations as FPC counsel like to assert, but on the assumed contractual obligations of Consolidated to pay Penn Water a specified return until 1980. From operations there could be no "stabilized income".

B. The FPC held it had jurisdiction over intrastate services on the assumption that the illegal and non-existent contracts would continue.

The FPC also held that, because the companies were tied together under the illegal Baltimore and Safe Harbor contracts (R., Vol. 16, pp. 53-54) the services of Penn Water to the three Pennsylvania electric utilities, although rendered by Penn Water entirely within Pennsylvania, were interstate in character and subject to regulation by it*. Here again the D. C. majority attempted to minimize the effect of the contracts upon the decision of the FPC. But the decision of the D. C. majority is based upon its own assertion (R., Vol. 18, p. 63) that "Each sale [of Penn Water in Pennsylvania] is in effect a pool sale drawn from the integrated interstate system and hence interstate in nature." The existence of this so-called interstate pool depends upon the illegal contracts tying the companies together under the control of Consolidated and upon the illegal revenue pooling provisions thereof. The other basis of jurisdiction over Penn Water's sales in Pennsylvania asserted by the FPC (R., Vol. 16, pp. 54-55) was the purchase by Penn Water of some energy generated by Consolidated in Maryland to fulfill Penn Water's Pennsylvania contracts. Such purchases from Consolidated were compelled by a provision of the Baltimore contract (Art. IV, R., Vol. 15, p. 4612) which was held by the Fourth Circuit to be illegal under Section 3 of the Clayton Act (R., Vol. 18, p. 10). Without such contract Penn Water would not have been under such compulsion to purchase such supplemental energy outside of Pennsylvania. Obviously, this

* Lack of FPC jurisdiction over this Pennsylvania business would not mean that it would be unregulated but merely that regulation thereof would be by the Pennsylvania Public Utility Commission.

phase of the FPC orders rests on assumed continued existence of these contractual provisions, held illegal by the Fourth Circuit.

C. The allocation of the rate reduction between customers was based upon the alleged "entitlements" of Consolidated provided for under the illegal and non-existent contracts.

The FPC allocated the reduction between Consolidated and the three Pennsylvania electric utility customers of Penn Water, giving 89% of the reduction to Consolidated (R., Vol. 16, pp. 174-175), such allocation being determined on the basis of alleged "entitlements" (R., Vol. 16, pp. 172-3) of Consolidated under the Baltimore and Safe Harbor contracts and not on the basis of the power actually delivered. Without the illegal contracts such "entitlements" would be non-existent. As the dissenting opinion points out (App. B, pp. 2a-3a) " * * as a result of that interpretation [of the Baltimore contract] the Commission concluded that very substantial sales by Penn Water to others had really been for the account of Consolidated, and allocated the reduction accordingly". An allocation on a delivered power basis (that is, on actual operations) would have given the Pennsylvania utilities a much greater share of the rate reduction. The D. C. majority (R., Vol. 18, p. 69) plainly recognized that its affirmance of the allocation of the reduction provided for by the rate orders depended upon its decision that the FPC may exempt the Baltimore and Safe Harbor contracts from the antitrust laws and accordingly base its allocation upon the artificial entitlements created thereby rather than upon the actual deliveries of power.

Ultimate Relief Sought by Petitioners.

Petitioners request this Court to review this case and set aside the orders of the FPC, or in the alternative remand the case to the FPC with directions to it to limit itself (1) to a determination of the reasonable rates for power sold by Penn Water and Transmission Company to Consolidated from and after February 1, 1949 on the usual unit

rate basis and on the basis of the amount of capacity and energy actually supplied,* at a rate commensurate with the absence of any "stabilized income", and with allocations of any reduction in rates based on cost of service actually rendered and not on fictitious "entitlements," and (2) to a determination of whether, upon elimination of the illegal contracts from consideration, there is any basis for the exercise by the FPC of jurisdiction over Penn Water's services in Pennsylvania to the three Pennsylvania electric utility customers. By orders of the FPC and the D. C. Circuit, the rate orders have been stayed, and revenues in excess of the amounts prescribed in the rate orders are segregated and in suspense for the period from and after February 1, 1949, the specified operative date of the first FPC order if it becomes effective. Thus, the Courts and the FPC remain in a position to adjust rates properly for the entire period involved.** This should have been done by the FPC

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* Penn Water and the Transmission Company filed new rate schedules for service to Consolidated on that basis on February 6, 1951 immediately after the District Court (Coleman, J.) injunction requiring Penn Water to perform the Baltimore and Safe Harbor contracts had been vacated pursuant to mandate of the Fourth Circuit, but such rate schedules were rejected February 15, 1951 (Tr., pp. 5628-30) on the ground, among others, that to file new schedules, Penn Water "must recognize" the existing FPC orders, thus possibly barring itself from continuing to appeal from these orders in the Courts.

** Accordingly, there is no basis for the statement of the D. C. majority (R., Vol. 18, pp. 55-56) that "granting petitioners' motions would be to disrupt a pattern of regulation". Any delay of the FPC in rendering its decision in 1949 in a proceeding begun in 1944, with hearings concluded in 1947, was certainly not due to petitioners. The D. C. majority suggests (R., Vol. 18, p. 55) that Penn Water submit new arrangements to the FPC and appeal from any decision of the FPC thereon by which it feels itself aggrieved. This obviously is no answer to petitioners' contentions that in *these proceedings* the FPC has improperly directed continuance of, and based its orders upon, illegal contractual arrangements. Furthermore, a decision in any new proceeding could not remedy the excessive reduction and improper allocation thereof which the FPC has ordered for the period from and after February 1, 1949 and which would in the absence of modification on appeal be effective until the effective date of new orders in a new proceeding. Similarly, unless Penn Water is given relief in these proceedings, it would be required to continue illegal arrangements (held by the Fourth Circuit to be a violation of criminal law) which have been ordered continued by the FPC, until final determination (probably after several appeals) of such new proceeding.

on the petition for rehearing, or after the decision of the Fourth Circuit. As the dissenting opinion points out (App. B, p. 1a), "the Commission's orders stood in a vacuum after the Fourth Circuit held the contract invalid; the only service to which they can have application may not be lawfully continued".

The Baltimore and Safe Harbor contracts were properly stricken down by the Courts. They should not in any respect be maintained through the guise of FPC rate orders. Four Court of Appeals Judges have so decided (the three Judges of the Fourth Circuit and the dissenting Judge of the D. C. Circuit), whereas only two Court of Appeals Judges, the D. C. majority, have decided to the contrary.

Questions Presented.

I. Has the FPC authority, as the D. C. Circuit held contrary to the Fourth Circuit, (a) to require and approve contractual arrangements between electric utility companies specifically adjudged by the Fourth Circuit and District Court for Maryland to violate the Federal antitrust laws, and (b) to premise the critical provisions of its rate orders (which would otherwise have no basis) upon the existence and continuance of such illegal contractual arrangements?

II. Has the FPC authority, as the D. C. Circuit held contrary to the Fourth Circuit, (a) to compel a state utility corporation to maintain contractual arrangements which provide for surrender to another corporation of managerial functions and initiative, thus destroying its independent corporate character, and specifically adjudged by the Fourth Circuit and District Court for Maryland to be in violation of the statutes of the state of its incorporation and the common law and public policy, and (b) to premise the critical provisions of rate orders (which would otherwise have no basis) upon the existence and continuance of such illegal contractual arrangements?

III. Does Part II of the Federal Power Act repeal by implication regulatory provisions of Part I of the Act; and is a corporation which is subject to regulation under Part I

of the Federal Power Act as a licensee under contract with the Federal Government also subject to the different regulatory scheme of Part II of the Act, as the D. C. Circuit held contrary to statements of the Court of Appeals for the Second Circuit and another panel of the D. C. Circuit?

All the above described holdings are specified as errors to be urged.

REASONS FOR GRANTING THE WRIT AND ARGUMENT.

As to Question I: The decision of the D. C. Circuit holding that the FPC may, under the guise of a rate order, direct continuance of, and base its orders on, contractual arrangements held illegal under the Federal antitrust laws is in direct conflict with the decision of the Fourth Circuit and is erroneous.

The Fourth Circuit held specifically that the Baltimore contract is invalid under the Federal antitrust laws and that any new arrangement between the parties must be such as would not violate the antitrust laws, saying (R., Vol. 18, p. 28):

> "It may well be, although the present arrangement between the Maryland and Pennsylvania utilities is invalid for the reasons set forth, that an interconnection of facilities and an interchange of electrical energy between them may be continued by some method that would meet with the approval of the appropriate regulatory authority and will not offend either the [Federal] anti-trust laws or the utility laws of Pennsylvania."

And again (R., Vol. 18, p. 20):

> "The maintenance of uniformity of regulation and the control of the activities of an industry of national scope by a specialized body are as important in the field of electric power as in the field of transportation by rail or water; but the control of the Federal Power Commission over the power sites of the country and over the interstate transmission of electric energy is not disturbed by the retention of the jurisdiction of the courts to enforce the anti-trust acts."

The D. C. majority, on the other hand, affirmed the FPC's rate orders, stating (R., Vol. 18, p. 55) that it would be "at cross-purposes with the intent of Congress" for that Court "to substitute antitrust criteria for those of the Federal Power Act" and that therefore (R., Vol. 18, p. 69) "there is no need to consider whether the various contracts involved herein are part of an arrangement declared illegal under the antitrust laws."

(a) There Is No Exemption from the Antitrust Laws Unless Expressly Provided for by Congress.

The Fourth Circuit stated (R., Vol. 18, p. 13) "In short, the grant of monopolistic privileges, subject to regulation by governmental body, does not carry an exemption, unless one be *expressly* granted, from the anti-trust laws, or deprive the courts of jurisdiction to enforce them." (Italics supplied.)

The D. C. majority, on the other hand, held (R., Vol. 18, p. 52) that "the antitrust laws are superseded by more specific regulatory statutes to the extent of the repugnancy between them,"* and found such repugnancy merely in certain general regulatory provisions of Part II of the Federal Power Act, none of which provide for exemption from the antitrust laws.

The D. C. majority decision is also in conflict with controlling decisions of this Court which were relied upon by the Fourth Circuit in holding the antitrust laws applicable to regulated industries (R., Vol. 18, pp. 12-13). *Georgia* v. *Pennsylvania R. Co.*, 324 U. S. 439 (1945); *U. S.* v. *Ter-*

* The cases cited by the D. C. majority for this proposition do not support it. *U. S. Nav. Co.* v. *Cunard S. S. Co.*, 284 U. S. 474 (1932), and *U. S.* v. *Borden Co.*, 308 U. S. 188 (1939), both involved regulatory statutes containing provisions for express exemptions from the antitrust laws. *Terminal Warehouse* v. *Penn. R. Co.*, 297 U. S. 500 (1936), and *Georgia* v. *Pennsylvania R. Co.*, 324 U. S. 439 (1945), hold that regulated industries are subject to the antitrust laws even though their rates and services are subject to the exclusive jurisdiction of regulatory bodies. *U. S. Alkali Ass'n.* v. *U. S.*, 325 U. S. 196 (1945), held that the Webb-Pomerene Act giving the F. T. C. the power to investigate violations of the Sherman Act did not give the F. T. C. power to enforce the Sherman Act or in any way repeal the enforcement provisions of the Sherman Act.

minal R. Ass'n, 224 U. S. 383 (1912); *U. S.* v. *Reading Co.*, 253 U. S. 26 (1920); *U. S.* v. *South-Eastern Underwriters Ass'n*, 322 U. S. 533 (1944).*

The Federal Power Act does not contain, as do some Federal regulatory acts,** any provisions for obtaining exemptions from the antitrust laws, nor does the D. C. majority refer to any provision of that or any other act permitting the FPC to grant such exemptions or even to deal with antitrust law questions.*** In fact, the Federal Power Act makes it a condition of licenses granted thereunder that licensees are prohibited from entering into agreements "to limit the output of electrical energy, to restrain trade, or to fix, maintain, or increase prices for electrical energy or service" (Section 10(h)).

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* See also *U. S.* v. *Southern Pacific Co.*, 259 U. S. 214 (1922) and *U. S.* v. *Union Pacific R. Co.*, 226 U. S. 61 (1912).

** Interstate Commerce Act, 49 U. S. C. §§5(11) and 5b(9); Communications Act, 47 U. S. C. §§221(a) and 222(c)(1); Civil Aeronautics Act, 49 U. S. C. §§492 and 494. The ICC, FCC and CAB are also, unlike the FPC, given express authority under Section 11 of the Clayton Act (15 U. S. C. §21) to enforce compliance with Sections 2, 3, 7 and 8 thereof (15 U. S. C. §§13, 14, 18 and 19). Under the Federal Power Act (§26 (16 U. S. C. §820)) it is the Attorney General of the United States rather than the FPC who enforces the antitrust laws.

*** The only provision granting any exemption upon approval of the FPC is found in a recent amendment (December 29, 1950) of Section 7 of the Clayton Act (15 U. S. C. §18) exempting acquisitions of stock or assets approved by the FPC and other specified commissions. This amendment clearly shows that specific enactment of Congress is necessary to give any exemption from the antitrust laws. The amendment (after the Fourth Circuit decision and the denial of certiorari) also clearly shows the correctness of the Fourth Circuit holding that the antitrust laws were not superseded by Part II of the Federal Power Act. Moreover, the fact that in such amendment Congress did not provide that FPC approval should exempt any other arrangements from any of the antitrust laws clearly shows that no other exemption is intended. In addition, the fact that Congress did not intend by the Federal Power Act of 1935 to give the FPC any power to grant exemptions from the antitrust laws is also evident from the fact that a provision in the 1935 bill (S. 2796, Sec. 203 (a)), as passed by the House, that dispositions of facilities, consolidations, acquisitions or control, approved by the FPC, should be exempted from any other Federal Acts making them unlawful, was dropped in conference.

The D.C. majority likened the Federal Power Act to the Interstate Commerce Act (R., Vol. 18, p. 53).* But, so far as the application of the antitrust laws to the fields covered by those Acts is concerned, there is no similarity. The Interstate Commerce Act contains *express provisions* (49 U. S. C. §§5(11) and 5b(9)), authorizing the Interstate Commerce Commission to approve, and thereby exempt, certain specified transactions, including revenue pooling arrangements (49 U. S. C. §5(1)), from the antitrust laws.**

Even express provisions for exemption from the antitrust laws of transactions approved by a regulatory body have been strictly construed, and the Courts have enforced the antitrust laws in respect of transactions other than those expressly authorized to be exempted, in the fields covered by the regulatory statutes involved. *Georgia* v. *Pennsylvania R. Co.*,*** *supra; U. S.* v. *Borden Co.*, 308 U. S. 188 (1939); *U. S.* v. *Socony-Vacuum Oil Co.*, 310 U. S. 150, 226-227 (1940); and *Norfolk Southern Bus Corp.* v. *Virginia Dare Transp. Co.*, 159 F. 2d 306 (4th Cir. 1947) cert. den. 331 U. S. 827.

This Court has frequently held that there is no implied repeal of, or exemption from, the antitrust laws. *Georgia* v. *Pennsylvania R. Co., supra,* 324 U. S. at pages 456-457; *U. S.* v. *Borden Co., supra,* 308 U. S. at pages 198 and 201; *U. S. Alkali Ass'n.* v. *U. S., supra,* 325 U. S. at

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* *Northwestern Pub. Serv. Co.* v. *Montana-Dakota Util. Co.*, 181 F. 2d 19, 22 (8th Cir. 1950), cited by the D. C. majority, did not involve any question under the antitrust laws or the power of either Commission to grant any exemption therefrom. It only was concerned with the similarity of the *rate regulation* jurisdiction of the ICC and the FPC.

** Prior to enactment of such express provisions, this Court held transactions of the kind subsequently exempted thereby to be illegal; *U. S.* v. *So. Pacific Co.*, 259 U. S. 214 (1922), *U. S.* v. *Lehigh Valley R. Co.*, 254 U. S. 255 (1920), *Georgia* v. *Pennsylvania R. Co., supra.*

*** Following this decision Congress enacted the Reed-Bulwinkle Act of 1948 (49 U. S. C. §5b (9)) specifically exempting certain railroad price fixing agreements when approved by the Interstate Commerce Commission.

page 209; *U. S.* v. *South-Eastern Underwriters Ass'n.*, *supra*, 322 U. S. at page 561.

The Attorney General, in an opinion to the Secretary of State dated October 31, 1944 (Vol. 40, p. 335, Op. No. 85), advised that a regulatory commission has no authority to exempt agreements from the antitrust laws except to the extent Congress has specifically so provided, and that statutory provisions granting such authority must be strictly complied with in order to be effective.

Both the Interstate Commerce Commission and the Federal Communications Commission recognize that they have no power to grant any exemption from the antitrust laws in the absence of express Congressional enactment.*

Sections 202** and 205 of Part II of the Federal Power Act (16 U. S. C. §§824a and 824d) from which the D. C. majority concludes that the FPC has authority to exempt the contractual arrangements between Penn Water, Safe Harbor and Consolidated from the Federal antitrust laws do not support such a conclusion. These are ordinary regulatory provisions which contain no provision for exemptions from the antitrust laws, and clearly do not destroy the specific mandate contained in Section 10(h) and the antitrust laws, which the FPC is given no power to waive.*** Furthermore, that Congress by enactment of such general regulatory provisions did not intend to authorize granting exemption from the antitrust laws is evident from the fact that it has, in some regulatory statutes, specifically authorized the granting of such exemptions in certain selected instances and with attendant specific limitations, conditions and safeguards.

There is clearly no "repugnancy" between the Federal antitrust laws and the sections of the Federal Power Act cited by the D. C. majority. On the contrary, as the Fourth

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* *Columbia Terminals Co.—Issuance of Notes*, 40 M. C. C. 288, 293 (1945); *Report on Chain Broadcasting*, Federal Communications Commission, May 2, 1941 (pp. 46-7).

** The rate orders under review were not issued under this section which was not in any way involved in the proceedings.

*** The dissenting opinion is in accord (App. B., p. 15a).

Circuit stated, the FPC is required to effectuate the policies of the Federal Power Act in a manner consistent with other laws including the Federal antitrust laws. In *Southern Steamship Co.* v. *N. L. R. B.*, 316 U. S. 31 (1942) (reversing an order of the Board directing reinstatement of employees who had been discharged because of a strike held to be in violation of the Federal laws regarding mutiny*), this Court said (p. 47):

> "Frequently the entire scope of Congressional purpose calls for careful accommodation of one statutory scheme to another, and it is not too much to demand of an administrative body that it undertake this accommodation without excessive emphasis upon its immediate task."

Clearly, if there is no power even to condone violations of other laws, as in that case, there is no authority to grant exemptions, or require violations, as the FPC has attempted to do here.**

This Court's decision in *Parker* v. *Brown*, 317 U. S. 341, 350-352, cited by the D. C. majority (R., Vol. 18, p. 51) does not support the D. C. majority decision.*** That case merely held that the antitrust laws were not applicable to the State of California acting through its own agents. The FPC, however, is not a state but a Federal agency affected

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* Sections 292 and 293 of the Criminal Code (35 Stat. 1146 (1909), 18 U. S. C. §483-4 (1940)).

** Even where regulatory agencies have authority to give contractual arrangements exemption from the antitrust laws they should (as held in *McLean Trucking Co.* v. *U. S.*, 321 U. S. 67, 80 (1944), and *Georgia* v. *Pennsylvania R. Co., supra*, 324 U. S. at page 456, both cases arising under a statute where provision for such exemption is made) give consideration and weight to the policies of the antitrust laws when doing so. This the FPC expressly refused to do, when by its order of February 28, 1949, it denied petitioners' petition for rehearing.

*** The *Sunshine*, *Rock Royal* and *Borden* cases cited by the D. C. majority (R., Vol. 18, p. 51) for the proposition that *Congress* may authorize arrangements which would otherwise violate the Federal antitrust laws are not in point. They all involved statutes which, unlike the Federal Power Act, contained express provisions for exemption from the Federal antitrust laws.

by all Federal laws, including the antitrust laws, as indicated in the *Southern Steamship* case, *supra*. In *Parker* v. *Brown*, this Court itself expressly stated (pp. 351 to 352) that the State could not give immunity to private parties to violate the antitrust laws. See also *Schwegmann Bros.* v. *Calvert Corp.*, 341 U. S. 384, 389 (1951). In the present case the FPC is apparently seeking authority to permit private parties to continue illegal arrangements.

The case of *Keogh* v. *Chicago & N. W. Ry. Co.*, 260 U. S. 156, 162 (1922), which the D. C. majority cites (R., Vol. 18, p. 54) for the proposition that a rate is not necessarily illegal because it is a *result* of a conspiracy in restraint of trade in violation of the antitrust laws is not in point. In that case the attack was solely on the amount, that is, the rate specified in an order of the Interstate Commerce Commission, and the Commission's order did not incorporate or embody the illegal conspiracy or arrangement alleged to exist. Here the FPC order under attack, while it purports to be only a rate order, does embody illegal arrangements, requires their continuance, and bases its critical features on the assumed existence and continuance thereof.*

(b) Section 10(h) of the Federal Power Act, Reaffirming the Antitrust Laws, Was Not Impliedly Repealed by Part II of such Act.

The D.C. majority, conceding (R., Vol. 18, p. 56) that "Section 10(h) does indeed virtually restate the Sherman Act", held that it, like the antitrust laws, is repealed *pro tanto* by implication by the provisions of Part II of the Federal Power Act discussed above stating:

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* Furthermore, in the *Keogh* case, the Court simply held that a rate already established by the Interstate Commerce Commission in one proceeding could not be attacked in a court in another proceeding. Here we have an appeal from the orders issued in the very proceeding in which the rates were prescribed, in which the appellate courts have statutory authority either to set aside the orders or to require that they be modified in the light of the established illegalities of the contractual situation. There is no attack here on a commission order which has gone into effect. The Courts are now determining whether the orders shall go into effect.

> "The very thing which that section [10(h)] prohibits, the combination of licensees with others to limit the output of electrical energy, is made one of the primary objectives of Part II."

The Fourth Circuit on the other hand held that the retention of Section 10(h) (which, along with other provisions of Part I of the Federal Power Act, was *reenacted* (49 Stat. 842, 844) in 1935 when Part II was added) indicates that the intention of Congress was to reaffirm the antitrust laws as applicable to electric utilities. The Fourth Circuit said (R., Vol. 18, p. 17):

> "The prohibition against monopolistic combinations was included among the conditions upon which the Power Commission may issue licenses for the construction and maintenance of power projects—not to deprive the courts of jurisdiction to enforce the anti-trust acts, but to make it perfectly clear that no licensee can legally agree to limit output, restrain trade or fix prices. The condition was a reaffirmance of the Sherman Act and was designed to restrict rather than to enlarge the Commission's authority."

The contrary statement of the D. C. majority is obviously incorrect since Section 202(a) (16 U. S. C. §824a (a)) expressly includes as the first purpose of Part II "the purpose of assuring an abundant supply of electric energy". The D. C. majority concedes (R., Vol. 18, p. 52) that "repeals by implication are not favored", but fails to point to any provision for express repeal.

(c) The Specified Return Formula Provided for in the Contracts Is Illegal Under the Antitrust Laws.

The FPC orders concededly did direct continuance of the provisions of the contracts containing the specified return formula. These provisions are in violation of the antitrust laws because they are in effect provisions for the pooling and division of earnings. Since they provide that Penn Water and Safe Harbor shall receive a specified return regardless of the services rendered, and credit Consolidated with revenue from other customers, they stifle the incentive

of Penn Water and Safe Harbor to compete, either with Consolidated or with others, and rob them of any initiative to obtain more customers and effect operating economies.*

In *U. S.* v. *Paramount*, 334 U. S. 131, 149 (1948), this Court held such arrangements for the pooling and division of earnings to be in violation of the antitrust laws stating "Clearer restraints of trade are difficult to imagine." Such arrangements were also held illegal in *U. S.* v. *Reading Co.*, 253 U. S. 26, 48 (1920); *Northern Securities Co.* v. *U. S.*, 193 U. S. 197, 327-328 (1904); *Norfolk Southern Bus Corp.* v. *Va. Dare Transp. Co., supra*, 159 F. 2d at 309-10; *Lee Line Steamers, Inc.* v. *Memphis, Helena & Rosedale Packet Co.*, 277 Fed. 5, 8 (6th Cir. 1922); *Chicago, M. & St. P. R. Co.* v. *Wabash, St. L. & P. R. Co.*, 61 Fed. 993, 997 (8th Cir. 1894).

The basic evil, so far as the Federal antitrust laws are concerned, in revenue pooling arrangements (as found in each of the foregoing cases) is the fact that they remove incentive to compete by providing that earnings shall be apportioned on some arbitrary basis unrelated to services rendered. It is therefore obvious that in the case of a two-party agreement such as the Baltimore contract, even though the incentive to compete is removed from only one of the parties, in this case Penn Water, and is not removed as to the other, Consolidated, the agreement is just as illegal as though the incentive of both were removed, because the elimination of competition on the part of one is sufficient to eliminate competition completely. Actually in the present instance, through the companion Baltimore and Safe Harbor contracts, the elimination of incentive to compete on the part of both Penn Water and Safe Harbor leaves Consolidated free of competition from either.

The FPC, in its brief attempting to intervene in the Fourth Circuit in October 1951 in the case relating to the

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* It should be pointed out here that in fixing the rates Penn Water was to receive there was no necessity of directing continuance of the illegal revenue pooling arrangements. The rates could have been fixed in a normal way on the usual unit rate basis customarily employed between utilities with payments based on the amount of capacity and energy actually supplied.

Safe Harbor contract, asserts (p. 14) that this payment plan prevents "setting up an economic interest upon his [the seller's] part," and argues (pp. 33, 34) that the restrictions on the seller are valid because, due to the payment plan, "its interests are not adversely affected" by the manner in which it is operated.

The fact that the rates and services of the parties to a revenue pooling arrangement are regulated does not excuse its invalidity under the antitrust laws any more than it excuses the invalidity thereunder of other restraints of trade. The decisions in the *Reading* and *Norfolk Southern Bus* cases related to utilities whose rates were regulated. Where Congress desired to permit (with adequate conditions, limitations and safeguards) the execution of revenue pooling arrangements by regulated companies it has specifically provided, in the applicable regulatory statutes, for their exemption from the antitrust laws.*

Regulation of rates (i.e., the amount to be charged) upon the basis of a return found reasonable, does not, as do the revenue pooling arrangements of the Baltimore and Safe Harbor contracts, insure the receipt of such return irrespective of whether or not the utility fails to render adequate service or loses business through a policy of non-competition.** The specified return provisions of the Baltimore and Safe Harbor contracts provide for payment even if no power at all is delivered.

The contention that a Federal regulatory agency may, pursuant to its authority to regulate rates, insure that a specified return will be received (or, in other words, regulate on the basis of a cost-plus subsidy plan) has been rejected by the Civil Aeronautics Board under the Civil

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* *Cf.* Section 5(1) and (11) of the Interstate Commerce Act (49 U. S. C. §5(1) and (11)); Section 15 of the Shipping Act (46 U. S. C. §814); and Sections 412(a) and 414 of the Civil Aeronautics Act (49 U. S. C. §§492(a) and 494).

** "A rate established as reasonable, whether by the company or the commission, is not guaranteed by the commission or the public. Whether it will actually yield more or less than a fair return during its continuance is a risk of the business." *Georgia Ry.* v. *R. R. Comm.*, 278 Fed. 242, 247 (N. D. Ga. 1922), aff'd. 262 U. S. 625 (1923).

Aeronautics Act. *Pennsylvania-Central Airlines Corp., et al., Motions*, 8 C. A. B. 685, 696 (1947). That Act, moreover, unlike the Federal Power Act, specifically authorizes the Board to exempt arrangements for the pooling and division of earnings from the antitrust laws (49 U. S. C. §§492, 494). *The Pennsylvania-Central* decision was affirmed by this Court in *T. W. A.* v. *C. A. B.*, 336 U. S. 601 (1949) which held that the normal method of rate regulation by prescribing the *amount* to be charged "forces carriers within a given class to compete in securing revenue and in reducing or controlling costs" (pp. 606-7).*

In a recent decision** the Interstate Commerce Commission stated with regard to its express power to exempt revenue pooling arrangements from the antitrust laws:

> "The object of pooling arrangements is ordinarily the restraint of competition, the statute directing that we find, in approving the arrangement, that such restraint shall not be undue."

(d) The D. C. Majority Misconstrued the Decision of the Fourth Circuit.

The D. C. majority attempted to distinguish the decision of the Fourth Circuit by stating (R., Vol. 18, pp. 53-54) that the Fourth Circuit only declared illegal certain "restraints exercised by Baltimore Company upon Penn Water" under the provisions of the Baltimore contract, implying that the Fourth Circuit's opinion did not apply to other parts of the

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* See also *United-Western, Acquisition Air Carrier Property*, 8 CAB 298, 321 (1947), in which the CAB stated: "the established policy of this Board * * * recognizes that differences in the return may accrue to different carriers operating under the same rates and * * * permits management to retain the profits of its economies as an incentive toward the accomplishment of decreased costs and increased revenues. The incentive which the Board's rate policy holds out to air carriers to profit from economies which produce a better-than-average return upon investment itself invalidates the assumption that the rate-making process is an instrument of precision which produces a mathematically precise rate of return."

** *Application of Pullman Co. under Sec. 5(1), I. C. C. Act*, 259 I. C. C. 41, 43-5 (1944).

contract. However, the Fourth Circuit declared the *entire contract*, not merely the restrictive provisions thereof, to be void and of no effect (R., Vol. 18, pp. 9, 28, 37, 40), both Penn Water and Consolidated having taken the position that the restrictive provisions thereof were an inseparable part of the contract.* The District Court for Maryland also expressly held that the entire Safe Harbor contract was invalid, not merely the restrictive provisions thereof. In so holding it rejected the argument of Consolidated that the restrictive provisions were separable (Consolidated having taken a different position with respect to the separability of the Safe Harbor contract than it did with respect to the separability of the Baltimore contract), and the District Court for Maryland called these restrictive provisions "the warp and weft of the agreement" (97 F. Supp. 952, 955) (R., Vol. 18, p. 45). The specific restraints on contracts for purchase and sale of power and on plant expansion are not only inseparable from the other parts of the contracts, but are reaffirmed throughout the contracts as for example, in the provisions permitting representatives of Consolidated through the Operating Committee (R., Vol. 18, pp. 7-8) to veto any action on operating, engineering and accounting matters and in the payment provisions which remove any incentive to compete with Consolidated.

The courts in the Fourth Circuit therefore clearly held invalid and void *ab initio* in their entirety contracts upon which the FPC determinations as to the amount of the rate reduction, the allocation thereof and its jurisdiction over sales in Pennsylvania were based.

The misinterpretation by the D. C. majority of the scope of the Fourth Circuit's opinion would in itself be a sufficient reason for granting certiorari because such misinterpretation produces a direct conflict between two Courts of Appeal which this Court alone is in a position to rectify. More-

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* Consolidated has also stated in the Safe Harbor contract litigation that the restrictive provisions of the Baltimore contract were essential (Tr., p. 5689).

over, the D. C. majority itself clearly doubted the validity of its attempted distinction of the Fourth Circuit opinion, finding it necessary to hold, contrary to the Fourth Circuit, that it "would be at cross-purposes with the intent of Congress" (R., Vol. 18, p. 55) to deny the FPC power to override the prohibitions of the antitrust laws.

As to Question II: The decision of the D. C. Circuit holding that the FPC may, under the guise of a rate order, direct continuance of, and base its orders on, contractual arrangements which destroy Penn Water's independent corporate character by surrender to Consolidated of its managerial functions and initiative in violation of public policy and in excess of the power given it under the organic laws of its State of incorporation, is in direct conflict with the decision of the Fourth Circuit and is erroneous.

The D. C. majority ignored the decision of the Fourth Circuit on this public policy and state law point without discussion and, by affirming the FPC orders, indicated that public policy and state law were intended to be superseded by the Federal Power Act. The Fourth Circuit held directly to the contrary, pointing out (R., Vol. 18, p. 28) that the FPC should approve some method of sale of electric energy between Penn Water and Consolidated which "will not offend either the anti-trust laws *or the utility laws of Pennsylvania*" (italics supplied). This objective can be accomplished by employing the type of unit rate for capacity and energy schedule generally in use between utilities throughout the United States.

The Baltimore and Safe Harbor contracts are not only invalid under the Pennsylvania statutes and public policy, as pointed out in the petition of the Pennsylvania Commis-

sion, but are also *ultra vires*,* as held by the District Court for Maryland (R., Vol. 18, pp. 77-78) in that they "destroy the corporate virility" of the seller by depriving its board of directors of the powers of management in violation of the corporate laws of Pennsylvania.**

The revenue pooling provisions of the contracts which the FPC *unquestionably* directed to be continued, are, like the other restrictive provisions, illegal under Pennsylvania law, and public policy, as well as under the antitrust laws, because of their destructive effect upon initiative with respect to rates and services. See the *Chicago, Milwaukee & St. Paul Railway* case, *supra*, 61 Fed. at p. 997.

The extraordinary authority to compel a state corporation to carry out a contract which destroys its independent corporate character and which violates the law of the sovereign which has created it cannot be found in, or even implied from any provision of, the Federal Power Act. On the contrary, Section 201(a) provides that the Federal regulation authorized thereunder is "to extend only to those matters which are not subject to regulation by the States."

Where Congress intended to permit a Federal regulatory body to modify the powers of a state corporation it has specifically so provided; Interstate Commerce Act, Sections 5(11) and 20b(5) (49 U. S. C. §§5(11), 20b(5)). Even under such provisions there would be no authority to require a state corporation to continue an arrangement such as the Baltimore contract which destroys its inherent corporate character in violation of the law of its state of incorporation. Any attempt to grant such authority would

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* Decisions holding contracts which deprive corporate directors of management powers to be *ultra vires* and void are: *Sherman & Ellis* v. *Indiana Mutual Casualty Co.*, 41 F. 2d 588 (7th Cir. 1930), cert. den. 282 U. S. 893; *Dubbs* v. *Kramer*, 302 Pa. 455, 153 Atl. 733, 734 (1931); *Severance* v. *Heyl & Patterson, Inc.*, 123 Pa. Super. 533, 187 Atl. 53, 58 (1936); *Rosenthal* v. *Light*, 185 App. Div. 702, 173 N. Y. S. 743 (1919); *Smith* v. *California Thorn Cordage, Inc.*, 129 Cal. App. 93, 18 P. 2d 393 (1933); *Long Park, Inc.* v. *Trenton-New Brunswick Theatres Co.*, 297 N. Y. 174, 77 N. E. 2d 633 (1948).

** The Pennsylvania corporate statutes involved are set forth in Appendix C hereto.

constitute an unconstitutional encroachment upon states' rights under the Tenth Amendment.*

There are no such provisions in the Federal Power Act and they are not needed for regulation by the FPC of the rates which have been placed within its jurisdiction.

As to Question III: The decision of the D. C. Circuit holding that Part II of the Federal Power Act repeals by implication provisions of Part I and is applicable to Penn Water as a licensee under Part I conflicts with statements of the Second Circuit and another panel of the D. C. Circuit, and is erroneous.

While the decision of the D. C. Circuit is consistent with a decision of the Third Circuit** involving Safe Harbor in so far as it holds Part II applicable to licensees, these decisions are in conflict with statements of the Court of Appeals for the Second Circuit*** and of another panel of the D. C. Circuit itself,† both of which recognized that Part II was not applicable to licensees. The decision of the D. C. Circuit moreover is in conflict with the decision of the Third Circuit referred to above, and another earlier decision of the Third Circuit,‡ also involving Safe

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* Thus, an attempt under the Federal Government's fiscal powers to give, by statute, a state banking corporation the power which it did not otherwise have to convert itself into a Federal corporation was rejected as unconstitutional in *Hopkins Federal Savings and Loan Association* v. *Cleary*, 296 U. S. 315 (1935). An attempt under the bankruptcy power of the Federal Government to revive a state corporation which had been dissolved under state law was similarly rejected in *Chicago Title & Trust Co.* v. *41-36 Wilcox Bldg. Corp.*, 302 U. S. 120 (1937). It would not appear that the Federal Government has greater power under the Commerce Clause of the Constitution.

** *Safe Harbor Water Power Corp.* v. *FPC*, 179 F. 2d 179, 185 (1949), cert. den. 339 U. S. 957 (1950).

*** *Niagara Falls Power Co.* v. *FPC*, 137 F. 2d 787, 792, 793 (1943).

† *Alabama Power Co.* v. *FPC*, 128 F. 2d 280, 293 (1942).

‡ *Safe Harbor Water Power Corp.* v. *FPC*, 124 F. 2d 800, 808 (1941) cert. den. 316 U. S. 663 (1942).

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IN THE

Supreme Court of the United States

OCTOBER TERM, 1951.

No. 428

PENNSYLVANIA WATER & POWER COMPANY and SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND,

Petitioners,

v.

FEDERAL POWER COMMISSION, and CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE and PUBLIC SERVICE COMMISSION OF MARYLAND, Intervenors,

Respondents.

APPENDICES B AND C TO PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT.

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Harbor, in so far as it holds that Part II repealed by implication certain regulatory provisions of Part I of the Act, whereas both these Third Circuit decisions held that licensees were subject to regulation under Part I (the later decision holding them subject to regulation under both Parts I and II).

If Part II is not applicable, then clearly there is no basis for the D. C. Circuit's decision that the regulatory features of Part II repeal, by implication, Section 10(h) of Part I and the antitrust laws and permit the FPC to require perpetuation of arrangements illegal thereunder.

Part II was not intended to be applicable to electric utilities licensed under Part I because (a) Part I contains within itself a complete set of provisions for the governance of licensees, including their rights and obligations with respect to the licensor-government and regulatory provisions applicable to both wholesale and retail sales, and was reenacted in 1935 when Part II first became law, (b) careful distinction is drawn between "licensees" under Part I and "public utilities" under Part II in the use of these terms throughout Parts I, II and III, (c) there are essential differences in the regulatory schemes provided in Parts I and II, and (d) the Federal Water Power Act of 1920 (reenacted as Part I of the Federal Power Act) was designed to stimulate and encourage private investment in hydroelectric projects,* and provided that no amendment should affect the rights of any license-holder, so that it is clear that Congress did not intend to change the situation of licensees by enactment of Part II.

It is respectfully submitted that the petition should be granted.

WILKIE BUSHBY
RANDALL J. LEBOEUF, JR.
JAMES PIPER
RAYMOND SPARKS
Counsel for Petitioners.

November 16, 1951.

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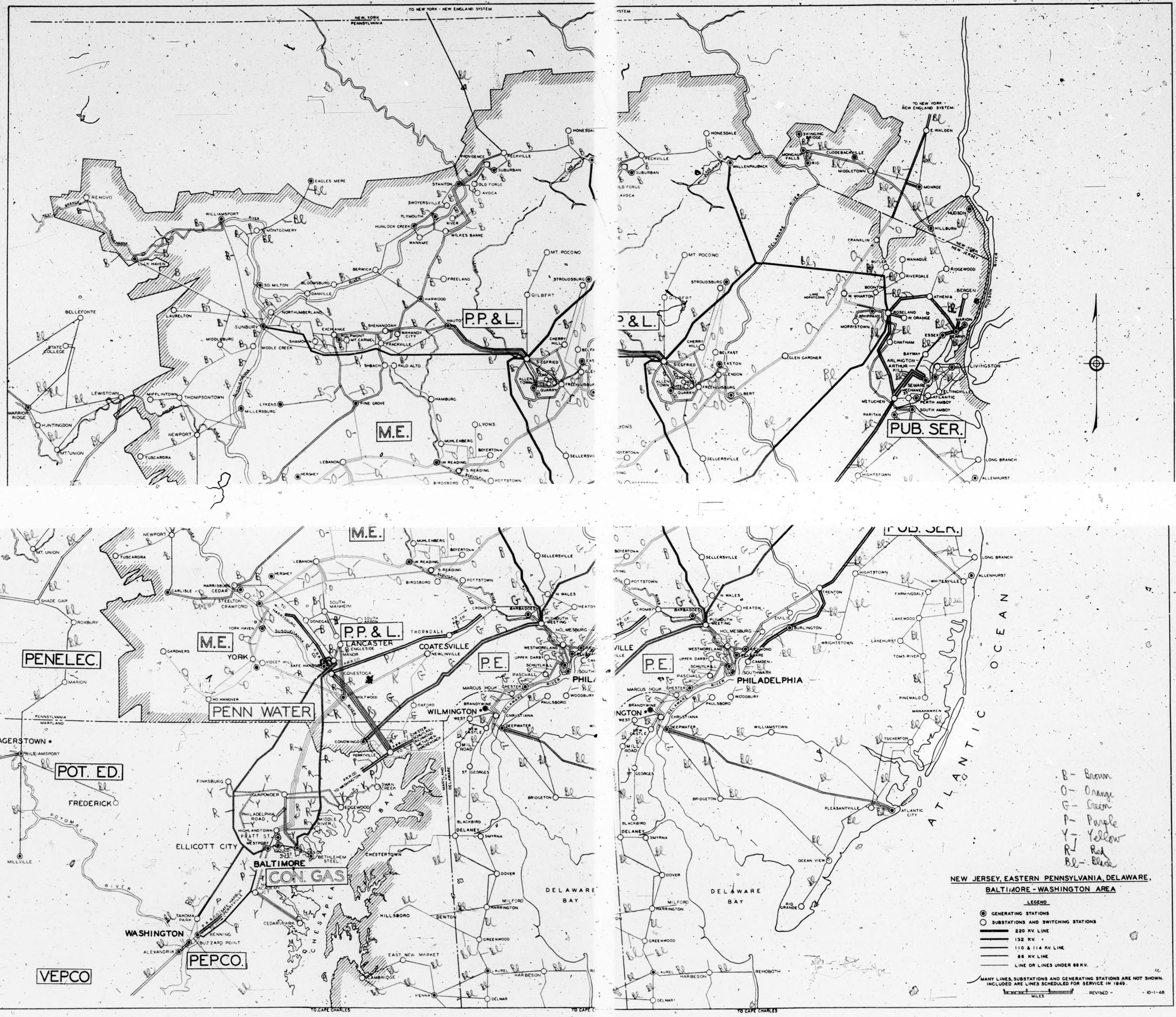
* *Grand River Dam Authority* v. *Grand Hydro*, 335 U. S. 359, 372 (1948); *First Iowa Hydro-Electric Coop.* v. *FPC*, 328 U. S. 152, 180, Note 23 (1946).


NEW YORK PENNSYLVANIA
TO NEW YORK - NEW ENGLAND SYSTEM
P.P. & L.
M.E.
PUB. SER.
PENELEC.
P.P. & L.
M.E.
PENN WATER
P.E.
POT. ED.
CON. GAS
PEPCO.
VEPCO
P.E.
PHILADELPHIA
ATLANTIC OCEAN
DELAWARE BAY
B- Brown
O- Orange
G- Green
P- Purple
Y- Yellow
R- Red
Bl- Black
NEW JERSEY, EASTERN PENNSYLVANIA, DELAWARE, BALTIMORE - WASHINGTON AREA
LEGEND
GENERATING STATIONS
SUBSTATIONS AND SWITCHING STATIONS
220 KV. LINE
132 KV. "
110 & 114 KV. LINE
66 KV. LINE
LINE OR LINES UNDER 66 KV.
MANY LINES, SUBSTATIONS AND GENERATING STATIONS ARE NOT SHOWN. INCLUDED ARE LINES SCHEDULED FOR SERVICE IN 1949.
MILES
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APPENDIX B

Dissenting Opinion of Wilbur K. Miller, District of Columbia Circuit Judge.

Filed October 4, 1951.

WILBUR K. MILLER, Circuit Judge, *dissenting:* It is my view that this court should have granted petitioners' motions to annul the rate reduction orders of the Federal Power Commission. The decision of the United States Court of Appeals for the Fourth Circuit, which held null and void the contractual arrangement between Pennsylvania Water & Power Company and Consolidated Gas Electric Light and Power Company of Baltimore, to which the orders were intended to apply prospectively, imperatively required that the case before us be remanded to the Commission to work out with the utilities some different plan for interchange of energy which would not violate any state or federal law and which would not be contrary to public policy. This should have been done because the Commission's orders stood in a vacuum after the Fourth Circuit held the contract invalid; the only service to which they can have application may not lawfully be continued.

But the Commission has ordered the two companies to continue to observe and be governed by all the provisions of the old contract which are "in and of themselves lawful,"—a qualification which overlooks the fact that the Fourth Circuit condemned the contract in its entirety. And the majority of this court apparently hold that the Power Commission has authority to cause the *whole* contract to remain in effect, since they conclude that federal anti-trust laws do not apply to utilities regulated under Part II of the Federal Power Act. Relying on that theory, my brethren say,

"The motions to set aside or to remand the Commission's orders on the basis of the Fourth Circuit's decision and the other points referred to above are denied."

It is thus clear that, despite the voluminous record in this case,[1] the numerous and sometimes lengthy briefs, and three days of oral argument, the basic issue is a simple one. Has the Federal Power Commission authority to order a combination of these two utilities under terms and conditions which, if arranged by private contract between them, would clearly violate the federal anti-trust laws and the public utility laws of Pennsylvania? If the Commission has such power, the majority have correctly denied the motions to annul and remand. If not, then those motions should have been granted. Before discussing what I regard as the basic question, it may be well to review somewhat in detail the proceeding before the Power Commission and the litigation in the Fourth Circuit.

I.

The Commission instituted in September, 1944, an investigation of the rates and charges of Penn Water, following which it entered an order on January 5, 1949, requiring a large reduction in Penn Water's annual revenue. The major portion of the reduction was allocated to Consolidated; indeed, the reduction ordered in Penn Water's charges against that company exceeded by approximately $500,000 the sum which Consolidated had paid Penn Water during the "test year" of 1946. The Commission interpreted the 1931 contract as entitling Consolidated to all Penn Water's energy except that required to meet its firm

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[1] The Power Commission filed with us a transcript in 75 volumes containing an aggregate of 26,876 pages. Appendices prepared by the parties abbreviated that bulk to 17 volumes containing 5,338 printed pages.

commitments to other customers; as a result of that interpretation the Commission concluded that very substantial sales by Penn Water to others had really been for the account of Consolidated, and allocated the reduction accordingly.

The rate order was accompanied by a lengthy opinion which makes it clear that the Commission assumed the continuance of the 1931 contract and based its order, which was to operate prospectively, upon the relationship created by that instrument as it construed it.

For example: (a) The Commission's jurisdictional findings as to the use of Penn Water's facilities for the transmission of electric energy at wholesale in interstate commerce were based upon the assumption that the method of operation required by the contract of 1931 would continue. (b) The allocation of cost of service which the Commission made was premised upon its interpretation of Consolidated's entitlements and Penn Water's obligations under the 1931 contract. (c) The rate of return which the Commission allowed Penn Water was largely based upon the financial security which the Commission though Penn Water enjoyed under the 1931 contract. Moreover, the form of rate schedule later prescribed followed the residual-entitlement, specified-return formula of the 1931 contract.

Having observed the patent fact that the rate reduction order was based upon, and applied only to, the combination of facilities and interchange of energy set up by the 1931 contract, Penn Water applied to the Power Commission on January 28, 1949, for a rehearing. It sought to show that the order ought not to be premised upon a contractual relation which it regarded as illegal and which, if judicially found unlawful, could not continue to exist.

Among other things, Penn Water pointed out to the Commission that on December 20, 1948, after the record in the Commission's proceeding had been closed, it had terminated the 1931 contract by notice to Consolidated; and that it had sued Consolidated in the United States District

Court for the District of Maryland for a declaration that the contract was invalid and unenforceable.[2]

Apparently this was the first time the Federal Power Commission had been officially informed that Penn Water had given notice of termination of what the Commission calls the "system foundation contracts," and that Penn Water considered them violative of the anti-trust laws and the

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[2] In the course of its application for rehearing, Penn Water stated to the Commission:

> "(c) Since the record in the proceeding has been closed the purported contract referred to as supplemented, has been terminated by notice dated December 20, 1948; and if given the opportunity on rehearing Petitioners hereby offer to prove:
>
> "(i) The fact of such termination;
>
> "(ii) The contract was null, void, and unenforceable because the basic agreements were made at a time when Penn Water and Baltimore Company [Consolidated] were affiliated through substantial ownership by Baltimore Company of Penn Water stock and by interlocking directors and officers; the basic agreements were never approved or ratified by the stockholders of Penn Water; the effect of Articles IV and V of the supplemental agreement of June 1, 1931, particularly as construed in practice by Baltimore Company, made the contract *ultra vires* and contrary to public policy; and such supplemental agreement constituted an agreement in unreasonable restraint of trade and in unreasonable restriction of competition in the generation and sale of electrical services, and unreasonably limited the output of electrical energy contrary to the laws of the United States, including Section 1 of the Sherman Antitrust Act of July 2, 1890 (15 U. S. C. 1946 ed. § 1; 26 Stat. 209, 50 Stat. 693), Section 5 of the Federal Trade Commission Act of September 26, 1914 (15 U. S. C. 1946 ed. § 45; 38 Stat. 719), and Section 10(h) of the Federal Power Act (16 U. S. C. 1946 ed. § 803(h); 41 Stat. 1068, 49 Stat. 842), and to the laws of Maryland and Pennsylvania.
>
> "(iii) Baltimore Company committed material breaches of the contract which justified its termination; and
>
> "(iv) The foregoing matters are now in litigation between Penn Water and Baltimore Company on complaint of Penn Water for declaratory and other relief, before the United States District Court for the District of Maryland, Civil Action No. 4179."

utility laws of Pennsylvania and had sued for a declaration to that effect.

On February 26, 1949, the Power Commission denied the application for rehearing and filed an opinion in response to it, in the course of which it said:

> ". . . If there are questions as to the legality of the foundation contracts which are in litigation, as Respondents' application for rehearing indicates, the validity of our order is not dependent upon the decision of those questions. In our opinion and order *we took care to leave the continuation of the operation of the integrated and interconnected system*[3] *in full effect, merely changing the rates,* as shown by our statement wherein we specifically stipulated that
>
> "'The present arrangement whereby sales to Pennsylvania customers are made on a firm basis on definite rate schedules whereas Baltimore Company takes what is left and assures Respondents of the recovery of all proper operating expenses, depreciation, taxes and a fair return, is the most practicable under the circumstances. *That arrangement will, therefore, be continued* with, however, such modifications as are necessary to accomplish the reductions mentioned above to Pennsylvania Power & Light, Philadelphia Company, Metropolitan Company and Baltimore Company.'" (My emphasis.)

Later in 1949—on October 27—the Commission prescribed a rate schedule for Penn Water's service to Consolidated which was designed to effectuate the reduction in Penn Water's revenue which it had ordered on January 5. The last paragraph of the October order is as follows:

> "The foregoing provisions supersede only the rates and charges heretofore made, demanded, collected or assessed against Baltimore Company by

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[3] This refers, of course, to the two sets of facilities as operated under the contract.

> Penn Water and Transmission Company. All other provisions of the aforementioned contracts, in and of themselves lawful prescribing or defining the power, energy and transmission services to be furnished, or any classification, practice, regulation or rule affecting such services, which several provisions are incorporated herein by reference, shall be observed and be in force."

The revenue reduction order of January 5, 1949, and the rate order of October 27, 1949, are those which this court was asked to review.

II

While the proceeding before the Power Commission, which has just been described, was in progress, the litigation in the Fourth Circuit began. As of June 1, 1931, Penn Water and Consolidated, which were then under common dominance, had drastically amended a previously existing contract between them so as to form a combination of their utility facilities under terms which made Penn Water a virtual vassal of Consolidated. Fifteen years later the two corporations ceased to be under common control and thereafter each was managed independently. But the basic contract of 1931, burdensome and restrictive as to the Pennsylvania company, not only continued to define and govern the relationship between the two utilities, but by its terms was to endure until 1980,—a bleak prospect indeed for Penn Water.

Due to differences and disputes which developed, Consolidated invoked the arbitration provisions of the contract on September 1, 1948. Shortly thereafter, Penn Water instituted suit in the United States District Court at Baltimore, asking that the arbitration provisions be declared unenforceable and that Consolidated be enjoined from proceeding thereunder. It gave notice of termination to Consolidated and in an amended complaint asked that the 1931 agreement be struck down in its entirety.

Thereupon Consolidated applied to the District Court for a restraining order and on February 9, 1949, the court restrained Penn Water, pending final determination of the issues, from doing anything in respect to the generation, transmission and disposition of power covered by the 1931 agreement in any manner different from the procedure theretofore followed in the performance of the contract. The District Court filed an opinion[4] on February 29, 1950, declaring the 1931 contract valid, and directing arbitration to proceed.

Penn Water appealed to the United States Court of Appeals for the Fourth Circuit and that court, on September 30, 1950, handed down an exhaustive opinion[5] reversing the judgment of the District Court. The appellate court held the 1931 contract invalid as contrary to public policy and as violative of the Sherman and Clayton Acts and the public utility laws of Pennsylvania. In the course of the opinion, the Fourth Circuit said (at page 568):

> "... It may well be, although the *present arrangement* between the Maryland and Pennsylvania utilities is invalid for the reasons set forth, that an interconnection of facilities and an interchange of electrical energy between them may be continued by some method that would meet with the approval of the appropriate regulatory authority and will not offend either the anti-trust laws or the utility laws of Pennsylvania." (Emphasis supplied.)

Consolidated's petition for *certiorari* was denied by the Supreme Court on December 11, 1950,[6] as a result of which

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[4] *Pennsylvania Water & Power Co.* v. *Consolidated Gas Electric Light & Power Co.*, 89 F. Supp. 452.

[5] *Pennsylvania Water & Power Co.* v. *Consolidated Gas, Electric Light & Power Co.*, 184 F. (2d) 552.

[6] *Consolidated Gas Electric Light & Power Co.* v. *Pennsylvania Water & Power Co.* and *Hessey et al., constituting the Public Service Commission of Maryland* v. *Pennsylvania Water & Power Co.* (two cases), 340 U. S. 906.

the case went back to the District Court for entry of a declaratory judgment in accordance with the opinion of the Court of Appeals for the Fourth Circuit. After the remand, a controversy arose in the District Court as to whether the invalidation of the 1931 agreement had revived an agreement of 1927 between the parties for the interstate sale and delivery of electric energy so that Consolidated was entitled to continued deliveries by Penn Water, in accordance with the terms set forth therein, regardless of the invalidity of the amendatory contract of 1931. In response to a motion by Penn Water that the Fourth Circuit interpret its mandate and settle the controversy, that court delivered a second opinion on January 10, 1951.[7]

The court held the earlier agreement of 1927 was not revived when the amendatory contract of 1931 was declared illegal, and reiterated in unmistakable terms its former holding that the 1931 contract was invalid in its entirety. In the course of the opinion, the Fourth Circuit said (186 F. (2d) at 937) that by entering into the amendatory contract

> ". . . Penn Water gave up its independent status as a producer and seller of electric energy and subjected itself so completely to the dominance of Consolidated as to violate the controlling statutes and *hence the 1931 agreement must be stricken down.*
>
> ". . . Here the prior contract has been merged in and its nature changed by the subsequent unlawful agreement, and as so changed, it has resulted in *an unlawful relationship which has continued for twenty years.* When the illegality of such relationship is declared, it is idle to contend that the court can withdraw the original contract from the illegal relationship and give validity, certainly after it has been buried therein for so long a period. *It must perish*

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[7] *Pennsylvania Water & Power Co.* v. *Consolidated Gas, Electric Light & Power Co.*, 186 F. (2d) 934.

along with the relationship of which it has been made an inseparable part.

* * * * * *

"Throughout the trial of this case and in the argument of the pending motion, Penn Water has reiterated its desire to continue to supply electric energy to Consolidated; and in view of the close relationship between the parties, the existence of interconnecting equipment and the control over its rates by the regulatory bodies, there is no reason to fear that the interests of consumers of electricity in Maryland will suffer through *the invalidation of the existing contract* between the two utilities.

"The District Court should issue a declaratory judgment (1) setting aside its judgment and order of March 18, 1950; (2) *declaring that the agreements of December 31, 1927, June 1, 1931 and September 29, 1939 are void and of no effect;* and (3) dissolving the restraining order of February 9, 1949." (Emphasis supplied.)

Presumably the District Court at Baltimore then entered a judgment declaring the agreements between Penn Water and Consolidated to be void and of no effect, as it had been directed to do. There was no equivocation or limitation in the Fourth Circuit's directive. It did not simply hold void the restrictive provisions, but condemned the 1931 agreement in its entirety. This was obviously because the court considered that the whole arrangement depended upon the restrictions which fettered Penn Water and that the paragraphs containing the restrictions, therefore, were not severable from the remainder of the contract. This appears from the following excerpt from the Fourth Circuit's opinion (186 F. (2d) at 936):

"The 1931 agreement, on the other hand, provided that Consolidated should be entitled to all the electric capacity and energy available to Penn Water and not

otherwise disposed of in the performance of existing contracts, and in consideration thereof, Consolidated agreed to pay Penn Water an amount equal to its operating expenses, a specified rate of return on existing facilities, and on the cost of new facilities less depreciation, and Consolidated was allowed a credit for the amount of the sales of energy by Penn Water to other persons. Closely associated with these provisions were the illegal restrictions on the future activities of Penn Water which resulted in the invalidation of the whole contract. Therein Penn Water was required to obtain the approval of Consolidated before entering into any agreement for the sale or purchase of electric power and energy and to obtain the approval of Consolidated before making any investment or disposing of its property having a value in excess of $50,000. These restrictive conditions were included in order to safeguard Consolidated in the performance of its promises and it is conceded that without them the contract would have been impracticable and would not have been made."

Although a final judgment of a court of competent jurisdiction had thus invalidated the entire contract between Penn Water and Consolidated, the Federal Power Commission still regarded it as desirable and in the public interest that the facilities of the two companies be operated as one integrated and interconnected system. Being of that opinion, the Commission was understandably anxious that the co-operative use of facilities and interchange of energy be continued. I think it should have called the parties in and required them to work out immediately a new contract in conventional form which would accord with the opinions of the Court of Appeals for the Fourth Circuit. The Commission thought, however, that the Fourth Circuit meant only to condemn the two paragraphs of the 1931 agreement which prohibited Penn Water from selling or buying energy and from increasing or reducing its plant investment without Consolidated's consent. It reasoned that it could require

the continuance of the old contract if those paragraphs were eliminated. This would leave in effect the contractual definition of Consolidated's residual entitlements and the residual payment type of rate. But the Fourth Circuit said those provisions were so closely associated with the illegal restrictions on the future activities of Penn Water that the whole contract was invalid. The court's opinions make abundantly clear its intention to strike down the entire arrangement,—not just the restrictive provisions.

It is significant that Penn Water and Consolidated conceded that, without the unlawful restraints on the former, the 1931 contract would have been impracticable and would not have been made. That was an admission that the restrictions and the remainder of the contract were so "closely associated" that illegality of the restrictions resulted in complete invalidity. Even if the unlawful paragraphs of the agreement were severable, the remaining provisions would be incompatible with the Fourth Circuit's decision because under them free and unrestrained competition would still be impossible. Welding the facilities of the two companies into one integrated system—the Commission's objective—is not conducive to competition.

III.

After the "system foundation contracts" had been held null and void, Penn Water entered a motion in this court on December 29, 1950, asking that we

> "... set aside, annul and dismiss the orders of the Commission sought to be reviewed in these proceedings, or, in the alternative, remand these proceedings to the Commission with instructions to annul and set aside its orders herein sought to be reviewed ...."

The Pennsylvania Public Utility Commission also moved this court on December 29, 1950,

> "To annul and dismiss the orders of the Federal Power Commission sought to be reviewed in Case

No. 10,239 on the ground that the decision of the United States Court of Appeals for the Fourth Circuit in *Pennsylvania Water & Power Company and Pennsylvania Public Utility Commission* v. *Consolidated Gas Electric Light and Power Company of Baltimore and Public Service Commission of Maryland*, 184 F. 2d 552 (1950), *cert.* denied December 11, 1950, renders invalid, null, void and of no effect the orders of the Federal Power Commission and the proceedings before it pursuant to which said orders were issued."

The question presented by these motions was what I have called the basic issue: can the Federal Power Commission lawfully establish between Penn Water and Consolidated a relationship which constituted a violation of the anti-trust statutes when established by contract between them? One who considers that question should bear in mind three indisputable propositions: 1. Regulated industries are not *per se* exempt from the Sherman Act. 2. Part II of the Power Act does not give the Commission power to lift the ban of the anti-trust laws. 3. As repeals by implication are not favored, only a clear repugnancy between the old law and the new results in the former giving way and then only *pro tanto* to the extent of the repugnancy. *Georgia* v. *Pennsylvania Railroad Company*, 324 U. S. 439, 456-7 (1945); *United States* v. *Borden Company*, 308 U. S. 188, 198 *et seq.* (1939).

In denying the motions and holding that the Commission has such power, the majority of the court necessarily first concluded that Part II of the Federal Power Act had impliedly repealed or superseded the anti-trust statutes so as to exempt from their prohibitions the combination between Penn Water and Consolidated which the Commission ordered to continue.

In order to show in bold relief the thinking of my brothers of the majority which led them to that conclusion, I have skeletonized the pertinent portion of their opinion:

"The problem raised by the motions is one of the interrelation of two statutory schemes—each of which reflects different historical pressures and different conceptions of the public interest. The Sherman Act and related laws represent an attempt to keep the channels of competition free so that prices and services are determined by the workings of a free market. . . . In marked contrast is a statute such as Part II of the Federal Power Act. It evidences congressional recognition that competition can assure protection of the public interest only in an industrial setting which is conducive to a free market and can have no place in industries which are monopolies because of public grant. . . .

"These contrasting objectives indicate that the antitrust laws can have only limited application to industries regulated by specific statutes. . . .

" . . . The net effect of what we have already said is that, though regulated industries are not *per se* exempt from the antitrust laws and repeals by implication are not favored, the antitrust laws are superseded by more specific regulatory statutes *to the extent* of the repugnancy between them. . . . where a statute provides for comprehensive and detailed regulation of a particular industry, as do the Interstate Commerce Act and the Federal Power Act, there is, as we have indicated, only a limited area for application of antitrust considerations to Commission decisions."

These generalities boil down to the thesis that Part II of the Federal Power Act is repugnant to the anti-trust laws and therefore supersedes them to the extent of the repugnancy; and that the repugnancy extends so far as to exempt from the anti-trust laws the combination of utilities ordered by the Commission which is otherwise clearly illegal under those statutes.

The majority do not point out with particularity the repugnancy upon which they rely. They seem to find it

in the "contrasting objectives" of the anti-trust acts and Part II of the Power Act, saying the first was designed to obtain the benefit of free competition, and the other to eliminate competition as having no place in the utility field and to substitute for it a regulatory agency. This being the only repugnancy suggested by the majority, their holding necessarily is that the anti-trust laws are superseded by Part II of the Power Act to the extent that the *objectives* of the two forms of legislation are in contrast. Let us see if there is really any repugnancy between the Sherman Act and Part II of the Power Act.

The first section of the former, which is 15 U. S. C. §1, declares illegal every contract, combination or conspiracy in restraint of trade or commerce. The 1931 contract between Penn Water and Consolidated was held violative of that section.

Section 202, found in Part II of the Power Act, empowers the Commission to require the interconnection and co-ordination of the facilities of the two utilities. But neither that section nor any other section of Part II authorizes the Commission to require interconnection and co-ordination of facilities under terms and conditions which will result in a violation of the Sherman Act. The Commission can exercise its power under §202 and under all of Part II without setting up an arrangement which is unlawful under anti-trust statutes. The Fourth Circuit intimated as much when it suggested that the interconnection of facilities and interchange of energy be continued "by some method which would meet with the approval of the appropriate regulatory authority and will not offend either the anti-trust laws or the utility laws of Pennsylvania." The majority opinion does not suggest any reason why that cannot be done by the Commission.

Since the Power Commission can perform all its functions under Part II without creating a violation of the Sherman Act, there is no repugnancy between the two statutes, and no room for the court to say that Part II superseded the anti-trust statutes.

I have said, as did the Fourth Circuit, that neither Part I nor Part II of the Federal Power Act purports to suspend the anti-trust statutes with respect to licensees and utilities regulated thereunder. On the contrary, §1 of the Sherman Act is substantially repeated in §10(h), found in Part I of the Power Act, 16 U. S. C. §803(h), which is as follows:

> "Combinations, agreements, arrangements, or understandings, express or implied, to limit the output of electrical energy, to restrain trade, or to fix, maintain, or increase prices for electrical energy or service are hereby prohibited."

Penn Water is a licensee under Part I of the Act and so is subject to the prohibitions of §10(h). The majority considers that the omission of that section from Part II not only repealed §10(h) but also amounted to a repeal of the prohibitions of the Sherman Act as far as regulated companies are concerned. That amounts to saying that the anti-trust laws do not apply to any regulated industry unless their provisions are substantially repeated in the regulatory statute. Just the opposite is true: the anti-trust laws apply to regulated industries unless exemption therefrom is expressly provided in the regulatory statute, or must inevitably be implied from provisions of the regulatory act which are clearly repugnant to anti-trust prohibitions.

It must be noted, too, that Penn Water does not lose its status as a licensee under Part I simply because it is regulated also under Part II. It continues, nevertheless, to be a licensee and so continues to be forbidden by §10(h) to engage in the combinations or arrangements made illegal thereby. It follows that, when the Commission required Penn Water and Consolidated to remain in the combination which had been condemned by the courts, it not only did not act under the authority of Part II which gives it no such power, but also affirmatively violated §10(h) of its own basic act.

The majority opinion says, however, that when a Part I licensee is also a Part II company, as Penn Water is, it is no longer subject to the anti-trust provisions of §10(h), simply because the language of that section does not appear in Part II. Then the notion that §10(h) was repealed by Part II is thus stated in the opinion:

> ". . . The prohibitions of §10(h) would apply to a licensee which is also regulated under Part II only to the extent that the prior statute is not repealed by the clear repugnancy between it and the later statute."

I suppose the court meant to say that Part II is clearly repugnant to §10(h) because it does not contain similar language and therefore repealed that section by implication. But Part II is not repugnant to §10(h) for the same reasons that it is not repugnant to the anti-trust laws: it is not necessary for the Commission to cause a violation of §10(h) in order fully to exercise its regulatory power under Part II over a Part I licensee which is subject to Part II regulation.

One other phase of the portion of the court's opinion which denies the motions remains to be noticed. It is that in which the court purports to give another reason for denying the motions to annul, in addition to the fallacious theory that the antitrust laws do not apply to regulated industries. On examination, however, the additional ground is seen to rest upon the same erroneous idea. It is thus stated in the opinion:

> "To grant petitioners' motions and set aside the order at this time would be to substitute antitrust criteria for those of the Federal Power Act, . . ."

By this the court meant that it would be improper to annul the Commission's orders on the mere ground that "a decision handed down in a suit between private parties under a non-controlling statute" had destroyed the only arrangement to which they could possibly have application.

If Penn Water "wishes," because of the Fourth Circuit's decision, to make some change in the old contractual arrangement which the Commission has ordered to be retained, the majority say the only thing it can do is to submit its proposed new arrangement. Then, after the Commission has disposed of the proposal, Penn Water can file a new petition for review if it feels aggrieved. That would be true if Penn Water wanted to change an existing *legal* arrangement.

The key error in the court's reasoning is revealed by its allusion to the decision of the Fourth Circuit as one "handed down in a suit between private parties under a non-controlling statute." It shows that in assigning this additional reason for denying the motions to annul, the court is still assuming that the Commission can lawfully require these utilities to form a combination which they cannot legally form by their own contract.

I think I have shown sufficiently already that the Sherman Act *is* the controlling statute which the Commission is not empowered to override. That the judgment invalidating the existing arrangement was handed down in a suit between private parties is, of course, immaterial. It is binding on those private parties, yet this court has required them to disobey it. It has done so upon the erroneous idea that the Sherman Act has been superseded by Part II of the Federal Power Act and so is not the "controlling statute."

In the portion of the majority opinion now being discussed, the court says it is the existing "services and rates, reflecting underlying operations, which were the subject of the Commission's orders." The implication is that all the Commission has done is to prescribe rates for service actually being rendered; that if the rates are just and reasonable for that service, and if the Commission's findings in that respect are supported by substantial evidence, "our review is at an end." I suggest that the "underlying operations" were the subject of the Commission's orders and therein lies the vice in them. They did not deal with rates alone but ordered the contractual "underlying operations" to continue.

It is a boot-strap argument to say that, because the Commission has power to prescribe rates for existing service so long as it is being rendered, it can therefore require continued rendition of the service no matter if it is unlawful.

For the reasons given, I think the motions to annul the Commission's order should have been granted, and so I dissent. My brothers of the majority, having denied the motions, then proceeded to explore the merits of the rate reduction order and the implementing rate schedule which the Commission prescribed, and affirmed those orders. I dissent also from that action, as I think the orders should have been set aside as improper. But I do not prolong this dissent by discussing the merits of the orders, as I think it perfectly clear that they should have been set aside as being without basis or applicability after the Fourth Circuit's judgment became final.

APPENDIX C

TEXT OF PERTINENT PENNSYLVANIA LAWS GOVERNING CORPORATIONS

(EXCERPTS)

Section Five of Corporation Act of 1874.*

The business of every corporation created hereunder, or accepting the same, shall be managed and conducted by a president, a board of directors or trustees, a secretary or clerk, a treasurer, and such other officers, agents and factors as the corporation authorizes for that purpose, * * *. The members of said corporation may, at a meeting to be called for that purpose, determine, fix or change the number of directors or trustees that shall thereafter govern its affairs, and a majority of the whole number of such directors or trustees shall be necessary to constitute a quorum * * *.

Section one of Act of May 31, 1887, P. L. 281 (No. 166).

SECTION 1. *Be it enacted, &c.,* That it shall be lawful, from and after the passage of this act, for any corporation, chartered or existing by or under any law of this State, to determine, by the vote of its stockholders holding a majority in interest of all of its stock, at a meeting duly called for the purpose, the time of holding the annual meeting for the election of officers of the corporation, and the number of directors that shall thereafter govern its affairs: *Provided,* That the number of directors so determined shall not be less than three nor more than fifteen, and that at least one third of the directors of every corporation shall be and remain, during their term of service, residents of the State of Pennsylvania: * * *.

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* As amended by Act of May 14, 1891, P. L. 61, and Act of May 6, 1927, P. L. 828 (No. 417).

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Supreme Court of the United States

OCTOBER TERM, 1951.

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No. 428.

PENNSYLVANIA WATER & POWER COMPANY and SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND,
Petitioners,

v.

FEDERAL POWER COMMISSION, and CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE and PUBLIC SERVICE COMMISSION OF MARYLAND, Intervenors,
Respondents.

No. 429.

PENNSYLVANIA PUBLIC UTILITY COMMISSION,
Petitioner,

vs.

FEDERAL POWER COMMISSION, and CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE and PUBLIC SERVICE COMMISSION OF MARYLAND, Intervenors,
Respondents.

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REPLY ON BEHALF OF PETITIONERS.

The clear conflict between the Fourth and D. C. Circuits, on the question of the FPC's authority to validate contractual arrangements violative of the anti-trust laws and state law, places Penn Water in the position of having been told by the Fourth Circuit that its contractual arrangements violate criminal law and by the D. C. Circuit that those same arrangements are legally required. Unless the conflict is resolved by this Court, this dilemma can confront not only Penn Water but every utility which is subject to Federal Power Commission regulation, as well as companies subject to the jurisdiction of other Federal regulatory agencies.

Government counsel in their "Memorandum for the Federal Power Commission" (Gov. Mem.) do not oppose the granting of a writ of certiorari in respect of the principal question (set out in Penn Water's Questions I and II) presented by Petitioners, saying only that "this Court may not deem this an appropriate case in which to consider that question" (Gov. Mem., p. 32). They admit the direct conflict between the opinions of the D. C. majority and the Fourth Circuit and concede the importance of the question (Gov. Mem., p. 21). They do not attempt to support the opinion of the D. C. majority that the FPC has authority to validate arrangements violative of the anti-trust laws and state law.*

Instead, government counsel, as do the Intervenor-Respondents (Consolidated and the Maryland Commission), in order to avoid an outright confession of error on the part of the FPC and the D. C. majority, have invented a specious and attenuated argument that the conflicting hold-

* To have supported the D. C. majority on this point would be in direct conflict with the traditional position taken by the government (as illustrated in a case now pending in this Court, *Far Eastern Conference et al.* v. *U. S.*, October Term 1951, No. 15 Misc.) to the effect that an administrative body has authority to grant exemption from the antitrust laws only to the extent expressly empowered to do so in its organic act, and that federal regulatory statutes do not impliedly exclude activities subject to their provisions from the antitrust laws. (Government brief in opposition to certiorari in that case, p. 5.)

ings on the authority of the FPC to exempt from the anti-trust laws and state laws were not necessary to the decision below or to the Fourth Circuit decisions and were therefore *dicta*. Such contentions are refuted by the whole course of the proceedings below and in the Fourth Circuit, by the arguments and briefs of counsel and by the opinions of the Courts.

Respondents Consolidated and Maryland Commission also assert that this case presents a collateral attack on rate orders of the FPC and that Penn Water* should start another rate proceeding before the FPC in order to present the issues already raised in this case. On the contrary, this case represents a direct appeal from FPC rate orders which have not yet gone into effect. This Court should determine whether the rate orders shall stand or shall be reversed or modified, particularly because the rate orders disregard the illegality of the contractual arrangements on which they are based.

These evasive attempts to prevent this Court from resolving the admitted conflict between Circuits is in furtherance of the program by which Consolidated has sought to keep the relatively smaller Penn Water a captive and prevent competition from it by maintaining control over the latter's expansion and sales of power to others, while at the same time compelling purchases of power from Consolidated on its own terms, all of which the Fourth Circuit held illegal.

The 97 pages of briefs filed by the Respondents are largely devoted to discussion of matters other than the central points.** These irrelevancies are devoted principally to making this Court think that to upset or modify the FPC rate order would impair Penn Water's generation, transmission and delivery of electricity to its present customers. But it is plain that what is involved in this case is

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* References to Penn Water in this brief will include Susquehanna unless otherwise stated.

** In these briefs Respondents call attention to the size of the printed record technically before this Court at their insistence. Substantially all of it is wholly irrelevant to the points at issue on the petition, as Penn Water pointed out in its petition, fn., p. 2.

only the contractual structure and the question whether Consolidated shall continue to dominate Petitioners under an arrangement which, as asserted in the FPC brief below (Tr. 5574), was prescribed by the FPC and "permits Penn Water's facilities to be operated as though they were under common ownership with Baltimore Company's facilities," a situation which the Fourth Circuit condemned.

The Respondents no more than mention and do not discuss the point (also ignored by the D. C. Circuit) that the contractual arrangements have been held by the Courts in the Fourth Circuit to violate the laws of Penn Water's and Safe Harbor's state of incorporation, Pennsylvania, destroy their corporate virility and are *ultra vires;* nor do they point to any provision of the Federal Power Act even purporting to authorize the FPC to override such laws. This is not a mere matter of conflict between Federal and State rate regulation. (See Penn Water's petition, pp. 30-32.)

The Respondents have wholly failed to refute the point made in the petition of the Pennsylvania Public Utility Commission (No. 429, pp. 21-25) that the D. C. majority's decision is contrary to the decisions of this Court in *Peoples Gas Co.* v. *Public Service Commission,* 270 U. S. 550 (1926) and *Lone Star Gas Company* v. *Texas,* 304 U. S. 224 (1938). Those cases clearly establish that the energy produced and sold in Pennsylvania is in intrastate commerce regardless of whether mingled with energy from another state. The respondents do not dispute the Pennsylvania Commission's statement as to the principle established by these cases but merely contain vague statements to the effect that they are distinguishable because of what the FPC calls the "unique characteristics" of the Penn Water operations.

As to the question of applicability of Part II to a licensee under Part I, the Respondents ignore the fact that this point is basic to the holding of the D. C. majority that Part II repealed by implication Section 10(h)* of Part I.

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* This section expressly reaffirms the applicability of the antitrust laws to Part I licensees.

This holding raises the same question as the D. C. majority's holding that Part II repealed by implication other provisions of the antitrust laws. Both these holdings were basic to the asserted authority of the FPC to absolve contractual arrangements from the Federal antitrust laws, and clearly both holdings should be reviewed if certiorari is granted.

(1) The point of law on which the D. C. majority and the Fourth Circuit admittedly conflict was the basis of the decision below. The issue as to the authority of the FPC to compel, and base its rate orders upon, continued performance by an electric utility of arrangements which have been adjudged to violate the antitrust laws, public policy and state laws, was a focal point of the decision below, and was the point upon which the D. C. majority and minority split.

No one can read the majority opinion below without seeing that the majority realized that, so far as concerns the antitrust laws and state law, it could not uphold the FPC rate orders based on the patently illegal foundation contracts without first holding that the FPC had authority under the Federal Power Act to absolve such contracts from the operation of such laws. This is proved by the fact that the D. C. majority opinion sustains various features of the rate orders by reference to the *"obligations and entitlements"* contained in, and only in, the fonndation contracts, after having devoted five pages to upholding the authority of the FPC to absolve the contracts from their illegality. Moreover, this was expressly recognized by Bazelon, J., in the opinion below, when he stated that to uphold Pennwater's position "would be to substitute antitrust criteria for those of the Federal Power Act" (R., Vol. 18, p. 55).

The other member of the D. C. majority (Fahy, J.) expressed himself to the same effect when, in a subsequent decision, he said:

> "In our recent decision in *Pennsylvania Water & Power Company, et al.* v. *Federal Power Commission*, U. S. App. D. C. F. 2(d) ; decided July 3, 1951; we dealt with the power of the Commission,

> acting within the policy and provisions of the Federal Power Act, to require the continuance of arrangements which, without the sanction of valid public authority, would violate the antitrust laws." *Maryland and Virginia Milk Products Association* v. *U. S.*, F. 2d (D. C. Cir., Nov. 8, 1951).

The dissenting Judge in the D. C. Circuit characterized "the basic issue", as follows (R., Vol. 18, pp. 82-83):

> "Has the Federal Power Commission authority to order a combination of these two utilities under terms and conditions which, if arranged by private contract between them, would clearly violate the Federal antitrust laws and the Public Utility laws of Pennsylvania?"

He then devoted the whole of his 18-page opinion to a discussion of the point.

The FPC and the other respondents have elsewhere repeatedly conceded and asserted that the decision of the D. C. majority herein is a holding that the FPC has authority to absolve these contractural arrangements from the impact of the antitrust laws and state law.

The FPC, in its brief (pp. 36, 43, 44, 45, 47) in the recent case before the Fourth Circuit regarding the Safe Harbor contract, cites the majority decision at least six times to that effect in urging the Fourth Circuit for that reason to hold the Safe Harbor contract valid in its entirety.

In the same case in the Fourth Circuit, Consolidated in its brief (pp. 65, 66, 80) and the Maryland Commission in its brief (pp. 9, 14) cited the D. C. majority opinion herein in a similar manner and for a similar purpose.

Furthermore, in the Court below in this case the FPC's brief, contrary to its present assertion that it has not entered any order prescribing or premised upon the arrangements adjudged unlawful, stated that the rate schedule which it prescribed for Penn Water "permits Penn Water's facilities to be operated as though they were under common ownership with Baltimore Company's facilities" (Tr., p. 5574).

In view of these representations made by respondents to other Courts, it is difficult to see how they can make the contrary argument to this Court that the majority decision below does not constitute a holding that the FPC has authority to exempt contractual arrangements otherwise illegal from the antitrust laws and state law.

(2) The point of law on which the D. C. majority and the Fourth Circuit admittedly conflict was also a basis of decision in the Fourth Circuit. In the Baltimore contract case the Fourth Circuit decided (a) that the contract was illegal under the antitrust laws, state law and public policy and (b) that prior approval by the Federal Power Commission of such contract would not absolve it from such illegalities. The second point as well as the first was necessary to the decision of the Fourth Circuit, because Consolidated and the Maryland Commission had argued at length in their briefs (Consol. Br., pp. 25-54; Md. Comm. Br., pp. 6-11)* that the contract had been approved by the Federal Power Commission and was therefore exempt from the operation of the antitrust laws and state law and that the Court had no jurisdiction to invalidate the contract on the basis of such laws. This point was then necessarily dealt with at length in Penn Water's reply brief in that case (pp. 15-24).

The claim of the authority of the Federal Power Commission to absolve the contract was one of the principal points in the petitions of Consolidated and the Maryland Commission in this Court for a writ of certiorari to the Fourth Circuit in the Baltimore contract case. This Court denied certiorari, 340 U. S. 906 (1950).

Similarly, the same question of the authority of the FPC was presented in the subsequent case in the Fourth Circuit involving the Safe Harbor contract, and the Fourth Circuit followed its decision on this point in the prior

* How then can Consolidated say in its brief in this Court (p. 7) that the point was not passed upon by the Fourth Circuit in that case?

case* citing its prior opinion, quoting with approval the dissenting opinion in the D. C. Circuit herein and stating expressly that it disagreed with the holding of the D. C. majority on the point (Pamphlet Op., pp. 18-19).**

As already indicated, all the Respondents herein argued the point in the Fourth Circuit in briefs and orally. There is nothing to the claim that the FPC was not a party to these cases in the Fourth Circuit, for as stated by the Fourth Circuit (Pamphlet Op., p. 3) FPC counsel were present in all courts in both cases and were given full opportunity to brief the point and argue it orally. The FPC brief consisted of 52 pages.

In its recent decision the Fourth Circuit reiterates the statement in its previous opinion that the FPC should approve some different contractual arrangement for the sale of power between these utilities which "will not offend either the antitrust laws or the utility laws of Pennsylvania".

There could not be a more direct conflict between two courts, not merely on the principle of law involved but on the application of that principle to the same subject matter.

(3) It is clear from the FPC orders themselves that a holding that the FPC had authority to absolve the contracts from the antitrust laws and state law was necessary if such orders were to be sustained. The FPC opinions and orders themselves also show that they are without basis unless the contractual arrangements are valid and continuing by reason of the FPC approval. Nevertheless, the Respondents now contend that the rate orders are based on physical operations as they were found to be conducted without regard to any contractual arrangements between the

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* *Consolidated Gas Electric Light and Power Company et al.* v. *Pennsylvania Water & Power Company et al.*, Fourth Cir., January 3, 1952, a copy of which opinion was filed with this court in pamphlet form (Pamphlet, Op.).

** In this decision the Fourth Circuit expressly confirmed Penn Water's position regarding the conflict stating (Pamphlet Op., p. 18) "We are constrained to differ from this conclusion [of the D. C. Circuit] for the reasons set out in our opinion in Penn Water v. Consolidated, 184 F. 2d, 552, * * *."

parties, and that the FPC neither contemplated nor ordered continuance of the arrangements.

Penn Water has already shown in its Petition (pp. 8-15) (and Respondents' argument nowhere answers) (a) how the critical features of the FPC rate orders rest on the assumed continued existence of the illegal "foundation contracts," (b) how Penn Water was required to purchase power from Consolidated at Consolidated's behest under a contractual clause held to be in direct violation of Section 3 of the Clayton Act, (c) how a provision of the contract which was held *per se* violative of the Sherman Act made installation of additional facilities by Penn Water subject to approval by Consolidated, (d) how the FPC ordered the contractual method of payment continued notwithstanding that it is a pooling of revenues clearly illegal under the Sherman Act,* (e) how the low rate of return allowed by the FPC was based solely on the continuing contractual obligation of Consolidated until 1980 to take electric service, and pay therefor a fixed rate of return, regardless of the amount of power furnished,** (f) how the FPC's deci-

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* Respondents claim that the Fourth Circuit did not hold the revenue pooling arrangement illegal, notwithstanding that the revenue arrangement is basic to the Baltimore and Safe Harbor contracts, and that such contracts were held illegal in their entirety by the Fourth Circuit. In its first opinion in the *Penn Water* case, the Fourth Circuit, having found some illegal features of the contract, expressly refrained from going on and passing on other features. But in the *Safe Harbor* case, contrary to the assertion of government counsel (fn. p. 23) and Consolidated (Br., p. 23), the Fourth Circuit expressly enumerates (Pamphlet Op., pp. 6-7) the revenue provision among the illegal provisions. Furthermore, the provision for payment of operating expenses and a fixed return, regardless of services rendered, with a credit for any revenue received from others, clearly stifles initiative to get business and to compete, and to effect operating economies, and is illegal under the established decisions of this Court discussed in Penn Water's Petition (pp. 25-28). The Respondents have not attempted to distinguish those cases or to cite any contrary authority.

** The government Memorandum in this Court concedes (p. 16) that the sole basis of the rate of return is that "Penn Water was assured a stabilized income as in the past," "under the arrangements with Consolidated which the FPC directed be continued". The claim of Consolidated (Br., p. 24) that the FPC asserted that the rate of return was "independently bottomed" is simply not correct. The reference is not to any order of the FPC but simply to *ex post facto* statements of counsel.

sion that the sale by Penn Water in Pennsylvania of power generated in Pennsylvania to Pennsylvania utilities comes under the jurisdiction of the FPC was based solely on the contractual arrangements including the contractual compulsion, violative of Section 3 of the Clayton Act, that Penn Water purchase power generated by Consolidated in Maryland, and (g) how the allocation of the rate reduction primarily to Consolidated was based solely on the contractual "entitlements" of Consolidated and not on actual operations. The entitlements used by the FPC as a basis for its allocation of the rate reduction were the entitlements to the amount of power provided in the contract, not the amounts of power actually delivered, which were far less. Obviously, a tariff, as differentiated from a contract, could not properly provide for such artificial entitlements, and the statement of Consolidated (Br. p. 25) that the entitlements are those provided for by a tariff is simply unfounded.*

Government counsel in their Memorandum in effect admit that the orders are based on the assumed continuance of the illegal control provisions of the contracts, stating (p. 27) that the output of the "integrated and coordinated interstate electric system" upon the existence of which the orders are assertedly based "is peculiarly the interstate product of the integrated system, *functioning as a single multi-state, electric and economic unit*" (italics added). The operation of the three companies in this manner could only be achieved by the contractual arrangements condemned by the Fourth Circuit.

In its brief in the recent Fourth Circuit case (p. 19) the FPC (as well as the other two Respondents) expressly

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* The government Memorandum also concedes (p. 25) that the finding of the FPC that the Pennsylvania business was interstate and its finding regarding allocation of the rate reduction "were based on the continuance of the arrangements as to power pooling and the residual-payment type of rate." The claim of Consolidated (Br., pp. 24-25) that the FPC has asserted that the Commission's jurisdictional findings were based on actual operations, and not upon the existence of any assumed contractual obligation, is also entirely incorrect. There is no such statement by the FPC but only *ex post facto* statements of counsel.

stated that it had approved and prescribed *all* the provisions of the Safe Harbor contract, "including the terms which the District Court viewed as in restraint of trade," and urged upon the Fourth Circuit that, for that reason, the Fourth Circuit should hold *all* the provisions of that contract exempt from the operation of the anti-trust laws and state law and therefore valid. Yet here the FPC (like the other Respondents) takes the position before this Court that the FPC has not approved or prescribed any of the illegal contractual provisions upon which its rate orders depend.

Respondent Consolidated's assertion in its brief in this Court (pp. 7-8) that the FPC's orders related only to "service" provisions of the contracts and do not include the illegal restrictive provisions, is directly contrary to the representations made by Consolidated to the Fourth Circuit in the Baltimore contract case and to this Court in its petition for certiorari in the Baltimore contract case. In its brief to the Fourth Circuit (pp. 35, 39) Consolidated stated that "all of the terms" of the contract were directly involved and that all the provisions were "terms of sale" and "inextricably interdependent," and constituted the tariff on file. Similarly in its petition to this Court for certiorari (p. 20) it stated that "the Commission necessarily approved every provision of the Basic Agreement except the pecuniary amount of the rates."*

Regarding the contention of Government counsel that by the phrase "in and of themselves lawful" in its order of October 27, 1949, the FPC intended to exclude from the continuing arrangement provisions which might be held

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* The Respondents nowhere explain how there is any business reality under their present theory of the situation created by the FPC orders and the Fourth Circuit decisions. The Penn Water contract, absent Articles IV and V, is not a rational business arrangement, as asserted by Consolidated itself in affidavits and briefs submitted to the Fourth Circuit and in its brief to this Court (p. 18). Counsel for the government here concede (Govt. Mem., p. 23) that the entire agreement was stricken down because its illegal provisions were inseparable parts of a contract that could not operate as a contract between the parties without these provisions. How could the arrangement operate any better as a rate schedule between the parties in the absence of these provisions?

to be illegal, we refer the Court to Penn Water's petition (pp. 11-12) and to the fact that it seems disingenuous to contend that an administrative body like the FPC was directing continuance of an arrangement indefinite in scope and dependent on subsequent decisions which might be rendered by courts in other cases, either the Penn Water contract case or the Safe Harbor contract case or some other case, none of which had then been decided.

(4) The FPC Orders Authorize Private Parties to Violate the Antitrust Laws. The D. C. majority cited *Parker* v. *Brown*, 317 U. S. 341 (1943), as indicating that a state or governmental body might commit acts which would be in violation of the antitrust laws if committed by private parties and there is an obscure reference to the case in the government Memorandum here (p. 21).

However, the case has no application to the present situation, as the Fourth Circuit directly held (Pamphlet Op., p. 20) and as Penn Water pointed out in its petition (pp. 23 and 24). In *Parker* v. *Brown* the State of California fixed production quotas for producers of raisins. It was held that this was the act of the State and that the acts of a State were not within the purview of the federal antitrust laws. However, this Court pointed out that it would have decided otherwise if the State had purported to authorize private individuals to violate the antitrust laws, i.e., to fix quotas for themselves and other producers.

The latter is the situation here. The FPC orders authorize a private party (Consolidated) to violate the antitrust laws.

As the Fourth Circuit pointed out (R. Vol. XVIII, pp. 8-9) Consolidated has consistently exercised its powers in disregard of the interests of both Penn Water and the public. The FPC had no authority to prevent or to supervise such actions by Consolidated and has never attempted to assert any such authority.*

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* Even if such authority existed in the FPC, the contractual arrangements, as the Fourth Circuit pointed out (Pamphlet Op., pp. 15-16) deprived Penn Water of the right to initiate proceedings before regulatory bodies with respect to matters affecting its business and the public interest.

On this important matter of the applicability of *Parker* v. *Brown* to the present situation, the D. C. majority (R. Vol. 18, p. 51) and the Fourth Circuit (Pamphlet Op., p. 20) are in direct conflict.

(5) There Is No Question in This Case of a Failure to Exhaust Administrative Remedies or of Any Collateral Attack on FPC Rate Orders. Respondents Consolidated and the Maryland Commission make the unfounded claim that the Petitioners have not exhausted their administrative remedies and that this appeal represents a collateral attack upon FPC rate orders. *It is significant that Government counsel for the FPC make no such claim in their Memorandum to this Court.*

Far from failing to employ their administrative remedies, Petitioners have followed exactly the procedure prescribed by the Federal Power Act, namely, petitions to the Court of Appeals to review the FPC orders and petitions for certiorari to this Court, all after having raised the points involved before the FPC itself and after rejection of such points by the FPC in the orders here sought to be reviewed.*

There is here no collateral attack on an effective FPC rate order, and the authorities cited in the briefs of Consolidated and the Maryland Commission relating to such collateral attacks are simply not in point.

For these reasons we cannot understand the suggestion made by these two Respondents, and also in the D. C.

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* The FPC, in its brief below in opposition to Petitioners' motions to annul or remand, expressly states (Tr. 5552) that the arguments advanced by Penn Water "are not new, having been urged upon the Commission and considered by it and having been repeatedly urged in this proceeding before this Court." How then can the Maryland Commission in its brief in this Court say (Br., pp. 12-13) that statements in the Petition are "calculated to mislead this Court to believe that such an issue had been raised in the proceeding before the Commission, had been ruled upon by the Commission," or (Br., pp. 22-23) that "this question is simply not presented by the record, was not before the Court below," or (Br., p. 33) that the question of the interrelation of the Sherman Act and the Federal Power Act "had not been presented to the Commission and hence could not have been covered by its Orders"? Consolidated makes the same unfounded statements in its brief in this Court (pp. 6-7).

majority opinion, that Penn Water should be forced to accept the present rate orders, although being properly reviewed under the statute; that in order to make the points made in its petition, Penn Water must file with the FPC new schedules embodying a new arrangement; and that in the new proceeding it must again make the same points already urged in this case. In such new proceeding Respondents would undoubtedly claim that the sustaining of the present orders was a precedent* and the points were being made too late.**

The Maryland Commission's brief in this Court (p. 34) asserts that the granting of certiorari would reopen the rate orders after protracted hearings and cause delay; but the filing of new tariffs and the starting of a new proceeding would obviously cause even greater delay.

(6) The Voluminous Arguments of Respondents as to the Economic Desirability of the Continuance of These Contractual Arrangements are Irrelevant and Unfounded. Counsel for the Respondents in their briefs argue at length regarding the economic desirability of the continuance of the contractual arrangements. It is difficult to see what bearing that can have on the granting or denial of the petition for *certiorari*, but since so much space is devoted to these arguments, we shall deal with them briefly.

The main argument of the Respondents as to the desirability of the continuance of the contractual arrangements seems to be that embodied in the FPC brief below that the arrangement "permits Penn Water's facilities to be

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* As pointed out in Penn Water's petition (fn., p. 16), the commencement of such a new proceeding could not correct the wrongful orders of the FPC on review herein. As also there pointed out, Penn Water filed new rate schedules on a new basis, but such rate schedules were rejected by the FPC on the ground, among others, that before doing so Penn Water "must recognize" the existing FPC orders with all the adverse implications arising from such recognition.

** Respondent Consolidated claims in its brief in this Court (p. 4) that the questions are not ripe for determination, *i. e.*, that they are made too early.

operated as though they were under common ownership with Baltimore Company's facilities" (Tr. 5574), so that there shall not be set up in the subservient company "an economic interest upon its part" (Brief of FPC before Fourth Circuit, p. 14) and so that the subservient company's interests are not affected by the exercise of the dominant power over it (same Brief, pp. 33-34).

There is no valid reason given why Penn Water should be tied as a captive to any of the utility companies with which it is interconnected; and *a fortiori* no sensible reason why it should be made captive to Consolidated, any more than to one of the three companies with which it is interconnected in the north, Metropolitan Edison Company, Pennsylvani Power & Light Company or Philadelphia Electric Company (see map on back cover of petition). There is nothing in the Federal Power Act which shows the intention of Congress to give the FPC authority to deliver one company over as a captive to another. Nothing to support the Respondents' contention flows from the fact that Consolidated has a larger steam capacity than Penn Water. The other utilities referred to also have larger steam capacity.

Furthermore, there is no shred of claim that Penn Water's interconnections to the north do not provide as good service to customers there under the normal unit rate contracts approved by the same FPC orders, without controls by one company over another, as does Penn Water's interconnection with Consolidated with the illegal revenue pooling, restraints and controls. Nor is there any claim that Penn Water's utility customers to the north are not just as dependent on Penn Water's power as Consolidated.

It is common knowledge that the companies to the north, as in other geographical areas in the country, are interconnected and interchange power and constitute efficient power pools without contractual arrangements of the type here involved.

This argument of the Respondents simply serves to prove in their own words that the revenue arrangement stifles all economic incentive on the part of Penn Water.

It leaves Penn Water with no motivation (a) to sell more power, (b) to obtain more customers, (c) to improve its service, or (d) to effect economies. These have been the negative vicious products of the contractual arrangements.

The affirmative vicious products have been (1) Consolidated's interference with Penn Water's power contracts with other utilities, (2) Consolidated's prevention of any expansion of the generating and transmission facilities of Penn Water when every other utility company including Consolidated was installing needed new facilities, and (3) Consolidated's dictation to Penn Water of purchases of power from Consolidated on Consolidated's terms rather than from other utilities on terms negotiated between Penn Water and them.

As the Fourth Circuit said in its recent decision (Pamphlet Op. p. 15): "These restrictions which tied the parties together and stifled individual initiative for the period of fifty years were made to promote the advantage of the persons in control and not primarily in the interest of the public."

(7) Respondents' argument, that the decision below as to the applicability of Part II to licensees under Part I is not in conflict with the decisions of other circuits, is unsound. It should be pointed out again that the question whether Part II of the Federal Power Act is applicable to a licensee under Part I and in what manner and to what extent, (a) has never been decided by this Court, and (b) is squarely presented by the D. C. majority's holding that Part II impliedly repealed portions of Part I (particularly Section 10(h), which reaffirmed the antitrust laws) and gave the FPC authority to grant exemption from such laws.

If for no other reason than this, if this Court grants certiorari on the questions of the authority of the FPC to exempt contractual arrangements from the antitrust laws and state laws, this Court should also grant certiorari on this question of the relationship between Part I and Part II. In considering the other questions this Court would

not want to be in a position of inability to deal with this point which underlies the reasoning of the D. C. majority.

Moreover, the decision of the D. C. majority is in direct conflict with the decisions of other Circuits on this matter and this Court should grant certiorari for that reason also. Respondents concede that the opinion of the D. C. majority on this point conflicts with opinions of the Court of Appeals for the Second Circuit in *Niagara Falls Power Co.* v. *F. P. C.*, 137 F. 2d 787, 792, 793 (1943), and of another panel of the D. C. Circuit in *Alabama Power Co.* v. *F. P. C.*, 128 F. 2d 280, 293 (1942), simply arguing that the latter two opinions did not have the question directly involved. However that may be, these conflicting opinions certainly leave the matter in serious doubt until this Court determines it.

In addition to the above conflict, it is clear that the D. C. majority opinion is in direct conflict with the decision of the Third Circuit* and the Fourth Circuit decisions on an important aspect of the question. The Third Circuit held that while Part II was applicable to licensees under Part I, there was no inconsistency between the two parts of the Act and based its decision regarding applicability primarily on that reasoning. The Fourth Circuit, in both the Penn Water and Safe Harbor contract cases, also held that Section 10(h) of Part I, having been reenacted at the same time that Part II was enacted, was not repealed by Part II.** Contrary to both other Circuits, the D. C. majority holds that Part II is inconsistent with, and repeals important provisions of, Part I, particularly Section 10(h). This Court should remove

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* *Safe Harbor Water Power Corp.* v. *F. P. C.*, 179 F. 2d 179, 185 (1949), cert. den. 339 U. S. 957 (1950).

** The position taken by the Fourth Circuit is the position taken by the government in its brief in this Court in *Isbrandtsen* v. *United States*, October Term, 1951, Nos. 134, 135, to the effect that an administrative body cannot sanction under one section of an act what Congress has flatly forbidden in some other section (Brief on Appeal in that case, pp. 17, 48).

the uncertainty on this important question of the interrelation of the two Parts of the Act in regard to licensees, as well as the question whether Part II is applicable at all.

It is respectfully submitted that the petition should be granted in all respects.

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January 26, 1952.

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IN THE

Supreme Court of the United States

OCTOBER TERM, 1951.

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Petitioners,

v.

FEDERAL POWER COMMISSION, and CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE and PUBLIC SERVICE COMMISSION OF MARYLAND, Intervenors,

Respondents.

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ERRATA SHEET

FOR BRIEF FOR THE PETITIONERS.

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The record reference at line 14 should be (R., Vol. 16, pp. 4959, 4980), the figure $616,000 being the difference between the alleged excess revenues received by Penn Water from Consolidated as found by the FPC, $1,733,318 (R., Vol. 16, p. 4980) and the adjusted revenue received from Consolidated as found by the FPC, $1,116,835 (R., Vol. 16, p. 4959).

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* The pertinent Pennsylvania statutes are printed in full as Appendix A to the brief for the Pennsylvania Public Utility Commission in No. 429.

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BRIEF FOR THE PETITIONERS.

Preliminary Statement.

This cause is before this Court on a writ of certiorari to review the judgment and orders of the United States Court of Appeals for the District of Columbia Circuit (D. C. Circuit), entered by a divided Court July 3 and 6, and September 6, 1951 (Printed Record (R.), Vol. 18, pp. 5394, 5395, 5399).

The judgment and orders denied motions to set aside, and instead affirmed, orders of the Federal Power Commission (FPC) issued under the Federal Power Act (the Act*) directing continuance of or premised on provisions of two power contracts (Baltimore and Safe Harbor contracts) which have been adjudged illegal in two

* For references to U. S. C. citations of sections, see table of citations.

unanimous decisions of the United States Court of Appeals for the Fourth Circuit (R., Vol. 18, p. 5322 and Opinion in Case No. 6315, January 3, 1952*) as violative of the Federal antitrust laws, Pennsylvania statutes, common law and public policy, the Fourth Circuit having held that the FPC had no authority to validate the contracts by the orders here involved.**

Opinions Below.

The majority opinion (R., Vol. 18, p. 5367) of the D. C. Circuit, per Bazelon, J., in which Fahy, J., joined (D. C. majority), and the dissenting opinion (R., Vol. 18, p. 5402) of Wilbur K. Miller, J., are reported at 193 F. 2d 230. The opinions and orders of the FPC of January 5, 1949, February 28, 1949, March 17, 1949, October 27, 1949 and December 15, 1949, which were affirmed by the D. C. majority, are found at R., Vol. 16, pp. 4845, 5178, 5220 and Vol. 17, pp. 5267, 5315.

Jurisdiction.

The petition for a writ of certiorari was granted February 4, 1952 (R., Vol. 18, p. 5419).*** The jurisdiction of this Court rests on Section 1254(1) of the Judicial Code

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* Pamphlet opinion furnished Court on petition for certiorari (Pamphlet op.).

** *Pennsylvania Water & Power Co., Pennsylvania Public Utility Commission* v. *Consolidated Gas Electric Light & Power Company of Baltimore, Public Service Commission of Maryland*, 184 F. 2d 552 (1950), cert. den. 340 U. S. 906 (1950), relating to the Baltimore contract; *Pennsylvania Water & Power Co., Pennsylvania Public Utility Commission* v. *Consolidated Gas Electric Light & Power Co., Safe Harbor Water Power Corporation, Public Service Commission of Maryland*, No. 6315, January 3, 1952, affirming District Court for Maryland, 97 F. Supp. 952 (May 3, 1951) and Docket No. 5253 (Op. March 12, 1951 and Order March 19, 1951), relating to the companion Safe Harbor contract.

*** Certification to the FPC of the opinion and judgment (in lieu of mandate) of the D. C. Circuit has been stayed (Transcript of Record (Tr.) 5750) and the stay was extended and is still in effect pending final decision of this Court. The FPC orders are expressed

(62 Stat. 928, 28 U. S. C. §1254(1) and Section 313(b) of the Act (49 Stat. 860, 16 U. S. C. §825(l)).*

Issues Presented.**

The primary issue in this case is whether the FPC (in the absence of any express authority in the Act such as is found in certain other Federal regulatory statutes) may compel electric utilities to perform, and may base its rate orders upon continued performance of, contracts which have been adjudged by the courts to be *per se* illegal and therefore void in their entirety as violative of the Federal antitrust laws, the laws of the utilities' state of incorporation and public policy.

This issue will be dealt with under Point I, relating to the Federal antitrust laws (the antitrust laws), and under Point II, relating to state law and public policy.

There is a further issue, discussed in Point III, whether a licensee subject to regulation under Part I of the Act, is also subject to the different regulatory system of Part II

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to be operative from and after February 1, 1949, but their effect was stayed by order of the FPC, and by order of the D. C. Circuit, and revenues collected by Penn Water from its four electric utility customers in excess of the amounts allowed by the FPC orders have been segregated to await the final determination of the case.

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* This Court also granted certiorari to review the judgment and orders of the D. C. Circuit on a petition filed by the Pennsylvania Public Utility Commission (No. 429). Both cases have been set down for hearing on the same date during the week of March 31, 1952.

** While there was a voluminous record below, the basic issue here is a simple one as Judge Miller said (R., Vol. 18, p. 5403). All that is needed are the power contracts (R., Vol. 15, pp. 4554-4603, 4606-21), opinions of the Fourth Circuit (R., Vol. 18, pp. 5322, 5356 and Pamphlet Op.), judgments entered on such opinions (R., Vol. 18, pp. 5396, 5398), opinions of the D. C. Circuit (R., Vol. 18, pp. 5367, 5402), and portions of the opinions and orders of the FPC (R., Vol. 16, pp. 4845-65, 4952-97, 5178-94; Vol. 17, pp. 5267-92). Petitioners were, however, unable to obtain from respondents' counsel a stipulation thus limiting the printed record.

of the Act. The asserted applicability of Part II was in turn basic to the D. C. majority's holding that the antitrust laws were repealed by implication by Part II and, particularly, that Section 10(h)* of Part I, reaffirming the antitrust laws, was so repealed.

Statement.

The two power contracts which are the basis of the FPC orders under review, and which were adjudged illegal by the Fourth Circuit are: (1) The Baltimore contract between Pennsylvania Water & Power Company (Penn Water) as, seller and Intervenor, Consolidated Gas Electric Light and Power Company of Baltimore (Consolidated) as buyer; and (2) The Safe Harbor contract between Safe Harbor Water Power Corporation (Safe Harbor), as seller, and Penn Water and Consolidated as buyers.** They were termed by the FPC the "foundation contracts" of its orders (R., Vol. 16, p. 4859). The FPC orders on review directed continuance of illegal contractual arrangements contained in the Baltimore contract, and substantive provisions of such orders were based on the assumed continuance of both contracts.

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* Section 10(h) of Part I was reenacted in 1935 when Part II of the Act was first enacted. It reads as follows:

"Section 10. All licenses issued under this Part shall be on the following conditions: * * *

"(h) That combinations, agreements, arrangements, or understandings, express or implied, to limit the output of electrical energy, to restrain trade, or to fix, maintain, or increase prices for electrical energy or service are hereby prohibited."

** The Baltimore contract consisted of three agreements dated December 31, 1927, June 1, 1931 and September 29, 1939 (R., Vol. 15, pp. 4577-4603, 4606-21). The Safe Harbor contract consisted of three agreements dated June 1, 1931, August 1, 1932 and November 22, 1939 (R., Vol. 15, pp. 4554-76). In the case of each contract the basic agreement was the one dated June 1, 1931.

The Corporations Involved in the Illegal Contracts.

Penn Water is a Pennsylvania electric utility corporation owning a hydroelectric generating plant at Holtwood, Pennsylvania, on the Susquehanna River. Penn Water also owns a steam electric generating plant and transmission lines in Pennsylvania and, through Susquehanna Transmission Company of Maryland (Transmission Company)*, transmission lines in Maryland. The present business of such companies is the generation and sale and transmission of electric energy at wholesale and in bulk. Penn Water also purchases electric energy for resale. Penn Water, directly and through Transmission Company, has charter rights for the sale of electric energy to the public at retail in Pennsylvania and Maryland. Although it has at the present time no retail distribution system, Penn Water has one large retail customer, the Pennsylvania Railroad.** Penn Water is a licensee under Part I of the Act.

Safe Harbor is a Pennsylvania electric utility corporation owning a hydroelectric generating plant at Safe Harbor, Pennsylvania, on the Susquehanna River, about eight miles above the Penn Water hydroelectric plant at Holtwood. It has no transmission lines or retail distribution system. Its business is the sale of electric energy at wholesale and in bulk. Safe Harbor is a licensee under Part I of the Act.***

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* References to Penn Water will include Susquehanna Transmission Company of Maryland, its wholly-owned subsidiary, except where inappropriate.

** The Railroad is supplied under a contract made jointly with Safe Harbor, Consolidated and Potomac Electric Power Co., but the FPC did not assert jurisdiction over this contract, the energy sold thereunder not being for resale.

Penn Water also sold electricity at retail to the street railway system in Baltimore until Consolidated took the business (R., Vol. 18, p. 5325).

*** The voting stock of Safe Harbor is owned one-half by Penn Water and one-half by Consolidated. Consolidated also owns an equal number of shares of non-voting stock.

Consolidated, one of the large utility companies in the United States, is a Maryland electric utility corporation with steam electric generating, transmission and distribution facilities in and around Baltimore, Maryland. Consolidated has generating capacity several times that of Penn Water or Safe Harbor and is in the business of selling electric energy at wholesale and in bulk as well as at retail and of purchasing energy for resale. Consolidated is also in the business of manufacturing and distributing gas and has a steam heating business. Consolidated's financial structure ($313,000,000 gross assets) is many times the size of that of Penn Water ($63,000,000 gross assets).

The plants of Penn Water and Safe Harbor are physically connected through the transmission lines of Penn Water. These plants are also physically connected through those lines (a) in Pennsylvania, with neighboring utilities Pennsylvania Power & Light Company (PP&L) near Lancaster, Philadelphia Electric Company (PE) in Coatesville, and Metropolitan Edison Company (ME) in York, and (b) in Maryland, with Consolidated near Baltimore and with Potomac Electric Power Company (PEPCO), which serves Washington, D. C. Like Consolidated, each of these four other utilities has substantial generating capacity, as well as transmission lines and retail distribution facilities.*

Except for the illegal contracts, power generated by Penn Water, Safe Harbor and Consolidated would be in competition or potential competition everywhere in the region, as held by the Fourth Circuit. The Fourth Circuit said:

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* The locations of the generating plants and transmission lines of these companies and other companies in the region are shown on the map attached to the back cover of this brief.

"If it were not for the agreement between the parties which is the subject of this suit, the parties would be potential competitors in the generation and sale of electric energy through their present facilities or other facilities that might be constructed; and would also be potential competitors in the purchase of power from others for resale. The power required by Potomac Electric to supply the wants of consumers in the District of Columbia could be purchased by Potomac Electric either from Consolidated or Penn Water and could be supplied by their present facilities or additional facilities that might be built, or by purchases from others. Similarly, Penn Water and Consolidated would be potential competitors for the supply of electric energy in and around Baltimore at wholesale or retail to customers with their present lines or an extension thereof to be approved by the public authorities.

"The electric power which is now distributed in and near Coatesville, Pennsylvania, by Philadelphia Electric could be supplied from the facilities now owned or additional facilities to be built by Penn Water or could be supplied from the facilities of Consolidated.

"Similarly, Penn Water and Consolidated would be potential competitors with respect to energy taken from Penn Water by Metropolitan Edison and Pennsylvania Fuel [Power] & Light which is used in York and Lancaster areas.

"Penn Water and Consolidated would be potential competitors for the sale of power to Potomac Edison at Frederick, Maryland, whose lines at that point are only a short distance from the lines of Penn Water so that they could easily be connected" (R., Vol. 18, pp. 5326-7).

The Fourth Circuit made a similar statement regarding Safe Harbor (Pamphlet Op., p. 8).

The Fourth Circuit Decisions Adjudging the Baltimore and Safe Harbor Contracts Illegal *Per Se*.

Since the illegality of the Baltimore and Safe Harbor contracts has been established in other proceedings in the Fourth Circuit (and the question here is the authority of the FPC to perpetuate illegal arrangements or base its rate orders thereon), it is not necessary to discuss the illegalities in detail. It will suffice to summarize the Fourth Circuit decisions.

The Fourth Circuit (Parker, Soper and Dobie, JJ.) unanimously held the Baltimore and the Safe Harbor contracts to be illegal on their face and void in their entirety, as in violation of the Federal antitrust laws, the statutes of Pennsylvania, common law and public policy.

The Fourth Circuit held that the contracts surrendered control of Penn Water and Safe Harbor to Consolidated, stifled their initiative with respect to rates, services, operating economies and new business and destroyed their independent corporate character as Pennsylvania corporations. By giving control to Consolidated over their contracts, sales, purchases, prices, territories, markets, output and expansion, the contracts made Penn Water a "virtual vassal of Consolidated" (R., Vol. 18, p. 5408) and Safe Harbor an "impotent agency" (R., Vol. 18, p. 5362). Not only did the contracts by their express terms confer these restrictive control powers on Consolidated, but the very method of payment provided for effectively prevented competition by stifling all incentive of Penn Water and Safe Harbor to compete.*

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* The Safe Harbor contract was substantially similar to the Baltimore contract, except that Safe Harbor's power not sold to others under contracts approved by Consolidated was to be sold two-thirds to Consolidated and one-third to Penn Water (instead of all to Consolidated) and Consolidated and Penn Water divided

Under the contracts Penn Water and Safe Harbor (sellers) were to be paid for power, not on the customary basis of a rate specified in advance per unit of capacity and energy actually furnished, but, regardless of the amount of power delivered, on the unusual basis of annual payments equal to all of the sellers' operating expenses, including taxes, and a specified percentage return on plant investment, with a credit for revenues received by the sellers from sales of power to others made with Consolidated's approval, and (in the case of Penn Water) with a charge for amounts paid by Penn Water for power purchased by it under contracts made with Consolidated's approval.

Such an arrangement is not in effect in the various power pools around the country and is virtually unheard of in the power industry, except in the case of a parent and a wholly-owned subsidiary where the subsidiary is merely an incorporated "vest pocket" of the parent.

The payment provisions of the Baltimore and Safe Harbor contracts do not provide for rates in the ordinary sense at all. They merely set up a series of debits and credits designed to bring the sellers out at a specified overall rate of return on plant investment unrelated to actual operations or deliveries of power. The amount of charges either in total dollars or per unit of supply cannot even be

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the residual payments to be made to Safe Harbor therefor on a two-thirds-one-third basis (instead of the entire residual payment being made by Consolidated). As counsel for Consolidated stated in the District Court in the Baltimore contract case (Ct. Tr., p. 422, Oct. 5, 1949) "the contract is substantially the same * * *. It is almost identical language." However, Consolidated refused to concede the illegality of the Safe Harbor contract following the Fourth Circuit decision on the Baltimore contract and this Court's denial of certiorari, and Penn Water therefore brought a declaratory judgment action in respect of the Safe Harbor contract similar to its action in respect of the Baltimore contract.

computed except retroactively, on an annual basis, long after the rendering of the service. This is not the accepted concept of fixed and definite rates and charges, such as, for example, public utilities under Section 205(c) of the Act are required to keep on file, for public inspection, with respect to every sale of electricity.*

This arrangement can even work out so that for a given year Consolidated will not only not pay Penn Water for a large amount of power received from it but will actually have a credit at the expense of the other customers. If the orders had been in effect for 1946, on the basis of the FPC test figures for that year, instead of Consolidated paying Penn Water for power, Penn Water would have had to pay Consolidated $616,000 (R., Vol. 16, pp. 4958, 4979). This is obviously an improper preference to Consolidated and discrimination against customers paying on a unit rate basis such as the three Pennsylvania utilities.**

Penn Water's contracts with its three other electric utility customers, (PP&L, PE and ME) are power contracts of the usual type, specifying in advance rates per unit of capacity and energy actually delivered. These contracts

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* Where charges for services are on a unit-rate basis any customer, by inspection of the tariffs, can see what any other customer is paying per unit of power and make comparisons with its own payments. In the case of Penn Water, none of its customers can ever know at any given time what Consolidated is paying for its service from Penn Water. Furthermore, the price per unit of supply can change substantially either up or down without any necessity for filing new schedules or obtaining commission approval as is normally necessary before any change can be made in unit rates. Payments are even adjusted years later by reason of such items as tax refunds or extra assessments.

** The specified return method of payment adopted in the FPC order of October 27, 1949 (R., Vol. 17, pp. 5279-83) should be contrasted with the usual unit rates in the schedules provided in the order with respect to services to the three Pennsylvania customers (R., Vol. 17, pp. 5284-92).

are also normal in that they do not have managerial controls by one company over the other.*

In its decisions on the Baltimore and Safe Harbor contracts, the Fourth Circuit mentioned particularly the following among the *per se* violations of the Sherman and Clayton Acts: (a) The prevention of competition between Penn Water, Safe Harbor and Consolidated, (b) the restraints on sales of power by Penn Water and Safe Harbor, (c) the restraints on installations of new facilities by Penn Water and Safe Harbor and (d) the restraints on purchases of power by Penn Water.**

The Fourth Circuit also held that the restraints in the contracts deprived Penn Water and Safe Harbor of the initiative each was required to exercise in respect of services and rates under the Pennsylvania statutes, and that the crippling effect of the contract on each company and its Board of Directors, even in the absence of the statutes, was violative of common law and public policy as laid down in decisions of this Court.*** In other words, the Fourth

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* These three contracts were entered into with the approval of Consolidated under the Baltimore contract, and Safe Harbor executed the contracts with PP&L and PE jointly with Penn Water, with the approval of Consolidated. The FPC orders also dealt with the rates in these three contracts.

** The Fourth Circuit, in the Baltimore contract case, also listed among the restrictive provisions the provision for an Operating Committee, giving Consolidated a veto over managerial decisions of Penn Water, and the arbitration article (R., Vol. 18, pp. 5328-9). The Fourth Circuit, in the Safe Harbor contract case, specifically enumerated among the restrictive provisions of the Safe Harbor contract (Pamphlet Op., p. 7) the payment provision, which was in all pertinent respects like the specified return method of payment provision in the Baltimore contract, and the provision for an Operating Committee giving Consolidated a veto over managerial decisions of Safe Harbor.

*** One of the cases cited by the Fourth Circuit to support the proposition was *Gibbs* v. *Consolidated Gas Company of Baltimore*, 130 U. S. 396 (1889), where this Court had condemned similar contractual arrangements attempted by Consolidated (or a predeces-

Circuit held the contractual arrangements to be violative of the fundamental organic law of Penn Water's and Safe Harbor's state of incorporation, common law and public policy, and not mere violations of some regulation imposed by Pennsylvania or its Public Utility Commission.*

The Fourth Circuit in the Baltimore contract case also decided an issue as to the FPC's authority, injected into the case by Consolidated for the first time on appeal, holding that the approval of the contract by the FPC orders here under review did not validate the contract, that the FPC had no authority to exempt the contract from the antitrust laws or oust the courts from jurisdiction to enforce those laws, and that the antitrust laws had not been impliedly repealed by the Act, but that Section 10(h) of Part I reaffirmed the antitrust laws.

The Fourth Circuit concluded that some new arrangement would be necessary, saying

> "It may well be, although the present arrangement between the Maryland and Pennsylvania utilities is invalid for the reasons set forth, that an interconnection of facilities and an interchange of electrical energy between them may be continued by some method that would meet with the approval of the appropriate regulatory authority and will not offend either the anti-trust laws or the utility laws of Pennsylvania" (R., Vol. 18, p. 5349).

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sor) in the gas field as violative of common law and public policy. In its brief in the Baltimore contract case Consolidated conceded that that contract was "vicious" and was unable to distinguish its essence from the present Baltimore contract.

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* Having decided that the Baltimore contract was illegal on the grounds mentioned, the Court in the Baltimore contract case expressly stated it was not passing on further questions of illegality such as *ultra vires*, although it later did so in the Safe Harbor contract case, where it held the contract *ultra vires*, by adopting the District Court decree (R., Vol. 18, p. 5398) to that effect in *haec verba* in its mandate.

In their petitions for certiorari in the Baltimore contract case, Consolidated and the Maryland Public Service Commission stressed the contention that the FPC had authority under the Act to validate the contract and had done so. This Court denied certiorari, 340 U. S. 906 (December, 1950).*

The decision of the Fourth Circuit on the Safe Harbor contract was simply a sequel to its previous decision on the Baltimore contract and followed it, finding that the effects of the Safe Harbor contract were essentially similar to those of the Baltimore contract. This was the only new issue in the Safe Harbor contract case. The Fourth Circuit reiterated its holding that the FPC had no authority to override the antitrust laws and state law and validate the contract and quoted with approval the dissenting opinion of the D. C. Circuit (Pamphlet Op. pp. 18-19). Both Fourth Circuit decisions follow established lines of decisions handed down by this Court.**

The Baltimore and Safe Harbor contracts were made for a term of 50 years at a time (June 1, 1931) when Penn

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* The Maryland Commission intervened in the District Court and Court of Appeals in both contract cases, asking that the contracts be upheld. The Pennsylvania Commission also intervened in both cases, asserting that the contracts violated the laws of Pennsylvania and public policy. Counsel for the FPC were present in the District Court and Court of Appeals in both these cases, and were furnished at their request with all the Penn Water briefs in those cases. They sought to intervene by formal petition at the last minute in the Court of Appeals in the second case to urge the claim that the FPC has authority to validate the contract. The FPC was denied intervention because the application was not timely (Pamphlet op. p. 3), but the FPC was allowed to file a 55-page brief and to take part in the argument.

** Consolidated and the Maryland Commission filed petitions for certiorari in the Safe Harbor contract case, February 23, 1952. There is no more reason for granting these petitions than there was in the Baltimore contract case, which was simply reaffirmed by the Safe Harbor contract decision. The newly filed certiorari petitions will, therefore, be opposed.

Water, Safe Harbor and Consolidated were under the common control of J. E. Aldred and associates, which control began in 1910 and extended at least through 1946 (R., Vol. 18, p. 5329). The contracts were left-overs of the era of private banking house and holding company control of utilities. At the present time, however, there is no common control of Penn Water and Consolidated, and Penn Water has over 6,000 stockholders.

As the Fourth Circuit said with respect to the contracts:

> "These restrictions which tied the parties together and stifled individual initiative for the period of 50 years were made to promote the advantage of the persons in control and not primarily in the interest of the public." (Pamphlet Op., p. 15).

The oppressive contract powers had actually been used by Consolidated (R., Vol. 18, pp. 5330, 5334-5). Consolidated had required Penn Water to purchase power from it. Consolidated had interfered with Penn Water's contracts with the Pennsylvania customers. Consolidated had forbidden Penn Water in 1947 to expand its transmission system in Pennsylvania to meet the needs of the Pennsylvania customers. By December 1948 Consolidated had withheld over $900,000 of payments due to Penn Water. In November 1948 Consolidated prohibited Penn Water from building a large new steam electric generating plant at Holtwood.* This new plant could have produced economical power beginning in this year of heavy power demand by using coal deposited in the Susquehanna River (free but for the cost of dredging and processing) which would otherwise go to waste. Instead Consolidated insisted not only on preventing this source of competition from Penn Water but also on building a new steam plant of its own in

* At a cost, including attendant facilities, of about $20,000,000.

Baltimore, to be fueled with the more expensive bituminous coal bought in the market (R., Vol. 18, p. 5330).

It was this refusal of Consolidated under the Baltimore contract to permit Penn Water to proceed with a new steam plant, and this withholding of over $900,000, that caused Penn Water to begin the contract litigation on December 21, 1948.*

The Proceedings Before the FPC and the D. C. Circuit.

In September, 1944 the FPC by order initiated a proceeding to examine into Penn Water's rates. No hearings were begun until 1946. Hearings were completed in July, 1947. The first FPC order was issued eighteen months later (January 5, 1949). Consolidated, the Maryland Commission and the Pennsylvania Commission intervened in the proceeding.

The FPC assumed jurisdiction over not only Penn Water's rates to Consolidated but also over the rates for Penn Water's services in Pennsylvania to PP&L, PE and ME.

The FPC (1) directed continuance of illegal contractual arrangements including Consolidated's restraints and vetoes over managerial decisions and the illegal method of payment; and (2) based substantive provisions of its orders upon the assumed existence and continuance of the illegal contracts (a) by computing the amount of the total reduction in Penn Water's revenues so as to lower Penn Water's return to the abnormally low rate of 5¼% per annum (and then by a subsequent order to 4¾%) of

* Almost immediately Consolidated applied for and obtained from the District Court for Maryland (Coleman, J.) a preliminary injunction requiring Penn Water to perform the Baltimore and Safe Harbor contracts. The injunction remained in force until dissolved pursuant to order of the Fourth Circuit, January 17, 1951, after this Court had denied certiorari.

depreciated original cost upon the express basis of the "guaranteed fixed return" supposedly assured by the illegal long-term Baltimore contract, (b) by basing its jurisdiction over rates for Penn Water's services in Pennsylvania to the three Pennsylvania customers upon the existence of an alleged single interstate system (the facilities of Consolidated, Penn Water and Safe Harbor) created by the two illegal contracts, and upon interstate purchases of power by Penn Water from Consolidated required by an exclusive dealing provision in the Baltimore contract adjudged illegal *per se* under Section 3 of the Clayton Act, and (c) by basing the allocation of the reduction predominantly to Consolidated, as against the three Pennsylvania customers of Penn Water, on the assumed "entitlements" and "obligations" created solely by the two illegal contracts.

The FPC in its orders assumed jurisdiction over the rates of Penn Water under Part II of the Act as well as under Part I* and applied the regulatory system of Part II to Penn Water. As a result, Penn Water, a licensee under Part I, is in the impossible situation of being subjected to two conflicting regulatory systems.

The first FPC order was not issued until January 5, 1949, shortly after the contract litigation had been begun. The illegalities of the contracts, as raised by the contract litigation, were immediately brought to the attention of the FPC in a petition for rehearing, January 28, 1949. But the FPC denied rehearing, February 28, 1949, and held that, even if the Courts determined the contracts to be illegal, such illegalities would be immaterial to its orders (R., Vol. 16, p. 5184).

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* Jurisdiction under Part I was asserted on the basis of the alleged inability of the Maryland Commission to agree with the Pennsylvania Commission.

Again the FPC reiterated this position when, on October 27, 1949, it entered an order, without notice or hearing, and, although exclusive jurisdiction of the proceeding had vested in the D. C. Circuit pursuant to Section 313(b) of the Act (the transcript of the record having been previously filed with the D. C. Circuit). By that order the FPC rejected rate schedules filed by Penn Water pursuant to the first FPC order, and prescribed new rate schedules, again based on and including the illegal contractual provisions, making substantive changes in its previous orders, including a further reduction of Penn Water's rate of return from 5¼% to 4¾%, and the addition of fuel rate adjustments in the Pennsylvania customer contracts.*

The petitions to the D. C. Circuit to review the FPC orders brought to the attention of that Court the illegalities of the Baltimore and Safe Harbor contracts, raised in the contract litigation, as grounds for setting aside the orders (R., Vol. 16, pp. 4807, 4813-14; R., Vol. 17, pp. 5222, 5230).

Prior to the completion of the filing of briefs in the D. C. Circuit in the present case, and after the Fourth Circuit decision invalidating the Baltimore contract, Penn Water moved (November 21, 1950) in the D. C. Circuit for leave to present that decision to the D. C. Circuit as a basis for setting aside the FPC orders on the ground that they were founded on the illegal Baltimore contract. When this Court denied certiorari in the Baltimore contract case, leave was granted by the D. C. Circuit and the matter was briefed and argued. While the decision was pending below, and immediately following the decision of the District Court for Maryland invalidating the Safe Harbor contract, Penn

* The position was reiterated when the FPC, by order of December 15, 1949, (R., Vol. 17, p. 5315) denied Penn Water's third petition for rehearing in which the contract illegality was again formally brought to the attention of the Commission.

Water moved (May 8, 1951) in the D. C. Circuit for leave to argue that the FPC orders should be set aside on the further ground that they were founded also on the illegal Safe Harbor contract.

The motions to set aside the FPC orders were denied by the D. C. majority which affirmed the FPC orders in all respects.

Penn Water's objectives in the cases in the Fourth Circuit were (1) to be free to compete with Consolidated, particularly as regards sales and purchases at wholesale, without the illegal restrictive controls by Consolidated and illegal pooling of revenues provided for in the contracts, and (2) to have its policies, contracts and expansion, and the exercise of initiative with respect to its rates, services, operating economies and new business, controlled by its Board of Directors as required by the laws of its state of incorporation.*

The FPC admitted that control by Consolidated over Penn Water is perpetuated by the FPC rate orders when it said in its brief below (Tr. 5574) that the arrangement prescribed by the FPC rate orders "permits Penn Water's facilities to be operated as though they were under common ownership with Baltimore Company's facilities."

Obviously this is a situation which the antitrust laws and the regulatory acts enacted in the 1930's were designed to prevent, *i.e.*, the exercise of controls and stifling of com-

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* Contrary to assertions which have been made in these cases by Penn Water's opponents, the record is clear, as the Fourth Circuit said in a passage quoted in the D. C. dissenting opinion (R., Vol. 18, p. 5410), that Penn Water is not trying to stop electric service to Consolidated and thereby to withdraw from interstate commerce and thus escape from whatever regulatory system Congress has imposed on such interstate electric business.

petition by a large utility corporation such as Consolidated. The Federal Power Act itself is one of those acts, and is a reaffirmation of such principles, witness Section 10(h). This section was reenacted in 1935 as a portion of Part I of the Act, the whole of which (Parts I, II and III) was enacted as Title II of the Public Utility Act of 1935.

As the dissenting opinion points out (R., Vol. 18, pp. 5411-12, 5403) after the decision in the Fourth Circuit, the FPC "should have called the parties in and required them to work out immediately a new contract in conventional form which would accord with the opinions of the Court of Appeals for the Fourth Circuit," and "the Commission's orders stood in a vacuum after the Fourth Circuit held the contract invalid; the only service to which they can have application may not be lawfully continued."

The Baltimore and Safe Harbor contracts were properly stricken down by the Court. They should not in any respect be maintained through the guise of FPC rate orders.

Errors To Be Urged.

The D. C. Circuit erred in:

(1) Holding that the FPC had authority to direct continuance of contractual arrangements adjudged illegal under the antitrust laws and base critical features in its orders thereon.

(2) Holding that the FPC had authority to order continuance of contractual arrangements adjudged illegal under fundamental state laws and base critical features in its orders thereon.

(3) Holding that a licensee subject to the regulatory system of Part I of the Federal Power Act is also subject to the different regulatory system of Part II thereof.

(4) Holding that, regardless of whether Part II is generally applicable to licensees under Part I, the enactment of Part II repealed by implication portions of Part I, such as Section 10(h) and the provisions giving licensees a net investment rate base.

(5) Denying motions to set aside, but instead affirming, the orders of the FPC, including orders of October 27, 1949 and December 15, 1949, which were issued (a) after the D. C. Circuit had exclusive jurisdiction of the case under Section 313(b) of the Act, and (b) without notice and without opportunity for hearing in violation of the Fifth Amendment of the Constitution of the United States.

Summary of Argument.

I. The FPC has no authority to direct continuance of or base its orders on contractual arrangements adjudged illegal *per se* under the Federal antitrust laws.

The holding of the D. C. majority that the Federal Power Act repealed *by implication* the antitrust laws (which are specifically reaffirmed by Section 10(h) of the Federal Power Act itself), and empowered the FPC to require continuance of, and base important features in its orders on, contractual arrangements specifically adjudged illegal *per se* and void under the antitrust laws, is contrary to the decisions of this Court in *U. S.* v. *Borden Co.*, 308 U. S. 188 (1939), *Georgia* v. *Pennsylvania R. Co.*, 324 U. S. 439 (1945), *U. S. Alkali Export Assn.* v. *U. S.*, 325 U. S. 196 (1945) and many other cases.

Congress has followed a clear and consistent pattern in regulatory legislation, of expressly specifying and narrowly confining any power intended to be conferred on a regulatory body to override the antitrust laws. Limited power of this character as to specified types of transac-

tions has been given to certain agencies but not to others. The only type of transaction as to which the FPC has been given such power is that given by the December 1950 amendment to Section 7 of the Clayton Act in connection with acquisitions of stock or assets.

This Court has repeatedly held that there is no implied repeal of, or exemption from, the antitrust laws and that even express statutory authorization to regulatory bodies to grant such exemption must be strictly construed and limited to the precise transactions specified in the authorization. Other Federal regulatory agencies (contrary to the FPC), and the Attorney General have recognized and carefully observed this basic principle.

The D. C. majority, however, held the antitrust laws and Section 10(h) of Part I of the Federal Power Act impliedly repealed by mere general regulatory provisions of Part II of the Act. The FPC clearly can, and is required, to administer these regulatory provisions without approving, as it did here, contractual arrangements which stand adjudicated as illegal under the antitrust laws. Under the system of unit-rates for capacity and energy, universally recognized as to electric utilities, it is neither necessary nor appropriate to allow one independent company to exercise managerial control over another or to stifle its initiative and incentive by illegal revenue pooling and other restrictive controls. See *U. S.* v. *Paramount*, 334 U. S. 131 (1948); *U. S.* v. *Reading Co.*, 253 U. S. 26 (1920); *Carter* v. *Carter Coal Co.*, 298 U. S. 238 (1936), and other Supreme Court and Courts of Appeals cases. The illegal contractual arrangements are basic to every important feature of the FPC rate orders here involved, including their provisions as to jurisdiction, rate of return, method of payment and allocation of the rate reduction among customers.

Basic to the argument of the D. C. majority that Section 10(h) of Part I and the antitrust laws were impliedly

repealed is ~~the asserted~~ applicability of Part II of the Act to licensees under Part I, such as Penn Water. That Part II is not applicable to such licensees is shown in Point III herein. However, even if it is applicable, there is nothing in Part II which impliedly repeals Section 10(h) of Part I and the antitrust laws, as shown in Point I herein.

II. The FPC has no authority to direct continuance of or base its orders on contractual arrangements of a state utility corporation adjudged illegal under the laws of its state of incorporation.

The D. C. majority completely ignored that the contractual arrangements on which the FPC orders are based stand adjudicated as violating not only the antitrust laws but also the corporation and public utility statutes and common law of Pennsylvania (the state of incorporation of Penn Water and Safe Harbor) and as being against public policy. As adjudicated by the Fourth Circuit, the contracts destroy the initiative of such corporations as to rates and services, give managerial control of Pennsylvania electric utility corporations to another, and are *ultra vires*. Thus, the illegalities are not in the field of utility "regulation", but involve violations of the fundamental organic laws of Pennsylvania.

Unlike some Federal regulatory statutes, the Federal Power Act contains no provision whatever for overriding state laws but on the contrary affirmatively states the policy of Congress even in the field of regulation only to supplement the authority of states where necessary to regulate transactions beyond the reach of the states.

Not only has Congress not authorized the FPC to approve or require violations of state laws such as are involved here, but it could not constitutionally do so because of the requirements of the Fifth and Tenth Amendments to the Constitution. *Chicago Title & Trust Co.* v. *41-36 Wilcox Building Corp.*, 302 U. S. 120 (1937); *Hopkins Federal Sav-*

ings & Loan Ass'n. v. *Cleary*, 296 U. S. 315 (1935); *Carter* v. *Carter Coal Co.*, 298 U. S. 238 (1936).

III. A licensee subject to regulation under Part I of the Act is not also subject to the different regulatory provisions of Part II.

Penn Water, as a licensee under Part I of the Act, is subject to the separate and different regulatory system provided for licensees under Part I. The D. C. majority's holding that Part II of the Act repealed Part I by implication (despite the reenactment of Part I at the time Part II was enacted) is untenable and contrary to the canons of construction as laid down by this Court in *United States* v. *Jackson*, 302 U. S. 628 (1938).

As confirmed by other Courts of Appeals decisions (*Niagara Falls Power Co.* v. *Federal Power Commission*, 137 F. 2d 787 (1943) and *Alabama Power Co.* v. *Federal Power Commission*, 128 F. 2d 280 (1942)), interstate sales of licensees are subject only to regulation under Part I (by the states involved unless one of them has no regulatory authority or the regulatory authorities of the states are unable to agree, in which case regulation is by the FPC) and Part II merely provides for FPC regulation of electric utilities other than licensees as to transactions which this Court had held could not be reached by State regulation in *Public Utilities Commission* v. *The Attleboro Steam and Electric Co.*, 273 U. S. 84 (1927).

The D. C. majority's holding would subject licensees to two conflicting systems of regulation, since the regulatory system of Part I differs from that of Part II, for example as to the regulatory authority (i.e. State instead of Federal) and as to the nature of the rate base to be used in fixing rates.

Both the language and the legislative history of the Act show that Congress enacted Part II "entirely as a

supplement to, and not a substitute for, State regulation." Moreover, under the express terms of Part I, the license is a contract which cannot be altered (by amendment of the Act or otherwise) without the licensee's consent.

Argument.

I. The FPC has no authority to direct continuance of or base its orders on contractual arrangements adjudged illegal *per se* under the Federal antitrust laws.

The contractual arrangements which are basic to the FPC orders here involved are not of a type which may be lawful or unlawful depending upon whether the facts disclose a "reasonable" or "unreasonable" restraint of trade. Instead, they stand adjudicated as illegal on the basis of contractual restraints on competition of the type which this Court has repeatedly held so vicious as to be illegal *per se*, including price fixing, restrictions on plant expansion, division of territory, exclusive dealing provisions and pooling of revenues. The Fourth Circuit, in the decision as to which this Court denied certiorari, expressly held the contractual arrangements illegal *per se* and stated that regardless of considerations of reasonableness or of intended or actual beneficial result, such contractual arrangements were void on their face in their entirety.* In so holding, the Fourth Circuit was following

*The D. C. majority opinion contains a statement that the Fourth Circuit decision is construed as "having done no more than declare illegal under the antitrust laws certain restraints exercised by Baltimore Company upon Penn Water—such as requiring its approval before it could take on new customers or expand generating facilities" (R., Vol. 18, pp. 5374-5). This was an obvious misconstruction, since the Fourth Circuit's opinions expressly held the contracts illegal and void in their entirety as vio-

controlling decisions of this Court.* Under those decisions the Rule of Reason is not applicable to restraints of the type involved here, as the Fourth Circuit pointed out (R., Vol. 18, pp. 5332-3).

Despite the *per se* illegality of the arrangements, the D. C. majority affirmed the FPC orders, holding the antitrust laws inapplicable to those orders on the ground that general regulatory provisions contained in Sections 202 and 205 of Part II of the Act have impliedly repealed the antitrust laws and Section 10(h) of Part I of the Act (which the D. C. majority conceded virtually restates the Sherman Act).**

This holding is in error since there is no authority in any regulatory body to override the antitrust laws in the absence of express provision therefor by Congress (Sec-

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lative of the antitrust laws, state law and public policy. Respondents themselves have made no attempt to uphold the D. C. majority's misconstruction of the Fourth Circuit decision, having admitted in their briefs relating to the petition for certiorari that the contracts were invalidated in their entirety. Under the circumstances it is unnecessary to discuss the point at length in this brief.

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* *U. S.* v. *Real Estate Boards*, 339 U. S. 485 (1950); *Standard Oil Co. of California* v. *U. S.*, 337 U. S. 293 (1949); *U. S.* v. *Paramount Pictures*, 334 U. S. 131, 143 (1948); *International Salt Co.* v. *U. S.*, 332 U. S. 392, 396 (1947); *U. S.* v. *Bausch & Lomb Co.*, 321 U. S. 707, 720 (1944); *U. S.* v. *Masonite Corp.*, 316 U. S. 265, 274-276 (1942); *Fashion Guild* v. *F. T. C.*, 312 U. S. 457, 468 (1941); *U. S.* v. *Socony-Vacuum Oil Co.*, 310 U. S. 150, 218, 220-224 (1940); *U. S.* v. *Trenton Potteries Co.*, 273 U. S. 392, 397-398 (1927); *U. S.* v. *Reading Co.*, 253 U. S. 26, 48 (1920); *Northern Securities Co.* v. *U. S.*, 193 U. S. 197, 327-328 (1904); *Gibbs* v. *Consolidated Gas Company of Baltimore*, 130 U. S. 396 (1889). See also *U. S.* v. *Aluminum Co.*, 148 F. 2d 416, 427 (2d Cir. 1945); *Norfolk Southern Bus Corp.* v. *Virginia Dare Transportation Co.*, 159 F. 2d 306 (4th Cir. 1947), cert. den. 331 U. S. 827; *Lee Line Steamers, Inc.* v. *Memphis, Helena & Rosedale Packet Co.*, 277 Fed. 5, 8 (6th Cir., 1922).

** The respondents' contention in connection with the petition for certiorari, to the effect that this holding was dictum, is without the slightest foundation. The D. C. majority clearly realized that it could not uphold the FPC orders without finding FPC power

tion A of this Point), and Section 10(h) of the Act, expressly reenacted in 1935 simultaneously with the enactment of Part II, specifically reaffirms the applicability of the antitrust laws to electric utilities which are licensees under the Act such as Penn Water and Safe Harbor (Section B of this Point).

The FPC clearly ordered continuance of or based its orders upon contractual provisions which are illegal *per se*. (Section C of this Point.)

A. A Regulatory Body Has No Power to Override the Antitrust Laws Unless Expressly Authorized by Congress To Do So.

The D. C. majority concedes (R., Vol. 18, p. 5373) that "repeals by implication are not favored" and refers to no provision of the Act or of any other act providing for exemption of electric utilities from the antitrust laws or permitting the FPC to override such laws. The Act does not contain, as do some Federal regulatory acts, any provision authorizing the FPC to override the antitrust

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to absolve illegal contracts from the antitrust laws. Judge Bazelon's opinion, devoting five pages to that subject, stated that to uphold Penn Water's position would be "to substitute antitrust criteria for those of the Federal Power Act" (R., Vol. 18, p. 5376), and sustained various features of the FPC orders by reference to the "obligations" and "entitlements" contained in the illegal contracts (R., Vol. 18, pp. 5390-5393). The concurring Judge (Fahy, J.) stated in a subsequent case that in the *Penn Water* case the Court had dealt with the FPC's power to require continuance of arrangements violating the antitrust laws. *Maryland & Virginia Milk Producers' Association* v. *U. S.*, CCH Trade Reg. Rep. (9th ed.) ¶62,940 (D. C. Cir., 1951). The dissenting Judge below also stated that that was "the basic issue" and devoted his entire 18-page opinion to the point (R., Vol. 18, pp. 5042-5419). Prior to the certiorari proceedings herein the respondents had asserted that the D. C. majority decision was a holding that the FPC has authority to absolve the illegal contracts from the antitrust laws and state law. In the face of all this, any suggestion that the D. C. majority's holding as to the "implied repeal" of the antitrust laws was mere dictum cannot be taken seriously.

laws or granting exemptions from the antitrust laws.* In fact, the Act makes it a condition of all licenses granted thereunder that licensees are prohibited from entering into agreements "to limit the output of electrical energy, to restrain trade, or to fix, maintain, or increase prices for electrical energy or service" (Section 10(h)).

1. The pattern of Federal regulatory statutes with reference to the antitrust laws.

Congress in enacting regulatory statutes has followed a clear and consistent pattern of giving to certain administrative agencies specific and narrowly confined authority to disregard and grant exemptions from the antitrust laws. The scope of the power varies from agency to agency, and from time to time as to the same agency, but always relates to specific types of transactions. No administrative agency has been given blanket power of this character in its field of regulation. This is clearly illustrated in Appendix A to this brief, which tabulates the nature and dates of enactment of the powers which Congress has from time to time assigned to various Federal administrative bodies in relation to the antitrust laws. Nor has any administrative agency, until the decision below, been held to possess *any* power to override or grant exemptions from the antitrust

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* See, for example, Interstate Commerce Act, 49 U. S. C. §§5(11) and 5b(9); Communications Act, 47 U. S. C. §§221(a) and 222(c)(1); and Civil Aeronautics Act, 49 U. S. C. §§492 and 494.

The ICC, FCC and CAB are also, unlike the FPC, given express authority under Section 11 of the Clayton Act (15 U. S. C. §21) to enforce compliance with Sections 2, 3, 7 and 8 thereof (15 U. S. C. §§13, 14, 18 and 19). The CAB was given this power in 1938 when Part II of the Federal Power Act was in effect and the FPC in existence. Clearly, if Congress had wished to give the FPC similar powers it would have followed similar procedure. Under the Federal Power Act (§26 (16 U. S. C. §820)) it is the Attorney General of the United States rather than the FPC who enforces by suit in court the condition incorporated in licenses pursuant to Section 10(h), which reaffirms the antitrust laws.

laws as an implied incident of even the most comprehensive general regulatory authority.

The only statutory provision granting any exemption upon approval of the FPC is found in a recent amendment (December 29, 1950) of Section 7 of the Clayton Act (15 U. S. C. §18) exempting acquisitions of stock or assets approved by the FPC and other specified commissions. This narrow grant of authority would have been unnecessary, so far as the FPC is concerned, if the FPC already had general authority to disregard or give exemptions from the provisions of the antitrust laws. It also clearly shows that a special legislative enactment was necessary to empower the FPC to give such exemptions even with respect to a subject matter (the acquisition of stock or assets) as to which the FPC already had regulatory jurisdiction under Section 203(a) of the Act.

The enactment of this amendment clearly shows the error of the D. C. majority's holding that the antitrust laws were superseded by Part II of the Act. Moreover, the fact that in such amendment Congress did not provide that FPC approval should exempt any arrangements, other than acquisitions of stock or assets, from any of the antitrust laws clearly shows that no such exemption was intended.

The fact that Congress did not intend by the Act to give the FPC authority to disregard or grant exemptions from the antitrust laws is further manifest from the fact that a provision of the 1935 bill (S. 2796, Sec. 203(a)) as passed by the House (see House Report No. 1318, 74th Congress, First Session) permitting the FPC to grant exemptions from other Federal acts, was dropped in conference. Section 203(a) of the bill as finally enacted in the present Act precludes any public utility from selling, leasing or otherwise disposing of its facilities, or merging or consolidating or acquiring the securities of another public utility without

the consent of the FPC. The original provision proposed by the House bill, which was dropped by the conferees, provided that upon certification by the FPC that the proposed transaction would be consistent with the public interest "any Act or Acts of Congress making the proposed transaction unlawful shall not apply."

The D. C. majority states that the Act is analogous to the Interstate Commerce Act (R., Vol. 18, p. 5374).* However, as is plainly illustrated in Appendix A hereto, there is no similarity between these two acts so far as the application of the antitrust laws in the fields of regulation covered by the respective acts is concerned. The Interstate Commerce Act contains *express provisions* (49 U. S. C. §§5(11) and 5b (9)), authorizing the Interstate Commerce Commission to approve, and thereby exempt, specified transactions, including revenue pooling arrangements (49 U. S. C. §5(1)), from the antitrust laws.** The Federal

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* In support of this statement the D. C. majority cites *Northwestern Pub. Serv. Co.* v. *Montana-Dakota Util. Co.*, 181 F. 2d 19, 22 (8th Cir. 1950). That case, however, did not involve any question under the antitrust laws or the power of either the FPC or the ICC to grant any exemption therefrom. It referred simply to the similarity of the *rate regulation* jurisdiction of the two Commissions.

** Prior to the enactment of such express provisions, this Court held transactions of the kind subsequently exempted thereby to be illegal. *U. S.* v. *Southern Pacific Co.*, 259 U. S. 214 (1922); *U. S.* v. *Lehigh Valley R. Co.*, 254 U. S. 255 (1920); *Georgia* v. *Pennsylvania R. Co.*, 324 U. S. 439 (1945). Under the express statutory authorization given the ICC by Congress after those cases were decided, the ICC approved the same or similar transactions without any suggestion that it would have had power to do so in the absence of such statutory authorization. *In the Matter of the Application of Southern Pacific Company to Acquire Control by Lease and by Stock Ownership of Central Pacific Railway Company*, Fin. Docket No. 2613, 76 I. C. C. 508 (1923); *Western Traffic Association—Agreements*, 276 I. C. C. 183 (1949). In *McLean Trucking Co.* v. *U. S.*, 321 U. S. 67, 86 (1944), this Court stated that even in the case of transactions which the ICC was expressly authorized by statute to exempt from the antitrust laws, the FCC was not entitled to ignore the policy of the antitrust laws in making its decisions.

Power Act, on the other hand, in addition to containing no authorization whatever to the FPC to exempt any transactions from the antitrust laws, expressly restates, in Section 10(b), the substance of the Sherman Act.

2. Applicable decisions of this Court.

The D. C. majority's holding that the Act repeals the antitrust laws by implication is squarely contrary to the decisions of this Court. This Court has frequently held that there is no implied repeal of, or exemption from, the antitrust laws, and even express authorizations to regulatory bodies to exempt from the antitrust laws have been strictly construed and the antitrust laws enforced as to transactions other than those expressly authorized to be exempted.

For example, in *U. S.* v. *Borden Co.*, 308 U. S. 188 (1939), the District Court had dismissed certain counts of an indictment under the Sherman Act on the ground that the Agricultural Marketing Agreement Act (50 Stat. 248, 7 U. S. C. 671 *et seq.*) had vested in the Secretary of Agriculture plenary power over the marketing of milk and that as a result such marketing "is removed from the purview of the Sherman Act" (308 U. S. at 197).* This Court reversed

* Other decisions of this Court are *Georgia* v. *Pennsylvania R. Co.*, 324 U. S. 439 (1945) [holding application of antitrust laws to price-fixing conspiracy of railroads not impliedly repealed by rate regulation provisions of the Interstate Commerce Act]; *U. S. Alkali Export Ass'n.* v. *U. S.*, 325 U. S. 196 (1945) [holding provisions of Sherman Act not impliedly repealed by Webb-Pomerene Act giving Federal Trade Commission power to investigate and make recommendations for adjustment of activities of export associations in restraint of trade]; *U. S.* v. *South-Eastern Underwriters Ass'n.*, 322 U. S. 533 (1944) [holding that State regulation could not affect application of antitrust laws to insurance companies and only Congress, not the Courts, can give exemption]; *U. S.* v. *Socony-Vacuum Oil Co.*, 310 U. S. 150 (1940) [holding National Industrial Recovery Act did not authorize exemptions from

unanimously. The Court pointed out that there was no express provision in the Agricultural Marketing Agreement Act for such an exemption, except as to carefully defined specific transactions, and reaffirmed the "cardinal principle of construction that repeals by implication are not favored" (p. 198). The Court stated in part (pp. 198-9):

> "When there are two acts upon the same subject, the rule is to give effect to both if possible. * * * as was said by Mr. Justice Story in *Wood* v. *United States*, 16 Pet. 342, 362, 363, '* * *.' There must be 'a positive repugnancy between the provisions of the new law, and those of the old; and even then the old law is repealed by implication only *pro tanto* to the extent of the repugnancy'."

Unlike the Act, the statute involved in the *Borden* case contained provisions permitting antitrust exemption under certain circumstances. With respect to these provisions, this Court said (p. 201):

> "These explicit provisions requiring official participation and authorization show beyond question how far Congress intended that the Agricultural Act should operate to render the Sherman Act inappli-

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antitrust laws except to the extent expressly provided therein]; *Western Union Division* v. *United States*, 338 U. S. 864 (1949), affirming 87 F. Supp. 324 (D. D. C. 1949) [see particularly statement of three-judge court at p. 337 of 87 F. Supp. that "absent a specific congressional permission, an administrative agency cannot validate an agreement between competitors which is otherwise invalid under the anti-trust laws"] See also, *Norfolk Southern Bus Corp.* v. *Virginia Dare Transportation Co.*, 159 F. 2d 306 (4th Cir. 1947), cert. den. 331 U. S. 827; *Hinton* v. *Columbia River Packers Assn.*, 131 F. 2d 88 (9th Cir. 1942); *Manaka* v. *Monterey Sardine Industries*, 41 F. Supp. 531 (N. D. Calif. 1941). After the decision in the *Georgia* case, above cited, Congress enacted the Reed-Bulwinkle Act of 1948 (49 U. S. C. §5b(9)), specifically exempting certain railroad price-fixing agreements when approved by the Interstate Commerce Commission.

cable. If Congress had desired to grant any further immunity, Congress doubtless would have said so." *

Although the D. C. majority concedes that regulated industries are not exempt from the antitrust laws, it has actually held in this case that, solely because Sections 202 and 205 of the Act give the FPC general regulatory jurisdiction over certain electric utilities, the Act is repugnant to and supersedes the antitrust laws with respect to such utilities. But this Court has repeatedly held that the antitrust laws are applicable to regulated industries in the absence of statutory provisions for specific exemption.**

The above-cited decisions of this Court were the basis of the adjudication by the Fourth Circuit that the FPC, having been given no authorization by Congress to override or grant exemption from the antitrust laws, could not validate the *per se* illegal Baltimore and Safe Harbor contracts and that any arrangements which the FPC might approve would have to be on a basis which would not offend the antitrust laws (R., Vol. 18, p. 5349).

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* Compare the very limited authority to exempt from the antitrust laws granted to the FPC by the recent amendment to the Clayton Act passed in December, 1950. This authority to exempt clearly does not cover transactions of the type involved here, but only acquisitions of stock or assets. The above statement of and quotations from the *Borden* case are taken substantially from the government's brief in the *Far East Conference* case, argued in this court on January 29, 1952, October term 1951, No. 15 Misc., in which the government took the same position that petitioners take here, namely, that a regulatory body has no authority to override or grant exemptions from the antitrust laws except to the extent, if any, that Congress has specifically conferred such power upon it.

** *Georgia* v. *Pennsylvania R. Co., supra; U. S.* v. *South-Eastern Underwriters Ass'n., supra; U. S.* v. *Terminal R. Ass'n.*, 224 U. S. 383 (1912); *U. S.* v. *Southern Pacific Co.*, 259 U. S. 214 (1922); *U. S.* v. *Reading Co.*, 253 U. S. 26 (1920); *U. S.* v. *Union Pacific R. Co.*, 226 U. S. 61 (1912). See, also, *U. S. Telephone Co.* v. *Central Union Telephone Co.*, 202 F. 66 (6th Cir. 1913), cert. den. 229 U. S. 620; *In re American Fuel & Power Co.*, 122 F. 2d 223 (6th Cir. 1941).

3. Pertinent rulings of other Federal regulatory agencies and the Attorney General.

In its inexplicable insistence in this case upon arrogating to itself the power to override the antitrust laws in order to give Consolidated a strangle-hold over potential competitors, the FPC stands alone among government agencies. Other regulatory bodies have uniformly acknowledged that they have no power to override or grant exemption from the antitrust laws except in strict accordance with express Congressional authorization.

For example, the Interstate Commerce Commission has held that Section 20a of the Interstate Commerce Act, giving it "exclusive and plenary jurisdiction" over issuance of carriers' securities, did not impliedly repeal Section 10 of the Clayton Act (15 U. S. C. §20) regarding competitive bidding for such securities. That Commission emphasized that Section 20a did not contain any specific provision for exemption from these Clayton Act requirements and that where Congress had intended exemptions from the antitrust laws they had elsewhere been expressly provided for in the Interstate Commerce Act. *Columbia Terminals Co.—Issuance of Notes*, 40 M. C. C. 288, 293 (1945).

Similarly, the Federal Communications Commission in its *Report on Chain Broadcasting*, May 2, 1941, in discussing its regulatory powers with respect to broadcasting said (p. 46):

> "In the absence of Congressional action exempting the industry from the anti-trust laws, we are not at liberty to condone practices which tend to monopoly and contractual restrictions destructive of freedom of trade and competitive opportunity."

The Attorney General, in an opinion to the Secretary of State dated October 31, 1944 (Vol. 40, Att. Gen. Op. p. 335),

advised that the Civil Aeronautics Board has no authority to exempt agreements from the antitrust laws except to the extent Congress has specifically so provided, and that statutory provisions granting such authority must be strictly complied with in order to be effective.*

These rulings of other regulatory agencies and the Attorney General are clearly sound. As the D. C. majority admits (R., Vol. 18, p. 5374) the initial duty with respect to the promulgation of reasonable rates and adequate services rests upon the utilities themselves and is a "condition precedent to proper operation of the rate-making process." It is the function of regulatory commissions to *police* this duty, not *assume* it. The public is entitled to the benefits of competitive rate making by utilities within the maximum limits which would be permitted by the regulatory body. See *Georgia* v. *Pennsylvania R. Co.*, *supra* (324 U. S. at pp. 458-9).

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* This ruling of the Attorney General reflects the position which the Department of Justice has taken in case after case. The Department has uniformly maintained the position that there is no implied repeal of or exemption from the antitrust laws; that a regulatory body has power to override the antitrust laws only if and to the extent expressly provided in the regulatory statute; and that there is no Congressional policy exempting transactions in the general field of regulation of any regulatory authority. See, for example, the Government's briefs in the following cases: *U. S.* v. *Pacific & Arctic Co.*, 228 U. S. 87 (1913); *U. S.* v. *Borden Co.*, 308 U. S. 188 (1939); *U. S.* v. *South-Eastern Underwriters Association*, 322 U. S. 533 (1944); *U. S. Alkali Export Assn.* v. *U. S.*, 325 U. S. 196 (1945); *Schwegmann Brothers* v. *Calvert Corp.*, 341 U. S. 384 (1951); *U. S.* v. *Far East Conference*, 94 F. Supp. 900 (D. N. J. 1951) argued in this Court on January 29, 1952 (October Term 1951, No. 13 Misc.); *Isbrandtsen Co.* v. *U. S.*, 96 F. Supp. 883 (S. D. N. Y. 1951), argued in this Court on January 30, 1952 (October Term 1951, No. 134, 135); *U. S.* v. *Railway Express Agency, Inc.*, 1952 C. C. H. Trade Regulation Service ¶67,215 (D. Del., December 7, 1951).

4. The provisions of the Act relied on by the D. C. majority do not support its decision.

The regulatory provisions of Part II of the Act which the D. C. majority regarded as superseding the antitrust laws are said to be contained in Sections 202* and 205. These Sections contain ordinary regulatory provisions.

Section 202 of the Act (16 U. S. C. §824 a) authorizes the FPC to promote and encourage voluntary interconnection and coordination of public utility facilities and to require, subject to certain limitations, when it finds it necessary or appropriate in the public interest, the establishment of physical connection of transmission facilities and to prescribe the terms and conditions of the arrangement to be made therefor.

Section 205 of the Act provides that rates shall be just and reasonable, prohibits preferences and prescribes the rules for the filing of rate schedules. All of the other Federal regulatory statutes discussed above contain similar provisions.**

These Sections 202 and 205 include no provision for exemption from the antitrust laws and clearly do not destroy the specific mandate contained in Section 10(h) of the Act and in the antitrust laws. Nor is there anything

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* Section 202 is not involved in this proceeding. This proceeding was not begun under that Section. There was no application by any state commission or any other person, as required by the Section, asking the FPC to direct establishment of any physical connection of transmission facilities. The facilities of the companies had already been physically connected for many years.

** Other Federal regulatory statutes (such as the Interstate Commerce Act, Sections 1, 3(4) and (5), and 6(11) (49 U. S. C. §§1, 3(4) and (5) and 6(11)), the Communications Act, Section 201 (47 U. S. C. §201), and the Civil Aeronautics Act, Section 1002 (49 U. S. C. 642)), provide for interconnection of facilities and the fixing of terms of through service and joint rates, but these have not been held to authorize the granting of exemption from antitrust laws. See *Georgia* v. *Pennsylvania R. Co.*, *supra* (324 U. S. 439, 456-457).

in these sections which even looks toward the elimination of competition between public utilities, let alone authorizing restrictive or other types of agreements which would permit a private utility to suppress such competition. On the contrary, Section 202 expressly states that the purpose of interconnection of facilities to be fostered thereby is that "of assuring an abundant supply of electrical energy throughout the United States."

There is no repugnancy between these regulatory provisions and the antitrust laws. The FPC can effectuate the purposes of these provisions, without overriding those laws, by approving the furnishing of power and payment therefor of unit rates on the usual basis without managerial control of one company over another. As Judge Miller's dissenting opinion below forcefully pointed out (R., Vol. 18, p. 5415):

> "Section 202 * * * empowers the Commission to require the interconnection and co-ordination of the facilities of the two utilities. But neither that section nor any other section of Part II authorizes the Commission to require interconnection and co-ordination of facilities under terms and conditions which will result in a violation of the Sherman Act. The Commission can exercise its power under § 202 and under all of Part II without setting up an arrangement which is unlawful under anti-trust statutes. The Fourth Circuit intimated as much when it suggested that the interconnection of facilities and interchange of energy be continued 'by some method which would meet with the approval of the appropriate regulatory authority and will not offend either the anti-trust laws or the utility laws of Pennsylvania.' The majority opinion does not suggest any reason why that cannot be done by the Commission.

> "Since the Power Commission can perform all its functions under Part II without creating a violation of the Sherman Act, there is no repugnancy between the two statutes, and no room for the court to say that Part II superseded the anti-trust statutes."

Moreover, as the Fourth Circuit said in its decision affirming the illegality of the Safe Harbor contract (Pamphlet op. p. 15).

> "Indeed it is impossible to say that an effective power pool cannot be maintained without the prohibitions upon individual action contained in the two contracts which, for this purpose, may be considered one."

5. The cases relied on by the D. C. majority do not support its decision.

The cases cited by the D. C. majority for its holding that the Act repeals the antitrust laws by implication and permits the FPC to ignore the antitrust laws, support the petitioners' position here to the extent that they are applicable at all. The *Borden* case has been discussed above and clearly supports the petitioners. The *U. S. Navigation Co.*, *Sunshine* and *Rock Royal* cases (284 U. S. 474; 310 U. S. 381; 307 U. S. 533) involved regulatory statutes which, unlike the Act, contained express provisions for exemption from the antitrust laws. *Terminal Warehouse Co.* v. *Penn R. Co.*, 297 U. S. 500 (1936) and *Georgia* v. *Pennsylvania R. Co.*, 324 U. S. 439 (1945) held that regulated industries are subject to the antitrust laws even though their rates and services are subject to the exclusive jurisdiction of regulatory bodies. *U. S. Alkali Export Assn.* v. *U. S.*, 325 U. S. 196 (1945) is strong authority against the D. C. majority's holding. This Court there held that the Webb-Pomerene Act, giving the Federal Trade Commission the

power to investigate violations of the Sherman Act, did not empower that Commission to enforce the Sherman Act or in any way repeal the provisions of the latter act.

In *Keogh* v. *Chicago & N. W. Ry. Co.*, 260 U. S. 156, 162 (1922), which the D. C. majority cites for the proposition that a rate is not necessarily illegal because it is a *result* of a conspiracy in restraint of trade in violation of the anti-trust laws, the attack was solely on the amount (*i.e.*, the rate) specified in an order of the Interstate Commerce Commission, and the Commission's order did not incorporate or embody the illegal conspiracy or arrangement alleged to exist. The FPC orders here involved, while they purport to be only rate orders, do embody illegal arrangements, require their continuance, and in critical respects are based on the assumed existence and continuance of those arrangements.

Furthermore, in the *Keogh* case, this Court simply held that a rate already established by the Interstate Commerce Commission in one proceeding could not be attacked in a court in another proceeding. Here we have an appeal from the orders issued in the very proceeding in which the rates were prescribed, in which the appellate courts have statutory authority either to set aside the orders or to require that they be modified in the light of the established illegalities of the contractual situation. There is no collateral attack here on a commission order which has gone into effect. The Courts are now determining whether the orders shall go into effect.*

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* A further distinction of the *Keogh* case, which upheld primary jurisdiction in the Interstate Commerce Commission with regard to a treble damage action based on alleged illegal rates, is that the Interstate Commerce Act expressly provided an exclusive remedy for recovery of such damages in a proceeding before the ICC. The Federal Power Act clearly contains no provision making proceedings before the FPC a remedy (either exclusive or non-exclusive) for antitrust law violations.

The D. C. majority states (R., Vol. 18, pp. 5372-3) that Congress and the states may authorize arrangements which are in violation of the antitrust laws and cites *Parker* v. *Brown*, 317 U. S. 341 (1943), but that case has no application to the present situation and does not support the holding of the Court that the FPC has authority to validate arrangements otherwise illegal under the antitrust laws. The case has nothing to do with the scope of the authority of the FPC under the Federal Power Act. In stating in connection with the citation of this case that Congress may authorize arrangements otherwise in violation of the antitrust laws, the D. C. majority by-passed the question involved here, namely whether Congress has done so. The *Parker* case involved only the validity of the California Agricultural Prorate Act, under which the State of California fixed quotas for the production of raisins, and held that since the fixing of such quotas was an act of that State, not of private parties, the California Act was not in conflict with the Sherman Act because the Sherman Act is not applicable to the actions of a State.* This Court held (317 U. S. at pp. 351-2) that even a State "does not give immunity to those who violate the Sherman Act by authorizing them to violate it, or by declaring that their action is lawful".

Here the FPC *is* attempting to authorize violation of the antitrust laws by Consolidated (a *private party*) and to base its orders upon private agreements which are in violation of the antitrust laws. It should be noted that Consolidated in exercising restraints over Penn Water under the contractual arrangements would not be acting in accord-

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* The FPC, of course, is not a State but a federal agency which has no authority to override any Federal law unless expressly authorized to do so by Congress, and the FPC has been given no such authority except with respect to acquisitions of stock or assets under Section 7 of the Clayton Act.

ance with any statutory regulatory standards but only in its own private interest or at its own whim.*

In *Schwegmann Bros.* v. *Calvert Corp.*, 341 U. S. 384, 389 (1951), this Court, citing its decision in the *Parker* case, reaffirmed that a State may not permit private parties to impose restraints which the Sherman Act forbids.

The *Lowenstein* case (69 Fed. 908), also cited by the D. C. majority (R., Vol. 18, p. 5373), is similar to the *Parker* case, holding that a State may *itself* operate a monopoly in the liquor trade. The *Olsen* case (195 U. S. 332) (R., Vol. 18, p. 5373) held that a *State* does not violate the antitrust laws by licensing pilots. The only issue raised by the *Olsen* case was whether a State may grant exclusive franchises. Such action is not comparable to exempting *private agreements* permitting one corporation to suppress competition with it by another.

6. No question of exhaustion of administrative remedy is involved.

The D. C. majority states (R., Vol. 18, pp. 5375-6) that §205 (d) of the Act (16 U. S. C. §824d (d)) requires Penn Water to submit new arrangements and rate schedules to the FPC for approval, and that if Penn Water is dissatisfied with the decision of the FPC with respect thereto it may take an appeal. But the petitioners have in this case prop-

* Even Congress could not constitutionally place one independent company under the domination of another. *Carter* v. *Carter Coal Co.*, 298 U. S. 238, 311-12 (1936). As the Fourth Circuit pointed out (R., Vol. 18, pp. 5329-30) Consolidated has consistently exercised its powers in disregard of the interests of both Penn Water and the public. The FPC had no authority to prevent or to supervise such actions by Consolidated and has never attempted to assert any such authority. Even if such authority existed in the FPC, the contractual arrangements, as the Fourth Circuit pointed out (Pamphlet Op., pp. 15-16), deprived Penn Water of the right to initiate proceedings before regulatory bodies with respect to matters affecting its business and the public interest.

erly exhausted the administrative remedy provided in the Act because they raised the points involved before the FPC itself* and, after rejection of those points by the FPC in its orders, petitioned the D. C. Circuit and in turn this Court for a review of such orders, pursuing exactly the remedy specified in Section 313(b) of the Act.** Furthermore, Penn Water did in fact file new rate schedules for service to Consolidated on the usual unit rate basis as soon as the preliminary injunction to perform the Baltimore and Safe Harbor contracts was dissolved, but the FPC rejected such schedules (Tr. 5628-30) on the ground, among others, that to file new schedules Penn Water "must recognize" the existing FPC orders, thus possibly barring itself from continuing to appeal in the courts from such orders.

The procedure suggested by the D. C. majority would require Penn Water (i) to accept the present rate orders (despite the fact that they are being properly reviewed under the Act), (ii) to file new schedules with the FPC embodying a new arrangement and (iii) to continue illegal arrangements until final determination (probably after several appeals) of such new proceeding. Any such procedure could only result in confusion and delay.

Under Section 205 of the Act a rate schedule becomes effective upon its filing, without necessity of affirmative FPC approval, and continues in effect unless and until affirmatively disapproved by the FPC. Thus, the D. C. majority's interpretation of Section 205 would mean that

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* The FPC, in its brief below in opposition to petitioners' motions to set aside the FPC orders, expressly stated (Tr. 5552) that the arguments advanced by Penn Water "are not new, having been urged upon the Commission and considered by it and having been repeatedly urged in this proceeding before this Court."

** Nor is there here any "collateral attack" on an FPC order which has become effective. The FPC orders have been stayed pending final determination in this case whether they shall become effective.

the *mere filing* of illegal arrangements would be sufficient to exempt them indefinitely from the antitrust laws or other laws making them illegal unless and until the FPC affirmatively disapproved them. Congress surely cannot have intended to enable private parties to obtain exemption from the antitrust laws for contracts suppressing competition by the mere act of filing them with the FPC.

Those Federal regulatory acts which give authority to the regulatory body to override the antitrust laws set up very carefully defined standards and safeguards.* The decision of the D. C. majority would give the FPC authority to override the antitrust laws without such Congressionally created standards and safeguards.

To uphold the D. C. majority's decision in this case would constitute virtual abandonment of the antitrust laws so far as regulated industries are concerned. It would reverse the entire pattern and history of Federal regulatory enactments. It would mean that, although Congress has followed the policy of leaving the antitrust laws in full effect except where specific exceptions are provided for in

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* See, for example, Section 5 of the Interstate Commerce Act (49 U. S. C. §5 (1) (11)) permitting the ICC to exempt arrangements for the pooling and division of earnings which requires a specific finding by that Commission that the arrangement will not unduly restrain competition; Section 5a(9) of the same Act (49 U. S. C. §5b(9)) authorizing the ICC to exempt price fixing agreements, which requires a specific finding that the arrangements will further the national transportation policy as set forth in the Interstate Commerce Act; and Sections 408, 412 and 414 of the Civil Aeronautics Act (49 U. S. C. §488, 492 and 494) authorizing the CAB to exempt various transactions, including arrangements for the pooling and division of earnings, which prohibit the exemption in some cases if a monopoly and restraint of competition would result and, in other cases, if the CAB finds the transactions would violate the Civil Aeronautics Act. This would include the requirement of the latter Act (Section 2, 49 U. S. C. §402) that the CAB encourage competition to the extent necessary to insure the sound development of the air transportation system.

regulatory statutes, henceforth the antitrust laws would have no effect whatever unless expressly reenacted in the regulatory statute. Indeed, under the D. C. majority's decision even with such specific reenactment the antitrust laws would not survive enactment of a general regulatory statute, because in the Act itself Section 10(h) substantially restates the Sherman Act.

Affirmance of the D. C. majority's decision would give all regulatory agencies *carte blanche* not only to ignore the antitrust laws but to authorize private parties to ignore them. The ICC, the FCC, the CAB and other administrative agencies would no longer need to confine themselves, in authorizing departure from the antitrust laws, to the specific transactions as to which exemption is authorized by the regulatory statutes under which they operate, but could ignore the antitrust laws in any and all instances. If the FPC in this case despite the antitrust laws can validate arrangements which have been specifically adjudged illegal and void *per se*, there is no longer any limit to the power of any regulatory agency to disregard the antitrust laws at its pleasure and to choose, as the FPC has done here, which companies shall be given power to suppress competition and which ones shall be the victims of that suppression.

B. Section 10(h) of the Act, reaffirming the Antitrust Laws, was not impliedly repealed by Part II of such Act and there is no repugnancy between these Provisions.

The D. C. majority concedes (R., Vol. 18, p. 5377) that Section 10(h) of Part I of the Act "does indeed virtually restate the Sherman Act" but argues that the section "is found only in Part I of the Federal Power Act, which deals with water power licensees, and not in Part II, dealing with public utilities selling electric energy in interstate com-

merce at wholesale." The D. C. majority therefore concludes that "Congress did not intend to make licensees which are also Part II companies, such as Penn Water, subject to §10(h)."*

There is no basis for this conclusion. Far from repealing Section 10(h), the Act of 1935 reenacted it. The above cited decisions of this Court, ruling against repeals by implication and holding that exceptions to the antitrust laws cannot be made by the courts in the absence of express Congressional provision, are particularly applicable where, as in the case of Section 10(h), the provision claimed to have been impliedly repealed is contained in the very statute which is claimed to have repealed it.

Section 10(h) is one of a number of conditions required by Congress to be incorporated in licenses granted under the Act, and there is no suggestion by the D. C. majority that any of the other conditions imposed by Section 10 have been repealed either expressly or by implication. The D. C. majority treats Section 10(h) as though it were contained in a statute enacted *prior* to Part II of the Act, whereas in fact Section 10(h) was reenacted as a section of Part I at the same time Part II was enacted. In such reenactment various changes not pertinent here were made in Part I but no change was made in Section 10(h). It is clear, therefore, that Congress intended no change in Section 10(h).

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*Petitioners contend (Point III below) that Penn Water, as a licensee subject to the comprehensive system of regulation provided in Part I, is not also subject to the different regulatory provisions of Part II to which certain public utilities other than licensees are subject. The inapplicability of Part II would remove all basis for the decision of the D. C. majority that the antitrust laws and Section 10(h) have been impliedly repealed as applied to Penn Water. But it is petitioners' contention here that even assuming the applicability of Part II to Penn Water, the antitrust laws and Section 10(h) nevertheless remain applicable and that no provision of the Act, whether contained in Part I or Part II, impliedly repeals either the antitrust laws or Section 10(h) of the Act.

By its express terms Section 10(h) is a required condition of "all licenses", but the D. C. majority's decision would in effect rewrite the statute to make Section 10(h) applicable to "all licenses except those issued to licensees which are subject to regulation under Part II." The argument of the D. C. majority that Section 10(h) was repealed by the enactment of Part II (so far as concerns licensees which enter interstate commerce, but presumably not licensees which do not enter such commerce) is obviously unsound on its face.

Since 1920 the statute has made it mandatory that all licensees have various specified conditions incorporated in their licenses including Section 10(h). There is no discretion in this respect on the part of the FPC. It is inconceivable that Congress intended one of those conditions automatically to become null and void if, as, and when the licensee should enter into interstate commerce, but remain binding on other licensees, or intended that licensees who were formerly expressly prohibited from making agreements in restraint of trade be not only permitted, but encouraged, to do so upon entering interstate commerce.

The D. C. majority bases its conclusion on the assertion (R., Vol. 18, p. 5377) that one of the primary objectives of Part II is "to limit the output of electrical energy" citing Section 202(a) (16 U. S. C. §824a(a)). Actually, however, Part II has precisely the opposite purpose. Section 202(a) expressly includes as the first purpose of Part II "the purpose of assuring an abundant supply of electric energy."

It seems clear that Section 10(h) was included in the Act to extend the antitrust laws to *all* licensees, whether or not engaged in interstate commerce. As was correctly stated in the Fourth Circuit decision as to which certiorari was denied by this Court (R., Vol. 18, p. 5338):

> "The prohibition against monopolistic combinations was included among the conditions upon which

> the Power Commission may issue licenses for the construction and maintenance of power projects—not to deprive the courts of jurisdiction to enforce the anti-trust acts, but to make it perfectly clear that no licensee can legally agree to limit output, restrain trade or fix prices. *The condition was a reaffirmance of the Sherman Act and was designed to restrict rather than to enlarge the Commission's authority.*"*

There is no repugnancy whatever between Section 10(h) and Part II; as the dissenting opinion below clearly demonstrates and as the Fourth Circuit pointed out, interconnection and coordination of facilities can be maintained without offending the antitrust laws. The Pennsylvania customers to the north, as well as numerous electric utilities in other parts of the country, are interconnected and interchange capacity and energy and maintain efficient pooling of power resources with contractual arrangements on the customary unit rate basis without control by any company over any other company or other restraints on competition. The unusual revenue pooling and restrictive controls of the Baltimore and Safe Harbor contracts are wholly unnecessary to effective interconnection and pooling of power resources.

It is significant that in an effort to support its assertion of repugnancy the D. C. majority found it necessary to resort to the argument that a Section which expresses a purpose of assuring an abundant supply of electrical energy (§202(a)) is the opposite of a Section which bans agreements to limit the output of electrical energy (§10(h)).**

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* Italics supplied here and elsewhere in this brief unless otherwise noted.

** Contrary to the reasoning of the D. C. majority, respondents have argued that Section 10(h) gives the FPC authority to enforce the antitrust laws and pass on antitrust matters. The Fourth Circuit in the Baltimore contract case disposed of this argument

C. The FPC Clearly Ordered Continuance of or Based its Orders Upon, Contractual Provisions Which are Illegal *Per Se*.

1. Pertinent Provisions of the FPC Orders.

The opinion of the D. C. majority treats the contractual arrangements as having been ordered by the FPC to continue and upholds the FPC's authority to order such continuance. This has been the position taken by Respondents, Consolidated and the Maryland Commission, as to both the Baltimore and Safe Harbor contracts. It is also the position which has been taken by the FPC regarding the Safe Harbor contract. As regards the Baltimore contract, counsel for the FPC have taken different positions at different times. In their brief below they took the position that the rate schedule which the FPC prescribed "permits Penn Water's facilities to be operated as though they were under common ownership with Baltimore Company's [Consolidated's] facilities" (Tr. 5574). In their memorandum relating to the petition for certiorari, however, government counsel took the position in substance that the FPC had authority to, but did not in fact, order continuance of any of the provisions of the Baltimore contract held illegal by the Fourth Circuit, asserting that Articles IV and V thereof were the only provisions which were held illegal and that these articles were not approved by the FPC.

Since the principal question for decision by this Court is the authority of the FPC to direct continuance of or

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by pointing out that Section 10(h) was not an operative provision of the Act, but simply a provision to be incorporated in all licenses, and that the function of the FPC was limited to calling any violation of a condition of a license to the attention of the Attorney General for such action, if any, as he might care to take to institute a court proceeding to enjoin the violation, or to revoke the license. The Fourth Circuit also pointed out that the Secretary of War has a power under the Act similar to that of the FPC. (R., Vol. 18, pp. 5336-9). In any event, any proceedings to enforce Section 10(h) must be brought before the courts for their decision, not the FPC.

base its orders on such illegal contractual arrangements, it is believed that it will be helpful to the Court to set forth pertinent provisions of the FPC orders regarding the contractual arrangements.

(a) *The FPC Orders Required Continuance of Contractual Arrangements Adjudged Illegal.*

In its opinion denying rehearing (Feb. 28, 1949, R., Vol. 16, p. 5178) the FPC stated that it was immaterial to its rate orders that the Baltimore and Safe Harbor contracts might be illegal and directed continuance of the Baltimore contract as follows:

> "In our opinion and order we took care to leave the continuation of the integrated and interconnected system in full effect, merely changing the rates, as shown by our statements wherein we specifically stipulated that
>
> > " 'The present arrangement whereby sales to Pennsylvania customers are made on a firm basis on definite rate schedules whereas Baltimore Company* takes what is left and assures Respondents [Penn Water and Transmission Company] of the recovery of all proper operating expenses, depreciation, taxes and a fair return, is the most practicable under the circumstances. *That arrangement will, therefore, be continued* * * * ' " (R., Vol. 16, pp. 5184-5). (Matter in brackets added.)**

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* Throughout the FPC orders and opinions Consolidated is referred to as Baltimore Company.

** This requirement was also contained (as indicated in the quotation above) in the FPC's first opinion (Jan. 3, 1949), (R., Vol. 16, p. 4981), and in finding 37 and par. (D) of its first order (R., Vol. 16, pp. 4994, 4995).

The first FPC opinion (No. 173) was incorporated in, and made a part of, its first order (Jan. 5, 1949), and the second order (Feb. 28, 1949) did the same with the second opinion (No. 173A) (R., Vol. 16, pp. 4983, 5192).

In paragraph (11) of its first order the FPC said:

> "The contracts referred to in (6) and (7) above [the Baltimore and Safe Harbor contracts], facilitate the achievement of those objectives *particularly by the methods of payment which they provide*, and by reason of the fact that generation of energy is directed by the coordinated action of load dispatchers in the City of Baltimore, representing the three system companies." (R., Vol. 16, p. 4987).

It is thus clear that the FPC specifically ordered the continuance of the illegal revenue pooling provisions of the Baltimore contract.

In the rate orders and opinions the FPC praised and commended *all* of the restrictive provisions of the Baltimore contract.

For example, in its opinion of February 28, 1949 denying rehearing, the FPC said:

> "By the terms of those contracts the installation of additional facilities by Penn Water is subject to approval by Baltimore Company,[2] to assure coordinated planning and investment to meet the growing power needs of the system as a whole with resulting additional economies and consumer benefits." (R., Vol. 16, p. 5184).

Footnote 2 referred to above quotes in full Article V of the Baltimore contract, the provision restraining Penn Water's plant expansion, expressly held illegal on its face by the Fourth Circuit.

In that opinion the FPC further said:

> "In this case refusal of Penn Water to receive energy originating outside of Pennsylvania from Baltimore Company would not be merely a termination of the purchase and sale of that energy (i.e., a

> cancellation subject to Section 35.5 of the Rules) but would constitute a change in rates and service in several aspects which cannot be accomplished except in compliance with requirements prescribed under Section 205 of the Federal Power Act." (R., Vol. 16, p. 5186).

Here the FPC is referring to the power of Consolidated under the Baltimore contract which the Fourth Circuit specifically held to be an exclusive dealing provision on its face in violation of Section 3 of the Clayton Act (R., Vol. 18, p. 5331), since it required Penn Water to purchase energy from Consolidated by prohibiting Penn Water from purchasing such energy from others without the consent of Consolidated.

Again, in its order of October 27, 1949,* the FPC in prescribing allegedly proper rate schedules which called for the residual specified return formula contained in the Baltimore contract, stated:

> "The foregoing provisions supersede only the rates and charges heretofore made, demanded, collected or assessed against Baltimore Company by Penn Water and Transmission Company. All other provisions of the aforementioned contracts, in and of themselves lawful prescribing or defining the power, energy and transmission services to be furnished, or any classification, practice, regulation or rule affecting such services, which several provisions are incorporated herein by reference, shall be observed and be in force." (R., Vol. 17, p. 5283.)

FPC counsel now contend that by the phrase "provisions of the aforementioned contracts, in and of themselves law-

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* This was the order by which the FPC further reduced Penn Water's rates, without notice or opportunity for hearing and after exclusive jurisdiction had vested in the D. C. Circuit.

ful" in this paragraph the FPC intended to exclude from the continuing arrangements contractual provisions which might be subsequently held by the courts to be illegal. FPC counsel then state that Articles IV and V are the illegal provisions, and the only illegal provisions, and are excluded.

A conclusive answer is that, in the very same order (R., Vol. 17, pp. 5273-4), the FPC expressly provides that it is continuing the exclusive dealing provision contained in in Article IV and elsewhere in the Baltimore contract, which was held to be a *per se* violation of Section 3 of the Clayton Act.

There is a further answer. These rate schedules were prescribed by the FPC (October, 1949) before even the first District Court decision was rendered (February, 1950) and months before the Fourth Circuit decision declaring the Baltimore contract illegal (September, 1950). It seems disingenuous to contend that an administrative body like the FPC was directing continuance of an arrangement indefinite in scope and dependent on subsequent decisions which might be rendered by courts in other cases, either the Baltimore contract case or the Safe Harbor contract case or some other case, none of which had then been decided.

The only tenable construction is that the phrase "provisions of the aforementioned contracts, in and of themselves lawful" was an attempt by the FPC to support its previous orders by a bold assertion that all of the provisions of the Baltimore contract, except the rates, are lawful.

The D. C. majority nowhere states that the FPC orders do not require continuance of contractual arrangements illegal under the antitrust laws. In fact it refers to the scope of the FPC's action as governing "the operations and arrangements under scrutiny" and states (making

no exception as to any restrictive provisions) that Penn Water can only change its operations, contracts, arrangements, etc., in accordance with the Act and with the consent of the FPC (R., Vol. 18, pp. 5375-6). The D. C. majority then supports critical features in the FPC orders, just as the FPC did, on the assumed continued existence of the contracts, as appears below.*

(b) *The FPC Based Critical Features of Its Orders Upon the Assumed Existence and Continuance of the Illegal Contracts.*

(i) *The prescribed rate of return was based on the assumption that Penn Water would receive the "stabilized income" provided by the Baltimore contract until 1980.*

The FPC, prospectively (*i.e.*, from and after February 1, 1949, the specified operative date of the FPC orders if they become effective), reduced the amounts payable by Penn Water's utility customers so as to limit Penn Water's return to the abnormally low rate of 5¼% per annum of depreciated original cost (and then by a subsequent order to 4¾%), on the express basis that "The contract with Baltimore Company [Consolidated] assures Respondents [Penn Water and Transmission Company] of a stabilized income" (R., Vol. 16, p. 4953). It was only the Baltimore contract which gave Penn Water a "stabilized income" until 1980, irrespective of the periods of low flow

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* The dissenting opinion points out (R., Vol. 18, pp. 5404-5) that the critical features of the FPC's orders (discussed in paragraphs (b).(i), (ii) and (iii) below), namely, the rate of return, the jurisdictional findings, and the allocation of cost of service, are based respectively upon the financial security, operations, and entitlements and obligations provided for by the Baltimore contract and the assumed continuance thereof until 1980.

in the Susquehanna River when Penn Water might not be able to generate and sell a normal amount of electricity. Without such long term continuing contractual obligation there was obviously no basis for the low return allowed.

The D. C. majority states (R., Vol. 18, p. 5387) that the FPC had "substantial evidence before it to support its findings" with respect to rate of return, but the central aspect of the "evidence" referred to by the D. C. Circuit (R., Vol. 18, p. 5386) is that Penn Water is "insulated" from any "substantial risk" by the illegal Baltimore contract.

Government counsel concede (Memorandum for the FPC on certiorari in this case (Govt. Memo.) p. 16) that the sole basis of the low rate of return is that "under the arrangements with Consolidated which the FPC directed be continued * * * Penn Water was assured a stabilized income as in the past."

Since the Baltimore contract has been adjudicated illegal there is no obligation whatsoever of Consolidated to Penn Water to continue to take any power at all. For example, notwithstanding the FPC's direction to Penn Water to put this tariff into effect, Consolidated could stop taking power on the FPC prescribed basis at the end of a period of high flow when a large amount of power had been generated and delivered, leaving Penn Water to sell the relatively small amount of power coming from the river in low flow as best it could, and thus to receive much less than the allowed return. The fact is that the FPC order, in fixing the abnormally low rate of return, was clearly based not on operations as FPC counsel like to assert, but on the assumed contractual obligations of Consolidated to take power from Penn Water and pay it a specified return until 1980. From operations, without a contract, there could be no "stabilized income."

(ii) *The FPC held it had jurisdiction over intrastate services on the assumption that the illegal and non-existent contracts would continue.*

The FPC also held that, because the companies were tied together under the illegal Baltimore and Safe Harbor contracts (R., Vol. 16, pp. 4859-60) the services of Penn Water to the three Pennsylvania electric utilities, although rendered by Penn Water entirely within Pennsylvania, were interstate in character and subject to regulation by it.*

Government counsel again concede (Govt. Memo., p. 25) that the finding of the FPC that the Pennsylvania business was interstate was "based on the continuance of the arrangements as to power pooling and the residual-payment type of rate."

Here again the D. C. majority attempted to minimize the effect of the contracts upon the decision of the FPC. But the decision of the D. C. majority is based upon its own assertion (R., Vol. 18, p. 5384) that "Each sale [of Penn Water in Pennsylvania] is in effect a pool sale drawn from the integrated interstate system and hence interstate in nature." The existence of this so-called interstate pool depends upon the illegal contracts tying the companies together under the control of Consolidated and upon the illegal revenue pooling provisions thereof (R., Vol. 16, p. 4860).

The other basis of jurisdiction over Penn Water's sales in Pennsylvania asserted by the FPC (R., Vol. 16, pp. 4860-

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* Thus, this basis of jurisdiction of the FPC over Penn Water's Pennsylvania business was dependent upon the illegal Safe Harbor as well as the illegal Baltimore contract, the former of which is stated by the FPC itself in its brief in the Fourth Circuit to have been prescribed by it "including the terms which the District Court viewed as in restraint of trade." The asserted basis of FPC jurisdiction is therefore clearly founded on contractual provisions held illegal under the antitrust laws by the Fourth Circuit.

61) was the purchase by Penn Water of energy generated by Consolidated in Maryland for sale to Penn Water's Pennsylvania customers. Such purchases from Consolidated were compelled by the exclusive dealing provisions of the Baltimore contract (e.g. Art. IV, R., Vol. 15, p. 4612) which were held by the Fourth Circuit to be illegal *per se* under Section 3 of the Clayton Act (R., Vol. 18, p. 5351). Without such provisions Penn Water could not be compelled by Consolidated to purchase such supplemental energy outside of Pennsylvania. Obviously, this phase of the FPC orders rests on assumed continued existence of these contractual provisions held illegal by the Fourth Circuit.

(iii) *The allocation of the rate reduction between customers was based upon the alleged "entitlements" of Consolidated provided for under the illegal and non-existent contracts.*

The FPC allocated the reduction among Consolidated and the three Pennsylvania electric utility customers of Penn Water, giving 89% of the reduction to Consolidated (R., Vol. 16, pp. 4980-81), such allocation being determined on the basis of alleged power "entitlements" (R., Vol. 16, pp. 4978-79) of Consolidated under the Baltimore and Safe Harbor contracts and not on the basis of the power actually delivered to Consolidated which was far less. Without the illegal contracts such "entitlements" would be non-existent.* As the dissenting opinion points out (R., Vol. 18, p. 5404) "* * * as a result of that interpretation [of the Baltimore contract] the Commission concluded that

* Obviously, the FPC could not properly order such artificial entitlements contrary to the service which was actually being rendered; and the statement of Consolidated in its brief in opposition to the granting of certiorari (p. 25) that in the absence of the void contracts the entitlements are those provided for by a tariff is simply unfounded.

very substantial sales by Penn Water to others had really been for the account of Consolidated, and allocated the reduction accordingly.

An allocation of cost on a delivered power basis (that is, on actual operations) would have given the Pennsylvania utilities a much greater share of the rate reduction. In this instance again Government counsel concede (Govt. Memo. p. 25) that the finding of the FPC regarding allocation of the rate reduction was "based on the continuance of the arrangements as to power pooling and the residual-payment type of rate."

The allocation to Consolidated by the FPC of the major portion of the reduction in Penn Water's rates also necessitated an underlying determination by the FPC that, because of the existence and continuance of the Safe Harbor contract, the alleged power entitlements of that contract in favor of Consolidated negative any obligation of Safe Harbor to deliver capacity and energy under contracts with the Pennsylvania customers which Safe Harbor had executed jointly with Penn Water with the approval of Consolidated.

Penn Water had made contracts with the three Pennsylvania utility customers and with the Pennsylvania Railroad for delivery of power, all with the approval of Consolidated. Safe Harbor had executed such contracts with PP&L, PE and the Pennsylvania Railroad jointly with Penn Water for such supply of power. The supply of power under these contracts requires the use of Safe Harbor's output as well as that of Penn Water. Nevertheless, based on the assumed existence of Consolidated's "entitlements" under the Safe Harbor contract, the FPC held that Safe Harbor was only a nominal party to the other contracts and that the use of Safe Harbor's power under such other contracts was a diversion of "entitlements" belonging to Consolidated.

Without the Safe Harbor contract there is no basis for this determination by the FPC.*

The D. C. majority (R., Vol. 18, p. 5390) plainly recognized that its affirmance of the allocation of the reduction provided for by the rate orders depended upon its decision that the FPC may exempt the Baltimore and Safe Harbor

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* The FPC made its determination of excess revenues on its interpretation of the "entitlements" of Consolidated under the Baltimore and Safe Harbor contracts as follows:

As to the Baltimore contract, it did this by considering all the revenues actually received by Penn Water from the Pennsylvania customers for net interchange energy as revenues received by Penn Water from Consolidated. Thus, for example, although the actual operations, as recognized by the FPC opinions, show revenues received by Penn Water from Consolidated of $1,104,951.85 in the test year 1946, the FPC determined that Penn Water received total revenues from Consolidated in that year of $2,386,311 (R., Vol. 16, pp. 4958, 4980). It was only after such improper adjustments that the FPC could order a reduction in revenues from Consolidated of over $1,700,000. The sole basis of this artificial FPC determination of revenues was its interpretation of the Baltimore contract as entitling Consolidated to the residue of Penn Water's energy output after Penn Water's contractual obligation to furnish only *firm* energy (as distinguished from *interchange* energy) to the Pennsylvania customers had been met. Contracts with all the Pennsylvania customers also contained provisions for the furnishing of interchange energy by Penn Water. Absent the Baltimore contract, the FPC's determination of the excess revenues and allocation of the rate reduction is wholly unsupportable.

As to the Safe Harbor contract, the FPC based its allocation of Penn Water's reduction upon the alleged entitlement of Consolidated under the Safe Harbor contract to two-thirds of the output of the Safe Harbor plant. In actual operations, however, only approximately one-third of Safe Harbor's output went to Consolidated. By reason of the contract entitlement, the FPC regarded Safe Harbor's capacity and energy supplied in Pennsylvania as being diverted from Consolidated by Penn Water and determined that Consolidated should be credited by Penn Water for such alleged diversion on the basis of Consolidated's relatively higher cost for steam generation of an equal amount of power. This resulted in an improper determination of the cost of Penn Water's services to each of its customers and an over-statement of the alleged excess revenues received by Penn Water from Consolidated. Thus, there is no question but that the allocation of the reduction was dependent upon the Safe Harbor contract. Counsel for Consolidated itself conceded this in argument in the District Court in the Safe Harbor contract case (Ct. Tr. p. 74, April 20, 1951).

contracts from the antitrust laws and accordingly may base its allocation upon the artificial entitlements created thereby rather than upon the actual deliveries of power.

2. The FPC Orders Clearly Required Continuance of or Were Based on Illegal Contractual Arrangements Regardless of Articles IV and V of the Baltimore Contract.

FPC counsel now apparently contend that the FPC's rate orders did not require continuance of Articles IV and V of the Baltimore contract, which expressly conferred upon Consolidated the power to control all contracts by Penn Water for purchase and sale of power and to control Penn Water's expansion or disposition of facilities, and that therefore the FPC prescribed only "lawful" parts, and no unlawful parts, of the contract.*

We have already quoted above passages from the FPC's orders reciting FPC requirements that existing arrangements continue and stating that the FPC was "merely changing the rates". We there showed also how the FPC specifically singled out Articles IV and V for lavish praise and expressly ordered continuance of the exclusive dealing provisions of Article IV, and how the FPC's brief in the Court below stated that the rate schedule which it prescribed for Penn Water "permits Penn Water's facilities to be operated as though they were under common ownership with Baltimore Company's facilities" (Tr. 5574).

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* The Fourth Circuit, in declaring the entire Baltimore contract illegal, held (R., Vol. 18, pp. 5358-9) that a part thereof, the prior 1927 Agreement was not reactivated as Consolidated and the Maryland Commission contended. The Court said that the controls over Penn Water given to Consolidated by the Baltimore contract were "closely associated" with the payment provision, pointing out that it was conceded that without the control provisions the 1931 Baltimore contract would have been impracticable and would not have been made. Similarly, in the case of the Safe Harbor contract, the control provisions were characterized by the District Court (Bryan, J., sitting by special designation), whose decision was affirmed by the Fourth Circuit, as the "warp and weft" of the contract (R., Vol. 18, p. 5366).

However, accepting at face value for the sake of argument the FPC's contention that it did not prescribe Articles IV and V but the rest of the contract only, the fact remains that the FPC orders clearly required continuance of arrangements which are illegal *per se* because, as more fully shown below, (a) the antitrust law illegalities are not merely contained in Articles IV and V of the contract but permeate the entire arrangement, (b) the FPC admits having required the contractual method of payment, which is revenue pooling illegal *per se*, and (c) the Penn Water rate orders rest not only on the Baltimore contract but also on the companion Safe Harbor contract (which gave Consolidated controls substantially similar to those in the Baltimore contract) and the FPC admits (Govt. Memo., p. 24, fn. 29) having ordered continuance of the entire Safe Harbor contract, including the provisions thereof adjudged illegal *per se* under the antitrust laws.

(a) *The antitrust law illegalities are not merely contained in Articles IV and V of the contract but permeate the entire arrangement.*

The entire Baltimore contract (R., Vol. 18, p. 5397) has been adjudged illegal and void. Mere assumed excision of Articles IV and V from the Baltimore contract, as urged by FPC counsel, would by no means cure the FPC's difficulty*.

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* The Respondents nowhere explain how there is any business reality under their present theory of the situation created by the FPC orders and the Fourth Circuit decisions in the Baltimore contract case. The Penn Water contract, absent Articles IV and V, is not a rational business arrangement (R., Vol. 18, p. 5359). Consolidated itself so asserted in affidavits and briefs submitted to the Fourth Circuit and in its brief to this Court in opposition to certiorari (p. 18). Counsel for the government have conceded (Govt. Memo., p. 23) that the entire agreement was stricken down because its illegal provisions were inseparable parts of a *contract* that could not operate as a *contract* between the parties without these provisions. How could the arrangement operate any better as a *rate schedule* between the parties in the absence of these provisions?

The retreat of FPC counsel to a suggestion that the FPC approved the balance of the arrangement and that such balance was "lawful" will not stand analysis. The basic Baltimore contract of June 1, 1931 contains ten Articles. It is revealing to examine these Articles one by one and then ask just what "lawful" parts FPC counsel has in mind:

Article I provides that the Agreement shall continue in force until April 22, 1980. Under what provision of the Act can the FPC possibly claim the power to issue an order requiring that rates or any other arrangements imposed on a utility "continue in force until April 22, 1980"? What possible justification is there in ordering Penn Water to perform until 1980 without ordering that Consolidated likewise perform?

Article II provides that Consolidated shall be entitled to all of Penn Water's own power and that received by Penn Water under the Safe Harbor contract not disposed of by Penn Water to others under contracts made *with Consolidated's approval.* This Article obviously embodies the admitted illegalities of Article IV of the Baltimore contract and all the adjudicated illegalities of the Safe Harbor contract which the FPC admits it prescribed *in toto.*

Article III provides for the specified return method of payment, which is illegal *per se* as shown in the next subdivision of this brief. Aside from this aspect, the provision in substance reincorporates the illegal features of Article IV of the Baltimore contract in that it effectively prevents Penn Water from selling power to others than Consolidated by removing all incentive on the part of Penn Water to do so because any revenues received from such sales would be credited to Consolidated.

Article IV is the Article requiring Penn Water to obtain Consolidated's approval before entering into any agreement

for purchase, sale or interchange of power, and is the Article under which Consolidated has sought to require termination or revision of Penn Water's contracts with the Pennsylvania customers, claiming the rates charged therein to be too low. It is also the Article which required exclusive dealing as to purchases of power. The FPC has required exclusive dealing by Penn Water with Consolidated to be continued in the FPC orders of February 28 and October 27, 1949.

Article V is the Article requiring Penn Water to obtain Consolidated's approval for plant expansion, or disposition of facilities, and is the Article under which Consolidated forbade Penn Water to build its proposed new steam generating plant using river coal free except for the cost of reclaiming.

Article VI is merely an incidental provision requiring Penn Water to keep its equipment in good condition as far as practicable.

Article VII is an Act-of-God provision to the effect that if any catastrophe should prevent Penn Water from supplying and Consolidated from receiving any part of the power contracted for, their respective obligations to supply and receive shall be suspended for the duration of the catastrophe, with reasonable abatement of payments in favor of Consolidated but without any provision for relieving Penn Water from its obligation under Article III to credit Consolidated with all revenues from other customers or for relieving Penn Water of any of its other obligations under the Baltimore contract.

Article VIII in effect subjects all managerial functions affecting Penn Water (including operating, engineering, accounting and contract matters) to the control of an operating committee with a veto power in Consolidated's commit-

tee representative or President as to all such matters. Under what provision of the Act can the FPC possibly claim authority to order that one company shall have such power and control over another independent company? Obviously this Article embodies essentially the same kind of control provisions as Articles IV and V and in fact was so treated in the Fourth Circuit decisions (R., Vol. 18, pp. 5328-9; Pamphlet Op., p. 7; see also R., Vol. 18, pp. 5366).

Article IX provides that in order to determine the payments to be made by Consolidated under the provisions of Article III (which embodies the illegal specified return provision) Consolidated shall have complete access to and right of audit of Penn Water's accounts. Under what provision of the Act can the FPC possibly claim authority to issue an order giving one company such a right as to another? This is one of the Articles used by Consolidated to facilitate its oppression of Penn Water by withholding of amounts aggregating over $900,000 as of December 1948.

Article X provides that in case of "any dispute" arising under the contract between Penn Water and Consolidated the dispute shall be referred to a board of arbitration, although such arbitration agreements are not even enforceable under Maryland law, the only jurisdiction in which Consolidated can be reached. Under what provision of the Act can the FPC possibly claim a right to include such a provision in a rate order?

The foregoing analysis demonstrates, we submit, that one need do no more than read the ten articles of the 1931 contract to see that the *per se* illegalities pervade every Article (with the possible sole exception of the incidental provision of Article VI that Penn Water's equipment shall be kept in as good condition as practicable) and that the

FPC's argument that its orders prescribed only the "lawful" parts of the contract cannot be supported.

(b) *The FPC admits that it required continuance of the specified return method of payment, which is illegal per se.*

The FPC orders concededly did direct continuance of the specified return method of payment contained in the Baltimore contract. These provisions are in violation of the antitrust laws because they have all the vices of and in effect are provisions for the pooling and division of earnings.* Since they provide that Penn Water shall receive a specified return regardless of the services rendered, and credit Consolidated with revenue from other customers, they stifle the incentive of Penn Water to compete, either with Consolidated or with others, and rob it of any initiative to obtain more customers and effect operating economies.

As pointed out in the preceding subsection of this brief, the payment provision has features of Article IV of the Baltimore contract and a like effect. Because of this Penn Water has no motive to sell power to others than Consolidated since all revenues from such sales will be credited to Consolidated. Penn Water is thus prevented from selling to others as effectively as under Article IV.

In *U. S.* v. *Paramount,* 334 U. S. 131, 149 (1948), this Court held such arrangements for the pooling and division

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* Respondents claimed in their briefs relating to the petition for certiorari herein that the Fourth Circuit did not hold the revenue pooling arrangement illegal. Actually, the revenue pooling feature is basic to the whole contractual arrangement, and the Fourth Circuit held the arrangement illegal in its entirety. In its first opinion, in the Baltimore contract case, the Fourth Circuit, having found some illegal features of the contract, expressly refrained from going on and passing on other features. But in the Safe Harbor contract case, the Fourth Circuit held that the Safe Harbor contract was illegal for the same reasons as the Baltimore contract and expressly enumerated (Pamphlet Op., pp. 6-7) the revenue pooling Article among the restrictive provisions.

of earnings to be in violation of the antitrust laws stating "Clearer restraints of trade are difficult to imagine."*

The stifling of incentive is even more pronounced in the Penn Water arrangement than in the type of arrangement involved in most of the cases, under which two companies share in arbitrary proportions, unrelated to services, the total earnings of both. In the latter situation, although incentive is diminished it is not completely eliminated, because if either company can increase the total joint earnings by getting new business or increasing its efficiency, it will at least share in the increased earnings to the extent of its arbitrary proportion. In the Penn Water arrangement, however, Penn Water's incentive is completely removed because 100% of the benefit of any increase in Penn Water's business or efficiency goes to Consolidated, and none of the burden of inefficiency or increased expense falls on Penn Water. In fact the arrangement may result in a credit rather than a charge to Consolidated in any year as pointed out in the Statement.

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* Such arrangements were also held illegal in *U. S.* v. *Reading Co.*, 253 U. S. 26, 48 (1920); *Northern Securities Co.* v. *U. S.*, 193 U. S. 197, 327-328 (1904); *Norfolk Southern Bus Corp.* v. *Va. Dare Transp. Co.*, 159 F. 2d 306, 309-10 (4th Cir. 1947); *Lee Line Steamers, Inc.* v. *Memphis, Helena & Rosedale Packet Co.*, 277 Fed. 5, 8 (6th Cir. 1922); *Chicago, M. & St. P. R. Co.* v. *Wabash, St. L. & P. R. Co.*, 61 Fed. 993, 997 (8th Cir. 1894).

In this last case the court said at p. 997 "The Contract removed every incentive to the companies to afford the public proper facilities, and to carry at reasonable rates; for, under its provisions, a company is entitled to its full percentage of gross earnings, even though it does not carry a pound of freight."

The fact that the rates and services of the parties to a revenue pooling arrangement are regulated does not eliminate its illegality under the antitrust laws any more than it eliminates the illegality of other restraints of trade. In both the *Reading* and *Norfolk Southern Bus* cases the parties to the revenue pooling arrangement condemned under the antitrust laws were utilities whose rates were regulated.

The illegality of the arrangement is not lessened by the fact that incentive was removed only as to the suppressed company, Penn Water, and not as to the suppressor, Consolidated. The elimination of competition on the part of one of the two parties is sufficient to eliminate competition between them completely.*

Even where, by special statutory provision, the unit rates are permitted to be combined with a maximum rate-of-return factor, care is taken to avoid removal of the incentive for increased efficiency and economy by permitting the utility to keep a share of any earnings in excess of the specified rate of return.**

As in the case of other types of agreements in restraint of trade, where Congress has desired to permit agreements for the pooling and division of earnings to be exempted by a regulatory body from the antitrust laws, it has specifically so provided, under carefully defined conditions and safe-

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* The FPC has conceded that this type of payment provision removes incentive to compete. In its brief submitted to the Fourth Circuit in October, 1951 in connection with its petition for intervention in the suit regarding the invalidity of the Safe Harbor contract, the FPC stated (p. 14) that the payment provision (which is in effect the same as that in the Baltimore contract) prevents "setting up an economic interest upon his [Safe Harbor's] part," and argued (pp. 33-34) that the restrictions on Safe Harbor were valid because, due to the payment plan, "its interests are not adversely affected" by the manner in which it is operated.

** For example, Potomac Electric Power Company, under such a special statute, agreed with the Public Utilities Commission of the District of Columbia that if its unit rates in any year should yield more than a 7½% return on the value of its property, it would reduce its unit rates for the following year by an amount equal to one-half of such excess, retaining the other half. See *Potomac Electric Power Co.* v. *Public Utilities Commission*, 158 F. 2d 521 (1946). Under this type of arrangement, the utility retains its incentive to get new business and effect economies, since it can keep all the benefits thereof in the current year and a share of such benefits even in the following year.

guards.* There is no such provision in the Federal Power Act. These provisions of other acts clearly indicate the distinction made by Congress between ordinary provisions for the regulation of rates and special provisions relating to revenue pooling.

Regulation of rates (i.e., the amount to be charged) upon the basis of a return found reasonable, does not, as do the revenue pooling arrangements of the Baltimore contract, insure the receipt of such return irrespective of whether or not the utility renders adequate service or loses business through a policy of non-competition.** The specified return provisions of the Baltimore contract provide for payment even if no power at all is delivered.

The contention that a Federal regulatory agency may, pursuant to its authority to regulate rates, insure that a specified return will be received (or, in other words, regulate on the basis of a cost-plus subsidy plan) has been rejected by the Civil Aeronautics Board under the Civil Aeronautics Act. *Pennsylvania-Central Airlines Corp., et al., Motions*, 8 C. A. B. 685, 696 (1947). That Act, moreover, unlike the Federal Power Act, specifically authorizes the

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* See, for example, Section 5(1) and (11), Interstate Commerce Act (49 U. S. C. §5(1) and (11)); Section 15, Shipping Act (46 U. S. C. §814); Sections 412(a) and 414, Civil Aeronautics Act (49 U. S. C. §§492(a) and 494). The Interstate Commerce Commission which, as pointed out above, has the express authority to exempt pooling arrangements from the antitrust laws, has stated in a recent decision:

> "The object of pooling arrangements is ordinarily the restraint of competition, the statute directing that we find, in approving the arrangement, that such restraint shall not be undue." *Application of Pullman Co. under Sec. 5(1), Interstate Commerce Act*, 259 I. C. C. 41, 43-5 (1944).

** "A rate established as reasonable, whether by the company or the commission, is not guaranteed by the commission or the public. Whether it will actually yield more or less than a fair return during its continuance is a risk of the business." *Georgia Ry.* v. *R. R. Comm.*, 278 Fed. 242, 247 (N. D. Ga. 1922), aff'd. 262 U. S. 625 (1923).

Board to exempt arrangements for the pooling and division of earnings from the antitrust laws (49 U. S. C. §§492, 494). *The Pennsylvania-Central* decision was affirmed by this Court in *T. W. A.* v. *C. A. B.*, 336 U. S. 601 (1949) which held that the normal method of rate regulation by prescribing the *amount* to be charged "forces carriers within a given class to compete in securing revenue and in reducing or controlling costs" (pp. 606-7).*

Thus, the courts, in striking down in the above cited cases revenue pooling arrangements analogous to that provided in the Baltimore contract (except where such arrangements have been specifically authorized with appropriate safeguards by Congress), have in no way interfered with the normal rate-making process. The FPC departed from the normal and customary rate making process when it prescribed the specified return method of payment.

(c) *The FPC admits that it required continuance of the entire Safe Harbor contract, which is also a foundation of the Penn Water rate orders.*

The FPC itself characterized the Safe Harbor contract (along with the Baltimore contract) as one of the "foundation contracts" underlying the Penn Water rate orders. The characterization was entirely justified because the Penn Water rate orders in numerous respects (most notably in connection with the FPC's asserted jurisdiction over Penn

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* See also *United-Western, Acquisition Air Carrier Property*, 8 CAB 298, 321 (1947), in which the CAB stated: "the established policy of this Board * * * recognizes that differences in the return may accrue to different carriers operating under the same rates and * * * permits management to retain the profits of its economies as an incentive toward the accomplishment of decreased costs and increased revenues. The incentive which the Board's rate policy holds out to air carriers to profit from economies which produce a better-than-average return upon investment itself invalidates the assumption that the rate-making process is an instrument of precision which produces a mathematically precise rate of return." To the same effect see *FPC* v. *Natural Gas Pipe Line Co.*, 315 U. S. 575, 590 (1942).

Water's Pennsylvania business [See Section C 1(b)(ii) of this Point], determinations of cost of services to and determinations of revenues received from the various customers and the cost allocation under which the major share of the rate reduction is given to Consolidated [See Section C 1(b)(iii) of this Point], were predicated upon the fictitious "entitlements" (R., Vol. 16, pp. 4978-9) provided for in the Safe Harbor contract rather than upon actual operations and power actually supplied.

The Safe Harbor contract has been adjudged illegal *per se* and void in its entirety on the same grounds as the Baltimore contract.

The FPC conceded in its October, 1951 brief in the Fourth Circuit case (referred to in Govt. Memo., p. 34) that "the Commission's order prescribed the June, 1931 [Safe Harbor] contract, as supplemented, including the terms which the District Court viewed as in restraint of trade."

II. The FPC has no authority to direct continuance of or base its orders on contractual arrangements of a state utility corporation adjudged illegal under the laws of its state of incorporation.

The D. C. majority ignored completely that the antitrust laws were not the only basis of the *per se* illegalities of the Baltimore and Safe Harbor contracts. As adjudged by the Fourth Circuit, the contracts were illegal and void on their face for the separate and independent reason that they violated the fundamental laws of the State of incorporation of Penn Water and Safe Harbor, namely, (a) the statutes of Pennsylvania governing Pennsylvania corporations,* (b)

* "The business of every corporation created hereunder, or accepting the same, shall be managed and conducted by a president, a board of directors * * *". (Section 5, Corporation Act of 1874). The substance of this statute was incorporated in the Penn Water and Safe Harbor by-laws.

the doctrine of *ultra vires* as laid down by the courts in Pennsylvania and elsewhere,* (c) the Pennsylvania statutes governing Pennsylvania utility corporations,** and (d) common law and public policy.***

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* Decisions holding contracts which deprive corporate directors of management powers to be *ultra vires* and void are: *Dubbs* v. *Kramer*, 302 Pa. 455, 153 Atl. 733, 734 (1931); *Severance* v. *Heyl & Patterson, Inc.*, 123 Pa. Super. 553, 187 Atl. 53, 58 (1936); *Sherman & Ellis* v. *Indiana Mutual Casualty Co.*, 41 F. 2d 588 (7th Cir. 1930), cert. den. 282 U. S. 893; *Rosenthal* v. *Light*, 185 App. Div. 702, 173 N. Y. S. 743 (1919); *Smith* v. *California Thorn Cordage, Inc.*, 129 Cal. App. 93, 18 P. 2d 393 (1933); *Long Park, Inc.* v. *Trenton-New Brunswick Theatres Co.*, 297 N. Y. 174, 77 N. E. 2d 633 (1948).

** "It shall be the duty of every public service company—

"(a) To furnish and maintain such service, including facilities, as shall in all respects be just, reasonably adequate, and practically sufficient for the accommodation and safety of its patrons, employes, and the public, and in conformity with such reasonable regulations or orders, as may be made by the commission." (Article II, Section 1, Pennsylvania Public Service Company Law of 1913.)

"Upon like approval of the commission first had and obtained, as aforesaid, and upon compliance with existing laws, *and not otherwise*, it shall be lawful—* * *

"(c) For any public service company to sell, assign, transfer, lease, consolidate, or merge its property, powers, franchises, or privileges, or any of them, to or with any other corporation or person." (Article III, Section 3, Pennsylvania Public Service Company Law of 1913.)

Such provisions were reenacted with the same purport in Pennsylvania Public Utility Law, May 28, 1937.

For full text of Pennsylvania statutes see Appendix to Brief of Pennsylvania Commission in Case No. 429.

*** *Gibbs* v. *Consolidated Gas Company of Baltimore*, 130 U. S. 396, 410-411 (1889); *Chicago, M. & St. P. R. Co.* v. *Wabash, St. L. & P. R. Co.*, 61 Fed. 993, 997 (8th Cir. 1894); *Central Transportation Co.* v. *Pullman's Car Co.*, 139 U. S. 24, 48, 51 (1891); *The New York and Maryland Line R. Co.* v. *Winans*, 17 How. 30 (U. S. 1854); *U. S. Tel. Co.* v. *Central Union Tel. Co.*, 202 Fed. 66, 72-73 (6th Cir. 1913), cert. den. 229 U. S. 620; *Union Trust & Savings Bank* v. *Kinloch Long-Distance Tel. Co.*, 258 Ill. 202, 101 N. E. 535, 537-38 (1913); *State* v. *The Hartford and New Haven R. Co.*, 29 Conn. 538 (1861); *Chicago Gas-Light & Coke Co.* v. *People's Gas-Light & Coke Co.*, 121 Ill. 530, 13 N. E. 169, 172-173 (1887); *Coombs* v. *Burk*, 40 Cal. App. 8, 180 Pac. 59 (1919). See also 7 Fletcher, Cyc. of Corporations §3592 (Perm. Ed. 1931).

The same contractual provisions for restrictive controls in Consolidated and revenue pooling which made the contracts illegal *per se* under the antitrust laws, as discussed in Point I above, also made them illegal under Pennsylvania laws. The contracts violated these state laws by depriving Penn Water and Safe Harbor of their initiative as to rates and services, and by taking managerial control away from their boards of directors and giving it to another corporation, Consolidated, a Maryland corporation and a competitor.

Thus, the illegalities were not mere violations of regulations of Pennsylvania or its Commission. They were not in the field of regulation at all but represented violation of the fundamental law of the sovereign which created the corporations.

There is nothing in the Act which even purports to give the FPC authority to order or condone contractual arrangements violative of such state laws. On the contrary, the wording of the Act and its legislative history indicate that even in the field of regulation Congress did not intend to take from the states any functions theretofore exercised, but only to supplement the authority of states where necessary to regulate matters in the area of interstate commerce which were beyond the reach of the states.

Where Congress has intended to permit a Federal regulatory body to modify the powers of a state corporation in some respects it has specifically so provided; Interstate Commerce Act, Section 5(11) and 20b(5) (49 U. S. C. §§5(11), 20b(5); Section 213 of the Motor Carrier Act of 1935 (49 Stat. 557).* No such provisions are to be found

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* For example, Section 5(11) of the Interstate Commerce Act provides in part: "* * * and any carriers or other corporations, and their officers and employees and any other persons, participating in a transaction approved or authorized under the provisions of this section shall be and they are hereby relieved from the opera-

in the Federal Power Act. The Act does not even contain a general provision exempting transactions approved by the FPC from other laws such as is contained in the Federal Communications Act with respect to mergers of telegraph companies (47 U. S. C. §222(c)(1)).* See also Section 414 of the Civil Aeronautics Act, 49 U. S. C. §494.

That, by enactment of the Act and the granting of licenses thereunder, Congress did not intend to alter the powers of state corporations or give them powers which they do not have under their organic state laws, is shown by Section 9(b) which requires as a condition of obtaining a license that the applicant corporation must show that it has complied with the laws of the state in which the project is located and has the right under state law to engage in the business of developing the project.

Respondents can point to no provision in the Act indicating any intention to deprive a corporation of its initiative as to reasonable rates and adequate services, which is "one of the most important duties of a public utility, inherent in its franchise to serve the public", as the Fourth Circuit held in the Baltimore contract case (R., Vol. 18, p.

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tion of the antitrust laws and of all other restraints, limitations, and prohibitions of law, Federal, State, or municipal, insofar as may be necessary to enable them to carry into effect the transaction so approved or provided for in accordance with the terms and conditions, if any, imposed by the Commission; and to hold, maintain, and operate any properties and exercise any control or franchises acquired through such transaction. Nothing in this section shall be construed to create or provide for the creation, directly or indirectly, of a Federal corporation, but any power granted by this section to any carrier or other corporation shall be deemed to be in addition to and in modification of its powers under its corporate charter or under the laws of any State."

* The Section provides in part: "* * * the Commission shall enter an order approving and authorizing such consolidation or merger, and thereupon any law or laws making consolidations and mergers unlawful shall not apply to the proposed consolidation or merger."

5347). Even the D. C. majority concedes that freedom of exercise by public utility companies of "their private initiative in promulgating rates, services and changes therein * * * is an important condition precedent to proper operation of the rate-making process" (R., Vol. 18, p. 5374). The respondents cannot point to any provision of the Act giving the FPC authority to permit a corporation to perform acts which are *ultra vires* or in contravention of the corporate statutes or common law, and public policy of the state of incorporation.

There is no general inconsistency between these Pennsylvania laws and the Act. Obviously, the FPC, to whatever extent it has jurisdiction, can regulate the rates to be charged and the services to be rendered by Penn Water without in effect ordering Penn Water to violate the organic laws of its state of creation by permitting Consolidated to veto its managerial decisions, suppress its competitive activities and stifle its incentive for growth, through provisions for revenue pooling, operating committee vetoes, and other restrictive controls. The FPC need only permit Penn Water to have an arrangement with Consolidated of the usual unit rate type, without managerial controls, as is elsewhere found in the industry. This Court has held that state law is superseded by a Federal law "only where the repugnance or conflict is so 'direct and positive' that the two acts cannot 'be reconciled or consistently stand together'." *Kelly* v. *Washington*, 302 U. S. 1, 10 (1937); *Hines* v. *Davidowitz*, 312 U. S. 52 (1941).*

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* Even where a Federal agency charged with the regulating of certain phases of interstate commerce has express authority to override state law, such authority may be exercised only where necessary to perform the functions assigned to it by Congress. *Florida* v. *U. S.*, 282 U. S. 194, 211-12 (1931); *Yonkers* v. *U. S.*, 320 U. S. 685, 690 (1944); *American Express Co.* v. *Caldwell*, 244 U. S. 617, 625 (1917); *North Carolina* v. *U. S.*, 325 U. S. 507, 511 (1945); *State of Texas* v. *U. S.*, 84 F. Supp. 791, 793 (W. D. Okla., 1949).

This Court has frequently held that an intention by Congress to preclude a state from exercising its traditional powers must be clear and manifest. See *International Union, U. A. W.* v. *Wisconsin Employment Relations Board*, 336 U. S. 245, 253 (1949); *Davies Whse. Co.* v. *Bowles*, 321 U. S. 144, 152 (1944); *California* v. *Zook*, 336 U. S. 725, 733 (1949), and cases cited.

But Congressional intent has been expressed to the contrary here. Even in the field of regulation as distinguished from fundamental state law, Part II of the Act, under which the FPC claims authority to continue arrangements illegal under state laws, provides in Section 201(a):

> "* * * such Federal regulation [under Parts II and III], however, to extend only to those matters which are not subject to regulation by the States." (Matter in brackets added.)

Furthermore, as more fully discussed in Point III below, the legislative history of Part II indicates that Congress intended to give the FPC only such powers as were beyond the reach of the states under the decision of this Court in *Public Utilities Commission* v. *Attleboro Steam & Electric Co.*, 273 U. S. 84 (1927).*

Even under specific provisions for overriding other laws, such as are contained in the Interstate Commerce Act and Federal Communications Act, there would be no authority to require a state corporation to continue an arrangement such as the Baltimore contract which destroys the inherent nature of the corporation in violation of the laws of the state of incorporation. An attempt to grant

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* Hearings on H. R. 5423 before the House of Representatives Committee on Interstate and Foreign Commerce, 74th Cong., 1st Sess. Pt. 1, p. 384, quoted in *Connecticut Light & Power Co.* v. *FPC*, 324 U. S. 515, 525 (1945) and *Jersey Central Power & Light Co.* v. *FPC*, 129 F. 2d 183, 193 (3d Cir. 1942).

such authority would be an unconstitutional invasion of the rights reserved to the states under the Tenth Amendment.

In *Chicago Title & Trust Co.* v. *41-36 Wilcox Building Corp.*, 302 U. S. 120 (1937) this Court held that even Congress pursuant to its bankruptcy power could not breathe life into a corporation which had been dissolved under the law of its state of incorporation. In holding that a corporation which had been dissolved under the state law could not file a voluntary petition in bankruptcy, this Court stated (pp. 127-128):

> "How long and upon what terms a state-created corporation may continue to exist is a matter exclusively of state power. *Horn Silver Mining Co.* v. *New York*, 143 U. S. 305, 312-313; *Ashley* v. *Ryan*, 153 U. S. 436, 441, 443; *New Jersey* v. *Anderson*, 203 U. S. 483, 493. The circumstances under which the power shall be exercised and the extent to which it shall be carried are matters of state policy, to be decided by the state legislature. There is nothing in the federal Constitution which operates to restrain a state from terminating absolutely and unconditionally the existence of a state-created corporation, if that be authorized by the statute under which the corporation has been organized. And it hardly will be claimed that the federal government may breathe life into a corporate entity thus put to death by the state in the lawful exercise of its sovereign authority."

In *Hopkins Federal Savings & Loan Ass'n.* v. *Cleary*, 296 U. S. 315 (1935), this Court held that an attempt by Congress to convert a state building and loan association into a Federal corporation contrary to the law of the state of incorporation was unconstitutional under the Tenth Amendment.

It would have violated Section 1 of Article I of the Constitution and the Fifth Amendment had Congress attempted

to give the FPC authority to take from Penn Water its corporate powers and vest those powers in a foreign competitor corporation. In *Carter* v. *Carter Coal Co.*, 298 U. S. 238 (1936) this Court held that a delegation under the Bituminous Coal Conservation Act of 1935 to less than all the producers of coal and employers of mine workers of the power to fix the wages to be paid by all the producers and employers was unconstitutional and said:

> "The power conferred upon the majority is, in effect, the power to regulate the affairs of an unwilling minority. This is legislative delegation in its most obnoxious form; for it is not even delegation to an official or an official body, presumptively disinterested, but to private persons whose interests may be and often are adverse to the interests of others in the same business. * * * The difference between producing coal and regulating its production is, of course, fundamental. The former is a private activity; the latter is necessarily a governmental function, since, *in the very nature of things, one person may not be entrusted with the power to regulate the business of another, and especially of a competitor.* And a statute which attempts to confer such power undertakes an intolerable and unconstitutional interference with personal liberty and private property. The delegation is so clearly arbitrary, and so clearly a denial of rights safeguarded by the due process clause of the Fifth Amendment, that it is unnecessary to do more than refer to decisions of this court which foreclose the questions. *Schechter Corp.* v. *United States,* 295 U. S. at p. 537; *Eubank* v. *Richmond,* 226 U. S. 137, 143; *Seattle Trust Co.* v. *Roberge,* 278 U. S. 116, 121-122" (pp. 311-312).

In any event there is no indication anywhere in the Federal Power Act that it was intended to permit the FPC to require electric utilities to perform contractual arrange-

ments depriving them of their independence and initiative with respect to rates and services or to perform *ultra vires* acts in violation of the laws of the sovereign creating them.

III. A licensee subject to regulation under Part I of the Act is not also subject to the different regulatory provisions of Part II.

The Federal Water Power Act of 1920 (now Part I of the Federal Power Act) was designed primarily to encourage the development of the hydroelectric resources of the United States. By that act a system of regulation, primarily by the states concerned, was established for persons licensed to develop hydroelectric power on navigable streams. The Water Power Act provided for various special rights to be enjoyed and obligations to be performed by licensees, and protected the licensee against any unilateral change in his license contract by providing (Sections 6 and 28) that no license could be altered without the licensee's consent and that no amendment of that Act should affect the rights of any licensee thereunder.

Parts II and III of the Federal Power Act were enacted in 1935 (at which time the 1920 Act with certain changes was reenacted as Part I). Part II was enacted primarily for the purpose of subjecting to Federal regulation public utilities other than licensees which had been held by this Court* not to be subject to regulation by the states as regards wholesale rates in interstate commerce and which were therefore free from any regulation, state or Federal, as to such rates.

The structure and language of the Act and the contractual nature of licenses issued under Part I, as well as its

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Public Utilities Commission v. *Attleboro Steam and Electric Co.*, 273 U. S. 84 (1927).

legislative history, show that Congress did not intend to subject to regulation under Part II licensees which were already subject to regulation under the different regulatory system of Part I. Furthermore, in view of the provisions of Section 201(a) of the Act, namely, "such Federal regulation [Parts II and III], however to extend only to those matters which are not subject to regulation by the States," it is clear that it was not intended that Part II should interfere in any respect with existing regulatory powers of the states provided for in Sections 19 and 20 of Part I.

A. The Language of the Act.

The D. C. majority held that by enactment of Part II of the Act Congress intended to repeal provisions of Part I of the Act, although Congress simultaneously reenacted Part I* (R., Vol. 18, p. 5381).

That this is not a reasonable construction of the Act, and that the only reasonable construction is that Part II is not applicable to licensees subject to regulation under Part I, is plain from the wording of the Act.

Under Section 20 of Part I licensees rendering electric services in interstate commerce are subject to regulation by the states concerned, unless one of the states does not have a regulatory authority or the regulatory authorities of the

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* This holding was basic to the holding of the D. C. majority that Section 10(h) of Part I restating the antitrust laws had been impliedly repealed by Part II. If Part II is not applicable to licensees under Part I, then the holding of the D. C. majority as to Section 10(h) falls completely. However, as stated in Point I, even if Part II should be held applicable to licensees there would still be no sound ground for holding Section 10(h) to have been impliedly repealed because of the absence of any inconsistency between any provision of Part II and the provisions of Section 10(h).

states are unable to agree. This is the same regulatory authority which the states possessed up to 1935 under the corresponding section of the Federal Water Power Act of 1920.

Part II expressly provides that the FPC shall have jurisdiction to regulate interstate rates of a "public utility". Thus, if a licensee under Part I were also a public utility within the meaning of Part II, it would be subject to dual regulation and there would be an irreconcilable conflict between the two Parts. But no sensible legislative body would enact in the same bill such a patent inconsistency without specifically resolving it. Congress did preclude any inconsistency when it provided that Federal regulation under Parts II and III of the Act was "to extend only to those matters which are not subject to regulation by the states" (Section 201(a)). Bearing in mind that the states for fifteen years had had authority to regulate the rates of licensees as specified in Section 20 of Part I, how could Congress have made it more plain that the regulation provided for in Part II was not to apply to such licensees?

This construction of the two parts of the Act conforms to the cardinal principle of statutory construction that all parts of an act shall be given effect where possible. The construction urged by the FPC and the D. C. majority does not conform to that principle of construction.

Similarly, the decision of the Third Circuit in *Safe Harbor Water Power Corporation* v. *F. P. C.*, 179 F. 2d 179 (1949), cert. den. 339 U. S. 957, does not conform to that principle. That decision left unsolved the inconsistency between Section 20 of Part I and the provisions of Part II, by saying in effect that it did not need to solve the inconsistency because at that time the states concerned were

unable to agree, so that at that moment the FPC had jurisdiction under both Section 20 of Part I and the provisions of Part II. However, such an accident of a special situation cannot be a guide to the construction of a statute intended to have general application to a whole industry in many states throughout the country.

In a prior case involving FPC jurisdiction over rates of Safe Harbor, in which the Third Circuit set aside FPC orders as beyond the FPC's jurisdiction, the Court said:

> "We conclude that it was the intention of Congress to regulate hydroelectric power by state commissions using the federal Agency set up in Section 20 only where the state commissions did not or could not perform the function expected of them."*

In the second *Safe Harbor* case the Third Circuit conceded that its first *Safe Harbor* decision had "squinted" toward the construction that Part II was not applicable to licensees under Part I (179 F. 2d, at p. 188). It also expressly refused to accept an argument that Part II, simultaneously enacted with reenactment of Part I, repealed Part I (179 F. 2d at p. 186).

Another inconsistency between Parts I and II arises with respect to rate base. It is clear from the legislative history that under Part I net investment was intended to be the rate base used for establishing rates for licensees. Section 3(13) of Part I defines** net investment to provide in effect for an undepreciated rate base except where depre-

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* *Safe Harbor Water Power Corporation* v. *F. P. C.*, 124 F. 2d 800, 806 (1941), cert. den. 316 U. S. 663 (1942).

** In order to encourage private investment it was essential that the terms which might affect the investment of licensees be certain; and therefore a definition of net investment was provided.

ciation and other reserves are accumulated from earnings in excess of a fair return.*

Under Part II the rate base is left to the FPC to determine, and it has here prescribed a depreciated rate base under Part II rather than the net investment rate base under Part I.**

Thus it cannot be denied that there are substantial and material conflicts and inconsistencies between Parts I and II of the Act. All of these are eliminated by the self-evident construction of the Act that Part I applies to licensees and Part II applies to "public utilities" engaged in interstate commerce other than licensees. Such a construction preserves the basic intent of Congress in its enactment of the Act not to curtail state jurisdiction. It also avoids the

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* In this connection the Secretary of Agriculture, Houston, recommended using net investment only rather than net investment or fair value and said in testifying before the Committee on Water Power of the House of Representatives, 65th Congress, 2nd Session (p. 701):

> "'Net investment' would furnish a certain basis for the Commission in *establishing rates*, which the 'fair value' does not."

Mr. Esch, one of the sponsors and draftsmen of the bill during the debate on the conference report (Cong. Rec., 65 Cong., 3d Sess., Vol. 57, Part V, p. 4638) said:

> "Another change made by the conferees was in reference to the basis for rate making. In the House bill the *basis for rate making* was practically the net investment, but there was some doubt expressed by the Senate conferees that the terms used would not authorize the commission to allow to the licensee the cost for the construction of locks, aids to navigation, or other capital expenditures."

** In view of the above discussed conflicts and inconsistencies between Part I and Part II, the D. C. majority is clearly incorrect when it states (R., Vol. 18, p. 5381) that

> "The *only problem* suggested to us which may arise from such a construction is that, in the event of recapture by the United States of the site awarded to a licensee, which is also a public utility, payment would have to be made pursuant to the valuation formula contained in Part I, which is said to differ from that used for rate-making in Part II."

undesirable necessity of invoking the principle of implied repeal. As this Court said in *United States* v. *Jackson*, 302 U. S. 628 (1938) at p. 631:

> "Repeals by implication are not favored. A law is not to be construed as impliedly repealing a prior law unless no other reasonable construction can be applied."

Here the construction of only one statute is in issue rather than the reconciliation of two conflicting laws enacted at different times.

Throughout the Act the careful and discriminating use of the words "licensees" and "public utilities" emphasizes and demonstrates the differentiation between licensees and public utilities. Throughout Part I the term "licensee" is used, throughout Part II the term "public utility" is used and throughout Part III (the procedural and administrative Part) terms expressly applying to both, such as "every licensee and public utility" are used. The words "Part" and "Act" are also carefully and discriminatingly used throughout the Act to indicate the separate applicability of Parts I and II to licensees and public utilities, respectively, and the joint applicability of Part III (the procedural and administrative Part) to both licensees and public utilities.

This construction of the Act was the one naturally adopted by the Second Circuit in *Niagara Falls Power Co.* v. *Federal Power Commission*, 137 F. 2d 787, 795 (2nd Cir. 1943), cert. den. 320 U. S. 792, and by another panel of the D. C. Circuit in *Alabama Power Co.* v. *Federal Power Commission*, 128 F. 2d 280, 293 (D. C. Cir. 1942), cert. den. 317 U. S. 652, cases in which the courts stated that Part II did not apply to licensees. In the first of these cases, involving a determination of original cost of the utility's properties, the Court said (p. 795):

> "When Congress in 1935 added Part II to the statute, 16 U. S. C. A. §824 *et seq.* which relates principally to rates of public utilities engaged in interstate commerce, *other than licensees* under Part I, it provided * * * ".

In the second of these cases, in which the Court was reviewing a determination by the FPC of the total cost of a licensed hydroelectric project, the Court pointed out (p. 293) that the FPC

> "in making valuations for purposes of rate regulation of public utilities—*not its licensees*—is governed, also, by a different formula than when it makes valuations of the property of a licensee. The formula for valuation of *properties of licensees*, for rate making purposes is contained in the provisions of sections of the 1920 Act which were incorporated into *Part I* of the Federal Power Act of 1935. *Part II* of the Power Act is that which deals with *public utilities* subject to the control of the Federal Power Commission, by reason of being engaged in distribution of electric power in interstate commerce." *

Such is the plain and simple explanation of the provisions of the Act and there is no conflict between Part I and Part II on such basis. It was only years after the enactment of the Act, when the FPC attempted to extend its jurisdiction under Part II to cover licensees, that an *FPC-*

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* The D. C. majority attempts to minimize these cases saying that neither one of them is "a rate case" and "Neither involved Part II and the possibility of conflict between Parts I and II was not discussed" (R., Vol. 18, pp. 5379-80). Both cases, however, deal with the determination of the "actual legitimate original cost" of a licensee's project property which is basic to any determination of the reasonableness of a licensee's rates under Part I. Moreover, Part II is discussed in both cases, as well as Part I, and both Courts correctly found no conflict between Parts I and II since they state Part I applies to licensees and Part II applies to public utilities which are not licensees.

created conflict arose. Congress never created any conflict since it had no thought of taking away any jurisdiction from the States and never intended that the provisions of Part II would apply to licensees that were already regulated under the provisions of Part I.

B. The Contractual Nature of a License Issued under Part I.

The Federal Water Power Act of 1920 was intended as an incentive to the development of national water power resources by private capital. It was recognized that private investors had theretofore been reluctant to risk their funds in water power developments primarily because of legal uncertainties. To eliminate these uncertainties Congress provided that investors could enter into license contracts with the United States, acting through the FPC, which contracts should include *all* the conditions, liabilities and responsibilities of the licensee, vis-a-vis the Government, during the license term.

This contractual relationship between licensees and the Government provided for governmental regulation of a unique character. The reason and purpose for this unique regulation was the unique status of licensees, as contrasted with ordinary utility companies engaged in the production or distribution of electric services. In return for the contractual benefits available to licensees, including the right to a specified and defined method of rate regulation, licensees had to assume unique burdens not incidental to ordinary regulation. The ordinary public utility, for example, is not subject, as is a licensee, to recapture of its property (Section 14), is not required to provide navigation facilities (Section 11), is not required to pay administrative charges (Section 10(e)), nor is it subject to expropriation of earnings (Section 10(e)) or to the crea-

tion and maintenance of amortization reserves (Section 10(d)). All such unusual provisions, however, were consistent with the purpose of the act, to promote hydroelectric development by offering terms that would be fair to the investor and protect the interests of the Government.

The Federal Water Power Act also contained a unified financial set up for licensees by harmonizing the provisions for rate fixing with those for amortization and in turn with those for determining the price of recapture of licensed projects by the Federal Government.

It was recognized that a definitive agreement as to just what system of regulation would apply, and under what circumstances, would be of paramount importance to prospective investors in a licensed project. In consequence, it was provided in Sections 19 and 20 of the Water Power Act that the FPC should have regulatory jurisdiction over intrastate rates of licensees only in the event the state in which the operations were conducted had no regulatory body, and should have regulatory jurisdiction over interstate rates of licensees only in the event that the states concerned had not provided any regulatory body or were unable to agree upon such rates.

It was furthermore the intent of Congress that the unique status of licensees should be preserved and maintained. For this reason it was provided in Section 6 that licenses might be altered only upon mutual agreement between the licensee and the FPC and in Section 28 that no amendment to the Act should affect any license theretofore issued.

Significantly, when the national policy with respect to the rendering of hydroelectric services was re-examined in 1935 at the time of the re-enactment of the Water Power Act as Part I of the Federal Power Act, the contractual status of licensees was left intact.

Part II, on the other hand, is a typical regulatory statute for ordinary electric utility companies engaged in interstate wholesale sales of electric energy without any of the special provisions contained in the Water Power Act or Part I for licensees.

The suggestion that, with the enactment of Part II, Congress intended to eliminate the entire statutory purpose of Part I, by making licensees who might engage in interstate commerce also subject to regulation by the FPC as an ordinary incident of government control, and not exclusively and uniquely by *contract,* is wholly inconsistent with the re-enactment of Part I.

Moreover, by statutory contract no amendment could be made by the United States in license contracts, irrespective of whether such change was by legislation or by FPC action, without the consent of the licensee. Thus license contracts could not have been amended by Congress in 1935 to subject the licensee to FPC regulation rather than regulation by the states as to its interstate wholesale rates. For the D. C. majority to argue that Congress intended by the enactment of Part II to subject licensees to the provisions thereof is in effect to argue that Congress intended to impair the obligation of the license contracts already in existence between the Government and licensees. Obviously Congress never had any such intent. Any such attempt was forbidden by Congress itself in Sections 6 and 28 of the Water Power Act. It might well be unconstitutional under the Fifth Amendment to the Constitution.*

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* Respondents' argument that in this case there could not have been any impairment of the license contract of Penn Water since it did not formally enter into a license contract with the Government until 1951, is beside the point. It is inconceivable that Congress intended without saying so to have Part II applicable to certain companies which obtained licenses after 1935 but not to other companies which obtained them before that date. Thus the questions to be determined are (a) whether or not Part II at the time of its adop-

C. The Legislative History.

The Congressional intent is borne out by the reiteration throughout the Congressional hearings on the Act that the jurisdiction of the States was not to be supplanted or curtailed in any respect by the Act. If licensees were subject to Part II of the Act and that Part repealed by implication Part I, as Respondents contend, jurisdiction of interstate wholesale rates of licensees would have been taken from the states involved and given to the FPC.

When the Public Utility Bill (H. R. 5423) which became the Federal Power Act was first introduced, Hon. Clyde L. Seavey, a member of the FPC, stated to the House Committee on Interstate and Foreign Commerce (74th Cong., 1st Sess., hearing on H. R. 5423 (p. 384)):

> "The new title II of the act is designed to secure coordination on a regional scale of the Nation's power resources and *to fill the gap in the present State regulation of electric utilities. It is conceived entirely as a supplement to, and not a substitute for State regulation.*"

In the report of the Committee on Interstate Commerce, submitted to the Senate by Senator Wheeler (see S. Report No. 621, 74th Congress, 1st Sess., p. 18) it is stated with respect to that Committee's revision of the original bill:

> "* * * *The revision has also removed every encroachment upon the authority of the States.* The revised

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tion was applicable to interstate wholesale sales by all licensees irrespective of whether or not they had prior thereto taken out licenses and (b) whether or not Part II repealed by implication the provisions of Part I in those respects in which Part II is inconsistent with Part I. The determination of these questions does not depend upon the result in any particular case arising years later, but has to be determined by the intent of Congress when, in 1935, it enacted Part II of the Act at the same time it reenacted the comprehensive contractual system for licensees which had already been in effect for 15 years and under which many license contracts for hydroelectric projects had already been entered into between the Government and licensees.

bill would impose Federal regulation only over those matters which cannot effectively be controlled by the States. The limitation on the Federal Power Commission's jurisdiction in this regard has been inserted in each section in an effort to prevent the expansion of Federal authority over State matters . . . ."

This same Senate Report (p. 48), when referring to the declarations of legislative policy contained in Sections 201(a) and (b) of Part II of the Act, said:

> "Subsection (a) * * * *declares the policy of Congress to extend that regulation to those matters which cannot be regulated by the States* and to assist the States in the exercise of their regulatory powers, but not to impair or diminish the powers of any State commission."*

In the course of hearings in which the purpose and effect of the three Parts of the Act were outlined for the Committee on Interstate and Foreign Commerce of the House of Representatives, 74th Cong., 1st Sess., on H. R. 5423, Commissioner Clyde L. Seavey of the FPC, commented upon such amendments, and made it clear that only Part III applied to *all* companies subject to FPC regulation (p. 389) saying:

> "The grants of authority in the present subsections (f), (g) and (h) to prescribe accounts, require reports, and make rules and regulations are removed from section 4 and placed in title III of the amended

* Additional similar statements are found throughout the hearings and Congressional Reports by all FPC witnesses, including FPC Solicitor Dozier DeVane (See for example the Hearings before the House Committee pp. 518, 529, 547-548), and by Members of Congress, including Mr. Rayburn, Chairman of the House Committee considering the bill (See for example his Report No. 1318, House of Representatives, 74th Congress, 1st Sess., p. 8).

> Power Act, *where they relate to all companies subject to regulation by the Commission.*"

Commissioner Seavey also made it clear that Part II only covered interstate electric utilities, not licensees, when he told the Committee, in presenting a prepared analysis of the Bill (p. 384):

> "The present analysis is devoted to the new titles which are added by the bill. * * * *Of these new provisions title II * * * contains the substantive provisions for the regulation of interstate electric utilities, and title III * * * brings together the provisions applicable to both water power licensees under title I and interstate operating companies under title II, including the general administrative and procedural sections.*"

The D. C. majority opinion mentions the decision of this Court in the *Attleboro* case and the Congressional intent to fill the gap of the state regulation of electric utility companies. This argument, however, demonstrates that licensees were not intended to be included within the category of public utilities under Part II, since there was no gap of regulation with respect to licensees. Section 20 as reenacted in Part I provides for regulation of the interstate power sales of licensees either jointly by the states involved or, in case of their inability to agree, by the FPC. Thus there was no gap for Congress to fill in 1935 as regards licensees. The gap that Congress filled was with respect to public utilities which are not licensees whose interstate wholesale rates were held under the *Attleboro* case not to be subject to regulation by their home state. As Mr. Dozier DeVane, Solicitor for the FPC, told the House Committee (pp. 497-498):

> "I would like to say first that insofar as rates are concerned that section 201 is intended to give the Federal Power Commission jurisdiction over the wholesale rates only; rates over which the State commissions have no jurisdiction as decided by the Supreme Court of the United States in the *Public Service Commission* v. *The Attleboro Steam & Electric Co.*, 273 U. S. 83."

Mr. DeVane further stated to the Committee (p. 514):

> "We have attempted in this bill, Mr. Wolverton, to accomplish these two purposes: *One is not to supersede, but aid State regulation; and insofar as rates are concerned, to deal only with rates that State Commissions cannot regulate.*"

By all tests of reasonable construction Part II of the Act is not applicable to licensees under Part I.

Conclusion.

It is respectfully submitted that the judgment and orders of the D. C. Circuit should be in all respects reversed and the D. C. Circuit should be directed to grant petitioners' motions to set aside the orders of the FPC.

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March 10, 1952.

PROVISIONS OF FEDERAL STATUTES EXPRESSLY RENDERING THE FEDERAL ANTITRUST LAWS INAPPLICABLE TO SPECIFIC TRANSACTIONS SUBJECT TO REGULATION

Industry	Present Federal Regulatory Statute	Date of First Enactment of Federal Regulation	Transactions, Subject to Action of Regulatory Commissions, to which Antitrust Laws Specifically Inapplicable	Statute First Providing for Inapplicability of Antitrust Laws	Date of First Enactment of Exception from Antitrust Laws
Railroad	Interstate Commerce Act, Part I (49 U.S.C. §§1-27)	1887 (24 Stat. 379)	(a) Section 5(1), (2) and (11) of the Interstate Commerce Act, as amended (49 U.S.C. §5(1), (2), (11)):	Transportation Act (41 Stat. 480)	1920
			Pooling of traffic or earnings and acquisitions, consolidations and mergers.		
			(b) Section 5b of the Interstate Commerce Act, as amended (49 U.S.C. §5b):	Reed-Bulwinkle Act (62 Stat. 472)	1948
			Rate association agreements and similar agreements.		
			(c) Section 7 of the Clayton Act, as amended (15 U.S.C. §18):	64 Stat. 1125	1950
			Stock and asset acquisitions (Section 7 of Clayton Act inapplicable).		

Industry	Present Federal Regulatory Statute	Date of First Enactment of Federal Regulation	Transactions, Subject to Action of Regulatory Commissions, to which Antitrust Laws Specifically Inapplicable	Statute First Providing for Inapplicability of Antitrust Laws	Date of First Enactment of Exception from Antitrust Laws
Motor Carrier	Interstate Commerce Act, Part II (49 U.S.C. §§301-327)	1935 (49 Stat. 543)	(a) Section 5(2), (11) and (13) of the Interstate Commerce Act, as amended (49 U.S.C. §5(2), (11) and (13)): Mergers and acquisitions.	Motor Carrier Act (49 Stat. 555)	1935
			(b) Section 5(1), (11) and (13) of the Interstate Commerce Act, as amended (49 U.S.C. §5(1), (11) and (13)): Pooling of traffic and earnings.	Transportation Act (54 Stat. 905)	1940
			(c) Section 5b of the Interstate Commerce Act, as amended (49 U.S.C. §5b): Rate association agreements and similar agreements.	Reed-Bulwinkle Act (62 Stat. 472)	1948
			(d) Section 7 of the Clayton Act, as amended (15 U.S.C. §18): Stock and asset acquisitions (Section 7 of Clayton Act inapplicable).	64 Stat. 1125	1950

Industry	Present Federal Regulatory Statute	Date of First Enactment of Federal Regulation	Transactions, Subject to Action of Regulatory Commissions, to which Antitrust Laws Specifically Inapplicable	Statute First Providing for Inapplicability of Antitrust Laws	Date of First Enactment of Exception from Antitrust Laws
Water Carrier	Interstate Commerce Act, Part III (49 U.S.C. §§901-923)	1916 (39 Stat. 728)	(a) Section 5(1), (11) and (13) of the Interstate Commerce Act, as amended (49 U.S.C. §5(1), (11) and (13)): Pooling of traffic and earnings.	Shipping Act of 1916 (39 Stat. 733)	1916
			(b) Section 5(2), (11) and (13) of the Interstate Commerce Act, as amended (49 U.S.C. §5(2), (11) and (13)): Mergers and acquisitions.	Transportation Act (54 Stat. 905)	1940
			(c) Section 5b of the Interstate Commerce Act, as amended (49 U.S.C. §5b): Rate association agreements and similar agreements.	Reed-Bulwinkle Act (62 Stat. 472)	1948
			(d) Section 7 of the Clayton Act, as amended (15 U.S.C. §18): Stock and asset acquisitions (Section 7 of Clayton Act inapplicable).	64 Stat. 1125	1950
Freight Forwarding	Interstate Commerce Act, Part IV (49 U.S.C. §§1001-1022)	1942 (56 Stat. 284)	Section 5b of the Interstate Commerce Act, as amended (49 U.S.C. §5b): Rate association agreements and similar agreements.	Reed-Bulwinkle Act (62 Stat. 472)	1948

Industry	Present Federal Regulatory Statute	Date of First Enactment of Federal Regulation
Aeronautics	Civil Aeronautics Act (49 U.S.C. §§401-705)	1938 (52 Stat. 977)
Telephone	Federal Communications Act (47 U.S.C. §§151-609)	1910 (36 Stat. 544)

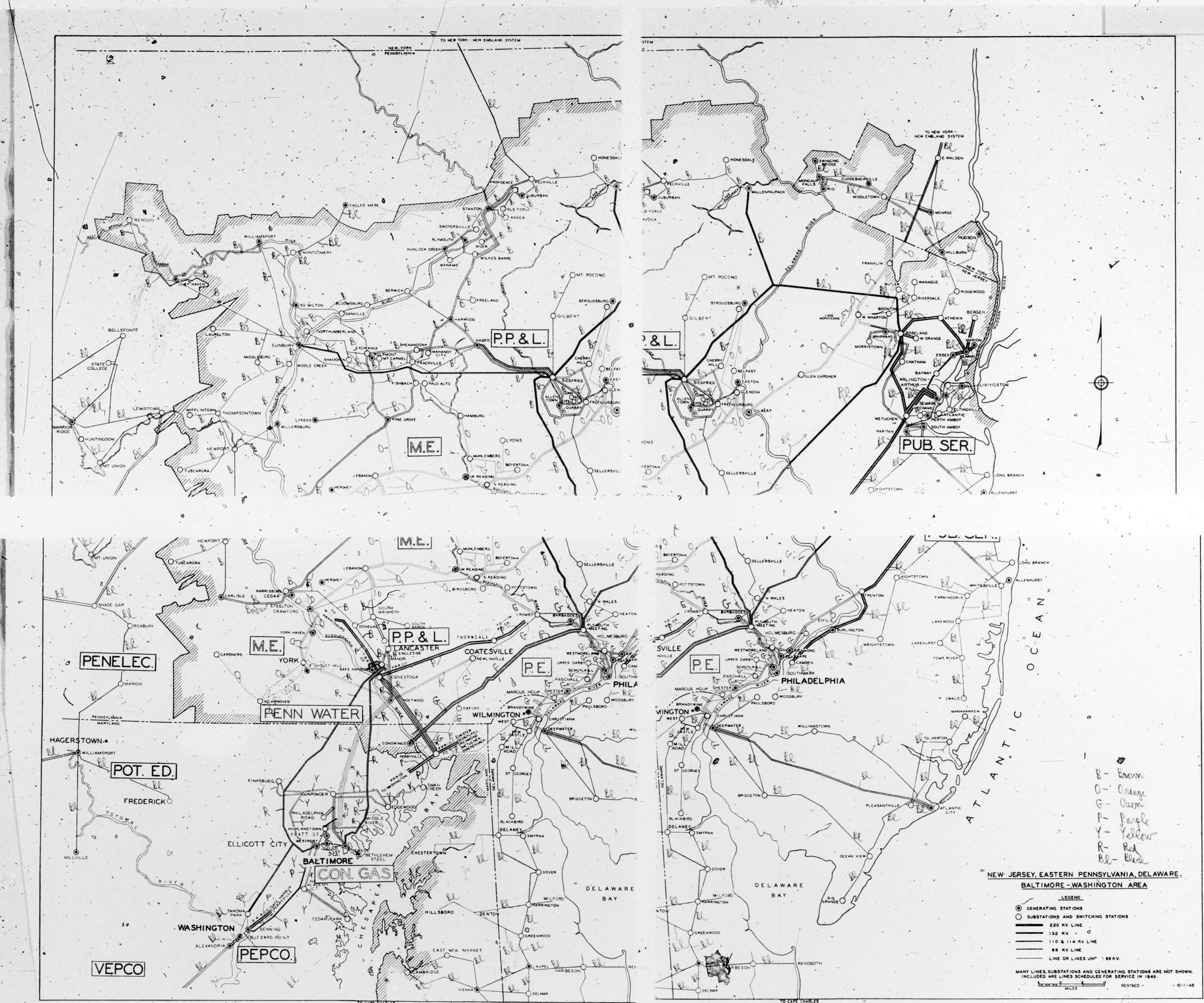
Transactions, Subject to Action of Regulatory Commissions, to which Antitrust Laws Specifically Inapplicable	Statute First Providing for Inapplicability of Antitrust Laws	Date of First Enactment of Exception from Antitrust Laws
(a) Sections 408, 409, 412 and 414 of the Civil Aeronautics Act, as amended (49 U.S.C. §§488, 489, 492 and 494):	Civil Aeronautics Act (52 Stat. 1001)	1938
Acquisitions, mergers, consolidations, interlocking interests and pooling of earnings or traffic.		
(b) Section 7 of the Clayton Act, as amended (15 U.S.C. §18):	64 Stat. 1125	1950
Stock and asset acquisitions (Section 7 of Clayton Act inapplicable).		
(a) Section 221 of the Federal Communications Act (47 U.S.C. §221):	Willis-Graham Act (42 Stat. 27)	1921
Acquisitions, mergers and consolidations.		
(b) Section 7 of the Clayton Act, as amended (15 U.S.C. §18):	64 Stat. 1125	1950
Stock and asset acquisitions (Section 7 of Clayton Act inapplicable).		

Industry	Present Federal Regulatory Statute	Date of First Enactment of Federal Regulation
Telegraph	Federal Communications Act (47 U.S.C. §§151-609)	1910 (36 Stat. 544)
Natural Gas	Natural Gas Act (15 U.S.C. §§717-717w)	1938 (52 Stat. 821)
Electric Power	Federal Power Act (16 U.S.C. §§791-825u)	1920 (41 Stat. 1063)

Transactions, Subject to Action of Regulatory Commissions, to which Antitrust Laws Specifically Inapplicable	Statute First Providing for Inapplicability of Antitrust Laws	Date of First Enactment of Exception from Antitrust Laws
(a) Section 222 of the Federal Communications Act, as amended (47 U.S.C. §222):	57 Stat. 5	1943
Acquisitions, mergers and consolidations.		
(b) Section 7 of the Clayton Act, as amended (15 U.S.C. §18):	64 Stat. 1125	1950
Stock and asset acquisitions (Section 7 of Clayton Act inapplicable).		
Section 7 of the Clayton Act, as amended (15 U.S.C. §18):	64 Stat. 1125	1950
Stock and asset acquisitions (Section 7 of Clayton Act inapplicable).		
Section 7 of the Clayton Act, as amended (15 U.S.C. §18):	64 Stat. 1125	1950
Stock and asset acquisitions (Section 7 of Clayton Act inapplicable).		

OTHER STATUTES EXPRESSLY PROVIDING FOR INAPPLICABILITY OF THE ANTITRUST LAWS IN SPECIFIC INSTANCES

Subject Matter	Statute First Providing for Inapplicability of Antitrust Laws	Date of First Enactment of Exception from Antitrust Laws
Labor, agricultural and horticultural organizations exempt from Clayton Act.	Section 6 of Clayton Act (15 U.S.C. §17)	1914 (38 Stat. 731)
Export associations, and agreements entered into by them, exempt from Sherman Act on certain conditions.	Webb-Pomerene Act (15 U.S.C. §62)	1918 (40 Stat. 517)
Certain associations of marine insurance companies exempt from the antitrust laws.	Section 29 of Merchant Marine Act (46 U.S.C. §885)	1920 (41 Stat. 1000)
Marketing agreements between the Secretary of Agriculture and producers or others engaged in the handling of agricultural commodities exempt from the antitrust laws on certain conditions.	Agricultural Marketing Agreement Act, as amended (7 U.S.C. §608b)	1937 (50 Stat. 246)
Resale price maintenance agreements exempt from Section 1 of Sherman Act, on certain conditions.	Section 1 of Sherman Act, as amended by Miller-Tydings Act (15 U.S.C. §1)	1937 (50 Stat. 693)
Non-profit institutions exempt from Robinson-Patman Act.	15 U.S.C. §13c	1938 (52 Stat. 446)
Insurance companies subject to State regulation exempt from the antitrust laws.	McCarran Act, as amended (15 U.S.C. §1012)	1945 (59 Stat. 34)


NEW YORK PENNSYLVANIA
TO NEW YORK - NEW ENGLAND SYSTEM
P.P.&L.
M.E.
PUB. SER.
PENELEC.
PENN WATER
POT. ED.
VEPCO
PEPCO.
CON. GAS
P.E.
PHILADELPHIA
WILMINGTON
BALTIMORE
WASHINGTON
ATLANTIC OCEAN
DELAWARE BAY
B- Brown
O- Orange
G- Green
P- Purple
Y- Yellow
R- Red
Bl- Black
NEW JERSEY, EASTERN PENNSYLVANIA, DELAWARE, BALTIMORE - WASHINGTON AREA
LEGEND
GENERATING STATIONS
SUBSTATIONS AND SWITCHING STATIONS
220 KV. LINE
132 KV. "
110 & 114 KV. LINE
66 KV. LINE
LINE OR LINES UNDER 66 KV.
MANY LINES, SUBSTATIONS AND GENERATING STATIONS ARE NOT SHOWN. INCLUDED ARE LINES SCHEDULED FOR SERVICE IN 1949.
MILES
REVISED - 10-1-48

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IN THE

Supreme Court of the United States

OCTOBER TERM, 1951.

No. 428.

PENNSYLVANIA WATER & POWER COMPANY and SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND,
Petitioners,

v.

FEDERAL POWER COMMISSION, and CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE and PUBLIC SERVICE COMMISSION OF MARYLAND, Intervenors,
Respondents.

REPLY BRIEF FOR THE PETITIONERS.

Statement.

In view of the confusing discussion of a multitude of largely irrelevant issues in respondents' briefs, it is now necessary to redefine the narrow issues actually in this case.

It is particularly important to make clear just what impact the Fourth Circuit decisions in the contract cases have on this case, in which the FPC orders against Penn Water are being reviewed in accordance with the statutory procedure under Section 313 of the Federal Power Act (the Act).*

The Fourth Circuit decisions affect this case in two ways:

(1) The Fourth Circuit held that the Baltimore and Safe Harbor contracts were illegal under the antitrust laws

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* Sections of the Act are referred to as numbered in the pamphlet filed in this Court by the FPC.

and state law and void in their entirety. Since the FPC orders direct that those contractual arrangements be continued, they can be sustained only if authority is found in the Federal Power Act for the FPC to order continuance of arrangements illegal under the antitrust laws and state law. Thus, the prime issue in this branch of the case is whether there is any such authority in the Act. None will be found (Point I below). The newly invented argument of FPC counsel that the FPC orders did not direct continuance of illegal arrangements is frivolous and is disposed of in subdivision (c) of Point I below.

(2) To the extent that determinations made in the FPC orders are based on the assumed continuance of the private contractual obligations and entitlements contained in the void contracts, the determinations are unfounded and therefore erroneous in view of the Fourth Circuit decisions holding the contracts null and void in their entirety. Thus, the prime issue in this branch of the case is whether determinations in the FPC orders are founded upon such contractual obligations and entitlements as distinguished from physical operations, which were wholly different. That they were so founded will be shown in Point II below. In this branch of the case there is no question of statutory authority. There could never be any statutory authority to issue orders on non-existent foundations.

The Fourth Circuit in the decisions discussed by the respondents was, of course, not reviewing the FPC orders against Penn Water (here under review) or the FPC orders against Safe Harbor (not here under review) and was therefore not acting on and changing either set of orders. Petitioners have never claimed otherwise.

However, when Penn Water in this proceeding brought to the attention of the FPC (January 28, 1949) the illegalities of the contracts, the FPC should have withdrawn its order of January 5, 1949, which directed continuance of the illegal arrangements and which was based in important respects on the assumed continuance of the illegal private obligations and entitlements. Since the FPC did not do so,

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the reviewing Court, the D. C. Circuit, should have set aside such orders.

The issues mentioned above are particularly clear-cut in view of the concessions which have been made by the FPC:

(a) The FPC has conceded that such a contract is illegal as a private contract.* The decisions of the Fourth Circuit as to such illegality stand as *res judicata* between the intervenors and petitioners.** In any event, those decisions are not on review here, and any reargument here of the issues they decided is beside the point. This brief will, therefore, contain no argument on points in intervenors' briefs relating to those issues.

(b) The FPC has conceded that the whole basis of the D. C. majority decision was erroneous by conceding that Section 10(h) of Part I of the Act was not impliedly repealed by Part II, as held by the D. C. majority, and that the Section has the same scope as the Sherman Act itself (FPC Br., pp. 63-4).

(c) The FPC also concedes that the arrangement which the FPC directed be continued stifles competition and removes all incentive on the part of Penn Water to compete (FPC Br., pp. 15, 18, 48, 61, 62) and that the payment provision is a revenue pooling arrangement which would be

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* Memorandum on unsuccessful motion to postpone argument herein (p. 3).

** This disposes of Consolidated's Brief Points I, III and V and the Maryland Commission's Brief Points 1 and 3c, which constitute an attempt to argue that the Fourth Circuit decisions are erroneous. This Court has denied certiorari as to the Baltimore contract case, 340 U. S. 906 (1950); the petition for certiorari as to the Safe Harbor contract case has not been decided. The only new issue presented by the latter petition is whether the Safe Harbor contract is substantially similar in effect to the Baltimore contract. Counsel for Consolidated conceded in the Baltimore contract case (Record in Safe Harbor contract case, p. 52) that the Safe Harbor contract was substantially identical. Both the District Court and the Fourth Circuit (unanimously) held the contracts were substantially identical. Consolidated has had one review of that question. Consolidated is not entitled to a second review of this purely private question which does not warrant the attention and time of this Court.

illegal under the antitrust laws as a contract between private parties (FPC Br., p. 60 fn. 44 and p. 68 fn. 46).

The plain fact is that the FPC has turned the business and management of Penn Water over to a competitor, Consolidated, under the guise of a rate order which, in the words of the FPC's brief below,

> "permits Penn Water's facilities to be operated as though they were under common ownership with Baltimore Company's facilities." (Tr., p. 5574).

It was this very system of operation, embodied in the Baltimore contract, under which Consolidated, by letter of November 23, 1948, prohibited Penn Water from building a new $20,000,000 addition to its steam electric generating plant at Holtwood, Pa., fueled by coal dredged from the Susquehanna River (free but for the cost of processing), which could now have been producing needed power for the defense effort. Instead, Consolidated used its contractual powers to take the business for itself, by building a new steam electric generating plant of its own in Baltimore, to be fueled by more expensive bituminous coal bought in the market.*

A large portion of the brief of the FPC, and the briefs of the intervenors, is taken up with a discussion of economic matters relating to the electric utility industry, apparently in an attempt to make it appear that determination of such matters, or consideration of the voluminous record relating thereto, is necessary or pertinent to the decision of this case. On the contrary, all that is necessary for the determination of this case are the parts of the opinions and orders of the FPC referred to in petitioners' main brief (p. 3), the provisions of the Federal Power Act, and

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* The Fourth Circuit emphasized this as one of the flagrant abuses of the contract system of operation. Consolidated asserts that the Court's finding as to this action of Consolidated was unsupported by the proceedings in the District Court, which upheld the contract. But the District Court itself expressly found that Consolidated under the contract prohibited Penn Water from building its steam plant "and instead, extended its own plant facilities in Baltimore" (89 F. Supp. 452, 460).

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the adjudicated fact that the Baltimore and Safe Harbor contracts with their alleged entitlements and obligations are invalid and non-existent as private contractual obligations.*

There is here no case for administrative expertise, but only a case of an administrative agency having issued orders which were clearly without foundation and beyond its authority as a matter of law, and having maintained its position even after these errors of law were pointed out to it. Here we have a direct review of orders issued by the FPC after the illegalities of the situation were brought to its attention. FPC counsel conceded in their brief below (Tr. 5552) that these arguments advanced by Penn Water

> "are not new, having been urged upon the Commission and considered by it and having been repeatedly urged in this proceeding before this Court."

Since this is a direct statutory review, as conceded in the FPC's brief (p. 59), the cases cited by the respondents, including *Far East Conference* v. *United States*, October Term, 1951, No. 15 Misc., relating to referral of questions of fact to administrative bodies when they have not passed on them, have no application. On the state of the record in the *Far East* case, the questions had not been passed on by the administrative body. The FPC does not really argue that the *Far East* case is applicable here, but only that it may have application to the Safe Harbor contract case.**

Furthermore, all the respondents' arguments regarding the necessity for finding background facts and the effects of the illegal arrangements are beside the point under con-

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* The orders here under review are expressly founded on both contracts; the invalidity of the Baltimore contract alone is a complete ground for setting the orders aside.

** This contention also is incorrect, because before the District Court or the Fourth Circuit decided either the Baltimore contract case or Safe Harbor contract case, the FPC had rendered its decision on the questions, albeit erroneously. However that may be, no one suggested in either contract case that there be such a referral, and counsel for the FPC was present in all courts and was furnished with all the briefs, as the Fourth Circuit found (194 F. 2d 89, 91 (1952)).

trolling decisions of this Court because the arrangements have been held illegal *per se* as a matter of law (Penn Water's main brief, pp. 24, 25). The FPC has had its full opportunity to advance its views; its views are erroneous as a matter of law and therefore should be reversed by the courts.

I. The FPC has no authority to direct continuance of arrangements illegal under the antitrust laws and state law, as it has attempted to do.

(a) Arrangements illegal under the antitrust laws.

To sustain the FPC orders here under review, some specific provision must be found in the Federal Power Act (or in some other Act of Congress) authorizing the FPC to direct continuance of arrangements otherwise illegal under the antitrust laws.

General regulatory provisions have never been construed as authorizing a regulatory body so to do, in the absence of some provision in the regulatory act (or the antitrust laws themselves) expressly giving the authority. We showed in our main brief (pp. 26-40 and App. A) that this Court, other regulatory bodies and the Attorney General have always so decided. Appendix A to our main brief contains a tabulation of provisions of Federal regulatory acts giving such specific authority, without which other regulatory bodies have not attempted to approve or direct continuance of illegal arrangements.

In order that there can be no question on this score, we submit as Appendix I to this brief a tabulation of general regulatory provisions in other Federal regulatory acts, which have never been held sufficient to permit the regulatory body to approve or direct transactions illegal under the antitrust laws. Where Congress intended to give such authority, it has enacted specific provisions, as also shown in the tabulation.

An examination of the tabulation shows that the subject matter of the regulatory provisions in these other acts

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is, in most cases, more extensive than that in the sections of the Federal Power Act to which FPC counsel refer.

FPC counsel do not discuss the point made in our main brief (pp. 27-30) that the Federal Power Act does not contain any specific provision authorizing the FPC to approve or order transactions illegal under the antitrust laws, and that it was not until the recent amendment of Section 7 of the Clayton Act (on December 29, 1950) that the FPC was given the one power of this kind that Congress has ever conferred upon it, namely, the power to exempt acquisitions of stock or assets approved by it. They do not discuss the point that this is a clear indication that, prior to December 29, 1950, the FPC had no power to exempt such acquisitions, and thereafter had only the limited power to exempt such acquisitions and no other transactions. Nor do they discuss the further point that a provision giving the FPC authority to grant exemptions was dropped from the original bill when the Federal Power Act was enacted in 1935. They simply fail to meet the clear implication from these Congressional actions.

As previously pointed out, the FPC has conceded (Br., pp. 63-4) that Section 10(h) of Part I of the Federal Power Act was not, as argued by the D. C. Circuit majority, repealed by Part II, and that the Section has the same scope as the Sherman Act itself.* FPC counsel argue that, notwithstanding the presence of this prohibition in Penn Water's license, it is not binding, and the FPC may somehow waive it. But the government license is a bilateral contract binding on both the government and the licensee and the FPC may not waive any of the statutory conditions, including this one. Permission to the FPC to waive such a statutory condition is given in subsection (i) of Section 10 in two specific and limited instances only, i.e., in the case of a license for a minor part only of a whole project, or for a small project of not more than 100 horsepower, neither of which has any application here.

FPC counsel refer to general regulatory provisions of the Federal Power Act, contending that such provisions

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* The D. C. Circuit majority itself conceded this.

authorize the FPC to approve or direct the otherwise illegal arrangements. A brief analysis of such provisions will show that they do not contain any such authority.

Sections 205(a) and (b) are general regulatory provisions regarding rates and services of public utilities such as are found in the other Federal regulatory acts listed in Appendix I hereto and do not carry the requisite authority. Establishment of "just and reasonable" rates and preventing of "undue preference" does not carry with it any power to order an arrangement whereby one company is turned over to the control of another, and its incentive to compete with the other company is destroyed, in violation of the antitrust laws.

That such is the effect of the FPC orders is shown in our main brief (pp. 48-52; 58-68). The argument of FPC counsel that the orders do not do so is unfounded and is disposed of in subdivision (c) of this point below.

Section 206 implements Section 205 and also is a general regulatory provision for preventing rates of public utilities which are "unjust, unreasonable, unduly discriminatory or preferential" and determining the "just and reasonable rate." This is another general regulatory provision which does not carry the requisite authority. This section, like Section 205, provides that the FPC may adjust rates whether they are contained in a unilateral tariff or in a bilateral contract. That it so provides does not mean that the FPC has authority to create a bilateral contract, which is by its nature a consensual arrangement, when none exists. It is even more obvious that a contract which is illegal as between the parties could not be imposed. Furthermore, even if the FPC could create a contract, it would have to be done by an order binding on both parties. Here, the FPC has entered no order against Consolidated and it has conceded it is Penn Water which is subject to penalties under the orders issued (FPC Br., p. 53).

FPC counsel mention Section 207 (Br., p. 40, fn. 31). There is no authority in Section 207 to approve or direct continuance of contractual arrangements, illegal or otherwise. That section deals only with the matter of inade-

quate service. This language is general, like the other general regulatory sections referred to.

Section 203(a) mentioned by Consolidated (Br., p. 53), is irrelevant. Under it, the FPC may approve the sale or other disposition by a public utility of facilities, or the purchase by a public utility of a security of another public utility. This section has been present in the Act since its enactment in 1935. Yet, as pointed out above, Congress found it necessary in December 1950 to enact a specific amendment to Section 7 of the Clayton Act, in order to give the FPC power to exempt from the antitrust laws acquisitions approved by it under Section 203(a) of the Federal Power Act.

Section 202, cited by FPC counsel, clearly does not give the FPC the requisite authority. In fact, the policy outlined in subsection (a) is directly contrary to the assertions of FPC counsel. The policy is "assuring an abundant supply of electric energy throughout the United States", and encouraging "the voluntary interconnection and coordination of facilities". Subsection (b) provides that, where adjacent public utilities are not interconnected, the FPC may require interconnection and the exchange of energy. This is similar to the authority to require interconnections contained in the other Federal regulatory acts tabulated in Appendix I hereto (Column 7). Such a provision does not empower the regulatory body to direct an arrangement for the entire business of the public utility, but only for such interconnection. Section 202(b) is patently insufficient to empower the regulatory body to order an arrangement otherwise illegal under the antitrust laws in the absence of specific provisions such as are contained in some of the other Federal regulatory acts.*

Section 20 of Part I providing for the regulation of the interstate rates and services of licensees is another general regulatory provision providing for "reasonable, nondiscriminatory, and just" rates, to be regulated by the states

* Furthermore, none of the foregoing Sections 202, 205, 206, and 207 are applicable to licensees regulated under Part I of the Federal Power Act (see Point III below).

involved or, if they are unable to agree, by the FPC. There is no authority here to order contractual arrangements illegal or otherwise.

Section 4(g) of Part I provides for investigation of any attempted occupancy of public lands or streams and issuance of such order in that connection as may be appropriate. This section has no applicability to a licensee of the Federal Government legally occupying a power site and has no relation to contractual arrangements.

Section 4(e) relates to the issuance of licenses, *i. e.*, licenses containing the conditions required by Section 10, including the condition of Section 10(h) that licensees shall not make combinations or agreements to limit the output of electrical energy or restrain trade or fix prices, which FPC counsel concede restates the antitrust laws (Br., p. 64).

Section 10(a) provides for the inclusion in each license granted, of a condition that the physical project "including the maps, plans, and specifications" shall be such as in the judgment of the Commission is best adapted for developing the water power. This subsection has nothing to do with contractual arrangements.

There is nothing in any of these provisions cited by FPC counsel or the intervenors different from the broad regulatory authority in other acts, shown in Appendix I hereto, which have never been treated by either Congress or the Courts as conferring power on the regulatory body to order arrangements otherwise illegal under the antitrust laws, in the absence of specific provisions of the type tabulated in Appendix A to petitioners' main brief.

Nor is there any general repugnancy between the Act and the antitrust laws, as the dissenting opinion below and the Fourth Circuit pointed out. Penn Water can sell power to Consolidated under an arrangement which does not violate the antitrust laws. This would be under the usual form of unit rate contract, without managerial controls of Consolidated over Penn Water like the contracts Penn Water has with the three Pennsylvania utilities, which these same FPC orders also approve. This is the type of contract found elsewhere in the industry.

FPC counsel resort to another contention based on the assumed authority of the FPC to direct continuance of the arrangements, which authority we have shown does not exist. They claim that the arrangement directed here, whereby the business and management of Penn Water is turned over to its competitor, Consolidated, resembles the action of a commission of the State of California in fixing raisin quotas under the California Agricultural Prorate Act, which this Court held not to be action within the purview of the antitrust laws, because it was the act of the State. *Parker* v. *Brown*, 317 U. S. 341 (1943).

The situation here is not similar to that in *Parker* v. *Brown*. There the State Commission simply assigned a raisin quota to producers. Here by orders against Penn Water, the FPC is purporting to permit a private party, Consolidated, to control Penn Water and prevent Penn Water's competition, in violation of the antitrust laws.

Here, it is Consolidated, not the FPC, which the FPC's orders permit to perform acts violating the antitrust laws. Further, it is difficult to see how the FPC can exempt Consolidated from the antitrust laws in an order directed against Penn Water.

By its orders the FPC is attempting to confer on Consolidated powers which the FPC itself does not have under the Act. It is not claimed that the FPC has any power over installation of facilities of Penn Water such as steam electric generating plants.* Yet the FPC is giving Consolidated control over the expansion of such facilities by Penn Water. FPC counsel say in effect (Br., p. 53) that if Penn Water should disobey a direction of Consolidated it would be a violation of an order issued under the Act and subject Penn Water to penalties or restraints to be imposed by the FPC. Yet the FPC itself has no such authority over facilities under the terms of the Act. Obviously Consolidated therefore, in controlling Penn Water's expansion of facilities would be acting under an unauthorized dele-

* The FPC's powers with respect to construction of facilities are limited to those which are part of a licensed *hydroelectric* project (Section 10(b) of the Act) despite Consolidated's incorrect statements in this regard (CG Br., pp. 74, 75).

gation without statutory standards and at its own whim in its own interest. Thus, the FPC is trying to obtain by indirection a power it admittedly does not have under the Act.

The true significance of *Parker* v. *Brown* in the present case arises from the fact that, as this Court stated, a state or public authority "does not give immunity to those who violate the Sherman Act by authorizing them to violate it, or by declaring that their action is lawful" (317 U. S. at p. 351).

The situation here is analogous to that in the *Schwegmann* case (341 U. S. 384 (1951)). There this Court held that a state could not demand of private parties conduct which the Sherman Act forbids. The State of Louisiana required liquor retailers to abide by minimum prices fixed by contract between distributors and other retailers, though not parties to such contracts themselves. This requirement of Louisiana law did not come within the narrowly defined express power to exempt from the antitrust laws granted to the states by Congress in the Miller-Tydings Act.

In the case here the FPC is attempting to require Penn Water to follow the mandates of a competitor, Consolidated, not only as to prices at which it sells power to others, but in all phases of its business, and to give up all incentive to compete, obtain new business and economize. The orders require Penn Water to submit itself to actions by Consolidated, a private party, which violate the antitrust laws. Such a situation has no analogy to the case put by FPC counsel (Br., p. 59) that a regulatory body might fix rates for several utilities, though they could not legally agree among themselves on such rates.

The situation here is also like that in *Carter* v. *Carter Coal Co.*, 298 U. S. 238 (1936), where this Court struck down the Bituminous Coal Conservation Act of 1935, as unconstitutional under the Due Process Clause of the Fifth Amendment, because it turned phases of the business of some coal companies over to the direction of competitors. It is obvious that, if Congress itself has no constitutional power to hand the business of one corporation over to a

competitor, a regulatory commission cannot do so. Neither the FPC nor the intervenors attempt to distinguish the situation in this case from that in the *Carter Coal* case.

Moreover the FPC is a Federal agency which cannot direct continuance of contractual arrangements illegal under the antitrust laws without specific authority from Congress. The pattern of legislation shown in Appendix A to our main brief giving certain regulatory agencies specific authority in limited instances to grant exemptions from the antitrust laws demonstrates this conclusively.

The FPC concedes (Br., p. 49) that as to the approving or permitting of a contract which might otherwise contravene the Sherman Act "the Government has consistently maintained that express statutory authority and an exercise of that authority are needed to establish an exemption from the antitrust laws."

It is clear that there is no authority in the Federal Power Act for the FPC to order continuance of contractual arrangements whereby private parties violate the antitrust laws.

(b) Arrangements illegal under fundamental state law.

We have pointed out in Point II of our main brief that the arrangements here involved have been held to violate fundamental Pennsylvania law, including the doctrine of *ultra vires*, not mere regulations of Pennsylvania or its Public Utility Commission.

Just as in the case of the antitrust laws, the Federal regulatory body must have some express authority in its regulatory act in order to supersede state law of the fundamental organic character involved here. FPC counsel point to no provision of the Federal Power Act which contains such authority.

As we pointed out in our main brief, such provisions are contained in some other Federal regulatory acts (p. 70), for example, Section 5(11) of the Interstate Commerce Act.

Furthermore, as pointed out in our main brief (pp. 72-73), action of a Federal regulatory body supersedes state law only where this is necessary, in order to carry out the

purposes of the Federal regulatory act. FPC counsel can, of course, point to no such necessity here, because the purposes of the Federal Power Act can be carried out by the FPC's approval of an ordinary unit rate contract between Penn Water and Consolidated with no managerial controls of one company over the other, such as is customary in the industry.*

Consequently, the cases cited in the FPC brief (p. 86) to the effect that Federal laws override state laws when Congressional intent is expressed and necessity therefor exists are not in point.

Also not in point are the cases cited in the FPC brief (p. 89) relating to situations where the Federal Government has preempted a field. There is no such preemption here. The only statutory provisions pointed out by the respondents for the proposition that Congress in enacting the Federal Power Act intended to preempt the field either do not sustain them or prove the opposite.

Section 8 of the Federal Power Act provides that no voluntary transfer of a license, or rights thereunder, shall be made without the written approval of the FPC. But the corporate powers surrendered here are not rights under a license. That this is so is not only self-evident but is also shown by Section 9(b), which requires, as a condition of obtaining a license, that the applicant must prove that it is duly authorized under state law to conduct the business which it must conduct to operate under the license. This is a recognition of the fact that such corporate rights flow from the laws of the state of incorporation and not from a license under the Federal Power Act.

FPC counsel nowhere discuss the constitutional question under the Tenth Amendment which arises under the cases cited in our main brief (pp. 74-75) since the FPC

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* Consolidated admits this would be satisfactory (Br., p. 41). The efficient power pools found in other parts of the country operate under such ordinary contracts. In this connection, the illegal revenue pooling in the present FPC orders should not be confused with pooling of power, which is a matter of physical interconnection.

orders attempt to override these fundamental state laws, as distinguished from mere state regulation of rates and services.

(c) The claim of FPC counsel that the FPC orders did not direct continuance of illegal contractual arrangements is frivolous.

FPC counsel now claim (Br., p. 72) that the FPC order of October 27, 1949 contained a provision eliminating from the FPC orders "any provision which might be held unlawful in the course of Penn Water's antitrust litigation against Consolidated".

Obviously the D. C. Circuit recognized that the FPC had purported to continue arrangements violative of the antitrust laws. A large portion of the opinion of the majority was devoted to an argument in support of the FPC's power to do so, and the entire minority opinion was occupied with arguments to the contrary.

FPC counsel at one time asserted that the provisions of the Baltimore contract excluded are those of Articles IV and V and only such articles. Since the filing of petitioners' main brief FPC counsel claim that a phrase in Article II is also excluded by the alleged exception (Br., p. 83, fn. 58).

The whole contention is without foundation.

The principal FPC orders were those of January 5 and February 28, 1949. As pointed out in our main brief (pp. 48-52 and 58 to 68), those orders directed the whole "present arrangement" to be continued, merely changing the rate of return. There was no exception whatsoever in the orders. The order of February 28, 1949 expressly approved the restrictions contained in Article IV (on Penn Water's right to contract) and Article V (on expansion of Penn Water's facilities), and said no change could be made in the arrangement by Penn Water without filing the change with the FPC for its approval.

Following the entry of such orders, petitioners petitioned the D. C. Circuit, pursuant to Section 313(b) of the Act, to review the orders and the FPC filed the transcript

with the D. C. Circuit. Thereafter pursuant to that Section, that Court had "exclusive jurisdiction to affirm, modify, or set aside such order in whole or in part."*

Thus the FPC order of October 27, 1949 was issued after the D. C. Circuit had exclusive jurisdiction to modify the original orders. It was also issued without any notice or any opportunity for hearing. Yet this is the order which contains the claimed exception.

The October 27, 1949 order approved the specified return method of payment, made further downward adjustment of rates so that the rate of return was reduced from the specified 5¼% to 4¾%, and then stated:

> "All other provisions of the aforementioned contracts, in and of themselves lawful prescribing or defining the power, energy and transmission services to be furnished, or any classification, practice, regulation or rule affecting such services, which several provisions are incorporated herein by reference, shall be observed and be in force" (R., Vol. 17, p. 5283).

This was obviously not designed to except any provision, but an attempt to sustain the legality of all the provisions of the contract to assist the intervenors, with whom the FPC has cooperated from the beginning of these litigations.

It was not until after the decision of the District Court sustaining the Baltimore contract had been reversed by the first Fourth Circuit decision, September 30, 1950, that this theory (admitted by FPC in its Brief, p. 31 to be a mere construction of the order) was evolved by FPC counsel and presented in their answer (November 28, 1950) to petitioner's motion to bring the Fourth Circuit decision before the D. C. Circuit in this case.

The contention of FPC counsel that certain contractual provisions were excepted, turns on the phrase "provisions of the aforementioned contract, in and of themselves lawful". Counsel state that Articles IV and V are the

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* The stay order of the D. C. Circuit, entered April 29, 1949, did not and could not reserve any jurisdiction in the FPC to change its original orders once jurisdiction had been vested in that Court, as now claimed by FPC counsel (Br., p. 25).

illegal provisions, although there is no indication whatsoever in the FPC order that those are the illegal provisions referred to or that there are any illegal provisions intended to be referred to. If the FPC had in fact intended to exclude Articles IV and V from its orders, it would have been a simple matter to have done so.

As pointed out in our main brief (p. 60), the contention that Article IV was thereby excluded is destroyed by the very order itself which, in another portion, expressly provides that the exclusive dealing provision contained in Article IV shall be continued (R., Vol. 17, pp. 5272-3). Furthermore, FPC counsel now admit (Br., p. 60) that the exclusive dealing provision of Article IV has been continued, terming it a service. Again, the order clearly continues the payment method which FPC counsel concede is illegal revenue pooling between private parties (Br., pp. 60-61, fn. 44) and which they concede was listed among the illegal provisions in the second Fourth Circuit decision (Br., p. 68, fn. 46).*

At the time the October 27, 1949 order was entered, there had been no decision by any court in the contract litigation. There had been a trial in the District Court and briefs filed by petitioners setting forth the many illegal features of the contract. As FPC counsel state (Br., p. 72) the FPC at that time knew the claims of illegality being made by petitioners (FPC counsel had all the briefs and were present in all the Courts). The Penn Water briefs, which FPC counsel then had, claimed that many provisions of the Baltimore contract were illegal, including the payment provision and provision for an operating committee, as well as Articles IV and V (Briefs of September 15, 1949, October 4, 1949 and October 17, 1949, in District Court). The provision in the October 27, 1949 order was obviously an attempt to bless rather than exclude the illegal provisions.

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* Both the first and second Fourth Circuit decisions included among the illegal provisions, the provision for an operating committee which gave Consolidated a vote over all managerial decisions of Penn Water and Safe Harbor, respectively (R. Vol. 18, p. 5328, and 194 F. 2d 89, 93).

Furthermore, it is absurd to say that a mature administrative body like the FPC was leaving the contents of an alleged rate schedule to be determined by others in other proceedings, even if it had authority so to delegate its function. It had no authority to do so. It also had no authority after the filing of the transcript in the D. C. Circuit, April 22, 1949, *itself* to make any change in its prior orders, let alone delegate authority to make a change.

Another inconsistency of this claim of respondents should be pointed out. While they state that the FPC left to the Fourth Circuit in the contract litigation the determination of what terms of the Baltimore contract were to be continued by the so-called tariff, the intervenors at the same time claim that the Fourth Circuit decision was an improper attack on the order. These conflicting contentions will simply not stand up.

The contention is made even more absurd by the contrary assertion of FPC counsel that the FPC directed the continuance of all of the contractual provisions of the Safe Harbor contract, when there is no substantial difference in this connection between the orders on Safe Harbor and the orders on Penn Water, except that the orders on Penn Water, unlike the Safe Harbor orders, specifically mention and direct continuance of the very illegal provisions which FPC counsel now state are excluded.*

Intervenor Consolidated argued to this Court in its petition for certiorari in the Baltimore contract case, which was denied (p. 20):

> "The Commission necessarily *approved every provision of the Basic Agreement*, except the pecuniary amount of the rates". [Italics Consolidated's.]

Moreover, the exclusion of Articles IV and V, and even the phrase in Article II now mentioned by FPC counsel, does not eliminate the difficulty that the FPC ordered continuance of illegal arrangements. The illegalities are

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* Obviously FPC counsel are taking these opposite positions to suit the procedural situation, there being no review case pending over the FPC Safe Harbor orders.

not contained only in Articles IV and V of the Baltimore contract. They permeate the whole contract, as shown in detail in Penn Water's main brief (pp. 60-62). Confronted with the details of such permeation, FPC counsel apparently decided in their current brief to concede that at least some of Article II was also illegal and was intended to be excepted. FPC counsel have never stated what other provisions they may claim are excepted.

No attempt is made by FPC counsel to argue the legality of the other provisions. For example, it is stated (Br., p. 62) that they "are merely ancillary". In fact FPC counsel claim the FPC can disregard the illegalities and say in their brief (p. 84) "the Commission's order is not invalidated because the contract as such may have been permeated with 'illegalities'."

We do not wish to repeat the exposition in our main brief (pp. 60-62) of the permeation of the whole contract by the illegalities. We point out, however, as an example that Article VIII provides for an operating committee which, without any of the other provisions, gives Consolidated a veto power over all of the managerial decisions of Penn Water, and which was specifically held to be illegal by the Fourth Circuit in both of its decisions (R., Vol. 18, pp. 5328-9; 194 F. 2d 89, 93).

In any event, FPC counsel concede and assert that the orders continued the illegal revenue pooling method of payment and the exclusive dealing arrangement whereby Penn Water is required to purchase any supplemental power it may need or desire from Consolidated. This exclusive dealing provision was expressly held by the Fourth Circuit to be illegal *per se* under Section 3 of the Clayton Act in the Baltimore contract case (R. Vol. 18, p. 5331). These provisions in themselves place Penn Water under the domination and control of Consolidated and permit Consolidated to eliminate all competition on the part of Penn Water and all competition in the sale of power to Penn Water on the part of other utilities with which Penn Water is connected.

The revenue pooling provision, which removes all incentive on the part of Penn Water, is as effective an instrument for suppressing competition as the direct power to veto other business, and also is a clear violation of doctrines of fundamental state law. Through it and the exclusive dealing provision Penn Water has been made to surrender to Consolidated its initiative over rates and services and managerial controls over important phases of its business. These provisions make the arrangement *ultra vires* Penn Water, as the Fourth Circuit held.

Consequently, the claim of FPC counsel regarding the exceptions in the October 1949 order is not only fanciful but is also immaterial.

II. The FPC based important determinations in its orders on the assumed continuance of the illegal private contractual obligations.

If, as we contend, the FPC orders were based on assumed continuance of private contractual obligations and entitlements, and such obligations and entitlements did not exist, the orders were without foundation and must fall. There is here no question of finding statutory authority. There can be no statutory authority to issue orders on false foundations, whether on private contracts illegal under the antitrust laws, or state law, or on any other type of non-existent foundation.

Therefore, in this branch of the case it remains only to make plain that the orders are based on the assumed continuance of the private contractual obligations and not simply on operations. Three important determinations in the orders were so based:

(a) **Rate of return.** The FPC opinions plainly state that the low rate of 5¼% (reduced even further to about 4¾% by the October 27, 1949 order) was fixed because the contract assured Penn Water of "stabilized income" and the Court below held that thereby Penn Water was "insulated" from "any substantial risk" by the contract (FPC Br., p.

77). FPC counsel now say that the unilateral arrangement prescribed by the FPC provides the same "stabilized income" during whatever period the rates "are operative, be it a month, a year, or a decade". There is clearly no stability in such an arrangement.

Consolidated may decide to stop taking and paying for power under the unilateral arrangement at any time. The FPC issued no order requiring Consolidated to continue. Thus, as pointed out in our main brief (p. 53), this may occur after a period of high flow in the Susquehanna River when a large amount of power had been generated and delivered, leaving Penn Water to sell the relatively small amount of power coming from the river in low flow as best it can and thus receive much less than the allowed return. This is certainly not a "stabilized income".

The statement of FPC counsel (Br., p. 109) that the FPC was regulating the sale of the product of this so-called integrated, interstate system, some generated in Maryland and some in Pennsylvania, is erroneous. No investigation was made of Consolidated's rates and charges for its contribution; the only orders issued were against Penn Water.

There is simply no escape from the fact that the substitution of the Commission-prescribed unilateral arrangement will not provide for the same "stabilization of income".

(b) **Jurisdiction of the FPC over Penn Water's Pennsylvania business.** Here, again, FPC counsel claim the jurisdictional determination of the order as to Penn Water's Pennsylvania business is not based on the invalidated contracts (Br., pp. 75-6).

FPC counsel ignore the point made in our main brief (pp. 54-5) that one of the express bases for this jurisdiction was the purchase by Penn Water from Consolidated of energy generated by Consolidated in Maryland and brought across the state line into Pennsylvania for resale to the Pennsylvania utilities, along with power generated by Penn Water in Pennsylvania. This purchase was required by the illegal exclusive dealing provision of the contract.

Once Penn Water is free from this contractual compulsion vested in Consolidated to compel Penn Water to purchase this power from Consolidated, this basis of the jurisdictional determination disappears. Realizing that this is so, FPC counsel have refrained from making the claim (made about other illegalities), that the illegal exclusive dealing provision has been excepted from the contractual provisions directed to be continued.

The other basis of this jurisdictional determination found in the FPC order is that the facilities of Penn Water are, under the Baltimore contract, operated by Consolidated from Maryland, along with the facilities of Safe Harbor and of Consolidated itself, and that the three groups of facilities by reason of this contractual arrangement constitute one system which lies across state lines. Here again, once Penn Water is free of this operational direction from Maryland, there is no more basis for claiming that its facilities are part of one system along with those of Consolidated, than that its facilities are part of one system along with the facilities of any of the utilities with which it is connected in Pennsylvania—Metropolitan Edison (ME), Pennsylvania Power and Light (PP&L), or Philadelphia Electric (PE). This is so, because there is no physical, engineering or electrical difference between these connections, and without the arrangement of control by Consolidated, Penn Water can no more be said to be in a power pool with Consolidated than in a power pool with ME or PP&L or PE.

To have an effective power pool there is no need for the continuance of the arrangement under Consolidated control. The Pennsylvania customers, ME, PP&L and PE are interconnected and exchange energy and have an effective power pool as do other utilities throughout the country under unit rate arrangements customary in the industry without managerial controls by any one company over another.

The conclusion is inescapable that, absent the arrangement of control by Consolidated, there is no basis whatever for FPC jurisdiction over Penn Water's sale of electrical

energy generated in Pennsylvania and sold to Pennsylvania utilities for use in Pennsylvania.

(c) **Allocation of the rate reduction.** We showed in our main brief (pp. 55-57) how the FPC had awarded the major portion, 89%, of the rate reduction to Consolidated as against 11% to Penn Water's Pennsylvania customers.* We there showed that the allocation was not based on service actually being rendered, but on the alleged artificial entitlements of Consolidated and the alleged artificial obligations of Penn Water and Safe Harbor under both the Baltimore and Safe Harbor contracts.

The entitlements and obligations referred to are the alleged entitlements of Consolidated to receive, and the alleged obligations of Penn Water to furnish, all of Penn Water's power remaining after Penn Water's firm commitments to its Pennsylvania customers are fulfilled and Consolidated's alleged entitlement to receive, and Safe Harbor's alleged obligation to furnish, two-thirds of Safe Harbor's power. But absent the contracts, Consolidated has no entitlement to power generated by Penn Water which is not delivered to Consolidated for use in Consolidated's system. Similarly, absent the Safe Harbor contract, Consolidated has no artificial entitlement to Safe Harbor's power which is not delivered to Consolidated for use in Consolidated's system.

FPC counsel admit (Br., p. 81) that the allocation of the reduction "actually did follow that provided by the contracts."

Consequently, since the private contractual obligations and entitlements are concededly void, the two bases on which the FPC allocated the rate reduction are non-existent and the allocation must fall.

We should add that FPC counsel discuss this matter as if Consolidated would somehow be unfairly dealt with by

* There is nothing to the assertion by the respondents that the Pennsylvania customers have not intervened to complain, since the Pennsylvania Public Utility Commission has intervened and is representing their interests in this case and is making this complaint.

an allocation of a rate reduction based on actual service, but they give no reason for their assertions. On the other hand, they ignore the incongruous effect of the allocations in the FPC order which, as pointed out in our main brief (p. 10), would have resulted in a net credit to Consolidated of $616,000 for the test year 1946. Although in that year Consolidated received a substantial amount of electric service from Penn Water, Consolidated would not only have not paid for such electric service, but would have received a cash bonus—all at the expense of Penn Water and its Pennsylvania utility customers.

These three important determinations contained in the FPC orders must fall, regardless of whether the FPC has any authority under the Federal Power Act to continue arrangements illegal under the antitrust laws. They are founded on erroneous assumptions. They are founded on private contractual obligations and entitlements which have been adjudicated among all the parties thereto to be invalid and non-existent. This would be so irrespective of the legal reason for the invalidation of the contracts. It is immaterial in this branch of the case that one of the legal reasons was the antitrust laws. The same result would have to be reached if the Fourth Circuit had held, for example, that the Baltimore contract no longer existed because of its termination for breach, by Penn Water's written notice of December 21, 1948, which not only declared the contract void for illegalities, but also terminated it on account of material breaches by Consolidated. The Fourth Circuit did not have to decide this matter of breach because it found the Baltimore contract void *ab initio* (R., Vol. 18, p. 5349).

III. FPC counsel fail to explain how Part II of the Act can be applicable to licensees under Part I.

The essential dilemma in trying to argue, as FPC counsel do, that Part II of the Act is applicable to licensees under Part I, such as Penn Water, is the clear inconsistency of the regulatory systems of the two Parts. Under Part I interstate rates and services of licensees are subject to regulation by the states involved, unless they are unable to agree, and then by the FPC; under Part II regulation in all cases is by the FPC. The Act is silent, if both Parts are applicable to a licensee, as to which regulatory system shall govern. This point alone should show that Congress did not intend both parts of the Act to be applicable to licensees.

To meet this dilemma FPC counsel argue that Section 20 of Part I does not mean what it says, that the states do not now have the power to regulate by agreement the interstate wholesale rates and services of licensees thereunder and that Congress enacted Part II in 1935 on that assumption. FPC counsel concede in their brief (p. 127) that the "sponsors of the Act" (the Federal Water Power Act of 1920) "believed that the power of the States was not limited to interstate retail rates." Moreover, when Congress enacted Part II in 1935, it simultaneously reenacted the Federal Water Power Act as Part I of the Federal Power Act, *without changing the language of Section 20,* an astounding performance if what FPC counsel states were correct. FPC counsel say that Congress made this new assumption in 1935 despite the express words of the section to the contrary.

FPC counsel state that Congress made this assumption because of this Court's decision in the *Attleboro* case, 273 U. S. 83 (1927). But this is unsound. The *Attleboro* case simply decided that one state could not regulate the interstate wholesale rates of an ordinary public utility, but had nothing to do with regulation of interstate wholesale rates by two states under compact powers expressly given

to them in Section 20 of the Federal Water Power Act (now Part I of the Federal Power Act) by Congress.

FPC counsel fail to discuss the decision of the Third Circuit in the first *Safe Harbor* rate case, 124 F. 2d 800 (1941), cert. den. 316 U. S. 663 (1942), which is the only applicable and controlling decision on the question. The basic holding of this case was that the States of Maryland and Pennsylvania had the right to regulate the interstate wholesale rates of Safe Harbor under Section 20 of Part I, and possessed the constitutional power to do so.*

We should add that the dilemma regarding dual regulation was not solved by the Third Circuit in the second *Safe Harbor* rate case, 179 F. 2d 179 (1949), cert. den. 339 U. S. 957, relied on by FPC counsel, as explained in our main brief (pp. 78-79).

The dilemma is insoluble and prevents any sound determination that Part II is applicable to licensees under Part I.**

The dilemma can only be avoided by adopting the simple construction indicated by the wording and structure of the Act—that Part I is applicable to licensees, Part II to public utilities in interstate commerce other than licensees, and Part III to both.

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* The cases cited by the FPC in its brief (p. 125) are inapplicable since they, like the *Attleboro* case, involved no question of the power of two states to regulate under compact, and none of them even considered Section 20 of the Federal Power Act.

** FPC counsel also fail to show that the rate base defined for licensees under Part I is the same as the discretionary rate base determined by the FPC under Part II, for the reason they give is a *non sequitur*. They merely say that because the *rates* to be established as provided in Part I are just and reasonable rates and the *rates* to be established under Part II are also just and reasonable rates, the *rate base* must therefore be the same.

FPC counsel avoid any discussion of the plain fact that Section 3(13) of Part I of the Act provides expressly that net investment (rate base) shall be that provided for in "Classification of Investment in Road and Equipment of Steam Roads, Issue of 1914, Interstate Commerce Commission", and that under that classification concededly no deduction from investment accounts is made on account of depreciation until property is retired.

That simple construction of the Act would also, as Congress intended, give licensees of the Federal Government the rights to which they are entitled to match the severe duties and obligations imposed on them, described in our main brief (pp. 83, 84), to which ordinary public utilities are not subject.

IV. Miscellaneous contentions and incorrect statements of the Respondents.

The briefs of the FPC and the intervenors make a number of contentions and incorrect statements regarding matters which are either irrelevant or of no great significance. There is no necessity to deal with these in detail but certain of them will be briefly disposed of. We do not deal at all with intervenors' statements arguing as to the validity or invalidity of the Baltimore and Safe Harbor contracts, since those matters stand as *res judicata*.*

A. FPC Brief.

1. **Penn Water is not Dependent on Consolidated's Steam Generation.** It is claimed that Penn Water must have Consolidated's steam generated electricity and is thus dependent on Consolidated (FPC Br., pp. 13, 45). The claim is baseless. The three Pennsylvania utilities with which Penn Water is connected all have large steam electric generating capacities and serve the same type of customers as Consolidated. If Penn Water needs supplemental steam generated electricity, it would be free to obtain it from these other utilities. Penn Water has been required to purchase supplemental electricity from Consolidated because of the illegal exclusive dealing provision of the Baltimore contract.

Penn Water at the present time has hydro-generated power and a small amount of steam-generated power for

* Since the FPC orders are founded on both the Baltimore and Safe Harbor contracts, the adjudicated invalidity of the Baltimore contract is sufficient basis regardless of the Safe Harbor contract for setting aside such orders.

sale to other utilities. This electricity can be sold by Penn Water at less than it costs these neighboring utilities to generate their own power and is readily saleable to them when, and in the quantities, available. If Penn Water has necessity, as FPC counsel assert, for "firming up" its hydro-generated electricity with steam-generated electricity, it could purchase from any connected utility in the absence of the illegal exclusive dealing provision of the FPC orders.

2. **Feasibility of Unit Rates.** FPC counsel assert (Br., p. 47) that there are too many uncontrollable variables to permit the unit rate basis for Penn Water's tariffs. There is obviously nothing to this. No one knows in advance how much power any utility is going to sell during a given period of time and rates established as reasonable by a regulatory body are not guaranteed by that body. As pointed out in our main brief (pp. 66, 67), the unit rate in the words of the Civil Aeronautics Board preserves "incentive toward the accomplishment of decreased costs and increased revenue" and, in the words of this Court, forces utilities "within a given class to compete in securing revenues and in reducing or controlling costs". *TWA* v. *CAB*, 336 U. S. 601, 606-7 (1949).

Penn Water's contracts with the Pennsylvania utilities are on the usual unit rate basis. The specified return method of payment is virtually unheard of in the industry except in the case of a parent and a wholly-owned subsidiary, where the subsidiary is an incorporated "vest pocket" of the parent and the contract is a mere matter of bookkeeping.*

3. **Alleged Concessions by Penn Water.** FPC counsel make unsupported assertions that petitioners have made numerous concessions regarding the FPC rate orders. We wish to inform the Court that no such concessions have been made. Petitioners do not concede, for example, that

* The Conowingo contract mentioned by intervenors was made in such a situation. This contract did not contain any managerial controls by the purchaser over the seller.

the FPC orders were authorized by or conform to the standards of the Federal Power Act (FPC Br., pp. 29, 38, 39, 60); or that the orders are supported by substantial evidence, or that the rate reduction was not excessive (FPC Br., pp. 36, 79).

There is no concession, as stated by FPC counsel (Br., p. 40 fn. 30) that Penn Water's sales to Consolidated are subject to the Commission's jurisdiction. We concede that such sales are in interstate commerce and subject to whatever regulatory system Congress has provided, but we contend that such system is regulation under Section 20 of Part I by the states if they can agree and, only if they cannot agree, by the FPC.

4. **Suggestion of Application by Penn Water to FPC for Relief from Restraints Ordered by It.** The contention is made that privately exercised restraints, such as Consolidated's control over Penn Water's expansion of facilities, are valid because Penn Water can apply to the FPC to have them lifted. That the FPC might change an illegal restraint does not make it valid while in force.

As pointed out above, by giving these restraints over Penn Water to Consolidated, and then claiming that a violation of the restraints would be a violation of an order of the FPC, FPC counsel are seeking to obtain for the FPC a power over non-project facilities which it does not have under the Act.

The whole idea that the FPC has power to, or will, police the performance of the arrangement in the public interest is specious. The FPC did not even so much as express concern over Consolidated's action in prohibiting Penn Water from building its new steam plant. On the contrary, the FPC in its order of February 28, 1949 subsequently praised the very contract provision under which that action had been taken. The FPC did nothing about Consolidated withholding over $900,000 (up to December 1948) from Penn Water. In fact, it expressly refused to take any action (R. Vol. 16, p. 4960).

Also, the FPC refused to investigate Consolidated's rates and charges for the power it sold to Penn Water and issued orders only against Penn Water, notwithstanding that such rates and charges were for interstate wholesale rates and regulatable to the same extent Penn Water's rates and charges were regulatable, and notwithstanding that Penn Water had requested such regulation.

5. **Incorrect Statement as to Penn Water's Retail Rights.** It is claimed in the FPC brief (p. 7) that Penn Water has no retail "franchise service area". This flies directly in the face of the decision of the Fourth Circuit, which is binding on all the necessary parties, including the Maryland and Pennsylvania Commissions, that Penn Water itself has charter rights to sell power at retail in Pennsylvania, and that its wholly-owned subsidiary, Susquehanna Transmission Company of Maryland, has charter rights to sell electricity at retail in Maryland (R., Vol. 18, p. 5326).

At the present time, Penn Water does not have any retail distribution system. However, as the Fourth Circuit found, Penn Water sold electricity to the street railway company in Baltimore up until the time during the period of Aldred control when the business was taken away from Penn Water and given to Consolidated (R., Vol. 18, pp. 5325, 5329).

Neither the FPC nor the intervenors question that both Consolidated and Penn Water have the right to and do sell at wholesale.

6. **References to Statements of Penn Water Officers.** FPC counsel point to testimony of officers of Penn Water and annual reports of Penn Water praising the contractual arrangement. They fail to state, however, that such statements were made at a time before Consolidated had used the controls of the agreement, culminating in Consolidated's use of its controls to prevent Penn Water from building its new steam generating plant. They also fail to state that the reports referred to were issued in the period of Aldred control, from 1910 at least through 1946.

7. **Alleged Failure to Challenge FPC Order of October 27, 1949.** The claim is made (FPC Br., p. 22 fn. 21) that Penn Water has not challenged the reduction of its rate of return from 5¼% to about 4¾% by the FPC order of October 27, 1949. We cannot understand this because Penn Water separately petitioned for review of the whole October order (R. Vol. 17, p. 1), argued the matter before the District of Columbia Circuit and listed affirmance of the order in its petition for certiorari (p. 1) and its main brief herein (p. 20) as among the errors to be urged.

8. **Alleged Resemblance to Cost-Plus Contract.** FPC counsel assert (Br., p. 93) that the illegal revenue pooling arrangement is like a cost-plus contract and that cost-plus contracts are not *ultra vires*. There is faint resemblance between the payment arrangement present here and an ordinary cost-plus contract although each have the same vice of removing incentive, the cost-plus contract to a much lesser degree.

Usually, cost-plus contracts are not made between competitors, and do not relate to the entire business of one of the contracting parties. Under an ordinary cost-plus arrangement there is no managerial control by a purchaser over a seller and the seller is free to do as much business as it pleases with others. A cost-plus contract covering the entire business of a company made with a competitor would be illegal, just as the payment provision here is illegal, since both remove incentive and eliminate competition.

No cost-plus arrangement would ever result in the purchaser receiving the commodity plus a cash bonus as the present arrangement would have resulted in the test year 1946, as previously pointed out. Also, under a cost-plus contract, the return is not fixed without any relation to the amount of the commodity furnished, as it is in this case.

B. Intervenors' Briefs.

1. **Suggested Initiation of New Rate Case.** Intervenors' counsel contend that Penn Water must file a new tariff and

have a new proceeding before the FPC and the courts in order to obtain relief from this restrictive arrangement.

There is nothing to this. The issues are before this Court in this proceeding. If Penn Water had abandoned review of the present orders and filed a new arrangement with the FPC, the FPC would undoubtedly have contended that this case was a precedent for its authority to impose the contractual arrangements.

In fact, Penn Water did file a new arrangement, February 6, 1951, at the earliest possible moment it could legally do so. This was immediately after the District Court on January 17, 1951, pursuant to the mandate of the Fourth Circuit, dissolved the preliminary injunction obtained by Consolidated requiring Penn Water to perform both the Baltimore and Safe Harbor contracts. But the FPC rejected this new tariff on the ground, among others, that to be permitted to file new schedules Penn Water "must recognize" the existing FPC orders. Thus, the FPC sought to put Penn Water in a position of barring itself from continuing to appeal from such orders.

This argument of intervenors' counsel is simply an attempt by them to avoid decision of the real issues, notwithstanding the years of litigation and expense which have been incurred by all parties to get such issues before this Court.

2. **Misstatement as to Penn Water's Intent Regarding Interstate Operations.** There is no attempt here, as intervenors contend, on the part of Penn Water to stop selling power to Consolidated and thereby withdraw from interstate commerce. Penn Water has repeatedly declared its readiness to continue to furnish power to Consolidated and thereby to subject itself to whatever regulatory system Congress has imposed on such sales. Penn Water does, however, contend that its Pennsylvania sales of power generated in Pennsylvania are not in interstate commerce but are subject to the regulation of the Pennsylvania Commission.

3. **Misstatement as to Safe Harbor's Status.** Intervenors repeatedly refer to Safe Harbor as being wholly-owned by Penn Water and Consolidated or as being jointly owned by them. Neither statement is correct. Safe Harbor is not a wholly-owned subsidiary of either Penn Water or Consolidated, nor do Penn Water and Consolidated own its stock jointly; each owns separately one-half of the voting stock of Safe Harbor. The stock is in no way tied to the power contract and is free for sale to anyone at any time. Thus all or any part of the voting stock may at any time come into the ownership of someone having no relation whatever to the power contract.

4. **Misinterpretation of Passage in Second Fourth Circuit Decision.** Intervenors say that in the Safe Harbor contract case the Fourth Circuit said that the FPC had not prescribed the provisions of the contract, including the illegal provisions, as if that meant that the Fourth Circuit had said that the FPC had not approved all the provisions. What the Fourth Circuit was doing at this point in its opinion was answering a minor controversy brought about by a statement in Penn Water's brief in the case as to whether the FPC had originated the provisions or whether the FPC had simply approved provisions which it found in the agreement and which were originated by John E. Aldred and associates.* The Fourth Circuit said that the latter

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*Penn Water Brief in answer to Brief of the FPC, p. 17: "The plain fact is, as shown by the FPC opinion and order of 1946 in the *Safe Harbor* case (Tr. 477-568), that the FPC did not itself prescribe the provisions of the Safe Harbor contract. As this Court found in the prior case (Op. 7, 9, 10), the Safe Harbor contract was drafted in 1931 while the parties were under the control of J. E. Aldred and associates. The contract was required to be filed with the FPC by general order of the FPC issued under the Federal Power Act. All that the FPC in its opinion and order in the *Safe Harbor* rate case did, was to change the rate, that is, the amount to be charged by Safe Harbor for its electricity. The FPC simply assumed the contract provisions. The opinion and order in the rate case are devoid of language appraising or evaluating the beneficial or detrimental effects of the contract provisions. There was no issue before the FPC in the *Safe Harbor* rate case as to any such matter."

was the case. This portion of the opinion is only a statement of the case, not a basis of decision, since the Fourth Circuit clearly held that the FPC had no authority under the Federal Power Act to exempt the contract from the antitrust laws and that the courts were not ousted from jurisdiction to determine antitrust law questions.

5. **Statement as to Continuance of Services.** Intervenors say that the contractual arrangements have been performed right along, even since Penn Water's claim of invalidity in December, 1948. But Penn Water was under court injunction, obtained by Consolidated, to perform both the Baltimore and Safe Harbor contracts until dissolution of the injunction January 17, 1951. Thereafter, on February 6, 1951 petitioners tried to file with the FPC rate schedules for new arrangements with Consolidated, but the rate schedules were rejected by the FPC. Penn Water then had to await the decision of the D. C. Circuit and now of this Court before taking further action.

6. **Statement Regarding Allocations.** Intervenors state that allocation of a rate reduction is a matter of fact to be determined at the administrative level. But this is clearly not so when the reduction being allocated, as well as the allocation, is expressly based on a non-existent foundation, as is the case here. Moreover the courts clearly have power to review and set aside plainly erroneous calculations and allocations.

7. **Statement Regarding Dissenting Opinion Below.** Intervenors say that the dissenting opinion below recognized the validity of the payment provision of the Baltimore contract. This is incorrect. The opinion clearly recognized that the Fourth Circuit invalidated the entire contract (R. Vol. 18, pp. 5409-12).

8. **Statement Regarding Motions to Set Aside.** Intervenors seem to intimate that petitioners did not call the Fourth Circuit's Safe Harbor contract decision to the

attention of the D. C. Circuit. On the contrary, just as soon as the District Court decided the Safe Harbor contract was invalid, petitioners moved to bring that decision before the D. C. Circuit and also presented the decision to the D. C. Circuit later in a motion for rehearing and that decision is part of the record in this case (R. Vol. 18, p. 5361).

9. **Statement as to Relief.** Intervenors contend that Penn Water has changed from time to time the relief it asked for in this case. There is nothing to this. Penn Water has always asked for the equitable relief the situation calls for. The words used may have varied but their import was the same. All the prayers for relief in the petitions for review and the motions in the D. C. Circuit ask for such relief as may be just in the premises.

The orders of the FPC are illegal and should be set aside and Penn Water should be permitted to file with the appropriate regulatory authorities new arrangements not incorporating the illegal contractual features. The moneys segregated under the D. C. Circuit stay order and FPC stay order are in the jurisdiction of the Courts and should be dealt with by them in an equitable manner.

Conclusion.

It is respectfully submitted that the judgment and orders of the D. C. Circuit should be in all respects reversed and the D. C. Circuit should be directed to grant petitioners' motions to set aside the orders of the FPC.

WILKIE BUSHBY,
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JAMES PIPER,
RAYMOND SPARKS,
Counsel for Petitioners.

April 1, 1952.

Appendix I

GENERAL REGULATORY POWERS OF FEDERAL COMMISSIONS AND STATUTES CONTAINING ALSO SPECIFIC PROVISION FOR LIMITED INAPPLICABILITY OF THE ANTITRUST LAWS

1	2	Matter Subject to Regulation					Matter Subject to Regulatory Supervision and Determination						
		3	4	5	6	7	7	8	9	10	11	12	13
Industry	Regulatory Statute	Rates, Regulations, Contracts, etc.	Divisions of Rates	Discriminatory Practices	Service	Compulsory Interconnections Through Service	Compulsory Interconnections, Through Service	Pooling of Revenues	Acquisition of Control	Mergers and Consolidations	Issue of Securities	Extensions or Abandonments	Rate Associations
Railroad	Interstate Commerce Act, Part I (49 U. S. C. §§1-27)	§§1(5), 15(1)	§§1(4), 15(6)	§§3(1), 15(1)	§§1(4), 1(10)-1(17), 1(21)	§§1(4), 3(4), 15(3)	§§1(4), 3(4), 15(3)	§5(1)	§5(2) *et seq.*	§5(2) *et seq.*	§20a	§§1(18)-(21), 5(2)(a)(ii)*	§5b
Motor Carrier	Interstate Commerce Act, Part II (49 U. S. C. §§301-327; §§5, 5b)	§316(a), (b), (c), (e), (g)	§316(a), (e), (f)	§316(d)	§§304(a)(1), (3), 316(b)*	§316(a), (e)	§316(a), (e)	§5(1)	§5(2) *et seq.*	§5(2) *et seq.*	§314	§§306-312	§5b
Water Carrier	Interstate Commerce Act, Part III (49 U. S. C. §§901-923; §§5, 5b)	§§905(a), 907(b)	§907(d)*, (e)*	§§905(e), (d), 907(b)	§905(a), (b), (d)	§§905(b)*, 907(d)*	§§905(b)*, 907(d)*	§5(1)	§5(2) *et seq.*	§5(2) *et seq.*		§§909-912*	§5b
	(Also, Shipping Act, 46 U. S. C. §§801-842)			§§812-816				§814					§814
Freight Forwarders	Interstate Commerce Act, Part IV (49 U. S. C. §§1001-1022)	§§1004(a), 1006(b), 1015		§§1004(b), (d), 1006(b)	§1004(a)				§1011			§§1010, 1011(b)	§5b
Aeronautics	Civil Aeronautics Act (49 U. S. C. §§401-705)	§§484(a), 642(d), 642(i)	§§484(a), 642(h)	§§484(b), 642(f)	§§484(a), 551 *et seq.*	§642(i)	§642(i)	§492	§§488, 489, 493	§§488, 493		§481	§492
Telephone	Federal Communications Act (47 U. S. C. §§151-609)	§§201(b), 205	§201(a)*	§§202, 205	§§201(a)*, 214(d)*, 215*	§§201(a)*, 214(d)*	§§201(a)*, 214(d)*		§221	§221		§214*	
Telegraph	Federal Communications Act (47 U. S. C. §§151-609)	§§201(b), 205	§201(a)	§§202, 205	§§201(a), 214(d), 215	§§201(a), 21	§§201(a), 214(d)		§222	§222		§214	

NOTES: (1) All but starred (*) items were contained in substantially the present form in regulatory statute prior to, or were enacted concurrently with, first enactment of specific antitrust exception provision.

(2) **Bold type** section numbers indicate Commission action covered by specific antitrust exception provision.

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IN THE

Supreme Court of the United States

October Term, 1951

No. 429

PENNSYLVANIA PUBLIC UTILITY COMMISSION,

Petitioner

v.

FEDERAL POWER COMMISSION,

Respondent

PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

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I. The decision of the D.C. Circuit, holding that where electric energy is produced in Pennsylvania and thereafter commingled with electric energy flowing from another state and sold to Pennsylvania customers and where the respective portions of such energy are ascertainable, is contrary to the decisions of your Honorable Court in Peoples Gas Company v. Public Service Commission, 270 U.S. 550 (1926) and Lone Star Gas Company v. Texas, 304 U.S. 224 (1938)	21

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III. The decision of the D.C. Circuit affirming FPC's determination of jurisdiction over Penn Water's sales in Pennsylvania is in conflict with the decision of the Fourth Circuit and erroneous because such determination, and the D.C. Circuit decision, are based upon the assumed existence and continuance of the illegal Baltimore and Safe Harbor contracts 37

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IN THE
SUPREME COURT OF THE UNITED STATES

October Term, 1951

No.

Pennsylvania Public Utility Commission,

Petitioner

v.

Federal Power Commission,

Respondent.

PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

Petitioner, Pennsylvania Public Utility Commission, prays that your Honorable Court issue a writ of certiorari to review the judgment and orders of the United States Court of Appeals for the District of Columbia Circuit (herein-

after called D. C. Circuit) entered in the above case on July 3 and 6, and September 6, 1951, (Printed Record Vol. 18 pp. 73, 74, and p. 78) denying motions to annul or remand and affirming orders of the Federal Power Commission. The judgment and orders were entered by a divided court and in direct conflict with the unanimous decision of the United States Court of Appeals for the Fourth Circuit from which this Court denied certiorari[1], and the decision of the United States District Court for Maryland,[2] declaring illegal certain contracts and holding in effect that FPC had no authority to validate them by the orders here involved. These contracts so declared illegal are the basis for the orders of FPC and terms thereof are required by said orders to be continued in effect.

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[1] **Pennsylvania Water & Power Company et al. v. Consolidated Gas Electric Light Power Company of Baltimore et al.**, 184 F. 2d 552 (1950), cert. den. 340 U. S. 906 (1950), 186 F. 2d 934 (1951).

[2] **Pennsylvania Water & Power Co. et al. v. Consolidated Gas Electric Light & Power Co. et al.**, 97 F. Supp. 952 (1951).

OPINIONS AND ORDERS BELOW

The opinion and order of FPC dated January 5, 1949, the opinion and order of February 28, 1949, and opinion and order of October 27, 1949, are found at R. Vol. 16 pp. 39-191; Vol. 16 pp. 372-388; Vol. 17 pp. 46-71; the majority opinion of the D. C. Circuit (R. Vol. 18 pp. 46-72) per Bazelon, Circuit Judge, in which Fahy, Circuit Judge, joined is not yet officially reported. The dissenting opinion of Wilbur K. Miller, Circuit Judge, was filed on October 4, 1951. The order denying rehearing, to which Judge Miller also dissented, is found at R. Vol. 18, pp. 78.

JURISDICTION

The jurisdiction of this Court is invoked under Section 1254(1) of the Judicial Code (62 Stat. 928, 28 U.S.C. §1254) and Section 313(b) of the Federal Power Act (49 Stat. 860, 16 U.S.C. §825 l).[3]

STATUTES INVOLVED

The statutes of the Commonwealth of Pennsylvania involved are set forth in Appendix A.

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[3] The judgment of the D. C. Circuit was entered on July 3, 1951. Petitioner's motion for rehearing was denied September 6, 1951, (R. Vol. 18 pp. 73-74). Application for a stay of certification to the FPC of the opinion and judgment (in lieu of mandate) of the D. C. Circuit pending application to this Court for a writ of certiorari and final disposition of the cases was duly made, and the orders granting and extending the stay were entered September 17, 1951, and October 15, 1951, respectively.

STATEMENT

FPC orders, which the D. C. Circuit affirmed, were issued in proceedings to determine the reasonableness of rates charged for the energy supplied by Pennsylvania Water and Power Company and Susquehanna Transmission Company of Maryland to Consolidated Gas, Electric Light & Power Company of Baltimore, Pennsylvania Power and Light Company, Philadelphia Electric Company and Metropolitan Edison Company. The latter three electric companies are located in Pennsylvania. These orders required a reduction in rates as well as continuance of substantive provisions of a contract between Penn Water and Consolidated.[4] The amount and allocation of the reduction were based upon said contract. Determination of FPC jurisdiction over Penn Water's wholesale sales in Pennsylvania and the allocation of the reduction between Consolidated and the Pennsylvania customers of

---

[4] The Baltimore contract consisted of three agreements dated December 31, 1927, June 1, 1931 and September 29, 1939 between Penn Water and Consolidated (R. Vol. 15, pp. 4577-4603; 4606-4621).

Penn Water were predicated upon the assumed existence and continuance of such contract. A further contract between Penn Water, Consolidated and Safe Harbor Water Power Corporation[5] was likewise the basis for important features of the order. FPC designated these contracts "the foundation contracts" of its orders. These contracts were adjudicated by the unanimous decision of the United States Court of Appeals for the Fourth Circuit and by the United States District Court for Maryland to be illegal and void **ab initio** in their entirety, as being in violation of the laws of Pennsylvania governing public utilities as well as Federal antitrust laws and public policy.

Litigation was begun in the Fourth Circuit prior to the first FPC order involved (January 5, 1949) and was formally brought to the attention of FPC by petitions for rehearing. FPC, however, held that the illegality of the contracts was immaterial to its orders. The decision of the Fourth Circuit (R. Vol. 18, pp. 1-28) was

[5] The Safe Harbor contract consisted of three agreements dated June 1, 1931, August 1, 1932 and November 22, 1939 between Safe Harbor, Consolidated and Penn Water (R. Vol. 15, pp. 4554-4576). In the case of each contract the basic agreement was the one dated June 1, 1931.

rendered and certiorari denied by your Honorable Court while review of the FPC orders by the D. C. Circuit Court was pending. The decision was brought to the attention of that Court by formal motions.

The Fourth Circuit held that the interchange of electricity should be by some method which "will not infringe either the [Federal] antitrust laws or the utility laws of Pennsylvania". The D. C. Circuit held, in effect, that "anti-trust criteria" do not apply to orders of the FPC and that the FPC could order continuance of what would otherwise be an illegal contractual arrangement and could base important features of its orders thereon. The D. C. Circuit did not discuss the adjudicated invalidity of the contracts under the Pennsylvania Public Utility Law and public policy.

The D. C. Circuit decision permits and, for the first time, enables FPC to dictate complete terms and conditions by and under which public utilities subject to its jurisdiction may operate. Further, FPC may now dictate the terms of any contract between public utilities and may dictate all intercorporate relations, notwithstanding the opposition of management of any or all of the utilities involved, or the legality thereof under federal or state laws.

The effect of its decision was to hold such invalidity wholly immaterial and to permit the FPC to incorporate into its rate orders provisions which destroy initiative in establishing reasonable rates and services although such initiative was required to be preserved under the Pennsylvania Public Service Company law (in effect when the Baltimore contract was made) and the Pennsylvania Public Utility Law, which is now in effect, and although the D. C. Circuit Court itself concedes (R. Vol. 18, p. 53) that the preservation of such initiative is a "condition precedent to proper operation of the rate making process."

The decision of the D. C. majority is not only in direct conflict on questions of Federal law of great importance with the unanimous decision of the Fourth Circuit and other courts, but the conflicting decisions relate to the identical contracts. The decision of the Fourth Circuit will have been rendered ineffective by the decision of the D. C. Circuit majority if this petition is not granted by Your Honorable Court.

Determination by Your Honorable Court of the validity or illegality of the contracts involved is of vital importance to your petitioner and the Commonwealth of Pennsylvania, as well as to the public utility commissions and the respective

states throughout the United States of America. The holding of the D. C. Circuit, affirming the action of FPC assuming jurisdiction of wholesale sales of electric energy within a state of energy produced within that state, is so inextricably based upon the contracts declared by the Fourth Circuit to be illegal and void **ab initio** that if FPC is denied the power to enforce the illegal contracts under the guise of rate orders, the basis for its finding and conclusion that the sales are in interstate commerce will have been removed.

THE PARTIES INVOLVED AND THEIR INTERESTS AND BUSINESSES.

Pennsylvania Public Utility Commission, your petitioner, is the administrative agency within the Commonwealth of Pennsylvania to which has been delegated the power and upon which has been conferred the duties of enforcing the public utility laws and of regulating rates and services of public utilities engaged in intrastate commerce.

Penn Water and Safe Harbor are Pennsylvania electric utility corporations subject to the jurisdiction of your petitioner. Both corporations own hydroelectric generating plants on the Susquehanna River. Penn Water also owns a steam generating plant and transmission lines in Pennsylvania, and, through its wholly owned subsidiary, transmission lines in Maryland. The present business of such companies is the sale of electric energy at wholesale and in bulk.

Penn Water's wholesale customers include PE, PP&L and ME. These are Pennsylvania electric utilities, having steam electric generat-

ing plants and transmission and distribution facilities in Pennsylvania, and sell both at wholesale and at retail. They are also subject to the jurisdiction of your Petitioner, Pennsylvania Public Utility Commission.

Consolidated is a Maryland electric utility corporation with steam electric generating, transmission and distribution facilities in and around the City of Baltimore, Maryland. Consolidated has generating capacity several times that of Penn Water or Safe Harbor and is in the business of selling electric energy at wholesale and in bulk as well as at retail.

THE CONTRACTS

The invalidated Penn Water, Baltimore and Safe Harbor contracts, which would have remained in effect until 1980, provided for payments by Consolidated for power, not on a unit rate basis, but on a basis which would provide to the seller recovery of operating expenses including taxes and a specified return on investment, regardless of the amount of power delivered or extent of services rendered, with a credit to Consolidated for revenues received from sales of power to others. This arrangement is in clear violation of the Pennsylvania Public Utility Law which requires utilities to establish and maintain reasonable rates and furnish adequate service. The obvious purpose and effect of the arrangements in issue are to remove incentive to compete, to expand or to effect operating economies. The contracts contain closely associated provisions providing for control by Consolidated over the contracts, sales, purchases, prices, output and expansion of both Penn Water and Safe Harbor which are also illegal under Pennsylvania law, public policy and the antitrust laws, and were **specifically** alluded to as being illegal

under such laws by the decisions of the Fourth Circuit and the District Court for Maryland.

The contracts surrender control of Penn Water and Safe Harbor to Consolidated, stifle their initiative with respect to rates and services and virtually destroy the independent corporate character of these Pennsylvania corporations. The provisions of the contracts have been used by Consolidated to interfere with Penn Water's and Safe Harbor's contracts with their Pennsylvania customers[6] and to prohibit Penn Water from building a new large steam electric generating plant in 1948 from which badly needed power could have been economically produced.

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[6] PP&L, PE and ME. The contracts with these customers are all on the customary unit rate basis, i. e., payment based on amount of power delivered and without managerial control and restraints by the purchaser over the seller.

PROVISIONS OF THE FPC ORDERS

FPC in its opinion denying rehearing (February 28, 1949) held immaterial to its rate orders the possible illegality of the Baltimore and Safe Harbor contracts. It directed continuance of the existing illegal pooling arrangement of the Baltimore contract as follows:

> "The present arrangement whereby sales to Pennsylvania customers are made on a firm basis on definite rate schedules whereas Baltimore Company takes what is left and assures Respondents (Penn Water and Susquehanna Transmission Company) of the recovery of all proper operating expenses, depreciation, taxes and a fair rate, is the most practicable under the circumstances. That arrangement will, therefore, be continued * * *" (R. Vol. 16, p. 379). (Matter in parenthesis added.)[7]

The FPC approved in emphatic terms the restrictive controls of the Baltimore contract, such

[7] A similar directive is contained in the first FPC order (R. Vol. 16 p. 175).

as Article VIII[8] requiring the consent of Consolidated to any action by Penn Water with respect to operating, engineering, or accounting matters (R. Vol. 16, pp. 53-54), Article IV[8] requiring the consent of Consolidated to purchases and sales by Penn Water (R., Vol. 16, p. 380) and Article V[8] requiring the consent of Consolidated to substantial expansions by Penn Water (R. Vol. 16, p. 378). Possibility exists that FPC or Consolidated might, in the future, assert that the FPC orders required continuance of the illegal restrictive provisions of the Baltimore and Safe Harbor contracts, as well as the payment provisions, and that the D. C. Circuit upheld its power to do so. The FPC orders were based upon the assumed existence of the entire contracts, including the restrictive provisions specifically referred to as illegal by the decisions of the Fourth Circuit and the District Court for Maryland. FPC, relying upon Baltimore and Safe Harbor contracts as "foundation contracts", held that certain operations thereunder, the wholesale sales of electric energy by Penn Water to the three Pennsylvania electric utilities, otherwise intrastate, were interstate in character and subject to regulation by it. Actually, these serv-

[8] The entire text of these Articles are set forth at R., Vol. 15, pp. 4612-14.

ices are rendered wholly within the State of Pennsylvania, but the FPC held them interstate on the grounds (R., Vol. 16, pp. 53-55) that Penn Water was part of an integrated system (created by the illegal contracts and continued by FPC direction) and that power purchased from Consolidated was used to supplement the power generated by Penn Water and sold in Pennsylvania (Article IV of the Baltimore contract permitting Consolidated to require that such supplemental power be purchased from it by preventing such purchase from others).

Absence of the illegal provisions of the Baltimore contract, which Consolidated utilized to require Penn Water to purchase supplemental power from Consolidated rather than from Penn Water's Pennsylvania customers, would permit Penn Water to purchase such supplemental power in Pennsylvania and thereby eliminate the need for intermingling of interstate power with that sold by Penn Water to such customers.

FPC held that the sales of electric energy by Penn Water to its Pennsylvania customers constituted sales in interstate commerce. It dismissed, without discussion, argument made by your Petitioner regarding lack of jurisdiction over the sale of energy produced in Pennsylvania and sold to Pennsylvania customers, as well as

the alternative contention that sales to Pennsylvania customers are local in character and the interstate commerce, if any involved, so negligible as to be incidental to the dominant intrastate business and as such not interstate commerce. Instead, it concluded that, by reason of the contractual arrangements, the system was "an integrated and coordinated electric system" (R. Vol. 16, p. 53) and that each of Penn Water's sales in Pennsylvania "is clearly a system transaction of a character wholly interstate even though at times it involves varying amounts of energy never crossing the State boundary, sometimes unmixed and sometimes mixed with out-of-state energy. (R. Vol. 16, p. 55)

FPC allocated the reduction between Consolidated and the three Pennsylvania electric utility customers of Penn Water, giving the major share of the reduction to Consolidated, such allocation being determined on the basis of alleged "entitlements" of Consolidated under the Baltimore and Safe Harbor contracts and not on the basis of the power actually delivered. An allocation on the latter basis would have given the Pennsylvania utilities a much greater share of the rate reduction.

ULTIMATE RELIEF SOUGHT BY PETITIONERS

Pennsylvania Public Utility Commission ultimately seeks to be free from FPC interference as regards enforcement of orders and regulations pertaining to the intrastate rates and services of Penn Water, to the end that the Commission may perform properly the duties imposed upon it and exercise the powers delegated to it by the Pennsylvania Public Utility Law.

Petitioner requests Your Honorable Court to review this case and set aside the orders of the FPC or, in the alternative, to remand the case to FPC with directions (a) that its jurisdiction be limited to determination of the reasonableness of rates for power sold in interstate commerce by Penn Water and Transmission Company to Consolidated, and (b) to determine such rates without regard to the illegal contracts and on a unit rate basis to be determined by the amount of capacity and energy actually supplied and with allocations, if any be made, to be based on costs of energy supplied and services actually rendered and not on fictitious "entitlements".

QUESTIONS PRESENTED

I. Where electric energy is produced in Pennsylvania and thereafter sometimes commingled with electric energy flowing from another state and sold to Pennsylvania customers and where the proportions of such respective energy are ascertainable, are such sales in interstate commerce within the scope and intendment of the Federal Power Act and subject to the jurisdiction of FPC?

II. May FPC compel a Pennsylvania public utility to maintain contractual arrangements, whereby such corporation is disabled from properly performing its duties under the law of the state of its incorporation and surrenders basic rights, powers and privileges inherent in that franchise to a foreign public utility and may FPC premise its findings as regards jurisdiction and other critical provisions of its rate orders upon the existence and continuance of such contractual arrangement?

III. Where contracts which constitute the basis for a jurisdictional finding by FPC of interstate transmission of energy have been de-

cleared illegal as being in violation of the Federal anti-trust laws, the Pennsylvania Public Utility and public policy, may FPC, nevertheless, require continuance of such contractual arrangements in the form of a rate order?

The above stated issues were determined in the affirmative by the D. C. Circuit and such determinations are specified as errors to be urged.

REASONS FOR GRANTING THE WRIT AND ARGUMENT

I. The decision of the D. C. Circuit, holding that where electric energy is produced in Pennsylvania and thereafter commingled with electric energy flowing from another state and sold to Pennsylvania customers and where the respective portions of such energy are ascertainable, is contrary to the decisions of Your Honorable Court in Peoples Gas Company v. Public Service Commission, 270 U. S. 550 (1926) and Lone Star Gas Company v. Texas, 304 U. S. 224 (1938).

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a. The D. C. Circuit Decision Is Contrary To Peoples Gas Co. v. Public Service Commission, 270 U. S. 550 (1926).

The energy produced and sold in Pennsylvania is in intrastate commerce, irrespective of whether mingled with energy of another state. In **Peoples Gas Co. v. Public Service Commission,** 270 U. S. 550, 554-555 (1926) the Gas Com-

pany received two-thirds of its gas from West Virginia and produced the other one-third in Pennsylvania. The gas from both sources was mixed and sold to various customers. Your Honorable Court held that the West Virginia gas was in interstate commerce but that the Pennsylvania gas was in intrastate commerce only. It was said:

> "As respects the Pennsylvania gas we think it must be held to be in intrastate commerce only. Feeding it into the same pipe lines with the West Virginia gas works no change in this regard. Of course after the commingling the two are undistinguishable. But the proportions of both in the mixture are known and that of either readily may be withdrawn without affecting the transportation or sale of the rest. So for all practical purposes the two are separable, and neither affects the character of the business as to the other. Eureka Pipe Line Co. v. Hallanan, 257 U. S. 265; United Fuel Gas Co. v. Hallanan, 257 U.S. 277; 281. And see Hallanan v. Eureka Pipe Line Co., 261 U.S. 393; Hallanan v. United Fuel Gas Co., 261 U.S. 398."

The fact of commingling with electric energy from another state does not affect the true nature of that produced and sold within the state. Par-

ticularly is that true where, as here, a division between purely intrastate energy and energy obtained from Consolidated is entirely practical. While impliedly denying the practicality in one portion of its order, FPC recognized the feasibility and duty of making similar allocations in its order of October 27, 1949 (R. Vol. 17, p. 53). FPC there specified in each of the three schedules of rates to the Pennsylvania customers an identical formula for fuel cost adjustment applicable to the portion of the kilowatt-hours sold as firm energy to Pennsylvania customers which is supplied by the Baltimore Company. The separation of sources of supply which FPC made in this latter matter is the type of allocation it should have made between intrastate and interstate sources of electric energy.

Your Honorable Court has approved FPC allocations where a utility's business consisted of intrastate sales, direct industrial and interstate wholesale:

Colorado Interstate Gas Co. v. Federal Power Commission, 324 U. S. 581 (1945);

Panhandle Eastern Pipe Line Co. v. Federal Power Commission, 324 U. S. 635 (1945).

Recognition of the practicalities of an allocation of source of energy which, on the basis of the instant record, is approximately 83% intrastate and 17% interstate, compels the conclusion that sales involving interstate commerce are negligible and sales in intrastate commerce predominant.

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b. The D. C. Circuit Decision Is Contrary To Lone Star Gas Company v. Texas, 304 U. S. 236 (1938).

The sales of energy by Penn Water to its Pennsylvania customers are matters of local concern which should logically be regulated by a local regulatory commission. The holding of FPC and D. C. Circuit that **all** sales were in interstate commerce and subject to the jurisdiction of FPC is contrary to the decision of Your Honorable Court in **Lone Star Gas Company v. Texas,** 304 U. S. 236 (1938). In that case, a company sold gas to distributing companies in Texas. 11% of the gas was obtained from Oklahoma. The Texas Commission regulated the rates of all gas delivered in Texas including that obtained from Oklahoma and commingled with the Texas gas. It was held that the Texas Com-

mission had not undertaken to regulate the sales and deliveries of gas in interstate commerce. Your Honorable Court said (p. 239):

> "* * * We think that the proved manner in which the gas from Oklahoma was treated and handled in Texas made it an integral part of the gas supplied to the Texas communities in appellant's intrastate business and that the Commission was entitled so to consider it in fixing its rate."

The treatment and amount of the backfeed energy in the instant case also made it an integral part of the energy produced in Pennsylvania and sold to Pennsylvania customers in Penn Water's intrastate business.

The primary features of the operation should control. The sales to Pennsylvania customers are local in nature and primarily intrastate. This is not a matter of permitting the Federal Power Commission to regulate accounting or the sale of securities; it is a matter of limiting the Federal Power Commission to the jurisdiction over rates as specifically set forth in the Federal Power Act.

II. The D. C. Circuit erroneously held, in conflict with the decision of the Fourth Circuit, that the FPC may compel continuance of, and base its orders upon, contractual arrangements which disable a Pennsylvania public utility from performing duties imposed upon it under the law of its state of incorporation and surrender to a foreign public utility the basic rights, powers and privileges which such law, and public policy, require it to exercise independently.

There is a clear conflict between the decisions of the Courts of Appeals for the Fourth Circuit and for the District of Columbia Circuit with respect to the power of the FPC to require continuance of, and base its determinations upon, illegal contractual arrangements contained in the Baltimore and Safe Harbor contracts. The Fourth Circuit held that the parties must find some method of interchanging electrical energy which "would meet with the approval of the appropriate regulatory authority and will not offend * * * the utility laws of Pennsylvania" (R. Vol. 18, p. 28). The D. C. Circuit majority decision did not even refer to this holding and ignoring the fact that the Baltimore and Safe

Harbor contracts were held invalid **in their entirety** because they violated the utility laws of Pennsylvania and public policy, held, in effect, that the FPC could predicate important features of its rate orders upon the assumed existence and continuance thereof, and thus require continuance of illegal provisions contained therein.

The invalidity of the Baltimore and Safe Harbor contracts under state law[9] and public policy[10] does not arise by reason of a mere technical violation of statute or charter. It arises from the fact that the contracts destroy the independent corporate character of the corporations. They completely divest the boards of directors of powers of management which belong to them alone by virtue of their corporate franchises. The contracts deprive Penn Water of the power to perform basic and fundamental duties imposed by Pennsylvania law and, in particular, the initiation of reasonable rates and adequate services. The Fourth Circuit, citing decisions

[9] The State statutes involved are set forth in Appendix A. pp. 41 to 46.

[10] The public policy referred to is not merely state public policy but public policy as laid down in decisions of this Court. **Gibbs v. Consolidated Gas Co. of Baltimore**, 130 U. S. 396 (1889); **Thomas v. Railroad Co.**, 101 U. S. 71 (1879); **Central Transp. Co. v. Pullman's Palace Car Co.**, 139 U. S. 24 (1891).

of this Court, properly held (R. Vol. 18, p. 25): "Indeed such restrictions upon the freedom of a public utility cannot be sustained irrespective of statutory prohibition". Further, it said (R. Vol. 18, p. 26):

> "One of the most important duties of a public utility, inherent in its franchise to serve the public, is the duty to take the initiative in proposing reasonable rates and rendering adequate services, taking into account changing conditions; and the utility is not relieved from this duty because its activities are subject to governmental regulation, for a regulatory commission is not clothed with the responsibility or qualified to manage the utility's business."

The District Court for Maryland in its order invalidating the Safe Harbor contract (R. Vol. 18, p. 45) held that the agreements violate the laws of Pennsylvania governing public utilities, public policy, the common law and are ultra vires, completely destroying "corporate virility".

The Court of Appeals for the Fourth Circuit stated (R. Vol. 18, p. 26):

> "The conclusion is inescapable that the contractual restrictions upon the power of Penn Water to perform its functions as a

utility under the Pennsylvania statutes are invalid.

This conclusion is not avoided by the fact that Penn Water is a public utility under Part II of the Federal Power Act and subject as such to the regulation of the Federal Power Commission."

The District Court for Maryland was in accord, stating (R. Vol. 18, p. 45) that the Safe Harbor contract deprives that company of "the discretion and initiative necessary to respond and be alive to its public obligations", and is "intolerable under the common law and statutes of the State of Pennsylvania".

These courts specifically allude to certain of the restrictive provisions of the contracts, including the provisions restricting contracts and plant expansion (R. Vol. 18, pp. 25, 42, 43) and requiring concurrence of Consolidated in operating, engineering and accounting matters (R. Vol. 18, pp. 7-8, 45). The FPC orders which were affirmed by the D. C. Circuit, on the other hand, commended and condoned these provisions (R. Vol. 16, pp. 181 and 378-379).

The FPC orders specifically require continuance of the payment provisions. These provisions are also restrictive and illegal under

the Pennsylvania public utility laws, and public policy, because they provide that Penn Water shall receive a specified return regardless of the quantity or quality of services rendered and thereby remove all incentive to exercise initiative with respect to rates and services, to obtain new business, or to effect operating economies. The Court of Appeals for the Eighth Circuit held a contract containing such provisions (as well as price fixing provisions) "contrary to public policy, and void" in **Chicago, M. & St. P. R. Co. v. Wabash, St. L. & P. R. Co.**, 61 Fed. 993, 997 (8th Cir. 1894), stating:

> "* * * The contract removed every incentive to the companies to afford the public proper facilities, and to carry at reasonable rates; for, under its provisions, a company is entitled to its full percentage of gross earnings, even though it does not carry a pound of freight. The necessary and inevitable result of such a contract is to foster and create poorer service and higher rates. There is no inducement for a road to furnish good service, and carry at reasonable rates, when it receives as much or more for poor service, or for no service, as it would receive for good service and an energetic struggle for business.

> "A railroad company is a quasi public corporation, and owes certain duties to the public, among which are the duties to afford reasonable facilities for the transportation of persons and property, and to charge only reasonable rates for such service. Any contract by which it disables itself from performing these duties, or which makes it to its interest not to perform them, **or removes all incentive to their performance, is contrary to public policy and void;** * * *."

That decision followed and cites **Gibbs v. Consolidated Gas Co. of Baltimore,** 130 U. S. 396, 406, 410-11 (1889), cited by the Fourth Circuit (R., Vol. 18, pp. 25).

Section 1 of the Public Service Company Law [11] and Sections 301 and 401, of the Pennsylvania Public Utility Law,[12] imposing upon public utilities the duty to furnish adequate services at reasonable rates are, in effect, statutory reaffirmations of this public policy and prohibit revenue pooling arrangements like that contained in the Baltimore contract, as well as the other types of restrictive provisions contained therein.

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[11] Appendix A, p. 41.
[12] Appendix A, pp. 44-45.

The statement of the D. C. Circuit that the Fourth Circuit only held illegal certain restraints imposed upon Penn Water by Consolidated under the Baltimore contract is, therefore, immaterial, since the illegal revenue pooling provisions are clearly directed by the FPC orders to be continued in effect. Furthermore, as already pointed out, the orders are based upon the assumed continued existence of *contracts* which the courts in the Fourth Circuit ruled invalid in their entirety. The orders cannot be based upon their own requirements. For example, the allocation of the major share of the rate reduction to Consolidated, is based upon its alleged "entitlements" under the contract. No evidence exists, other than the contracts, upon which the FPC could predicate a decision as to the existence of such entitlements.

While the Federal Power Act gives the FPC jurisdiction over rates and services, it does not give it any power or authority to breathe into state corporations powers, franchises or other rights which they do not possess under the laws of their states of incorporation. This is pointed out in the Fourth Circuit opinion (R. Vol. 18, p. 27-28), which states (citing Section 201(b) (16 U.S.C. Section 824(b)):

"There is, however, a limitation upon the jurisdiction of the Federal Power Commis-

sion over public utilities subject to Part II * * *."

and concludes that "there is a field in which the Pennsylvania Utility Commission is qualified to act."

The legislative history of Part II of the Act shows that Congress intended to give the FPC powers **supplementary** to those exercised by the states and only to regulate in that area of commerce which was beyond the reach of the states under the decision in **Public Utilities Commission v. Attleboro Steam & Electric Co.**, 273 U.S. 83 (1927).[13] Since the power of the FPC to regulate rates and services is made merely *supplemental* to the regulatory powers of the states, there was clearly no intention on the part of Congress to displace the authority of the states over the inherent powers of corporations created by them.

There is no indication anywhere in the Federal Power Act that it was intended to permit the

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[13] Hearings on H.R. 5423 before the House of Representatives Committee on Interstate and Foreign Commerce, 74th Cong., 1st Sess., Pt. 1, p. 384. Quoted in **Connecticut Light & Power Co. v. FPC**, 324 U.S. 515, 525 (1945), and in **Jersey Central Power & Light Co. v. FPC**, 129 F. 2d 183, 193 (3d Cir. 1942).

FPC to require the performance of contractual arrangements depriving state utilities of their independence and initiative with respect to rates and services in violation of state law.

Your Honorable Court has frequently held that an intention by Congress to preclude a state from exercising its traditional powers must be clearly manifested. See **International Union, U.A.W. v. Wisconsin Employment Relations Board,** 336 U.S. 245, 253 (1949); **Davies Whse. Co. v. Bowles,** 321 U.S. 144, 152 (1944); *California v. Zook,* 336 U.S. 725, 733 (1948) and cases cited. A state law is superseded by a Federal law "only where the repugnance or conflict is so 'direct and positive' that the two acts cannot 'be reconciled or consistently stand together' ". **Kelly v. Washington,** 302 U.S. 1, 10 (1937).

As Your Honorable Court held in **Hines v. Davidowitz,** 312 U.S. 52, 67 (1941), the controlling question is "whether, under the circumstances of this particular case, Pennsylvania law stands as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress." Even where a federal agency charged with regulating certain phases of interstate commerce has authority to override state law, this Court has held such authority may be exercised only where neces-

sary to perform the function assigned the agency by Congress.

Florida v. U.S., 282 U.S. 194 (1931).

Clearly, no such necessity exists in this case because, as the Fourth Circuit suggested, the FPC can regulate the interstate rates and services of Penn Water without imposing upon it a contract which is in violation of state law and public policy. Especially is this true where, as in the instant case, the illegality of the Baltimore contract arises out of the fact that it deprives Penn Water of the power to **initiate** rates and services in the first instance, which power the D. C. Circuit concedes (R. Vol. 18, p. 53) to be "a condition precedent to the proper operation of the rate-making process."[14]

As the Fourth Circuit pointed out (R. Vol. 18, p. 28), the approval of both the Federal and State Commissions may properly be required. See **Lake Shore & Michigan Southern Railroad Co. v. Ohio**, 165 U.S. 365 (1897) and **Cummings v. Chicago**, 188 U.S. 410 (1903), holding that the construction of a bridge and dock, respectively,

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[14] It is noteworthy in this connection that the policy of the Pennsylvania Public Utility Law is consistent with the policy laid down by the decisions of your Honorable Court cited by the Fourth Circuit (R., Vol. 18, pp. 25-26).

in navigable rivers, even though approved by Secretary of War pursuant to the River and Harbor Acts of 1890 (c. 907, 26 Stat. 426) and 1899 (c. 429, 30 Stat. 1121) respectively, required approval of state authorities also.

In **McGuinn v. City of High Point,** 217 N.C. 449, 8 S.E. 2d 462 (1940), it was held that the granting of a project license by FPC did not give the licensee additional corporate powers, and that the lack of such power under state law prevented the operation of the project by such licensee. In **Northern Pennsylvania Power Co. v. Pennsylvania Public Utility Commission,** 132 Pa. Super. 178, 200 Atl. 866 (1938), reversed on other grounds, 333 Pa. 265, 5 A. 2d 133 (1939), it was held that a merger approved by FPC also required the approval of your petitioner.

III. The decision of the D. C. Circuit affirming FPC's determination of jurisdiction over Penn Water's sales in Pennsylvania is in conflict with the decision of the Fourth Circuit and erroneous because such determination, and the D. C. Circuit decision, are based upon the assumed existence and continuance of the illegal Baltimore and Safe Harbor contracts.

FPC in its first opinion (R., Vol. 16, pp. 53-54) makes it clear that its decision as to jurisdiction over Penn Water's sales in Pennsylvania is based upon the fact that the facilities of Penn Water, Transmission Company, Safe Harbor and Baltimore Company are "operated as an integrated and coordinated electric system" and that all of Penn Water's and Transmission Company's facilities are "integral parts of that system". The Commission states (p. 53) that the illegal contracts "were designed to facilitate this completely integrated operation of system generating and transmitting facilities" and calls them the "system foundation contracts" (pp. 53, 378). The existence of the so-called integrated and coordinated system is plainly dependent upon

the restrictive provisions of the agreements through which Consolidated controls the other companies. FPC shows this by its reference (pp. 54-54) to Article VIII[15] which not only provides for intercompany cooperation but also prohibits Penn Water from taking any action with respect to operating, engineering and accounting matters without the consent of a representative of Consolidated. The Safe Harbor contract contains a similar provision (Article XIV, R., Vol. 15, p. 4567) specifically held illegal by the District Court for Maryland (R., Vol. 18, p. 45). Similarly the Commission refers (p. 54) to "the provisions for over-all compensation to Penn Water and Safe Harbor without regard to the amounts delivered" (the illegal revenue pooling provisions) as "Contributing to the accomplishment of complete integration".

FPC also predicates its decision as to jurisdiction on the intermingling of power purchased from Consolidated with other power produced by Penn Water for the purpose of sale to the Pennsylvania customers (R., Vol. 16, pp. 54-55). This intermingling, as the FPC states, is likewise dependent upon the illegal contracts. It

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[15]Article VIII is set forth in full at R., Vol. 15, pp. 4613-14.

says (p. 55): "The very purpose of the system foundation contracts was the elimination of artificial barriers such as State boundaries". Also, in its opinion (February 28, 1949) denying rehearing, the FPC pointed out (R., Vol. 16, p. 380) that "refusal of Penn Water to receive energy originating outside of Pennsylvania from Baltimore Company" could not be effected in compliance with the contract. This is, of course, primarily due to the fact that under Article IV (R., Vol. 15, p. 4612), Penn Water cannot purchase the supplemental energy which it needs to supply its Pennsylvania customers from any one other than Consolidated without Consolidated's consent.

Under applicable decisions of this Court, the mere mingling of the power purchased from Consolidated with that produced and sold by Penn Water in Pennsylvania would not, apart from the existence of the contracts requiring such intermingling and tying the companies together into the so-called "integrated system", be sufficient grounds for holding such sales in Pennsylvania to be sales in interstate commerce.

Wherefore, Pennsylvania Public Utility Commission, petitioner, respectfully prays your Honorable Court to issue the requested writ of

certiorari to the United States Court of Appeals for the District of Columbia Circuit.

Respectfully submitted,
Pennsylvania Public Utility Commission,
By: WILLIAM J. GROVE,
Assistant Counsel,
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Assistant Counsel,
LLOYD S. BENJAMIN,
Acting Counsel

November 16, 1951.

APPENDIX A

TEXT OF PERTINENT STATE STATUTES (EXCERPTS)

Pennsylvania Public Service Company Law.*

Article I—Definitions

"Section 1. * * *

"The term 'Public Service Company', when used in this act, includes all * * * water-power corporations * * * ".

Article II—Duties and Liabilities of Public Service Companies

"Section 1. It shall be the duty of every public service company—

"(a) To furnish and maintain such service, including facilities, as shall in all respects be just, reasonably adequate, and practically suf-

*Approved July 26, 1913, Pamphlet Laws 1374 (Effective January 1, 1914) as amended and supplemented.

ficient for the accommodation and safety of its patrons, employes, and the public, and in conformity with such reasonable regulations or orders, as may be made by the commission.

"(b) To render and furnish all such service at prices, charges, rates, tolls, fares or compensation that shall be just and reasonable, and in conformity with such reasonable regulations or orders as may be made by the commission.

"(c) To make all such repairs, changes, alterations and improvements in or to such service, including facilities, as shall be reasonably necessary for the accommodation or safety of its patrons, employes and the public. * * *"

Article III—Creation, Powers and Limitation of Powers, of Public Service Companies

"Section 3. Upon like approval of the commission first had and obtained, as aforesaid, and upon compliance with existing laws, and not otherwise, it shall be lawful—

* * * * * * *

"(c) For any public service company to sell, assign, transfer, lease, consolidate, or merge its property, powers, franchises, or privileges, or any of them, to or with any other corporation or person."

Appendix A

Pennsylvania Public Utility Law.*

Article I—Short Title and Definitions

"Section 2. Definitions.—The following words, terms and phrases shall have the meanings ascribed to them in this section, unless the context clearly indicates otherwise.

* * * * * * *

"(17) 'Public Utility' means persons or corporations now or hereafter owning or operating in this Commonwealth equipment, or facilities for:

"(a) Producing, generating, transmitting, distributing or furnishing natural or artificial gas, electricity, or steam for the production of light, heat or power to or for the public for compensation; * * *"

Article II—Certificate of Public Convenience

"Section 202. Enumeration of Acts Requiring Certificate.—Upon approval of the commission, evidenced by its certificate of public convenience

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*Approved May 28, 1937, Pamphlet Laws 1053 (Effective June 1, 1937), as amended and supplemented. (66 Purdon's Pennsylvania Statutes Annotated, Sec. 1101 *et seq.*) This Law superseded the Public Service Company Law.

first had and obtained, and upon compliance with existing laws, and not otherwise, it shall be lawful:

* * * * * * *

"(d) For any public utility to dissolve, or to abandon or surrender, in whole or in part, any service, rights, power, franchise, or privilege: * * *.

"(e) For any public utility, except a common carrier by railroad subject to the Interstate Commerce Act, to acquire from, or to transfer to, any person or corporation, including a municipal corporation, by any method or device whatsoever, including a consolidation, merger, sale or lease, the title to, or the possession or use of, any tangible or intangible property used or useful in the public service: * * *."

Article III—Rates and Rate Making

"Section 301. Rates to Be Just and Reasonable.—Every rate made, demanded, or received by any public utility, or by any two or more public utilities jointly, shall be just and reasonable, and in conformity with regulations or orders of the commission: * * *."

Article IV—Service and Facilities

"Section 401. Charter of Service and Facilities.—Every public utility shall furnish and

maintain adequate, efficient, safe, and reasonable service and facilities, and shall make all such repairs, changes, alterations, substitutions, extensions, and improvements in or to such service and facilities as shall be necessary or proper for the accommodation, convenience and safety of its patrons, employes and the public. Such service also shall be reasonably continuous and without unreasonable interruptions or delay. Such service and facilities shall be in conformity with the regulations and orders of the commission. Subject to the provisions of this act and the regulations or orders of the commission, every public utility may have reasonable rules and regulations governing the conditions under which it shall be required to render service. * * *."

Pennsylvania Laws Governing Corporations.

Section Five of Corporation Act of 1874.*

The business of every corporation created hereunder, or accepting the same, shall be managed and conducted by a president, a board of directors or trustees, a secretary or clerk, a treasurer, and such other officers, agents and factors as the corporation authorizes for that

*As amended by Act of May 14, 1891, P. L. 61, and Act of May 6, 1927, P. L. 828 (No. 417).

purpose, * * *. The members of said corporation may, at a meeting to be called for that purpose, determine, fix or change the number of directors or trustees that shall thereafter govern its affairs, and a majority of the whole number of such directors or trustees shall be necessary to constitute a quorum * * *.

Section one of Act of May 31, 1887, P. L. 281 (No. 166).

SECTION 1. *Be it enacted, &c.*, That it shall be lawful, from and after the passage of this act, for any corporation, chartered or existing by or under any law of this State, to determine, by the vote of its stockholders holding a majority in interest of all of its stock, at a meeting duly called for the purpose, the time of holding the annual meeting for the election of officers of the corporation, and the number of directors that shall thereafter govern its affairs: *Provided*, That the number of directors so determined shall not be less than three nor more than fifteen, and that at least one third of the directors of every corporation shall be and remain, during their term of service, residents of the State of Pennsylvania: * * *.

BRIEF FOR PETITION -ER

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IN THE

Supreme Court of the United States

October Term, 1951

No. 429

PENNSYLVANIA PUBLIC UTILITY COMMISSION,
Petitioner

vs.

FEDERAL POWER COMMISSION

BRIEF FOR PETITIONER

ON WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

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Preliminary Statement

IN THE

SUPREME COURT OF THE UNITED STATES

October Term, 1951

No. 429

PENNSYLVANIA PUBLIC UTILITY COMMISSION,

Petitioner

vs.

FEDERAL POWER COMMISSION

BRIEF FOR PETITIONER

PRELIMINARY STATEMENT

Your Honorable Court issued a writ of certiorari to review the judgment and orders of the United States Court of Appeals for the District of Columbia, entered by a divided court July 3 and 6, and September 6, 1951 (R. Vol. XVIII, pp. 5394, 5395, 5399).

Preliminary Statement

The judgment and orders denied motions to set aside orders of the Federal Power Commission (FPC), directing continuance of, and premised on, provisions of two power contracts, adjudged illegal by the United States Court of Appeals for the Fourth Circuit as being in violation of the antitrust laws, the law of Pennsylvania and of the common law (R. Vol. XVIII, 5322 and Opinion in Case No. 6315 January 3, 1952).[1]

[1] Pennsylvania Water & Power Co., Pennsylvania Public Utility Commission v. Consolidated Gas Electric Light & Power Company of Baltimore, Public Service Commission of Maryland, 184 F. 2d 552 (1940), cert. den. 340 U. S. 906 (1950), relating to the Baltimore contract. Pennsylvania Water & Power Co., Pennsylvania Public Utility Commission v. Consolidated Gas Electric Light & Power Co., Safe Harbor Water Power Corporation, Public Service Commission of Maryland, No. 6315, January 3, 1952, affirming District Court of Maryland, 97 F. Supp. 952 (May 3, 1951) and Docket No. 5253 (Op. March 12, 1951, and Order March 19, 1951), relating to the companion Safe Harbor contract.

OPINIONS BELOW

The majority opinion (R. Vol. XVIII, p. 5367) of the D. C. Circuit, per Bazelon, J., in which Fahy, J., joined (D. C. majority), and the dissenting opinion (R. Vol. XVIII, p. 5402) of Wilbur K. Miller, J., are reported at 193 F. 2d 230. The opinions and orders of the FPC of January 5, 1949, February 28, 1949, March 17, 1949, October 27, 1949, and December 15, 1949, which were affirmed by the D. C. majority, are found at R. Vol. XVI, pp. 4845, 5178, 5220 and Vol. XVII, pp. 5267, 5315.

JURISDICTION

The petition for a writ of certiorari was filed November 16, 1951, and was granted February 4, 1952. The jurisdiction of this Court rests on Section 1254 (1) of the Judicial Code (62 Stat. 928, U. S. C. §1254 (1) and Section 313 (b) of the Act (49 Stat. 860, 16 U. S. C. §825 (1)).

STATEMENT OF THE CASE

(a) The Parties Involved and Their Interests and Business

Pennsylvania Public Utility Commission, your petitioner, is the administrative agency within the Commonwealth of Pennsylvania to which has been delegated the power and upon which has been conferred the duties of enforcing the public utility laws and of regulating rates and services of public utilities engaged in intrastate commerce.

Pennsylvania Water and Power Company, hereafter designated Penn Water, and Safe Harbor Water Power Corporation, hereafter designated Safe Harbor, are Pennsylvania electric utility corporations subject to the jurisdiction of your petitioner. Both corporations own hydro-electric generating plants on the Susquehanna River. Penn Water also owns a steam generating plant and transmission lines in Pennsylvania, and, through its wholly owned subsidiary, transmission lines in Maryland. The present business of such companies is the sale of electric energy at wholesale and in bulk.

Penn Water's wholesale customers include Philadelphia Electric Company, Pennsylvania Power & Light Company and Metropolitan Edison Company (PE, PP&L and ME). These are Pennsylvania electric utilities, having steam electric generating plants and transmission and distribution facilities in Pennsylvania, and sell both at wholesale and at retail. They are also subject to the jurisdiction of your petitioner, Pennsylvania Public Utility Commission.

Consolidated Gas Electric Light & Power Company of Baltimore, hereafter designated Consolidated, is a Maryland electric utility corporation with steam electric generating, transmission and distribution facilities in and around the City of Baltimore, Maryland. Consolidated has generating capacity several times that of Penn Water or Safe Harbor and is in the business of selling electric energy at wholesale and in bulk as well as at retail.

(b) The Proceedings before the FPC and the D.C. Circuit

The FPC orders were entered as a result of a proceeding by FPC in September, 1944, to examine into the rates charged by Penn Water to Consolidated. Hearings began in 1946 and were completed in July, 1947. Consolidated, the Maryland Com-

mission and the Pennsylvania Commission intervened in the proceeding.

FPC assumed jurisdiction not only of Penn Water's rates to Consolidated but also of the rates for Penn Water's services in Pennsylvania to the three electric utilities in Pennsylvania, PP&L, PE and ME.

The FPC orders (1) directed continuance of illegal contractual arrangements contained in the Baltimore contract; and (2) based critical dispositions in its orders upon the assumed existence and continuance of both the illegal Baltimore and Safe Harbor contracts by (a) basing its jurisdiction over rates for Penn Water's services in Pennsylvania to its three Pennsylvania customers upon the existence of an alleged single interstate system (the facilities of Consolidated, Penn Water and Safe Harbor) created by the two illegal contracts, and upon interstate purchases of power by Penn Water from Consolidated required by an exclusive dealing provision in the Baltimore contract adjudged illegal *per se* under Section 3 of the Clayton Act, and (b) by basing its findings of revenue and expenses, allocation of costs and allocation of the reduction, predominately to Consolidated as against the three Pennsylvania customers of Penn Water, on "entitlements" and "obligations" created solely by the two illegal contracts.

The first FPC order was issued January 5, 1949, eighteen months after the last hearing and shortly after the contract litigation had been begun. The illegalities of the contracts, as raised by the contract litigation, were immediately brought to the attention of the FPC in a petition for rehearing, January 28, 1949. FPC denied rehearing February 28, 1949 and held that, even if the Courts determined the contracts to be illegal, such illegalities would be immaterial to its orders.

The FPC orders are expressed to be operative from and after February 1, 1949, but their effect was stayed by order of the FPC, and then by order of the D. C. Circuit, and revenues collected by Penn Water under its contract with its four electric utility customers in excess of the amounts allowed by the FPC orders have been segregated to await the final determination of the case.

Petitions to the D. C. Circuit to review the FPC orders brought to the attention of that Court the illegalities of the Baltimore and Safe Harbor contracts, raised in the contract litigation, as grounds for annulling or remanding the orders (R. Vol. XVI, pp. 4807-13; R. Vol. XVII, pp. 5222, 5230).

Prior to the completion of the filing of briefs in the D. C. Circuit in the present case, and after the Fourth Circuit decision invalidating the Baltimore contract, Petitioner moved (November 21, 1950) in

the D. C. Circuit to present that decision to the D. C. Circuit as a basis for annulling or remanding the FPC orders on the ground that they were founded on the illegal Baltimore contract. When this Court denied certiorari in the Baltimore contract case, leave was granted by the D. C. Circuit and the matter was briefed and argued. While the decision was pending below, and immediately following the decision of the District Court for Maryland invalidating the Safe Harbor contract, Petitioner moved (May 8, 1951) in the D. C. Circuit to annul or remand the FPC orders on the further ground that they were founded also on the illegal Safe Harbor contract. The motion was denied.

(c) The Contracts

The invalidated Penn Water, Baltimore and Safe Harbor contracts, which would have remained in effect until 1980, provided for payments by Consolidated for power, not on a unit rate basis, but on a basis which would provide to the seller recovery of operating expenses including taxes and a specified return on investment, regardless of the amount of power delivered or extent of services rendered, with a credit to Consolidated for revenues received from sales of power to others. This arrangement is in

clear violation of the Pennsylvania Public Utility Law which requires utilities to establish and maintain reasonable rates and furnish adequate service. The obvious purpose and effect of the arrangements in issue are to remove incentive to compete, to expand or to effect operating economies. The contracts contain closely associated provisions providing for control by Consolidated over the contracts, sales, purchases, prices, output and expansion of both Penn Water and Safe Harbor which are also illegal under Pennsylvania Law, public policy and the antitrust laws, and were specifically alluded to as being illegal under such laws by the decisions of the Fourth Circuit and the District Court of Maryland.

The contracts surrender control of Penn Water and Safe Harbor to Consolidated, stifle their initiative with respect to rates and services and virtually destroy the independent corporate character of these Pennsylvania corporations. The provisions of the contracts have been used by Consolidated to interfere with Penn Water's and Safe Harbor's contracts with their Pennsylvania customers[2] and to prohibit Penn Water from building a new large

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[2] PP&L, PE and ME. The contracts with these customers are all on the customary unit rate basis, i.e., payment based on amount of power delivered and without managerial control and restraints by the purchaser over the seller.

steam electric generating plant in 1948 from which badly needed power could have been economically produced.

(d) Provisions of the FPC Orders

FPC, in its opinion denying rehearing (February 28, 1949), held immaterial to its rate orders the possible illegality of the Baltimore and Safe Harbor contracts.

FPC approved in emphatic terms the restrictive controls of the Baltimore contract; such as Article VIII[3] requiring the consent of Consolidated to any action by Penn Water with respect to operating, engineering, or accounting matters (R. Vol. XV, p. 4564), Article IV requiring the consent of Consolidated to purchases and sales by Penn Water (R. Vol. XV, pp. 4558-59) and Article V requiring the consent of Consolidated to substantial expansions by Penn Water (R. Vol. XV, p. 4559).

The FPC orders were based upon the assumed existence of the entire contracts, including the restrictive provisions specifically referred to as illegal by the decisions of the Fourth Circuit and the Dis-

[3] The entire text of these Articles are set forth at R. Vol. XV, p. 4554.

trict Court for Maryland. FPC, relying upon Baltimore and Safe Harbor contracts as "foundation contracts", held that certain operations thereunder, the wholesale of electric energy by Penn Water to the three Pennsylvania electric utilities, otherwise intrastate, were interstate in character and subject to regulation by it. Actually, these services are rendered wholly within the State of Pennsylvania, but FPC held them interstate on the grounds (R. Vol. XVI, pp. 4859-61) that Penn Water was part of an integrated system (created by the illegal contracts and continued by FPC direction) and that power purchased from Consolidated was used to supplement the power generated by Penn Water and sold in Pennsylvania (Article IV of the Baltimore contract permitting Consolidated to require that such supplemental power be purchased from it by preventing such purchase from others).

FPC held that the sales of electric energy by Penn Water to its Pennsylvania customers constituted sales in interstate commerce. It dismissed the contentions made by your petitioner that FPC lacked jurisdiction over the sale of energy produced in Pennsylvania and sold to Pennsylvania customers and that sales to Pennsylvania customers are local in character and the interstate commerce, if any involved, so negligible as to be incidental to the dominant intrastate business and as such not interstate commerce. Instead, it concluded that, by

reason of the contractual arrangement, the system was "an integrated and coordinated electric system" (R. Vol. XVI, p. 4859) and that each of Penn Water's sales in Pennsylvania "is clearly a system transaction of a character wholly interstate even though at times it involves varying amounts of energy never crossing the State boundary, sometimes unmixed and sometimes mixed with out-of-state energy" (R. Vol. XVI, p. 4861).

FPC based its allocation of the reduction between Consolidated and the three Pennsylvania electric utility customers of Penn Water, giving the major share of the reduction to Consolidated, on the basis of alleged "entitlements" of Consolidated under the Baltimore and Safe Harbor contracts and not on the basis of the power actually delivered. An allocation on the latter basis would have given the Pennsylvania utilities a much greater share of the rate reduction.

ERRORS TO BE URGED

The United States Court of Appeals for the District of Columbia Circuit erred in holding that:

I. Where electric energy is produced in Pennsylvania and thereafter sometimes commingled with electric energy flowing from another state and sold to Pennsylvania customers and where the proportions of such respective energy are ascertainable, such sales are in interstate commerce within the scope and intendment of the Federal Power Act and subject to the jurisdiction of FPC.

II. FPC may compel a Pennsylvania public utility to maintain contractual arrangements, whereby such corporation is disabled from properly performing its duties under the law of the state of its incorporation and surrenders basic rights, powers and privileges inherent in that franchise to a foreign public utility.

III. FPC may premise its findings as regards jurisdiction and other critical provisions of its rate orders upon the existence and continuance of illegal and invalid contracts, more particularly, findings regarding allocation of reduction in rates.

SUMMARY OF ARGUMENT

Pennsylvania Public Utility Commission ultimately seeks to be free from FPC interference as regards enforcement of orders and regulations pertaining to the intrastate rates and services of Penn Water, to the end that the Commission may perform properly the duties imposed upon it and exercise the powers delegated to it by the Pennsylvania Public Utility Law.

Petitioner contends that Your Honorable Court should set aside the orders of the FPC or, in the alternative remand the case to FPC with directions (a) that its jurisdiction be limited to determination of the reasonableness of rates for power sold in interstate commerce by Penn Water and Transmission Company to Consolidated, and (b) to determine such rates without regard to the illegal contracts and on a unit rate basis to be determined by the amount of capacity and energy actually supplied, with allocations of reductions, if any be made, to be based on costs of service for energy supplied and services actually rendered and not on fictitious "entitlements."

ARGUMENT

I. Where Electric Energy Is Produced in Pennsylvania and Thereafter Commingled with Electric Energy Flowing from Another State and Sold to Pennsylvania Customers and Where the Respective Portions of Such Energy Are Ascertainable, the Sale of Such Energy Is Subject to the Jurisdiction of the Pennsylvania Public Utility Commission

(a) Pennsylvania Public Utility Commission has jurisdiction under Peoples Gas Company v. Public Service Commission, 270 U. S. 550, 46 Sup. Ct. 371 (1926).

The energy produced and sold in Pennsylvania is in intrastate commerce, irrespective of whether mingled with energy of another state. In *Peoples Gas Co. v. Public Service Commission*, 270 U. S. 550, 554-555, 46 Sup. Ct. 371 (1926) the Gas Company received two-thirds of its gas from West Virginia and produced the other one-third in Pennsylvania. The gas from both sources was mixed and

sold to various customers. Your Honorable Court held that the West Virginia gas was in interstate commerce but that the Pennsylvania gas was in intrastate commerce only. It was said:

> "As respects the Pennsylvania gas we think it must be held to be in intrastate commerce only. Feeding it into the same pipe lines with the West Virginia gas works no change in this regard. Of course after the commingling the two are undistinguishable. But the proportions of both in the mixture are known and that of either readily may be withdrawn without affecting the transportation or sale of the rest. So for all practical purposes the two are separable, and neither affects the character of the business as to the other. Eureka Pipe Line Co. v. Hallanan, 257 U. S. 265; United Fuel Gas Co. v. Hallanan, 257 U. S. 277; 281. And see Hallanan v. Eureka Pipe Line Co., 261 U. S. 393; Hallanan v. United Fuel Gas Co., 261 U. S. 398."

The fact of commingling with electric energy from another state does not affect the true nature of that produced and sold within the state. Particularly is that true where, as here, a division between purely intrastate energy and energy obtained from Consolidated is entirely practical. While impliedly denying the practicality in one portion of its order,

FPC recognized the feasibility and duty of making similar allocations in its order of October 27, 1949 (R. Vol. XVII, p. 53). FPC there specified in each of the three schedules of rates to the Pennsylvania customers an identical formula for fuel cost adjustment applicable to the portion of the kilowatt-hours sold as firm energy to Pennsylvania customers which is supplied by the Baltimore Company. The separation of sources of supply which FPC made in this latter matter is the type of allocation it should have made between intrastate and interstate sources of electric energy.

Your Honorable Court has approved FPC allocations where a utility's business consisted of intrastate sales, direct industrial and interstate wholesale: *Colorado Interstate Gas Co. v. Federal Power Commission*, 324 U. S. 581, 65 Sup. Ct. 829 (1945); *Panhandle Eastern Pipe Line Co. v. Federal Power Commission*, 324 U. S. 635, 65 Sup. Ct. 821 (1945). Recognition of the practicalities of an allocation of source of energy which, on the basis of the instant record, is approximately 88% intrastate and 17% interstate, compels the conclusion that sales involving interstate commerce are negligible and sales in intrastate commerce predominant.

(b) Pennsylvania Public Utility Commission has jurisdiction under Lone Star Gas Company v. Texas, 304 U. S. 224, 236, 58 Sup. Ct. 833 (1938).

The sales of energy by Penn Water to its Pennsylvania customers are matters of local concern which should logically be regulated by a local regulatory commission. The holding of FPC and D. C. Circuit that all sales were in interstate commerce and subject to the jurisdiction of FPC is contrary to the decision of Your Honorable Court in *Lone Star Gas Company v. Texas*, 304 U. S. 224, 236, 58 Sup. Ct. 883 (1938).

In *Lone Star Gas Company v. Texas*, supra, a company sold gas to distributing companies in Texas. 11% of the gas was obtained from Oklahoma. The Texas Commission regulated the rates of all gas delivered in Texas including that obtained from Oklahoma and commingled with the Texas gas. It was held that the Texas Commission had not undertaken to regulate the sales and deliveries of gas in interstate commerce. Your Honorable Court said (p. 239):

> "* * * We think that the proved manner in which the gas from Oklahoma was treated and handled in Texas made it an integral part of the gas supplied to the Texas communities in

appellant's intrastate business and that the Commission was entitled so to consider it in fixing its rate."

The treatment and amount of the backfeed energy in the instant case also made it an integral part of the energy produced in Pennsylvania and sold to Pennsylvania customers in Penn Water's intrastate business.

The primary features of the operation should control. The sales to Pennsylvania customers are local in nature and primarily intrastate. This is not a matter of permitting the Federal Power Commission to regulate accounting or the sale of securities; it is a matter of limiting the Federal Power Commission to the jurisdiction over rates as specifically set forth in the Federal Power Act.

II. FPC May Not Compel a Pennsylvania Public Utility to Maintain Contractual Arrangements whereby Such Corporation Is disabled from Properly Performing Its Duties under the Law of the State of Its Incorporation and Surrender Basic Rights, Powers and Privileges to a Foreign Public Utility

(a) The FPC order based upon the invalid contracts disables Pennsylvania Water and Power Company from performing duties imposed upon it under Pennsylvania law.

The invalidity of the Baltimore and Safe Harbor contracts under state law[4] and public policy[5] does not arise by reason of a mere technical violation of statute or charter. It arises from the fact that the contracts destroy the independent corporate character of the corporations. They completely divest

[4] The State statutes involved are set forth in Appendix A.

[5] The public policy referred to is not merely state public policy but public policy as laid down in decisions of this Court: Gibbs v. Consolidated Gas Co. of Baltimore, 130 U. S. 396 (1889); Thomas v. Railroad Co., 101 U. S. 71 (1879); Central Transp. Co. v. Pullman's Palace Car Co., 139 U. S. 24 (1891).

the board of directors of powers of management which belong to them alone by virtue of their corporate franchises. The contracts deprive Penn Water of the power to perform basic and fundamental duties imposed by Pennsylvania law and, in particular, the initiation of reasonable rates and adequate services. The Fourth Circuit, citing decisions of this Court, properly held (R. Vol. XVIII, p. 5346). "Indeed such restrictions upon the freedom of a public utility cannot be sustained irrespective of statutory prohibition". Further, it said (R. Vol. XVIII, p. 5347):

> "One of the most important duties of a public utility, inherent in its franchise to serve the public, is the duty to take the initiative in proposing reasonable rates and rendering adequate services, taking into account changing conditions; and the utility is not relieved from this duty because its activities are subject to governmental regulation, for a regulatory commission is not clothed with the responsibility or qualified to manage the utility's business."

The District Court of Maryland in its order invalidating the Safe Harbor contract (R. Vol. XVIII, p. 5366) held that the agreements violate the laws of Pennsylvania governing public utilities, public policy, the common law and are ultra vires, completely destroying "corporate virility".

The Court of Appeals for the Fourth Circuit stated (R. Vol. XVIII, p. 5347):

> "The conclusion is inescapable that the contractual restrictions upon the power of Penn Water to perform its functions as a utility under the Pennsylvania statutes are invalid."

The District Court of Maryland was in accord, stating (R. Vol. XVIII, p. 5366) that the Safe Harbor contract deprives that company of "the discretion and initiative necessary to respond and be alive to its public obligations", and is "intolerable under the common law and statutes of the State of Pennsylvania".

These courts specifically allude to certain of the restrictive provisions of the contracts, including the provisions restricting contracts and plant expansion (R. Vol. XVIII, pp. 5346, 5363, 5364) and requiring concurrence of Consolidated in operating, engineering and accounting matters (R. Vol. XVIII, pp. 5328, 5329, 5366). The FPC orders which were affirmed by the D. C. Circuit, on the other hand, commended and condoned these provisions (R. Vol. XVI, pp. 4987, 5184, 5185).

The FPC orders approved by a majority of the D. C. Circuit specifically require continuance of the payment provisions. These provisions are also restrictive and illegal under the Pennsylvania public

utility laws, and public policy, because they provide that Penn Water shall receive a specified return regardless of the quantity or quality of services rendered and thereby remove all incentive to exercise initiative with respect to rates and services, to obtain new business, or to effect operating economies.

The Court of Appeals for the Eighth Circuit held a contract containing such provisions (as well as price fixing provisions) "contrary to public policy and void" in *Chicago, M & St. P. R. Co.*, 61 Fed. 993, 997 (8th Cir., 1894), stating:

> "* * * The contract removed every incentive to the companies to afford the public proper facilities, and to carry at reasonable rates; for, under its provisions, a company is entitled to its full percentage of gross earnings, even though it does not carry a pound of freight. The necessary and inevitable result of such a contract is to foster and create poorer service and higher rates. There is no inducement for a road to furnish good service, and carry at reasonable rates, when it receives as much or more for poor service, or for no service, as it would receive for good service and an energetic struggle for business.
>
> "A railroad company is a quasi public corporation, and owes certain duties to the public,

among which are the duties to afford reasonable facilities for the transportation of persons and property, and to charge only reasonable rates for such service. Any contract by which it disables itself from performing these duties, or which makes it to its interest not to perform them, or removes all incentive to their performance, is contrary to public policy and void, * * *."

That decision followed and cites *Gibbs v. Consolidated Gas Co. of Baltimore*, 130 U. S. 396, 406, 410-11 (1889), cited by the Fourth Circuit (R. Vol. XVIII, p. 5346).

Section 1 of the Public Service Company Law[6] and Sections 301 and 401, of the Pennsylvania Public Utility Law[7], imposing upon public utilities the duty to furnish adequate services at reasonable rates are, in effect, statutory reaffirmations of the public policy and prohibit revenue pooling arrangements like that contained in the Baltimore contract, as well as the other types of restrictive provisions contained therein.

The statement of the D. C. Circuit that the Fourth Circuit held illegal only certain restraints imposed upon Penn Water by Consolidated under the Baltimore contract is, therefore, immaterial,

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[6] Appendix A, p. 45.

[7] Appendix A, p. 48.

since the illegal revenue pooling provisions are clearly directed by the FPC orders to be continued in effect. Furthermore, as already pointed out, the orders are based upon the assumed continued existence of contracts which the courts in the Fourth Circuit ruled invalid in their entirety. The orders cannot be based upon their own requirements.

While the Federal Power Act gives the FPC jurisdiction over rates and services, it does not give it any power or authority to breathe into state corporations powers, franchises or other rights which they do not possess under the laws of their states of incorporation. This is pointed out in the Fourth Circuit opinion (R. Vol. XVIII, p. 5348, 5349), which states (citing Section 201(b) (16 U.S.C. Section 824 (b)):

> "There is, however, a limitation upon the jurisdiction of the Federal Power Commission over public utilities subject to Part II * * *."

and concludes that "there is a field in which the Pennsylvania Public Utility Commission is qualified to act."

The legislative history of Part II of the Act shows that Congress intended to give the FPC powers supplementary to those exercised by the states and only to regulate in that area of commerce which was

beyond the reach of the states under the decision in *Public Utilities Commission v. Attleboro Steam & Electric Co.*, 273 U. S. 83, 47 Sup. Ct. 294 (1927).[8] Since the power of the FPC to regulate rates and services is made merely supplemental to the regulatory powers of the states, there was clearly no intention on the part of Congress to displace the authority of the states over the inherent powers of corporations created by them.

There is no indication anywhere in the Federal Power Act that it was intended to permit the FPC to require the performance of contractual arrangements depriving state utilities of their independence and initiative with respect to rates and services in violation of state law.

Your Honorable Court has frequently held that an intention by Congress to preclude a state from exercising its traditional powers must be clearly manifested. See *International Union, U. A. W. v. Wisconsin Employment Relations Board*, 336 U. S. 245, 253, 69 Sup. Ct. 516 (1949); *Davies Whse. Co. v. Bowles*, 321 U. S. 144, 152 64 Sup. Ct. 474 (1944);

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[8] Hearings on H.R. 5423 before the House of Representatives Committee on Interstate and Foreign Commerce, 74th Cong., 1st Sess., Pt. 1, p. 384. Quoted in Connecticut Light & Power Co. v. FPC, 324 U. S. 515, 525 (1945), and in Jersey Central Power & Light Co. v. FPC, 129 F. 2d 183, 193 (3d Cir. 1942).

California v. Zook, 336 U. S. 725, 733, 69 Sup. Ct. 841 (1948) and cases cited. A state law is superseded by a Federal law "only where the repugnance or conflict is so 'direct and positive' that the two [illegible] cannot 'be reconciled or consistently stand together' ". *Kelly v. Washington,* 302 U. S. 1, 10, 58 Sup. Ct. 87 (1937).

Your Honorable Court held in *Hines v. Davidowitz,* 312 U. S. 52, 67, 61 Sup. Ct. 399 (1941), that the controlling question is "whether, under the circumstances of this particular case, Pennsylvania law stands as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress." Even where a federal agency charged with regulating certain phases of interstate commerce has authority to override state law, this Court has held such authority may be exercised only where necessary to perform the function assigned the agency by Congress: *Florida v. U. S.,* 282 U. S. 194, 51 Sup. Ct. 119 (1931).

Clearly, no such necessity exists in this case because, as the Fourth Circuit suggested, the FPC can regulate the interstate rates and services of Penn Water without imposing upon it a contract which is in violation of state law and public policy. Especially is this true where, as in the instant case, the illegality of the Baltimore contract arises out of the fact that it deprives Penn Water of the power

to initiate rates and services in the first instance, which power the D. C. Circuit concedes (R. Vol. XVIII, p. 5374) to be "a condition precedent to the proper operation of the rate-making process."

The D. C. Circuit by affirming the orders of FPC has effectively approved a principle of law which permits FPC to require performance by Penn Water of contracts which have been declared illegal and void as violating the law of the state of incorporation.

(b) Findings regarding jurisdiction and allocation of reduction in rates.

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(1) *FPC based its jurisdiction on the contracts*

FPC in its first opinion (R. Vol. XVI, pp. 4859-60) makes it clear that its decision as to jurisdiction over Penn Water's sales in Pennsylvania is based upon the fact that the facilities of Penn Water, Transmission Company, Safe Harbor and Baltimore Company are "operated as an integrated and coordinated electric system" and that all of Penn Water's and Transmission Company's facilities are "integral parts of that system". FPC states that

the illegal contracts "were designed to facilitate this completely integrated operation of system generating and transmitting facilities" and calls them the "system foundation contracts" (R. Vol. XVI, p. 4859). The existence of the so-called integrated and coordinated system is plainly dependent upon the restrictive provisions of the agreements through which Consolidated controls the other companies. FPC shows this by its reference to Article VIII which not only provides for intercompany cooperation but also prohibits Penn Water from taking any action with respect to operating, engineering and accounting matters without the consent of a representative of Consolidated. The Safe Harbor contract contains a similar provision (Article XIV, R. Vol. XV, p. 4567) specifically held illegal by the District Court of Maryland (R. Vol. XVIII, p. 5366). Similarly FPC refers to "the provisions for over-all compensation to Penn Water and Safe Harbor without regard to the amounts delivered" (the illegal revenue pooling provisions) as "Contributing to the accomplishment of complete integration" (R. Vol. XVI, p. 4860).

FPC also predicates its decision as to jurisdiction on the intermingling of power purchased from Consolidated with other power produced by Penn Water for the purpose of sale to the Pennsylvania customers (R. Vol. XVI, pp. 4860-1). This

intermingling, as the FPC stated, is likewise dependent upon the illegal contracts.

Speaking with regard to the contracts, it stated (R. Vol. XVI, p. 4861):

> "The very purpose of the system foundation contracts was the elimination of artificial barriers, such as State boundaries. In the making of sale of system barriers, such as those by Penn Water to its Pennsylvania utility customers, no distinction is made between energy crossing a State boundary and that which does not. Likewise, title to energy flowing on the system is of no significance among the companies comprising the system since they physically function as one enterprise and since the compensation features of the system contracts are so designed as to render consideration of title unimportant.
>
> "In the light of the foregoing facts, each of Penn Water's sales in Pennsylvania is clearly a system transaction of a character wholly [19] interstate even though at times it involves varying amounts of energy never crossing the State boundary, sometimes unmixed and sometimes mixed with out-of-state energy. In short, Penn Water is selling interstate system energy to purchasers outside the system. Such sales are sales "in interstate commerce".

Disposing of the contention that there existed a joint rate, the Commission said (R. Vol. XVI, p. 4863):

> "In the first place, Safe Harbor sells its entire output to Penn Water and Baltimore Company and having received payment therefor constituting its entire revenue, it cannot sell any part of it to Penn Water's Pennsylvania customers. And while the [21] system operations are coordinated, the compensation features of the contracts by which Safe Harbor and Penn Water sell to Baltimore Company clearly refute any suggestion of 'joint rate' ".

In its opinion (February 28, 1949) denying rehearing, FPC pointed out (R. Vol. XVI, p. 5186) that "refusal of Penn Water to receive energy originating outside of Pennsylvania from Baltimore Company" could not be effected in compliance with the contract. This is due to the fact that under Article IV (R. Vol. XV, p. 4612) Penn Water cannot purchase the supplemental energy which it needs to supply its Pennsylvania customers from any one other than Consolidated without Consolidated's consent.

Under applicable decisions of this Court, argued supra, the mere mingling of the power purchased from Consolidated with that produced and sold by Penn Water in Pennsylvania would not afford a

basis for FPC assuming jurisdiction. Illegal and invalid contracts requiring such intermingling of energy and tying the companies together into a so-called "integrated system" cannot be deemed in law to be a proper basis for holding such sales in Pennsylvania to be sales in interstate commerce.

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(2) *Allocations of Rate Reductions*

FPC found that for the test year 1946 Penn Water's revenues, per books, for services to Consolidated were shown as $1,399,331.10 (R. Vol. XVI, p. 4958). It also found that Penn Water's net cost of service to Consolidated was $652,933 (R. Vol. XVI, p. 4980). Penn Water actually received from Consolidated in 1946 only $1,104,951.85. Accepting, arguendo, FPC's findings, it would appear that Penn Water's revenues from Consolidated were excessive by approximately $747,000. In contrast FPC's finding No. 33 (R. Vol. XVI, p. 4992-4993) reads:

> "On the basis of a reasonable and proper allocation of the cost of service rendered by Penn Water and Transmission Company to Baltimore Company, the rates and charges to Baltimore Company for 1946 are unjust and unreasonable by approximately $1,733,318."

This glaring discrepancy is explained by FPC's adjustment of Penn Water's actual revenues as shown by the books by an amount of $1,127,699, so that, with certain other adjustments not here material, it concluded that Penn Water was theoretically to be regarded as receiving in revenues from Consolidated in 1946 the sum of $2,386,311 (R. Vol. XVI, p. 4959, 4961, 4980).[9] This extraordinary adjustment in revenues arose entirely from acceptance and recognition of alleged "entitlements" of Consolidated to Penn Water's output under the contract.

Without the Baltimore contract, the FPC could not have found the dollar amounts which it treated Penn Water as having received from Consolidated. Nor could it have found the dollar amounts which it did find to represent Penn Water's cost of service to Consolidated. Without the Baltimore contract, FPC could not have found that, of the ordered $1,954,261 reduction in rates,[9] approximately 89%

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[9] The FPC found Penn Water's revenues for the test year 1946 to have been "excessive" in an amount of $2,176,786. Of this figure $222,475 was deemed to be excess revenues received from the Railroad which the Commission did not purport to regulate. In consequence, the actual reduction ordered came to $1,954,261, of which $1,733,318, or approximately 89%, was allocated to Baltimore Company.

should be allocated to Baltimore Company (R. Vol. XVI, p. 4980).

The major adjustment of $1,127,699 represents a transfer by FPC to revenues from Consolidated of net interchange revenues actually received by Penn Water from the sale of energy to PP&L, ME, and PE (R. Vol. XVI, p. 4961). FPC's explanation for this adjustment is somewhat cryptic, but it clearly arises out of acceptance of "entitlements" to Penn Water's energy under the invalid Baltimore contract. The Commission said (R. Vol. XVI, p. 4979):

> "As interchange sales in Pennsylvania are on a when-as-and-if basis, the mwh so supplied by Penn Water comes from Baltimore Company's contract residual entitlement to Penn Water's resources and are therefore deemed to have been made for Baltimore Company's account."

FPC construed the Baltimore contract to entitle Consolidated to all of Penn Water's electric capacity and energy not otherwise disposed of under existing contracts approved by Consolidated (R. Vol. XVI, p. 4986). "Contracts" for the sale of energy in the invalid Baltimore contract were construed by FPC to refer only to existing contracts for the sale of firm energy. In other words, although FPC found (R. Vol. XVI, p. 4988) that Penn Water

under its arrangements with PP&L, ME and PE not only sells firm energy, but also buys and sells in interchange transactions, for purposes of cost allocation the Baltimore contract provisions regarding "entitlements" cause Consolidated to receive all the residue of Penn Water's energy output after only its firm commitments to the Pennsylvania customers had been met.

The significant fact is that FPC increased Penn Water's alleged revenues from Consolidated by over $1,000,000 because it regarded Penn Water's net interchange revenues from sales of energy as being made out of Consolidated's contractual "entitlement" and thus for Baltimore Company's account.

The net revenues from interchange transactions with Pennsylvania customers are billed to and received from those customers. They are not revenues from Baltimore Company. The contract being illegal and void, there cannot be any contractual "entitlement" whatever to any of Penn Water's output by Consolidated. Not even FPC may continue to regard as revenues received from Consolidated those revenues which Penn Water actually received from the Pennsylvania customers. Clearly FPC's adjustment of $1,127,699 net interchange revenue is improper. The $1,127,699 does not represent additional revenue from Consolidated. This conclusion of FPC is wholly unsupportable in that

it is premised upon "entitlements" under a contract which has been declared illegal, invalid and unenforceable.

The D. C. Circuit has approved determination by FPC of an allocation of reduction in rates which has as its sole basis the judicially declared illegal and void contracts. FPC reallocated revenues and expenses of Penn Water in determining the excess of revenue earned above a fair return. Findings of cost allocations were made and a reduction of rates directed in direct proportion of the excess revenue to such reallocated cost. Each of the above are based on provisions of the illegal contracts.

FPC's finding with regard to revenues and expenses are based upon the provisions of the contract (R. Vol. XVI, p. 4961):

> "Instead of showing the net revenue from interchange power as a credit item to operating expenses, the amount thereof, $1,127,699 has been added to revenues from Baltimore Company."

With regard to the allocation of costs, the Commission made the following observations:

(a) Division of cost of service between Consolidated and Pennsylvania customers (R. Vol. XVI, p. 4963):

> "By combining recomputed firm power services rendered Baltimore Company by both

Penn Water and Safe Harbor, Respondents' witness Spaulding testified that costs applicable to such services exceeded the recomputed billing by the amount of $266,578. Important bases for Spaulding's determination were the assumptions that Safe Harbor and Penn Water render joint services to Baltimore Company, and that Baltimore Commpany does not have a right or contract entitlement to two-thirds of Safe Harbor's output."

(b) Allocation of transmission facilities:

1. 220 KV. 60 Cycle Lines and Switching Stations (R. Vol. XVI, p. 4965):

"The allocation of the witness Spaulding is based upon his view that the transmission of energy from Baltimore to Pennsylvania does not relate to the firm demand requirements of any of the [147] Pennsylvania customers except the Railroad and that the supply to the Railroad is in part a responsibility of Baltimore Company.[112]

"[112] He considers the problem as if Baltimore Company's entitlement to power and energy from Safe Harbor did not exist. This interpretation of the subordination of entitlement is neither necessary nor supportable."

2. Safe Harbor-Perryville Line, Conestoga Substation and Perryville Switching Station (R. Vol. XVI, p. 4967):

> "On the other hand, Staff witness Davis allocated the substation 47% to Baltimore Company and 53% to the Railroad in Pennsylvania, and the line and switching station 91% to Baltimore Company and 9% to the Railroad in Pennsylvania, in each instance on the basis of energy flows over the facilities and on the ground that these facilities were used not only for service to the Railroad in Pennsylvania and Maryland, but also for the rendering of interchange services to Philadelphia Company on the behalf of Baltimore Company from the residual of energy to which the latter is entitled under its contract."

(c) Allocation of 25 Cycle Production Facilities to Pool (R. Vol. XVI, p. 4969):

> "Spaulding's 50.15% determination involves acceptance of his estimate of dependable hydro capacity and also his combining the dependable capacity for both Penn Water and Safe Harbor without regard to the Baltimore Company's entitlement (contract proportion) in [152] determining the capacity service rendered Baltimore Company."

"In charging Pennsylvania customers equitably for energy received, it becomes necessary and proper to first charge Baltimore Company with all of the hydro capacity and energy received and to credit it for all steam capacity and energy supplied by it and all hydro capacity and energy diverted from it."

(d) Capacity available to Baltimore Company (R. Vol. XVI, p. 4976):

"[162]

	Holtwood Steam (kw)	Holtwood Hydro (kw)	Safe Harbor Hydro (kw)	Total (kw)
Dependable capacity	28,000	91,740	158,260	278,000
Less prorated station use and line losses	2,216	7,260	12,524	22,000
	25,784	84,480	145,736	256,000
Less Baltimore Co.'s 2/3rds of Safe Harbor's capacity			97,157	97,157
Less 25 cycle to Highlandtown		41,480		41,480
	25,784	43,000	48,579	117,363
Demands in Pennsylvania				153,512
Balance to be supplied by Baltimore Company				36,149"

(e) Unit costs for capacity and firm energy and further allocations (R. Vol. XVI, p. 4979):

"As interchange sales in Pennsylvania are on a when-as-and-if basis, the mwh so supplied by Penn Water comes from Baltimore Company's contract residual entitlement to Penn Water's

resources and are therefore deemed to have been made for Baltimore Company's account."

With regard to the allocation of rate reduction, the Commission applied the provisions of the illegal and void contracts (R. Vol. XVI, p. 4981):

> "Under the arrangements now in effect the sales to Pennsylvania Power & Light Company, Philadelphia Electric Company and Metropolitan Edison Company are made on a firm basis and Baltimore Company takes what is left. In fact, Baltimore Company in times of severe water shortage may carry the main burden of supplying the foregoing Pennsylvania customers.
>
> "[167] It is not feasible, because of the nature of Penn Water's operations, for the latter to assume firm commitments to all its customers, including Baltimore Company. The present arrangement whereby sales to Pennsylvania customers are made on a firm basis on definite rate schedules whereas Baltimore Company takes what is left and assures Respondents of the recovery of all proper operating expenses, depreciation, taxes and a fair return, is the most practicable under the circumstances. That arrangement will, therefore, be continued with, however, such modifications as are necessary to accomplish the reductions mentioned

above to Pennsylvania Power & Light, Philadelphia Company, Metropolitan Company and Baltimore Company."

FPC, having allocated costs on the basis of contractual entitlements, concluded that the difference between total allowable costs and total revenues, thus determined, represented the excess amounts earned by the rates of Penn Water and accordingly determined the percent of excess revenues (R. Vol. XVI, p. 4980):

"The allocated special facility costs added to the allocated hydro capacity cost and the allocated cost of capacity supplied by Baltimore Company (supra) and to firm energy costs give total allocated costs which compare with total revenues as follows:

"[166]

PP&L Co.	$1,877,818	$1,958,356	$ 80,538	3.70
Philadelphia Company	834,550	948,861	114,311	5.25
Metropolitan Company	641,361	667,455	26,094	1.20
Railroad (in Pa.)	1,261,323	1,483,798	222,475	10.22
Baltimore Company	652,993	2,386,311	1,733,318	79.63
Total	$5,268,045	$7,444,781	$2,176,736	100.00"

The D. C. Circuit, in affirming the order of FPC, was clearly in error in permitting a determination of FPC jurisdiction on the basis of the provision of the illegal contracts and in permitting a determination of allocation of costs and revenues on the basis

of the illegal provisions of entitlement and in directing a rate reduction, based on the result of such allocations.

Further irrespective of the invalidity of the contracts there is no reasonable basis for application of a fiction of entitlements where the amount of energy actually sold by and to the respective parties is known. Fiction is at war with reality. The realities of the relationship are illustrated only by the actual sale and purchase of energy as were reflected on the books of Penn Water, Safe Harbor and Consolidated.

Failure of FPC to accept the business practices reflected by books of parties themselves was so arbitrary and capricious as to amount to an error of law.

CONCLUSION

Pennsylvania Public Utility Commission respectfully urges your Honorable Court the importance of the instant case to it, the administrative body charged with the power and duty to enforce the Pennsylvania Public Utility Law, and to Pennsylvania customers of Pennsylvania Water and Power Company.

Argument

The issues before your Honorable Court relate to the power and duty of your petitioner with regard to regulation of intrastate sales of energy by Pennsylvania Water and Power Company, and to the power of FPC to require continued performance of contractual provisions which are not only invalid but also illegal as being contrary to public policy and the laws of the Commonwealth of Pennsylvania. There is also challenged the power of a regulatory body such as FPC to dispense favor to one utility as against another, as well as the power to disregard fact, reality and accepted business principles and to indulge in theory and fiction. By such indulgence FPC has assumed power, and the D. C. Circuit Court has placed thereon the sanction of the law, to arbitrarily discriminate in the allocation of rate reductions not only between utilities but between people of the several states.

Pennsylvania Public Utility Commission respectfully submits that the D. C. Circuit Court was in error in (1) holding that sales of energy produced and sold within the Commonwealth of Pennsylvania, mingled at times with energy from another state, constituted sales in interstate commerce, notwithstanding that the respective amounts were ascertainable and that the amount flowing from another state represented an insignificant portion of the total; (2) holding that FPC had power to require a Pennsylvania public utility to perform contracts

which were illegal in the state of Pennsylvania, and (3) holding that FPC may disregard the actual sales in fact and effect an allocation of a reduction in rates on the basis of contractual entitlements.

Your Honorable Court is respectfully requested to uphold the errors assigned and to annul the orders of FPC or, in the alternative, to remand the case to FPC with appropriate directions.

Respectfully submitted,

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APPENDIX A

TEXT OF PERTINENT STATE STATUTES (EXCERPTS)

Pennsylvania Public Service Company Law.*

Article I—Definitions

"Section 1. * * *

"The term 'Public Service Company', when used in this act, includes all * * * water-power corporations * * *".

Article II—Duties and Liabilities of Public Service Companies

"Section 1. It shall be the duty of every public service company—

"(a) To furnish and maintain such service, including facilities, as shall in all respects be just, reasonably adequate, and practically sufficient for the accommodation and safety of its patrons, em-

*Approved July 26, 1913, Pamphlet Laws 1374 (Effective January 1, 1914) as amended and supplemented.

ployees, and the public, and in conformity with such reasonable regulations or orders, as may be made by the commission.

"(b) To render and furnish all such service at prices, charges, rates, tolls, fares or compensation that shall be just and reasonable, and in conformity with such reasonable regulations or orders as may be made by the commission.

"(c) To make all such repairs, changes, alterations and improvements in or to such service, including facilities, as shall be reasonably necessary for the accommodation or safety of its patrons, employes and the public. * * *"

Article III—Creation, Powers and Limitation of Powers, of Public Service Companies

"Section 3. Upon like approval of the commission first had and obtained, as aforesaid, and upon compliance with existing laws, and not otherwise, it shall be lawful—

* * * * * * * *

"(c) For any public service company to sell, assign, transfer, lease, consolidate, or merge its property, powers, franchises, or privileges, or any of them, to or with any other corporation or person."

Text of Pertinent State Statutes

Pennsylvania Public Utility Law.*

Article I—Short Title and Definitions

"Section 2. Definitions.—The following words, terms and phrases shall have the meanings ascribed to them in this section, unless the context clearly indicates otherwise.

* * * * * * *

"(17) 'Public Utility' means persons or corporations now or hereafter owning or operating in this Commonwealth equipment, or facilities for:

"(a) Producing, generating, transmitting, distributing or furnishing natural or artificial gas, electricity, or steam for the production of light, heat or power to or for the public for compensation; * * *"

Article II—Certificate of Public Convenience

"Section 202. Enumeration of Acts Requiring Certificate.—Upon approval of the commission, evidenced by its certificate of public convenience first

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* Approved May 28, 1937, Pamphlet Laws 1053 (Effective June 1, 1937), as amended and supplemented. (66 Purdon's Pennsylvania Statutes Annotated, Sec. 1101 *et seq.*) This law superseded the Public Service Company Law.

had and obtained, and upon compliance with existing laws, and not otherwise, it shall be lawful:

* * * * * * * * *

"(d) For any public utility to dissolve, or to abandon or surrender, in whole or in part, any service, rights, power, franchise, or privilege: * * *.

"(e) For any public utility, except a common carrier by railroad subject to the Interstate Commerce Act, to acquire from, or to transfer to, any person or corporation, including a municipal corporation, by any method or device whatsoever, including a consolidation, merger, sale or lease, the title to, or the possession or use of, any tangible or intangible property used or useful in the public service: * * *."

Article III—Rates and Rate Making

"Section 301. Rates to Be Just and Reasonable. —Every rate made, demanded, or received by any public utility, or by any two or more public utilities jointly, shall be just and reasonable, and in conformity with regulations or orders of the commission: * * *."

Article IV—Service and Facilities

"Section 401. Charter of Service and Facilities. —Every public utility shall furnish and maintain adequate, efficient, safe, and reasonable service and

facilities, and shall make all such repairs, changes, alterations, substitutions, extensions, and improvements in or to such service and facilities as shall be necessary or proper for the accommodation, convenience and safety of its patrons, employes and the public. Such service also shall be reasonably continuous and without unreasonable interruptions or delay. Such service and facilities shall be in conformity with the regulations and orders of the commission. Subject to the provisions of this act and the regulations or orders of the commission, every public utility may have reasonable rules and regulations governing the conditions under which it shall be required to render service. * * *."

Pennsylvania Laws Governing Corporations.

Section Five of Corporation Act of 1874.*

The business of every corporation created hereunder, or accepting the same, shall be managed and conducted by a president, a board of directors or trustees, a secretary or clerk, a treasurer, and such other officers, agents and factors as the corporation authorizes for that purpose, * * *. The members of said corporation may, at a meeting to be called for that purpose, determine, fix or change the number of

* As amended by Act of May 14, 1891, P. L. 61, and Act of May 6, 1927, P. L. 828 (No. 417).

directors or trustees that shall thereafter govern its affairs, and a majority of the whole number of such directors or trustees shall be necessary to constitute a quorum * * *.

Section one of Act of May 31, 1887, P. L. 281 (No. 166).

SECTION 1. *Be it enacted, &c.,* That it shall be lawful, from and after the passage of this act, for any corporation, chartered or existing by or under any law of this State, to determine, by the vote of its stockholders holding a majority in interest of all of its stock, at a meeting duly called for the purpose, the time of holding the annual meeting for the election of officers of the corporation, and the number of directors that shall thereafter govern its affairs: *Provided,* That the number of directors so determined shall not be less than three nor more than fifteen, and that at least one third of the directors of every corporation shall be and remain, during their term of service, residents of the State of Pennsylvania: * * *.

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Nos. 428, 429

In the Supreme Court of the United States

OCTOBER TERM, 1951

PENNSYLVANIA WATER & POWER COMPANY, ET AL., PETITIONERS

v.

FEDERAL POWER COMMISSION ET AL.

PENNSYLVANIA PUBLIC UTILITY COMMISSION, PETITIONER

v.

FEDERAL POWER COMMISSION

ON PETITIONS FOR WRITS OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

MEMORANDUM FOR THE FEDERAL POWER COMMISSION

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MEMORANDUM FOR THE FEDERAL POWER COMMISSION

OPINIONS BELOW

The main opinion of the Federal Power Commission, issued on January 5, 1949, directing a rate reduction (R. XVI, 39–191)[1] is reported at

[1] The record in these cases consists of eighteen printed volumes and several unprinted volumes of transcripts and exhibits. We will use Roman numerals to refer to volumes and arabic numbers to refer to pages. Thus (Tr. VI, 73) and (R. XVI, 91) will indicate page 73 in volume six of the unprinted transcript and page 91 of volume sixteen of the printed record, respectively.

82 PUR(NS) 193. Its opinion of February 28, 1949, denying rehearing (R. XVI, 372–388) is reported at 82 PUR(NS) 286, and its opinion order, issued October 27, 1949, rejecting proposed tariffs and prescribing the rate schedules prescribed (R. XVII, 46–71) is not yet reported. The opinions of the Court of Appeals for the District of Columbia Circuit (R. XVIII, 46–72, 81–98) are not yet officially reported.[2]

JURISDICTION

The judgment of the Court of Appeals in these cases was entered on July 3, 1951 (R. XVIII, 73–74). Petitioners' applications for rehearing, seasonably filed, were denied on September 6, 1951 (R. XVIII, 78). The petitions for writs of certiorari were filed on November 16, 1951. The jurisdiction of this Court is invoked under 28 U. S. C. 1254 (1) and under Section 313 (b) of the Federal Power Act.

---

[2] Additional opinions here relevant are: (1) The opinions of the Court of Appeals for the Fourth Circuit in *Pennsylvania Water & P. Co.* v. *Consolidated G., E. L. & P. Co. of Baltimore*, 184 F. 2d 552 (C. A. 4), certiorari denied, 340 U. S. 906, 186 F. 2d 934 (C. A. 4) (the first *Consolidated* case), which appear at R. XVIII, 1–28, 35–40; (2) the opinion of the District Court for the District of Maryland in *Pennsylvania Water & P. Co.* v. *Consolidated G. E. L. & P. Co. of Baltimore*, 97 F. Supp. 952 (the second *Consolidated* case), which appears at R. XVIII, 40–46, and the opinion on appeal of the Court of Appeals for the Fourth Circuit, decided January 3, 1952, copies of which have been made available to the Court by the petitioners.

QUESTIONS PRESENTED

1. Petitioners seek to raise the question as to whether the Federal Power Commission may prescribe contractual arrangements adjudged by the Fourth Circuit to violate the antitrust laws and the laws of Pennsylvania, or provisions premised upon such unlawful arrangements (Pet. in No. 428, p. 17). We do not believe that the case presents any such question, inasmuch as the Commission has not entered any order prescribing or premised upon arrangements adjudged unlawful.

2. Whether Penn Water's wholesale sales to its electric utility customers in Pennsylvania are, in the circumstances of this case, in interstate commerce.

3. Whether interstate wholesale rates of Penn Water, which both owns and operates facilities for the transmission and sale for resale of electric energy in interstate commerce and holds a license under Part I of the Federal Power Act, are, in the circumstances of this case, regulable by the Federal Power Commission under the rate regulation provisions of both Part I and Part II of the Act. We do not believe the case presents the question raised by petitioners as to inconsistency between the two Parts, and repeal of Part I *pro tanto* by the subsequently enacted Part II.

STATUTE INVOLVED

The pertinent provisions of the Federal Power Act (Title II of the Public Utility Act of 1935, c. 687, 49 Stat. 803, 838, 16 U. S. C. 791a, *et seq.*) appear in the pamphlet copy of the Act submitted with this memorandum.

STATEMENT

These cases were instituted by the filing under Section 313 (b) of the Federal Power Act of three petitions for review of two orders of the Federal Power Commission (FPC) in the Court of Appeals for the District of Columbia Circuit. Two of the petitions, one filed jointly by Susquehanna Transmission Company of Maryland[3] and Pennsylvania Water and Power Company (Penn Water) on April 22, 1949, and the other filed by the Pennsylvania Public Utility Commission (Pennsylvania Commission) on April 25, sought review of an FPC order, issued January 5, 1949, requiring Penn Water to reduce, effective February 1, 1949, its interstate wholesale rates and charges for electric energy by approximately $2,000,000 annually. The third petition was filed by Penn Water on February 8, 1950, seeking re-

[3] Because of doubts respecting Penn Water's right to own and operate facilities in Maryland, Susquehanna Transmission Company of Maryland was created as a wholly owned subsidiary of Penn Water to own part of Penn Water's transmission facilities located in that state. By virtue of its arrangements with Penn Water, Susquehanna has no separate rates and charges. The references to Penn Water in this brief generally include Susquehanna.

view of the FPC order, issued October 27, 1949, rejecting rate schedules proposed by Penn Water in alleged compliance with the January 5 order and prescribing rate schedules to effectuate those rate reductions. While these petitions were pending before the court below, petitioners filed motions to annul the FPC orders on the ground that the contract between Penn Water and Consolidated Gas Electric Light and Power Company of Baltimore (Consolidated), on which these orders were allegedly based, had been invalidated as violative of the federal antitrust laws and the laws of Pennsylvania in a private suit between the parties.[4] The court below (one judge dissenting) denied the motions to annul and affirmed the FPC orders. The facts pertinent to the issues here involved may be summarized as follows:

Penn Water: Penn Water, a corporation organized under the laws of Pennsylvania, owns and operates at Holtwood, Pennsylvania, on the Susquehanna River some nine miles north of the Pennsylvania-Maryland State line a "run-of-river" hydroelectric project under a 50-year license issued in 1931 by the FPC under Part I of the Federal Power Act (R. XVI, 41–42, Order of July 3, 1931 in Project 1881). In addition, Penn Water, in conjunction with Susquehanna, owns and operates transmission lines and associ-

[4] *Pennsylvania Water & P. Co.* v. *Consolidated G., E. L. and P. Co. of Baltimore*, 184 F. 2d 552, 186 F. 2d 934 (C. A. 4); R. XVIII, 1–28, 35–40.

ated equipment located in Pennsylvania and Maryland (R. XVI, 41–42). These transmission lines interconnect with those of Consolidated (the Baltimore electric company) and of Safe Harbor Water Power Corporation (Safe Harbor),[5] by means of which the electric generating facilities of Penn Water, Consolidated and Safe Harbor are interconnected, integrated and operated as a power pool in order to supply their combined loads with maximum over-all economy and maximum coordinated utilization of hydro resources and generating facilities (R. I, 25–27, 69–78). These transmission lines also interconnect with the facilities of Penn Water's Pennsylvania customers, including the Thorndale-Columbia section of the Pennsylvania Railroad (Railroad), and with the facilities of the Potomac Electric Power Company and of the Perryville (Md.)-Benning (D. C.) section of the Railroad (R. XVI, 43).

[5] Safe Harbor is a Pennsylvania corporation which owns and operates under a 50-year license issued in 1930 by the FPC a large "run-of-river" hydro-electric project on the Susquehanna River several miles above Penn Water's project. All of its stock is owned by Penn Water and Consolidated: 100,000 shares of Class A nonvoting stock are owned by Consolidated and 200,000 shares of Class B voting stock are divided equally between Penn Water and Consolidated (R. XVI, 44). Safe Harbor's rates and charges have been held subject to FPC regulation, both as a "licensee" under Part I of the Federal Power Act, and as a "public utility" under the Act's Part II. *Safe Harbor W. P. Corp.*, 5 FPC 221, 231–243, 66 PUR(NS) 212, 222–223, affirmed, 179 F. 2d 179 (C. A. 3), certiorari denied, 339 U. S. 957.

Penn Water has no franchise service area and does not itself sell to the public. In addition to its arrangements with Consolidated (see *infra*), Penn Water has contractual obligations to sell firm electric energy to three electric utilities in Pennsylvania, and to the Railroad for electrified railroad use in Pennsylvania (R. XVI, 45–48).

The Power Pool: Under its power pooling arrangements with Consolidated,[6] which were to remain in effect until April 22, 1980, Penn Water delivers to Consolidated all of the residue of Penn Water's capacity and energy remaining after Penn Water's firm obligations to the three Pennsylvania utilities and the Railroad have been met (R. XV, 4607–4608; XVI, 45). Penn Water, in turn, is entitled to obtain from Consolidated steam-generated energy in excess of Consolidated's own requirements up to the limits of its available generating capacity to enable Penn

[6] Penn Water was also a party, together with Consolidated, to a fifty-year agreement, effective June 1, 1931, with Safe Harbor, the third member of the power pool. Under this contract, Safe Harbor agreed with Consolidated and Penn Water (and the latter *inter se*), that in return for a combined annual payment which would yield to Safe Harbor a specified rate of return after operating expenses (including taxes and depreciation) the latter companies should be entitled to all of the capacity and energy available from Safe Harbor's project in the ratio of two-thirds to Consolidated and one-third to Penn Water (R. XV, 4554–4576; XVI, 45). Under the arrangement, the entitlements are at the disposal of the power pool to permit the maximum utilization of the resources at lowest cost (R. I, 26; V, 2137–2138; XIII, 4369).

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Water to meet its firm power obligations in Pennsylvania (R. XV, 4585; XVI, 45).[7] For the residue, Consolidated pays whatever dollar amount is necessary, in addition to Penn Water's revenues from those customers, to cover all of Penn Water's cost of operation (including taxes and depreciation) and to provide Penn Water with a fair return on investment (R. XVI, 45). The amount Consolidated is to pay is computed in accordance with a formula which includes a credit to Consolidated for its deliveries to Penn Water. The purpose of this arrangement, as stated in Article VIII of the Supplemental Agreement of June 1, 1931, was "to encourage the maximum utilization of the power and energy entitlements and resources and other facilities of the parties * * * to the end that the joint use of this property and equipment shall give the greatest practical benefit to the public" (R. XV, 4613–4614; XVI, 53–54).[8] The contract also contained,

[7] Consolidated's generating facilities, the principal steam-electric resources of the pool, consist now of four steam-electric plants of 585,000 kw. Safe Harbor's generating facilities are exclusively hydro, its plant having an effective capacity of 230,000 kw. Penn Water's generating facilities are principally hydro with an effective capacty of 104,000 kw.; its steam-electric plant has a capacity of only 20,000 kw. (R. XVI, 42, 168).

[8] Article VIII goes on to provide that the parties

"* * * shall so conduct their operations that economic interchange of power and energy during the different hours of the day, the seasons of the year, and over more prolonged periods, shall be encouraged in every possible way" (R. XV, 4614; XVI, 54).

as Articles IV and V (R. XV, 4612–13), the provisions, held unlawful by the Fourth Circuit, that Penn Water could not expand or contract its facilities, or take on new customers without the consent of Consolidated.

Such an arrangement has enabled Penn Water to operate in a manner not otherwise possible because of the unusual nature of its system. Since its hydro plant, which constitutes the bulk of its energy resources, is essentially, a "run-of-river" plant,[9] Penn Water's ability to provide dependable capacity from its own resources is limited by the amount of water available in the Susquehanna River, which "is one of the most variable flow streams of large size in the country." (Tr. III, 1236).[10] Most of the time there is not enough river flow to permit the operation of Penn Water's hydro plant to the full electric capacity of the generators.[11] At times of low flow it does not have sufficient capacity to supply the demands of its customers. Consequently, if dependent solely upon its own generating facilities to supply the firm power loads of its customers, it could not do

[9] Penn Water's hydraulic storage capacity is sufficient only to provide for a weekly cycle of drawdown and refill (R. I, 438–439).

[10] The flow of the river fluctuates widely from a low of 2,100 cubic feet per second to a high of 860,000 cfs (R. I, 39).

[11] The Penn Water hydro plant can utilize a maximum of 31,500 cfs. (Tr. LIX, 22536), with the river flow more often than not being substantially less (Tr. LVIII, 22371; LXVI, 24764).

so (R. V. 2149; Tr. X, 3626). For the periods of low and high flow of the river do not coincide with periodic low and high demands for electric energy, which characteristically occur in daily, weekly and yearly cycles, each with its own peak;[12] since electric energy cannot feasibly be stored, all demands must be satisfied by capacity capable of producing electric energy instantaneously as customers switch on their lights, motors, and other appliances.

Moreover, if operated independently, Penn Water could not have made the most effective utilization of the potential resources of the river nor could it have obtained the maximum economy of generation (R. I, 25, 74–75, 440–441). Penn Water's inability to impound water during high flow months for use in subsequent low flow months, and the frequent recurrence of low river flows, limits its dependable capacity (R. I, 413; V, 2212–2216; XVI, 165–166). These physical limitations, plus the excessive capital investment required for producing the relatively small de-

[12] Daily peaks are usually in midmorning or midafternoon when industrial activity is highest, or in the early evening hours when residential use overlaps commercial and industrial uses. Weekly peaks usually occur in the first five working days of the week; weekly lows on week ends (and holidays). Yearly peaks usually occur in winter when darkness falls before the close of the working day, and frequently during the pre-Christmas period, when unusually high commercial and residential uses coincide with high industrial use (R. I, 42; Tr. LXV, 24222).

pendable output,[13] would preclude Penn Water, if operated independently, from competing successfully with steam plants and substantial water would have to be wasted over the spillways at times of high flow (R. I, 25; Tr. III, 1236).

Under the power pool arrangements worked out by Penn Water and Consolidated, Penn Water's hydro facilities have been integrated into a system which has steam generating facilities and supplies a large utility load (R. I, 32–33, 439); this results in the most effective and economic use of Penn Water's hydro resources. Penn Water has been able to take on firm obligations and to meet them through the availability of power from Consolidated's steam-generation plants (R. V, 2397), which normally are capable of producing up to their full capacity;[14] in times of severe water shortage, Consolidated

[13] Since the continuous output of the Penn Water plant at low water (2,100 cfs) is only about 8,500 kw.; the investment per kw. would be $3,897, compared to an average investment of $316 per kw. for electric plant in service of companies whose electric operating revenues are more than $250,000 per year. R. XVI, 186; Tr. III, 1236; *Statistics of Electric Utilities in the United States* (Federal Power Commission 1950), p. xxi.

[14] Steam plants, not shut down for emergency or for scheduled maintenance, are usually capable of producing up to their full capacity at all times, including peak-load periods (R. VI, 2455), and usually are used in the order of their efficiency—the newer, larger, more efficient units being used most continuously (base-load operations), the less efficient units being put into operation for shorter periods as the load increases (peak-load operation) (R. I, 23, 36–37, VI, 2455).

carries the main burden of supplying Penn Water's customers (R. XIV, 4405; XVI, 175).

In addition, during periods of low river flow, Penn Water's hydro plant is shut down during daily and weekly off-peak load hours to permit water to accumulate. The steam plants of the pool are utilized to carry the load during such periods. Then during peak-load hours, the hydro plant is operated at full capacity for a few hours using the water which has accumulated during the period of nonuse (R. I, 37, 439; VI, 2455; Tr. LIII, 20137). Through such peaking operation, its hydro plant is used to the best advantage by contributing its maximum generating capacity to the system during peak-load hours when maximum capacity is needed and by saving the costs of using the oldest and most inefficient steam plants which would otherwise be used (R. I, 38-42; VI, 2455).[15] On the other hand, when the river flow is high, the hydro plant is operated around the clock to carry the base load of the pool in substitution for steam-generated energy, thereby reducing the amount of fuel which would otherwise have to be burned and minimizing the

[15] The availability of the hydro energy avoids the installation of additional steam capacity and the necessity of keeping existing boilers banked and ready for use (R. I, 24, 38), which would involve standby losses and the operation of turbo-generators below their most efficient loadings. The hydro capacity is also instantly available, coming from standstill to full load in a fraction of a minute (R. I, 42).

waste of water (R. I, 36–37, 40, 75; VI, 2455; Tr. III, 1236, 1246–1247).[16]

Since, under the system thus evolved, Penn Water's hydro facilities are integrated with the generating facilities of Consolidated as well as Safe Harbor, the energy used to satisfy demands of customers of either is determined on the basis of maximum utilization and economy (*i. e.*, river flow, relative costs of steam generation, and magnitude of loads) (R. I, 40; II, 599–600; XVI, 181). As a result, the flow of energy is generally south from Pennsylvania toward Maryland at all times during the spring months when the river is high (R. I, 341). During the rest of the year, the practice is to generate energy at Penn Water's hydro plants so as to assist Consolidated in carrying its peak loads during the day, but to stop hydro generation so as to allow the ponds to refill during off-peak periods (R. I, 45–46, 439). And, although at such times the flow of energy tends to be to the north, from Baltimore to Pennsylvania, the direction of flow on the lines crossing the State boundary may change frequently according to the needs of the consumers in Pennsylvania or Maryland (R. I, 341; II, 599–600; VI, 2455; XVI, 54; Tr. LXVI, 24733).

[16] The purpose of the residual type of payment provided in the contract (*supra*, p. 8) was to free and direct the entire pecuniary motivation to the achievement of the maximum over-all economy of operation and utilization of available resources and facilities, without artificial restrictions due to contractual prices or otherwise (R. I, 25–27, 69–78).

The FPC's order of January 5, 1949: On September 1, 1944, having received petitions from the Mayor and City Council of Baltimore, Maryland and from the Public Service Commission of Maryland (Maryland Commission) (R. XV, 4623, 4731–33),[17] the FPC instituted an investigation into the reasonableness of the rates and charges made by Penn Water for its interstate sales of electrical energy at wholesale, including its sales to Consolidated (R. XVI, 31).[18] After extensive hearings in which Consolidated and the Maryland and Pennsylvania Commissions actively participated as intervenors (R. I, 2; XVI, 31–37), the FPC on January 5, 1949, issued its opinion and order (R. XVI, 39–191).

After reviewing the operations of the power pool, the FPC found that since all of the resources of the pool are available to meet the combined load of its members, without reference to

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[17] The importance of the interstate rates to Consolidated's retail rates to consumers, which were at the time the subject of a Maryland Commission rate proceeding, is referred to by that commission in its opinions in its investigation. *Re Consolidated Gas Electric Light and Power Company of Baltimore*, 61 P. U. R. N. S. 94, 102–103; *id.*, 67 P. U. R. N. S. 144, 149–150.

[18] The FPC simultaneously and on the same petitions initiated a separate investigation of the rates charged by Safe Harbor Water Power Corporation to Consolidated, and after hearings, on November 4, 1946, ordered a reduction of about $627,551 annually. *Safe Harbor W. P. Corp.*, 5 F. P. C. 221. Upon review, the Court of Appeals for the Third Circuit affirmed the order. *Safe Harbor W. P. Corp.* v. *FPC*, 179 F. 2d 179 (C. A. 3), certiorari denied, 339 U. S. 957.

state boundaries, the pool was an "integrated and coordinated interstate electric system." (R. XVI, 51). The FPC further found that the sales of system energy, such as those by Penn Water to its Pennsylvania utility customers, made without reference to the state of origin of the energy, were pool sales, and hence, in light of the interstate nature of the pool, were sales in interstate commerce (R. XVI, 55). The FPC accordingly concluded that Penn Water is a "public utility" under Part II of the Federal Power Act by virtue of its ownership and operation of facilities for the transmission and sale at wholesale of electric energy in interstate commerce, and that its sales for resale to Consolidated, as well as to its three Pennsylvania customers, are subject to Commission jurisdiction under Section 206 (a) of the Act (R. XVI, 56).[19]

In addition, the FPC found that it had jurisdiction to regulate Penn Water under Section 20 of Part I, which relates *inter alia* to rates of licensees whose power enters interstate commerce, since, as it found, the States were "unable to agree" on these rates (R. XVI, 58). The FPC further found that Penn Water's status as a licensee under Part I does not exempt it from regulation under Part II and that no conflict resulted in the pending case from regulation under both Parts (R. XVI, 59).

[19] The FPC did not assert jurisdiction over Penn Water's sales to the Railroad (R. XVI, 51).

In determining just and reasonable rates, the FPC found Penn Water entitled to a return of $1,300,672, computed on a "fair and reasonable rate of return" of 5¼% on a proper rate base, which the FPC found to be $24,774,712[20] (R. XVI, 186). This 5¼% rate of return was allowed since, under the arrangements with Consolidated which the FPC directed be continued as "the most practicable under the circumstances" (R. XVI, 175), Penn Water was assured a stabilized income as in the past (R. XVI, 147).

Since Penn Water's net operating income exceeded a fair return by $1,954,261, the FPC undertook to determine "a reasonable and proper allocation of the cost of service rendered by Penn Water" (R. XVI, 175, 186). On the basis of that allocation, which the FPC grounded on the representative costs of Penn Water's services, which the FPC directed to be continued, to its Pennsylvania customers and to Consolidated, the FPC ordered Penn Water, effective February 1, 1949, to file tariffs which would reduce its rates to its Pennsylvania customers by the aggregate sum of $220,943 and to Consolidated by a reduction of $1,733,318 in Consolidated's residual payments (R. XVI, 174–175, 187, 189–90).[21]

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[20] This rate base consists of gross investment of $33,426,585 plus working capital of $650,000 less accrued depreciation of $9,001,873 (R. XVI, 186).

[21] The FPC formula differed from that provided for in the contract in the following particulars, among others: The

Petitioners sought rehearing of this rate reduction order of January 5, 1949, on the ground, among others, that the contract between Penn Water and Consolidated, particularly Article IV and V, violated the antitrust laws (R. XVI, 206), and consequently that the FPC findings as to jurisdiction, rate of return and allocation, were invalid (R. XVI, 206, 208, 236, 248, 249, 330–331, 332). In so urging, petitioners referred to the complaint filed in December 1948, by Penn Water against Consolidated in the United States District Court for the District of Maryland in which Penn Water sought a declaratory judgment that the contract was invalid under the antitrust laws (R. XVI, 207). The FPC denied the petitions for rehearing with the comment (R. XVI, 378):

> If there are questions as to the legality of the foundation contracts which are in litigation, as [petitioners'] application for rehearing indicates, the validity of our order is not dependent upon the decision of those questions.

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rate of return was reduced from 7% to 5¼%; the rate base to which the 5¼% was to be applied was changed from an undepreciated rate base to a rate base computed by deducting accrued depreciation from gross investment and including working capital; the method of computing the annual allowance for depreciation was changed from a sinking-fund depreciation method to the straight line method, thereby increasing the annual allowance (R. XVI, 186–7; R. XVII, 58–62; Tr. III, 1136–8, 1159–60; R. XV, 4608–12, 4617–21).

Following the FPC's denial of a second petition for rehearing, Penn Water, on April 22, 1949, and the Pennsylvania Commission, on April 25, petitioned the court below for review of the FPC's January 5 order.

The FPC's order of October 27, 1949: Thereafter, on May 31, Penn Water filed with the FPC rate schedules purportedly in compliance with the January 5 order (R. XVII, 27–45). On October 27, the FPC, rejected these schedules after finding that they did not comply with the January 5 order in several respects. The FPC prescribed schedules which it found would effectuate the requirements of its order, and directed the continuance of only those provisions of the Penn Water-Consolidated contract which were "in and of themselves lawful" (R. XVII, 46–47, 62).[22] After denial of its application for rehearing of this order, Penn Water filed in the court below an additional petition seeking review of this order (R. XVII, 1–10).

The proceedings below: While these cases were pending in the court below, petitioners moved the court to annul the FPC's orders on the ground that essential factual and legal support for these orders had been destroyed by the decision

[22] These rate schedules were to be effective in accordance with the terms of an order of the court below, issued on April 29, 1949, which stayed their effective date pending final decision on the condition that Penn Water segregate in a special reserve the amount of the prescribed rate reduction.

rendered by the Court of Appeals for the Fourth Circuit in Penn Water's private antitrust action against Consolidated (*supra*, pp. 5, 17) (R. XVIII, 1–28).[23] The court below, however, denied the motions to annul. It construed the Fourth Circuit decision—

> as having done no more than declare illegal under the antitrust laws certain restraints exercised by [Consolidated] upon Penn Water—such as requiring its approval before it could take on new customers or expand generating facilities. Those restraints had been privately agreed upon by the parties and submitted to the Commission as an accomplished fact. The court was careful to avoid using language which might be interpreted in such a fashion as to affect any rate proceeding * * * [R. XVIII, 53–54].

Accordingly, the court stated (R. XVIII, 54):

> In our view, the Fourth Circuit's opinion neither purported to nor did relieve Penn Water from its obligation under the Federal Power Act to continue the then-existing services and rates. It is those services and rates, reflecting underlying operations, which were the subject of the Commission's order. "A rate is not necessarily illegal because it is the result of a conspiracy in restraint of trade in viola-

[23] The Fourth Circuit's decision reversed the ruling of the District Court for the District of Maryland holding that the contract was valid. *Pennsylvania Water & P. Co.* v. *Consolidated G. E. L. & P. Co. of Baltimore*, 89 F. Supp. 452.

> tion of the Anti-Trust Act. What rates are legal is determined by" the regulatory statute [citing *Keogh* v. *Chicago & N. W. Ry. Co.*, 260 U. S. 156, 162]. The validity of Commission action in this proceeding must be determined in light of the criteria furnished by the Federal Power Act, as applied to the operations and arrangements under scrutiny.

As to petitioners' attacks on the jurisdictional basis of the FPC orders, the court held that Penn Water was part of an "integrated and coordinated interstate electric system", that its sales to its Pennsylvania customers were in interstate commerce, and that consequently it was a public utility under Part II of the Federal Power Act, with its rates for those sales subject to regulation under that Part (R. XVIII, 61–64). The court also ruled *inter alia* that the fact that Penn Water is a licensee under Part I, does not prevent it from also being regulated as a public utility under Part II (R. XVIII, 57–60), and further that since there was substantial evidence to support the finding that the Maryland and Pennsylvania Commissions were "unable to agree," the FPC was also authorized to regulate Penn Water's wholesale interstate rates as a licensee under Section 20 of Part I (R. XVIII, 60–61).

On the merits, the court ruled that the FPC's findings were supported by substantial evidence (R. XVIII, 64–72) and, accordingly, it affirmed (R. XVIII, 72).

ARGUMENT

(1) The principal basis for certiorari in these cases arises from the fact that in its opinion of January 3, 1952, in the second *Consolidated* case,[24] the Fourth Circuit has stated that it disagreed with the view expressed by the court below that the Federal Power Act authorizes the Federal Power Commission to prescribe arrangements which would otherwise be in violation of the antitrust laws. The question upon which the courts have differed is doubtless an important one—although since the enactment of the Federal Power Act it seems never to have arisen except in the two recent cases involving the Penn Water-Consolidated contracts. The Government's position on this question is that at least where the Federal Power Commission lawfully prescribes an arrangement requiring integrated operation of power companies, action in compliance with the Commission's order would not violate the antitrust laws. Cf. *Parker* v. *Brown*, 317 U. S. 341. The only question presented in such circumstances is the scope of the Commission's statutory authority.

These cases, however, may not present an appropriate vehicle for this Court to consider and determine the question upon which the courts of

[24] *Consolidated Gas Electric Light and Power Co. of Baltimore* v. *Pennsylvania W. & P. Co.* (C. A. 4), decided January 3, 1952.

appeals have disagreed. For the conflict with the Fourth Circuit would arise only if the Federal Power Commission *has* prescribed arrangements found by that court to violate the Sherman Act. Here, as we shall show, the Commission has not issued any such order; it has not required the companies to perpetuate any contractual provision found unlawful by the Fourth Circuit. Furthermore, neither of the Fourth Circuit's opinions expresses disagreement with the alternative ground for the decision of the court below (quoted at pp. 19–20, *supra*), that nothing in the antitrust or Pennsylvania laws warranted relieving Penn Water of its obligation to continue the then existing services at the reduced rates fixed by the Federal Power Commission,[25] which was the principal object of the Commission's order. Thus, on the present record, it seems highly unlikely that this Court will reach the issue of law upon which the two courts of appeals have disagreed.

The Fourth Circuit in the first *Consolidated* case held violative of the antitrust laws only the provisions of the contract (Articles IV and V) which prohibited Penn Water from making new sales or purchases of electric energy and from expanding its generating facilities without Consolidated's approval (R. XVIII, 7 *et seq.*; see

[25] Petitioners do not assert in this Court that the Federal Power Commission's order reducing rates is not supported by substantial evidence.

also R. XVIII, 25).[26] That court did not hold illegal the provisions as to power pooling and the residual payment type of rate.[27] And, although it went on to invalidate the entire contract, which, of course, included these provisions, it did so not because it regarded the latter provisions as illegal in and of themselves, but rather because, in its view, Articles IV and V were such inseparable parts of the agreement that the remainder could not operate as a contract between the parties without these Articles (R. XVIII, 37).

The FPC's opinions and orders do not prescribe the continuance of any provisions found unlawful. For the FPC's order expressly limited

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[26] The Fourth Circuit expressly stated (R. XVIII, 7):

"The restrictions which are imposed upon the activity of Penn Water by the agreement and give rise to the contention of invalidity are contained in Articles IV and V * * *." Its decision in the second *Consolidated* case is similarly limited. Slip Op., pp. 3–4.

[27] In its opinion in the second *Consolidated* case (Slip Op., p. 5) the Fourth Circuit removed any possible doubt as to its holding in the first case by summarizing the contract as follows:

"This [the Penn Water-Consolidated contract] provided in effect that Consolidated should be entitled to all the electric capacity and energy available to Penn Water from its plant at Holtwood on the Susquehanna and from Safe Harbor, and in return Consolidated agreed to pay Penn Water an amount equal to its operating expenses and a specified rate of return on Penn Water's invested capital; *and then followed* the illegal restrictions upon the activities of Penn Water * * *." [Italics supplied.]

its scope to contractual provisions, "in and of themselves lawful" (R. XVII, 62)—a phrase included in the order after Penn Water had presented to the Commission its contention that portions of the contract were unlawful under the antitrust laws and had called attention to the fact that the issue was then pending before the District Court in Maryland in the first of the antitrust suits against Consolidated (R. XVI, 206–7). The obvious purpose of this phrase was to insure that the Commission's order would not be construed as having approved any provision which the courts might find to be unlawful.[28]

Indeed, both courts of appeals seem to agree that the Commission did not prescribe the restrictive Articles which the Fourth Circuit found unlawful. In the second *Consolidated* case, the Fourth Circuit declared that (Slip Op., p. 15)[29]—

> It is obvious that the Commission did not prescribe the restrictive conditions of the

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[28] Penn Water's assertion (Pet. in No. 428, pp. 11–12), that the phrase "in and of themselves lawful," could not have any relationship to the Fourth Circuit's ruling on Articles IV and V, ignores these facts, which show that the FPC, even prior to the Fourth Circuit's ruling, was aware of the possible illegality of these provisions.

[29] Before the Fourth Circuit in the second case, the Power Commission had contended that its order there involved, unlike its order in the instant case, *had* prescribed the restrictive contractual arrangements in issue. The court's holding in response to this contention that the Commission could not prescribe what the antitrust laws prohibit was an alternative ground of its decision (Slip Op., p. 15, *et seq.*).

> contract as part of the rate order in either case * * *.

The court below, although holding that the Commission possesses power to do so, has not said that it has prescribed the restrictive conditions; on the contrary it differentiated between the "restraints * * * privately agreed upon by the parties and submitted to the Commission as an accomplished fact" and the "services and rates, reflecting underlying operations, which were the subject of the Commission's order" (R. XVIII, 54).

As the Fourth Circuit indicated in its decision in the second *Consolidated* case (Slip Op., pp. 14–15), the Commission's orders were directed to the continuance of the arrangements as to power pooling and the residual-payment type of rate (R. XVI, 175, 378–9), which the Fourth Circuit in neither case found to be in violation of the antitrust laws.[30] The Commission's conclusions as to rate of return, interstate commerce and allocation of the rate reduction were based on the continuance of the arrangements as to power pooling and the residual-payment type of rate. Although Penn Water had contended that this

[30] The FPC's purpose in requiring the continuance of the residual-payment type of rate was to encourage the most effective operation of the power pool. The testimony of Penn Water's own officers had clearly demonstrated that, contrary to Penn Water's present claim (Pet. in No. 428, p. 26, fn), the full benefits of the power pool could be obtained only by this type of payment (R. I, 25–27, 69–78).

residual type of payment violated the Sherman Act (Br. in first *Consolidated* case, p. 27; Br. in second *Consolidated* case, pp. 25–26, 32–35), the Fourth Circuit did not so hold. It therefore cannot be said that the Commission's decision was predicated on continued operation of the provisions of the contract found to have been illegal.

(2) The foregoing discussion is fully applicable to petitioners' contention (Pet. in No. 428, pp. 30–32; Pet. in No. 429, pp. 26–36) that the decision below is in conflict with the further ruling of the Fourth Circuit that the Penn Water-Consolidated contract violated the laws of Pennsylvania, in that they deprived Penn Water's directors of the powers of management (Pet. in No. 428, p. 31), and destroyed Penn Water's "corporate virility" (Pet. in No. 429, p. 28). Here, also, the Fourth Circuit ruling is limited to Articles IV and V of the contract (R. XVIII, 25, *et seq.*), and as we have shown, *supra*, pp. 23–24, the FPC did not prescribe the continuance of these provisions. Moreover, there is no conflict on this point for the further reason that the court below dealt only with those activities of Penn Water which are subject to regulation under the Power Act, whereas the Fourth Circuit only held that since some of Penn Water's activities in Pennsylvania appeared to be local and not subject to the Federal Power Act, there was room for the operation of Pennsylvania law with respect to some of the company's activities.

(3) Petitioner in No. 429 contends that Penn Water sales to its Pennsylvania customers were not in interstate commerce (Pet. in No. 429, pp. 16–17, 19, 21–25). It cannot be disputed that substantial amounts, and at times all, of the power sold to the Pennsylvania customers comes from Baltimore (R. XIV, 4405). Furthermore, as shown *supra*, pp. 11–13, Penn Water's generating facilities, together with those of Consolidated and Safe Harbor, are operated as an "integrated and coordinated interstate electric system" (R. XVI, 51). The output of that system or pool, part of which is sold to Consolidated and part to Penn Water's customers in Pennsylvania, is peculiarly the interstate product of the integrated system, functioning as a single multi-state electric and economic unit, for the existence and nature of the product are wholly dependent upon the operation of the integrated interstate system. The product Penn Water sells to the Pennsylvania customers is a product which would not be available but for the interstate pool which enables Penn Water to draw on Consolidated's out-of-state steam generators during peak-load hours of low river flow, and would not be available at the actual low production cost involved but for the operations of the interstate pool.

The unique characteristics of the power pool and the nature of the product not only distinguish this case from *Peoples Gas Co.* v. *Public Service Commission*, 270 U. S. 550, and *Lone Star*

Gas Company v. *Texas*, 304 U. S. 224,[31] relied on by the Pennsylvania Commission (Pet. in No. 429, pp. 21–25), but also support the FPC's conclusion, approved by the court below (R. XVIII, 61–64), that these sales are in interstate commerce although at times they involve varying amounts of energy never crossing the State lines (R. XVI, 55). The similar conclusion as to Safe Harbor, the third participant in the pool, has already been approved by the Court of Appeals for the Third Circuit. *Safe Harbor W. P. Corp.* v. *FPC*, 124 F. 2d 800 (C. A. 3); *Safe Harbor W. P. Corp.* v. *FPC*, 179 F. 2d 179 (C. A. 3), certiorari denied, 339 U. S. 957;[32] see, also, *Missouri* v. *Kansas Gas Co.*, 265 U. S. 298; *Public Utilities Commission* v. *Landon*, 249 U. S. 236.

[31] The fact that when the river flow is low Penn Water is unable to meet its maximum Pennsylvania load obligations from Pennsylvania generators further distinguishes the *Peoples Gas* case, which held that the state could require a sale from a pipeline carrying a mixture of out-of-state and in-state gas where the line contained sufficient intrastate gas for the sale. Similarly the *Lone Star Gas* case is further distinguishable inasmuch as the rates ultimately sought to be fixed there were retail rates which, under established principles, are subject to state regulation even though in interstate commerce (*Pennsylvania Gas Co.* v. *Public Service Commission*, 252 U. S. 23).

[32] In the first *Safe Harbor* case, the Third Circuit pointed out that Safe Harbor is "part of a large integrated interstate electric system" and that its electric output "must be treated as an integrated whole." 124 F. 2d at 802, 807. And in the second *Safe Harbor* case, the Third Circuit again held that Safe Harbor's sales "constitute in fact wholesale sales in interstate commerce" because they are "delivered to an integrated interstate electric system." 179 F. 2d at 185, fn. 9.

(4) The court below properly affirmed the FPC's conclusion that Penn Water's status as a licensee under Part I of the Federal Power Act does not preclude its also being a "public utility," subject to Part II of the Act. This conclusion is not only the same as that reached by the Third Circuit on the same question in the second *Safe Harbor* case, in which this Court declined to review this holding by denying certiorari (Pet. in No. 709, October Term, 1949, pp. 6–19; 339 U. S. 957), but is fully supported by the legislative history of Part II, wherein Congress recognized that its definition of public utilities embraced some licensees and expressly intended that such licensees be regulated as public utilities as well.[33]

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[33] Thus, the House Committee on Interstate and Foreign Commerce deleted the word "licensees" in Section 305 (a)'s prohibition against personal profit by officials and left that prohibition directed solely against public utilities, because it understood that licensees owning or operating Part II jurisdictional facilities would be regulated as public utilities. The Committee commented:

"The Senate bill includes licensees within the provisions of this section, but inasmuch as such licensees when interstate operating public-utility companies will be subject to the provisions of the section in any event, licensees have been omitted from the bill as reported, because of the lack of public interest in those companies which are not public utilities."

H. Rep. No. 1318, 74th Cong., 1st Sess., p. 31; H. Rep. No. 1903, 74th Cong., 1st Sess., pp. 56, 75; see also, Hearings before the Senate Committee on Interstate Commerce, 74th Cong., 1st Sess., on S. 1725, pp. 233–234.

The alleged conflicting dicta in *Niagara Falls Power Company* v. *FPC*, 137 F. 2d 787, 792–793 (C. A. 2), certiorari denied, 320 U. S. 792, and *Alabama Power Co.* v. *FPC*, 128 F. 2d 280, 293 (C. A. D. C.) were urged unsuccessfully as grounds for certiorari in the second *Safe Harbor* case (Pet. in No. 709, October Term, 1949, pp. 7–8, 15–16). On their face they afford little support to Penn Water's theory. Furthermore, a mere reading of the latter two decisions, in both of which the Commission prevailed, will show that the courts were dealing with problems in no way resembling those at bar, and that the statements were made in an entirely different context from that now under consideration.

Nor does the statement below (R. XVIII, 60) as to repeal of Part I by implication from Part II support Penn Water's claim of conflict with the Third Circuit's *Safe Harbor* decisions (Pet. in No. 428, pp. 32–33). The first *Safe Harbor* decision involved no question of regulation under Part II, since there the FPC had not undertaken to exercise its authority under that Part. 124 F. 2d 800 (C. A. 3); see also 179 F. 2d 179, 182. In its second *Safe Harbor* decision, the Third Circuit, in ruling that the company was subject to regulation under both Parts, found it unnecessary to hold that Part II, enacted in 1935, repealed by implication any portion of the earlier Section 20 since it found that the result would be the same under either part; the court indi-

cated, however, that had it been necessary to its decision, it would have so ruled. 179 F. 2d at 185, fn. 10.[34]

The court below also indicated that it did not matter which part was applicable (R. XVIII, 60). In this case, the FPC had proceeded under both Parts I[35] and II, and the standard for fixing rates under both Parts is essentially the same, as both the court below and the Third Circuit have held (R. XVIII, 60; *Safe Harbor W. P. Corp.* v. *FPC*, 179 F. 2d 179, 182–193 (C. A. 3), certiorari denied, 339 U. S. 957; Brief for the Federal Power Commission in Opposition, in No. 709, Oct. Term, 1949, pp. 13–23).

The "careful distinction" "drawn between 'licensees' under Part I and 'public utilities' under Part II" (Pet. in No. 428, p. 33) does not indicate that a company could not be both a licensee and a public utility and so regulable under both Parts; rather, it serves merely to define the provisions applicable to companies which are licensees and not public utilities and *vice versa*. Finally, subjecting Penn Water to regu-

[34] "It would seem to be more accurate to state that certain portions of Parts I and II are inconsistent with each other unless we, or some other court, find a rational reconciliation as we think we have done. If the provisions of the respective Acts cannot be reconciled then the former must be deemed to be repealed by the latter."

[35] The FPC may fix rates for licensees if it finds that the State Commissions are unable to agree on rates. Section 20, 16 U. S. C. § 813. Such a finding in this case was upheld by the court below (R. XVIII, 60–61), and is not challenged here.

lation as a public utility as well as a licensee affect no vested rights of Penn Water as a licensee, since its license was issued after the enactment of Part II in 1935.

CONCLUSION

The judgment below is clearly correct. Since the issue upon which the Fourth Circuit disagrees with the court below would seem not to be presented by the facts of this case, this Court may not deem this an appropriate case in which to consider that question. On the other question there is no conflict in decisions, and no need for certiorari.

Respectfully submitted.

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IN THE

Supreme Court of the United States

OCTOBER TERM, 1951

No. 428

PENNSYLVANIA WATER & POWER COMPANY AND SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND, *Petitioners,*

vs.

FEDERAL POWER COMMISSION, AND CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE AND PUBLIC SERVICE COMMISSION OF MARYLAND, INTERVENORS, *Respondents.*

No. 429

PENNSYLVANIA PUBLIC UTILITY COMMISSION, *Petitioner,*

vs.

FEDERAL POWER COMMISSION, AND CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE AND PUBLIC SERVICE COMMISSION OF MARYLAND, INTERVENORS, *Respondents.*

ON PETITIONS FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

BRIEF OF INTERVENOR-RESPONDENT CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE IN OPPOSITION

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OPINIONS BELOW

The Opinion of the United States Court of Appeals for the District of Columbia Circuit filed July 3, 1951, is not

yet officially reported, but appears at Record (R.), Vol. XVIII, p. 46. The Dissenting Opinion of Miller, Circuit Judge, filed October 4, 1951, which has not yet been officially reported, appears in Appendix B to the Petition in No. 428.

The Opinions and Orders of the Federal Power Commission (FPC) affirmed by the Court of Appeals have not yet been published. They appear in the Record as follows: (1) Opinion No. 173 and Order of January 5, 1949, reducing rates of Pennsylvania Water & Power Company (Penn Water) — R., Vol. XVI, pp. 39-176, 177-191; (2) Opinion No. 173-A and Order of February 28, 1949, denying Petition for Rehearing on Opinion No. 173 and Order of January 5, 1949 — R., Vol. XVI, pp. 372-388; (3) Order of March 17, 1949, denying Petition for Rehearing on Opinion 173-A and Order of February 28, 1949 — R., Vol. XVI, pp. 414-415; (4) Order of October 27, 1949, prescribing new rate schedules for Penn Water — R., Vol. XVII, pp. 46-71; and (5) Order of December 15, 1949, denying Petition for Rehearing on Order of October 27, 1949 — R., Vol. XVII, pp. 94-99.

JURISDICTION

Petitioners have invoked the jurisdiction of this Court under U. S. C., Title 28, Sec. 1254(1), and Sec. 313(b) of the Federal Power Act (U. S. C., Title 16, Sec. 825 l (b)).

PRELIMINARY STATEMENT

The Petitions allege actually three questions.

One question is whether a "licensee," under Part I of the Federal Power Act,[1] which is also a "public utility".

[1] U. S. C. A. Title 16, Part I, Secs. 791-823; Part II, Secs. 824-824h.

under Part II of that Act, is subject to rate regulation under Part II. Petitioner Penn Water denies this. Certiorari on this issue has already been denied by this Court.[2] This issue presents no conflict between Circuits.

A second question is whether, in connection with sales of combined steam and hydro electricity as "firm" power provided by an interconnected and physically integrated interstate electric power system, FPC may exercise jurisdiction over the fluctuating "unfirm" hydro component of this service if that component is generated and sold in a single State. The Pennsylvania Public Utility Commission (PUC) denies this. Its Petition on this issue ignores the facts of the interstate system's physical operation as established by the record and found by the Court below. This issue also presents no conflict between Circuits.

The remaining question — the "primary issue" — is alleged by both Petitioners, Penn Water and PUC, to be whether FPC may compel utilities under its jurisdiction to perform acts which — absent such order — would violate the Federal anti-trust laws. This question was not presented below because, *in this case*, FPC made no such order. It ordered as a tariff for Penn Water's services to Consolidated Gas Electric Light and Power Company of Baltimore (Consolidated) the *rate* and *service* provisions of a contract between those companies, at the same time reducing rates to Consolidated approximately $1,700,000 out of an overall reduction of $2,000,000. These rate and service provisions, so ordered, have never been held to be illegal. Two paragraphs, Articles IV and V, of that contract were, however, later found by the Fourth Circuit

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[2] *Safe Harbor Water Power Corporation v. Federal Power Commission* (1950), 339 U. S. 957 (C. A. 3, March 22, 1949, 179 F. 2d 179).

illegally to restrict Penn Water's contracts with third parties and its physical expansion. That Court thereupon invalidated the entire contract — the legal provisions with the illegal. Petitioners, and the Dissent below by Miller, J., contend that invalidation of the entire contract, *qua* private contract, automatically annulled the tariff which FPC had prescribed by adopting only the valid rate and service provisions of the contract. This alleged issue hangs on this *non sequitur*.

The Court below correctly found that the Petitioners had not exhausted their administrative remedies to change the tariffs by proper procedure before FPC instead of by their present effort to annul those tariffs and to vacate the rate reduction by collateral attack. This finding correctly disposed of the case. But the Court below went further and discussed the general relationship between the Federal Power Act and the Federal anti-trust laws. In a subsequent and different case, involving a different contract and opposite controlling facts,[3] the Fourth Circuit differed from the reasoning of the Court below in the latter's discussion of such relationship. The different reasoning *in that case*, possibly material *in that case*, may present sound grounds for granting certiorari *in that case*. Its difference from reasoning in this case, not material to the decision of this case, does not establish grounds for certiorari *in this case*. It presents a question which is not ripe for determination by this Court *at this time* on *this record*.

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[3] *Consolidated Gas Electric Light and Power Company of Baltimore and Public Service Commission of Maryland v. Pennsylvania Water & Power Company and Pennsylvania Public Utility Commission*, USCA 4th, January 3, 1952, not reported. Copies of this Opinion have been filed by Petitioners with this Court.

THE QUESTIONS AS PRESENTED BY PETITIONERS

1. The question presented by Penn Water *alone* is its "Questions Presented" No. III (Penn Water Pet., No. 428, p. 17). This question is whether, as an acknowledged "licensee" under Part I of the Federal Power Act, Penn Water is subject to rate regulation under Part II of that Act as an acknowledged "public utility" under such Part II. This issue *was* submitted to and passed upon by the lower Court.

Under substantially identical facts and upon identical argument, the Third Circuit held that a "licensee" under Part I of the Federal Power Act is also subject to rate regulation under Part II of that Act if such licensee is also a Part II "public utility." *Safe Harbor Water Power Corp. v. FPC* (1949), 179 F. 2d 179. And, on an argument identical with that now presented by Penn Water, certiorari was denied. (1950) 339 U. S. 957. This question was adequately disposed of by Part II of the Opinion of the Court below (R., Vol. XVI, p. 57), and will not be further argued herein. This issue presents no conflict between Circuits, nor ground for the granting of certiorari.

2. The question presented by PUC *alone* is its "Questions Presented" No. I (PUC Pet., No. 429, p. 19). This question, *as so presented*, is whether FPC has jurisdiction over energy "produced in Pennsylvania and thereafter *sometimes commingled*" with interstate energy and sold to Pennsylvania customers. This issue also *was* submitted to and passed upon by the lower Court which found the issue to be based on a factually incorrect contention (repeated at Penn Water Pet., No. 428, p. 14) that "the services of Penn Water to the three Pennsylvania electric utilities (are) rendered by Penn Water entirely within Pennsylvania * * *." This contention is contrary to the factual record

before FPC, to the factual findings of FPC, and to the affirmance of those findings by the Court below. It ignores Penn Water's dependence on interstate system operations to firm up its own widely fluctuating output which is primarily dependent upon an extremely varied river flow. It likewise abandons the basis of Penn Water's attack on FPC jurisdiction over this service which it made before FPC, viz., that Penn Water's sales to its Pennsylvania customers were "*joint*" sales and that FPC has no statutory jurisdiction over *joint* tariffs (R., Vol. XVI, pp. 56-57). This question asks this Court to substitute its judgment for that of the Court below and for that of the FPC on complicated technical issues of fact. It was adequately disposed of by Part III of the Opinion of the Court below (R., Vol. XVI, p. 61) and will not be further argued herein. It provides no basis for the granting of certiorari.

3. The question presented by *both* Penn Water and PUC is described by Penn Water as follows (Penn Water Pet., No. 428, p. 2):

> "The primary issue raised by this petition is whether the FPC (in the absence of any express authority in the Federal Power Act such as is found in certain other Federal regulatory statutes) may compel electric utilities to perform, and may base its rate orders upon continued performance of, contracts which have been adjudged by the courts to violate Federal antitrust laws, public policy and the laws of the utilities' state of incorporation."

This issue is in effect a consolidation of Penn Water's "Questions Presented" Nos. I and II (Penn Water Pet., No. 428, p. 17). It is duplicated in the Petition of Pennsylvania Public Utility Commission and constitutes that Commission's "Questions Presented" Nos. II and III (PUC Pet., No. 429, p. 19). It was not passed upon by the Court below

or by FPC. Neither was it passed upon by the Fourth Circuit in the Baltimore Contract Case.[4]

This question, as so framed, distorts the issue that was tried below in the following respects:

a. The question distorts the orders of FPC here sought to be vacated.

FPC did not compel performance of any illegal contract provision. The Order of FPC establishing rates, which is here under attack, appears in full in R., Vol. XVII, pp. 46-71. After first reducing the tariff rates, the Commission's order provided that:

> "All other provisions of the aforementioned contracts, *in and of themselves lawful* prescribing or defining the *power, energy and transmission services to be furnished*, or any classification, practice, regulation or rule affecting such services, which several provisions are incorporated herein by reference, shall be observed and be in force." (R., Vol. XVII, p. 62. Emphasis added.)

This order obviously prescribes observance only of contract provisions which are "in and of themselves lawful" and which also "prescribe or define" the "services to be furnished." It does not compel compliance with either Article IV or Article V of the Baltimore Contract, which Articles — and which Articles *alone* — were subsequently held "in and of themselves" unlawful by the Fourth Circuit.[5] Article IV imposed restrictions on Penn Water's contracts with third parties. It did not prescribe or define the services to be furnished, and therefore compliance with it was not prescribed by the above order of FPC. Article V placed

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[4 & 5] *Pennsylvania Water & Power Company and Pennsylvania Public Utility Commission v. Consolidated Gas Electric Light and Power Company of Baltimore and Public Service Commission of Maryland* (Sept. 30, 1950), 184 F. 2d 552, Cert. Den., 340 U. S. 906.

restrictions on the physical expansion of Penn Water. It likewise did not prescribe or define the services to be furnished, and compliance with it was likewise not ordered by FPC.

b. The question assumes — but does not articulate — the *non sequitur* that if an entire contract between utilities, subject to FPC jurisdiction, is stricken down in a collateral action between private parties, because it contains two invalid restrictions, FPC cannot prescribe as a rate-schedule tariff the valid *rate* and *service* provisions of the contract divorced from such restrictions. Based on this *non sequitur*, Petitioners now argue that because the valid portions of the Baltimore *Contract* fell with the invalid under the Fourth Circuit's Opinions of Sept. 30, 1950 and January 10, 1951, the tariff prescribed by FPC in its Order of Oct. 27, 1949 to carry out its Opinion and Order 173 of Jan. 5 1949, and consisting of only the valid rate and service provisions of the Baltimore Contract as modified by FPC, was automatically annulled simultaneously with the contract invalidation. The dissent below of Miller, J., adopts, and is based on this very *non sequitur*. He there states: "But the Commission has ordered the two companies to continue to observe and be governed by all the provisions of the old contract which are 'in and of themselves lawful,' — a qualification which overlooks the fact that the Fourth Circuit condemned the contract in its entirety."

Although the Fourth Circuit struck down the entire contract, it "condemned" only Articles IV and V.

c. The question ignores the fundamental difference between FPC's ordering the continued performance of a private *contract* and its prescribing of a rate and service *tariff*.

d. The question (in asserting an illegal compulsion by FPC of "continued performance") ignores the plain direction to the Petitioners by FPC three years ago,[6] and by the Court below, to utilize the administrative remedies which are now and have at all times been available to Petitioners to change Penn Water's rate and service tariffs by the only method prescribed and permitted by the Federal Power Act. Penn Water denied that such administrative requirements applied to it (R., Vol. XVI, pp. 401 et seq.), and thus far has refused to avail itself of that remedy. Instead, it prosecutes this effort to strike down *ab initio*, by a collateral attack to which FPC was not a party, the rate reduction order of FPC applicable to services already actually rendered. Petitioners have not exhausted their administrative remedies.[7]

e. The question incorrectly asserts that FPC compelled an illegal method of rate payment, which Petitioners improperly label "revenue pooling." Because of Petitioners' inability to demonstrate that FPC prescribed performance of Articles IV and V of the Baltimore Contract, they endeavor to show that the payment provisions, which admittedly were ordered by FPC, are illegal. These payment provisions effect no pooling or sharing of revenue. This same argument was unsuccessfully made below and before the Fourth Circuit, but neither the Court below nor the Fourth Circuit at any time has regarded these provisions as illegal revenue pooling.

f. The question ignores the fact that the orders of FPC were expressly based on the continuing *physical operation* of a physically unified interstate power system. This

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[6] Opinion 173-A (R., Vol. XVI, p. 372).

[7] Federal Power Act, Sections 205 & 206, 16 USCA, Sections 824d & 824e.

physical system operation has been unanimously commended by Commissions and Courts alike.[8] Such unified physical operation has in fact, continued down to the present.

From the foregoing, it is apparent that the orders of FPC here under attack do not purport to "compel" Penn Water or any other electric utility to "perform" any illegal contract or to do any illegal act, nor were those orders "based upon" the "continued performance" of any illegal contract or any illegal act. The Fourth Circuit underlined this fact by saying with respect to this very Baltimore Contract, "It is obvious that the Commission did not prescribe the restrictive conditions of the contract as part of the rate order * * *".[9]

This "primary issue" (as alleged by Petitioners) may be properly raised only after (a) Penn Water has first exhausted its administrative remedies, and then only (b)

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[8] *Safe Harbor Water Power Corporation v. FPC*, 179 F. 2d 179 (1949); Fourth Circuit Opinion in *Baltimore Contract* case, *supra*, Footnotes 4 & 5, at p. 566, "We do not venture to say that the physical connection of the facilities of the two utilities, and the interchange of electric power produced by water in Pennsylvania and steam in Maryland is not a desirable utilization of their combined resources."; Fourth Circuit Opinion in *Safe Harbor Contract* case, *Cons. Gas Elec. Lt. & Pr. Co. of Balto., et al. v. Penn Water, et al.* (Jan. 3, 1952), copies supplied Court by Petitioners, pp. 12-13; FPC Opinion 173, Record, Vol. XVI, pp. 39, 43, "Operations * * * are closely integrated and coordinated as a matter of economy, efficiency, flexibility, and maximum utilization of hydro capabilities."; FPC Opinion 173-A, Record, Vol. XVI, pp. 372, 378, "precisely what was sought to be encouraged and fostered by the Federal Power Act and established as a part of the criterion of the public interest to be served by regulation thereunder"; and see testimony of Penn Water's Officers, Record, Vol. I, pp. 23-27; 31-32; 36-38; 74-75.

[9] *Consolidated Gas Electric Light and Power Company of Baltimore and Public Service Commission of Maryland v. Pennsylvania Water & Power Company and Pennsylvania Public Utility Commission*, USCA 4th, January 3, 1952, not reported.

if, thereafter, FPC actually does prescribe the illegal compulsions now incorrectly ascribed to it by Petitioners. This question presents no conflict between the Circuits *in this case* because neither Court had that issue before it. It presents no adequate ground for the granting of certiorari *in this case.*

STATEMENT

A. FPC Reduced Penn Water's Rates Approximately $2,000,000.

On petition of the Public Service Commission of Maryland (Maryland Commission), the City of Baltimore, and others, FPC on September 1, 1944 (over seven years ago) instituted an investigation of the rates charged to Consolidated by Penn Water and Safe Harbor Water Power Corporation (Safe Harbor) (R., Vol. XVI, p. 31). The latter two companies are Pennsylvania hydroelectric companies which sell only at wholesale. Penn Water also has a small amount of steam-electric generation. Safe Harbor is owned ⅔ by Consolidated and ⅓ by Penn Water, and under its FPC tariff sells its entire output to those two companies in that proportion.

The Safe Harbor rate case was tried first. On November 4, 1946, FPC reduced Safe Harbor's rate of return to 5% and its annual rates to its two customers by about $600,000. The question of whether a Part I "licensee" and Part II "public utility" could be regulated under Part II of the Federal Power Act was answered by FPC in the affirmative in that case. The Third Circuit affirmed on December 30, 1949, *Safe Harbor Water Power Corporation v. FPC,* 179 F. 2d 179, and certiorari was denied on May 15, 1950, 339 U. S. 957.

Trial of the Penn Water rate case began April 15, 1946, and concluded July 16 of the following year. It produced

a record of 26,000 pages of testimony, and at no time during that protracted hearing did Penn Water challenge the validity of any of its contracts. By its Opinion No. 173 and Order of January 5, 1949 (R., Vol. XVI, pp. 39, 177), FPC reduced Penn Water's rate of return to 5¼%, and its annual rates by $1,954,261, based on 1946 operations.

B. Penn Water Thereupon Unilaterally Altered Its Services and Contracts.

On January 28, 1949, Penn Water filed its Petition for Rehearing (R., Vol. XVI, p. 192), objecting "to virtually every statement, finding and requirement of that opinion and order" (R., Vol. XVI, p. 372). Its main contention was "that since the record before the Commission was closed there have been substantial changes in the operations and contracts of Petitioner Penn Water, * * * so that the bases for the said Order * * * are destroyed * * *" (R., Vol. XVI, p. 374). This contention by Penn Water, that the FPC Rate Reduction Order had been rendered entirely nugatory, referred to unilateral action by Penn Water, first, in physically disrupting the interstate, integrated system operations on January 26, 1949 (two days prior to its Petition for Rehearing)[10] and, second, in renouncing and instituting suit on December 21, 1948, against Consolidated to invalidate the long-term contract between Penn Water

[10] This physical throwing of switches, "splitting of buses," and similar radical departures from long-established system operating procedures was directed by a 14-page "Operating Order" issued by Penn Water to its and Safe Harbor's operators. It jeopardized the safety of Consolidated's expensive equipment in Baltimore and threatened the continuity of service in the Baltimore and Washington areas. This danger forced Consolidated and the Maryland Commission to seek injunctive relief in the United States District Court for the District of Maryland. It was this physical disruption of operations, and this alone, to which the injunction granted by that Court was directed. Penn Water has not again resorted to such action since that injunction was dissolved on mandate of the Fourth Circuit on January 17, 1951 (R., Vol. XVI, pp. 382-383).

and Consolidated of June 1, 1931 (the Baltimore Contract) under which Penn Water, prior to the enactment of the Federal Power Act of 1935, had contracted to sell power to Consolidated. This Contract had been filed by Penn Water with FPC on January 13, 1936 (pursuant to Section 205(c) of the Federal Power Act, U. S. C., Title 16, Sec. 824(d)(c)), as Penn Water's filed tariff prescribing its rate and service to Consolidated. FPC was not made a party to this suit.

C. FPC Directed Penn Water to Comply with Administrative Requirements of the Federal Power Act.

On February 28, 1949, FPC entered its Opinion 173-A and order denying Penn Water's Application for Rehearing (R., Vol. XVI, p. 372). In that Opinion, FPC pointed out that any unilateral change by Penn Water in such physical operations would constitute a change in its services and rates to Consolidated which could be accomplished only by compliance with the procedural requirements of the Federal Power Act through the filing by Penn Water of amended tariffs, and concluded, "None of these alleged changes having been made or proposed in the only way they could lawfully become effective, Respondents are in no position in this or any other proceeding to urge any objection or claim in reliance thereon." FPC further pointed out that if such changes "occurred before our order was issued Respondents cannot, on the allegations they have made, complain *in this proceeding* of our failure to hear matters which they failed to bring to our attention by timely application." (P. 382. Emphasis added.)

The Commission thereupon properly refused to consider *in this proceeding* this last-minute collateral attack by Penn Water in its effort to nullify the FPC tariff and thereby still further delay the major rate reduction "already long overdue." The Commission, however, carefully directed Penn

Water's attention to the appropriate and necessary administrative procedure under the Federal Power Act whereby any challenge to the tariff could be considered by the Commission.[11] Instead of responding to this suggestion and properly pursuing their administrative remedies, Petitioners actively prosecuted the collateral action in the United

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[11] On this point, the Commission in its Opinion 173-A of February 28, 1949, said (R., Vol. XVI, 372, at pp. 380 et seq.):

"Furthermore, our rules (Sections 35.5) require that when a rate or service which has been filed with the Commission, as these foundation contracts have been, 'is proposed to be cancelled and no new rate schedule is filed in its place * * * each public utility required to file the schedule shall formally notify the Commission of the proposed cancellation' 30 days in advance and shall submit a statement of the reasons therefor and that notice has been served upon the other parties to the schedule or contract. A copy of such notice to the Commission is required to be duly posted.

"Compliance with filing requirements is particularly important in a case like the present where the filings cover, not a single sale and delivery by one party to the other, but interchange of energy and capacity between and among the parties to the contracts and numerous other obligations and rights which are required to be filed as changes under Section 35.3(c).

"* * *

"If such changes insofar as they affect rates charged Baltimore Company by Penn Water are to be legally effectuated under Section 205(d) of the Act, that can only be done by filing as prescribed in our rules. This will afford 30 days opportunity for examination of the changes before they become effective. If questionable, they are subject to suspension pending hearing and decision, under Section 205 of the Act. If at such a hearing it should appear that the changed rates to Baltimore Company are unjust or unreasonable (as a result of Penn Water's failure to utilize the more economical modes of operation previously followed or for any other reason), or that they are unduly discriminatory or preferential (because of an unreasonable difference between localities, or otherwise), the Commission may refuse to permit them to become effective insofar as they cover the services continued to be rendered by Penn Water to Baltimore Company.

"Insofar as such changes affect service, compliance with the Rule referred to would enable the Baltimore Company, the Maryland Public Service Commission, or any other interested electric utility or state commission, before such changes are put into effect to make application under Section 202(b) for an order 'to sell energy

States District Court for the District of Maryland to strike down the Baltimore Contract. They then sought to exploit their collateral attack by motions to annul or remand (filed in the instant proceeding at the last hour after main briefs were in and the case ready for argument). The Court below, however, in the Opinion here sought to be reviewed, yet again pointed out to Petitioners the necessity for exhaustion of their administrative remedy.[12] It is submitted that the Court below was correct, and that this case is not ripe for certiorari until after the administrative remedy has been exhausted.

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* * * or exchange energy' from and after the time of the proposed change or termination of service, or a complaint under Section 207 as to the adequacy of the service to be rendered.

"None of these alleged changes having been made or proposed in the only way they could lawfully become effective, Respondents are in no position in this or any other proceeding to urge any objection or claim in reliance thereon. An unlawful attempt to avoid putting into effect the rate reduction we ordered affords no valid basis for objecting to that order."

[12] "* * * if petitioners, *as a result of the Fourth Circuit's decision*, wish to make any changes in operations, *contracts*, arrangements, etc. within the jurisdiction of the Federal Power Commission, they must do so in accordance with the Federal Power Act (cf. *Michigan Consol. Gas Co. v. Panhandle Eastern Pipe L. Co.*, 173 F. 2d 784, 788-789 (6th Cir., 1949)). Under Section 205(d) thereof, 'Unless the Commission otherwise orders, no change shall be made by any public utility in any such rate, charge, classification, or service, or in any rule, regulation, *or contract relating thereto*, except after 30 days' notice to the Commission and to the public' (16 U. S. C. Sec. 824d (d)). Pursuant to that section, petitioners may submit new *arrangements* and rates based thereon to the Commission. And the Commission 'either upon complaint or upon its own initiative without complaint' may 'enter upon a hearing concerning the lawfulness of such rate, charge, classification, or service * * *.' (Sec. 205 (e), 16 U. S. C. Sec. 824d (4)). If Penn Water feels itself aggrieved *after* such proposed changes *have been acted upon by the Commission*, it may *at that time* bring a new petition for review. In short, a 'rate established in the mode described should be deemed the legal rate and obligatory alike upon carrier and shipper until changed in the manner provided' by the statute. *(Robinson v. Baltimore & Ohio R. R.*, 222 U. S. 506, 510 (1912))." (R., Vol. XVIII, pp. 54, 55. Emphasis added).

D. Instead of Complying with FPC's Directions, Penn Water Attacked the Baltimore Contract in a Private Suit.

Instead of changing its services and rates by the appropriate administrative procedure, Penn Water prosecuted its private suit against Consolidated in the United States District Court for the District of Maryland to strike down the Baltimore Contract and by such collateral attack to annul the FPC rate reduction order *ab initio*. FPC was not a party to this suit.

On March 18, 1950, the District Court sustained the validity of the Baltimore Contract. *Pennsylvania Water & Power Company v. Consolidated Gas Electric Light and Power Company of Baltimore*, 89 F. Supp. 452.

On Penn Water's appeal, the Fourth Circuit reversed the District Court and, passing only on the face of the Contract, invalidated it.

E. The Fourth Circuit Invalidated the Baltimore Contract Only Because of the Restrictions of Articles IV and V Thereof.

The Fourth Circuit found that two, and only two, provisions of the Baltimore Contract were invalid (R., Vol. XVIII, p. 1 et seq.). These were Article IV, which restricted Penn Water's contracts with others, and Article V, which restricted Penn Water's physical expansion. As above noted, the FPC orders here under attack are not dependent on or related to these two restrictions, and do not require compliance therewith by Penn Water.

The Fourth Circuit's finding that the invalidity of the Baltimore Contract was confined to Articles IV and V is clearly shown from the following excerpts from its Opinion:

"The restrictions which are imposed upon the activity of Penn Water by the agreement and *give rise*

to the contention of invalidity are contained in *Articles IV and V* as follows:

"Article IV. So far as possible consistently with the performance of any duty or obligation to serve imposed on Power[13] by its charter or otherwise by law, Power shall obtain the approval of Electric before entering into any agreement or agreements with any other person or corporation for the sale and/or purchase and/or interchange of electrical and hydraulic power and energy, or before making any substantial modifications in the existing contracts now in force between Power and its customers other than Electric.

"Article V. So far as possible consistently with the performance of any duty or obligation aforesaid, Power shall obtain the approval of Electric (1) before incurring any single commitment for investment (except for renewals or replacements) in excess of $50,000.00 on the basis of which Electric shall make payment under Article III(b) hereof, and (2) before alienating or disposing of in any one year any property, plant, or equipment, other than stores and construction equipment, having a total value in excess of $50,000.00 and included in the investments of Power and/or subsidiaries of Power in plant, property or power development devoted to the generation, transmission, or distribution of electrical power and energy.

"* * *

"The District Judge found and it is not disputed that *the effect of the quoted provisions of Articles IV and V* of the contract is to confer upon Consolidated the power to control (1) the prices at which Power may sell its product; (2) the extent to which Power may extend its plant; (3) the territory in which Power may sell its product; and (4) the amount of back feed energy which Power must purchase from Consolidated.

[13] "Power" designates Penn Water and "Electric" designates Consolidated.

"We are in agreement with this interpretation of the contract. * * *

"* * *

"There can be no doubt that the freedom of action of Penn Water as a public utility of the state has been and is restricted *by the provisions of Articles IV and V* of the basic agreement whereby Penn Water is required to get the approval of Consolidated before making any agreement for the purchase or sale of electric power or making any investment or disposition of any property in excess of $50,000." (R., Vol. XVIII, pp. 7, 8, 25. Emphasis added.)

In its Opinion on Motion to Interpret Mandate the Fourth Circuit, after describing with approval the payment and other provisions of the Contract, again emphasized that only Articles IV and V of the Contract were illegal by saying:

"* * * Closely associated with these provisions were *the illegal restrictions* on the future activities of Penn Water *which resulted in the invalidation of the whole contract. Therein* Penn Water was required to obtain the approval of Consolidated before entering into any agreement for the sale or purchase of electric power and energy and to obtain the approval of Consolidated before making any investment or disposing of its property having a value in excess of $50,000. These restrictive conditions were included in order to safeguard Consolidated in the performance of its promises and it is conceded that without them the *contract* would have been impracticable and would not have been made. * * *" (R., Vol. XVIII, 35, at p. 37. Emphasis added.)

After thus finding that the *only* illegality in the Baltimore Contract was in Articles IV and V thereof, the Court found that those two Articles provided an essential *contractual* protection to Consolidated against the heavy open-end obligations imposed on Consolidated by the Contract,

and, because of their inseparability from the rest of the Contract, struck the entire Contract down. As noted above, the Baltimore Contract was executed before the enactment of the Federal Power Act, before Consolidated had the regulatory protection now afforded by such Act and when, therefore, the *contractual* provisions of Articles IV and V were its sole protection.

The finding that only Articles IV and V were illegal was again confirmed by the Fourth Circuit when, in its January 3, 1952 Opinion in the Safe Harbor contract case, it referred to its Baltimore Contract Opinion and said (pp. 3-4):

> "* * * We there held that the contract between Consolidated and Penn Water, then in suit, which for convenience may be called the Penn Water Contract, was invalid, because *Articles IV and V of the basic agreement* of June 1, 1931 conferred upon Consolidated the power to control: (1) the prices at which Penn Water might sell its product; (2) the extent to which Penn Water might extend its plant; (3) the territory in which Penn Water might sell its product; and (4) the amount of back feed energy which Penn Water must purchase from Consolidated. *These restrictions*, we concluded, *invalidated the contract* * * *." (Emphasis added.)

The Court below is thus obviously correct when it observes that the Fourth Circuit "issued a judgment declaring *certain phases* of the contractual arrangement between Penn Water and Consolidated illegal * * *."

Petitioners contend that since both the valid and invalid provisions of the Baltimore Contract were stricken down by the Fourth Circuit in their entirety *qua contract*, the provisions of the tariff prescribed by FPC, *qua tariff*, otherwise entirely valid, must likewise succumb. This is the fatal *non sequitur* of Petitioners' case.

F. Upon Invalidation of the Baltimore Contract, Penn Water Moved the Court Below to Annul the FPC Rate Reduction Order.

The FPC-Penn Water rate reduction order, effective February 1, 1949 (R., Vol. XVII, p. 58) was awaiting argument on appeal before the Court of Appeals for the District of Columbia Circuit when, on December 11, 1950, the Supreme Court of the United States denied certiorari in the Baltimore Contract case in the Fourth Circuit. On December 29, 1950, Penn Water filed its motion in the Court below to annul the rate reduction order because of the Fourth Circuit's invalidation of the Baltimore Contract. It is this motion, and the lower Court's denial thereof, which is of primary significance in the Petitions herein.

ARGUMENT

A. The Court Below Properly Denied the Motion to Annul the FPC Rate Reduction Order.

1. Because Petitioners Have Not Exhausted Their Administrative Remedy.

The Court below made the sound procedural determination, under established administrative law,[14] that Petitioners could not present to the Court of Appeals for the first time, as a basis for vacating the FPC's rate reduction orders, questions which Petitioners had ignored during the course of the lengthy hearings before the Commission, which they had subsequently made the basis of a collateral Court proceeding to which FPC was not a party, and as to which the Federal Power Act prescribes a proper procedure for presentation in the first instance to the Commission.

---

[14] *Macauley v. Waterman S. S. Corpn.* (1946), 327 U. S. 540; *Aircraft Diesel Equipment Corpn. v. Hirsch* (1947), 331 U. S. 752; *Myers v. Bethlehem Shipbuilding Corpn.* (1938), 303 U. S. 41; *FPC v. Metropolitan Edison Co.* (1938), 304 U. S. 375.

2. Because the FPC Rate Reduction Order Compelled No Unlawful Act.

a. FPC Did Not Compel Performance of Any Illegal Act or Contract Provision.

By its order of October 27, 1949 (R., Vol. XVII, p. 46), rejecting as improper rate schedules filed by Penn Water, purportedly in compliance with the original FPC rate reduction order, FPC prescribed the new rates to be collected by Penn Water, and again made it clear that its order did not attempt to validate any provisions of the Baltimore Contract which might later be invalidated in the then-pending litigation in Baltimore to which FPC was not a party.

It did this (R., Vol. XVII, p. 62) first, by prescribing as tariffs only those provisions of the Baltimore Contract *"in and of themselves lawful,"* thereby automatically excluding from its order any provisions which might be found unlawful "in and of themselves."

It did this, secondly, by prescribing as tariff provisions only those lawful provisions of the Baltimore Contract *"prescribing or defining the power, energy and transmission services to be furnished, or any classification, practice, regulation or rule affecting such services * * *."* Articles IV and V of the Baltimore Contract do none of these things, and they were thereby specifically excluded from the FPC order regardless of the subsequent determination of their validity or invalidity.

Neither the Court below nor the Fourth Circuit found that FPC had purported to validate or prescribe performance of either Article IV or Article V of the Baltimore Contract. In the Baltimore Contract case, the Fourth Circuit said with respect to the Opinion and order of FPC: "The restrictive provisions of the agreement were not men-

tioned and their legal validity was not discussed." (R., Vol. XVIII, p. 22). Indeed, in its recent Safe Harbor Contract Opinion (p. 15), the Fourth Circuit affirmatively states with reference to the *Penn Water* FPC rate reduction order, "It is obvious that the Commission did not prescribe the restrictive conditions of the contract as part of the rate order * * *."

b. FPC Based Its Orders on the Continuing Physical Operations of an Interstate Power System.

In its Opinion 173-A and Order denying Penn Water's Application for Rehearing (R., Vol. XVI, p. 372 at p. 378), FPC described the physically unified interstate operations of Penn Water — as testified to by Penn Water's own officers — as being not only legal but commendable, and "precisely what was sought to be encouraged and fostered by the Federal Power Act * * *." (This unified integrated interstate operation has continued on down to the present, irrespective of contract invalidation.) It pointed out that questions as to the legality of the Baltimore *Contract*, then in litigation, could not affect the validity of the Commission's *Order* which was directed to the "continuation of the *operation* of the integrated and interconnected system," that is, to the *physical operation* of an interstate system.

Thus, the Court below said (R., Vol. XVIII, at p. 54):

> "It is those services and rates, reflecting *underlying operations* which were the subject of the Commission's order." (Emphasis added.)

c. FPC Did Not Prescribe "Revenue Pooling"

Penn Water's Petition contains a score of references to alleged illegal "revenue pooling" and "division of earnings" which it contends were "compelled" by FPC. By its very terms, the concept of "revenue pooling" contemplates a joint pooling or combining of revenues and a division or

sharing of the total. Under neither the Baltimore Contract nor the FPC Order is any pooling of revenues prescribed. This same attack was leveled at the Baltimore Contract before the Fourth Circuit. It was leveled at FPC's order before the Court below. It was also leveled at the Safe Harbor Contract before the Fourth Circuit. Petitioners, however, cannot point to a single holding or inference in any of the Opinions in these cases that the payment provisions ordered by FPC are invalid either as "revenue pooling" or otherwise. On the contrary, the Fourth Circuit, both in its Opinion in the main Baltimore Contract case, and in its Opinion on Penn Water's Motion to Clarify the Mandate in that case, described in detail the payment provisions of the Baltimore Contract with unquestioned approval, and clearly separated them from the illegal restrictions which invalidated that Contract. At this point, Penn Water's Petition (p. 9) again takes recourse to its fundamental *non sequitur* by saying:

> "It is thus clear that the FPC specifically ordered the continuance of the illegal revenue pooling provisions of the Baltimore contract.
>
> "While the Fourth Circuit did not specifically refer to these provisions in declaring the contract illegal it did declare the entire contract invalid * * *."

If Penn Water desires to change the payment provisions of the tariff prescribed by FPC, it may do so only through the appropriate and requisite administrative process.

d. FPC Did Not Base "Critical Features" of its Rate Reduction Orders on Continuance of the Baltimore Contract.

Penn Water's Petition, on this ground, challenges the validity of FPC's order with respect to rate of return, jurisdiction over Penn Water, and allocation of the rate reductions.

(1) The 5¼% Rate of Return.

The Court below (R., Vol. XVIII, p. 66) found that this rate of return was "designed to provide 3.17% for bonds, 5.21% for preferred stock and 8.64% for common stock and surplus and was 'fair' "; that it was based on "substantial evidence," and that it met "the test laid down in the *Hope* case." FPC there denied any "assumption" by it that the Baltimore Contract would be "continued" and asserted that this rate of return "was independently bottomed on the 'end result' test." The adequacy or fairness of this rate of return is not dependent on continuance of any contract. It relates to conditions actually existing during the period in which service was rendered under these rates. If Petitioners contend that this rate of return is now improper, they have their administrative remedy on full hearing before the Commission. The determination of rate of return should not be annulled because of a collateral attack in which it was not even considered.

(2) Jurisdiction of FPC Over Penn Water.

The Court below correctly affirmed FPC's assertion of jurisdiction on the basis of physical operations of the unified interstate electric system. These operations have continued despite invalidation of the Baltimore Contract and do not depend on its existence. No record citation is or can be given by Penn Water in support of its contention (Pet. No. 428, p. 14) that the existence of the interstate pool operations depends upon any illegal contractual provisions.

FPC has asserted that the Commission's jurisdictional findings "were based on the actual operations taking place and not upon the existence of any assumed contractual obligation to conduct such operations." FPC further asserted that its orders "were based upon a consideration of physical

facilities and electrical operations resulting in the service then being rendered * * *; were in no way dependent upon the restrictive conditions of the contract, or any assumed legal effect of the contract," and that the very services over which jurisdiction was so asserted have continued on down to the present and that such operations are "completely interstate in character." Penn Water's statement (Pet. No. 428, p. 14) that the existence of the interstate system depends on the illegal contracts is disproved by the continued operations of the system despite the non-existence of the Baltimore Contract. These operations continue because of the immutable laws of physics operating on existing interconnected generating and transmission facilities.

If Petitioners desire to reduce or terminate FPC jurisdiction over these operations, they may do so only by changing the operations pursuant to the administrative requirements of the Federal Power Act.

(3) Allocation of Rate Reductions.

The entitlements to which Petitioners object are those provided for by the tariff filed by Penn Water itself. They form an integral part of the tariff rates and are "in and of themselves lawful." Because they form a part of the tariff rate they likewise may not be changed except in conformity with administrative requirements.

The Court below amply disposed of this argument by Part V of its Opinion (R., Vol. XVIII, p. 69), and (at p. 71) found that "the conclusions of the Commission on this point are proper and are supported by substantial evidence."

B. Under the Facts of this Case, the Opinion of the Court Below is Not in Conflict with the Opinion of the Fourth Circuit in the Baltimore Contract Case.

Petitioners assert "direct conflict" between Circuits on the so-called "primary issue" but, as shown above, the record in this case does not properly present that issue. It was not ripe for decision and the lower Court did not decide it. It was not presented to the Fourth Circuit in the Baltimore Contract case.

After an extensive quotation from the FPC's Opinion No. 173-A, defining the physical operations covered by its order, the Fourth Circuit said:

> "This view of expert government authority is entitled to respect and we do not venture to say that the physical connection of the facilities of the two utilities, and the interchange of electric power produced by water in Pennsylvania and by steam in Maryland is not a desirable utilization of their combined resources. Nor do we undertake to gainsay the view of the Commission that *even if the restrictive conditions of the basic contract are invalid*, as to which the Commission expressed no opinion, it still has the *duty and authority* under the Federal Power Act to encourage and *establish the interconnection* of electrical facilities of regional districts if it finds that such action is necessary and appropriate in the public interest, and will not interfere with the lawful authority of the state commissions in respect to the generation and distribution of electrical energy in intrastate commerce. Sections 201, 202(a)(b), 16 U. S. C. A. Sections 824, 824a (a)(b)." (R., Vol. XVIII, pp. 23-24. Emphasis added.)

As to this, the lower Court said:

> "In our view, the Fourth Circuit's opinion neither purported to nor did relieve Penn Water from its obligation under the Federal Power Act to continue the

then existing services and rates. It is those services and rates, reflecting underlying operations, which were the subject of the Commission's order." (R., Vol. XVIII, p. 54.)

This language as to the effect of the FPC order clearly presents no conflict. Nor is there any conflict on the question of whether Penn Water's application to FPC for rehearing was properly denied. In fact, the Fourth Circuit took pains in its Safe Harbor Contract Opinion to point out (p. 3) that "* * * we are not engaged in the review of the enforcement of an order of an administrative board or commission." Nor was that Court so engaged in the Baltimore Contract case.

Assuredly, there is no conflict with the holding of the lower Court that the anti-trust question had not been timely raised.

There is no conflict as to the holding of the lower Court that the regulatory provisions of Part II apply to Penn Water as a "public utility" under that section of the Federal Power Act notwithstanding the fact that it is also a "licensee" under Part I. This holding is in complete agreement with an identical ruling of the Third Circuit in the Safe Harbor rate case.[15]

There is no conflict between Circuits on the holding of the lower Court that all of Penn Water's sales of energy were subject to FPC jurisdiction. This holding is in complete agreement with an identical ruling of the Third Circuit on substantially identical facts in the Safe Harbor rate case.[16]

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15 & 16 *Safe Harbor Water Power Corp. v. Federal Power Comm.*, *supra* n. 2.

There is no conflict as to the lower Court's holdings regarding Penn Water's rate base, rate of return, or allocations.

There is no conflict as to the lower Court's holding that Safe Harbor sells its entire output ⅔ to Consolidated and ⅓ to Penn Water. In fact, the Fourth Circuit in its most recent decision in the Safe Harbor contract case said (at pp. 4-5), "These two utilities are its only customers under an arrangement approved by the Pennsylvania Commission."

There is no conflict as to the lower Court's holding that the Petitioners have not exhausted their administrative remedy.

The Petitioners, in an effort to create a conflict between Circuits, have, in fact, distorted the holding of the lower Court. Their statement at page 5 of Penn Water's Petition (No. 428) that "* * * the D.C. majority held in effect that 'antitrust criteria' (R., Vol. XVIII, p. 55) do not apply to orders of the FPC * * *"; the statement on page 12 of that Petition that "* * * the D.C. majority has upheld the FPC orders on the ground that 'antitrust criteria' are not applicable"; and the reference on page 15 of the same brief to the lower Court's "decision that the FPC may exempt the * * * contracts from the antitrust laws" misrepresent the language of the lower Court's Opinion.

The Petitioners' motion to annul FPC's rate order was actually denied by the lower Court on the ground that Petitioners had not exhausted their administrative remedy. Preliminary to such ruling, however, and in response to the contentions made in such motions, the lower Court discussed the relationship between the Federal Power Act and the Federal antitrust laws. It thereby indicated its dis-

agreement with Petitioners' arguments as to the comprehensive and overriding effect of the Fourth Circuit's Opinion. The lower Court thereby reconciled its position *in this case* with that of the Fourth Circuit. *In this case*, no conflict between Circuits arises from this discussion because FPC carefully refrained from ordering the performance of any act which, *qua* contract, would violate the Sherman Act. The Court therefore made no definitive judgment on this concept, and carefully pointed out that before such a decision could be made, the actual issue must first be properly raised in appropriate proceedings under the Federal Power Act.

This discussion was not essential to the operative decision of the lower Court. It here presents, at most, an incipient difference of thinking between the Court below and the Fourth Circuit on a question not presented to either Court or decided by either. This incipient difference in thinking became more apparent in the recent decision of the Fourth Circuit in the Safe Harbor Contract case, which was, however, decided on an entirely different record. In the Safe Harbor case — quite contrary to the present case — FPC contends that it *did* prescribe restrictions which the Fourth Circuit found to be invalid *qua* contract. Petitioners' efforts to create a conflict between Circuits *in this case* present no grounds for the issuance of certiorari. The Fourth Circuit's Opinion in the Safe Harbor Contract case rendered January 3, 1952, may present such a conflict as to warrant the granting of certiorari *in that case*.

CONCLUSION

It is submitted that the judgment of the Court below, which affirmed the orders of the Federal Power Commission, should not be reviewed by certiorari here, unless the Court below made an error of law in its construction of the Federal Power Act, and the Commission's authority thereunder, under the Constitution and Laws of the United States. No such error appears from the Petitions.

It is respectfully submitted that the Petitions should be denied.

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January 23, 1952.

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IN THE

Supreme Court of the United States

OCTOBER TERM, 1951

No. 428

PENNSYLVANIA WATER & POWER COMPANY AND SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND, *Petitioners*,

VS.

FEDERAL POWER COMMISSION, AND CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE AND PUBLIC SERVICE COMMISSION OF MARYLAND, INTERVENORS, *Respondents*.

No. 429

PENNSYLVANIA PUBLIC UTILITY COMMISSION *Petitioner*,

VS.

FEDERAL POWER COMMISSION, AND CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE AND PUBLIC SERVICE COMMISSION OF MARYLAND, INTERVENORS, *Respondents*.

ON PETITIONS FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

BRIEF OF INTERVENOR-RESPONDENT PUBLIC SERVICE COMMISSION OF MARYLAND IN OPPOSITION TO GRANTING OF CERTIORARI

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Public Service Commission
of Maryland.

The Daily Record Co., Baltimore 3, Md.

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BRIEF OF INTERVENOR-RESPONDENT PUBLIC SERVICE COMMISSION OF MARYLAND IN OPPOSITION TO GRANTING OF CERTIORARI

OPINIONS BELOW

The Opinion of the United States Court of Appeals for the District of Columbia has not yet been officially reported. It will be found in Vol. XVIII of the Record, pp. 46-72.

The Opinions and Orders of the Federal Power Commission affirmed by the Court of Appeals have not yet been published. They appear in the Record as follows: (1) Opinion No. 173 and Order of January 5, 1949 — Record, Volume XVI, pp. 39-191; (2) Opinion No. 173A and Order of February 28, 1949, denying Petition for Rehearing on Opinion No. 173 and Order of January 5, 1949 — Record, Volume XVI, pp. 372-388; (3) Order of March 17, 1949, denying Petition for Rehearing on Opinion No. 173A and Order of February 28, 1949, — Record Volume XVI, p. 414; (4) Order of October 27, 1949, prescribing rate schedules — Record, Volume XVII, pp. 46-71; and (5) Order of December 15, 1949, denying application for rehearing on Order of October 27, 1949 — Record, Volume XVII, pp. 94-99.

JURISDICTION

Petitioners invoke the jurisdiction of this Court under U. S. C. Title 28, Section 1254(1) and under U. S. C., Title 16, Section 825 l.

COUNTER STATEMENT OF THE CASE

Respondent-intervenor, Public Service Commission of Maryland (hereinafter referred to as "Maryland Commission") does not accept the Statement of the Case by Pennsylvania Water and Power Company (hereinafter referred to as "Penn Water") or that of the Pennsylvania Public Utility Commission (hereinafter referred to as "Pennsylvania Commission") because those petitioners, in a patent effort to divert the attention of this Court from the fundamental administrative-procedure determination of the Opinion below, misstate the only issue of substance which their petitions raise.

The Opinion of the Court of Appeals for the District of Columbia Circuit, and the judgment based thereon, affirm in normal manner rate orders of the Federal Power Commission which were based upon and fully supported by an extended record of hearings held during a long period of time. Certiorari should not issue from this Court unless there is serious question as to whether the Court of Appeals made a reversible error of law in its construction of the Federal Power Act, and the Federal Power Commission's authority under the Constitution and laws of the United States. No possibility of such error appears, in any manner, in either petition for certiorari.

The proceedings below were statutory appeals from final orders of the Federal Power Commission in an extensive rate investigation of Penn Water's wholesale charges, for hydroelectric power and energy sold by it to Consolidated Gas Electric Light and Power Company of Baltimore (hereinafter referred to as "Consolidated"). These orders hold, in effect, that Consolidated is entitled on a 1946 basis to an annual rate reduction of approximately $1,700,000 on its power bill from Penn Water. The total annual rate reduction ordered by the Commission in Penn Water's rates, on a 1946 basis, amounts to approximately $2,000,000 (FPC Opinion No. 173 and Order of January 5, 1949, Opinion No. 173A and Order of February 28, 1949, and Order of March 17, 1949, Volume XVI pp. 39, 372, and 414, respectively), the remaining $300,000 of the rate reduction being allocated to Penn Water's Pennsylvania customers. This reduction was ordered to be carried out by rate schedules specified for Penn Water by the Federal Power Commission in its Order of October 27, 1949, a petition for rehearing being denied by the Commission's Order of December 15, 1949 (Record Volume XVII pp. 46 and 94, respectively).

The rate case before the Federal Power Commission was begun by order issued September 1, 1944, and a supplemental order issued October 3, 1944, which instituted an investigation of the services, contracts, rates, and charges of Penn Water for any transmission or sale of electric energy subject to the Commission's jurisdiction under the Federal Power Act. A companion order issued on the same date (September 1, 1944) began a similar investigation of the rates and charges of Safe Harbor Water Power Corporation (hereinafter referred to as "Safe Harbor"). Both orders were issued in response to the request of the Maryland Commission* (Petition of August 31, 1944 — Record Volume XVI p. 41), which had pending before it a general investigation of the rates and charges of Consolidated to its Maryland consumers. The Maryland Commission found it necessary to have a prior determination by the Federal Power Commission of the *wholesale* rates paid by Consolidated for hydroelectric power and energy obtained from Penn Water and Safe Harbor, before passing upon the reasonableness of Consolidated's *retail* rates to its Maryland consumers.

The generating facilities of Penn Water, Safe Harbor, and Consolidated are coordinately operated as an integrated and interconnected electric system, the interconnection being provided primarily by an extensive network of transmission lines owned by Penn Water and its wholly owned subsidiary, Susquehanna Transmission Company of Maryland. These integrated operations, as currently performed, were begun under two long-term contracts executed in 1931, to continue until 1980. These contracts were filed with the

* Additional requests for investigation were filed by the governmental authorities of Baltimore City, Baltimore County, and other intervenors in the rate case before the Maryland Commission (Record Vol. XVI, p. 41).

Federal Power Commission in 1936 in compliance with the provisions of the Federal Power Act (Sec. 205 (c); 16 U. S. C. 824d (c)) and thus became the service and rate tariffs of the three companies, passing out of the realm of contract and into that of duty established by law.

Under one agreement (the "Safe Harbor contract") entered into on June 1, 1931, and supplemented by amendments dated August 1, 1932, and November 22, 1939, Consolidated purchased two-thirds and Penn Water purchased one-third of the entire Safe Harbor hydro output, produced at Safe Harbor, Pennsylvania, until 1980. In return, Consolidated and Penn Water assured Safe Harbor of a combined annual payment (divided two-thirds and one-third between the two companies) sufficient to yield a specified annual return above operating expenses. Under the other agreement (the "Penn Water contract"), entered into between Consolidated and Penn Water on the same date, June 1, 1931, Consolidated purchased all the power and energy available to Penn Water from its hydroelectric and steam generating plants at Holtwood, Pennsylvania, and also Penn Water's one-third of Safe Harbor's power and energy not otherwise disposed of in performance of Penn Water's obligations to its other customers. Consolidated pays Penn Water annually a lump sum sufficient to cover all operating expenses and taxes (including Penn Water's payment to Safe Harbor) plus a specified return.* These

* A survey of the Opinions of the Fourth Circuit in the Penn Water and Safe Harbor Contract cases will show that no criticism is made of the economical, coordinated, and integrated operations of the system which result from the above-described provisions, or even of any of the provisions themselves. The Opinions in the Penn Water contract case (184 F. 2d 552, and 186 F. 2d 934) clearly condemn as illegal per se only Articles IV and V of the Penn Water contract, which gave Consolidated control over Penn Water's contracts with others and over installation or disposition of generating facilities. This distinction was carefully observed by

contracts constitute part of the record before the Federal Power Commission as Items E, F, G, H, and I, and appear in the Record pp. 4554-4621. The form of service and payment therefor as thus described has been prescribed by the Commission's Orders.

The vast triangular power pool resulting from this coordinated arrangement for the interchange of energy and services has provided the Maryland consuming public with an economical, reliable, and necessary supply of hydro power since 1931. The overall plan has been consistently praised by all parties (see footnotes, pp. 8 and 9), until just before the Federal Power Commission ordered Penn Water to reduce its rates. Then, and only then, did Penn Water allege that the 1931 contracts were invalid. By strong inference, the plan has also been praised even by the two Fourth Circuit Opinions which held parts of the two 1931 contracts (not the operations) to be illegal per se.

The Safe Harbor rate case was tried first by the Federal Power Commission. It resulted in that Commission's Opinion No. 143 and Order of November 4, 1946 (5 FPC Rep. 221), in which the Commission reduced the rates of Safe Harbor to Penn Water and Consolidated by approximately $600,000 annually on a 1943 basis, saying in part:

> "The inter-connected system is so operated as to obtain the lowest cost for system power and energy requirements. The output of each generating facility flows into the system at such times and in such amounts as will produce economy of operation and reliability of service. * * *
>
> "Under a 1927 contract which, as amended (Basis Agreement), continues in effect until 1980, the Mary-

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the Opinion below. It is also confirmed by the Fourth Circuit's Opinion in the recently decided Safe Harbor contract case, *Consolidated Gas Electric Light and Power Company of Baltimore et al. v. Pennsylvania Water and Power Company et al.*, decided January 3, 1952.

land company is entitled to all the electric capacity and energy not otherwise disposed of under existing contracts or by any obligation to serve imposed upon the Pennsylvania Company (Penn Water) by its charter or by law, which is available from the Pennsylvania Company's hydro and steam plants, as well as that available to the Pennsylvania Company from Safe Harbor. The Pennsylvania Company may require the Maryland Company (Consolidated) to supply it with steam generated energy (backfeed) in excess of the Maryland Company's own requirements, up to the available capacity of the Maryland Company's generating stations then being operated. The Maryland Company agrees to reimburse the Pennsylvania Company for all of its operating expenses, including taxes, depreciation, and the cost of power from Safe Harbor, as well as a certain return, less a credit for the revenues which the Pennsylvania Company receives for local sales in Pennsylvania."

The U. S. Court of Appeals for the Third Circuit upheld the Federal Power Commission's decision in every respect, noting that "Safe Harbor's output is delivered to an integrated interstate electric system * * *", and held that "Safe Harbor's contracts for power and its backing by the Pennsylvania and Maryland companies *are exemplary.*" (Emphasis supplied.) See *Safe Harbor Water Power Corp. v. Federal Power Commission*, 179 F. (2d) 179, cert. denied 339 U. S. 957 (1950).

In the Penn Water rate case (the present proceedings), hearings began on April 15, 1946, and concluded July 16, 1947, during which time over 26,000 pages of Record and hundreds of complicated exhibits were received. Following submission of voluminous briefs, the Federal Power Commission issued Opinion No. 173 and its Order of January 5, 1949 (Record Volume XVI pp. 39-191), ordering Penn Water to reduce its rates and charges, on a 1946 basis, in the total amount of approximately $2,000,000 annually.

During the entire period of the proceedings before the Commission, neither Penn Water nor the Pennsylvania Commission raised any question as to the validity of the long-term contracts under which the interconnected system had been established in 1931, and which as tariffs had been controlling the services of Penn Water and Safe Harbor since they were first filed in 1936 in response to the Order of the Federal Power Commission.

In its petition for rehearing filed with the Federal Power Commission on January 28, 1949, Penn Water asserted for the first time the fact that it considered its long-term power contracts to be null and void, and that it was making this assertion the basis of court proceedings recently instituted in the United States District Court for Maryland. Denying this petition, the Commission, in its Opinion 173A and Order of February 28, 1949 (Record Volume XVI pp. 372-382), informed Penn Water that its rate order rested upon *services as they had been rendered since 1931,* as testified to in the Record before the Commission, and as they must continue to be rendered until changed in the manner required by the Commission's rules issued under the provisions of the Federal Power Act. The Commission pointed out that illegality of particular provisions of the contracts could not affect the rates established by the Commission in relation to services actually rendered, and as they were continuing to be rendered (and have in fact continued to be rendered to the date of this Brief).*

* The Commission makes it quite clear, in its Opinion No. 173A, that it considered it improper to further delay rate reductions which were long overdue in relation to services which had been rendered in the same manner since 1931. The Commission emphasized the testimony of the officers of Penn Water that the integrated interconnected power system was "the outgrowth of twenty years of experience by the two companies in determining the best methods of promoting the coordination of the hydro and transmission facil-

Penn Water, although it continued its collateral attack on its long-term hydro contracts in the United States District Court for Maryland, did not choose to exercise its right to petition for changes of its tariffs as filed with the Federal Power Commission, or of its services as rendered thereunder. Instead, it elected to stand on the record before the Commission and to pursue its appeal from the Commission's orders to the U. S. Court of Appeals for the District of Columbia Circuit, filing a 238 page printed brief, supplemented by a 49 page brief filed by the Pennsylvania Commission. The Federal Power Commission replied with a printed brief of 178 pages, the Maryland Commission with 36 pages, and Consolidated with 50 pages. After these main briefs were filed, and the case ready to be set for argument on the merits, Penn Water and the Pennsylvania Commission filed motions to postpone the date of oral argument. Subsequently, they filed motions to annul or remand the orders of the Commission, asserting that they had been rendered void by the decision of the Fourth Circuit in the Penn Water contract case, *Pennsylvania Water and Power Company, et al. v. Consolidated Gas Electric Light and Power Company, et al.*, 184 F. 2d 552, 186 F. 2d 934, cert. den. 340 U. S. 906. The Court allowed time for extended briefing and argument of these motions, in assigning the case for three days of oral argument, divided between the motions and the appeal on the merits.

Having failed, after these extended briefs and argument below, to convince the Court of Appeals that there was any

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ities of Penn Water with the steam generating plants of Baltimore Company, to the end of maximum utilization of natural resources, minimumzation of investment and the utmost in service availability to the ultimate customers," and that this should not be changed except by the procedures provided by the Act. (Record Volume I p. 69. See also Record Volume I pp. 25-26 and Volume XVI pp. 374-383.)

error in that Record of over 26,000 pages* of proceedings as conducted from September 1, 1944, to July 16, 1947, and culminating in the Order of January 5, 1949, petitioners now seek to have the entire effect of those proceedings destroyed and the purposes of the Federal Power Act frustrated, by insisting that the Court below erred in refusing to annul or remand the Commission's orders because of a collateral determination subsequently obtained by Penn Water in the Fourth Circuit, in proceedings to which the Federal Power Commission was even not a party. Petitioners make this argument despite the fact that the Fourth Circuit stated in the Penn Water contract case that its action did not extend to the rates (and accordingly services) covered by the Commission's Orders (*Pennsylvania Water and Power Company, et al. v. Consolidated Gas Electric Light and Power Company of Baltimore, et al., supra*—see infra, Argument III.)

The Court below referred to and accepted such statement of the Fourth Circuit in good faith, and did not disagree therewith; rather, it treated that statement as consistent with the view expressed below — that what might be illegal as contract between the parties, as constituting a monopoly in violation of the Sherman Act, might nevertheless be valid as an approved tariff or ordered operation

* The printed record in the Court below consisted of 4805 pages, plus an additional 514 pages of Appendices to Penn Water's Briefs. As is indicated in the first footnote of page 2 of Penn Water's petition, it sought to restrict the Record here. If this had been accomplished, the Court would not have before it the real nature of the case and the Record which shows the ample and complete support for the Commission's Orders, including the evidence of Penn Water's officers (Record Vol. I pp. 20-28, 31-46, 69), showing their sworn support of the integrated interconnected power pool which the Commission's Orders maintain — quite contrary to their later collateral efforts to destroy the benefits of that pool, by attacking the contracts which put it in operation.

by the Federal Power Commission, acting in pursuance of the directive of Congress specified in the Federal Power Act (Record Volume XVIII pp. 49-54). The Court below, however, did not rest with this reconciliation of the Commission's orders with the Opinion of the Fourth Circuit in the Penn Water contract case. Regardless of such reconciliation, it based its decision squarely on its holding that if Penn Water had any right to change its services or rates as a result of having had its contracts declared illegal in violation of the Sherman Act, it should pursue its legal remedies under the Federal Power Act, as it had first been directed to do by the Commission when the petition for rehearing before that Commission was denied.

The ensuing restatement of questions presented, and argument with reference thereto, will show that Penn Water is in no manner aggrieved by such a decision, that there is no conflict of circuits with reference thereto, and that certiorari, as requested by petitioners, should be denied.

RESTATEMENT OF QUESTIONS

The petitioners, Penn Water (its petition, p. 17) and Pennsylvania Commission (its petition, p. 19) each state three questions which they seek to have determined by this Court. Because of the duplication involved in Penn Water's questions I and II and the Pennsylvania Commission's questions II and III, all of which seek to present a single issue not yet properly before the Court, there are only three basic questions presented, none of which presents a proper basis for the granting of certiorari in this case.

Question I of the Pennsylvania Commission may be accepted as the first question. However, we will show in another part of this brief that it rests upon a conclusion of

fact contrary to that determined by the Commission upon substantial evidence, and then presents a question of law not faced by either the Commission or the Court below. It clearly does not present a basis for certiorari. (See Argument I herein).

Question III of petitioner, Penn Water, is the only one of the questions that was passed upon by the Court below, and may be accepted as the second question. However, it does not present a conflict of circuits such as is asserted by Penn Water. The Court below correctly followed the determination of the U. S. Court of Appeals for the Third Circuit in *Safe Harbor Water Power Corporation v. F. P. C.*, 179 F. 2d 179, 185 (1949) cert. den. 339 U. S. 957 (1950), *which is the only other opinion which has dealt squarely with this question.* In that case, certiorari was denied by this Court after it was faced with the same misleading argument as to conflict of circuits which is now presented here by petitioners. (See Argument II herein).

Penn Water's Questions I and II have their counterparts in Questions III and II, respectively, of the Pennsylvania Commission. These four questions, separately stated at length in the petitions, can be simply resolved into the one issue which is stated as the first sentence of Penn Water's "Statement" (its petition, pp. 2-3) namely, "the primary issue raised by this petition is whether the FPC * * * may compel electric utilities to perform, and may base its rate orders upon continued performance of, contracts which have been adjudged by the courts to violate Federal antitrust laws, public policy and the laws of the utilities' state of incorporation." This simplified statement, however, like the more complicated questions stated in the petitions, is calculated to mislead this Court to believe that such an issue had been raised in the proceeding before the Commis-

sion, had been ruled upon by the Commission after evidence and argument, and was then confirmed by the Court below.

Actually, the issue stated by petitioners here was never presented to the Commission, and was not accepted as an issue by the Court below. At best, it was suggested only by Penn Water's petition for rehearing before the Federal Power Commission, in response to which the Commission pointed out that if Penn Water desired to raise such questions (which it had ignored during the four years that the rate case was before the Commission and which involved a disruption of the integrated power system as Penn Water had presented it to the Commission), the provisions of the Commission's rules and the Federal Power Act relative to change or withdrawal of tariffs should be complied with (Record Vol. XVI, pp. 375-382).

In confirming the Commission's denial of Penn Water's petition for rehearing, the Court below makes the squarely procedural administrative law determination that Penn Water could not present to the Court of Appeals, *for the first time* as basis for setting aside or remanding the Commission's Orders, matters which the petitioners had ignored during the course of hearings before the Commission, which they had subsequently made the basis of a collateral attack in Court proceedings to which the Commission was not a party, and for which the Federal Power Act specifies a proper procedure of presentation in the first instance to the Commission. That was the basis of the decision below, which petitioners seek to avoid by misstating the issues to this Court, in Penn Water's Questions I and II and the Pennsylvania Commission's Questions III and II.

Phrased succinctly as a legal proposition for review by this Court, the proper third question is:

Was the Court of Appeals, as the tribunal established by law to review decisions of the Federal Power Commission, correct in affirming a decision of the Commission that the Federal Power Act requires a regulated licensee and utility to charge the rates and to perform the services required by order of the Commission, supported by an extended record and issued after protracted hearings, until that utility has sought and obtained a change of its rates and service under procedures duly established by the Commission under the Act?

The ensuing argument (Argument III) will demonstrate that the Court below correctly answered that question in orthodox fashion, under well-established doctrines of administrative law consistently confirmed by this Court.

If petitioners wish a determination of the issues which they erroneously claim to be the questions of this case, they should present the issues which raise those questions in *original* proceedings before the Commission, where a complete record may be made with reference thereto, and then bring them up through the proper appellate procedure. Only then will they be ripe for determination.

ARGUMENT

As shown above, there are really only three issues raised by the questions presented by petitioners. This Court does not decide upon certiorari any issues other than those specified in the petition. Rule 38, U. S. C. A. Title 28, Rules, U. S. Supreme Court, p. 66; *National Licorice Co. v. National Labor Relations Board*, 309 U. S. 350, 357 N. 2 (1940). This argument will address itself to three propositions relating separately to each of the three issues presented by the questions which petitioners raise:

I. *The Court of Appeals' affirmance of the Federal Power Commission's determination, that it has jurisdiction over all of the wholesale sales of Penn Water, was correct and creates no conflict of circuits (Pennsylvania Commission's petition, p. 19, Question 1).*

II. *The Court of Appeals' affirmance of the Federal Power Commission's determination, that it has jurisdiction over Penn Water as a public utility under Part II of the Federal Power Act, was correct and creates no conflict of circuits as to the issue involved (Penn Water's petition, pp. 17-18, Question III).*

III. *The Court of Appeals' denial of petitioners' motions to annul or remand was correct and creates no conflict between the circuits (Penn Water's petition, p. 17, Questions I and II; Pennsylvania Commission's petition, pp. 19-20, Questions II and III).*

Accordingly, certiorari should be denied.

I.

The Court of Appeals' affirmance of the Federal Power Commission's determination, that it has jurisdiction over all of the wholesale sales of Penn Water, was correct and creates no conflict of Circuits (Pennsylvania Commission's Petition p. 19, Question I).

Pennsylvania Commission's Question I (its petition, p. 19) states:

> "Where electric energy is produced in Pennsylvania and thereafter sometimes commingled with electric energy flowing from another state and sold to Pennsylvania customers and where the proportions of such respective energy are ascertainable, are such sales in interstate commerce within the scope and intendment of the Federal Power Act and subject to the jurisdiction of FPC?"

This question is predicated upon an assumption of fact (namely, the separability of intrastate wholesale sales of power and energy by Penn Water to its Pennsylvania customers) which is contrary: (1) to the Record as made before the Federal Power Commission, (2) to the findings of the Commission, and (3) to the confirmance by the Opinion below of those findings as being supported by substantial evidence. It is fully met and disposed of by that portion of the Opinion which reads in part as follows (Record Vol. XVIII, pp. 61-64):

> "* * * It is said that (1) Penn Water's sales to its Pennsylvania customers for resale are sales of electric energy produced and sold in Pennsylvania; (2) the back-feed energy generated by Baltimore Company to Penn Water and sold by it to its Pennsylvania customers loses its interstate character when it is received by Penn Water and commingled with the Pennsylvania produced energy. Even if these sales of back-feed are considered interstate, it is suggested that they constitute so negligible a portion of Penn Water's total sales to Pennsylvania customers that they cannot furnish the basis of federal regulation, or that federal regulation may extend only to an allocable portion of interstate sales.
>
> "* * *
>
> "We are convinced from an examination of the voluminous materials submitted to us that the Commission properly found Penn Water to be part of an 'integrated and coordinated interstate electric system.' * * *
>
> "* * * *Given such interconnected and integrated interstate wholesale operations, there can be no such thing as assigning a particular sale solely to operations within Pennsylvania. Each sale is in effect a pool sale drawn from the integrated interstate system and hence interstate in nature.*
>
> "The same conclusion was reached by the Third Circuit with regard to another of the participants in this

pool, Safe Harbor. The court pointed out that Safe Harbor is 'part of a large integrated interstate electric system' and that its electric output 'must be treated as an integrated whole'. In the second *Safe Harbor* case, the court again held that Safe Harbor's sales 'constitute in fact wholesale sales in interstate commerce' because they are 'delivered to an integrated interstate electric system.'

"*We find substantial evidence in the record to support the Commission's factual findings with regard to the interstate nature of Penn Water's sales.* It is the nature of the operations underlying the sales which furnishes the basis for Commission action rather than legalistic niceties of title and place of sale. Those operations bring petitioners' rates and services within the reach of Part II of the Federal Power Act. The Commission did not assume jurisdiction over any direct consumer sales. It 'was meticulous to take in only territory which this Court had held the States could not reach' — interstate sales at wholesale." (Emphasis added — footnotes omitted.)

The concluding paragraph of the Court's Opinion (Record p. 72) is also particularly applicable here, because Pennsylvania Commission's Question I involves "just the sort of weighing of evidence and making of pragmatic adjustments which fall within the special competence of an expert agency and which should not be interfered with by a court unfamiliar with day-to-day operations and complex technological and financial materials". The Court below pointed out the proper scope of review, when it continued (Record p. 72) "Our review is designed to leave to the Commission the flexibility which is necessary if it is satisfactorily to discharge its function of protecting the public interest, and yet to prevent arbitrary action outside the scope of the Commission's authority. *We have examined all the points raised and are convinced that the Commis-*

sion's treatment of each one was within the range of its statutory authority and was supported by substantial evidence." (Emphasis added.)

This ruling by the Court below is in direct pursuance of the review provisions of the Federal Power Act, Section 313 (U. S. C. A. Title 16, Sec. 825 l) and is in accord with a long line of decisions of this Court in many fields of administrative action.

Rochester Telephone Co. v. U. S., 307 U. S. 125, 146 (1939);
National Labor Relations Board v. Waterman S.S. Co., 309 U. S. 206, 208, 209 (1940);
National Labor Relations Board v. Link Belt Co., 311 U. S. 584, 596-597 (1941);
Colorado v. Interstate Gas Co., 324 U. S. 581, 586-590 (1945).

There is also nothing in the Record by way of evidence which would support the analogy which Question I of the Pennsylvania Commission seeks to draw between the complicated, integrated pool operation of the interconnected electrical system here involved, to the relatively simple local sales of gas involved in the cases of *Peoples Gas Co. v. Pub. Ser. Comm.*, 270 U. S. 550 (1926) and *Lone Star Gas Co. v. Texas*, 304 U. S. 236 (1938).

The Pennsylvania Commission did not present any evidence at any time to the Federal Power Commission. Its brief to the Federal Power Commission did not raise the issue now raised by its Question I, and did not cite either of the above cases. This observation is also true as to the briefs filed with the Commission by Penn Water. On the contrary, the Pennsylvania Commission relied for its jurisdiction over sales to the Pennsylvania customers of Penn Water, not on the argument that they constituted clearly separable sales of Pennsylvania generated energy, but on

the argument that they constituted "joint" sales by Penn Water and Safe Harbor and that the Federal Power Act (unlike the Interstate Commerce Act) did not give the Federal Power Commission jurisdiction over "joint" sales and services. This unsupported, untenable argument was effectively answered by the Commission in its Opinion 173 (Record pp. 56-58) and was abandoned by both the Pennsylvania Commission and Penn Water in the Court below.

The attempt to substitute before the Court below the argument now presented by Pennsylvania Commission's Question I was futile, because of the complete lack of support in the Record for any separability of the sales to the Pennsylvania customers of Penn Water from the overall operations of the power pool. The whole tenor of the evidence of experts for the Commission and for Penn Water was that it is impossible to identify kilowatt hours of electric energy fed into and sold out of an interconnecting transmission system of a power pool, such as is here involved. Aside from that, the energy use made of the pool by each particular customer is itself less valuable to any particular customer than the capacity (power) use made of the hydro-plants to replace steam generation. And so, unlike the case of *Peoples Gas Co. v. P.S.C., supra,* relied on by Pennsylvania Commission, the amounts of intrastate power and energy (capacity service as well as energy) are not separable for purposes of intrastate regulation. (See the Commission's Opinion 173, Record Vol. XVI, pp. 51-58).

Question I as raised by the Pennsylvania Commission asks this Court to substitute its judgment for that of the Court below and for that of the Federal Power Commission on *issues of fact* involving complicated technical questions, which the Commission was particularly qualified to determine and was authorized by statute to determine with finality. This Court must refuse this request.

Accordingly, the Pennsylvania Commission's request for certiorari rests only upon the two questions (II and III) which go to the denial by the Court below of the motions to annul or remand, discussed hereinafter, in Argument III.

II.

The Court of Appeals' affirmance of the Federal Power Commission's determination, that it has jurisdiction over Penn Water as a public utility under Part II of the Federal Power Act, was correct and creates no conflict of Circuits as to the issue involved (Penn Water's Petition, pp. 17-18, Question III).

Penn Water's Question III (its petition, pp. 17-18) states:

> "Does Part II of the Federal Power Act repeal by implication regulatory provisions of Part I of the Act; and is a corporation which is subject to regulation under Part I of the Federal Power Act as a licensee under contract with the Federal Government also subject to the different regulatory scheme of Part II of the Act, as the D.C. Circuit held contrary to statements of the Court of Appeals for the Second Circuit and another panel of the D.C. Circuit?"

It is difficult to believe that counsel seriously expected this question to provide grounds for the issuance of certiorari, upon the claimed conflict of circuits specified in Penn Water's petition (pp. 32-33). The Third Circuit, in the second Safe Harbor Rate case, 179 F. 2d 179, 185 (1949) cert. den. 339 U. S. 957 (1950), and the Court below are in clear agreement in the only two Opinions which have squarely faced the issue, considered it, discussed it, and made rulings thereon.

Penn Water suggests a conflict of circuits for three reasons, all of which are untenable: (1) a statement in the first Safe Harbor decision by the Third Circuit, *Safe Harbor*

Water Power Corp. v. FPC, 124 F. 2d 800, 808 (1941) cert. den. 316 U. S. 663 (1942), which did not have the issue before it, which at p. 804, footnote 4, states the Court's view as contrary to Penn Water's contention here, and which in any event would yield to the later decision by the same circuit in the second Safe Harbor case, *supra;* (2) an earlier decision by the United States Court of Appeals in the District of Columbia, *Niagara Falls Power Co. v. FPC*, 137 F. 2d 787, 792 (1943), which was not a rate case, which did not have the matter directly in issue, and which likewise must yield to the later pronouncement of the Court of Appeals below, speaking for the same circuit; and (3) a random statement in *Alabama Power Co. v. FPC*, 128 F. 2d 280, 293 (1943), which was not a rate case and again did not deal squarely with the issue.

The Opinion below (Record pp. 57-61), in conjunction with the above referred to Opinion of the Third Circuit in the second *Safe Harbor rate case* (179 F. 2d 179, 185), shows that the clear language of the Federal Power Act and the legislative history of the Act fully support the construction of Part II adopted by the Court below and that there is no error calling for review by this Court. In one brief paragraph the Opinion below disposes of the argument that there were other contrary rulings as follows (Record, p. 58):

> "The only judicial utterances cited to us in this regard are to the effect that 'Part II, as added in 1935, gives the Commission jurisdiction over the transmission and sale of electricity at wholesale in interstate commerce, whether or not by licensees' and that the Safe Harbor Company 'is not only a *licensee* under Part I but it is also a *public utility* under Part II.' Neither *Alabama Power Co. v. Federal Power Commission* nor *Niagara Falls Power Co. v. Federal Power Commission*, both of which contain language which

might be thought to run counter to Part II jurisdiction over a licensee, was a rate case. Neither involved Part II and the possibility of conflict between Parts I and II was not discussed."

The same arguments now presented in support of Penn Water's Question III were presented to this Court and rejected as forming no basis for certiorari in the above referred to second *Safe Harbor rate case*, 339 U. S. 957 (1950). This Question provides no adequate ground for the granting of certiorari, and Penn Water's petition must stand or fall upon its Questions I and II, as discussed hereinafter under Part III of this Argument.

III.

The Court of Appeals' denial of Petitioners' motions to annul or remand was correct and creates no conflict between the Circuits (Penn Water's petition, p. 17, Questions I and II; Pennsylvania Commission's petition, pp. 19-20, Questions II and III).

As earlier indicated (Restatement of Questions above), the several overlapping questions contained in Penn Water's petition as Questions I and II and the Pennsylvania Commission's petition as Questions II and III, are entirely summarized in Penn Water's claim that the "primary issue raised" is "whether the FPC (in the absence of any express authority in the Federal Power Act such as is found in certain other Federal regulatory statutes) may compel electric utilities to perform, and may base its rate orders upon continued performance of, contracts which have been adjudged by the courts to violate Federal anti-trust laws, public policy and the laws of the utilities' state of incorporation" (Penn Water petition, pp. 2-3). This question is simply not presented by the record, was not before the

Court below, and could not properly be ruled on by this Court in this proceeding.

The Federal Power Commission did not order the performance of any contracts as such, in any of the Orders affirmed below, or of any particular provisions of any contracts (most assuredly not the provisions of Article IV and V of the Penn Water contract, which were the sole provisions upon which the Fourth Circuit rested its Opinion regarding the invalidity of that contract).* When in its petition for rehearing before the Federal Power Commission, Penn Water for the first time suggested to the Federal Power Commission that the basic power contracts had been placed in litigation in the Courts, the Commission, in denying the petition (Opinion 173A, Record Vol. XVI, pp. 372, 375), informed Penn Water that the Commission's Order did not rest upon the decision of "questions as to the legality of the foundation contracts which are in litigation", but rather was founded upon the *operations* of the combined Penn Water-Safe Harbor-Consolidated system and the *services* as actually rendered by Penn Water.

The Federal Power Commission pointed out that until such operations and services were changed with the approval of the Commission, under the rules and regulations of the Commission issued in pursuance of the provisions of the Federal Power Act, Penn Water was bound to render them at the reduced rates prescribed by the Commission in its Order of January 5, 1949. The Commission thus met Penn Water's eleventh hour maneuver — a collateral attack

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* The Fourth Circuit's holding that the Penn Water contract was invalid only because of the provisions of Articles IV and V appears in at least three places in its first opinion (Record, Vol. XVIII, pp. 7, 8, 25) in its second opinion (Record, Vol. XVIII, p. 37), and also in its opinion in the Safe Harbor Contract Case (p. 3 of printed pamphlet copy supplied by Penn Water).

to avoid the long overdue rate reduction — by referring Penn Water to the orderly processes of the law as prescribed by the Federal Power Act, implemented by the Commission's rules. If there was no error in the Commission's denial of petition for rehearing (and we submit clearly there was none for reasons hereafter briefly summarized), there was likewise none in the lower Court's affirmance thereof.

The provisions of the Penn Water contract held to be invalid *per se* (Articles IV and V only) have played no part in the rate orders of the Commission. The services originally began under the contracts in 1931, and have continued in exactly the same manner from 1931 to the present date. Obviously there must be rates to pay for such services (regardless of contract), and under the law they can properly be only the just and reasonable rates allowed by the Federal Power Act and prescribed by the Commission in this case.

Petitioners insist that the Orders of the Commission, prescribing reasonable rates based on operations, must be destroyed because of the illegality of the contracts, and moreover, (by inference here and statement to the Court below) still claim the right to keep the exorbitant rates prescribed by the very contracts which they claim to be illegal. In all equity and justice, there was never a clearer case for upholding the orderly processes of the law to defeat such unconscionable conduct.

What petitioners overlook is that when Penn Water filed its contract as a tariff in 1936 under the Federal Power Act, its former obligations to serve under the contracts and at the rates therein prescribed passed out of the realm of contract and into the area of duty prescribed by law. The *tariffs* (not the contracts), from that date and until with-

drawn or changed in the manner prescribed by the Federal Power Act (Sec. 205 as described by the Commission in its Opinion No. 173A, Record Vol. XVI p. 372), constituted the only lawful terms of service for Penn Water.* Any departure by the parties thereto would itself be unlawful.

Texas & Pacific Ry. v. Mugg, 202 U. S. 242 (1906);
Texas & Pac. Ry. v. Abilene Cotton Oil Co., 204 U. S. 426, 439-449 (1907);
Western Union Tel. Co. v. Esteve Bros. & Co., 256 U. S. 566, 573 (1921);
Davis v. Henderson, 266 U. S. 92, 93 (1924);
Davis v. Cromwell, 264 U. S. 560 (1924);
Northwestern Pub. Serv. Co. v. Montana-Dakota Co., 181 F. 2d 19, 22-23 (1950); affirmed *Montana-Dakota Co. v. Northwestern Pub. Serv. Co.*, 341 U. S. 246, 95 L. Ed. 912 (May 7, 1951).

The Eighth Circuit's opinion in the *Montana-Dakota* case states, in part:

> "The plan or scheme of the Federal Power Act is analogous to that of the Interstate Commerce Act * * *, and decisions under the latter act should be controlling here * * * The rates filed and approved by the Commission are the lawful rates until changed in the way approved by the Act * * *
>
> "Moreover, the transmission of electric energy being at wholesale and interstate, the seller must collect the charge named in the filed rate and the purchaser

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* It has long been established administrative and utility law that, however great a regulated utility's substantive right may be, it must comply with the procedures established by the law for perfecting it.

State ex rel v. Kansas Postal Tel. Co., 96 Kan. 298 (1915), holding that a utility with a constitutional right to discontinue service, because it was operating at a loss, must nevertheless comply with the procedure of securing Commission approval to withdrawal.

State ex rel RR. Commissioners v. Bullock, 78 Fla. 321 (1919), affirmed 254 U. S. 513 (1921).

> must pay that rate. So long as the filed rate is not changed in the manner provided by the Act it is to be treated as though it were a statute, binding upon the seller and the purchaser alike."

This Court, in affirming on other grounds, recognized the doctrine of the filed tariff, saying in part that the utility "* * * can claim no rate as a legal right that is other than the filed rate, whether fixed or merely accepted by the Commission, and not even a Court can authorize commerce in the commodity on other terms."

The Court of Appeals for the Fourth Circuit, in deciding the Penn Water contract case, must have had this law well in mind when it rested its decision partly upon the case of *Georgia v. Pennsylvania RR. Co.*, 324 U. S. 439, 452-460 (1945). That case held that utilities as regulated industries are not *per se* exempt from the Sherman Act, but also stated clearly that in condemning a Sherman Act violation, the Court could not and would not intrude on the primary jurisdiction of the Interstate Commerce Commission over its filed tariffs.

Referring to *Keogh v. Chicago & N. W. R. Co.*, 260 U. S. 156, 161-162 (1922), the Opinion in the *Georgia* case (p. 453) states:

> "* * * The legal rights of a shipper against a carrier in respect to a rate are to be measured by the published tariff. That rate until suspended or set aside was for all purposes the legal rate as between shipper and carrier and may not be varied or enlarged either by the contract or tort of the carrier. And it added: 'This stringent rule prevails, because otherwise the paramount purpose of Congress — prevention of unjust discrimination — might be defeated. * * *' "

Referring to *North Dakota ex rel. Lemke v. Chicago & N. W. R. Co.*, 257 U. S. 485 (1922) and *Texas v. I. C. C.*, 258 U. S. 158 (1922), the *Georgia* case (p. 454) further states:

> "It is clear that a suit could not be maintained here to review, annul, or set aside an order of the Interstate Commerce Commission. Congress has prescribed the method for obtaining that relief. It is exclusive of all other remedies, including a suit by a State in this Court. * * *"

And, after referring to and quoting *Central Transfer Co. v. Terminal R. Asso.*, 288 U. S. 469 (1933), which likewise involved application of the "primary jurisdiction" doctrine as explicitly embodied in the Clayton Act, the *Georgia* case (p. 455) in referring back to all of these cases said:

> "* * * *We adhere to these decisions.* But we do not believe they or the principles for which they stand are a barrier to the maintenance of this suit by Georgia.
>
> "The relief which Georgia seeks is *not a matter subject to the jurisdiction of the Commission. Georgia in this proceeding is not seeking an injunction against the continuance of any tariff; nor does she seek to have any tariff provision cancelled.* * * *" (Emphasis added).

The Court of Appeals in the Fourth Circuit case was apparently mindful of these clearly established limitations upon its powers. This is evidenced by the extent to which its Opinion observes that it does not purport to affect the orders of the Federal Power Commission here under attack. Thus, it took care to point out that its decision did not have the very effect which is now ascribed to it as the principal basis for the present petitions. After discussing the Federal Power Commission rate case Opinion affirmed below, the Fourth Circuit said (184 F. 2d 552, 566) that it did not "undertake to gainsay the view of the Commission that *even if the restrictive conditions of the basic contract*

are invalid, a. to which the Commission expressed no opinion, it still has the duty and authority under the Federal Power Act to encourage and establish the interconnection of electrical facilities * * *".

The Fourth Circuit, at the conclusion of its Opinion in the recently decided Safe Harbor contract case (Opinion of Jan. 3, 1952, pamphlet copy filed with this Court, pp. 22, 23), summarized its position as follows:

> "*There need be no interference with the rate making power or the overall control of the Federal Power Commission.* We repeat with respect to Safe Harbor what was said in regard to Penn Water in our prior opinions, 184 F. 2d 552, 568, and 186 F. 2d 934, 937:
>
> " '*It is not our function in this case to decide how far the activities of Penn Water and Consolidated under the basic contract are subject to the regulations of the Federal Power Commission* or the Pennsylvania Public Utility Commission, either or both. * * * It may well be, although the present arrangement between the Maryland and Pennsylvania utilities is invalid for the reasons set forth, that an interconnection of facilities and an interchange of electrical energy between them may be continued by some method that would meet with the approval of the appropriate regulatory authority and will not offend either the anti-trust laws or the utility laws of Pennsylvania' (184 F. 2d 568).
>
> " 'Throughout the trial of this case and in the argument of the pending motion, Penn Water has reiterated its desire to continue to supply electric energy to Consolidated; and in view of the close relationship between the parties, the existence of interconnecting equipment *and the control over its rates by the regulatory bodies, there is no reason to fear that the interest of consumers of electricity in Maryland will suffer through the invalidation of the existing contract between the two* utilities' (186 F. 2d 937)" (Emphasis added).

Assuming, as the Fourth Circuit says, that "there need be no interference with the rate making power or the overall control of the Federal Power Commission", what is there to be placed before this Court?

The Federal Power Commission, having found the operations of Penn Water as conducted from 1931 to date to be in the public interest, but at unjust and unreasonable rates, has prescribed just and reasonable rates and the conditions of service to which they apply (the latter being the conditions of service as previously rendered). The schedules prescribed by the Commission replace the pre-existing "filed tariffs" and the contracts between the parties, as far as service and rates are concerned. The decision of the Fourth Circuit case, in condemning certain contract provisions, can have no direct effect upon the filed tariffs or service as rendered thereunder prior to the effective date of the Commission's Orders, nor can it have any direct effect upon the schedules required by the Commission's Orders now attacked, which continue operations and services found to be in the public interest and establish reasonable rates therefor. The Court below determined, on the Record as made before the Commission, those matters left for the Court by the review provisions of the Federal Power Act (Sec. 313), concerning the power of the Commission to determine just and reasonable rates and terms of service.

The decisions of the Fourth Circuit in both contract cases affect in no way the justness or reasonableness of the Federal Power Commission's Orders in relation to the facts of operation, particularly since Penn Water does not deny that services have continued during the period subsequent to February 1, 1949, in the same manner as they have always been rendered since 1931. If the decisions in the Fourth Circuit cases can have any effect upon the reason-

ableness of the Commission's Orders for the future, regarding any desire of Penn Water to offer services in different form (or at different rates), this issue remains to be raised and established by Penn Water in the orderly manner prescribed by Section 205 of the Federal Power Act, and upon a properly made new record with reference thereto.

The petitions for certiorari constitute a studied and carefully presented attempt, first, to divert this Court's attention from the purely procedural administrative law determination made by the Court of Appeals for the District of Columbia Circuit, in denying petitioners' motions to annul; and second, to attract the Court's attention to an asserted conflict between the views of the Fourth Circuit and the Court below, as to the interrelationship of the Sherman Act and the Federal Power Act, which had not been presented to the Commission and hence could not have been covered by its Orders. They almost ignore the nature of the findings of the Court below that the Federal Power Commission, after 26,000 pages of record, had issued opinions and orders clearly within its jurisdiction under the Federal Power Act and amply supported by evidence in that Record, and that any rights which petitioners may have to change the operations and rates of Penn Water, predicated upon a subsequent decision by a Court in other proceedings regarding the contractual relation of the parties, may and must be properly presented to the Federal Power Commission under the appropriate sections of the Federal Power Act.

The Court below, faced with petitioners' motions to annul or remand, painstakingly considered whether the Fourth Circuit's decision regarding the applicability of the Sherman Act, the Pennsylvania Public Utility laws, and public policy to the long-term power contract between Penn Water and Consolidated, would apply equally to rate orders of the Commission. This matter had been pressed

upon the Court by petitioners in the motions to annul or remand, and had constituted the first part of the oral argument below. Petitioners claimed below, as they claim here, that the Fourth Circuit had collaterally destroyed the Orders of the Federal Power Commission.

In answering the argument of petitioners, the Court below expressed its opinion that integrated electric power service arrangements which might be illegal as entered into by agreement of the parties (whether because of the Sherman Act or some other law) might, nevertheless, be lawful if compelled by Congress acting through a duly established regulatory agency (Record Vol. XVIII, pp. 49-53). The Court below reconciled its position with that of the Fourth Circuit. It did not disagree therewith.

Furthermore, the Court below did not make a definitive decision as to any matter which it deemed to be within the Commission's primary jurisdiction. It clearly pointed out to petitioners that if a definitive decision as to such matter is to be had, it must occur only after petitioners (or others) have properly presented the matter to the Federal Power Commission, in the first instance, under the appropriate sections of the Federal Power Act. The Court below said (Record Vol. XVIII, pp. 54-55):

> "In our view, the Fourth Circuit's opinion neither purported to nor did relieve Penn Water from its obligation under the Federal Power Act to continue the then-existing services and rates. *It is those services and rates, reflecting underlying operations, which were the subject of the Commission's order.* 'A rate is not necessarily illegal because it is the result of a conspiracy in restraint of trade in violation of the Anti-Trust Act. What rates are legal is determined by' the regulatory statute. *The validity of Commission action in this proceeding must be determined in light of the criteria furnished by the Federal Power Act, as applied*

to the operations and arrangements under scrutiny. If jurisdiction was properly assumed by the Commission, if its rate order is 'just and reasonable' within the meaning of the Federal Power Act, and if its findings are supported by substantial evidence, Penn Water can have no complaint and our review is at an end. If petitioners, as a result of the Fourth Circuit's decision, wish to make any changes in operations, contracts, arrangements, etc., within the jurisdiction of the Federal Power Commission, they must do so in accordance with the Federal Power Act. Under §205(d) thereof, 'Unless the Commission otherwise orders, no change shall be made by any public utility in any such rate, charge, classification, or service, or in any rule, regulation, or contract relating thereto, except after thirty days' notice to the Commission and to the public.' Pursuant to that section, petitioners may submit new arrangements and rates based thereon to the Commission. And the Commission 'either upon complaint or upon its own initiative without complaint' may 'enter upon a hearing concerning the lawfulness of such rate, charge, classification, or service * * *.' *If Penn Water feels itself aggrieved after such proposed changes have been acted upon by the Commission, it may at that time bring a new petition for review.* In short, a 'rate established in the mode prescribed should be deemed the legal rate and obligatory alike upon carrier and shipper until changed in the manner provided' by the statute." (Emphasis added.)

This portion of the Opinion shows the real procedural nature of the Court's decision below. It would necessarily be the basis for affirmance here if certiorari were to be granted. The Fourth Circuit has stated no conflict therewith. There could be no such conflict, because it is protected by many decisions of this Court.

The benefits to the public which will result from the final (but much delayed) affirmance of the Federal Power Com-

mission's Orders by the Court of Appeals for the District of Columbia Circuit should not be further delayed by reargument of well established law in this Court. Again, the opinion below succinctly summarizes the legal and practical reasons why the motions to annul or remand were denied, which reasons apply equally to a denial of the applications for certiorari here (Record Vol. XVIII, pp. 55-56):

> "To grant petitioners' motions and set aside the order at this time would be to substitute antitrust criteria for those of the Federal Power Act, a substitution which would be at cross-purposes with the intent of Congress. It would result in the reopening of a rate proceeding begun in 1944 because of an issue raised for the first time on rehearing in 1949 and a decision handed down in a suit between private parties under a non-controlling statute in 1951. In view of this chronology, we think the Supreme Court's statement in *Interstate Commerce Commission v. Jersey City*, 322 U. S. 503, 514 (1944), is especially pertinent: 'If upon the coming down of the order litigants might demand rehearings as a matter of law because some new circumstance has arisen, some new trend has been observed, or some new fact discovered, there would be little hope that the administrative process could ever be consummated in an order that would not be subject to reopening.' *The effect of granting petitioners' motions would be to disrupt a pattern of regulation which was carefully drawn to meet the problems of a complex industry.*" (Emphasis added.)

It is clearly manifest that the petitions filed here, in order to delay or defeat a substantial rate reduction, attempt to place the Fourth Circuit and the Court below in conflict upon substantial issues of law by having each Court decide *more than was really before it*, and by placing interpretations upon each Court's opinion inconsistent with

its language. Such an effort cannot support certiorari in this case.

Penn Water is not harmed by being properly relegated to its remedies of petition to the Federal Power Commission to change its services and rates, provided it can show justification for such changes. In the meantime, all parties will serve and be served under tariffs which were found by the Commission to be in the public interest as to the integrated, coordinated power system created hereby. The rates have been prescribed by the Commission as just and reasonable, upon a record which contains no reversible error. Any result, other than prompt denial of certiorari, would lead only to the chaos and confusion which the Federal Power Act sought to avoid by providing for the filing of new tariffs with the Commission.

On the other hand, the granting of certiorari in this case would reopen the validity of Federal Power Commission rate orders which are the result of three years of protracted hearings, years of research and study by that Commission's staff of experts, and careful prior judicial scrutiny of over 26,000 pages of expert testimony and hundreds of highly complicated exhibits. All factors were carefully weighed and considered by the Federal Power Commission before the orders, reducing Penn Water's wholesale charges to Consolidated, were issued. They were again carefully considered by the U. S. Court of Appeals for the District of Columbia, after three days of extensive argument by counsel. The Orders were found to be completely valid in every respect, and not in conflict with the Fourth Circuit's decision in the *Penn Water* contract case.

Every conceivable issue which could be properly brought before this Court, therefore, has already been painstakingly considered and adjudged, first, by the competent trained

technical experts of the Commission, and then by the Court below. There is no need for this Court to assume the tremendous responsibility of reviewing this already reviewed, immensely complicated case. Such a review is not only legally unnecessary. It would further prolong the long overdue rate reducation due from Penn Water to Consolidated, and through the latter company, to the Maryland public which has been forced to pay, and is still paying, excessive rates for electricity.

CONCLUSION

Wherefore, the petitions for certiorari should be denied.

Respectfully submitted,

CHARLES D. HARRIS,
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of Maryland.

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IN THE

Supreme Court of the United States

OCTOBER TERM, 1951

Nos. 428 & 429

PENNSYLVANIA WATER & POWER COMPANY AND SUSEQUEHANNA TRANSMISSION COMPANY OF MARYLAND, *Petitioners*,

VS.

FEDERAL POWER COMMISSION, AND CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE AND PUBLIC SERVICE COMMISSION OF MARYLAND, INTERVENORS, *Respondents*.

PENNSYLVANIA PUBLIC UTILITY COMMISSION, *Petitioner*,

VS.

FEDERAL POWER COMMISSION, AND CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE AND PUBLIC SERVICE COMMISSION OF MARYLAND, INTERVENORS, *Respondents*.

ON WRITS OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

BRIEF FOR INTERVENOR-RESPONDENT, CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE

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IN THE

Supreme Court of the United States

OCTOBER TERM, 1951

No. 428

PENNSYLVANIA WATER & POWER COMPANY AND SUSEQUEHANNA TRANSMISSION COMPANY OF MARYLAND, *Petitioners,*

VS.

FEDERAL POWER COMMISSION, AND CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE AND PUBLIC SERVICE COMMISSION OF MARYLAND, INTERVENORS, *Respondents.*

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PENNSYLVANIA PUBLIC UTILITY COMMISSION, *Petitioner,*

VS.

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ON WRITS OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

BRIEF FOR INTERVENOR-RESPONDENT, CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE

OPINION BELOW AND RELATED CASES

The Opinions and Orders of the Federal Power Commission (FPC) affirmed by the Court of Appeals have not all as yet been published. They are reported and or appear in the Record (R.) as follows:

1. Opinion No. 173 and Order of January 5, 1949 reducing the rates of Pennsylvania Water & Power Company (Penn Water) by $1,954,261, and prescribing Penn Water's tariff. 8 F. P. C. 1-106, R., Vol. 16, pp. 4845-4982, 4983-4997.

2. Opinion No. 173-A and Order of February 28, 1949, denying Petition for Rehearing on Opinion No. 173 and Order of January 5, 1949: 8 F. P. C. 170-81, R., Vol. 16, pp. 5178-5194.

3. Order of March 17, 1949 denying Petition for Rehearing on Opinion No. 173-A and Order of February 28, 1949: R., Vol. 16, pp. 5220-5221.

4. Order of October 27, 1949, prescribing new rate schedules for Penn Water: R., Vol. 17, pp. 5267-5292; and

5. Order of December 15, 1949, denying Petition for Rehearing on Order of October 27, 1949: R., Vol. 17, pp. 5315-5320.

6. **The opinion below:** Opinion of the Court of Appeals for the District of Columbia Circuit, affirming the above FPC orders: (July 3, 1951), 193 F. 2d Adv. Sh. 230, R., Vol. 18, p. 5367 (Dissent, R., Vol. 18, p. 5402).

7. Opinion and order of FPC, which prescribed the tariff of Safe Harbor Water Power Corporation (Safe Harbor) and reduced Safe Harbor's rates approximately $600,000: (Oct. 25, 1946), 5 F. P. C. 221.

8. Opinion of the Court of Appeals for the Third Circuit, affirming the last-named FPC order: (Dec. 30, 1949), 179 F. 2d 179; Cert. den. (May 15, 1950), 339 U. S. 957.

9. Opinion of the Fourth Circuit, in the "Baltimore Contract" case: (Sept. 30, 1950), 184 F. 2d 552, R., Vol. 18, p. 5322; Cert. den. (Dec. 11, 1950), 340 U. S. 906.

10. Opinion of the Fourth Circuit, interpreting its mandate in the last-named decision: (Jan. 10, 1951), 186 F. 2d 934, R., Vol. 18, p. 5356.

11. Opinion of the Fourth Circuit, in the "Safe Harbor Contract" case: (Jan. 3, 1952), ... F. 2d ..... (Pamphlet copy filed with this Court by Petitioners.)

12. Opinion of the three-judge Court Middle District of Pennsylvania, holding that the Pennsylvania Public Utility Commission has no jurisdiction over Safe Harbor's rates, and that the Federal Power Commission's Orders were not affected by the legality of the contracts under the Anti-trust laws and the laws of Pennsylvania: (Aug. 7, 1951), 99 F. Supp. 151,

JURISDICTION

The jurisdiction of this Court was invoked under Section 1254(1) of the Judicial Code (62 Stat. 928, 28 U. S. C. §1254) and Section 313(b) of the Federal Power Act (49 Stat. 860, 16 U. S. C. §8251).

QUESTIONS PRESENTED

1. Did the Fourth Circuit have jurisdiction, in a collateral action to which the Federal Power Commission was not a party, to annul, directly or indirectly, orders and tariffs promulgated by FPC? (Argument, Part I)

2. Did the Fourth Circuit have jurisdiction, in a collateral action to which the Federal Power Commission was not a party, and without preliminary referral to FPC, to annul contracts the provisions of which had, either in part or in whole, been prescribed as tariffs by FPC? (Argument, Part I)

3. Did the Federal Power Commission have authority to prescribe the tariff here assailed? (Argument, Part II)

4. Does the Federal Power Commission have primary jurisdiction to determine the facts with respect to the legality of the tariff provisions it has prescribed? (Argument, Part III)

5. Did the Federal Power Commission prescribe a lawful tariff? (Argument, Part IV)

6. Did the Federal Power Commission authorize an unlawful Contract? (Argument, Part V)

7. Does the Federal Power Commission have jurisdiction over sales of electricity in Pennsylvania from a physically integrated interstate electric system when, at times, such service consists in whole or in part of unfirm hydro-electric power generated in Pennsylvania, and at other times, in whole or in part, of firm steam-electric power generated in Maryland? (This brief will not argue this question.)

8. Is a "licensee" under Part I of the Federal Power Act, which is also a "public utility" under Part II of that Act, subject to rate regulation under Part II? (This brief will not argue this question.)

STATEMENT

By this action, Penn Water asks this Court to annul orders[1] of the FPC which prescribed tariffs for Penn Water's services and reduced, effective February 1, 1949, Penn Water's electric rates by $1,954,261 a year. Of this reduction, FPC ascribed $1,733,318 to excessive annual charges made by Penn Water to Consolidated Gas Electric Light and Power Company of Baltimore (Consolidated) (R., Vol. 16, p. 4980).

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[1] In the Matter of *Pennsylvania Water & Power Company*, FPC Docket No. IT-5915, Opinion No. 173 (R., Vol. 16, p. 4845) and Order issued Jan. 5, 1949 (R., Vol. 16, p. 4983), 8 F. P. C. 1; same case, Opinion No. 173-A (R., Vol. 16, p. 5178) and Order issued Feb. 28, 1949 (R., Vol. 16, p. 5192), 8 F. P. C. 170; Order of Oct. 27, 1949, prescribing rate schedules (R., Vol. 17, p. 5267); rehearing denied Dec. 15, 1949 (R., Vol. 17, p. 5316).

The interstate electric services to which such rate reduction applies have continued unchanged from the effective date of the FPC order (February 1, 1949), to the present.

1. HISTORY OF THIS CASE

The FPC rate reduction order of January 5, 1949 was the result of a plenary investigation[2] by that Commission of the "rates, charges, or classifications" and of the "rules, regulations, practices, or contracts affecting such rates, charges, or classifications" in connection with Penn Water's sales of electric energy subject to FPC's jurisdiction. This investigation, and a similar plenary investigation of the rates, charges, classifications, rules, regulations, practices, and contracts of Safe Harbor (4 F. P. C. 696), had been requested by the Public Service Commission of Maryland (Maryland Commission), the City of Baltimore, and others, in August, 1944 (R., Vol. 15, pp. 4623, 4731).

The Safe Harbor rate case was tried first, the hearings beginning November 17, 1944, and concluding March 16, 1945. They produced a transcript of 6,136 pages of testimony and 255 exhibits. On November 4, 1946, FPC filed its Opinion No. 143 and Order (5 F. P. C. 221), prescribing (a) in its entirety (except as to rates), as Safe Harbor's tariff, the contract between Safe Harbor, Penn Water, and Consolidated of June 1, 1931 (the Safe Harbor Contract),[3] under which Safe Harbor sold its entire output to its two owners, Penn Water and Consolidated, in proportion to their respective ownership, i.e., 1/3 to Penn Water and 2/3 to Consolidated; and (b) reducing rates by $627,000 annually. This order was affirmed by the Third Circuit on December

[2] Initiated by Order of September 1, 1944, 4 F. P. C. 697 (R., Vol. 16, p. 4837).

[3] R., Vol. 15, p. 4554.

30, 1949.[4] In that opinion, the Court said (179 F. 2d at p. 199):

> "Safe Harbor's contracts for power and its backing by the Pennsylvania [Penn Water] and Maryland [Consolidated] companies are exemplary."

The tariff and rates so prescribed and affirmed and service thereunder have continued in effect until the present.

Hearings in the *Penn Water* rate case began April 15, 1946, and continued intermittently to July 16, 1947. They produced a transcript of 21,260 pages of testimony, some 600 exhibits and the above-mentioned Order reducing rates by approximately $2,000,000.

On January 28, 1949, three weeks after such Order reducing its rates, Penn Water applied to FPC for rehearing, averring, *inter alia,*

> "* * * that *since the record before the Commission was closed* there have been *substantial changes* in the *operations* and *contracts* of Petitioner Penn Water, as hereinafter more fully described, so that the bases for the said Order and for many of the findings, conclusions, and requirements contained in said Opinion and Order are destroyed and such findings, conclusions and requirements are not in accord with the facts and the law * * *." (R., Vol. 16, p. 4999) (Emphasis added.)

The "substantial changes in the operations and contracts" so alleged related to unilateral action which had then just been taken by Penn Water.

Changes in "operations" had been effected by an elaborate Operating Order issued by Penn Water on January 26, 1949, just two days before the application for rehearing, to prevent the backfeed of power from Maryland to the

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[4] *Safe Harbor Water Power Corporation v. Federal Power Commission,* 179 F. 2d 179 (1949), Cert. Den. 339 U. S. 957 (1950).

Pennsylvania companies. It directed the operators of the Penn Water and Safe Harbor electric plants on the Susquehanna River in Pennsylvania to throw certain switches, to "split" busses, to break the connections between the Baltimore system and the systems of the Pennsylvania electric companies, and to follow other novel operating procedures which not only changed the long-established unified operation of the entire interstate electrical system but exposed service to the public in the Baltimore and Washington areas to major breakdowns and interruptions and subjected Consolidated's equipment in Baltimore to the possibility of extensive damage.

This grave threat of serious service disruption and property damage impelled Consolidated and the Maryland Commission to seek the immediate protection of a preliminary restraining order which required the restoration of the "operating procedure" uniformly followed for the previous 17 years. This order was obtained in the action which Penn Water had just filed to annul the Baltimore contract.

In opposing the issuance of this restraining order, Penn Water's counsel told the Court that the purpose of these physical changes was to escape FPC jurisdiction, saying (Tr., Feb. 4, 1949, pp. 69, 110, 111):

> "We have filed an application for a rehearing before the Federal Power Commission in order to raise this point.* * *
>
> "But your Honor, we cannot defend ourselves before the Federal Power Commission unless we continue to do what we have done, that is, prevent the mingling of that power. We would have no defense. * * *
>
> "It is the opinion of the lawyers in the proceeding, I believe, and it is my opinion that we cannot upset the Federal Power Commission order, so far as it relates to jurisdiction over the Pennsylvania business, if we

permit power coming from Maryland to mingle with power delivered to those Pennsylvania customers. * * *

"I believe probably they have jurisdiction over us until the physical fact of non-mingling occurs."

Penn Water's Brief (PW Br.) is here silent as to the real occasion for this preliminary restraining order, but asserts (PW Br., pp. 15, 41) that it was obtained to require "Penn Water to perform the Baltimore and Safe Harbor contracts". Judge Miller's dissent in the Court below accepted this erroneous contention, which was also made in that Court.

The changes in "contracts" referred to in Penn Water's Petition for Rehearing were Penn Water's notices to Consolidated of the termination of its contracts with Consolidated (the Baltimore Contract and the Safe Harbor Contract[5] and the institution of suit by Penn Water in the United States District Court for the District of Maryland to annul the Baltimore Contract.

Penn Water's Petition for Rehearing pointed out "the effect of Articles IV and V" of the Baltimore Contract (R., Vol. 16, pp. 5006, 5012).

The close relationship between Penn Water's assault on the validity of its contracts with Consolidated and its application to FPC for rehearing on the rate reduction order was recognized by the Court below where it said (193 F. 2d Adv. Sh., at pp. 233-34, R., Vol. 18, p. 5370):

"* * * The illegality of these system foundation contracts was first raised by petitioners in their petition for rehearing of the January 1949 order, about nineteen months before the Fourth Circuit decision was handed down."

In its Opinion No. 173-A of February 28, 1949, 8 F. P. C. 170 (R., Vol. 16, p. 5178), on such petition for rehearing,

[5] R., Vol. 15, pp. 4606 and 4554, respectively.

FPC pointed out that any unilateral change by Penn Water in such physical operations would constitute a change in its services and rates to Consolidated which could be accomplished only by compliance with the procedural requirements of the Federal Power Act through the filing by Penn Water of amended tariffs, saying:

> "Now, by the changes referred to in Penn Water's application for rehearing, all of the carefully built-up benefits of pool design, investment, construction, and operation apparently are intended to be sacrificed by Penn Water. * * *" (8 F. P. C. at p. 176, R., Vol. 16, p. 5185).

In denying Penn Water's petition for rehearing and thereby avoiding still further delay in the major rate reduction (which it said was "already long overdue"), the Commission, however, carefully directed Penn Water's attention to the appropriate and necessary administrative procedure under the Federal Power Act whereby any challenge to the tariff could be considered by the Commission.[6]

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[6] On this point, the FPC in the same Opinion said at 8 F. P. C. 176 et seq. (R., Vol. 16, at pp. 5186 et seq.):

"Furthermore, our rules (sec. 35.5) require that when a rate or service which has been filed with the Commission, as these foundation contracts have been, 'is proposed to be cancelled and no new rate schedule is filed in its place * * * each public utility required to file the schedule shall formally notify the Commission of the proposed cancellation' 30 days in advance and shall submit a statement of the reasons therefor and that notice has been served upon the other parties to the schedule or contract.' A copy of such notice to the Commission is required to be duly posted.

"Compliance with filing requirements is particularly important in a case like the present where the filings cover, not a single sale and delivery by one party to the other, but interchange of energy and capacity between and among the parties to the contracts and numerous other obligations and rights which are required to be filed as changes under section 35.3(c).

"* * *

"Insofar as such changes affect service, compliance with the rule referred to would enable the Baltimore Co., the Maryland

Instead of responding to this suggestion (which was approved as the lawful and proper procedure by the Court below), and changing its services and rates by the appropriate administrative procedure, Penn Water, on April 22, 1949, petitioned the United States Court of Appeals for the District of Columbia Circuit for review of the rate reduction orders. At the same time, Penn Water prosecuted the collateral action instituted by it against Consolidated in the United States District Court for the District of Maryland to annul the Baltimore Contract. FPC was not a party to the latter suit.

The District Court sustained the validity of the contract[7] and excluded Penn Water's voluminous proffers of evidence.

On appeal, the issue submitted by Penn Water was the "invalidity of the agreement on its face,"[8] and the Fourth Circuit reversed stating:[9]

> "* * * we reach the conclusion that the basic agreement is invalid on its face * * *." (R., Vol. 18, p. 5334).[10]

Public Service Commission, or any other interested electric utility or State commission, before such changes are put into effect to make application under section 202(b) for an order 'to sell energy * * * or exchange energy' from and after the time of the proposed change or termination of service, or a complaint under section 207 as to the adequacy of the service to be rendered.

"None of these alleged changes having been made or proposed in the only way they could lawfully become effective, respondents are in no position in this or any other proceeding to urge any objection or claim in reliance thereon. An unlawful attempt to avoid putting into effect the rate reduction we ordered affords no valid basis for objecting to that order."

[7] *Pennsylvania Water & Power Company v. Consolidated Gas Electric Light and Power Company of Baltimore* (Feb. 28, 1950), 89 F. Supp. 452.

[8] Penn Water's Brief in Fourth Circuit, pp. 3, 7.

[9] *Pennsylvania Water & Power Company v. Consolidated Gas Electric Light and Power Company of Baltimore* (Nov. 21, 1950), 184 F. 2d 552, 560 f.n. (R., Vol. 18, p. 5334).

[10] To the same effect, see Penn Water's Brief herein, p. 8.

On such a curtailed record,[11] the Fourth Circuit not only purported to find the contract to be invalid on its face because of Articles IV and V thereof, but, without any basis (other than Penn Water's rejected but unconceded and untried proffers), made many assertions regarding factual issues, e. g.: potential competition (completely at variance with the conclusions of FPC);[12] the physical operations of the interstate system; the supposed effect of the contract on such operations; the alleged actual exertion of restraints by Consolidated over Penn Water (especially with respect to an alleged "prohibition" by Consolidated of Penn Water's plant expansion); and the relative "economy" of river coal. None of these findings were based on any trial of the facts in any Court. Consolidated not only denies all of these findings but also the jurisdiction of the Fourth Circuit to make them and to hold the contract invalid without at least preliminary reference to FPC. Some of these assertions by the Fourth Circuit were adopted without question by Judge Miller in his dissent below (R., Vol. 18, p. 5402).

Upon such action by the Fourth Circuit, Penn Water filed in its then-pending FPC rate case appeal in the District of Columbia Circuit its motion to annul the orders of the Commission sought to be reviewed in these proceedings. Denial

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[11] Penn Water submitted to the Fourth Circuit 18 printed pages of testimony and 292 printed pages of untried and excluded proffers. This *summary* action by the Fourth Circuit on such a "truncated record" stands in stark contrast to the exhaustive factual investigation which preceded the FPC rate reduction order. Penn Water even here likewise contends that "All that is needed are the power contracts * * *." (PW Br., p. 3 f.n.).

[12] Thus, for example, at pp. 10-11 of FPC's Memorandum on the petition for certiorari herein, it is said:

"These physical limitations, plus the excessive capital investment required for producing the relatively small dependable output, would preclude Penn Water, if operated independently, from competing successfully with steam plants and substantial water would be wasted over the spillways at times of high flow."

of this motion by the District of Columbia Circuit is the primary issue in this case.[13] (Penn Water Br., p. 3).

Upon like action by the Fourth Circuit with respect to the Safe Harbor Contract, Penn Water submitted that fact to the Court below, as a ground for annulment of the FPC Penn Water rate reduction order. (*Consolidated Gas Elec. Lt. & Pr. Co., et al. v. Pennsylvania Water & Pr. Co., et al.*, Jan. 3, 1952, ... F. 2d ....., application for certiorari now pending, Nos. 611 & 612, this Term.)

2. COUNTER STATEMENT OF FACTS

It is to be regretted that at this stage of the litigation it is necessary to direct the Court's attention to many assertions in Penn Water's brief which have no basis in any testimony in this or in any other case before any court, or commission, or otherwise.

These assertions, iterated and reiterated, seek to portray a "large" and "oppressive" Consolidated which ruthlessly has "stifled" and "crippled" "small" and helpless Penn Water and Safe Harbor; which "has consistently exercised its powers in disregard of both Penn Water and the public" (Penn Water Br., p. 40 f.n.); and which is, even now, before

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[13] Absolute annulment of the FPC orders was the sole issue submitted by Penn Water on such motion in the Court below. No modification of the FPC order was requested, argued, or passed upon by the Court. Penn Water's petition for certiorari in this case, at page 15, asks, as alternative relief, that the case be remanded to FPC with directions retroactively to determine new rates "from and after February 1, 1949 on the usual unit rate basis and on the basis of amount of capacity and energy actually supplied at a rate commensurate with the absence of any 'stabilized income' and with allocations of any reduction in rates based on cost of service actually rendered and not on fictitious 'entitlements.'" This was an entirely new form of relief proposed by Penn Water for the first time in this Court. Such alternative relief is not mentioned in Penn Water's brief here, and is apparently now abandoned by it.

this very Court, seeking to perpetuate this outlawry and assault on the public welfare.

Not only does the brief repeatedly make these unfounded charges against Consolidated, but it actually charges FPC itself with an "inexplicable insistence in this case upon arrogating to itself the power to override the antitrust laws in order to give Consolidated a strangle-hold over potential competitors * * *" (PW Br., p. 33); asserts that FPC here has chosen "which companies shall be given power to suppress competition and which one shall be the victim of that suppression" (PW Br., p. 43); and that FPC is "attempting to authorize violation of the antitrust laws by Consolidated * * * in its own private interest or at its own whim" (PW Br., pp. 39-40).

Consolidated cannot longer remain silent before these unsupported and unsupportable charges. The factual issues they raise have never been tried in any Court. The Record which Penn Water presented to the Fourth Circuit in the Baltimore Contract case contained 18 printed pages of testimony, none of which related to these charges, and 292 printed pages of untried and excluded proffers, devoted entirely to such accusations. The case was argued before the Fourth Circuit on the issues presented "on the face of the contract," but much of the material contained in the excluded proffers was incorporated by that Court in its Opinion in rendering summary judgment, and a lengthy footnote to the Court's decision cites, with obviously full acceptance, the untried accusations made in these very excluded proffers (184 F. 2d at pp. 560-61).

The undoubted influence which these unfounded and unsupported charges had upon the Fourth Circuit, and their repetition before this Court, make their refutation here unavoidable.

A. *The Interstate System*

Penn Water's own description (quoted at R., Vol. 16, p. 5183) sets forth in brief compass the necessity for *its own* creation of the interstate electric system as follows:

> "The System had its origin 32 years ago.
>
> "It arose from the necessity of finding a solution to the problem of providing, without large and expensive reservoirs, a uniform supply of power while utilizing the unharnessed energy of a drainage area subject to severe droughts and floods. The average daily flow at Holtwood has varied from as little as 1700 cubic feet per second up to 756,000 cubic feet per second since the Company began operations. Nevertheless, out of this difficult situation, an important and reliable power pool has been developed.
>
> "The answer to the problem was combined hydro and steam supply; not the substitution of hydro for steam, but from the outset the integration and coordination of hydro and steam in the planning for the capacity needed and in the operation and maintenance of the facilities."

The "difficult situation," above referred to, was Penn Water's, with its "unfirm" and highly fluctuating source of power, not Consolidated's with its "firm," around-the-clock steam generation. It was Penn Water which needed Consolidated.

Moreover, Penn Water has never had a franchise territory and has never served the public, which in that entire portion of the State of Pennsylvania is being adequately served under franchises and certificates of public necessity by Philadelphia Electric, Pennsylvania Power and Light, and Metropolitan Edison. (See map attached to Penn Water's Brief.)

Baltimore, being the nearest large city, became in 1910 Penn Water's first and principal market (R., Vol. 1, pp. 20-21, 25-27).[14]

Over the years, the physical system was planned and constructed in the light of that basic situation.

B. *The Baltimore Contract*

In the mid-1920's, Penn Water's management expressed concern over the possible loss of its control of Consolidated as a result of holding company purchases of Consolidated's stock in the open market (Safe Harbor Contract Case, Nos. 611, 612, Current Term, App. Jt. App., p. 118). As a hedge against such possibility, Penn Water prepared and had executed a long-term contract with Consolidated which (1) immediately increased Penn Water's earnings by 64%; (2) made possible Penn Water's increase of its dividend yield on cash paid in from 12.5% in 1926, to 18.8% in 1930, and 25% or above in all the years between 1936 and 1945, in two of which years it reached a rate of 28.2% (Staff Exh. No. 56, R., Vol. 9, p. 3592), and during which period it was able to transfer $10,000,000 in addition to surplus; (3) by later amendment, transferred to Consolidated the heavy burden of the severe fluctuations of Susquehanna River flow; (4) at the depths of the Great Depression, guaranteed to Penn Water the above return which, as an "operating expense" of Consolidated, actually came before Consolidated's own dividends; and (5) produced a net revenue which FPC, in the orders here assailed by Penn Water, found to be about 2½ times what it should have been.[15]

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[14] It is significant that Consolidated's purchase of power from Penn Water at that time was coincident with the acquisition by Penn Water's management of control over Consolidated (R., Vol. 14, pp. 4497-98).

[15] See also statements of FPC in its Opinion No. 173-A of February 28, 1949, 8 F. P. C. 170, 179, f. n. 3 (R., Vol. 16, at p. 5190).

For 18 years (i.e., until FPC asserted jurisdiction and reduced its rates), Penn Water found no fault with this contract but praised it to regulatory authorities as being in the public interest. Moreover, its own officers, in this very case, testified at length as to its great merit (R., Vol. 1, pp. 25-26, 31-34, 69-77). The Penn Water Contract was filed by Penn Water with the Federal Power Commission January 13, 1936 (pursuant to Sec. 205(c) of the Federal Power Act, U. S. C. Title 16, Sec. 824d(c)), and designated by the Commission as Penn Water's Federal Power Commission Rate Schedule No. 1 (R., Vol. 1, p. 68).

C. The Safe Harbor Contract

Penn Water, having planned in the late 1920's for an additional hydro project at Safe Harbor, Pennsylvania, eight miles upstream from its own plant at Holtwood, found itself unable either to finance the new project or to provide a market for its output. After unsuccessfully negotiating with its Pennsylvania utility company customers to participate and assist in the proposed project, Penn Water turned to Consolidated for help. Consolidated provided over $9,000,000 in working capital on unsecured notes during the construction period, purchased two-thirds of Safe Harbor's equity for $6,000,000, unconditionally guaranteed Safe Harbor's $21,000,000 bond issue, and agreed to purchase two-thirds of the entire output of the present plant.

Construction of the entirely new Safe Harbor project was achieved by the cooperation of Consolidated with Penn Water, and was formalized by the contract of June 1, 1931 between Penn Water, Consolidated, and Safe Harbor (the Safe Harbor Contract), which alone made possible the construction of the Safe Harbor project.

In return for this heavy financial outlay, risk, and obligation to absorb this large block of power at the depths of the Depression, when industry was prostrate, Consolidated received only one-half of the voting stock in Safe Harbor. Penn Water, although contributing only half as much as Consolidated did to the company's equity, received the other half of the voting stock. Consolidated purchased all of the non-voting stock.

The Safe Harbor Contract was likewise filed on January 14, 1936, with the FPC as Safe Harbor's Federal Power Commission Rate Schedule No. 1. As noted above, it was prescribed in its entirety by order of FPC of November 4, 1946, as Safe Harbor's tariff, after amendment by a rate reduction of approximately $600,000 a year. This order was affirmed by the Third Circuit on December 30, 1949, 179 F. 2d 179, and cert. den. 339 U. S. 957 (1950).

The Safe Harbor Agreement provided (1) for the necessary financing of a wholly new project, to be wholly owned jointly by Penn Water and Consolidated in proportions of ⅓ and ⅔, respectively; (2) for the sale until 1980 of the entire output of Safe Harbor's initial plant (except such as might be required for the performance of any duty imposed upon Safe Harbor by its charter or otherwise by law) to its two owners equitably in the ratio of their respective stock ownership; (3) for the construction by Penn Water of transmission lines and for the transmission thereover to Penn Water and Consolidated of such output; (4) for the payment by Penn Water and Consolidated to Safe Harbor of amounts sufficient to yield a net return of 7% on its investment, subject to rate changes by regulatory authorities; (5) for coordination and joint use of facilities; and (6) for arbitration of disputes.

Safe Harbor's charter limits it to hydroelectric operation; it has no franchise territory or transmission lines; and at the time the Safe Harbor Agreement was executed, the Pennsylvania Commission had expressly forbidden Safe Harbor to sell its output to anyone except Penn Water and Consolidated. This was later amended, but the Pennsylvania Commission has never given Safe Harbor authority to sell to the public and has consistently forbidden Penn Water to resell Safe Harbor power to the public.[16]

The Safe Harbor Agreement was filed with the Pennsylvania Commission on September 17, 1933, in compliance with an order of that Commission.[17]

Throughout the years, the Pennsylvania Commission found no fault with either the Safe Harbor or Baltimore Contracts. In 1946 and 1947 it conducted rate proceedings jointly against these companies and ordered substantial rate reductions to Penn Water's Pennsylvania customers. Because, under the Safe Harbor and Penn Water FPC filed tariffs, Consolidated would have been required to increase its payments to those companies by the exact amount of such rate reduction, it became necessary for it to seek protection. A special three-judge United States District Court for the Middle District of Pennsylvania enjoined the Pennsylvania Commission from enforcing this order because of the supremacy of Federal jurisdiction. The Court also decided that the rate orders of the FPC had not been annulled by the asserted invalidation of the Baltimore and Safe

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[16] *Pennsylvania Power & Light Co. v. P. S. C. of Penna.*, 112 Pa. Super. 500, 171 Atl. 412, 3 PUR (NS) 152 (1934).

[17] The Pennsylvania Commission's contention that it had not given its approval to the Safe Harbor Contract is disposed of by the Fourth Circuit's statement in the Safe Harbor Contract Opinion (pamphlet copy filed by Petitioners, pp. 4-5): "These two utilities [i.e., Consolidated and Penn Water] are its only customers under an arrangement approved by the Pennsylvania Commission."

Harbor Contracts (*Consolidated Gas Electric Light and Power Company of Baltimore v. John Siggins, et al., Constituting the Pennsylvania Public Utility Commission, Safe Harbor Water Power Corporation and Pennsylvania Water & Power Company* (July 31, 1951), 99 F. Supp. 151). No appeal was taken from this judgment.

Penn Water's and Consolidated's status and rights with respect to Safe Harbor in the Safe Harbor Contract are identical with the sole exception of the ⅓-⅔ entitlement to output and correlative obligation to pay Safe Harbor's expenses and return in the same proportion. This important fact is not apparent from Penn Water's brief, which consistently seeks to convey the erroneous impression that the Safe Harbor Contract is an enslavement of Safe Harbor by Consolidated.

In affirming FPC's order prescribing the Safe Harbor Contract as FPC's tariff, the Third Circuit found the contract to be "exemplary."[18]

Penn Water asserts (Penn Water Br., p. 8 f.n.) that the Safe Harbor Contract is "substantially similar to the Baltimore Contract." It is, in fact, completely different in the following fundamental (as well as other) respects:

1. The Safe Harbor project would not have come into being without the Safe Harbor Contract.
2. It provides for the financing of that project.
3. It sells the entire output of a designated plant.
4. It sells that output to its two owners.
5. Articles IV and V of the Baltimore Contract do not appear in the Safe Harbor Contract.

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[18] *Safe Harbor Water Power Corp. v. Federal Power Commission* (1949), 179 F. 2d 179, 199.

6. The Safe Harbor Contract is limited to the output of a designated plant; the Baltimore Contract was not.

7. The Safe Harbor Contract was not a "residual type" contract as was the Baltimore Contract.

8. Because of these differences, the alleged "restrictions" in the Safe Harbor Contract are clearly severable while those in the Baltimore Contract, *qua contract*, were held not to be.

D. *Consolidated's Alleged Use of "Oppressive Powers"*

At page 14 (and rephrased elsewhere throughout its brief), Penn Water says, "The oppressive contract powers had actually been used by Consolidated (R., Vol. 18, pp. 5330, 5334-5)." This Record reference is to the opinion of the Fourth Circuit in the Baltimore Contract case. But the Fourth Circuit had absolutely no evidence before it on this accusation — and this charge was not tried before it or elsewhere.[19] Yet that Court's acceptance of these unsupported charges on the basis of Penn Water's untried and excluded proffers is now cited as authority for them!

No testimony on any of the following factual issues was before the Fourth Circuit.

Penn Water contends (P. W. Br., p. 14) that Consolidated has actually exercised its "oppressive contract powers" as follows:

(1) By requiring Penn Water to purchase power from Consolidated.

[19] Consolidated had sought arbitration, to secure the impartial determination of disputes, as provided for by the contract. The District Court's exclusion of Penn Water's proffers in the main resulted from its proper conclusion that Penn Water was attempting to submit to the Court matters which it had contracted to arbitrate.

The system operation *set up by Penn Water*, whereby Consolidated was required to provide firm steam "back up" power to Penn Water to permit the latter to convert its interruptible run-of-river hydro into firm power for sale in Pennsylvania is one of the basic facts in this record, supported by Penn Water's as well as FPC's testimony. This means that firm power from Maryland must be available at all times to Pennsylvania when the hydro plant is completely shut down during large parts of each day in periods of low flow, so that Penn Water may discharge its contract obligation to supply firm power to its other customers (R., Vol. 16, pp. 4857 et seq.).

Consolidated, while it has fulfilled its obligation to be ready to supply such "back-up" energy, has never required Penn Water to receive energy from Maryland if at any particular time so-called interchange or unfirm economy energy could be purchased in Pennsylvania at a lower cost than Consolidated's incremental generating cost. In other words, Consolidated has collaborated with Penn Water in obtaining the required energy from the cheapest source. Penn Water's real complaint here is that this often requires obtaining energy from across the Maryland State Line.

Penn Water now calls this "oppression."

(2) By interfering with Penn Water's contracts with its Pennsylvania customers.

These contracts have never been changed from those prepared many years ago by Penn Water. Consolidated has, unsuccessfully, protested to Penn Water that its Pennsylvania customers should not be supplied, as they are, with large quantities of steam-generated power from Baltimore without an adjustment for huge increases in the cost of coal since the contracts were made in the 1930's. Penn Water refused. But FPC agreed with Consolidated as to

the reasonableness of such a change, and prescribed it (R., Vol. 17, p. 5273).

Consolidated also objected, unsuccessfully, to Penn Water's increasing and continued physical diversion of Consolidated's share of cheap Safe Harbor power to Penn Water's Pennsylvania customers. (*Safe Harbor Contract cases*, Nos. 611 & 612 Current Term, App. Jt. App., p. 147).

Penn Water now calls this "oppression."

(3) By "forbidding" Penn Water in 1947 "to expand its transmission system in Pennsylvania to meet the needs of the Pennsylvania customers".

There is likewise no testimony in any case relating to this charge. It refers to a suggestion made by Consolidated in 1947 which, after a study by Penn Water's and Safe Harbor's engineers and approval by their respective Presidents, made possible the provision of spare transformer capacity at Safe Harbor at an expense of only $30,000 instead of $300,000 as originally proposed by Penn Water. The facilities installed under this more economical plan have supplied power without curtailment or interruption during the five years since that time at a substantial saving to the public.

(4) By withholding "over $900,000 of payments due to Penn Water."

There is no testimony in any case relating to this contention.

As stated in Consolidated's brief below, Consolidated intervened in the FPC rate case (1) to protect its share of cheap Safe Harbor power; (2) to obtain whatever rate reduction might be ordered by FPC; and (3) to have FPC determine the reasonableness of Penn Water's mounting

rate case expenses which then and now are billed to Consolidated as an operating expense. Consolidated had reimbursed Penn Water to the extent of $194,000 of these expenses when, becoming alarmed at the profligacy of Penn Water's rate case outlays, it sought the protection of an authoritative determination by FPC as to their reasonableness, *vel non*. In its order of January 5, 1949, FPC declined to determine this issue, saying:

> "The Intervener, Baltimore Company, has petitioned the Commission to determine an allowable amount of rate case expense (with respect to these proceedings) that Respondent, Penn Water, may charge Baltimore Company under contract between them. * * * Intervener's liability, if any, for such an item relating to past transactions, is a contractual one, which is determinable either under the arbitration procedure provided by the contract, or by proceeding in the courts." (8 F. P. C. at pp. 81-2, R., Vol. 16, p. 4960).

On June 30, 1949, Penn Water sued Consolidated in the United States District Court for the District of Maryland (Civil No. 4610) for $1,204,300.41, which was the amount Consolidated up to that time had withheld for this reason from Penn Water's billings, representing Penn Water's rate case expenses up to that time in excess of the above-mentioned $194,000 which Consolidated had paid. Since that date, Penn Water has billed Consolidated well in excess of one million dollars for additional legal expenses, not only in its rate case proceedings, but in its several suits for the invalidation of the Penn Water and Safe Harbor Contracts. Consolidated has established contingent reserves for payment of such rate case expenses pending the ultimate authoritative determination of their reasonableness. It does not believe, as Penn Water contends, that Penn Water's expenses in breaking the Baltimore and Safe

Harbor Contracts are collectible by Penn Water as an "operating expense."

This bona fide effort by Consolidated to protect its customers against the imposition of extravagant charges by Penn Water is cited by Penn Water as an example of Consolidated's "oppressive powers."

Civil No. 4610 has never been tried.

(5) By "prohibiting" in 1948 its construction of a steam plant which could have used "free" river coal, and by insisting, instead, "not only on preventing this source of competition from Penn Water but also on building a new steam plant of its own in Baltimore, to be fueled with the more expensive bituminous coal bought in the market" (Penn Water Brief (P. W. Br.) pp. 14-15).

There is likewise no testimony in any record in any case regarding this contention, yet the Fourth Circuit completely accepted Penn Water's untried proffers in the Baltimore Contract case, and makes this entirely unfounded assertion in its opinion, which is cited by Penn Water as authority for its accusation and which was adopted by Judge Miller in his dissent below!

What are the facts?

In 1948, Penn Water proposed a $17,000,000 capital expenditure at Holtwood for the installation of 66,000 kw additional steam-electric capacity, including coal recovery and processing facilities. Based on the actual cost of a unit which it had just completed, Consolidated estimated that it could install a more efficient 75,000-kw unit at a cost of less than $11,000,000. Penn Water urged that the $6,000,000 *additional cost* for the 9,000 kw *less capacity* would be justified in savings in operating costs through the use of "river coal," i.e., fine particles of anthracite coal which accumu-

late with other sediment in the pools above the dams. Penn Water's proposal included the construction of a $6,000,000 plant for the cleaning and separation of this river coal. Consolidated accepted Penn Water's estimates for its proposed boilers and generators, but such a coal-treating plant has never been built and had not even been engineered when Penn Water asked Consolidated to underwrite the project and, by approving it, to assume the obligation until 1980 to pay all of its expenses and depreciation, and a return on the plant.

Penn Water's proffers regarding the economies of "free" river coal, which the Fourth Circuit accepted in full, without so much as a word of testimony or argument thereon, and which Judge Miller likewise adopts in the dissent below, completely ignores the very heavy costs of dredging, transporting, processing and, in general, making such river coal usable. This includes the cost of providing special river-dredging equipment, barges, provision for their winter storage and protection against ice, unloading piers and handling equipment, equipment for transporting coal-bearing silt to the separating and cleaning plant, the facilities in such plant for desliming classifiers, thickeners, clarifiers, silt-refuse and water pumps, vibrating screens, washing tables, flotation cells, dewatering screens and centrifuges, the provision for large storage areas for disposal of the separated silt and dikes to prevent its re-entry into the river, the transportation of the silt by pipe line to such area and transportation of the separated coal to a dewatering plant, loading equipment at the latter point, and the provision of extensive railroad coal-car storage and loading-yard siding facilities, the cost of railroad transportation from such point 8 miles to the Holtwood steam plant, its unloading and storage at that point, and its subsequent treatment and drying before actual consumption in the

boilers, together with the costs of operating and maintaining this extensive equipment.

River coal is anything but "free"!

For some years Consolidated has been required to add about one steam-electric generating unit a year to provide for its increasing load. When Penn Water made this proposal, Consolidated asked Penn Water for additional engineering data on the coal-treating plant, estimated coal accumulations in the river, railroad transportation costs, etc. This information was not forthcoming in such form as to provide a basis for any engineering recommendation or sound cost estimate. Penn Water has no obligation to provide any additional plant for the public service — Consolidated has. In response to that obligation, and in the absence of essential engineering data on such a huge pioneering venture, as well as in the absence of any commitment from Penn Water that it could have its plant installed in time for, or that its output would be available for, Consolidated's increased system load, Consolidated was forced to proceed with the ordering of its next unit and informed Penn Water that it could not approve and thereby underwrite to 1980 the $17,000,000 expenditure without more adequate engineering data. It again requested such data so that the studies could proceed in connection with the unit to be ordered the following year. Penn Water refused to discuss the project further.

None of this information was before the Fourth Circuit or before the Court below. Penn Water's unfounded charge colored the Fourth Circuit's opinion and the dissent below, and the effort is here made to have this accusation affect the conclusions of this Court. The only record reference which Penn Water makes in support of these accusations is to the opinion of the Fourth Circuit.

3. THE PENN WATER RATE ORDER OF FPC

Penn Water contends that by the Orders here assailed, FPC (a) compelled Penn Water to perform an illegal contract, and (b) based its rate order on Penn Water's continued performance of such contract.

The record does not support this contention. FPC avers that its Orders had no such purpose or effect, and in its Safe Harbor Contract opinion the Fourth Circuit fully concurs, saying, "It is obvious that the Commission did not prescribe the restrictive conditions of the contract as part of the rate order * * *."

When Penn Water in its petition for rehearing of the FPC rate reduction order for the first time raised the issue with that Commission of the invalidity of the Baltimore and Safe Harbor Contracts, FPC, in its Order denying rehearing (1) pointed out the great public benefits produced by the physical, integrated, and coordinated operations of hydro and steam, quoting Penn Water's own assertions to that effect,[20] (2) stated that such physical regional integra-

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[20] FPC there states:

"Penn Water has consistently in its representations to its stockholders and to regulatory authorities explained and emphasized the results and importance of the pooling arrangements. Thus in its 1941 Report to Stockholders it said:

" 'Coordinated operation of this pool of power means that each member not only has available in emergency the combined resources of the interconnected systems, but also derives through daily and seasonal interchange arrangements the benefit which arises from the use of the most economic sources of generation for supplying the power requirements of the pool. A further benefit flows from the possibility of planning generating-capacity additions of the most economic type and size with consequent reduction in the amount of unused reserve capacity that would occur were the systems uncoordinated. Thus the regional transmission network of the Pennsylvania Water & Power Company has multiple purposes, and energy continually flows in, across, and out of it as the needs of the interconnected members develop from minute to minute and day to day.' "
(8 F. P. C. at p. 174, R., Vol. 16, p. 5182.)

tions of facilities is precisely what is sought to be fostered by the Federal Power Act;[21] (3) stated that the validity of its Order is not dependent on questions as to the validity of the contracts,[22] *because* (4) its orders related to rates and services applicable to the continuing *physical operation* of the interconnected physical *system*.[23]

When this issue was again presented to the Commission by Penn Water's Preliminary Statement to its filing of new rate schedules (R., Vol. 17, p. 5253), the Commission yet again emphasized the fact that (1) it was not ordering Penn Water to perform any unlawful provision, and (2) that its orders were limited to prescribing only those tariff provisions defining the physical services to be furnished. The Commission there said (R., Vol. 17, p. 5283):

> "The foregoing provisions supersede only the rates and charges heretofore made, demanded, collected or assessed against Baltimore Company by Penn Water and Transmission Company. All other provisions of the aforementioned contracts, in and of themselves lawful prescribing or defining the power, energy and transmission services to be furnished, or any classifica-

[21] "The regional integration and coordination of facilities, the resulting economies, and the utilization and conservation of natural resources thus achieved are precisely what was sought to be encouraged and fostered by the Federal Power Act and established as a part of the criterion of the public interest to be served by regulation thereunder (Cf. Section 202(a))." (8 F. P. C. at p. 175, R., Vol. 16, p. 5184).

[22] "If there are questions as to the legality of the foundation contracts which are in litigation, as Respondents' application for rehearing indicates, the validity of our order is not dependent upon the decision of those questions." (8 F. P. C. at p. 175, R., Vol. 16, p. 5184). This conclusion was accepted by the Court below, and by the three-judge District Court for the Middle District of Pennsylvania (99 F. Supp. 151).

[23] "In our opinion and order we took care to leave the continuation of the operation of the integrated and interconnected system in full effect, merely changing the rates. * * *." (8 F. P. C. at p. 175, R., Vol. 16, pp. 5184-5185).

tion, practice, regulation or rule affecting such services, which several provisions are incorporated herein by reference, shall be observed and be in force."

As will be seen, *infra*, pp. 31 *et seq.*, the Fourth Circuit (assuming its jurisdiction to do so) invalidated the Baltimore Contract solely because it contained Articles IV and V. Article IV placed restrictions on Penn Water's making new contracts which would commit Consolidated to "firming up" or other obligations. Article V placed restrictions on Penn Water's plant expansions on which Consolidated would have to make payments to Penn Water. Neither of these provisions define the "services to be furnished" by Penn Water under the tariff prescribed by FPC. Moreover, if these two provisions are illegal (which Consolidated submits they are not), they were specifically excluded from FPC's order, which prescribed only those service provisions "in and of themselves lawful."

The Court below fully appreciated that the order of FPC related to the physical operations of the system (which have continued to date without the slightest change, notwithstanding the Fourth Circuit's decisions). As to this, the Court below said:

> "In our view, the Fourth Circuit's opinion neither purported to nor did relieve Penn Water from its obligations under the Federal Power Act to continue the then-existing services and rates. It is those services and rates, reflecting underlying operations, which were the subject of the Commission's order" (R., Vol. 18, p. 5375).

Penn Water insists, however, that FPC may not regulate even the continuing physical operations of the system because the "alleged single interstate system (the facilities of Consolidated, Penn Water and Safe Harbor) [was] cre-

ated by the two illegal contracts * * *" (PW Br., p. 16; see also p. 54). It is true that the physical system *resulted* from these contracts, but the physical system is still there, even though the Fourth Circuit has held (we submit, improperly) the contracts to be invalid. And, of sheer physical necessity, this vast system still continues to function and the loads it serves still exist and must be supplied. The river flow still varies widely and unpredictably, lights and motors go on and off, peak and off-peak loads are dispatched for over-all economy, and power flows back and forth in the system just as it always has. It is to this physical operation that the FPC order is directed. And until the physical operations of that system and the tariffs relating thereto are changed in accordance with the requirements of the Federal Power Act, such physical operations must and will continue. Articles IV and V of the Baltimore Contract have nothing to do with it.

In addition, Penn Water contends that the payment provisions prescribed by FPC constitute illegal "revenue pooling." Consolidated favors no special type of payment provision, but the one ordered by FPC is the one which was devised and promoted by Penn Water and which, in this very case — contrary to Penn Water's present contention — was described in the testimony by Penn Water's own officers as being the only method whereby the greatest benefit from the hydro operations could be achieved (R., Vol. 1, pp. 25-26, 69-78).

It is significant that, although Penn Water made this same contention as to "illegal revenue pooling" in both the Baltimore Contract case and the Safe Harbor case, the Fourth Circuit, in neither case, found such payment method to be either pooling or illegal. A guaranteed return for the entire output of a plant is not "revenue pooling."

4. THE BALTIMORE CONTRACT OPINION OF THE FOURTH CIRCUIT.

As noted above, page 10, the Fourth Circuit determined the case on the narrow issue of "validity of the contract on its face." It had substantially no factual record before it, but borrowed heavily from Penn Water's untried proffers. It made no effort to obtain any factual information or advice from FPC. Assuming its jurisdiction to do so, it made the following determinations:

a. The Fourth Circuit found that the Baltimore Contract was invalid solely by reason of Articles IV and V thereof. The District of Columbia Circuit points out this fact in its opinion. Penn Water takes strenuous exception to this statement of the D. C. Circuit (PW Br., pp. 24-5, f.n.), but the Fourth Circuit's own language is conclusive. In its decision of September 30, 1950, in the Baltimore Contract case, the Fourth Circuit said 184 F. 2d 552, 557, 566):

> "The restrictions which are imposed upon the activity of Penn Water by the agreement and give rise to the contention of invalidity are contained in Articles IV and V as follows:
>
> " 'Article IV. So far as possible consistently with the performance of any duty or obligation to serve imposed on Power by its charter or otherwise by law, Power shall obtain the approval of Electric before entering into any agreement or agreements with any other person or corporation for the sale and/or purchase and/or interchange of electrical and hydraulic power and energy, or before making any substantial modifications in the existing contracts now in force between Power and its customers other than Electric.
>
> " 'Article V. So far as possible consistently with the performance of any duty or obligation aforesaid, Power shall obtain the approval of Electric (1) before incurring any single commitment for investment (except for renewals or replacements) in excess of $50,000.00

on the basis of which Electric shall make payment under Article III(b) hereof, and (2) before alienating or disposing of in any one year any property, plant, or equipment, other than stores and construction equipment, having a total value in excess of $50,000.00 and included in the investments of Power and/or subsidiaries of Power in plant, property or power development devoted to the generation, transmission, or distribution of electrical power and energy.'

"* * *

"The District Judge found and it is not disputed that the effect of the quoted provisions of Articles IV and V of the contract is to confer upon Consolidated the power to control * * * [prices, plant extension, territory, and backfeed purchases]."

"* * *

"There can be no doubt that the freedom of action of Penn Water as a public utility of the state has been and is restricted by the provisions of Articles IV and V of the basic agreement * * *."

In its opinion of January 3, 1952, in the Safe Harbor case, the Court said of its above opinion:

"We there held that the contract between Consolidated and Penn Water then in suit, which for convenience may be called the Penn Water contract, was invalid, because Articles IV and V of the basic agreement of June 1, 1931 conferred upon Consolidated the power to control * * * [the abovementioned activities]."[24]

b. The Court then held the entire contract invalid because, *qua* contract, Articles IV and V were inseparable from the rest of the agreement. In its opinion of January

[24] It is of interest to note that "the effect of Articles IV and V" was the specific "illegality" mentioned in Penn Water's Petition to FPC for Rehearing (R., Vol. 16, p. 5012).

10, 1951, in the Baltimore Contract case, the Court said (186 F. 2d at p. 936):

> "* * * These restrictive conditions were included in order to safeguard Consolidated in the performance of its promises and it is conceded that without them the contract would have been impracticable and would not have been made. * * *"

In this regard it should be noted that the Baltimore contract was executed in 1931 before enactment of the Federal Power Act in 1935. Consolidated's protection against its heavy "open end" obligations to Penn Water was at that time solely a *contractual* protection. Such protection was therefore inseparable from the balance of the contract, *qua contract*. Since the enactment of the Federal Power Act, Consolidated has the protection of the broad regulatory power of FPC and consequently, *qua tariff*, Articles IV and V are not necessary.

c. The Court held that FPC had not prescribed the restrictive provisions of the Baltimore Contract.

In its Baltimore Contract opinion, the Court said (184 F. 2d 552, 565, 566):

> "* * * The restrictive provisions of the agreement were not mentioned and their legal validity was not discussed [i.e., by FPC].
>
> "* * *
>
> "* * * Nor do we undertake to gainsay the view of the Commission that even if the restrictive conditions of the basic contract are invalid, as to which the Commission expressed no opinion, it still has the duty and authority under the Federal Power Act to encourage and establish the interconnection of electrical facilities * * *"

In its opinion in the Safe Harbor Contract case, the Court said:

> "It is obvious that the Commission did not prescribe the restrictive conditions of the contract as part of the rate order in either [the Baltimore Rate Order case or the Safe Harbor Rate Order] case."

d. The Court summarily invalidated the contract despite numerous, genuine issues as to material facts.

The Court based its summary judgment primarily on its factual finding of potential competition. In doing so (there being no testimony in the Record), it accepted Penn Water's untried proffers, and the map which is attached to Penn Water's brief herein. This finding is opposed to FPC's position (based upon exhaustive testimony from all parties) on the same factual issue. The Court was oblivious as well to the fact that Consolidated has no charter, franchise, or certificate rights in Pennsylvania, as to the interruptible character of Penn Water's power. In fact, the Court went so far as to point out (R., Vol. 18, p. 5326) that "Penn Water and Consolidated would be potential competitors for the sale of power to Potomac Edison at Frederick, Maryland, whose lines at that point are only a short distance from the lines of Penn Water so that they could easily be connected." This is another instance of a statement made by the Court on the basis of Penn Water's untried proffer. The Court was entirely unaware of the fact that this possibility had been discussed by Penn Water's and Consolidated's engineers and abandoned as impracticable because the existing power resources of Potomac Edison to the west made it economically unfeasible to provide at heavy expense the interconnection facilities. No testimony on this point has been given in any case.

The Fourth Circuit overlooks entirely the non-competitive character of the field, and that for many years Potomac Edison, Potomac Electric Power Co., Metropolitan Edison, Philadelphia Electric, Pennsylvania Power & Light, and Consolidated have operated as State-regulated monopolies. There is no practical probability that Penn Water would be authorized by the Pennsylvania Commission, or by the Maryland Commission to enter any of the territories now adequately served by those companies. (Cf. *Panhandle Eastern Pipe Line Co. v. Michigan Public Service Comm'n.*, 341 U. S. 329 (1951).

e. The Court stated that its judgment directly affected the FPC rate-reduction Order.

In the Baltimore Contract case, the Court said (184 F. 2d 552, 568):

> "* * * It may well be, although the present arrangement between the Maryland and Pennsylvania utilities is invalid for the reasons set forth, that an interconnection of facilities and an interchange of electric energy between them may be continued by some method that would meet the approval of the appropriate regulatory authority and will not offend either the anti-trust laws or the utility laws of Pennsylvania. That question is not before us. * * *"

In the Safe Harbor Contract case, the Court said:

> "Further proceedings before the Federal Power Commission will doubtless be necessary if it is ultimately decided that the three party basic contract, as well as the two party basic contract, is invalid; but that course need not involve embarrassment. The problem of the Commission would then be to devise a plan which will effectuate the purposes of the Federal Power Act and at the same time conform to the anti-trust statutes."

The Court erred in summarily striking down the contract, in view of the exclusive primary jurisdiction of the Federal Power Commission to determine the disputed factual issues of potential competition, price fixing, devision of territories, actual approval by the Pennsylvania Commission, and other issues relevant to the validity of the contract, which were alleged by Penn Water and summarily determined by the Court without testimony thereon. The Court erred because of conflict between the Court's factual findings and findings of FPC in the instant case, and because of the Court's refusal to apply the legally applicable Rule of Reason. This error is discussed in the Argument *infra*, p. 72.

The denial by this Court of certiorari in that case "lends no support to the decision" of the Fourth Circuit in that case.[25]

5. THE SAFE HARBOR CONTRACT OPINION OF THE FOURTH CIRCUIT

It should be remembered that the Safe Harbor Contract, except as to rates, had, by Opinion No. 143 and order of November 4, 1946, been prescribed in its entirety by FPC as Safe Harbor's filed tariff (5 F. P. C. 221). This order was affirmed by the Third Circuit (which found the contract to be "exemplary") in 179 F. 2d 179 (1949), Cert. den. 339 U. S. 957 (1950).

The Safe Harbor Contract was, likewise by summary judgment (again assuming the Court's jurisdiction to do so), held to be "invalid on its face" despite the existence of material issues of fact.

Four minor provisions in the contract, not one of which had in over 20 years been of any significance or had any

[25] See Memo of Mr. Justice Frankfurter in denial of certiorari in *Agoston v. Commonwealth of Pennsylvania*, 340 U. S. 844 (1950).

practical effect, were found to make the entire agreement *per se* illegal.

The provisions so held illegal are these. Article IIIa required Safe Harbor to *expand* its plant when *both* of its owners reasonably request it to. Article IIIa also in effect gave its two owners an option on output from such plant expansion. Both of these provisions are academic because even Penn Water's officers agree that the present Safe Harbor Plant utilizes all of the river flow up to 65,000 cubic feet per second; that flow exceeds that amount on an average of only 54 days a year; and that the installation of additional generators would not be economically feasible. Article IV, properly read in its context, prevents only such separate agreements between Safe Harbor and either one of its two owners as would injure the over-all efficiency of the operation. Article XIV provides for an "Operating Committee" for "investigation, consultation and advice," but with no powers to *bind* Safe Harbor.

a. On the basis of these ancillary and academic provisions—which in 20 years had never been invoked, — the contract was *summarily* stricken down in its entirety (assuming the Court's jurisdiction to do so), even in the face of Consolidated's affidavit that the provisions were immaterial, separable, and the contract fully operable without them.

b. As in the Baltimore Contract case, the Court found that FPC had not prescribed the restrictive provisions, despite FPC's contention that in this, the Safe Harbor case, it actually had.

c. The Court also found that its judgment directly affected the FPC-prescribed Safe Harbor tariff, saying:

> "Further proceedings before the Federal Power Commission will doubtless be necessary if it is ultimately decided that the three party basic contract

> [Safe Harbor Contract], as well as the two party basic contract [Baltimore Contract] is invalid; but that course need not involve embarassment."

d. It expressed disagreement with the opinion of the Court below in the case at bar as to the relationship between the antitrust laws and the Federal Power Act.

The Court condemned the contract under the Pennsylvania Public Utility Law (apparently the section authorizing transfers of franchises, etc., only *with Commission approval*) although at the outset of its opinion the Court said:

> "These two utilities [Consolidated and Penn Water] are its [Safe Harbor's] only customers under an arrangement *approved by the Pennsylvania Commission.*" (Emphasis added.) (Pamphlet copy of Opinion, pp. 4-5.)

Consolidated submits that the Fourth Circuit was in error in invalidating this contract, which had been prescribed in its entirety by FPC as a tariff and affirmed by the Third Circuit. Even though that Court's decision in the Baltimore Contract case were admitted to be correct, which it is not, and that the Fourth Circuit had jurisdiction, which it did not, the Court was in error in striking down the Safe Harbor Contract because of the entirely different nature of provisions of the latter contract, e.g.: its creation of a new project; the physical limitations on the expansion of that project; the charter and franchise and certificate limitations on Safe Harbor; the approval of the Safe Harbor project by the Pennsylvania Commission, and its approval of the sale of Safe Harbor's output to its two owners (which latter approval is actually stated by the Fourth Circuit in its Safe Harbor Contract Opinion). The Court erred in summarily striking down this contract because

of the exclusive primary jurisdiction of the Federal Power Commission to determine the disputed factual issues of potential competition, price fixing, and other issues material to the validity of the contract, as well as issues as to the Safe Harbor Contract's separability from the Baltimore Contract, and the separability of its own immaterial and academic "restrictions" on the balance of the contract. This error is discussed in the Argument, *infra*, pp. 69-73.

Consolidated and the Maryland Commission have petitioned this Court for certiorari in the Safe Harbor Contract case, which are Cases 611 and 612 in the current term of this Court.

6. THE PRACTICAL RESULTS OF PENN WATER'S OBJECTIVES

Penn Water contends that the Baltimore and Safe Harbor Contracts have been destroyed and that the FPC rate reduction order has consequently been annulled. Nowhere does Penn Water suggest the obvious argument that if the FPC order, prescribing a *new* tariff which *excludes* Articles IV and V, is unlawful, then, *a fortiori*, Penn Water's *present* filed FPC tariff, which *includes* those Articles, is also unlawful. Penn Water has furnished services to Consolidated from 1931, and is now furnishing such service under the present filed tariff. Thus, Penn Water actually is asking this Court to create a complete regulatory "vacuum", as Judge Miller's dissent suggests. This vacuum presumably would continue until such uncertain time in the future as Penn Water might file and FPC might approve a new tariff or until a new tariff would be imposed on Penn Water by FPC.

Or does Penn Water's silence on this aspect of the case indicate that, if successful here, it would insist on the full effectiveness of its present filed tariffs despite its inclusion

of all of the alleged "restraints"); claim the right to retain the excess charges impounded by it since February 1, 1949 under the $1,954,261 rate reduction order; and continue collecting such excessive rates until the establishment of a new tariff? Penn Water states that final determination of any new schedules will only be achieved after "confusion and delay" and "probably after several appeals" (PW Br., p. 41).

7. CONSOLIDATED'S POSITION

Consolidated did not originate the present arrangement. Over the years it has cooperated with Penn Water, at the latter's solicitation, in making Penn Water's and Safe Harbor's fluctuating output 100% marketable and in building up a physical system, the efficient operation of which in the public interest has been acclaimed not only by Penn Water, but by Commissions and Courts alike.[26] Consolidated has planned its own facilities in coordination with that system, and has provided many millions of dollars of plant and equipment at Baltimore both to "firm up" the unfirm hydro and to receive delivery thereof.

It believes that the present operations of the system are highly beneficial to the public. FPC regards them as so beneficial as to have prescribed their continuance. The Fourth Circuit admits that they are "practicable and successful".[27] Consolidated has continued to "firm up" Penn Water's hydro and to operate its own facilities so there will be no interruption to or curtailment of the public service—notwithstanding the Fourth Circuit's decisions.

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[26] R., Vol. 1, pp. 25-27, 31-32, 75-77; Opinion 173, 8 F. P. C. 1, 14; Opinion 173-A, 8 F. P. C. 170, 174-176; *Safe Harbor Water Power Corp. v. FPC* (CA 3, Dec. 30, 1949), 179 F. 2d 179, 199.

[27] *Consolidated Gas Electric Light & Pr. Co. et al. v. Penn Water & Pr. Co. et al.* (CA 4, Jan. 3, 1952). Pamphlet copy furnished by Petitioners, pp. 12-13.

It holds no brief for any special type of system arrangement, and assuredly will not (as Penn Water suggests it may — PW Br., p. 53) abruptly stop its receipts or deliveries of power.

Its primary concern remains what it was before FPC and the Court below — the protection of its share of cheap Safe Harbor power.

Having made possible the Safe Harbor project, borne the burden of that project during the many years when power was in excess supply, and having provided the expenditure of millions of dollars for the receipt at 220,000 volts, and transformation of Safe Harbor power, it has sought to retain what the Fourth Circuit itself in the Safe Harbor Contract case, has called its "rightful entitlement in Safe Harbor's production", "its ownership in the power purchased of Safe Harbor", its "share".

The Fourth Circuit's assurance to Consolidated of Penn Water's "desire to continue to supply electric energy to Consolidated" (R., Vol. 18, p. 40) was based on a similar assertion to that Court which Penn Water repeats at page 26 of its Brief in Opposition to Certiorari in the Safe Harbor Contract case Nos. 611 and 612 of the current term. Even were this offer a binding commitment, it is no more than an offer by Penn Water to retain all that part of Consolidated's ⅔ interest in Safe Harbor's output which Consolidated has, upon being compensated therefor, permitted Penn Water physically to divert into Pennsylvania. Penn Water's present "offer" is to continue the diversion, but to stop any compensation to Consolidated for it. This is what Penn Water calls "the same *services* Consolidated has been receiving". The Fourth Circuit could hardly have approved this offer had it understood it.

8. CHEAP SAFE HARBOR POWER

The Safe Harbor plant is modern, efficient, and was built very cheaply at the depth of the Depression in 1930-31. It has nearly twice the capacity of Penn Water's Holtwood hydro and steam plant with approximately the same investment.

Penn Water has attacked Consolidated's share in Safe Harbor's output for three reasons: (1) to avoid FPC jurisdiction over alleged "joint sales" by Penn Water and Safe Harbor (PW Br., p. 8). (This contention was found "wholly without substance" by the Commission, R., Vol. 16, pp. 4862-4863, Vol. 17, p. 5269, and by the Court below, 193 F. 2d Adv. Sh. at p. 245, R., Vol. 18, p. 5391, but is renewed here (PW Br., p. 56)); (2) to annul the entire FPC rate reduction order; and (3) to aid the physical diversion into Pennsylvania of cheap Safe Harbor power so that it may be combined with Penn Water's own more expensive power.

In its brief in the Court below, Consolidated's argument was directed primarily at the preservation of its ⅔ share of Safe Harbor output, pointing out the repeated confirmation of that right by Safe Harbor, by Penn Water, by Penn Water's Pennsylvania customers, by the FPC, by the United States Court of Appeals for the Third Circuit, and by all of the affirmative testimony in this case. The Court below fully sustained Consolidated's position.

Consolidated's basic concern in this entire litigation has been and remains the protection of its ⅔ share of the cheap Safe Harbor hydro.

In the Safe Harbor Contract case, Consolidated's affidavits in opposition to summary judgment showed that the incidental "restraints" in the Safe Harbor Contract had not come into operation in 20 years; were of no significance in

the operation of the Safe Harbor plant; that such plant cannot now be economically enlarged; that such academic "restraints" are of no importance to continued operations under the contract; that in this respect (and others) they have no resemblance to Articles IV and V of the Baltimore Contract, and that they are clearly severable. Penn Water, however, insisted on invalidation of the entire contract, which, of course, included the very material contractual division of Safe Harbor output ⅔ to Consolidated and ⅓ to Penn Water.

Nowhere does Penn Water attack the validity of a tariff which prescribes that Consolidated shall be entitled to ⅔ of Safe Harbor's output and Penn Water to ⅓. Nowhere has the Fourth Circuit found such a provision invalid, whether in a tariff or in a contract. On the contrary, in the Safe Harbor Contract case, the Fourth Circuit adopted the language of the District Court in referring to this "share" as Consolidated's "rightful entitlement".

SUMMARY OF ARGUMENT

I. *The Fourth Circuit Had No Jurisdiction To Annul Either the Prescribed and Affirmed Safe Harbor Tariff or the FPC Order Prescribing the Penn Water Filed Tariff as Amended.*

The Fourth Circuit had no jurisdiction summarily to strike down, directly or indirectly, in a collateral action to which the Federal Power Commission was not a party, a tariff prescribed by that Commission and affirmed by the Third Circuit with certiorari denied (the Safe Harbor tariff), or an order of that Commission which prescribed a filed tariff as amended (the Penn Water tariff). The Fourth Circuit had no jurisdiction summarily, and without preliminary resort to the primary jurisdiction of the Federal

Power Commission, to pass on the validity of service contracts the provisions of which, as amended, were prescribed in whole (the Safe Harbor Contract) or in part (the Baltimore Contract) as tariffs by FPC. *Far East Conference, et al. v. United States of America & Federal Maritime Board* (March 10, 1952), No. 15 Misc., Oct. Term, 1951.

Such FPC orders, after protracted investigations and hearings, and affirmance as to the Safe Harbor tariff, by the Third Circuit, should conclusively establish that the contract provisions are not unlawful *per se* on their face, as the Fourth Circuit purported to find, and are strongly persuasive as to their lawfulness under the Rule of Reason. Such issue, in any event, is subject to FPC's primary jurisdiction.

II. *The Federal Power Commission Had Authority to Prescribe the Tariff.*

The Federal Power Act empowers the FPC to order physical connections between utilities, the sale and exchange of energy between them, to prescribe the terms and conditions of the arrangements to be made between the persons affected by such order, including apportionment of costs, compensation, and reimbursement; to approve dispositions, consolidations, acquisitions or control consistent with the public interest; to determine the just and reasonable rate, charge, classification, rule, regulation, practice, or contract to be thereafter observed and in force and to fix the same by its order; to determine the proper, adequate, or sufficient service to be furnished and fix the same by its order, and to bring actions to enjoin violations of the Act or orders of the Commission, or to compel compliance.

Under such powers of "comprehensive and detailed regulation", the Federal Power Commission had ample authority to prescribe the tariff here assailed by Petitioners.

Moreover, the Sherman Act does not apply to tariffs prescribed by the Federal Power Commission even assuming that such tariffs prescribe (which they do not) actions which would be unlawful under an independent contract between private parties. *Parker v. Brown*, 317 U. S. 341 (1943).

III. *The Federal Power Commission Has Primary Jurisdiction.*

Under its comprehensive authority, the Federal Power Commission has primary jurisdiction to ascertain and interpret the circumstances underlying legal issues, and to determine questions essential to the proper determination of the lawfulness of its own orders and of the tariffs which it prescribes. *United States Navigation Co., Inc. v. Cunard S.S. Co., Ltd.*, 284 U. S. 474 (1932); *Macauley v. Waterman S.S. Corpn.*, 327 U. S. 540 (1946).

The disputed but untried factual issues of "potential competition", alleged "restraints", separability, system operations, and similar questions within this field of government-regulated monopoly, all within the expert competence of the Federal Power Commission, should not have been summarily decided by the Fourth Circuit (as they were) without either evidence thereon or reference to the Federal Power Commission.

IV. *The Federal Power Commission Prescribed a Lawful Tariff.*

The Federal Power Commission orders here assailed by Petitioners prescribe a tariff, and do not, as contended, constitute a blanket authorization to private parties to enter into or continue independent contracts at their "whim". The cases cited by Penn Water with reference to laws which authorize private parties independently to negotiate con-

tracts, and which exempt from the Sherman Act the contracts so privately negotiated are thus not in point. The Federal Power Commission orders prescribed a tariff applicable to continuing physical operations which would not be, and were not, affected by any determination of the 11th-hour question raised by Petitioners, long after the record was closed, as to the lawfulness of service contract provisions. The Fourth Circuit's decision that Articles IV and V of the Baltimore Contract are unlawful (assuming the Fourth Circuit's jurisdiction so to find) does not annul the tariff prescribed by FPC which excluded those provisions.

Consolidated is required to pay for and is entitled to ⅔ of the output of the Safe Harbor plant under the Safe Harbor filed tariff which was prescribed in its entirety by the Federal Power Commission,[28] affirmed by the Third Circuit,[29] and cert. denied.[30] The prescribed apportionment based on this tariff entitlement was lawful and, under the doctrine of the "filed tariff", cannot be collaterally attacked. *Montana-Dakota Utility Company v. Northwestern Public Service Co.*, 341 U. S. 246 (1951); *Keogh v. C. & N. W. R. Co.*, 260 U. S. 156, 161-162 (1922). No Court or Commission has found such entitlement to be unlawful. The allocations under the Penn Water tariff are based on complicated, technical considerations involved in the integrated operations of the interstate electric system, and Consolidated's obligation (not shared by Penn Water's other customers) to provide steam-electric generating capacity with which to "firm up" Penn Water's unfirm, unreliable run-of-river hydro-power. The question of allocations is one of fact to be determined at the administrative level. *Colorado Interstate Gas Company v. FPC*, 324 U. S. 581, 589-591 (1945).

[28] 5 F. P. C. 221 (1946).
[29] 179 F. 2d 179 (1949).
[30] 339 U. S. 957 (1950).

Allocation of a rate reduction does not affect the total amount of the reduction, and Penn Water's other customers have not complained.

The prescribed payment provisions are lawful. No Commission or Court has found them otherwise. Consolidated did not originate them, and, in this case, Penn Water's officers urged them upon the Commission as the only practical means of effecting full economic utilization of Penn Water's hydro facilities.

The payment provisions are not revenue pooling. There is no division of gross or net earnings, nor formula for division or pooling of any kind. This same argument was made unsuccessfully before the Fourth Circuit and before the Court below.

V. *FPC Did Not Authorize An Unlawful Contract.*

The FPC orders prescribed a tariff; they did not authorize a private contract.

The cases cited by Penn Water in support of the proposition that *private parties* cannot generally be granted immunity from the anti-trust laws, and cannot be authorized to enter into *private contracts* in violation of such laws, have no application to a tariff prescribed by FPC. But even if this were not so, the Fourth Circuit clearly erred in summarily striking down on their faces the Safe Harbor and Baltimore Contracts. The Safe Harbor Contract was a means of creating the entirely new Safe Harbor project, and for the sale to its two owners of its output in proportion to their ownership. Its provisions were fully known to the Pennsylvania Commission, the Maryland Commission, and FPC. Even now, the Pennsylvania Commission forbids the resale of Safe Harbor power by Penn Water to the public. After 20 years, Penn Water, as part of its effort to

avoid the FPC rate reduction against it, assailed the Safe Harbor Contract because of minor and ancillary alleged "restraints" in that contract which had never been of any significance, and which Consolidated pointed out were readily severable.

Despite the fact that this contract constituted Safe Harbor's filed and prescribed FPC tariff which had been affirmed by the Third Circuit and as to which certiorari had been denied by this Court, the Fourth Circuit summarily and without any testimony or referral to FPC found it invalid, *per se*, under the Sherman Act, without any determination of its reasonableness under the Rule of Reason.

Entirely apart from Safe Harbor's charter, franchise, certificate, and physical limitations to the generation of unreliable "run-of-river" hydro and the sale of its entire output to its two owners, the Fourth Circuit determined that this newly-created source of power must compete with its two owners. No decisions of this Court support any such ruling. For many of the same reasons, the Fourth Circuit erred in summarily striking down the Baltimore Contract.

These contracts, moreover, enabled both Penn Water and Safe Harbor to make full utilization of their hydro facilities, assured them of substantial income throughout the Depression (during which they were executed), and afterwards made possible in the case of Penn Water, the payment of very large dividends as well as the amassing of a substantial surplus, with the full knowledge and approbation of its stockholders and of the Pennsylvania Commission. They provide no ground for their summary invalidation by the Fourth Circuit under the Laws of Pennsylvania.

ARGUMENT

I.

The Fourth Circuit Had No Jurisdiction to Annul Either the Prescribed and Affirmed Safe Harbor Tariff or the FPC Order Prescribing the Filed Penn Water Tariff as Amended.

This case presents for review Orders of the FPC prescribing a tariff.

The Petitioners attack the tariff so prescribed on the ground that it has been annulled by judgments of the Fourth Circuit in collateral actions to which FPC was not a party.

Under the recent decisions of this Court in *Far East Conference, et al. v. United States of America and Federal Maritime Board* (March 10, 1952),[31] the Fourth Circuit had no jurisdiction to strike down, directly or indirectly, in a collateral action to which FPC was not a party, any tariff either approved or prescribed by FPC. That case clearly decides that the Fourth Circuit lacked power even to rule on the validity of the service contracts, *qua contracts*, without "preliminary resort" to FPC because of that Commission's primary jurisdiction over and its specialized experience and knowledge in this entire field.

Assuredly, the Fourth Circuit had no jurisdiction to strike down the Safe Harbor tariff which FPC had prescribed (5 F. P. C. 221), which the Third Circuit had affirmed (179 F. 2d 179), as to which certiorari had been denied by this Court (339 U. S. 957), and under which services continue to be supplied. But the Fourth Circuit purported to do exactly that in the Safe Harbor Contract case, in which petitions for certiorari are now pending before

[31] No. 15 Misc., October Term 1951, 20 L. W. 4207.

this Court in Case Nos. 611 and 612 of the current term. And that is exactly what Petitioners here contend that the Fourth Circuit did do.

Assuredly, the Fourth Circuit had no jurisdiction to strike down the Penn Water tariff which had been on file with FPC since 1936; which, as amended, was prescribed by FPC by the orders here assailed; and under which services continue to be supplied. Yet that is exactly what the Fourth Circuit purported to do in the Penn Water Contract case. And that is exactly what Petitioners here contend the Fourth Circuit did.

If, as decided in the *Far East Conference* case, the administrative board or commission has primary jurisdiction with respect to the legality of tariffs which have *not* been filed, *a fortiori* in this case, it has primary jurisdiction with respect to a tariff which has not only been filed, but which has been prescribed in its entirety (with rate reduction), and affirmed on appeal (the Safe Harbor tariff), or which has been filed and prescribed as amended (the Penn Water tariff).

In both the Baltimore Contract case and the Safe Harbor Contract case, the Fourth Circuit purported summarily to strike down, as unlawful on its face, a tariff which FPC had prescribed after protracted investigations. Without so much as an inquiry to FPC as to the fundamental factual issue of the existence of "potential competition" (which FPC, the Maryland Commission, and Consolidated all deny), that Court accepted Penn Water's untried proffers and purported to strike down the tariffs because they "restricted" that non-existent "potential competition". The Fourth Circuit refused to consider the effect of FPC's orders in this field of Government-regulated monopoly even as *prima facie* evidence that the assailed provisions were not

unlawful, *per se*. It refused to consider the effect of FPC's orders as evidence that the assailed provisions are lawful under the Rule of Reason, and desirable in the public interest.

Judge Miller's dissent asserts that the Fourth Circuit's opinion actually struck down as unlawful the physical integrated, interstate electric system, saying:

> "Welding the facilities of the two companies into one integrated system — the Commission's objective — is not conducive to competition" (R., Vol. 18, p. 5412).

The Commission, on the contrary, found that such:

> "* * * regional integration and coordination of facilities, the resulting economies, and the utilization and conservation of natural resources thus achieved are precisely what was sought to be encouraged and fostered by the Federal Power Act and established as a part of the criteria of the public interest to be served by regulation thereunder" (8 F. P. C., at p. 175, R., Vol. 16, p. 5184).

It is submitted that under the well-established doctrine of primary jurisdiction, the Fourth Circuit was without jurisdiction to take any collateral action which would affect, directly or indirectly, the tariffs or orders promulgated by FPC, and that in so far as Petitioners' attack on the orders of FPC are based on their collateral actions in the Fourth Circuit, that attack must fail. The primary jurisdiction of FPC, under its sweeping statutory powers of regulation, prevents collateral nullification of its orders and tariffs. The decisions of the Fourth Circuit which Petitioners here seek to use to that end are completely ineffective for that purpose.

The primary jurisdiction of the FPC (considered more fully, *infra*, pp. 55 *et seq.*) disposes of the question which

Penn Water asserts is "the primary issue in this case" (PW Br., p. 3).

The entire balance of this Argument, which is in response to Penn Water's Argument, should therefore be considered in the light of, and subject to, this fundamental jurisdictional principle. Notwithstanding that the actions of the Fourth Circuit will hereinafter be discussed, *arguendo*, as though made by a Court of competent jurisdiction, the total invalidity of such actions should dispose of Petitioners' case on this main issue without further argument. What follows is submitted to demonstrate that the Petitioners' contentions are erroneous even assuming, *arguendo*, the jurisdiction of the Fourth Circuit in the premises.

II.

The Federal Power Commission Had Authority to Prescribe the Tariff.

Penn Water seeks to minimize the broad authority of the Federal Power Commission under the Federal Power Act[32] by repeatedly referring to the "mere general regulatory provisions" of that Act (PW Br., pp. 21, 25, 28, 32), and by asserting that it contains only "ordinary regulatory provisions" (p. 35). On the contrary, the Court below correctly points out (R., Vol. 18, pp. 5371, 5373) that Congress in the Federal Power Act "has substituted [for competition] a regulatory agency authorized to supervise almost every phase of the regulated company's business", and has provided "for comprehensive and detailed regulation * * *".[33]

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[32] Title II, Public Utility Act of 1935, Secs. 202-209, 301-20, Chap. 687, 49 Stat. 803, 838; 16 U. S. C. Secs. 791-825.

[33] *First Iowa Hydro-Electric Coop. v. FPC*, 328 U. S. 152, 164 (1946); *FPC v. Arizona Edison Co., Inc.* (CA 9, Feb. 12, 1952), — F. 2d — (not yet reported).

As examples of the broad authority granted to FPC, it will suffice merely to refer to a few provisions of the Act.

Section 202(b) (16 U. S. C., sec. 824a(b)) of the Act empowers the Commission to order physical connections between utilities and the sale or exchange of energy between them and to "prescribe the terms and conditions of the arrangement to be made between the persons affected by any such order, including the apportionment of costs between them and the compensation or reimbursement reasonably due to any of them".

Section 203(a) (16 U. S. C., sec. 824b(a)) authorizes FPC to approve any "disposition, consolidation, acquisition, or control" which is "consistent with the public interest".

Section 206(a) (16 U. S. C., sec. 824e(a)) authorizes the Commission to "determine the just and reasonable rate, charge, classification, rule, regulation, practice, or contract to be thereafter observed and in force" and to "fix the same by order".

Section 207 (16 U. S. C., sec. 824f) authorizes the Commission, subject to certain conditions, to "determine the proper, adequate, or sufficient service to be furnished", and to "fix the same by its order, rule or regulation".

Section 314(a) and (b) (16 U. S. C., secs. 825m(a) and (b)) empowers the Commission itself to bring an action to enjoin any violation of the Federal Power Act or of any rule, regulation, or order of the Commission thereunder, and to obtain writs of mandamus to compel compliance with the Federal Power Act or any rule, regulation or order of the Commission thereunder.

Under the extensive powers so conferred on FPC by the Federal Power Act, that Commission had ample authority to prescribe the tariff here assailed. Penn Water, how-

ever, eschews any reference to the fact that the order it assails prescribes a tariff. Instead, it asserts that such order was an attempted grant by FPC to private individuals of an immunity from the Sherman Act with respect to their private "contractual arrangements."

On the contrary, the specific operative order here assailed is FPC's Order of October 25, 1949, "Prescribing Rate Schedules" (R., Vol. 17, p. 5267). Consonant with the invalid premise of its argument, the cases cited by Penn Water, e.g., the *Borden*, *Georgia*, and *Alkali* cases[34] (PW Br., p. 20) all relate to the independent actions of private individuals, companies, or associations. None of them is applicable to a tariff prescribed by an administrative agency such as is here involved. In fact, in the Georgia case, this Court carefully limits the effect of its decision to the independent action of private parties and avoids any effect on a filed tariff (324 U. S., at pp. 460-61).

However, even if FPC in its tariff order had prescribed (which it had not) provisions which would be unlawful under the Sherman Act as a private contract between independent individuals, the tariff so prescribed would not be subject to the Sherman Act. This was the holding of *Keogh v. Chicago & N. W. R. Co.*, 260 U. S. 156 (1922), which was reaffirmed by both the majority and dissenting opinions of this Court in the *Georgia* case (324 U. S. at pp. 453, 482).

In *Parker v. Brown*, 317 U. S. 341 (1943), this Court determined that the Sherman Act was a prohibition of individual and not of State action, and that actions which would violate the Sherman Act if made effective solely by virtue of a contract by private persons were not unlawful under the

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[34] *United States v. Borden Co.*, 308 U. S. 188 (1939); *Georgia v. Pennsylvania R. Co.*, 324 U. S. 439 (1945); *United States v. Alkali Export Assn.*, 325 U. S. 196 (1945).

Sherman Act if such actions derived their authority from legislative command of the State.

Penn Water seeks to distinguish that case (PW Br., p. 39) on the ground that the action there found lawful had been prescribed by a State but that prescription by FPC (which is not a State) would have no such efficacy. This argument is answered by *United States v. Cooper Corporation*, 312 U. S. 600 (1941), in which this Court held that the United States is not subject to the Sherman Act, saying (at p. 607):

> "* * * In §§1, 2, and 3 the phrase designating those liable criminally is 'every person who shall' etc. In each instance it is obvious that while the term 'person' may well include a corporation it cannot embrace the United States."

III.

The Federal Power Commission Has Primary Jurisdiction.

Under such sweeping statutory authority, FPC has, indeed, "comprehensive and detailed" control of this interstate power system, its operations, the parties to it and their relations with each other.

The Court below made the sound procedural determination, under established administrative law,[35] that Petitioners could not present to the Court of Appeals for the first time, as a basis for annulling the FPC's rate reduction orders, questions (a) which Petitioners had ignored during the course of the lengthy hearings before the Commission; (b) which they had subsequently made the basis of a collateral Court proceeding to which FPC was not a party;

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[35] *Aircraft Diesel Equipment Corpn. v. Hirsch*, 331 U. S. 752 (1947); *Macauley v. Waterman S. S. Corpn.*, 327 U. S. 540 (1946); *FPC v. Metropolitan Edison Co.*, 304 U. S. 375 (1938); *Myers v. Bethlehem Shipbuilding Corpn.*, 303 U. S. 41 (1938).

(c) which the Fourth Circuit in that proceeding decided without regard to FPC's primary jurisdiction; and (d) as to which the Federal Power Act prescribes a proper procedure for presentation in the first instance to the Commission.

In the *Far East Conference* case, *supra*, this Court defines what it calls a "firmly established principle", as follows:

> "* * * in cases raising issues of fact not within the conventional experience of judges or cases requiring the exercise of administrative discretion, agencies created by Congress for regulating the subject matter should not be passed over. This is so even though the facts after they have been appraised by specialized competence serve as a premise for legal consequences to be judicially defined. Uniformity and consistency in the regulation of business entrusted to a particular agency are secured, and the limited functions of review by the judiciary are more rationally exercised, by preliminary resort for ascertaining and interpreting the circumstances underlying legal issues to agencies that are better equipped than courts by specialization, by insight gained through experience, and by more flexible procedure."

The instant case, like the *Far East* case, involves questions clearly within the "general scope" of the administrative commission's jurisdiction. Even the dissent in the *Far East* case stated that:

> "If the rates *were filed*, of course the Board would have exclusive jurisdiction to pass on them." (Emphasis added.)

Here it is not the United States (as it was in the *Far East* case) which contends that the tariff is unlawful, but the very utility which originally filed the tariff and which, by

its present contention of illegality, seeks to annul a rate reduction order as to it.

Assuredly, the factual questions of potential competition, alleged "restraints", separability, the public benefits to be derived from operations of the interstate power system and the relationship of the tariff to such operations, exemplify the very type of technical and complicated "circumstances underlying legal issues" which demand the "ascertaining and interpreting" by an expert body such as FPC. Such issues cannot be, and should not have been, summarily determined by a Court from the face of a contract and a map, as was done in the Baltimore Contract case by the Fourth Circuit (assuming jurisdiction), or on disputed but untried issues of fact and the same map, as was attempted by the Fourth Circuit in the Safe Harbor Contract case, in neither of which cases was FPC a party.

Moreover, this Court regards the doctrine of "primary jurisdiction" as not being confined to questions of fact, but as being applicable to mixed questions of law and fact, and to questions of law with which the administrative agency is peculiarly equipped to deal.[36]

In asking this Court to annul the FPC's orders because of the Fourth Circuit's collateral decisions, without consideration of FPC's views thereon, Petitioners ask this Court to determine an issue which lies within FPC's primary jurisdiction and thereby to contravene the rule laid down in the above cases.

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[36] *Macauley v. Waterman S.S. Corp., supra; National Labor Relations Board v. Hearst Publications*, 322 U. S. 111, 130-31 (1944); *Dobson v. Commissioner*, 320 U. S. 489, 501-02 (1943); *Gray v. Powell*, 314 U. S. 402, 412 (1941); *Myers v. Bethlehem Shipbuilding Corp., supra; Miles Laboratories, Inc. v. Federal Trade Commission*, 140 F. 2d 683, 685 (1944), cert. den. 322 U. S. 752 (1944).

IV.

The Federal Power Commission Prescribed a Lawful Tariff.

The orders of FPC which reduced Penn Water's rates nearly $2,000,000 a year, by their terms, prescribed a tariff or rate schedule. The attack which is here leveled against those orders carefully avoids any reference to them as tariffs and, instead, assails them as an authorization given to private parties to enter into or continue independent "contractual arrangements" at the "whim" of such private parties. The wide distinction between a prescribed tariff and a private contract is ignored. That the tariff so prescribed is lawful appears from the following facts.

A. The Tariff Was Restricted to Provisions "In and Of Themselves Lawful".

When Penn Water first attacked the rate reduction orders in its petition to FPC for rehearing; on the ground of the alleged unlawfulness of its service contracts, FPC carefully pointed out that it had prescribed a tariff which was limited to provisions relating to physical operations and "in and of themselves lawful", and that only such provisions should "be observed and be in force" (R., Vol. 17, p. 5283)

B. Articles IV and V Were the Only Provisions of the Baltimore Contract Purportedly Found by the Fourth Circuit to be Unlawful "In and Of Themselves".

The many statements in the Fourth Circuit's opinion, quoted *supra* at pages 31 *et seq.*, fully establish this fact (assuming its jurisdiction so to find). The following is but an example:

> "The restrictions which are imposed upon the activity of Penn Water by the agreement and *give rise to*

the contention of invalidity are contained in Articles IV and V * * *" (184 F. 2d at p. 557, R., Vol. 18, p. 5328). (Emphasis added.)

C. Articles IV and V Were Not Prescribed by FPC.

1. If assumed to be "unlawful".

Assuming, *arguendo*, the jurisdiction of the Fourth Circuit to determine this issue, and the correctness of its determination of the unlawfulness of Articles IV and V, they were specifically excluded from the tariff by the language of the FPC order limiting that order to provisions "in and of themselves lawful".

2. Because they do not relate to "any service to be furnished".

The order of FPC carefully pointed out that it had prescribed a tariff which related to services actually being rendered and had ordered only those provisions "prescribing or defining" the "service to be furnished" (R., Vol. 17, p. 5283). Articles IV and V neither prescribe nor define "any service to be rendered", and the FPC order thus, by its terms, excluded them.

3. Because FPC denies they were prescribed.

The FPC itself has denied that it prescribed Articles IV and V. See Memorandum of FPC on petition for certiorari in this case, pages 24, 25.

4. Because the Fourth Circuit (assuming its jurisdiction) so found.

The Fourth Circuit said: "It is obvious that the Commission did not prescribe the restrictive conditions of the contract as part of the rate order * * *."

5. Because service has continued.

The services supplied to Consolidated by Penn Water have continued without change. Neither Article IV nor V is essential to or affects Penn Water's physical operations, its deliveries of electricity, or its rates therefor, as ordered by FPC.

D. The Allocations Prescribed by the FPC Tariff Are Lawful.

Penn Water contends that the FPC allocations are unlawful because they are based on Consolidated's "entitlements" which allegedly succumbed with the contracts. No one contends that the entitlements, as such, are unlawful.

1. The entitlement to ⅔ of Safe Harbor power is established by tariff ordered by FPC.

The Safe Harbor tariff, prescribed by FPC by its order of November 4, 1946 (5 F. P. C. 221), provides that Safe Harbor sell its entire output to its two owners, ⅓ to Penn Water and ⅔ to Consolidated, and requires those two companies to pay all of Safe Harbor's expenses and return in the same proportions.

This tariff was sustained on appeal by the Third Circuit December 30, 1949 (179 F. 2d 179) and certiorari denied by this Court (339 U. S. 957).

2. The doctrine of the "filed Tariff" prevents collateral attack thereon.

This Court recently reaffirmed the well-established doctrine of the "filed tariff" by saying that a customer "can claim no rate as a legal right that is other than the filed rate, whether fixed or merely accepted by the Commission, and not even a court can authorize commerce in the commodity

on other terms". *Montana-Dakota Utility Company v. Northwestern Public Service Co.*, 341 U. S. 246 (1951).

The doctrine that the filed tariff constitutes the only lawful rate and *terms of service* between a utility and its customers, when the filing of such tariff is required by statute, was early established and uniformly recognized in cases involving regulation of carriers by the Interstate Commerce Commission.

Texas & Pacific Ry. v. Mugg, 202 U. S. 242 (1906);
Texas & Pacific Ry. v. Abilene Cotton Oil Co., 204 U. S. 426, 439-449 (1907);
Western Union Tel. Co. v. Esteve Bros. & Co., 256 U. S. 566, 573 (1921);
Davis v. Henderson, 266 U. S. 93 (1924).

And in *Keogh v. C. & N. W. R. Co.*, 260 U. S. 156, 163 (1922), this Court said:

> "* * * The legal rights of a shipper against a carrier in respect to a rate are to be measured by the published tariff. Unless and until suspended or set aside, this rate is made, for all purposes, the legal rate, as between shipper and carrier. The rights, as defined by the tariff, cannot be varied or enlarged by either contract or tort of the carrier. * * *"

Penn Water's footnote denial of this fundamental principle (PW Br., p. 55) is not, and cannot be, supported by any decision of this Court, and its collateral assault in this case on the Safe Harbor tariff by attack on the Safe Harbor Contract can therefore have no affect on that tariff.

Safe Harbor receives no revenue from any customer other than its two owners, Consolidated ⅔ and Penn Water ⅓ (R., Vol. 6, pp. 2526-2528; Vol. 10, p. 3778; Vol. 13, p. 4222; Vol. 14, p. 4492).

So long as Consolidated is required by that tariff, as it has been continuously since the FPC order of November 4, 1946, to pay ⅔ of Safe Harbor's expenses and return, Penn Water should not be permitted to divert to its own use any part of Consolidated's entitlement under that same tariff to the ⅔ of Safe Harbor's output for which Consolidated is required to pay.

The recent decision of this Court in the *Far East Conference* case, *supra*, in denying to the Government the right to seek court determination, prior to Commission determination, of a steamship company's dual rate system (which rates were not even on file as a rate schedule) assuredly preserves in all its vigor the principle that a filed schedule or prescribed tariff cannot be collaterally attacked.

3. There is nothing unlawful in such proportional sale of Safe Harbor's entire output.

The FPC (5 F. P. C. 221), the Third Circuit ((1949), 179 F. 2d 179, at pp. 184-185), the District of Columbia Circuit in the opinion below (R., Vol. 18, pp. 5391-5392), and the Fourth Circuit (Safe Harbor Contract Opinion) have all found that Safe Harbor sells (as it must under its tariff) its entire output to its two owners in proportion to their ownership, ⅔ to Consolidated and ⅓ to Penn Water. In the Fourth Circuit's Safe Harbor Contract Opinion, it said:

> "These two utilities are its only customers under an arrangement approved by the Pennsylvania Commission."

As previously shown herein, the Fourth Circuit, in the Safe Harbor contract opinion, described the sale of Safe Harbor's entire output to its two owners "to be divided between them in proportion of two-thirds to Consolidated and one-third to Penn Water" and calls this their "rightful entitlement in Safe Harbor's production".

Nowhere does that Court, nor for that matter do the Petitioners, claim that such a proportionate sale of an entire output is unlawful. On the contrary, the Court emphasized its lawfulness by clearly distinguishing these provisions from the alleged "restrictions" "which led to the condemnation of the agreement".

Moreover, Penn Water's present insistence (Br., p. 56) that "allocations of cost be on a delivered power basis (that is, on actual operations)" puts the cart before the horse. Present power deliveries are the *result* of the present tariffs. Penn Water now wants to reverse the process and make deliveries so established the basis of a change in the tariffs which established them. A simple statement will show the utter inequity of this proposal. Consolidated would, through the years, have insisted on physical delivery to it of its ⅔ of Safe Harbor power had it not been compensated under the tariff for its diversion to Penn Water. Penn Water now contends that that diversion should continue but that the compensation for it should stop!

4. Judge Miller's dissent.

At Penn Water's Brief, pp. 55-56, Judge Miller's dissent below is quoted to show the alleged impropriety of FPC's allocation of the rate reduction. Judge Miller there said that the FPC had concluded that "very substantial sales by Penn Water to others had really been for the account of Consolidated". In making this statement, Judge Miller was apparently oblivious to the following facts of Record:

(a) The fact that — quite contrary to the status of Penn Water's other customers—Consolidated provided all the "firming up" capacity during protracted periods of low river flow, which alone made it possible for Penn Water to sell firm power as it did to its other customers (R., Vol. 16, pp. 4857, 4859).

(b) The fact that, during the daily off peak periods throughout the low river flow seasons, Consolidated supplied most of the electricity that was sold by Penn Water under its firm contracts with its other customers (R., Vol. 16, p. 4860).

(c) The fact that in addition to this, Consolidated generated and supplied to Penn Water huge quantities of interchange energy which Penn Water in turn sold as interchange to its other customers (R., Vol. 12, p. 4156; Vol. 13, p. 4400).

(d) The fact that Penn Water collected from its Pennsylvania customers the payments for such huge quantities of electricity so supplied to it by Consolidated (R., Vol. 12, p. 4154).

(e) The fact that Penn Water also sold to its Pennsylvania customers and collected from them for huge quantities of Consolidated's ⅔ share of Safe Harbor's output (R., Vol. 13, p. 4400).

5. Allocation of the rate reduction does not change its total amount.

The allocation of the rate reduction among Penn Water's customers, is actually an academic one so far as Penn Water is concerned. Any change in the allocation of the reduction would not possibly affect the total amount of that reduction.

Penn Water contends that its customers in Pennsylvania were entitled to a larger part of the reduction than was allocated to them by FPC. Those customers have made no such claim either to FPC or to the Court below. Penn Water's argument ignores the vast difference between the "firm" power supplied to its Pennsylvania customers and its "what's left" power supplied to Consolidated.

6. Allocation is controlled by administrative finality.

The matter of allocations is one of fact to be determined at the administrative level.[37] The Court below determined that the Commission's findings in this respect were supported by substantial evidence (R., Vol. 18, p. 5392). Section 825-l of the Federal Power Act provides that "The findings of the Commission as to the facts, if supported by substantial evidence, shall be conclusive." This should be determinative of this issue.

E. The Payment Provisions Prescribed by the FPC Tariff Are Lawful.

1. The Fourth Circuit did not find them to be unlawful.

Despite Penn Water's vigorous assault on the payment provisions in the Baltimore Contract case, the Fourth Circuit found no fault with them. It described those payment provisions in detail and clearly distinguished them from the allegedly illegal provisions in the Contract (186 F. 2d at p. 936; R., Vol. 18, p. 5358).

Even Judge Miller, in his dissent below, obviously regarded the payment provisions as lawful parts of the contract which the Fourth Circuit said must fall because of their close association with Articles IV and V. Judge Miller said (R., Vol. 18, p. 5412):

> "* * * This would leave in effect the contractual definition of Consolidated's residual entitlements and the *residual payment type of rate*. But the Fourth Circuit said those provisions were so closely associated with the *illegal restrictions* on the future activities of Penn Water that the whole contract was invalid. * * *" (Emphasis added.)

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[37] *Colorado Interstate Gas Co. v. FPC*, 324 U. S. 581, 589-91 (1945).

Despite Penn Water's similar vigorous assault on the similar prescribed payment provisions in the Safe Harbor Contract case, the Fourth Circuit again refused to find those provisions invalid, saying:

> "This provides in effect that Consolidated should be entitled to all the electric capacity and energy available to Penn Water from its plant at Holtwood on the Susquehanna and from Safe Harbor, and in return Consolidated agreed to pay Penn Water an amount equal to its operating expenses and a specified rate of return on Penn Water's invested capital; *and then followed the illegal restrictions* upon the activities of Penn Water which have *already been described.*" (Emphasis added.)

2. Penn Water itself recommended them to the Commission in this case.

Although Consolidated has no special concern as to the type of payment prescribed by FPC and did not originate the present method, it submits that Penn Water should not be permitted collaterally to strike down the rate reduction orders of FPC, because that Commission prescribed the method of payment which in this very case was claimed by Penn Water's own officers to be the only practical means of assuring the full economic utilization of Penn Water's hydro facilities.

Mr. John A. Walls, then President of Penn Water, so testified (R., Vol. 1, p. 26), as did also Mr. George W. Spaulding, then Vice-President and now President of Penn Water (R., Vol. 1, pp. 71, 74-75).

3. In any event, this Court should not consider this objection.

Section 825-l of the Federal Power Act provides that on appeal "no objection to the order of the Commission shall

be considered by the Court unless such objection shall have been urged before the Commission in the application for rehearing unless there is reasonable ground for failure so to do".

A fortiori, this Court should not be asked to consider Penn Water's present objection which not only were not urged by Penn Water in its application to FPC for rehearing, but which are the exact opposite of what was urged upon the Commission in this case by Penn Water's own officers.

4. The payment provisions are not "revenue pooling".

By its very terms, the concept of "revenue pooling" contemplates a joint pooling or combining of revenues and a division or sharing of the total. Under neither the Baltimore Contract nor the FPC order is any pooling of revenues prescribed. This same attack was leveled at the Baltimore Contract before the Fourth Circuit. It was leveled at FPC's order before the Court below. It was also leveled at the Safe Harbor Contract before the Fourth Circuit. Petitioners, however, cannot point to a single statement in any of the opinions in these cases that the payment provisions ordered by FPC are invalid either as "revenue pooling" or otherwise.

The Penn Water tariff payment provisions do not fit any definition of revenue pooling. There is no division of gross or net earnings. There is no formula for any division or pooling of any kind. If this payment provision, which has been operative as a filed tariff since 1936, were as Penn Water contends, one "for the pooling and division of earnings" (PW Br., p. 63), Penn Water could not, through the years, have earned a return so disproportionately higher than Consolidated's.

Penn Water contends that the prescribed payments are "unrelated to services", and goes so far as to assert "the specified return provisions of the Baltimore contract provide for payment even if no power at all is delivered" (PW Br., p. 66)! On the contrary, they are directly related to the power and energy produced by the flow of the Susquehanna River averaged over a 40-year period (R., Vol. 15, p. 4608). The tariff provisions prescribed by FPC, which establish a cost-plus or definite return, while not promoted or espoused by Consolidated, are assuredly not unlawful, and the many cases cited by Penn Water, relating to actual pooling of revenue, are not in point.

If Penn Water desires to change the payment provisions of the tariff prescribed by FPC, it may do so only through the appropriate and requisite administrative process.

F. The Newly Alleged "Invalidities".

Section I-C-2-(a) of Penn Water's Brief (pp. 59-63) alleges a whole array of illegalities which, it is now contended, "permeate the entire arrangement". Several of these allegations will be recognized as repetitious, but the rest are propounded for the first time in this Court and, are therefore subject to the ban of Section 825-l of the Federal Power Act, above quoted.

V.

FPC Did Not Authorize an Unlawful Contract

A. Under The Sherman Act

Parts I and II of Penn Water's Argument are based in their entirety on the unsound premise that the FPC rate reduction orders here assailed did not prescribe a *tariff* relating to the continuing physical operations of a physical system but, it is argued, were a grant to "private parties" of an immunity or "exemption" from the anti-trust laws and

a license to such private parties to enter into or continue independent "contractual arrangements" at their "own whim".

That the sole effect of the orders of FPC was to prescribe a *tariff* regulating rates in relation to continuing services cannot be gainsaid. The only real issue in this case is whether FPC had the authority to prescribe the tariff provisions which it did prescribe, irrespective of the existence or non-existence of a contract between *private parties.* The many cases cited by Penn Water in support of the proposition that *private parties* cannot generally be granted immunity from the anti-trust laws, and cannot be authorized to enter into or continue *private contracts* in violation of such laws, have no application to an order of a Federal regulatory agency which prescribes a tariff. Most of the cases cited at page 25 of Penn Water's Brief do not even involve regulated public utilities or tariffs. None of them annulled a tariff either prescribed or approved by a regulatory agency. The same observation applies to Appendix A of Penn Water's Brief.

But even if it were assumed, *arguendo*, that (a) FPC had authorized the continuance of private contracts by private parties, (b) had not prescribed tariffs, and that (c) the Fourth Circuit had primary jurisdiction to determine contract validity, it is submitted that the Fourth Circuit was clearly in error in summarily finding the Safe Harbor and Baltimore contracts invalid on their face.

The Safe Harbor contract provided for the financing of a wholly new project, the sale of its entire output to its two owners — (this was at that time actually required by the Pennsylvania Commission) — in proportion to their ownership, the construction by one of its owners of transmission lines for the delivery of such output to both owners, the

payment for such power by its two owners in proportion to their ownership so as to provide a 7% return to Safe Harbor on actual investment, the cooperation of the parties to encourage economy, the establishment of a joint Operating Committee to "investigate, consult and advise", and for arbitration of disputes.

For 18 years this contract operated efficiently and in the public interest with the full knowledge and approbation of FPC, the Pennsylvania Commission, and the Maryland Commission, with each of which it had been filed.

Then, in an avowed effort to upset the FPC rate-reduction order against Penn Water and to destroy Consolidated's right to ⅔ of Safe Harbor's cheap power, Penn Water denounced the Safe Harbor Contract as invalid because of alleged "restrictions" which for 20 years had never been operative or of the slightest significance. These are as follows:

Article III required Safe Harbor to install *additional* machinery or equipment at the request and for the benefit of *one* of its owners, provided the other approved.

The same Article in effect gave an option to its two owners to purchase the output from any possible additions at Safe Harbor, stipulating that sales of such additional output (except any which might be required for the performance of any duty or obligation to serve imposed upon Safe Harbor by its charter or otherwise by law) could not be made to any other person without the consent of its two owners. (By its Safe Harbor rate order, FPC required the two owners to pay the expenses of and return on any additional plant at Safe Harbor, thereby effectively prescribing this provision.)

Article IV prevented Safe Harbor from making separate, independent deals on the side with either owner individually which would work against the over-all economy — an implicit obligation of any such joint venture.

The Operating Committee provision was also alleged by Penn Water as a restriction despite the fact that under the very terms of the contract (and in actual operation), that Committee was advisory only, and could not and did not bind Safe Harbor.

The Fourth Circuit purported summarily to find these provisions (a) in violation of the Sherman Act, *per se*, (b) in violation of a Pennsylvania statute forbidding transfers of franchises without approval of the Pennsylvania Commission, and (c) in violation of common law and public policy — all in the face of clear-cut fundamental issues of fact. This Court has said that such a summary procedure presents "a treacherous record for deciding issues of far-flung import, on which this Court should draw inferences with caution from complicated courses of legislation, contracting and practice". *Kennedy v. Silas Mason Co.*, 334 U. S. 249, 257 (1948).

Safe Harbor would not have been built without the Safe Harbor Contract. Safe Harbor is limited by charter to producing unfirm, unreliable hydro power from the Susquehanna River. Before the contract was executed, Safe Harbor had been forbidden by the Pennsylvania Commission to sell its output to the public or to any customer other than its two owners. Safe Harbor has always been subject to FPC jurisdiction. Expansion of its plant is not economically feasible because of the characteristics of the river.

The Court summarily decided the issue of competition on the sole basis of the *location* of Safe Harbor's plant.

Invalidation of the Safe Harbor agreement, as *per se* violation of the Sherman Act, without a determination of reasonableness under the Rule of Reason, conflicts with *Standard Oil Company v. United States*, 221 U. S. 1 (1911), *United States v. Bausch & Lomb Co.*, 321 U. S. 707, 728-29 (1944), *United States v. Yellow Cab Co.*, 332 U. S. 218 (1947), 338 U. S. 338 (1949), and *United States v. Columbia Steel Co.*, 334 U. S. 495 (1948). Prescription of the Safe Harbor Contract as a tariff by FPC and affirmance by the Third Circuit is a clear indication that the contract complies with the Rule of Reason. Such application of the Rule of Reason would fully accommodate the Sherman Act and the Federal Power Act.

Under FPC's Safe Harbor rate Order of November 4, 1946, its two owners must pay for any output of additional plant, hypothetical though that output might be. This administrative amendment of the tariff destroys any basis for the Court's findings of "restrictions" on such output. What Safe Harbor has sold to its owners, it cannot sell to others.

The Fourth Circuit held that a wholly new business which has been created by its two owners, and the entire output of which is sold to its two owners, must, under the Sherman Act, compete with those owners despite the complete absence of any preexisting competition (not to mention its physical, charter, franchise, and certificate inability to compete). The cases cited by the Fourth Circuit involved preexisting competition,[38] and were thus inapplicable.

[38] *Northern Securities Co. v. U. S.*, 193 U. S. 197 (1904); *U. S. v. Terminal Railroad Association of St. Louis*, 224 U. S. 383 (1912); *U. S. v. Reading Co.*, 253 U. S. 26 (1920); *U. S. v. Crescent Amusement Co.*, 323 U. S. 173 (1944); and *Timken Roller Bearing Co. v. U. S.*, 341 U. S. 593 (1951). See also *U. S. v. Yellow Cab Co.*, *supra*, and *U. S. v. Columbia Steel Co.*, *supra*.

Kiefer-Stewart v. Seagram & Sons, Inc., 340 U. S. 211 (1951), did not compel competition between parent and wholly-owned subsidiary but forbade them from eliminating competition from independent wholesalers.

In *U. S. v. Griffith*, 334 U. S. 100 (1948), and *Schine Chain Theatres, Inc. v. U. S.*, 334 U. S. 110 (1948), and *U. S. v. Paramount Pictures, Inc.*, 334 U. S. 131 (1948), a group of affiliated companies used conspiracy and group monopoly powers to defeat *competition offered the group from outside theatres.* No competition *between* parent and subsidiary corporations was required by these decisions.

With all these reasons for overruling the Fourth Circuit in the Safe Harbor case (now pending before this Court on applications for certiorari in Nos. 611 and 612), the invalidity of the Safe Harbor Contract cannot be assumed in this proceeding as has been done by Petitioners.

For many of the same reasons, the summary, *per se*-invalidation of the Baltimore Contract by the Fourth Circuit was erroneous, entirely aside from that Court's lack of jurisdiction. Our petition for certiorari having been denied in that case (No. 428, October term 1950), we shall not here repeat the arguments of that petition. However, the case at bar involves a different subject matter (FPC orders) and a different party (FPC), and the ruling of the *Fourth Circuit* should not be accepted as binding as to the invalidity of the Penn Water Contract for purposes of this proceeding. We repeat our belief that the Fourth Circuit's action was incorrect in the *Penn Water* case, and that the law of its decisions should herein be overruled.

B. UNDER PENNSYLVANIA LAW.

The Fourth Circuit erred in summarily invalidating the service contracts because of alleged violations of Pennsylvania Law.

1. The Pennsylvania statutes relied upon by the Fourth Circuit (184 F. 2d 552, 566 f.ns. 8, 9) provide that a Pennsylvania public utility must have the permission of that Commission in order lawfully to

> "sell, assign, transfer, lease, consolidate or merge its property, powers, franchises, or privileges, or any of them" and
>
> "to dissolve, or to abandon or surrender, in whole or in part, any service, right, power, franchise or privilege" or
>
> "to acquire from, or to transfer to any person * *'* by any method or device whatsoever, including a consolidation, merger, sale or lease, the title to or the possession or use of, any tangible or intangible property, used or useful in the public service."

In this regard, the jurisdiction claimed by the Pennsylvania Commission over theoretical plant expansions and alleged transfers of franchises must give way to the paramount Federal jurisdiction over these matters under Sec. 10(b) (16 U. S. C., sec. 803(b)) which requires FPC approval of plant expansions (in excess of a miniscule 100 horsepower), and Sec. 8 (16 U. S. C., sec. 801) which requires Commission approval of the transfer of a license or rights thereunder[39] without which a hydro company's corporate franchise is valueless.

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[39] *H. P. Hood & Sons, Inc. v. Du-Mond*, 336 U. S. 525 (1949); *Mayor of Vidalia v. McNeely*, 274 U. S. 676 (1927); *Public Utilities Commission v. Attleboro Steam & Electric Co.*, 273 U. S. 83 (1927); *Colorado v. United States*, 271 U. S. 153 (1926); *Buck v. Kuykendall*, 267 U. S. 307 (1925); *Bush Co. v. Maloy*, 267 U. S. 317, (1925); *Missouri v. Kansas Gas Company*, 265 U. S. 298 (1924); *Sault Ste. Marie v. International Transit Co.*, 234 U. S. 333 (1914); *Adams Express Co. v. New York*, 232 U. S. 14 (1914).

Even if the Safe Harbor or the Penn Water Agreement were a transfer of franchise, a lease of entire properties of a utility, an abandonment of service, or a renunciation of initiative in the exercise of duties prescribed by law,[40] the Federal law (in the broad powers conferred on the Federal Power Commission by the Federal Power Act, particularly Sections 8, 10(b), 203, 204-207, 16 U. S. C., secs. 801, 803(b), 824b, 824c-824f) has preempted the field in all such matters relating to licensees and public utilities subject to its control. (N. 39, *supra*, p. 74, and see 99 F. Supp. 151, *infra*, p. 76).

It is submitted that neither contract constitutes an abandonment of service or renunciation of initiative in the exercise of legal duties or surrender of franchise, as charged by Petitioners. The Record in the instant proceeding makes it abundantly clear that the Federal agency empowered by law to establish policy in this field has had these contracts before it since 1936, and has found no such surrender of duties by either Penn Water or Safe Harbor, as it would have been obliged to do in the performance of its official duties had any such surrender existed.

2. The Pennsylvania Commission has approved the contracts.

Both contracts have been on file since 1933 with the Pennsylvania Commission and have been before it from time to time. When it amended Safe Harbor's Certificate of Convenience and Necessity, Jan. 10, 1933 (R., Vol. 10, p. 3790) and issued to Penn Water a companion authorization to serve the Pennsylvania Railroad in Manor Township (R., Vol. 14, pp. 4483, 4485), the contracts for service were necessarily considered.

In 1946, in attempting to assert its jurisdiction in contravention of the jurisdiction already asserted by FPC, the Pennsylvania Commission began a contemporaneous rate

[40] As contended by PW Br., pp. 68-72, and PUC Br., pp. 20-28.

case against Penn Water; it later made Safe Harbor a party thereto; and it issued a temporary rate order, purporting to reduce rates and charges to the Pennsylvania customers of Penn Water. The contracts were before the Commission and necessarily played a part in its deliberations preliminary to its decision. But there was no indication from the Commission that it considered them to be unlawful. Because this rate reduction to Pennsylvania customers was at the direct and sole expense of Consolidated, under the residual Baltimore Contract, it was necessary for Consolidated and the Maryland Commission to seek relief in the Federal Courts in Pennsylvania.

The three-judge District Court for the Middle District of Pennsylvania, in permanently enjoining the Pennsylvania Commission's action, adjudged that all of Safe Harbor's output is sold in interstate commerce; that FPC had complete jurisdiction over Safe Harbor's rates, charges and properties; and that Federal power is supreme. *Consolidated Gas Electric Light and Power Company of Baltimore v. Siggins*, 99 F. Supp. 151 (1951). This coincides with the Third Circuit's previous decision to the same effect in the Safe Harbor rate case appeal, 179 F. 2d 179, cert. den. 334 U. S. 957 (1950).

With this long history of action by the Pennsylvania Commission with respect to these contracts which had been filed with it as tariffs, it was clearly improper for the Fourth Circuit summarily to strike them down as lacking Pennsylvania Commission approval, and therefore as violating the several sections of the Pennsylvania Public Utility Law on which the Fourth Circuit relied. It is significant that the Pennsylvania Commission has never offered to show that it ever disapproved these contracts.

3. The contracts were not *ultra vires*. It is not *ultra vires* for a corporation to sell its entire output. Especially is this

true with respect to the Safe Harbor Contract, under which the corporation sold its output to its two owners. It was not *ultra vires* to enter into a contract which was essential to the full utilization of hydro power and which assured a substantial return regardless of economic depressions. For 20 years both hydro companies prospered as they could not have done in the absence of the contracts. It was not *ultra vires* for Safe Harbor to agree to expand its plant when its stockholders requested it to do so. The advisory services of an Operating Committee in no wise divested the corporate officers of their managerial powers, and during 20 years of operation those provisions never had such effect. Contracts for the sale of the entire output of a plant do not violate the public policy of Pennsylvania.[41]

The Safe Harbor Contract is specifically authorized by the Pennsylvania Act of July 2, 1895.[42] In so far as the Baltimore Contract is concerned, the alleged "restrictions" which the Fourth Circuit found invalid under the Laws of Pennsylvania were Articles IV and V, which both FPC and the Fourth Circuit declared were not prescribed in the Penn Water tariff.

4. Both Penn Water and the Pennsylvania Commission, under well established principles of Pennsylvania law, were estopped from asserting the invalidity of these Contracts under the Public Utility Law of Pennsylvania and public policy.

As for the Pennsylvania Commission, it is not contended that the contracts here in question are absolutely void under the Pennsylvania Public Utility Law but merely that they lacked the Commission's approval. This is clearly a

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[41] *Walker v. Mason*, 272 Pa. 315, 116 A. 305 (1922); *Swift & Co. v. Hatleigh & Co.*, 66 Pa. Superior 504 (1917); *Greensboro Gas Co. v. Oil and Gas Co.*, 222 Pa. 4, 70 A. 940 (1908); *Salant v. Fox*, 271 Fed. 449 (CCA 3, 1921); and *Shipman v. Saltsburg Coal Co.*, 62 Fed. 146 (CCA 3, 1894).

[42] See Appendix, *infra*, pp. 81-82.

matter upon which the Pennsylvania Commission can and should be estopped in the light of its long history of dealing with the contracts. (See extracts from affidavit in the record of Nos. 611-612, this Term, pp. 164-171).

Commonwealth ex rel. Margiotti v. Union Traction Co., 327 Pa. 497 (1937);
Commonwealth ex rel. Attorney General v. Bala & Bryn Mawr Turnpike Co., 153 Pa. 47 (1893);
Central District and Printing Telegraph Co. v. Homer City Borough, 242 Pa. 597 (1914);
Pennsylvania Railroad v. Montgomery Co. Passenger Ry., 167 Pa. 62 (1895);
Valley Railways v. Harrisburg, 280 Pa. 385 (1924);
Breinig v. Allegheny City, 232 Pa. 474 (1938);
Ervin v. Pittsburgh, 339 Pa. 241 (1940).

The Pennsylvania Commission was thus estopped under the law of Pennsylvania from asserting its non-approval of these contracts, and the Fourth Circuit was in error in refusing to apply this Pennsylvania law. It had been properly pleaded and argued. (See consideration thereof in the District Court for Maryland in the Baltimore contract case, 89 F. Supp. 452, 459 (1950)).

The Pennsylvania Commission (Br. p. 20) asserts that the doctrines of *ultra vires* and public policy involved are "laid down in decisions of this court" citing *Gibbs v. Consolidated Gas Co. of Baltimore*, 130 U. S. 396 (1889); *Thomas v. Railroad Co.*, 101 U. S. 71 (1879); *Central Transp. Co. v. Pullman's Car Co.*, 139 U. S. 24 (1891).[43]

These are cases involving factual situations utterly different from the instant case and are clearly inapplicable under modern regulatory statutes such as the Pennsylvania

[43] Cf. PW Br., pp. 69 *et seq.*

Public Utility Law and the Federal Power Act (the controlling law here) which confer upon Commissions the authority to approve and foster what those cases condemned.

Penn Water was likewise clearly estopped from attacking these contracts on the ground of *ultra vires* and violation of public policy. In *Pittsburgh, Johnstown, Ebensburg, and Eastern Railroad Company v. Altoona and Beech Creek Railroad Company*, 196 Pa. 452 (1900), the Court, denying an attack on a 990-year lease by a railroad of its properties as being *ultra vires* and against public policy, said:

> "In the present case, the cry of ultra vires is made by a party to the contract — to the executed agreement from which it has already derived some benefit. If it is ultra vires now, it was ultra vires then, when the contract was solemnly entered into by this appellee, with the full knowledge that there was no connecting line, and equity will turn a deaf ear for relief from a compact intelligently and deliberately made when prayed for by a party to it, whose conscience has become quickened only when hopes are disappointed and expectations not realized. If we are asked to give equitable relief to extended hands, they must not only be clean, but unfettered by a contract of their own making. * * *"

(See also: *Wright v. The Pipe Line Co.*, 101 Pa. 204 (1882); *South Side Passenger Railway Co. v. Second Avenue Passenger Railway Co.*, 191 Pa. 492 (1899); *McBride v. W. Pa. Paper Co.*, 263 Pa. 345 (1919)).

5. The applicable public policy is that established by the Federal Power Act. The agreement left the hydro companies entirely free to take the initiative in proposing rates, and the protracted litigation of their respective rate cases before FPC and the Pennsylvania Commission in positions adversary to Consolidated since 1944 (during which time

Penn Water was supporting and praising those contracts), demonstrates the hollowness of this contention. There is no evidence that either company ever failed to take the initiative in proposing rates or in rendering adequate service. The Fourth Circuit erred in the invalidation of the contracts because of their alleged violation of the public policy of Pennsylvania.

CONCLUSION

It is respectfully submitted that if Penn Water desires to change its services and rates, it should proceed in the orderly manner prescribed by the Federal Power Act, as it was directed to do by FPC over three years ago in its Order No. 173-A; that the collateral actions in the Fourth Circuit cannot annul the filed and prescribed FPC tariffs; that FPC has primary jurisdiction in the premises and the Federal authority is paramount; that the orders of FPC here assailed are within the authority of that Commission and are lawful in their entirety; and that the judgment of the Court below should be affirmed.

Respectfully submitted,

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March 27, 1952.

APPENDIX

TEXT OF PERTINENT PENNSYLVANIA STATUTE

Act of July 2, 1895, P. L. 432, Sec. 1,
15 P. S. Section 1404

Being a further supplement to an Act, entitled "An Act to provide for the incorporation and regulation of certain corporations," approved the twenty-ninth day of April, one thousand eight hundred and seventy-four, to further provide for the incorporation and regulation of corporations heretofore or hereafter incorporated for the purpose of the supply, storage or transportation of water and water power for commercial and manufacturing purposes.

Section 1. Be it enacted, &c., That corporations heretofore or hereafter incorporated under the Act of Assembly, entitled "An Act to provide for the incorporation and regulation of certain corporations," approved April twenty-ninth, one thousand eight hundred and seventy-four, and the supplements thereto, for the supply, storage or transportation of water and water power for commercial and manufacturing purposes, be and the same are hereby authorized and empowered to determine the character, design and construction of the works and the use to be made of the water and water power of such companies, in order that the same may be supplied to the public to the best advantage, and by themselves, their agents, engineers and workmen, cause to be located, constructed, maintained, repaired and operated under the law and supplements to which this is a further supplement, the said works and all machinery, dams, buildings, cisterns, races, canals, waterways, reservoirs, pipes, conduits, lines, plants, apparatus, fixtures and appliances deemed necessary, requisite and proper for said purposes, and it shall and may be lawful for such corporations from time to time to contract with any individual or corporation of this or any other State for

the construction, operation, use and maintenance of their works or any part thereof as aforesaid, and to mortgage their said property, real, personal and mixed, and franchises to any person or corporation of this State or elsewhere, either directly or as trustee, to secure the payment of such indebtedness as may be incurred or created for the purpose of constructing and erecting the said works, or as a guaranty for the faithful performance of contracts and covenants on the part of such water and water power company to be performed, including the guaranty of the payment of the bonds and interest thereon of any other corporation, party to such contract, and the stock in any company incorporated for the purposes named in this Act may be owned and held by corporations of this or other States of the United States.

Approved — The 2d day of July, A. D. 1895.

DANIEL H. HASTINGS.

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IN THE

Supreme Court of the United States

OCTOBER TERM, 1951

Nos. 428 and 429

PENNSYLVANIA WATER & POWER COMPANY AND SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND, *Petitioners*,

VS.

FEDERAL POWER COMMISSION, *Respondent*, AND CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE AND PUBLIC SERVICE COMMISSION OF MARYLAND, *Intervenors*,

PENNSYLVANIA PUBLIC UTILITY COMMISSION, *Petitioner*,

VS.

FEDERAL POWER COMMISSION, *Respondent*, AND CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE AND PUBLIC SERVICE COMMISSION OF MARYLAND, *Intervenors*,

ON WRITS OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

BRIEF OF INTERVENOR-RESPONDENT PUBLIC SERVICE COMMISSION OF MARYLAND

CHARLES D. HARRIS,
General Counsel,
Public Service Commission
of Maryland,
Intervenor-Respondent.

Baltimore, Maryland
March 27, 1952.

The Daily Record Co., Baltimore 3, Md.

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IN THE

Supreme Court of the United States

OCTOBER TERM, 1951

Nos. 428 and 429

PENNSYLVANIA WATER & POWER COMPANY AND SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND, *Petitioners*,

VS.

FEDERAL POWER COMMISSION, *Respondent*, AND CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE AND PUBLIC SERVICE COMMISSION OF MARYLAND, *Intervenors*,

PENNSYLVANIA PUBLIC UTILITY COMMISSION, *Petitioner*,

VS.

FEDERAL POWER COMMISSION, *Respondent*, AND CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE AND PUBLIC SERVICE COMMISSION OF MARYLAND, *Intervenors*,

ON WRITS OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

BRIEF OF INTERVENOR-RESPONDENT PUBLIC SERVICE COMMISSION OF MARYLAND

PRELIMINARY STATEMENT

Replying to the preliminary statement in the brief (p. 1) of petitioner, Pennsylvania Water and Power Company (Penn Water), the Public Service Commission of Maryland (Maryland Commission) asserts that the rate orders of the

Federal Power Commission (FPC) here involved were "premised on" and directed "continuance of" services of Penn Water as rendered consistently in the same general manner since 1931. These orders control those services and prescribe rates therefor regardless of contract, and are issued in direct pursuance of authority conferred by the Federal Power Act (16 U. S. C. Sec. 791a-825r — pamphlet copy filed by FPC). They are fully supported by the record before FPC as found by the Court below.

The decisions of the United States Court of Appeals for the Fourth Circuit (P. W. brief, p. 2), upon which the petitioners rely,* were rendered without jurisdiction and are void under the recent ruling by this Court in the case of *Far East Conference, et al, v. United States of America and Federal Maritime Board*, decided March 10, 1952, 20 L. W. 4270.

Even assuming arguendo that the Fourth Circuit had jurisdiction to annul the contracts, its Opinions (correct or incorrect on their merits) cannot have the extended effect, asserted by the petitioners, of collaterally destroying FPC rate orders fully supported by the record in this case, relating to services rendered and as they must continue to be rendered until changed in the manner required by law (Federal Power Act, Sec. 205d).

Finally, the Fourth Circuit decisions were in clear error on each of their rulings, on the merits, as to the validity of the long term power contracts which they condemned. Be-

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* *Pennsylvania Water and Power Co., et al. v. Consolidated Gas Electric Light and Power Co. of Baltimore, et al.*, 184 F. 2d 552, 186 F. 2d 934, cert. denied 340 U. S. 906 (1950), often referred to as the "Penn Water Contract Case"; and *Consolidated Gas Electric Light and Power Co. of Baltimore, et al. v. Pennsylvania Water and Power Co., et al.*, decided January 3, 1952, petitions for certiorari filed February 23, 1952, and often referred to as the "Safe Harbor Contract Case".

fore this Court considers any such brash attempt as is made by petitioners here to have the Fourth Circuit decisions (which were made without any factual record) collaterally destroy rate orders supported by careful findings, based on an extended record and many months of hearings, it should inquire into the merits of the asserted Sherman Act and Pennsylvania public utility law violations in relation to the facts established by the instant record, and in light of the controlling force of the Federal Power Act. Such inquiry will reveal clearly that the contracts, which have been on file since their inception with FPC, the Pennsylvania Commission, and the Maryland Commission, without any governmental agency (or any private party) ever finding any invalidity in them, have been unlawfully and inequitably condemned by the Fourth Circuit.

OPINIONS BELOW

The Opinion of the United States Court of Appeals for the District of Columbia is officially reported in 193 F. 2d 230 (advance sheets), and appears in the Record herein Vol. 18, p. 5367, the dissenting Opinion of Miller, J., appearing in Vol. 18, p. 5402.

The FPC Opinions and Orders affirmed by the Court of Appeals appear in the Record as follows: (1) Opinion No. 173 and Order of January 5, 1949 — Vol. 16, pp. 4845-4997; (2) Opinion No. 173A and Order of February 28, 1949, denying Petition for Rehearing on Opinion No. 173 and Order of January 5, 1949 — R. Vol. 16, pp. 5178-5194; (3) Order of March 17, 1949, denying Petition for Rehearing on Opinion No. 173A and Order of February 28, 1949 — R. Vol. 16, p. 5220; (4) Order of October 27, 1949, prescribing rate schedules — R. Vol. 17, pp. 5276-5292 and (5) Order of December 15, 1949, denying application for rehearing on Order of October 27, 1949 — R. Vol. 17, pp. 5315-5320.

JURISDICTION

Petitioners invoke the jurisdiction of this Court under U. S. C., Title 28, Section 1254 (1) and under U. S. C., Title 16, Section 825 (1). Petition for writ of certiorari was granted February 4, 1952.

COUNTER STATEMENT OF THE CASE

The Maryland Commission does not accept the Statement of the Case as made by either petitioner, because petitioners (1) misstate the only issue of substance which their petitions raise, in a patent effort to divert the attention of this Court from the fundamentally administrative-procedure determination of the Opinion below, and (2) make many misstatements of fact unsupported by this Record (or any other record) in order to support the factually unsupportable decisions of the Fourth Circuit.

By a studied use and frequent repetition of carefully chosen adjectives and other characterizations, petitioners' briefs seek to paint a picture in support of the Fourth Circuit decisions which has no supporting evidence. For a more detailed refutation of petitioners' unsupported charges beyond what appears hereinafter, we refer the Court to affidavits in the Record in Cases Nos. 611 and 612, current term (pp. 115, 123) and to the "Statement" and "Counter-Statement of Facts" in the brief of Consolidated Gas Electric Light and Power Company of Baltimore (Consolidated), Intervenor-Respondent, which we hereby adopt.

It is incredible to our Commission that groundless charges, so glibly made by petitioners, could have been so extensively accepted and repeated by the Fourth Circuit (without record support) when we consider the following: (1) ever since their inception, the contracts have been on file with the Pennsylvania Commission, the Maryland Com-

mission, and FPC, and were necessarily reviewed from time to time by each Commission as related to proceedings before it (the Pennsylvania Commission originally issued, and later amended, certificates of convenience and necessity to serve under the contracts); (2) after four years of extended investigation FPC found no vice in the contracts, but on the contrary approved all of the service arrangements contained therein, and (3) the Department of Justice, charged with administering the anti-trust laws, urged denial of certiorari by this Court in the *Safe Harbor rate case*,* thus giving its stamp of approval to FPC's Safe Harbor rate order, which preserved the Safe Harbor contract as a tariff with only the rates changed.

The Case Below.

The proceedings below were statutory appeals from final orders in an extensive rate investigation of Penn Water's wholesale charges, for hydroelectric power and energy sold by it to Consolidated. These orders hold, in effect, that Consolidated is entitled on a 1946 basis to an annual rate reduction of approximately $1,700,000 on its power bill from Penn Water. The total annual rate reduction ordered by FPC in Penn Water's rates, on a 1946 basis, amounts to approximately $2,000,000 (FPC Opinion No. 173 and Order of January 5, 1949, R. Vol. 16, p. 4845), the remaining $300,000 of the rate reduction being allocated to Penn Water's Pennsylvania customers. This reduction was ordered to be carried out by rate schedules specified for Penn Water in the Order of October 27, 1949, which rejected schedules filed by Penn Water because they were not in compliance

* *Safe Harbor Water Power Corp. v. Federal Power Commission*, 179 F. 2d 179, cert. denied 339 U. S. 957 (1950), in which the U. S. Court of Appeals for the Third Circuit described the Safe Harbor contract as "exemplary".

with Opinion 173 and Order of Jan. 5, 1949, a petition for rehearing being denied by the Order of December 15, 1949 (R. Vol. 17, pp. 5267 and 5315, respectively).

The Opinion and Judgment below affirm in normal manner these FPC rate orders, which were based upon and fully supported by an extended record of hearings held during a long period of time. They also deny motions to annul or set aside these FPC orders, which motions were filed by petitioners at the eleventh hour and were predicated upon a decision by the Court of Appeals for the Fourth Circuit, rendered shortly in advance of oral argument below and purporting to annul Penn Water's long term power contract to supply power to Consolidated.* The Opinion below (in partial response to these motions to annul) pointed out that rate and service arrangements ordered by FPC might be valid even though they preserved service which, as resting solely on contract between the parties, might be unlawful (R. Vol. 18, p. 5372 n. 12). However, the Court based its result squarely upon the procedural determination that no change in service or rates (whether otherwise lawful or unlawful) could be properly sought by Penn Water without first petitioning FPC for such change in the manner required by law (R. Vol. 18, pp. 5375-5376).

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* *Pennsylvania Water & Power Co., et al. v. Consolidated Gas Electric Light and Power Company, et al.*, 184 F. 2d 552, 186 F. 2d 934, cert. den. 340 U. S. 906 (1950), (the *Penn Water Contract Case*). Although the motions to annul rested on this decision alone, petitioners, in motion for reargument (and now in argument here) rest in part upon the Fourth Circuit's Opinion which purportedly also annulled the power contract between Penn Water, Safe Harbor, and Consolidated, *Consolidated Gas Electric Light and Power Company, et al. v. Pennsylvania Water & Power Co., et al.*, Jan. 3, 1952 (pamphlet copy filed herein by petitioners) currently before this Court on petitions for certiorari in Nos. 611 and 612 (the *Safe Harbor Contract Case*).

Historical Background of the Case.

The rate case before FPC was begun by order issued September 1, 1944, which instituted an investigation of the services, contracts, rates, and charges of Penn Water for any transmission or sale of electric energy subject to FPC jurisdiction under the Federal Power Act. A companion order issued on the same date (September 1, 1944) began a similar investigation of the rates and charges of Safe Harbor Water Power Corporation (Safe Harbor). Both orders were issued in response to the request of the Maryland Commission* (Petition of August 31, 1944 — R. Vol. 16, p. 4847), which then had pending before it a general investigation of the rates and charges of Consolidated to its Maryland consumers. The Maryland Commission found it desirable to have a prior determination by FPC of the wholesale rates paid by Consolidated for hydroelectric power and energy obtained from Penn Water and Safe Harbor, before passing upon the reasonableness of Consolidated's *retail* rates to its Maryland consumers.

The generating facilities of Penn Water, Safe Harbor, and Consolidated are coordinately operated as an integrated and interconnected electric system, the interconnection being provided primarily by an extensive network of transmission lines owned by Penn Water and its wholly owned subsidiary, Susquehanna Transmission Company of Maryland. These integrated operations, as currently performed, were begun under two long-term contracts executed in 1931, to continue until 1980. These contracts were filed with FPC in compliance with the provisions of the Federal Power Act

* Additional requests for investigation were filed by the governmental authorities of Baltimore City, Baltimore County, and other intervenors in the rate case before the Maryland Commission (R. Vol. 16, p. 4847), who as such intervenors had urged the Maryland Commission to request this FPC investigation.

(Sec. 205(c); 16 U. S. C. 824d (c)) and thus became service and rate tariffs, passing out of the realm of contract and into that of duty established by law.

Under one agreement (the "Safe Harbor Contract") entered into on June 1, 1931, and supplemented by amendments dated August 1, 1932, and November 22, 1939, Consolidated purchased two-thirds and Penn Water purchased one-third of the entire Safe Harbor hydro output, produced at Safe Harbor, Pennsylvania, until 1980. In return, Consolidated and Penn Water assured Safe Harbor of a combined annual payment, divided two-thirds and one-third between the two companies, sufficient to yield a specified annual return above operating expenses (the contract return of 7% was reduced to 5% by FPC in its Opinion 143, 5 F. P. C. Rep. 221). Under the other agreement (the "Penn Water Contract"), entered into between Consolidated and Penn Water on the same date, June 1, 1931, Consolidated purchased all the power and energy available to Penn Water from its hydroelectric and steam generating plants at Holtwood, Pennsylvania, and also Penn Water's one-third of Safe Harbor's power and energy not otherwise disposed of in performance of Penn Water's obligations to its other customers. Consolidated pays Penn Water annually a lump sum sufficient to cover all operating expenses and taxes (including Penn Water's payment to Safe Harbor), plus a specified return, reduced to 5¼% by FPC in its Orders here under appeal. These contracts constitute part of the record before FPC as Items E, F, G, H, and I (R. Vol. 15, pp. 4554-4621). The form of service and payment therefor as thus described has been prescribed by the Commission's Orders.*

* A survey of the Opinions of the Fourth Circuit in the *Penn Water* and *Safe Harbor* contract cases will show that no criticism is made of

The vast triangular power pool resulting from this coordinated arrangement for the interchange of energy and services has provided the Maryland consuming public with an economical, reliable, and necessary supply of hydro power since 1931. The overall plan has been consistently praised by all parties, including Penn Water's officers (R. Vol. 1, pp. 25-26; 68-71), until just before FPC ordered Penn Water to reduce its rates. Then, and only then, did Penn Water allege that the 1931 contracts were invalid. In its latest opinion (pamphlet copy in *Safe Harbor Contract Case*, Nos. 611 and 612, p. 13), the Fourth Circuit says as to "the plan" that "the experience of twenty years shows that it is practicable and successful."

The *Safe Harbor rate case* was tried first. It resulted in FPC's Opinion No. 143 and Order of November 4, 1946 (5 F. P. C. Rep. 221), reducing the rates of Safe Harbor to Penn Water and Consolidated by approximately $600,000 annually on a 1943 basis, saying in part:

> "The interconnected system is so operated as to obtain the lowest cost for system power and energy requirements. The output of each generating facility flows into the system at such times and in such amounts as will produce economy of operation and reliability of service. * * *

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the economical, coordinated, and integrated operations of the system which result from the above-described provisions, or even of any of the provisions themselves. The Opinions in the *Penn Water Contract Case* (184 F. 2d 552, and 186 F. 2d 934) condemn as illegal *per se* only Articles IV and V of the Penn Water contract, which gave Consolidated control over Penn Water's contracts with others and over installation or disposition of generating facilities. This distinction was carefully observed by the Opinion below. It is also confirmed by the Fourth Circuit's Opinion in the recently decided *Safe Harbor Contract Case — Consolidated Gas Electric Light and Power Company of Baltimore, et al. v. Pennsylvania Water & Power Company, et al.*, decided January 3, 1952, now on petition for certiorari in Nos. 611 and 612 (pamphlet copy filed by petitioners, p. 3).

"Under a 1927 contract which, as amended, continues in effect until 1980, the Maryland Company is entitled to all the electric capacity and energy not otherwise disposed of under existing contracts or by any obligation to serve imposed upon the Pennsylvania Company (Penn Water) by its charter or by law, which is available from the Pennsylvania Company's hydro and steam plants, as well as that available to the Pennsylvania Company from Safe Harbor. The Pennsylvania Company may require the Maryland Company (Consolidated) to supply it with steam generated energy (backfeed), in excess of the Maryland Company's own requirements, up to the available capacity of the Maryland Company's generating stations then being operated. The Maryland Company agrees to reimburse the Pennsylvania Company for all of its operating expenses, including taxes, depreciation, and the cost of power from Safe Harbor, as well as a certain return, less a credit for the revenues which the Pennsylvania Company receives for local sales in Pennsylvania."

The Court of Appeals for the Third Circuit upheld FPC's decision in every respect, noting that "Safe Harbor's output is delivered to an integrated interstate electric system * * *", and held that "Safe Harbor's contracts for power and its backing by the Pennsylvania and Maryland companies *are exemplary*" (emphasis supplied). *Safe Harbor Water Power Corp. v. Federal Power Commission*, 179 F. (2d) 179, 199 (1949) cert. denied 339 U. S. 957 (1950).

In the *Penn Water rate case* (the present proceedings), hearings began on April 15, 1946, and concluded July 16, 1947, during which time 21,200 pages of Record and over 600 exhibits (R. Vols. 6-15) were received. Following submission of voluminous briefs, FPC issued Opinion No. 173 and its Order of January 5, 1949 (R. Vol. 16, pp. 4845-4997), ordering Penn Water to reduce its rates and charges, on a 1946 basis, in the total amount of approximately $2,000,000 annually. During the entire period of the proceedings be-

fore FPC, neither Penn Water nor the Pennsylvania Commission raised any question as to the validity of the long-term contracts under which the interconnected system had been established in 1931, and which as tariffs had been controlling the services of Penn Water and Safe Harbor since they were first filed in 1936 in response to FPC Order.

In its petition for rehearing filed on January 28, 1949, Penn Water asserted for the first time the fact that it considered its long-term power contracts to be null and void, and that it was making this assertion the basis of court proceedings recently instituted in the United States District Court for Maryland. Denying this petition, in its Opinion 173A and Order of February 28, 1949 (R. Vol. 16, p. 5178), FPC informed Penn Water that its rate order rested upon *services as they had been rendered since 1931*, as testified to by officers of Penn Water, and as they must continue to be rendered until changed in the manner required by the Commission's rules issued under the provisions of the Federal Power Act (Sec. 205d). FPC stated that any possible illegality of particular provisions of the contracts could not affect the rates established in relation to services actually rendered, and as they were continuing to be rendered (and have in fact continued to be rendered to the date of this brief).*

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* The Commission makes it quite clear, in its Opinion No. 173A, that it considered it improper to further delay rate reductions which were long overdue, in relation to services which had been rendered in the same manner since 1931. The Commission emphasized the testimony of the officers of Penn Water that the integrated interconnected power system was "the outgrowth of twenty years of experience by the two companies in determining the best methods of promoting the coordination of the hydro and transmission facilities of Penn Water with the steam generating plants of Baltimore Company, to the end of maximum utilization of natural resources, minimumization of investment and the utmost in service availability to the ultimate customer", and that this should not be changed except by the procedures provided by the Act (R. Vol. 16, p. 5178 at 5181-88; Vol. 1, pp. 25-26, 69).

Penn Water, although it continued its collateral attack on its long-term hydro contracts in the United States District Court for Maryland, did not choose to exercise its right to petition for changes of its tariffs as filed with FPC, or of its services as rendered thereunder. Instead, it elected to stand on the record before the Commission and to pursue its appeal from FPC's orders to the U. S. Court of Appeals for the District of Columbia Circuit, filing a 238-page printed brief, supplemented by a 49-page brief filed by the Pennsylvania Commission. FPC replied with a printed brief of 178 pages, the Maryland Commission with 36 pages, and Consolidated with 50 pages. After these main briefs were filed, and the case ready to be set for argument on the merits, Penn Water and the Pennsylvania Commission filed motions to postpone the date of oral argument. Subsequently, they filed motions to annul or remand the orders of the Commission, asserting that they had been rendered void by the decision of the Fourth Circuit in the *Penn Water Contract Case*. The Court allowed time for extended briefing and argument of these motions, assigning the case for three days of oral argument, divided between the motions and the appeal on the merits.

Having failed, after these extended briefs and arguments below, to convince the Court of Appeals that there was any error in the rate orders based on that Record of over 21,200 pages (plus over 600 Exhibits)* as conducted from

* The printed record in the Court below consisted of 4805 pages, plus an additional 514 pages of Appendices to Penn Water's Briefs. As is indicated in the first footnote of page 2 of Penn Water's petition for certiorari and repeated in its brief p. 3, note "**", it sought to restrict the Record here. If this had been accomplished, the Court would not have before it the real nature of the case and the Record which shows the ample and complete support for the Commission's Orders, including the evidence of Penn Water's officers R. Vol. 1, pp. 20-28, 31-46, 69), showing their sworn support of the integrated interconnected power pool — quite contrary to their later collateral

September 1, 1944, to July 16, 1947, and culminating in the Order of January 5, 1949, petitioners now seek to have the entire effect of those proceedings destroyed and the purposes of the Federal Power Act frustrated, by insisting that the Court below erred in refusing to annul or remand the Orders because of the collateral determination subsequently obtained by Penn Water in the Fourth Circuit, in the *Penn Water Contract Case* — proceedings to which FPC was even not a party.

The Court below, in response to the motions to annul, indicated that what might be illegal as contract between the parties, as constituting a monopoly in violation of the Sherman Act, might nevertheless be valid as a rate and service order of FPC, acting in pursuance of the directive of Congress specified in the Federal Power Act (R. Vol. 18, pp. 5370-5375). The Court below, however, did not rest with this reconciliation of the Commission's orders with the Opinion of the Fourth Circuit in the *Penn Water Contract Case*. Regardless of such reconciliation, it based its decision squarely on its holding that, if Penn Water had any right to change its services or rates as a result of having had its contracts declared illegal in violation of the Sherman Act, it should pursue its legal remedies under the Federal Power Act, as it had first been directed to do by FPC when the petition for rehearing was denied (R. Vol. 18, pp. 5375-5376).

ISSUES PRESENTED BY PETITIONERS AND OUTLINE OF ARGUMENT IN RESPONSE

Petitioners, Penn Water (brief, p. 3) and Pennsylvania Commission (brief, p. 13) separately state three issues which they seek to have determined by this Court. Be-

efforts to destroy the benefits of that pool by attacking the contracts which put it in operation, and the rate orders which now continue it in effect.

cause of the duplication involved in Penn Water's issues I and II and the Pennsylvania Commission's issues II and III, all of which seek to present a single issue not properly reviewable by this Court on the instant Record, there are only three basic questions presented by petitioners:

I. *Did the Court below err in holding that "where electric energy is produced in Pennsylvania and thereafter sometimes commingled with electric energy flowing from another state and sold to Pennsylvania customers and where the proportions of such respective energy are ascertainable, such sales are in interstate commerce within the scope and intendment of the Federal Power Act and subject to the jurisdiction of FPC"?* (PUC brief, p. 13.)

This issue, presented by the Pennsylvania Commission alone, rests upon a conclusion of fact contrary to that determined by FPC upon substantial evidence (FPC found that Penn Water has no *separable* intrastate sales). The assertion that Penn Water's sales to its Pennsylvania customers can and should be treated as sales in intrastate commerce, subject to the jurisdiction of the Pennsylvania Commission (PUC brief, pp. 15-19), is contrary to the nature of such sales and the facts of combined hydro-steam operation of the integrated system, as found by FPC upon substantial evidence and confirmed by the Court below (R. Vol. 18, pp. 5382-5384). Petitioner thus asks this Court, contrary to long-established law, to substitute its judgment for that of FPC, upon just the kind of complicated engineering and economic facts which FPC is best qualified to determine.

Petitioner draws no support from the two principal cases upon which it relies, *Peoples Gas Company v. P. S. C.*, 270 U. S. 550 (1926) and *Lone Star Gas Co. v. Texas*, 304 U. S. 224 (1938), both of which were determinations of the ex-

tent of state power over commerce *in the absence of federal regulation.* Those cases confirmed determinations of the fact of separability of the intrastate commerce involved therein, as made by the Commission in the first instance. The latter case dealt solely with a problem of local distribution consistently recognized to be intrastate, a factor which is clearly not involved in the instant case.

No further argument will be submitted on this issue, for it is obviously correctly decided by the Court below upon the reasoning referred to in the record reference above (Vol. 18, pp. 5382-5384).

II. *Is a licensee subject to regulation under Part I of the Federal Power Act also subject to regulation as a public utility under Part II of the Act?* (P. W. brief, pp. 3, 19, 23, 76.)

This issue is presented by Penn Water alone. The Court below, in affirming FPC's decision that Part II applies to licensee-public utilities, correctly followed the determination of the Court of Appeals for the Third Circuit in the *Safe Harbor rate case — Safe Harbor Water Power Corporation v. FPC,* 179 F. 2d 179, 185 (1949) cert. den. 339 U. S. 957 (1950) — which is the only other opinion which has dealt squarely with this question.

No further argument thereon will be submitted herein, because the subject is adequately disposed of by the Opinions of the two Courts of Appeals, for the Third Circuit and the District of Columbia Circuit. What we would argue would of necessity be repetitious thereof, as well as what has been presented by FPC in its opinions and brief.

Petitioner, Penn Water, has resolved its issues I and II (and the Pennsylvania Commission's corresponding issues III and II) into one issue which is stated (P. W. pet., pp. 2-3; brief, p. 3):

III. *"The primary issue in this case is whether the FPC *.* * may compel electric utilities to perform, and may base its rate orders upon continued performance of, contracts which have been adjudged by the courts to violate Federal antitrust laws, public policy and the laws of the utilities' state of incorporation".*

This simplified statement, like the more complicated questions stated in the petitions and repeated characterizations in the briefs, is very carefully worded in a manner designed to create the impression that such an issue had been raised in the proceeding before FPC, had been ruled upon by FPC after evidence and argument, and was then confirmed by the Court below. Actually, the issue stated by petitioners here was *never presented to FPC,* and was not accepted as an issue by the Court below.

At best, only an approximation of it was suggested by Penn Water's petition for rehearing. In response thereto, FPC pointed out that if Penn Water desired to raise such questions (which it had ignored during the four years that the rate case was in progress, and which involved a disruption of the integrated power system as Penn Water had presented it to FPC), the provisions of the Commission's rules and the Federal Power Act relative to change or withdrawal of tariffs should be complied with (R. Vol. 16, pp. 5181-5188).

In confirming FPC's denial of Penn Water's petition for rehearing, the Court below makes the squarely procedural administrative law determination that Penn Water could not present to the Court of Appeals *for the first time,* as basis for setting aside or remanding FPC's Orders, matters which the petitioners had ignored during the course of hearings before the Commission, which they had subsequently made the basis of a collateral attack in Court pro-

ceedings to which FPC was not a party, and for which the Federal Power Act specifies a proper procedure of presentation in the first instance to FPC (R. Vol. 18, pp. 5375-5376). That was the basis of the decision below, which petitioners seek to avoid by misstating the issue to this Court, in Penn Water's issues I and II and the Pennsylvania Commission issues III and II, and the arguments related thereto.

Phrased succinctly as a legal proposition for review by this Court, the only proper issue related to and including all of these questions (as embodied within issue III), and properly stated in relation to the record in this proceeding, is:

Was the Court of Appeals, as the tribunal established by law to review decisions of the Federal Power Commission, correct in affirming a decision of the Commission that the Federal Power Act requires a regulated licensee and utility to charge the rates and to perform the services required by order of the Commission, supported by an extended record and issued after protracted hearings, until that utility has sought and obtained a change of its rates and service under procedures duly established by the Commission under the Act?

The Court below correctly answered that question in orthodox fashion, under well-established doctrines of administrative law consistently confirmed by this Court.

If petitioners wish a determination of what they erroneously claim to be "the primary issue" of this case, they should present that issue in *original* proceedings before FPC, where a complete record may be made with reference thereto. After such proper procedure has been followed and FPC has issued an order resting on such a record, the parties interested may, or may not, desire and petition

for judicial review thereof. In any event, only then will Penn Water's asserted "primary issue" be ripe for determination.

SUMMARY OF ARGUMENT

Because of the vigor of petitioners' procedurally unlawful attack as made herein upon the FPC Orders, and because of the vital importance to the Maryland public of the substantial rate reductions involved, we urge upon this Court (with detailed argument to follow) that the decision below should be affirmed for the following reasons:

1. *Petitioners' arguments that the FPC Orders should be annulled rest upon decisions of the Fourth Circuit, which lacked jurisdiction to make those decisions because of the broad doctrine of "primary jurisdiction", as confirmed by the recently decided Far East Conference case (Argument 1 hereinafter,* p. 21).

The Federal Power Act (16 U. S. C. 791a-825r, pamphlet copy filed by FPC) confers on FPC detailed and comprehensive powers to secure uniform and consistent regulation of licensees and public utilities such as Penn Water and Safe Harbor. The *Far East Conference* case (20 L. W. 4207, Mar. 10, 1952) confirms the doctrine of "primary jurisdiction" which runs back to *Texas & Pacific R. Co. v. Abilene Cotton Oil Co.*, 204 U. S. 426 (1907), and which establishes the fact that the Fourth Circuit had no power to render the decisions herein relied upon by petitioners.

The broad and properly applicable doctrine of administrative law is not to be avoided by petitioners' attempts to convert the argument into one of "repeal by implication" of the Sherman Act. As was stated clearly by the Court below (R. Vol. 18, pp. 5371-5372), the Sherman Act is of lim-

ited application in this field of government-regulated monopoly. The Fourth Circuit had no jurisdiction (and should have declined to exercise jurisdiction) to apply the Sherman Act in contravention of: (a) the facts, and (b) the purpose and policy of the Federal Power Act.

2. The theory of the "filed tariff", as embodied in Section 205 of the Federal Power Act, precludes petitioners from asserting a collateral destruction of the tariffs and the rate orders of the FPC (Argument 2 hereinafter, p. 31).

Assuming *arguendo* that the Fourth Circuit had jurisdiction to render the decisions on which petitioners here rely, the motions to annul or remand were nevertheless correctly denied. To grant them would give court decisions declaring Penn Water's power contracts invalid (on their face, without regard to the facts of operation, or the public necessity and benefits involved in the existing service and the continuance thereof) the collateral effect of annulling FPC Orders based upon voluminous record and argument *in which no question was ever raised as to the validity of such contracts*, although they constituted the filed tariffs controlling the service and rates to be regulated. When such tariffs have been confirmed (as here) by rate orders after formal hearings, they constitute the only lawful terms of service and may be changed only in the manner established by law (Federal Power Act, Sec. 205d) — namely, by proceedings beginning before FPC. To hold otherwise, would be a departure not only from the explicit statutory provisions of Section 205 embodying the doctrines of the filed tariff, but likewise would violate the sound administrative law doctrines of "primary jurisdiction" and "exhaustion of administrative relief".

3. *The Rate Orders Should Not Be Annulled or Remanded Because of the Sherman Act (Argument 3 hereinafter,* p. 43).

FPC orders establishing rate schedules relating to operations, fully supported by an extended record and hearings before the Commission, are acts of the Federal Government and are not dependent for their authority upon the contractual consent of the parties which began those operations. As acts of the government (even if they ordered what would be proscribed to private parties by the Sherman Act), they are not subject to the Sherman Act.

The rate orders here in question, however, were issued by FPC so as to apply only to service arrangements which would, in and of themselves, be lawful. FPC has construed the rate schedules of Penn Water to Consolidated as not to include Article IV and V of the Penn Water contract, which were the only provisions thereof found by the Fourth Circuit to be *per se* unlawful. Accordingly, there is no provision of Penn Water's prescribed rate schedules subject to the charges made herein by Penn Water.

Furthermore, even as contracts, and in their entirety, the Penn Water contract and the Safe Harbor contract do not violate the Sherman Act. They were proper business arrangements for developing a great natural resource and for securing the maximum benefits therefrom to the public. They are clearly valid under proper application of the rule of reason.

4. *The Rate Orders Should Not Be Annulled or Remanded Because of the Pennsylvania Public Utility Law or Public Policy (Argument 4 hereinafter,* p. 52).

The FPC Orders here involved relate to *service* of Penn Water which is entirely interstate in character (as is like-

wise true of Safe Harbor), and as such is not subject to any of the laws or policy of Pennsylvania as urged by petitioners.

ARGUMENT

1. Petitioners' arguments that the FPC Orders should be annulled rest upon decisions of the Fourth Circuit, which lacked jurisdiction to make those decisions because of the broad doctrine of "primary jurisdiction", as confirmed by the recently decided Far East Conference case.

In the recent case of *Far East Conference, United States Lines Company, States Marine Corporation et al. v. The United States of America and Federal Maritime Board*, 20 L. W. 4207 (March 10, 1952), this Court denied the right even of the United States to sue in the first instance in the District Court to enjoin a dual-rate system alleged to be in violation of the Sherman Act. In that opinion, this Court confirmed its earlier decision of *United States Navigation Co. v. Cunard Steamship Co.*, 284 U. S. 474 (1932), and stated the applicable principles which condemn the action of the Fourth Circuit in the *Penn Water Contract Case*, upon which Penn Water here relies:

> "* * * in cases raising issues of fact not within the conventional experience of judges or cases requiring the exercise of administrative discretion, agencies created by Congress for regulating the subject matter should not be passed over. This is so even though the facts after they have been appraised by specialized competence serve as a premise for legal consequences to be judicially defined. Uniformity and consistency in the regulation of business entrusted to a particular agency are secured, and the limited functions of review by the judiciary are more rationally exercised, by preliminary resort for ascertaining and interpreting the circumstances underlying legal issues to agen-

cies that are better equipped than courts by specialization, by insight gained through experience, and by more flexible procedure".

The exclusive primary jurisdiction of FPC, which deprives the Fourth Circuit of original jurisdiction and authority in the two contract cases, is founded upon the broad powers conferred by the Federal Power Act (16 U. S. C., Secs. 791a-825r; citations of sections which follow are to the pamphlet copy filed herein by FPC).

Section 207 empowers FPC, in case any interstate service of a public utility is inadequate, to determine the proper service to be rendered and to "fix the same by its order".

Section 206 empowers the FPC, if it finds that any rate, charge, or classification in any interstate sale or any *contract affecting* such rate, charge or classification is unjust, unreasonable, unduly discriminatory or preferential," to determine "the just and reasonable rate, charge * * * or *contract* to be thereafter observed and in force" and to "*fix the same by order*".

Section 205, providing for just, reasonable, and nondiscriminatory rates, requires "all *contracts which in any manner affect or relate* to such rates, charges, classification and service" (Sub-par. (c)), for interstate sales by public utilities of energy at wholesale, to be filed with the FPC under rules to be established by FPC and prohibits any changes in such contracts until after thirty days' notice to the FPC and the public (Sub-par. (d)).

Section 202(b) authorizes the FPC to require a public utility, if its generating facilities and output are sufficient for the purpose, to establish physical connections with, and make sales of energy to, other electric companies and to "*prescribe the terms and conditions of the arrangement*

to be made between the persons affected by any such order, including the apportionment of cost between them and the compensation or reimbursement reasonably due to any of them" (Emphasis added to the foregoing excerpts).

Section 10(b) prohibits a licensee from constructing any additions of capacity in excess of 100 horsepower to a licensed project "without the prior approval of the Commission".

Section 8 provides that "no voluntary transfer of any license or of the rights thereunder granted shall be made without the written approval of the Commission * * *".

Section 309 empowers the FPC by order, rules, and regulations to carry out and enforce the provisions of the Federal Power Act.

Section 313 provides the exclusive method by which such orders of the FPC may be reviewed by the Court of Appeals.

As the opinion below pointed out, certain underlying objectives of a regulatory statute, such as the Federal Power Act, are sometimes at variance with certain underlying objectives of the Sherman Act. Nevertheless, it is FPC's duty, in exercising its jurisdiction, to reconcile and accommodate these two Federal enactments to the specific problems before it. *The vehicle for this accommodation and reconciliation in a particular case is the rule of reason.* If, in appraising the validity of a tariff, FPC observes and stays within the rule of reason, the Sherman Act and the Federal Power Act can be read together, accommodated, reconciled, and applied to accomplish the underlying policies of the two enactments. The statutory standard of the Federal Power Act is reasonableness. Just and reasonable rates, services, and contracts of licensees and public utilities subject thereto are objectives of that Act. Such is

also the statutory standard of reasonableness which has been read into the Sherman Act. We submit that the District of Columbia Circuit had these considerations in mind when it said in its opinion below (R. Vol. 18, pp. 5371-5373):

> "In place of competition as a generalized and indirect regulator of prices and services in the field of interstate transmission of electric energy at wholesale, Congress has substituted a regulatory agency authorized to supervise almost every phase of the regulated company's business. Rates charged by such utilities, *as well as the services and contractual provisions affecting them,* must be 'just and reasonable.' And what is 'just and reasonable' is not determined by the pressures of competition but by the adequacy of the service to the public, the fairness of the return allowed upon the investment in the company, and the degree to which the congressional objective of efficient use of the nation's power resources is served. * * *
>
> "These contrasting objectives indicate that the antitrust laws can have *only limited application* to industries regulated by specific statutes. * * *
>
> "The net effect of what we have already said is that, though regulated industries are not *per se* exempt from the antitrust laws and appeals by implication are not favored, the antitrust laws are superseded by more specific regulatory statutes *to the extent* of the repugnancy between them. That is not to say that competitive considerations may not be components of the public interest sought to be served by a particular regulatory statute, and hence a guide to a commission's exercise of its authority *when the question is properly before it.* * * * But where a statute provides for comprehensive and detailed regulation of a particular industry, as do the Interstate Commerce Act and the Federal Power Act, there is, as we have indicated, only a limited area for application of antitrust considerations to Commission decisions." (Emphasis added.)

The question whether the Penn Water contract and the Safe Harbor contract are reasonable and in the public interest under the "just and reasonable" standards of the Federal Power Act, and the "rule of reason" standard of the Sherman Act, is peculiarly a question for FPC determination, with its expert technical and engineering resources. It is not a question to be decided collaterally in a summary proceeding in the District Court on the face of those tariffs alone; but only after all of the surrounding facts have been fully explored, intelligently appraised, and applied by an administrative body competent to do so. Otherwise, there may be conflict between the two enactments separately applied to the same tariffs by different tribunals. Variance in the application of the laws is bound to result.

We submit that these were the considerations which led this Court, in *U. S. Navigation Co. v. Cunard S. S. Co.*, 284 U. S. 474, 485, 487, to say:

> "Whether a given agreement among such carriers should be held to contravene the act may depend upon a consideration of economic relations, of facts peculiar to the business or its history, of competitive conditions in respect of the shipping of foreign countries, and of other relevant circumstances, *generally unfamiliar to a judicial tribunal, but well understood by an administrative body especially trained and experienced in the intricate and technical facts and usages of the shipping trade; and with which that body, consequently, is better able to deal.*
>
> "* * *
>
> "Moreover, having regard to the peculiar nature of ocean traffic, it is not impossible that, although an agreement be apparently bad on its face, it properly might, upon a full consideration of all the attending circumstances, be approved or allowed to stand with modifications."

Any consideration of the facts of the relations between Penn Water, Safe Harbor, and Consolidated, as shown by the record herein before FPC and as summarized in its Opinion 173A (R. Vol. 16, p. 5178) demonstrates vividly how the failure of the Fourth Circuit to observe these long-established principles, as confirmed by the *Far East Conference* case, resulted in its erroneous assertion of jurisdiction to apply the Sherman Act in condemnation of tariffs on file with FPC. Its action thus disrupts the "uniformity and consistency in the regulation of business entrusted to a particular agency" and threatens grave injury to the public interest by destroying the reasonable prices which both the Sherman Act and the Federal Power Act were designed to protect.

Petitioners seek to avoid the need for FPC to exercise its primary jurisdiction, by asserting that the Federal Power Act confers no specific authority to exempt utilities from the application of the Sherman Act. But FPC has asserted no such authority to exempt. It asserts that *its orders* are not affected by the Sherman Act; but, if they are subject to its provisions, they prescribe nothing that is contrary to the Act. Furthermore, no specific authority to exempt is required for the application of the normal rules of primary jurisdiction and exhaustion of administrative relief.

Petitioners' entire argument to annul the existing rate orders rests upon the Fourth Circuit Opinions in the *Penn Water Contract Case* (184 F. 2d 552, 186 F. 2d 934, cert. denied 340 U. S. 906) and in the *Safe Harbor Contract Case* (pamphlet opinion filed by petitioners — *Consolidated Gas Electric Light and Power Company, et al, v. Pennsylvania Water & Power Co., et al.*, January 3, 1952, cert. requested February 23, 1952 in Nos. 611 and 612, current term).

In the *Penn Water Contract Case*, the Fourth Circuit relied primarily upon the inapplicable decisions of *U. S. Alkali Ass'n. v. U. S.*, 325 U. S. 196 (1945), and *U. S. v. Borden Co.*, 308 U. S. 188 (1939). Neither of these cases involved a comprehensive and detailed plan for the uniform and consistent regulation of an entire business or industry on a national scale by an independent regulatory commission, such as is the purpose of the Interstate Commerce Act, the Shipping Act, or the Federal Power Act.* The Fourth Circuit brushed aside the clearly applicable decision of *U. S. Navigation Co. v. Cunard S.S. Co.*, 284 U. S. 474 (1932), and related decisions under the Interstate Commerce Act.**

Although the Fourth Circuit correctly stated that "the maintenance of uniformity of regulation and the control of the activities of an industry of national scope by a specialized body are as important in the field of electric power as in the field of transportation or water", (*Penn Water Contract Case*, 184 F. 2d 552, 564), it justified its frustration of that principle by stating that "the control of the Federal Power Commission over the power sites of

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* It is further pointed out: (1) In each of these cases, relied on by the Fourth Circuit, there had been only inaction by the regulatory authority empowered to act (as distinguished from here, where FPC has acted in broad approval of the arrangements involved); (2) in the *Alkali* case, the agency lacked power to deal conclusively with the subject matter (325 U. S. 195, 205, 210); and (3) in the *Borden* case (308 U. S. 188, 204-205), the agency's power to deal at all with the subject matter was questioned. In the *Borden* case, the Court pointed out that while there was administrative power under the *Capper-Volstead* Act to control "*producers*" of agricultural products and their rights to combine with *each other*, the administrator's power did not cover "combination or conspiracy with *other persons* in restraint of trade". This was the situation in *Hinton v. Columbia River Packers Ass'n.*, 131 F. 2d 88 (1942), also cited by the Fourth Circuit to support its result.

** Particularly relevant here are *Terminal Warehouse Co. v. Penn. R.R. Co.*, 297 U. S. 500 (1936); and *Keogh v. C. & N. N. W. Ry. Co.*, 260 U. S. 156 (1922).

the country and over the interstate transmission of electric energy is not disturbed by the retention of the jurisdiction of the courts to enforce the anti-trust acts". The Fourth Circuit erroneously relied on *Georgia v. Pa. R. R. Co.*, 324 U. S. 439 (1945), despite the fact that this Court, in sustaining the right of the State of Georgia to bring an original proceeding in this Court to enjoin a conspiracy of carriers in violation of the Sherman Act (and then only with a strong dissent by four Justices), explicitly stated that its Opinion would not support "an injunction against the continuance of any tariff" or a proceeding "to have any tariff provision cancelled" (324 U. S. 439, 455). This Court, by the use of this language, sought to preclude the very result which the Fourth Circuit obtained in the *Penn Water Contract Case.*

This Court's denial of certiorari in the *Penn Water Contract Case,* as indicated in the citation above, does not confirm the action of the Fourth Circuit as being correct. It "imports no expression of opinion upon the merits of the case". *Agoston v. Commonwealth of Pennsylvania,* 340 U. S. 844 (1950); *Sunal v. Large,* 332 U. S. 174, 181 (1947); *House v. Mayo,* 324 U. S. 42, 48 (1945).

The petitioners now assert the *Penn Water* contract decision as basis for direct annulment of the tariff. Thus, it is incumbent upon this Court to declare the error of the Fourth Circuit's Opinion in asserting jurisdiction over matter subject to the primary jurisdiction of FPC.

The *Safe Harbor* contract opinion perpetuates and relies upon the above-described jurisdictional errors of the *Penn Water Contract Case.* It went further than the *Penn Water* contract opinion, however, in making explicit the Court's belief that it had collaterally destroyed FPC Orders, saying:

"Further proceedings before the Federal Power Commission will doubtless be necessary * * *. The problem of the Commission would then be to devise a plan which will effectuate the purposes of the Federal Power Act and at the same time conform to the anti-trust statutes." (pamphlet opinion of Jan. 3, 1952, filed by petitioners, p. 22.)

In the *Safe Harbor Contract Case*, the Fourth Circuit affirmed a *summary judgment*, in complete disregard of the facts as supported by answer and affidavits of Consolidated (and as sought to be presented in FPC's petition to intervene, which was denied), and in further disregard of FPC's assertion (in its brief filed with the Fourth Circuit) that it had ordered as a rate schedule the entire Safe Harbor contract. In the above-quoted statement, the Fourth Circuit flatly ignored the fact that FPC had thus already expressed its deliberate judgment, based upon an extended record, as to the relation between the policy of the Federal Power Act and the facts found by the Commission.

This action of the Fourth Circuit was in clear disregard of *Georgia v. Pennsylvania R. R.*, *supra*, and the policy expressed in the *Far East Conference* opinion quoted above. Certiorari has been requested and is now pending decision in Nos. 611 and 612. It should be granted and the decision of the Fourth Circuit reversed.

This Court has many times required exhaustion of administrative relief as to matters submitted to administrative control, before permitting Court action upon matters of law related thereto.

Myers v. Bethlehem Shipbuilding Corp., 303 U. S. 41 (1938);

FPC v. Metropolitan Edison Co., 304 U. S. 375 (1938);
Macauley v. Waterman S. S. Corp., 327 U. S. 540 (1946);
Aircraft & Diesel Equipment Co. v. Hirsch, 331 U. S. 752 (1947).

This Court has made it clear not only that exhaustion of administrative relief is required, but that the administrative determination takes on a high degree of finality as to the "coverage" of the statute under which an agency acts, because the agency is better qualified than the Courts to understand the facts and construe the basic statutes in relation thereto.*

Gray v. Powell, 314 U. S. 402 (1941);
Endicott Johnson Corp. v. Perkins, 317 U. S. 501 (1943);
Oklahoma Press Co. v. Walling, 327 U. S. 186 (1946);
National Labor Relations Board v. Hearst Publications, Inc., 322 U. S. 111 (1949).

The Fourth Circuit's decisions violate all the rules so carefully established by this Court for "the complementary roles of courts and administrative agencies in the enforcement of the law". Its decision should be respectively overruled in the *Penn Water Contract Case*, and reversed in the *Safe Harbor Contract Case*, now pending on certiorari, and the FPC Orders herein affirmed in their entirety.

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* There could be no better illustration of a Court's inherent technical disadvantage than the Fourth Circuit's failure to understand the engineering and the economic aspects of the instant controversy. Even worse is its disavowal of any interest in any argument that the engineering and economic factors should be given weight in its deliberations (184 F. 2d 552, 559 Par. [6] "it is idle to consider", etc. — a clear repudiation of interest in the benefits of coordinated operation and economy which the contracts effected, and which it was the duty of FPC, under the Federal Power Act, to foster and achieve).

2. The theory of the "filed tariff", as embodied in Section 205 of the Federal Power Act, precludes petitioners from asserting a collateral destruction of tariffs or rate orders of the FPC.

Assuming *arguendo* that the Fourth Circuit was correct in determining that it had authority to strike down contracts (*qua* contract) despite their partial or total identity with tariffs on file with and approved by FPC, the Fourth Circuit decisions do not have the collateral effect of destroying the FPC orders, as is now asserted by petitioners. If they could have this effect, petitioners are completely sustained in their bold attempt to flout the doctrines of primary jurisdiction, exhaustion of administrative relief, and administrative supremacy as to matters committed to Commission control; furthermore, Section 205 of the Federal Power Act (which provides for the filing of rate schedules for service by utilities subject to FPC regulation and constitutes such filed tariffs the only lawful terms of service until changed after petition to and hearing by the Commission) might just as well have been omitted from the law. Section 205 provides in part as follows:

> "(c) Under such rules and regulations as the Commission may prescribe, every public utility shall file with the Commission, * * * schedules showing all rates and charges for any transmission or sale subject to the jurisdiction of the Commission, and the classifications, practices, and regulations affecting such rates and charges, together with *all contracts* which in *any manner* affect or relate to such rates, charges, classifications and services.
>
> "(d) Unless the Commission otherwise orders, *no change* shall be made by any public utility in *any such* rate, charge, classification, or service, or in any rule, regulation, or *contract* relating thereto, except after thirty days' notice to the Commission and to the public." (Emphasis added.)

When Penn Water, in its petition for rehearing before FPC, suggested for the first time to FPC that the basic power contracts were invalid and had been placed in litigation in the Courts, the Commission informed Penn Water that the Commission's rate order did not rest upon the decision of "questions as to the legality of the foundation contracts which are in litigation", but rather was founded upon the *operations* of the combined system and the *services* as actually rendered by Penn Water (Opinion 173A, R. Vol. 16, pp. 5181-5188).

FPC pointed out that Penn Water's petition sought to present only certain new legal arguments, which could have been presented to the Commission and which had been withheld, concerning contractual provisions (Articles IV and V), the asserted illegality of which would not affect the findings of fact upon which the rate order was based. As to asserted changes in operations (which Penn Water was restrained from continuing because of the hazards to the system), FPC said that until such operations and services were changed with the approval of the Commission, under the rules and regulations issued in pursuance of Sec. 205 of the Federal Power Act, Penn Water was bound to continue such operations and service at the reduced rates prescribed by the Order of January 5, 1949.

FPC thus met Penn Water's eleventh hour maneuver — a collateral attack to avoid the long overdue rate reduction — by referring Penn Water to the orderly processes of the law as prescribed by the Federal Power Act, implemented by FPC rules. If there was no error in this denial of the petition for rehearing (and we submit there was none), there was likewise none in the affirmance thereof by the Court below.

The provisions of the Penn Water contract regarded by the Fourth Circuit to be invalid *per se* (Articles IV and V only)* have played no part in the rate orders of the Commission. The services, originally begun under the contracts in 1931, have continued in exactly the same manner from 1931 to the present date. Obviously there must be rates to pay for such services, regardless of contract. Under the law, they are the just and reasonable rates allowed by the Federal Power Act and prescribed by FPC in its Orders here under attack.

Petitioners insist that the rate orders, although prescribing reasonable rates for services based on operations as validly found by FPC,** must be destroyed because of the illegality of the contracts; and moreover, (by inference here and statement to the Court below) they still claim the right to keep the exorbitant rates prescribed by the very contracts which they claim to be illegal. In all equity and justice, there was never a clearer case for upholding the orderly processes of the law to defeat such unconscionable conduct.

What petitioners overlook is that when Penn Water filed its contract as a tariff in 1936 under the Federal Power Act, its former obligations to serve under the contract and at the rates therein prescribed passed out of the realm of contract and into the area of duty prescribed by law. The *tariffs* (not the contracts), from that date and until with-

* The Fourth Circuit's holding that the Penn Water contract was invalid only because of the provisions of Articles IV and V appears in at least three places in its first opinion (R. Vol. 18, pp. 5328, 5329, 5346), in its second opinion (R. Vol. 18, p. 5358), and also in its opinion in the *Safe Harbor Contract Case* (p. 3 of printed pamphlet copy supplied by Penn Water).

** Petitioners have abandoned any attempt to show any illegality in the order based on the record before FPC, except the two minor legal points in issues I and II above, pp. 14-15.

drawn or changed in the manner prescribed by the Federal Power Act (Sec. 205 as described by the Commission in its Opinion No. 173A, R. Vol. 16, pp. 5178, 5186-5188), constituted the only lawful terms of service for Penn Water.* Any departure by the parties thereto would itself be unlawful.

Texas & Pacific Ry. v. Mugg, 202 U. S. 242 (1906);
Texas & Pac. Ry. v. Abilene Cotton Oil Co., 204 U. S. 426, 439-449 (1907);
Western Union Tel. Co. v. Esteve Bros. & Co., 256 U. S. 566, 573 (1921);
Davis v. Henderson, 266 U. S. 92, 93 (1924);
Davis v. Cornwell, 264 U. S. 560 (1924);
Northwestern Pub. Serv. Co. v. Montana-Dakota Co., 181 F. 2d 19, 22-23 (1950); affirmed *Montana-Dakota Co. v. Northwestern Pub. Serv. Co.*, 341 U. S. 246 (1951).

The Eighth Circuit's opinion in the *Montana-Dakota* case states in part:

> "The plan or scheme of the Federal Power Act is analogous to that of the Interstate Commerce Act * * *, and decisions under the latter Act should be controlling here * * * The rates filed and approved by the Commission are the lawful rates until changed in the way approved by the Act * * *
>
> "Moreover, the transmission of electric energy being at wholesale and interstate, the seller must collect the charge named in the filed rate and the purchaser must

* It has long been established administrative and utility law that, however great a regulated utility's substantive right may be, it must comply with the procedures established by the law for perfecting it.
State ex rel. v. Kansas Postal Tel. Co., 96 Kan. 298 (1915), holding that a utility with a constitutional right to discontinue service, because it was operating at a loss, must nevertheless comply with the procedure of securing Commission approval to withdrawal.
State ex rel. R.R. Commissioners v. Bullock, 78 Fla. 321 (1919), affirmed 254 U. S. 513 (1921).

pay that rate. So long as the filed rate is not changed in the manner provided by the Act it is to be treated as though it were a statute, binding upon the seller and the purchaser alike."

This Court, in affirming on other grounds in the *Montana-Dakota* case, recognized the doctrine of the filed tariff, saying in part that the utility "* * * can claim no rate as a legal right that is other than the filed rate, whether fixed or merely accepted by the Commission, and not even a Court can authorize commerce in the commodity on other terms". Under the above-cited cases, and upon reason as well as authority, this doctrine applies not only to rates but of necessity to the services to which the rates relate and all applicable terms of service.

The Fourth Circuit, in deciding the *Penn Water Contract Case*, must have had this law well in mind when it rested its decision partly upon the case of *Georgia v. Pennsylvania R.R. Co.*, 324 U. S. 439, 452-460 (1945). That case held that utilities as regulated industries are not *per se* exempt from the Sherman Act, but also stated clearly that in condemning a Sherman Act violation, the Court could not and would not intrude on the primary jurisdiction of the Interstate Commerce Commission over its filed tariffs.

Referring to *Keogh v. Chicago & N. W. R. Co.*, 260 U. S. 156, 161-162 (1922), the Opinion in the *Georgia* case (p. 453) states:

"* * * The legal rights of a shipper against a carrier in respect to a rate are to be measured by the published tariff. That rate until suspended or set aside was for all purposes the legal rate as between shipper and carrier and may not be varied or enlarged either by the contract or tort of the carrier. And it added: 'This stringent rule prevails, because otherwise the paramount purpose of Congress — prevention of unjust discrimination — might be defeated. * * *' "

Referring to *North Dakota, ex rel. Lemke v. Chicago & N. W. R. Co.*, 257 U. S. 485 (1922) and *Texas v. I. C. C.*, 258 U. S. 158 (1922), the *Georgia* case (p. 454) further states:

> "It is clear that a suit could not be maintained here to review, annul, or set aside an order of the Interstate Commerce Commission. Congress has prescribed the method for obtaining that relief. It is exclusive of all other remedies, including a suit by a State in this Court. * * *"

And, after referring to and quoting *Central Transfer Co. v. Terminal R.R. Assn.*, 288 U. S. 469 (1933), which likewise involved application of the "primary jurisdiction" doctrine as explicitly embodied in the Clayton Act, the *Georgia* case (p. 455) in referring back to all of these cases said:

> "* * * *We adhere to these decisions.* But we do not believe they or the principles for which they stand are a barrier to the maintenance of this suit by Georgia.
>
> "The relief which Georgia seeks is *not a matter subject to the jurisdiction of the Commission. Georgia in this proceeding is not seeking an injunction against the continuance of any tariff; nor does she seek to have any tariff provision cancelled.* * * *" (Emphasis added.)

The Fourth Circuit was apparently mindful of these clearly established limitations upon its powers. This is evidenced by the extent to which its Opinions observe that it does not purport to interfere with the overall authority of FPC or its rate-making powers. After discussing the FPC rate opinion affirmed below, the Fourth Circuit said (184 F. 2d 552, 566) that it did not

> "undertake to gainsay the view of the Commission that *even if the restrictive conditions of the basic contract are invalid*, as to which the Commission expressed no opinion, it still has the duty and authority under the Federal Power Act to encourage and establish the interconnection of electrical facilities * * *."

At the conclusion of its Opinion in the recently decided *Safe Harbor Contract Case* (Opinion of Jan. 3, 1952, pamphlet copy filed with this Court, pp. 22, 23), the Fourth Circuit summarized its position as follows:

> *"There need be no interference with the rate making power or the overall control of the Federal Power Commission.* We repeat with respect to Safe Harbor what was said in regard to Penn Water in our prior opinions, 184 F. 2d 552, 568, and 186 F. 2d 934, 937:
>
> > *"'It is not our function in this case to decide how far the activities of Penn Water and Consolidated under the basic contract are subject to the regulations of the Federal Power Commission or the Pennsylvania Public Utility Commission, either or both.* * * * It may well be, although the present arrangement between the Maryland and Pennsylvania utilities is invalid for the reasons set forth, that an interconnection of facilities and an interchange of electrical energy between them may be continued by some method that would meet with the approval of the appropriate regulatory authority and will not offend either the anti-trust laws or the utility laws of Pennsylvania' (184 F. 2d 568)."* (Emphasis added.)

The existing FPC orders preserve just such "an interconnection of facilities and an interchange of electrical energy" in full compliance with all applicable laws, and no

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* It must be observed, however, that in the *Safe Harbor Contract Case*, the Fourth Circuit indicated its belief that "further proceedings before the Federal Power Commission will doubtless be necessary if it is decided that the three party contract, as well as the two party contract, is invalid" (quoted in part and discussed above, p. 29). If this means that the Fourth Circuit felt it had by its action destroyed the rate orders (as is assumed by Miller, J., in dissent below) then the Fourth Circuit has accomplished collaterally a review and annulment of FPC Orders contrary to the exclusive review provisions of the Federal Power Act (Sec. 313). The essence of the matter is that the Fourth Circuit lacked any such power to collaterally destroy the rate orders.

further action by FPC is necessary to that end. Having found the operations of Penn Water as conducted from 1931 to date to be in the public interest, but at unjust and unreasonable rates, FPC has prescribed just and reasonable rates and the conditions of service to which they apply (the latter being the conditions of service as previously rendered). The schedules prescribed by the Commission replace the pre-existing "filed tariffs" as well as the contracts between the parties, as far as service and rates are concerned. Even assuming that the Fourth Circuit had jurisdiction to condemn the contracts between the parties because of certain provisions which the Court deemed to be illegal *per se*, its decision can have no direct effect upon the filed tariffs or services as rendered thereunder prior to the effective date of the FPC Orders, nor can it have any direct effect upon the schedules required by those Orders, which continue operations and services found to be in the public interest and establish reasonable rates therefor.

Petitioners asked the Court below and now ask this Court improperly to accept the Fourth Circuit decisions, without any inquiry into their merits, as the basis for annulling the FPC rate orders. The Court is asked to do so, without any record from FPC as to its views after hearing and argument before it, regarding the matters urged upon and accepted by the Fourth Circuit. Only if such hearing and argument is had before FPC *in advance of determination of such questions by the Courts* can there be a proper reconciliation of the policy of the Sherman Act and the Federal Power Act, and proper uniformity and consistency of regulation attained.*

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* See argument and cases above, pp. 29-30, showing the need for exhaustion of administrative relief even as to questions of law, and the advantages attached to administrative determination of "coverage" of the statute.

Petitioners' arguments constitute a studied and carefully presented attempt: first, to divert this Court's attention from the purely procedural administrative law determination made by the Court below in denying petitioners' motions to annul; and second, to attract the Court's attention to an asserted conflict between the views of the Fourth Circuit and the Court below as to the interrelationship of the Sherman Act and the Federal Power Act, which had not been presented to FPC and hence could not have been covered by its Orders. They almost ignore the nature of the findings of the Court below that the Federal Power Commission, after 21,200 pages of record, has issued opinions and orders clearly within its jurisdiction under the Federal Power Act and amply supported by evidence in that record.

The Court below, faced with petitioners' motions to annul or remand (which made there the same studied presentation as is made here), painstakingly considered whether the Fourth Circuit's decision regarding the applicability of the Sherman Act, the Pennsylvania public utility laws, and public policy to the long-term power contract between Penn Water and Consolidated would apply equally to the FPC rate orders. It was claimed below, as here, that the Fourth Circuit decisions had the collateral effect of destroying the rate orders without further inquiry.

In answering the argument of petitioners, the Court below expressed its opinion that integrated electric power service arrangements which might be illegal as entered into by agreement of the parties (whether because of the Sherman Act or some other law) might, nevertheless, be lawful if compelled by Congress acting through a duly established regulatory agency (R. Vol. 18, pp. 5370-5374). This was correct. The Court was also correct in not basing

its decision upon its opinion as to this or any other matter which might be within FPC's primary jurisdiction to determine in the first instance. It clearly pointed out to petitioners that if a definitive decision as to such matter is to be had, it must occur only after petitioners (or others) have properly presented the matter to FPC, under its rules made in proper pursuance under the applicable provisions of the Federal Power Act. The Court below said (R. Vol. 18, pp. 5375-5376):

> "In our view, the Fourth Circuit's opinion neither purported to nor did relieve Penn Water from its obligation under the Federal Power Act to continue the then existing services and rates. *It is those services and rates, reflecting underlying operations, which were the subject of the Commission's order.* 'A rate is not necessarily illegal because it is the result of a conspiracy in restraint of trade in violation of the Anti-Trust Act. What rates are legal is determined by the regulatory statute. *The validity of Commission action in this proceeding must be determined in light of the criteria furnished by the Federal Power Act, as applied to the operations and arrangements under scrutiny. If jurisdiction was properly assumed by the Commission, if its rate order is 'just and reasonable' within the meaning of the Federal Power Act, and if its findings are supported by substantial evidence, Penn Water can have no complaint and our review is at an end. If petitioners, as a result of the Fourth Circuit's decision, wish to make any changes in operations, contracts, arrangements, etc., within the jurisdiction of the Federal Power Commission, they must do so in accordance with the Federal Power Act.* Under §205(d) thereof, 'Unless the Commission otherwise orders, no change shall be made by any public utility in any such rate, charge, classification, or service, or in any rule, regulation, or contract relating thereto, except after thirty days' notice to the Commission and to the public.' Pursuant to that section, petitioners may submit new arrangements

and rates based thereon to the Commission. And the Commission 'either upon complaint or upon its own initiative without complaint' may 'enter upon a hearing concerning the lawfulness of such rate, charge, classification, or service * * *.' *If Penn Water feels itself aggrieved after such proposed changes have been acted upon by the Commission, it may at that time bring a new petition for review.* In short, a 'rate established in the mode prescribed should be deemed the legal rate and obligatory alike upon carrier and shipper until changed in the manner provided' by the statute." (Emphasis added.)

This portion of the Opinion shows the real procedural nature of the Court's decision below. It states sound basis for affirmance here.

The Court below determined, on the record as made before FPC, that those matters left for review by the Court under the review provisions of the Federal Power Act (Sec. 313), concerning the FPC's power to determine just and reasonable rates and terms of service, were properly decided by FPC. The decisions of the Fourth Circuit in both contract cases affect in no way the justness or reasonableness of the FPC rate orders in relation to the facts of operation. Penn Water does not (and cannot) deny that services have continued during the period subsequent to February 1, 1949, in the same manner as they have always been rendered since 1931 and as testified by Penn Water's officers before FPC. If the Fourth Circuit decisions can have any effect upon the future reasonableness of the rate orders, particularly with regard to any desire of Penn Water to offer services in different form, or at different rates, this issue remains to be raised and established by Penn Water in the orderly manner prescribed by Section 205(d) of the Federal Power Act, and upon a properly made new record with reference thereto. It presents no basis for condemning the orders in this proceeding.

The benefits to the public which will result from the final, but much delayed, affirmance of FPC's Orders should not be further delayed. Again, the opinion below succinctly summarizes the legal and practical reasons why the motions to annul or remand were denied, which reasons apply equally to support affirmance here (R. Vol. 18, pp. 5376-5377):

> "To grant petitioners' motions and set aside the order at this time would be to substitute antitrust criteria for those of the Federal Power Act, a substitution which would be at cross-purposes with the intent of Congress. It would result in the reopening of a rate proceeding begun in 1944 because of an issue raised for the first time on rehearing in 1949 and a decision handed down in a suit between private parties under a non-controlling statute in 1951. In view of this chronology, we think the Supreme Court's statement in *Interstate Commerce Commission v. Jersey City*, 322 U.S. 503, 514 (1944), is especially pertinent: 'If upon the coming down of the order litigants might demand rehearings as a matter of law because some new circumstance has arisen, some new trend has been observed, or some new fact discovered, there would be little hope that the administrative process could ever be consummated in an order that would not be subject to reopening.' *The effect of granting petitioners' motions would be to disrupt a pattern of regulation which was carefully drawn to meet the problems of a complex industry.*" (Emphasis added.)

Petitioners are not harmed by an affirmance of the decision below, which would leave to Penn Water its orderly remedy by way of petition to FPC to change its services and rates, provided it can show justification for such changes. In the meantime, service will be rendered, in the same manner it has been rendered since 1931, under tariffs which were found by FPC to be in the public interest as to the integrated coordinated power system created thereby.

The rates have been prescribed as just and reasonable upon a record which contains no reversible error.

Any result, other than affirmance of the result below, would perpetrate a gross injustice upon the Maryland rate-paying public, and would lead only to the chaos and confusion which the Federal Power Act sought to avoid by providing for the filing of new tariffs with the Commission when a change in service is sought, whatever the reason for change may be.

This Court should decline to issue judgment in this case upon the questions presented by Penn Water and the Pennsylvania Commission as to whether the rate orders of the Commission here involved are fraught with the illegalities attributed (and we believe erroneously attributed) to the contracts, as contracts. That question can be answered properly by a Court only after Penn Water has made a proper record with reference thereto before the Federal Power Commission, in conformity with the orderly processes prescribed for making a change in its services and rates. The following argument, however, briefly shows that the rate orders do not violate either the Sherman Act (and related federal laws), or the Pennsylvania law, or public policy.

3. The Rate Orders should not be Annulled or Remanded Because of the Sherman Act.

a. The Rate Orders are official acts of the United States Government, and as such, are not subject to the Sherman Act.

As held by the Court below (R. Vol. 18, pp. 5367-5376), the rate orders were issued in direct pursuance of authority conferred by the Federal Power Act. As such, they are acts of the United States Government which are not to be

stricken down by a statute of that Government passed many years earlier to control the acts of private individuals, not the Government. *Parker v. Brown*, 317 U. S. 341, 350-352 (1943). If a State, as in *Parker v. Brown*, may order action by individuals, which if taken on their own initiative would violate the Sherman Act, the same doctrine most certainly protects the act of the Federal Government in prescribing the existing FPC rate orders.

FPC has not ordered, as contended by petitioners, a violation of the Sherman Act, or approved action of private individuals taken in violation of the Sherman Act. It does not purport to free or authorize Penn Water, Consolidated, Safe Harbor, or any others, to contract or combine in violation of the Sherman Act or any other law. It has in fact issued rate orders in pursuance of authority of the Federal Power Act, which accomplish the very purpose of the Sherman Act by an assurance that the public be not overcharged as a result of private action by contract, combination, or conspiracy. Penn Water is engaged in an all out effort to avoid the FPC orders, retain the substantial amounts involved in the rate orders, and for the future secure a higher rate of return if, and to the extent, it can avoid FPC control. It is inconceivable that the Sherman Act can be perverted to accomplish a result so contrary to its original and continuing policy.

b. FPC HAS MADE IT EXPLICIT THAT IT HAS NOT ORDERED ANY ILLEGAL SERVICE ARRANGEMENT.

In the rate schedules which FPC prescribed in its Order of Oct. 27, 1949 (R. Vol. 17, pp. 5267, 5283), the final paragraph of the schedule for Penn Water reads:

> "The foregoing provisions supersede only the rates and charges heretofore made, demanded, collected or assessed against Baltimore Company by Penn Water

and Transmission Company. All other provisions of the aforementioned contracts, in and of themselves lawful prescribing or defining the power, energy and transmission services to be furnished, or any classification, practice, regulation or rule affecting such services, which several provisions are incorporated herein by reference, shall be observed and be in force."

Having been faced, in the petition for rehearing, with Penn Water's assertion that it was attacking its power contract in the courts because Articles IV and V violated the Sherman Act and other laws, FPC incorporated into its order only the "*service*" provisions of the contract (not as *contract* — but as part of the order) and then only such provisions as would be "in and of themselves lawful". This established clearly for Penn Water that the rates had been and were to remain fixed in relation to service and operations, and not in relation to Articles IV and V (legal or illegal) or any other provisions of the contract as such. FPC purposely omitted all that did not constitute a "classification, practice, regulation, or rule affecting such service."

Although we believe that a prescription of the entire Penn Water contract as a rate and service schedule would not have constituted an illegal order, subject to be annulled without inquiry as to the merits by the Fourth Circuit decisions, FPC ordered a schedule for service to Consolidated which does not embody as service arrangements any provisions of the contracts which might properly be deemed to be unlawful *per se*. In the argument below, Commission counsel adopted a construction of the schedule as eliminating Articles IV and V of the Penn Water contract, because the Fourth Circuit had found them, and only them, to be illegal *per se* (see footnote, *supra*).

Accordingly, whatever may be the merits as to petitioners' arguments that the Penn Water contract violates

the Sherman Act and related laws, because of the provisions of Article IV (controlling contracts with others) and Article V (controlling expansion), FPC takes the position that these Articles are not necessary to the rate schedules and are not prescribed thereby.

Apparently recognizing the weakness of basing their position on the only Articles which the Fourth Circuit found to be *illegal per se*, petitioners have now shifted their attack to an assertion of illegality in the method of payment, which they refer to as "illegal revenue pooling" (PUC brief, p. 29; P. W. brief, p. 21, and many repetitions in each brief). Petitioners apparently hope, by the force of repetition of these words, to establish an illegality in the form of payment which the Fourth Circuit refused to find in any of its Opinions, although it was most vigorously pressed upon the Court by Penn Water.

The form of payment provided for is obviously not "illegal revenue pooling". The benefits thereof were explained at length to FPC by the officers of *Penn Water* (R. Vol. 1, pp. 26, 70-71), and have been fully approved and ordered by FPC. In their inception they were modeled upon the Conowingo contract which had been approved by FPC, the Pennsylvania Commission, and the Maryland Commission.

If payment provisions of the rate orders in any way restrict Penn Water's incentive or initiative to render safe, adequate, and non-discriminatory service to the public, it is only by way of affording an exact method whereby from year to year Penn Water is permitted, and guaranteed, to earn an exact return — namely, the just and reasonable return as established by FPC from substantial evidence in the record. In this respect, the rate orders clearly accomplish the purpose and policy of both the Federal Power Act and the Sherman Act.

C. The Fourth Circuit Opinions cannot be accepted as conclusive here of the Sherman Act determinations made by that Court.

The Penn Water Contract Case

Although certiorari has been denied by this Court in the *Penn Water Contract Case,* (184 F. 2d 552, cert. den. 340 U. S. 906 (1950)), the denial of certiorari does not amount to approval of the decision on its merits. *Agoston v. Commonwealth of Pennsylvania,* 340 U. S. 844 (1950).

Before this Court considers petitioners' arguments that the rate orders are invalid because they rest on illegal contracts, the Court must itself appraise the asserted grounds for illegality in the light of the record in the instant case. This record will show that many of the unfounded statements of Penn Water made in unaccepted proffers in the *Penn Water Contract Case,** and now repeated as fact in the briefs here, are contrary to fact and to the testimony of Penn Water's officers in this case (R. Vol. 1, pp. 14-28, 30-34, 68-78).** Their testimony herein shows that Penn Water in fact has no distribution territory in Maryland or Pennsylvania and has never sought to compete with its customers in Maryland or Pennsylvania, but has accepted its proper regulated business role as a generating utility selling at wholesale only;† that the 1931 contract was not entered into to "throttle" competition or to "stifle" Penn Water's incentive or initiative, but was a necessary arrange-

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* Which, being excluded in the trial court, were not subjected to cross-examination or met by rebuttal testimony.

** See footnote, p. 11.

† R. Vol. 1, p. 32, Mr. G. W. Spaulding, now President of Penn Water, testified:

> "It has never attempted to develop local distribution systems nor to enter upon a retail distribution business, nor has it attempted to compete with its other utility customers for bulk power industrial customers."

ment to enable Penn Water's unfirm hydro power from a river of widely fluctuating flow to be more effectively used in connection with the necessary large steam resources of Consolidated. The testimony in this record shows no dominating Consolidated,* but rather the true story of how Penn Water's officers claimed full credit for developing the hydro resources of the Susquehanna River, obtaining their greatest accomplishment in the 1931 contracts which achieved the "most economical result attainable" (R. Vol. 1, p. 26) "to the end of maximum utilization of natural resources, minimumization of investment and the utmost in service availability to the ultimate consumer" (R. Vol. 1, p. 69).

Now, petitioners urge this Court to strike down not only the contracts, but government orders based upon 21,200 pages of record and 602 exhibits, by merely looking at the face of the contracts, the Opinions of the Fourth Circuit (based upon a map and the face of the contracts), and the same map in the back of Penn Water's brief here.**

This, we respectfully say, cannot be the case. If it is to be given serious consideration at all, the Court should review the arguments presented by Consolidated and the Maryland Commission in their petitions for certiorari in the *Penn Water Contract Case* (October Term 1950, No. 424) as related to the facts now available in the instant record, and arrive at the correct conclusion that there is no "*per se*" violation of the Sherman Act involved.

On the contrary, the contract was a proper and lawful business means of developing and expanding the benefits

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* R. Vol. 1, p. 33, Mr. Spaulding testified:
"Penn Water is in the unique position of being the only *non-captive* wholesaling utility company in the United States."

** P. W. brief, p. 3 n. "**".

to be obtained from a valuable natural resource. Through it, Consolidated purchased and guaranteed the return upon the entire output of the Penn Water plant until 1980, subject to such existing contracts for sale to others as might be renewed or new contracts which might be made with Consolidated's consent (or required by law to be made) to others. Entire output contracts have never been illegal *per se*.

It is submitted that the Fourth Circuit misconstrued and misapplied this Court's decisions as to what constitutes a restraint of trade *per se*, in applying them in this area of government-regulated monopoly to such an arrangement. Of course, any concerted tampering with the *market price structure* cannot be justified. *United States v. Socony-Vacuum Oil Co., Inc.*, 310 U. S. 150 (1940); *United States v. Trenton Potteries Co.*, 273 U. S. 392 (1927). But obviously concerted action, whereby the producer of energy and the purchaser thereof agree upon a price (even a complicated price) for the energy sold, is not *market price fixing*. If it were, every contract for purchase and sale would be *ipso facto* illegal.

Furthermore, the price of Penn Water's sales to Consolidated and to each of its Pennsylvania customers were subject to the complete supervision and control of FPC, which had been exercised before the Fourth Circuit acted. The decisions of this Court which we believe required application of the rule of reason to such a transaction were ignored by the Fourth Circuit. They should have applied to sustain both the Penn Water and Safe Harbor contracts, if they were at all subject to the Sherman Act.

Standard Oil Co. v. U. S., 221 U. S. 1 (1911);
Board of Trade of Chicago v. U. S., 246 U. S. 231 (1918);

U. S. v. Bausch and Lomb Co., 321 U. S. 707, 728-9 (1944), (exclusive dealing arrangement);
U. S. v. Yellow Cab Co., 332 U. S. 218 (1947), 338 U. S. 338 (1949), (vertical and horizontal integration);
U. S. v. Columbia Steel Co., 334 U. S. 495 (1948), (horizontal integration);
U. S. v. Paramount Pictures Corp., 334 U. S. 131, 173-4 (1948), (vertical integration by stock control and ancillary contracts);
Standard Oil Co. of California v. U. S., 337 U. S. 293, 311-313 (1949).

The Safe Harbor Contract

The Fourth Circuit's decision in the *Safe Harbor Contract Case*, decided January 3, 1952, is pending certiorari before this Court in Nos. 611 and 612. There is no need to repeat here the reasons for granting certiorari that are fully stated in the petitions there. The Department of Justice (charged with the enforcement of the Sherman Act), representing FPC (charged with carrying out the policies of the Federal Power Act), has intervened and urges that certiorari be granted. We respectfully urge that the merits of the decision of the Fourth Circuit must be reviewed and independently judged by this Court before that decision be accepted, as urged by petitioners here, as forming any basis for questioning the rate orders here involved.*

It is with reference to the Safe Harbor power that petitioners urge that the rate orders rest for their allocation of the reduction upon "entitlements" under the Safe Harbor contract, and hence must fail (P. W. brief, p. 55; P. U. C. brief, p. 32). There are several answers to this argument.

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* The actual facts behind the 1931 contracts and the relations of Penn, Water, Safe Harbor, and Consolidated are set forth in the affidavits of Robert T. Greer and R. L. Thomas in the Record of Nos. 611 and 612 (R. 115 and 123).

First, the Fourth Circuit found nothing illegal in Consolidated's purchase until 1980 of two-thirds of the entire Safe Harbor output. Petitioners can point to no place where the Fourth Circuit, or any other Court, has so held.

Secondly, although Penn Water sought in every way throughout the FPC hearings (except by attacking the legality of the contract) to prevent an allocation to Consolidated of its clearly equitable right to two-thirds of the entire output of Safe Harbor, FPC and the Court below found that the record presents nothing to support Penn Water's contentions. The Court below said:

> "The materials before the Commission were hardly consistent with the interpretation now sought by Penn Water. They pointed instead to the view, adopted by the Commission, that Baltimore Company (Consolidated) had a two-thirds entitlement from Safe Harbor which was diverted by Penn Water in order to satisfy its Pennsylvania commitments" (R. Vol. 18, p. 5391).

Thirdly, whatever may be the status of the Safe Harbor contract, the FPC Order in the *Safe Harbor rate case* (5 F. P. C. Rep. 221), affirmed by the Third Circuit (179 F. 2d 179, cert. den. 339 U. S. 957 (1950)), has required Consolidated to pay for two-thirds of the Safe Harbor output and to continue doing so until changed under the law. An allocation can hardly be held arbitrary or unlawful for crediting Consolidated with what it is obligated by law to buy.

The Safe Harbor contract decision by the Fourth Circuit, without inquiry into its merits, cannot be interpreted as supporting petitioners' arguments to strike down the allocation involved in the rate orders under appeal, because of artificial contractual entitlements.

4. The Rate Orders Should Not be Annulled or Remanded Because of the Pennsylvania Public Utility Law or Public Policy.

Earlier arguments, without further elaboration, establish here also that the rate orders, as orders prescribed by the Federal Government through FPC acting under authority conferred by the Federal Power Act, are removed from condemnation by statutes or common law policy which might apply to private contracts.

Also, to the extent that the rate orders omit Articles IV and V of the Penn Water contract from the prescribed rate schedules, they do not even conflict with the decision of the *Fourth Circuit* upon which Penn Water relies. The Fourth Circuit (184 F. 2d 552, 566), related that portion of its Opinion dealing with Pennsylvania law and policy solely to Articles IV and V,* saying:

> "There can be no doubt that the freedom of action of Penn Water as a public utility of the State has been and is restricted by the provisions of Articles IV and V of the basic agreement * * *."

However, the Fourth Circuit decisions, assuming *arguendo* that they may be related to the rate orders, were in clear error in applying to licensee-public utilities (Penn Water and Safe Harbor) the provisions of the Pennsylvania public utility law referred to by the Fourth Circuit, 184 F. 2d 552, 566 (1950). When it is considered that *every provision* of Penn Water's contracts constituted a term of an interstate sale of electric energy at wholesale within the meaning of the Federal Power Act, filed as a tariff with FPC and completely subject to the jurisdiction of FPC

* As did its entire reasoning concerning invalidity under the Sherman Act and other federal statutes.

under the Federal Power Act, there could be no proper application of Pennsylvania law thereto.

As the commerce clause of the Constitution removes the interstate sale of electricity at wholesale from the regulatory power of the States, even in the absence of Congressional control, *P. U. C. v. Attleboro Steam and Electric Co.*, 273 U. S. 83 (1927), there is clearly no jurisdiction in the States once the national control has been expressed under the comprehensive provisions of the Federal Power Act, and has been exercised by FPC acting thereunder. The sections of the Pennsylvania Public Utility Law cited in the Pennsylvania Commission's brief (pp. 45-49), only some of which were relied on by the Fourth Circuit (184 F. 2d 552, 566), are the normal provisions relating to adequacy of service, abandonment or termination of service, the maintenance of just and reasonable service, and the power to sell, assign, lease, consolidate, or merge its property, powers, franchises or privileges, etc. There are corresponding provisions of the Federal Power Act (Secs. 8, 20, 202, 203a, 205, 206, and 207) which completely remove from the application of Pennsylvania law the entirely interstate business of Penn Water and Safe Harbor. These companies have no intrastate sales subject to the jurisdiction of the Pennsylvania Commission or the Pennsylvania public utility law.

The Fourth Circuit (184 F. 2d 552, 568), in partial justification of its decision in the *Penn Water Contract Case*, said:

> "The evidence in this case shows that Penn Water is engaged in the *production and local distribution* of electrical energy to local utilities which distribute power to consumers in Pennsylvania, and in respect to this business, it seems clear that the state commission possesses regulatory power".

Earlier in its Opinion, the Fourth Circuit (184 F. 2d 552, 555) had correctly stated that "Penn Water sells its electric

energy and services in bulk to five customers". It continued with a correct description of the sales to Consolidated, ME, PP&L, and PE* (which are all interstate sales at wholesale, subject in their entirety to FPC jurisdiction, as found by FPC in the instant case upon substantial evidence in the record and confirmed by the Court below, R. Vol. 18, pp. 5382-5384) and to the Pennsylvania Railroad which is likewise an interstate sale in bulk.** Penn Water simply does not have any "local business" or "local activities" such as the Fourth Circuit stated, and there is no explanation or justification for the portion of its Opinion (184 F. 2d 568) which flatly contradicts the correct statement at the beginning of the Opinion (184 F. 2d 555). Obviously, whatever the Fourth Circuit said (and we have earlier indicated the complete lack of a factual record there), this Court must be governed by the instant record, and the FPC findings fully supported by evidence, that Penn Water has no intrastate business (R. Vol. 18, pp. 5382-5384).

The Fourth Circuit's decision to apply State utility law to Safe Harbor's operations was even more flagrant. There is no intrastate service for State utility law to control. FPC's *Safe Harbor rate case* Opinion (5 FPC Rep. 221 (1946)), asserting control over *all* of Safe Harbor's sales, had been affirmed by the Court of Appeals for the Third Circuit, 179 F. 2d 179 (1949), and certiorari had been denied by this Court, 339 U. S. 957 (1950). Beyond that, and resting thereon, a special statutory three-judge court for the Middle District of Pennsylvania has enjoined the

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* Metropolitan Edison Company, Pennsylvania Power and Light Company, and Philadelphia Electric Company.

** FPC did not assert control over the sales to the Pennsylvania Railroad, but obviously that does not make it local business subject to State control. It is a sale in interstate commerce, out of the same interstate power pool as found by FPC, but was exempted from the instant Orders because it is not a sale at wholesale for resale.

Pennsylvania Commission from exercising rate control over Safe Harbor, finding that Safe Harbor makes no intrastate sales.* This aspect of the *Safe Harbor Contract Case* clearly disregards controlling federal law and the commerce clause of the Constitution, and calls for review and reversal by this Court.

CONCLUSION

We believe that we have fully supported the preliminary statement with which we began this brief, and which summarizes our position at its conclusion.

It is respectfully submitted that the judgments and orders of the Court of Appeals for the District of Columbia Circuit should be affirmed in all respects.

Respectfully submitted,

CHARLES D. HARRIS,
General Counsel,
Public Service Commission
of Maryland,
Intervenor-Respondent.

Baltimore, Maryland
March 27, 1952.

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* *Consolidated Gas Electric Light and Power Company of Baltimore v. Siggins, et al.*, 99 F. Supp. 151 (1951).

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Nos. 428 and 429

In the Supreme Court of the United States

OCTOBER TERM, 1951

PENNSYLVANIA WATER & POWER COMPANY, ET AL.,
PETITIONERS

v.

FEDERAL POWER COMMISSION, ET AL.

PENNSYLVANIA PUBLIC UTILITY COMMISSION,
PETITIONER

v.

FEDERAL POWER COMMISSION

ON WRITS OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

BRIEF FOR THE FEDERAL POWER COMMISSION

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In the Supreme Court of the United States

OCTOBER TERM, 1951

No. 428

PENNSYLVANIA WATER & POWER COMPANY, ET AL., PETITIONERS

v.

FEDERAL POWER COMMISSION, ET AL.

No. 429

PENNSYLVANIA PUBLIC UTILITY COMMISSION, PETITIONER

v.

FEDERAL POWER COMMISSION

ON WRITS OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

BRIEF FOR THE FEDERAL POWER COMMISSION

OPINIONS BELOW

The main opinion of the Federal Power Commission, issued on January 5, 1949, directing a rate reduction (R. XVI, 4845–4997)[1] is reported

[1] The record in these cases consists of eighteen printed volumes and several unprinted volumes of transcripts and ex-

at 8 F. P. C. 1, 82 PUR (NS) 193. Its opinion of February 28, 1949, denying rehearing (R. XVI, 5178–94) is reported at 8 F. P. C. 170, 82 PUR (NS) 286, and its opinion order, issued October 27, 1949, rejecting proposed tariffs and prescribing rate schedules (R. XVII, 5267–5292) is reported at 8 F. P. C. 1193, and its order denying rehearing thereon at 8 F. P. C. 1364. The opinions of the Court of Appeals for the District of Columbia Circuit (R. XVIII, 5367–5393, 5402–5419) are reported at 193 F. 2d 230.[2]

JURISDICTION

The judgment of the Court of Appeals in these cases was entered on July 3, 1951 (R. XVIII, 5394–5). Petitioners' applications for rehearing,

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hibits. We will use roman numerals to refer to volumes and arabic numbers to refer to pages. Thus (Tr. VI, 73) and (R. XVI, 4991) will indicate page 73 in volume six of the unprinted transcript and page 4991 of volume sixteen of the printed record, respectively.

[2] Additional opinions here relevant are: (1) The opinions of the Court of Appeals for the Fourth Circuit in *Pennsylvania Water & P. Co.* v. *Consolidated G. E. L. & P. Co. of Baltimore*, 184 F. 2d 552 (C. A. 4), certiorari denied, 340 U. S. 906, 186 F. 2d 934 (C. A. 4) which appear at R. XVIII, 5322–49, 5356–61; (2) the opinion of the Court of Appeals for the Fourth Circuit in *Consolidated G. E. L. & P. Co. of Baltimore* v. *Pennsylvania Water & P. Co.*, decided January 3, 1952, pending on petitions for writs of certiorari, Nos. 611, 612, this Term. The first decision of the Fourth Circuit will be referred to below as "the first *Consolidated* case," or "the *Penn Water* antitrust case." The second decision will be referred to as "the second *Consolidated* case" or "the *Safe Harbor* antitrust case."

seasonably filed, were denied on September 6, 1951 (R. XVIII, 5399). The petitions for writs of certiorari were filed on November 16, 1951 and granted on February 4, 1952 (R. XVIII, 5419). The jurisdiction of this Court rests upon 28 U. S. C. 1254 (1) and Section 313 (b) of the Federal Power Act.

QUESTIONS PRESENTED

1. Whether the Federal Power Commission's orders reducing rates and prescribing rate schedules for Penn Water are invalidated by the antitrust laws.

2. Whether the Federal Power Commission orders are invalidated by the laws of Pennsylvania.

3. Whether Penn Water's wholesale sales to its electric utility customers in Pennsylvania are in interstate commerce.

4. Penn Water also presents the question as to whether its status as a "licensee" under Part I of the Federal Power Act exempts it from regulation as a "public utility" under Part II. Since the Commission's orders are based upon and are valid under both Parts, we do not think this question has any materiality in this case.

STATUTE INVOLVED

The pertinent provisions of the Federal Power Act (Title II of the Public Utility Act of 1935, c. 687, 49 Stat. 803, 838, 16 U. S. C. 791a, *et seq.*) appear in the pamphlet copy of the Act submitted with this brief.

STATEMENT

These cases were instituted by the filing under Section 313 (b) of the Federal Power Act of three petitions for review of two orders of the Federal Power Commission in the Court of Appeals for the District of Columbia Circuit. Two of the petitions, one filed jointly by Susquehanna Transmission Company of Maryland[3] and Pennsylvania Water and Power Company (Penn Water) on April 22, 1949, and the other filed by the Pennsylvania Public Utility Commission (Pennsylvania Commission) on April 25, sought review of the Power Commission order, issued January 5, 1949, requiring Penn Water to reduce, effective February 1, 1949, its interstate wholesale rates and charges for electric energy by approximately $2,000,000 and thereby to reduce its net return from about $3,300,000 to $1,300,000 annually. The third petition was filed by Penn Water on February 8, 1950, seeking review of the Power Commission's order, issued October 27, 1949, rejecting rate schedules proposed by Penn Water in alleged compliance with the January 5 order and prescribing rate schedules to effectuate

[3] Because of doubts as to Penn Water's right to own and operate facilities in Maryland, Susquehanna Transmission Company of Maryland was created as a wholly owned subsidiary of Penn Water to own part of Penn Water's transmission facilities located in that State (R. 1, 20). By virtue of its arrangements with Penn Water, Susquehanna has no separate rates and charges. The references to Penn Water in this brief generally include Susquehanna.

those rate reductions. While these petitions were pending before the court below, petitioners filed motions to annul the Power Commission's orders on the ground that the contract between Penn Water and Consolidated Gas Electric Light and Power Company of Baltimore (Consolidated), on which these orders were allegedly based, had been invalidated as violative of the federal antitrust laws and the laws of Pennsylvania by the Court of Appeals for the Fourth Circuit in Penn Water's private antitrust suit against Consolidated (the first *Consolidated* case).[4] The court below (one judge dissenting) denied the motions to annul and affirmed the orders of the Power Commission. The facts pertinent to the issues here involved may be summarized as follows:

Penn Water: Penn Water, a corporation organized under the laws of Pennsylvania, owns at Holtwood, Pennsylvania, on the Susquehanna River some nine miles north of the Pennsylvania-Maryland State line, a small steam electric plant and a "run-of-river" hydroelectric project which it operates under a 50-year license issued in 1951 by the Power Commission under Part I of the Federal Power Act (R. XVI, 4847–48, Order of July 3, 1951 in Project 1881).[5] In addition,

[4] When the motions were filed, the Fourth Circuit had not yet ruled that the Safe Harbor contract was also invalid.

[5] The Power Commission ordered Penn Water to apply for a license in 1939 and its order was sustained in 1941. *Pennsylvania Water & P. Co.* v. *F. P. C.*, 123 F. 2d 155 (C.

Penn Water, in conjunction with Susquehanna, owns and operates transmission lines and associated equipment located in Pennsylvania and Maryland (R. XVI, 4847-48). These transmission lines interconnect with those of Consolidated (the Baltimore electric company) and of Safe Harbor Water Power Corporation (Safe Harbor).[6] They also interconnect with the facilities of Penn Water's Pennsylvania customers, including the Thorndale-Columbia section of the Pennsylvania Railroad (Railroad), and with the facilities of the Potomac Electric Power Company and of the Perryville (Md.)-Benning (D. C.) section of the Railroad (R. XVI, 4849).

A. D. C.), certiorari denied, 315 U. S. 806. Penn Water thereafter applied for a license, but it did not accept the terms of the tendered license until 1951. In these proceedings, however, Penn Water contended, and the Power Commission agreed, that Penn Water should be treated as a licensee for rate-making purposes (R. XVI, 4864).

[6] Safe Harbor is a Pennsylvania corporation which owns and operates under a 50-year license issued in 1930 by the Power Commission a large "run-of-river" hydroelectric project on the Susquehanna River several miles above Penn Water's project. All of its stock is owned by Penn Water and Consolidated: 100,000 shares of Class A nonvoting stock are owned by Consolidated and 200,000 shares of Class B voting stock are divided equally between Penn Water and Consolidated (R. XVI, 4850). Safe Harbor's rates and charges have been held subject to regulation by the Commission, both as a "licensee" under Part I of the Federal Power Act, and as a "public utility" under the Act's Part II. *Safe Harbor W. P. Corp.*, 5 F. P. C. 221, 231–243, 66 PUR (NS) 212, 222–223, affirmed, 179 F. 2d 179 (C. A. 3), certiorari denied, 339 U. S. 957.

Penn Water has no franchise service area and does not itself sell to the public. Ever since its incorporation in 1910, Penn Water has disposed of its power in bulk to other utilities. It has never attempted to develop local distribution systems, to enter upon a retail distribution business, to compete with its utility customers for bulk power industrial customers, or to secure substantial monopolized distribution territory (R. I, 32). In addition to its arrangements with Consolidated (see *infra*), Penn Water has contractual obligations to sell firm electric energy to three electric utilities in Pennsylvania,[7] and to the Railroad for electrified railroad use in Pennsylvania (R. XVI, 4851–54).

The Contract with Consolidated: Under a contract which was entered into in 1931 (R. XV, 4606 *et seq.*) and which was to remain in effect until April 22, 1980 (R. XV, 4607), Penn Water and Consolidated agreed so to operate their power generating facilities that they would obtain "the most effective utilization of output, and coordination in operation, of the two plants" (R. XV, 4606–7).[8] Under Article II Penn Water

[7] Metropolitan Edison Company for part of its requirements in York, Pennsylvania; Philadelphia Electric Company for its requirements in Coatesville, Pennsylvania; and Pennsylvania Power and Light Company for its obligations in Lancaster, Pennsylvania (R. XVI, 4853).

[8] Penn Water and Consolidated were also party to a fifty-year agreement, effective June 1, 1931, with Safe Harbor, the third member of the power pool. Under the Safe Harbor

agreed to deliver to Consolidated all of Penn Water's capacity and energy "not otherwise disposed of in performance of now existing contracts, new contracts entered into by [Penn Water] with Consolidated's approval or any duty or obligation to serve imposed on [Penn Water] by its charter or otherwise by law" (R. XV, 4607–4608; XVI 4851). Penn Water, in turn, was entitled to obtain from Consolidated steam-generated energy in excess of Consolidated's own requirements up to the limits of the latter's available generating capacity to enable Penn Water to meet its firm power obligations in Pennsylvania (R. XV, 4585; XVI, 4851).[9]

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contract, Safe Harbor agreed with Consolidated and Penn Water (and the latter *inter sese*), that in return for a combined annual payment which would yield to Safe Harbor a specified rate of return after operating expenses (including taxes and depreciation) the latter companies should be entitled to *all* of the capacity and energy available from Safe Harbor's project in the ratio of two-thirds to Consolidated and one-third to Penn Water (R. XV, 4554–4576; XVI, 4851). Although under the arrangements the payment obligation is prorated between Penn Water and Consolidated in the ratio of their capacity and energy entitlements, the power generated by Safe Harbor is at the disposal of the power pool to permit the maximum utilization of the resources at lowest cost (R. I, 26; V, 2137–2138; XIII, 4369). This is the contract which, because of other provisions, the Fourth Circuit held to be invalid under the antitrust laws in the *Safe Harbor* antitrust case, in which petitions for certiorari are now pending in Nos. 611, 612, this Term.

[9] Consolidated's generating facilities, the principal steam-electric resources of the pool, consist now of four steam-electric plants of 385,000 kw. capacity. Safe Harbor's gener-

For the residue which it received from Penn Water, Consolidated paid in accordance with a formula contained in Article III whatever dollar amount was necessary, in addition to Penn Water's revenue from its customers, to cover all of Penn Water's cost of operation (including taxes and depreciation) and to provide Penn Water with a formula-determined rate of return on investment (R. XV, 4608–12; XVI, 4851) which amounted to from 9.9% to 12.4% per year between 1931 and 1945 on the rate base used by the Commission (R. IX, 3593). The formula for the computation of the amount Consolidated paid to Penn Water included credits to Consolidated for its deliveries to Penn Water and for Penn Water's diversion to its own use, with Consolidated's consent, of energy purchased by Consolidated under the contracts.

Article VIII provided for the appointment by each party of "one representative to act as its agent for investigation, consultation, and advice in all operating, engineering and accounting matters pertaining to the interconnected facilities herein contemplated, and to the supply and interchange of power and exchange herein provided for. * * * These representatives to be known as the Operat-

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ating facilities are exclusively hydro, its plant having an effective capacity of 230,000 kw. Penn Water's generating facilities are principally hydro with an effective capacity of 104,000 kw.; its steam-electric plant has a capacity of only 20,000 kw. (R. XVI, 4848, 4974).

ing Committee shall confer upon request of either; in case of their inability to agree, the question in dispute shall be submitted to the Presidents of the respective companies for their decision" (R. XV, 4614). The purpose of these arrangements, as stated in Article VIII, was "to encourage the maximum utilization of the power and energy entitlements and resources and other facilities of the parties * * * to the end that the joint use of this property and equipment shall give the greatest practical benefit to the public" (R. XV, 4613–4614; XVI, 4859–4860).[10]

In addition, Article IV of the contract required Penn Water to "obtain the approval of [Consolidated] before entering into any agreement or agreements * * * for the sale and/or purchase and/or interchange of electrical and hydraulic power and energy, or before making any substantial modifications in the existing contracts now in force between [Penn Water] and its customers other than [Consolidated]" (R. XV, 4612). Article V similarly required the obtaining of Consolidated's approval before Penn Water incurred "any single commitment for investment (except for renewals or replacements) in excess of $50,000 on the basis of which [Con-

[10] Article VIII goes on to provide that the parties "* * * shall so conduct their operations that economic interchange of power and energy during the different hours of the day, the seasons of the year, and over more prolonged periods, shall be encouraged in every possible way" (R. XV, 4614; XVI, 4860).

solidated] shall make payment" under the payment provision (R. XV, 4612–3).

The Power Pool: As a result of the arrangements as to power pooling and residual method of payment, Penn Water has been able to operate in a manner not otherwise possible because of the unusual nature of its system. Since its hydro plant, which constitutes the bulk of its energy resources, is essentially, a "run-of-river" plant,[11] Penn Water's ability to provide dependable capacity from its own resources is limited by the amount of water available in the Susquehanna River, which "is one of the most variable flowstreams of large size in the country" (Tr. III, 1236).[12] Most of the time there is not enough river flow to permit the operation of Penn Water's hydro plant to the full electric capacity of the generators.[13] At times of low flow it does not have sufficient capacity to supply the demands of its customers. Consequently, if dependent solely upon its own generating facilities to supply the firm power loads of its customers, it could not do so (R. V, 2149; Tr. X, 3626). For the

[11] Penn Water's hydraulic storage capacity is sufficient only to provide for a weekly cycle of drawdown and refill (R. I, 438–439).

[12] The flow of the river fluctuates widely from a low of 2,100 cubic feet per second to a high of 860,000 c. f. s. (R. I, 39).

[13] The Penn Water hydro plant can utilize a maximum of 31,500 c. f. s. (Tr. LIX, 22536), with the river flow more often than not being substantially less (Tr. LVIII, 22371; LXVI, 24764).

periods of low and high flow of the river do not coincide with periodic low and high demands for electric energy, which characteristically occur in daily, weekly and yearly cycles, each with its own peak;[14] since electric energy cannot feasibly be stored, all demands must be satisfied by capacity sufficient to produce electric energy instantaneously as customers switch on their lights, motors, and other appliances.

Moreover, if operated independently, Penn Water could not have made the most effective utilization of the potential resources of the river nor could it have obtained the maximum economy of generation (R. I, 25, 74-75, 440-441). Penn Water's inability to impound water during high-flow months for use in subsequent low-flow months, and the frequent recurrence of low river flows, limits its dependable capacity (R. I, 41; V, 2212-2216; XVI, 4971-72). These physical limitations, plus the excessive capital investment required for producing the relatively small dependable output,[15] would preclude Penn Water, if

[14] Daily peaks are usually in midmorning or midafternoon when industrial activity is highest, or in the early evening hours when residential use overlaps commercial and industrial uses. Weekly peaks usually occur in the first five working days of the week; weekly lows on week ends (and holidays). Yearly peaks usually occur in winter when darkness falls before the close of the working day, and frequently during the pre-Christmas period, when unusually high commercial and residential uses coincide with high industrial use (R. I, 42; Tr. LXV, 24222).

[15] Since the continuous output of the Penn Water plant at

operated independently, from competing successfully with steam plants and substantial water would have to be wasted over the spillways at times of high flow (R. I, 25; Tr. III, 1236).

Under the power pool arrangements worked out by Penn Water and Consolidated, Penn Water's hydro facilities have been integrated into a system which has steam generating facilities and supplies a large utility load (R. I, 32–33, 439; R. XVI, 4849–4850, 4857, 4987); this results in the most effective and economic use of Penn Water's hydro resources. Penn Water has been able to take on firm obligations and to meet them through the availability of power from Consolidated's steam-generation plants (R. V, 2397), which normally are capable of producing up to their full capacity;[16] in times of severe water shortage, Consolidated carries the main burden of

low water (2,100 c. f. s.) is only about 8,500 kw., the investment per kw. would be $3,897, compared to an average investment of $316 per kw. for electric plant in service of companies whose electric operating revenues are more than $250,000 per year. R. XVI, 4992; Tr. III, 1236; *Statistics of Electric Utilities in the United States* (Federal Power Commission 1950), p. xxi.

[16] Steam plants, not shut down for emergency or for scheduled maintenance, are usually capable of producing up to their full capacity at all times, including peak-load periods (R. VI, 2455), and usually are used in the order of their efficiency—the newer, larger, more efficient units being used most continuously (base-load operations), the less efficient units being put into operation for shorter periods as the load increases (peak-load operation) (R. I, 23, 36–37; VI, 2455).

supplying Penn Water's customers (R. XIV, 4405; XVI, 4981).

In addition, during periods of low river flow, Penn Water's hydro plant is shut down during daily and weekly off-peak load hours to permit water to accumulate. The steam plants of the pool are utilized to carry the load during such periods. Then during peak-load hours, the hydro plant is operated at full capacity for a few hours using the water which has accumulated during the period of non-use (R. I, 37, 439; VI, 2455; XVI, 4988; Tr. LIII, 20137). Through such peaking operation, Penn Water's hydro plant is used to the best advantage by contributing its maximum generating capacity to the system during peak-load hours when maximum capacity is needed and by saving the costs of using the oldest and most inefficient steam plants which would otherwise be used (R. I, 38–42; VI, 2455; XVI, 4988).[17] On the other hand, when the river flow is high, the hydro plant is operated around the clock to carry the base load of the pool in substitution for steam-generated energy, thereby reducing the amount of fuel which would otherwise

[17] The availability of the hydro energy avoids the installation of additional steam capacity and the necessity of keeping existing boilers banked and ready for use (R. I, 24, 38), which would involve standby losses and the operation of turbo-generators below their most efficient loading. The hydro capacity is also instantly available, coming from standstill to full loads in a fraction of a minute (R. I, 42; XVI, 4849–4850).

have to be burned and minimizing the waste of water (R. I, 36–37, 40, 75; VI, 2455; Tr. III, 1236, 1246–1247; XVI, 4988). As a result, the flow of energy is generally south from Pennsylvania toward Maryland at all times during the spring months when the river is high (R. I, 341; XVI, 4860). During the rest of the year, the practice is to generate energy at Penn Water's hydro plants so as to assist Consolidated in carrying its peak loads during the day, but to stop hydro generation so as to allow the ponds to refill during off-peak periods (R. I, 45–46, 439; R. XVI, 4860). And, although at such times the flow of energy tends to be to the north, from Baltimore to Pennsylvania, the direction of flow on the lines crossing the State boundary may change frequently according to the needs of the consumers in Pennsylvania or Maryland (R. I, 341; II, 599–600; VI, 2455; XVI, 4860; Tr. LXVI, 24733).

The Residual Method of Payment.—The residual method of payment provided in the contract (*supra*, p. 9) is an essential element to the successful operation of the power pool, the purpose of which is to have energy provided by the source which is most economical at the particular time, regardless of whether owned by Consolidated or Penn Water. Rates based on units of service would, of course, have impelled each party to operate so as to derive the maximum advantage for itself under such rates. This would not bring about the maximum utilization of the power re-

sources of the Susquehanna and the lowest possible joint costs of production, for it had proved impossible to devise unit rates adequate to that purpose, as Penn Water's officials testified.

John A. Walls, then president of Penn Water, testified before the Commission that the unit basis rate which was used in the 1927 contract between the parties "militated against the correct principles of operating a combined hydro-steam generating and supply system" (R. I, 26), and that it was not until the method of payment was changed to "an annually computed lump sum, independent of the number of kilowatts and kilowatt hours, that * * * the most economical result obtainable from the combined power resources could be derived" (*ibid.*).

George W. Spaulding, then vice president and now president of Penn Water, similarly testified that maximum coordinated use of combined resources was not achieved under the unit basis rate used prior to the 1931 agreement with Consolidated, since the customers "were inclined to view their own power requirements as matters distinct from the requirements of other customers" (R. I, 72). Mr. Spaulding described some of the methods of payment which had been tried but had not worked out satisfactorily (R. I, 71):

> The evolution of Penn Water's power agreements with its customers in Baltimore

> included the early extreme of a stipulated capacity service always available and price on a kilowatt-year basis, combined with additional energy sales at a stated mill rate during specified hours of the day.
>
> Another form of sale was a stipulated capacity service combined with a limited amount of yearly energy at a stated mill rate to be taken at the customer's desires.
>
> Neither form of contractual arrangement recognized the possibility of energy purchases in large volume during the periods of ample flow, nor the coordinated scheduling of the available steam resources in the interest of operating economy.

See also n. 34, p. 47, *infra*.

The residual method of payment provided in the 1931 contract, on the other hand, Mr. Spaulding went on to state, had the advantages of removing "all artificial barriers which would interfere with the hour-to-hour, day-to-day and the long range coordination of the power resources of the companies involved. Such a goal had not been as fully achieved by Penn Water and [Consolidated] in two decades of preceding power relations" (R. I, 71). As a result, under that form of payment (R. I, 75),

> [a]ll of the objectives desired in 1931 have been attained. The Safe Harbor project was successfully constructed, financed and brought to a proper earning

> level. The most effective utilization of the system steam capacity and energy and that of our hydro plants has been fully achieved, with the resulting conservation of fuel, particularly during the critical days of fuel shortage in the recent national emergency, of benefit to the public.
>
> The ability to supply the Pennsylvania Railroad Company at several widely separated points, to the convenience and advantage of the customer, would not have been possible had it been sought separately by Penn Water or by Baltimore Company, operating under a contractual arrangement that was complicated with artificial barriers.

In brief, therefore, the effect of the residual payment was to eliminate the conflict of interests between Penn Water and Consolidated as to the use to which Penn Water's facilities should be put, and to make Penn Water's facilities fully available for pool purposes, with both Penn Water and Consolidated motivated by the common interest of deriving the maximum benefit from these facilities as part of the pool (R. XVI, 4860). As stated in its 1941 Report to Stockholders, the pooling of resources (of which the method of payment was an essential part) solved for Penn Water the problem

> of providing, without large and expensive reservoirs, a uniform supply of power while utilizing the unharnessed energy of a drainage area subject to severe droughts

> and floods. The average daily flow at Holtwood has varied from as little as 1,700 cubic feet per second up to 756,000 cubic feet per second since the Company began operations. Nevertheless, out of this difficult situation, an important and reliable power pool has been developed.
>
> The answer to the problem was combined hydro and steam supply; not the substitution of hydro for steam, but from the outset the integration and coordination of hydro and steam in the planning for the capacity needed and in the operation and maintenance of the facilities [R. XVI, 5183].

The residual method of payment thus enables Penn Water's hydro facilities to be integrated with the generating facilities of Consolidated as well as Safe Harbor. It permits the energy used to satisfy demands of customers of either to be determined on the basis of maximum utilization and economy (*i. e.*, river flow, relative costs of steam generation, and magnitude of loads) (R. I, 40; II, 599–600; XVI, 4987).

The Power Commission's order of January 5, 1949: On September 1, 1944, having received petitions from the Mayor and City Council of Baltimore, Maryland and from the Public Service Commission of Maryland (Maryland Commission) (R. XV, 4623, 4731–4733),[18] the Power

[18] The importance of the interstate rates to Consolidated's retail rates to consumers, which were at the time the subject of a Maryland Commission rate proceeding, is referred to

Commission instituted an investigation into the reasonableness of the rates and charges made by Penn Water for its interstate sales of electrical energy at wholesale, including its sales to Consolidated (R. XVI, 4837).[19] After extensive hearings, in which the Maryland and Pennsylvania Commissions actively participated as intervenors on opposite sides (R. I, 2; XVI, 4837–4843), the Power Commission on January 5, 1949, issued its opinion and order (R. XVI, 4845–4997).

After reviewing the operations of the power pool, the Commission found that since all of the resources of the pool are available to meet the combined load of its members, without reference

by that Commission in its opinions in its investigation. *Re Consolidated Gas Electric Light and Power Company of Baltimore*, 61 PUR (NS) 94, 102–103; *id.*, 67 PUR (NS) 144, 149–150.

[19] The Power Commission simultaneously and on the same petitions initiated a separate investigation of the rates charged by Safe Harbor to Consolidated. On November 4, 1946, after extensive hearings, the Commission, no question as to the antitrust laws having been raised, directed the continuance of the entire Safe Harbor contract with the exception of the rates which it ordered reduced by about $627,551 annually. The Commission there construed the contract as providing that Safe Harbor's total output (not the residual left after certain contracts were met, as suggested by Penn Water (Br. No. 428, p. 8 n.)), was to be divided between Penn Water and Consolidated on a ⅓–⅔ basis. *Safe Harbor W. P. Corp.*, 5 F. P. C. 221. Upon review, the Court of Appeals for the Third Circuit affirmed the order. *Safe Harbor W. P. Corp.* v. *Federal Power Commission*, 179 F. 2d 179 (C. A. 3), certiorari denied, 339 U. S. 957.

to state boundaries, the pool was an "integrated and coordinated interstate electric system" (R. XVI, 4857). The Commission further found that the wholesale sales of system energy, such as those by Penn Water to its Pennsylvania utility customers, made without reference to the state of origin of the energy, were pool sales, and hence, in light of the interstate nature of the pool, were sales for resale in interstate commerce (R. XVI, 4861). The Commission accordingly concluded that Penn Water is a "public utility" under Part II of the Federal Power Act by virtue of its ownership and operation of facilities for the transmission and sale at wholesale of electric energy in interstate commerce, and that its sales for resale to Consolidated and to its three Pennsylvania customers are subject to Commission jurisdiction under Section 206 (a) of the Act (R. XVI, 4862).[20]

In addition, the Commission found that it had jurisdiction to regulate Penn Water under Section 20 of Part I, which relates *inter alia* to the rates of licensees whose power enters interstate commerce, since, as it found, the States were "unable to agree" on these rates (R. XVI, 4864). The Commission further found that Penn Water's status as a "licensee" under Part I does not exempt it from regulation as a "public utility" under Part II and that no conflict resulted in the

[20] The Commission did not assert jurisdiction over Penn Water's sales to the Railroad (R. XVI, 4857, fn. 18).

pending case from regulation under both Parts (R. XVI, 4865).

In determining just and reasonable rates, the Power Commission found Penn Water entitled to a return of $1,300,672, computed on a "fair and reasonable rate of return" of 5¼% [21] on a proper rate base of $24,774,712 [22] (R. XVI, 4992). The Commission fixed the return at 5¼% since (1) under the arrangements with Consolidated which the Commission directed be continued as "the most practicable under the circumstances" (R. XVI, 4981), Penn Water was assured a stabilized income as in the past (R. XVI, 4953), and (2) cost of capital studies showed that such a return, based on Penn Water's actual cost of 3.17% for bond money and 5.21% for preferred stock, allowed about 8.64% for equity capital, which the Commission found to be adequate (R. XVI, 4954–57).

Since Penn Water's net operating income exceeded a fair return by $1,954,261, the Commission undertook to determine "a reasonable and

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[21] Penn Water's statement (pp. 17, 52) that the Commission by subsequent order reduced the rate of return to 4¾% has no foundation. The item of $141,777 upon which this argument was based in the court below was taken into account in the Commission's original opinion reducing rates. (R. XVI, 4961, 4980–4981, 4993–4994). In any event, the contention was not accepted by the court below and has not been brought here for review.

[22] This rate base consists of gross investment of $33,126,585 plus working capital of $650,000 less accrued depreciation of $9,001,873 (R. XVI, 4992).

proper allocation, of the cost of service rendered by Penn Water" (R. XVI, 4981, 4992). On the basis of that allocation, which the Commission grounded on the representative costs of Penn Water's services, which it directed to be continued, to its Pennsylvania utility customers and to Consolidated, the Commission ordered Penn Water to lower its rates in a manner which, on the basis of 1946 operations, would result in a reduction to its Pennsylvania utility customers by the aggregate sum of $220,943 and to Consolidated of $1,733,318[23] in Consolidated's residual payments (R. XVI, 4980–81, 4993, 4995–96).[24] The Commission, accordingly, directed Penn

[23] While the revenue Penn Water received directly from Consolidated exceeded a reasonable return by about $700,000, the Commission directed that Consolidated receive a credit for the revenues received by Penn Water from its Pennsylvania utility customers for economy interchange energy belonging to Consolidated. This credit of $1,127,699 and other adjustments resulted in increasing Penn Water's excess revenues from Consolidated to $1,733,318. See *infra*, pp. 81–83.

[24] The Commission prescribed formula differed from that provided for in the contract in the following particulars, among others: The rate of return was reduced to 5¼%; the rate base to which the 5¼% was to be applied was changed from an undepreciated rate base to a rate base computed by deducting accrued depreciation from gross investment and including working capital; the method of computing the annual allowance for depreciation was changed from a sinking-fund depreciation method to the straight line method, thereby increasing the annual allowance (R. XVI, 4992–93; R. XVII, 5279–5283; Tr. III, 1136–8, 1159–60; R. XV, 4608–12, 4617–21).

Water to file a "new schedule of rates and charges for (or) and in connection with its transmission and sale of electric energy in interstate commerce for resale" to its Pensylvania utility customers and Consolidated to effectuate the prescribed reductions as of February 1, 1949, reserving the right to reject the schedules and in lieu thereof t prescribe appropriate schedules by its own further order (R. XVI, 4995).

Petitioners sought rehearing of this rate reduction order of January 5, 1949. In its petition for rehearing Penn Water urged for the first time that the 1931 agreement, and particularly Articles IV and V thereof (see *supra,* p. 10), violated the Federal antitrust laws and the laws of Pennsylvania (R. XVI, 5012), and consequently that the Commission's findings as to jurisdiction, rate of return and allocation, were invalid (R. XVI, 5012, 5014, 5042, 5054, 5055, 5136–37, 5138). In so urging, Penn Water referred to its complaint filed in December 1948 against Consolidated in the United States District Court for the District of Maryland in which it sought a declaratory judgment that the Consolidated contract was invalid under the antitrust laws and the laws of Pennsylvania (R. XVI, 5013). The Power Commission denied the petitions for rehearing (R. XVI, 5178–5194) with the comment (R. XVI, 5184):

> If there are questions as to the legality of the foundation contracts which are in liti-

> gation, as [petitioners'] application for rehearing indicates, the validity of our order is not dependent upon the decision of those questions. In our opinion and order we took care to leave the continuation of the operation of the integrated and interconnected system in full effect, merely changing the rates, * * *.

Following the denial of their second petitions for rehearing, Penn Water, on April 22, 1949, and the Pennsylvania Commission, on April 25, petitioned the court below for review of the Power Commission's January 5 order.[25]

The Power Commission's order of October 27, 1949: Thereafter, on May 31, 1949 Penn Water filed with the Commission rate schedules purportedly in compliance with the January 5 order (R. XVII, 5248–5266). On October 27, the Power Commission rejected these schedules after finding that they did not comply with the January 5 order in several respects. The Commission prescribed its own schedules which it found would effectuate the requirements of its order

[25] By order dated April 29, 1949, the court below had stayed the January 5 order of the Commission insofar as it provided that the new rate schedules should be effective February 1, 1949, but had refused to suspend the requirement that rate schedules be filed and the Commission's reservation of the right to reject the schedules and in lieu thereof to prescribe appropriate schedules by its own further order. The court stayed the effective date of the required schedules on the condition that Penn Water segregate the amount of the prescribed rate reduction in a special reserve.

and would allow Penn Water the 5¼% return prescribed (R. XVII, 5277–5278). The Schedule pertaining to Consolidated, after detailing the means by which the new rate was to be determined (R. XVII, 5279–5283), contains the following final paragraph, which is of significance in this case:

> The foregoing provisions supersede only the *rates* and charges heretofore made, demanded, collected or assessed against Baltimore Company by Penn Water and Transmission Company. All *other* provisions of the aforementioned contracts, *in and of themselves lawful* prescribing or *defining the power, energy and transmission services to be furnished, or any classification, practice, regulation or rule affecting such services,* which several provisions are incorporated herein by reference, shall be observed and be in force. [Italics supplied.]

After denial of its application for rehearing of this order, Penn Water filed in the court below an additional petition seeking review of this order (R. XVII, 5222–5231).

The proceedings below: While these cases were pending in the court below and after briefs on the merits had been filed by all parties, petitioners moved the court to annul the Power Commission's orders on the ground that they had been deprived of essential factual and legal support by the decision rendered by the Court of Appeals for the Fourth Circuit in Penn Water's first private

antitrust action against Consolidated (R. XVIII, 5322–49).[26] The court below, however, denied the motions to annul. It construed the Fourth Circuit decision—

> as having done no more than declare illegal under the antitrust laws certain restraints exercised by [Consolidated] upon Penn Water—such as requiring its approval before it could take on new customers or expand generating facilities. Those restraints had been privately agreed upon by the parties and submitted to the Commission as an accomplished fact. The court was careful to avoid using language which might be interpreted in such fashion as to affect any rate proceeding * * * [R. XVIII, 5374–75].

Accordingly, the court stated (R. XVIII, 5375):

> In our view, the Fourth Circuit's opinion neither purported to nor did relieve Penn Water from its obligation under the Federal Power Act to continue the then-existing services and rates. It is those services and rates, reflecting underlying operations, which were the subject of the Commission's order. "A rate is not necessarily illegal because it is the result of a conspiracy in

[26] The Fourth Circuit's decision reversed the ruling of the District Court for the District of Maryland holding that the contract was valid and dismissing Penn Water's complaint. *Pennsylvania Water & P. Co.* v. *Consolidated G. E. L. & P. Co. of Baltimore*, 89 F. Supp. 452.

> restraint of trade in violation of the Anti-Trust Act. What rates are legal is determined by" the regulatory statute [citing *Keogh* v. *Chicago & N. W. Ry. Co.*; 260 U. S. 156, 162]. The validity of Commission action in this proceeding must be determined in light of the criteria furnished by the Federal Power Act, as applied to the operations and arrangements under scrutiny.

As to petitioners' attacks on the jurisdictional basis of the Commission's orders, the court held that Penn Water was part of an "integrated and coordinated interstate electric system," that its sales to its Pennsylvania utility customers were in interstate commerce, and that, consequently since these sales are for resale, Penn Water was a "public utility" under Part II of the Federal Power Act, with the rates for those sales subject to regulation under that Part (R. XVIII, 5382–85). The court also ruled *inter alia* that the fact that Penn Water is a licensee under Part I, does not prevent it from also being regulated as a public utility under Part II (R. XVIII, 5378–81), and further that since there was substantial evidence to support the finding that the Maryland and Pennsylvania Commissions were "unable to agree," the Commission was also authorized to regulate Penn Water's wholesale interstate rates as a licensee under Section 20 of Part I (R. XVIII, 5381–82).

On the merits, the court ruled that the Power Commission's findings were supported by substantial evidence (R. XVIII, 5385–5393) and, accordingly, it affirmed (R. XVIII, 5393).

SUMMARY OF ARGUMENT

I

The Power Commission's order was a valid exercise of its power to prescribe just and reasonable rates. An important stated purpose of the Power Act was to procure the most efficient use of the nation's power resources. It was proper for the Commission to take this factor into account in prescribing a rate schedule based upon the continued integration of the hydro facilities of Penn Water with Consolidated's steam plants. This consideration fully justifies the use of the residual payment formula, in order to assure the most economic use of the combined resources of the two companies. Indeed, petitioners no longer seem to question that the Commission's order conforms to the standards of the Power Act.

II

A. 1. The Commission's order prescribing the rate schedule is not subject to the antitrust laws. Although an express statutory exemption may be necessary to permit an administrative agency to authorize private conduct which would otherwise violate the antitrust laws, here we are concerned with a governmental order binding of its

own force. Such governmental action and conduct taken pursuant thereto to avoid statutory penalties has never been deemed subject to the antitrust laws. For the Sherman Act only applies to private combinations and monopolies, not to the acts of governmental agencies within the scope of their authority. *Parker* v. *Brown*, 317 U. S. 341.

2. Furthermore, in this case we are dealing with a rate order. Such statutes as the Federal Power Act govern industries in which the processes of competition cannot be counted on adequately to protect the public. It has long been recognized that rates are to be regulated in accordance with the standards of the controlling statute. An agency administering such a statute may weigh many factors in addition to antitrust criteria, and is not precluded from prescribing arrangements which might be unlawful under the Sherman Act if contained only in private agreements. As long as a rate order is authorized by the pertinent regulatory statute, the Sherman Act is inapplicable. This principle is sufficient to dispose of this case, since the Power Commission has authority, in fixing rates, to include provisions prescribing both the service to be rendered in return for the rate fixed and the formula by which the rate is to be computed. The provisions prescribing the residual method of disposing of Penn Water's power to Consolidated and of determining the amount

Consolidated was to pay were thus entirely appropriate in the rate order. The remaining provisions of the order, including those provisions incorporated by reference from the contract, were merely ancillary to these provisions.

B. The foregoing considerations also make it plain that the Commission's order does not violate the antitrust provision of the Power Act, Sec. 10 (h). That section, like the Sherman Act, does not apply to governmental action in the field of rate regulation.

C. The Commission has not ordered the continuance of any contractual provision held unlawful by the Fourth Circuit or otherwise in violation of the antitrust laws. In the first *Consolidated* antitrust case, the Fourth Circuit held only that Articles IV and V of the Penn Water-Consolidated agreement violated the antitrust laws. It did not suggest that the power-pooling and residual method of payment were unlawful, but the contrary. The Power Commission, on the other hand, only prescribed as a part of its order portions of the contract "in and of themselves lawful," a reservation properly construed as excluding the specific provisions which the Fourth Circuit held to be unlawful. The Fourth Circuit and the court below both agree on this.

D. Petitioners' argument that the Commission's order must fall because based upon continuance of the private contract which the Fourth Circuit

held invalid ignores the fact that the order supplants the contract and stands on its own feet. The fact that the order in general follows the plan of the contract, though with important changes in the basic provisions governing rates, and adopts by reference certain of the contract's provisions, does not mean that the order continues the contract *qua* contract.

In any event, since the antitrust laws do not apply to the Commission's order, it is immaterial whether any provisions of the order might violate the antitrust laws if viewed as private contractual arrangements.

II

The Commission's order is not invalid because in conflict with the laws of Pennsylvania. The only provisions held by the Fourth Circuit to violate the Pennsylvania laws were Articles IV and V, and they were not prescribed by the Commission. Furthermore, analysis of the Pennsylvania laws referred to, which are merely the general utility and corporation laws which preclude a corporate management from abdicating its functions, indicates that they would not bar a reasonable business arrangement necessary to permit efficient operation of the corporation's resources. No Pennsylvania authority holds otherwise. In any event, if the Commission's action is authorized by the Power Act, Pennsylvania law cannot stand in the way. The fact that Con-

gress was not seeking to regulate rates formerly subject to state control does not mean that the federal regulation of interstate wholesale rates was to be restricted by state law. *Public Utilities Commission* v. *United Fuel Gas Co.*, 317 U. S. 456, 466–467; *Illinois Natural Gas Company* v. *Central Illinois Public Service Company*, 314 U. S. 498.

IV

Petitioners assert that the Commission's order is based upon provisions of the Safe Harbor contract held unlawful by the Fourth Circuit in the second antitrust case. But the Commission relied upon its own order prescribing the contract (as modified so as to reduce the rates) as the rate schedule in that case, not upon the contract as such. That order, sustained by the Third Circuit (*Safe Harbor W. P. Co.* v. *Federal Power Commission*, 179 F. 2d 179, certiorari denied, 339 U. S. 957) cannot be attacked in any other court collaterally in a private suit to which the Commission is not a party. The doctrine of primary jurisdiction clearly requires resort to the Commission initially in any proceeding to invalidate or modify its order. Furthermore, the Safe Harbor rate order, as governmental action in the field of rates, cannot violate the antitrust laws. See Point II A *supra*. The Fourth Circuit's decision in the *Safe Harbor* case disregards these fundamental principles and was clearly erroneous.

V

Penn Water's sales to its Pennsylvania customers were sales in interstate commerce, as both the court below and the Third Circuit in the *Safe Harbor* cases have held. The Pennsylvania customers received power which, depending on the flow of the Susquehanna, came from Penn Water's plant in Pennsylvania or Consolidated's plants in Maryland. Interstate and intrastate energy, often commingled, could not have been purchased as a source of firm power except as a unit. The entire sale is thus properly treated as interstate. Interstate commerce is a practical conception. Obviously, the sale of the energy of an integrated system cannot be divided into interstate and intrastate segments so as to enable a State commission to regulate the energy sold in a period of high-water flow and the federal commission in other periods when the power moves interstate. The rates for such an inseparable transaction must be controlled by the single agency which can have jurisdiction over all of them—which means the federal commission.

VI

The contention that a licensee subject to regulation under Part I of the Power Act may not also be regulated under Part II is irrelevant here since Penn Water's rates were lawfully fixed under both Parts. In any event, the language

as well as express and authoritative statements in the legislative history demonstrate that companies which were both licensees under Part I and public utilities under Part II were to be subject to regulation under both. The Parts do not impose inconsistent regulations; indeed, in so far as rates are concerned, the statutory language is substantially identical.

ARGUMENT

INTRODUCTORY

The Commission's investigation into the reasonableness of Penn Water's rates for wholesale sales in interstate commerce was instituted on September 1, 1944. As a result of extensive hearings held for over a year, in which a record of 21,279 pages of testimony and of 605 exhibits was compiled, the Commission found in 1949 that Penn Water's net return was about two and a half times what it should be and ordered a rate reduction of approximately $2,000,000 a year,[27] to be allocated among Penn Water's wholesale customers in accordance with the arrangements which it prescribed. In reaching this conclusion, the Commission found that the plan for the pooling of power resources previously agreed to by Penn Water and Consolidated in 1931, including the residual method of payment, was the "most

[27] The Commission found Penn Water entitled to a return of $1,300,672 (*supra*, p. 22).

practicable" means of overcoming the problems presented by the extremely variable flow of the Susquehanna River, and of achieving the maximum utilization and economies from their combined hydro and steam generating facilities. The Commission, accordingly, directed that these arrangements should be continued in the public interest.

As the cases come before this Court, petitioners no longer attack the merits of the Commission's rate reduction; they do not claim that the orders are not supported by substantial evidence or that the rate reduction was excessive.[28] Their primary argument—apart from the Pennsylvania's Commission's challenge to the finding of interstate commerce—is that in private litigation the 1931 contract had been held to violate the antitrust laws and that the Commission's order reducing rates was based upon this contract and therefore must fall. Thus, petitioners are invoking the antitrust laws to frustrate the public interest in an already long delayed rate reduction, the propriety of which in and of itself is no longer challenged.

The Government—which in this case includes both the Federal Power Commission and the De-

[28] Nor do they attack the allocation of the rate reduction except collaterally, in support of the contention that the Commission relied on the allegedly illegal contracts in determining how the allocation should be made. Brief in No. 428, pp. 55–58; Brief in No. 429, pp. 32–42. Neither petition for certiorari raised a question as to the validity of the allocations as such.

partment of Justice (which is charged with primary responsibility for enforcing the antitrust laws)—does not regard these cases as presenting any clash between antitrust enforcement and a regulatory agency. For the Power Commission has not ordered the continuance of any contractual provision held unlawful by the Fourth Circuit or otherwise in violation of the antitrust laws. And the Fourth Circuit, which has held that the Commission is without power to prescribe conduct otherwise illegal, agrees that the Commission has not undertaken to do so in this case.

The Commission's order prescribing the entire contract in the *Safe Harbor* case, which was upheld by the Third Circuit [29]—but which is nevertheless attacked by petitioners in this case on the ground that the order here involved is based in part on the Safe Harbor contract—does not represent any different attitude or approach. No antitrust objection was raised before the Commission or the court in that case. What the Commission would do if the problem were presented to it in connection with the Safe Harbor order cannot be foretold. But certainly the Commission itself, not the District Court in Maryland, is the proper forum for either a new challenge to the validity of its order or an attempt to have the order narrowed or otherwise modified.

[29] *Safe Harbor W. P. Corp.* v. *Federal Power Commission*, 179 F. 2d 179, certiorari denied, 339 U. S. 957.

For the above reasons we think it plain that the Commission has in no way sought to curtail the scope of operation of the antitrust laws with respect to the contracts involved in these cases. It is true that the Commission did prescribe the rates in accordance with a formula which, though not claimed to be unauthorized under the Federal Power Act, petitioners assert to be in violation of the antitrust laws and laws of Pennsylvania. But a long line of cases establishes that the Interstate Commerce Commission and those agencies, including the Federal Power Commission, whose statutes are modeled in large part on the Interstate Commerce Act, are supreme when it comes to rates, and that rates which comply with the standards of the regulatory statutes are lawful and must be observed even though the utilities involved may be subject to the antitrust laws for acting in combination in fixing the rates or in other respects. See particularly *Georgia* v. *Pennsylvania Railroad*, 324 U. S. 439. Here all that the Commission has prescribed is a rate schedule. The residual payment plan is the method by which the rates are to be computed, not an independent restrictive contractual provision. Indeed, the Commission's final order of October 27, 1949 fully defines the method of payment (R. XVII, 5279–5283) and thus completely supplants the Article of the contract dealing with that subject.

Clearly, this rate provision contained in the Federal Power Commission's order, superseding that in the private contract, is valid if authorized by the Federal Power Act. Petitioners' briefs do not seem to challenge the validity of the Commission's order in that aspect. Nevertheless, since the authority of the Commission to prescribe the order which it actually entered is vital to almost every feature of this case, we shall show in Point I (*infra*, pp. 39–48), that the Federal Power Act clearly authorizes the Commission to enter the order here involved. We shall then show, in Point II (*infra*, pp. 49–84), in more detail than we have in this introduction, that this case presents no problem as to possible conflict between the Power Commission order and the Sherman Act, and that if it did, the Sherman Act does not apply to conduct prescribed by the Federal Power Commission.

I

THE POWER COMMISSION'S ORDER WAS AUTHORIZED BY THE FEDERAL POWER ACT

The provisions of the Federal Power Act applicable to Penn Water as both a "public utility" and a "licensee" (see *infra*, pp. 117–137), clearly empower the Commission to prescribe for Penn Water the power pooling and rate formula appropriate thereto here involved. Section 205 (a) of the Act's Part II relating to public utilities declares that "all rates and charges made, de-

manded, or received by any public utility" for sales which are subject to the Commission's jurisdiction [29] and "all rules and regulations affecting or pertaining to" them "shall be just and reasonable," and any of them that are not just and reasonable are "unlawful." Section 205 (b) forbids public utilities to "grant any undue preference * * * or [to] maintain any unreasonable difference in rates, charges, service, facilities, or in any other respect."

Section 206 (a) empowers the Commission to enforce these provisions by expressly providing that if, after hearing, the Commission finds that "any rate, charge, or classification * * * or * * * rule, regulation, practice, or contract affecting such rate, charge, or classification is unjust, unreasonable, unduly discriminatory or preferential," it shall "determine the just and reasonable rate, charge, classification, rule, regulation, practice, or contract to be thereafter observed and in force, and fix the same by order." [31]

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[29] Penn Water's sales to Consolidated are concededly subject to the Commission's jurisdiction as sales for resale in interstate commerce (Penn Water's main brief below, p. 62). And as we show *infra*, pp. 105–117, Penn Water's sales for resale to its Pennsylvania utility customers are likewise in interstate commerce.

[31] The Act also provides in Section 207 that whenever the Commission, upon complaint of a State Commission—after notice and opportunity for hearing—shall find that "any interstate service of any public utility is inadequate or insufficient, the Commission shall determine the proper, adequate, or sufficient service to be furnished, and shall fix the same by its order, rule, or regulation: * * *."

Not only was the Commission empowered to prescribe just and reasonable rates and services, but Congress made clear its intent that the Commission in so doing was also to bend its efforts to achieve "the most efficient use of the nation's resources consistent with the public interest in cheap power and in conservation" (R. XVIII, 5378). Section 202 (a) provides that the Commission shall have the duty "to promote and encourage" the "voluntary interconnection and coordination of facilities for the generation, transmission, and sale of electric energy" so as to assure "an abundant supply of electric energy throughout the United States with the greatest possible economy and with regard to the proper utilization and conservation of natural resources." And for this purpose, the Commission is "empowered and directed to divide the country into regional districts" (Section 202 (a)). In addition, the Commission is authorized by Section 202 (b), on application, to direct a public utility "to establish physical connection of its transmission facilities with the facilities of one or more other persons engaged in the transmission or sale of electric energy, to sell energy to or exchange energy with such persons," and to "prescribe the terms and conditions of the arrangement to be made between the persons affected by any such order, including the apportionment of cost between them and the compensation or reimburse-

ment reasonably due to any of them." Although in this case the Commission was not proceeding under Section 202 it properly took into account the congressional policy therein expressed in determining what rates and services should be prescribed (R. XVI, 5184).[32]

[32] The legislative history of Section 202 makes clear that, at least as far as the draftsmen were concerned, the objective of encouraging the coordinated use of power facilities sought to be achieved by that Section was one of the primary purposes of Part II. Cf. *Connecticut Light & Power Co.* v. *Federal Power Commission*, 324 U. S. 515, 525. Dozier A. DeVane, then Solicitor of the Commission, testified before the Senate Committee upon behalf of the bill of which he was the draftsman (Hearing before the Senate Committee on Interstate Commerce on S. 1725, 74th Cong., 1st Sess., p. 273):

"To my mind, that is one of the most important provisions of this bill. When you visualize what you are going to do by title I, that you are going to tear down the fences, which are the holding companies, and you are going to turn the operating utilities loose insofar as their prior control and ownership is concerned, that section takes on an added significance. It should be considered along with section 205 [now 203], which requires Commission approval for the purchase and sale of operating properties—to say where these properties shall go in the public interest. Under this bill, and without tremendous force of regulation on the part of the Commission, these companies will integrate into strong regional systems, as directed by Congress.

"What is the other great advantage to be gained by that? The advantage through proper interconnection of these properties of a substantial reduction in stand-by facilities. Where you have a system that has to depend upon its own generating facilities for its power you will find that in a great many instances the cost of stand-by facilities runs above 40 percent of the total cost, and you will find in a majority of instances that it will run between 30 and 40 percent. Studies have

Broad authority over rates and services is similarly vested in the Commission under Part I relating to licensees. Section 20 of that Part requires that "the rates charged and the service rendered by any * * * licensee [whose power enters interstate commerce] * * * shall be reasonable, nondiscriminatory, and just to the customer and all unreasonable discriminatory and unjust rates or services are hereby prohibited and declared to be unlawful; * * *." Section 20 goes on to provide that when the states directly concerned have failed to provide a com-

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been made that convince a great many engineers and a great many other qualified people whose views are entitled to respect that with proper integration that investment can be reduced to approximately 15 percent. If the average is between 30 and 40 percent today, and if by integration we can reduce it to 15 percent, think of the benefit that will accrue to the consumers of this energy as the result of the establishment of regional districts and the proper interconnection of all facilities in each district."

And Frank R. McNinch, then Chairman of the Commission, stated in hearings before the House and Senate Committees considering the legislation, that Part II was

"* * * directed primarily toward the coordination of the power generated and transmission facilities in the United States, intended as we believe, effectively, to serve the interests of the consumer in bringing to the consumers electricity upon more economical terms and at less cost than under the present lack of coordinating arrangements and likewise being equally to the interest of the companies. [Hearings before the House Committee on Interstate and Foreign Commerce, 74th Cong., 1st Sess., on H. R. 5423, p. 383.]"

See also: *id.*, pp. 384, 517, 531, 535, 2165–2168; Hearings before the Senate Committee on Interstate Commerce, 74th Cong., 1st Sess., on S. 1725, pp. 257–258.

mission or the states are unable to agree,[38] "jurisdiction is hereby conferred upon the commission * * * to enforce the provisions of this section, to regulate and control so much of the services rendered, and of the rates and charges of payment therefor as constitute interstate or foreign commerce. * * *."

The Commission is further authorized to "issue such order as it may find appropriate, expedient, and in the public interest to conserve and utilize the * * * water-power resources of the region" (Section 4 (g)). Its power to issue licenses for the "development, transmission, and utilization of power * * * from * * * any of the streams * * * over which Congress has jurisdiction" (Section 4 (e)) is conditioned on the requirement that "the project * * * shall be such as in the judgment of the Commission will be best adapted to a comprehensive plan * * * for the improvement and utilization of water-power development" (Section 10 (a)).

The Commission's requirements as to power pooling and the residual method of payment are plainly within these broad grants of authority to prescribe and fix just and reasonable rates, charges and services. As we have shown *supra*,

[38] We show *infra*, p. 118, that the Commission's finding that the states here involved are unable to agree is conclusive here. It is not only supported by substantial evidence as ruled by the court below, but petitioners do not attack it.

pp. 11–15, because of the variable nature of the flow of the Susquehanna River and the limited storage capacity of its dam, Penn Water would be uneconomic as an independent unit. It would be unable to assume any substantial firm obligations. It would be unable to compete successfully with steam generating plants and, in periods of high flow, it would have to waste substantial amounts of water over the spillways.

On the other hand, by their integration with Consolidated's steam power generating facilities and large utility load, the most effective and economic use of Penn Water's hydro facilities can be—and has been—made. For example, Penn Water has been able to assume substantial firm obligations. When the flow is low, its facilities are used for peaking, thereby contributing maximum generating capacity when most needed and saving costs of using the oldest and most inefficient steam plants of the pool. And when the flow is high they are used to carry the system's base load, thereby reducing fuel costs and minimizing water waste.

By virtue of these arrangements, the "operations of Penn Water, Safe Harbor and [Consolidated] are closely integrated and coordinated as a matter of economy, efficiency, flexibility, and maximum utilization of hydro capabilities" (R. XVI, 4849), and the energy used to satisfy the demands of the customers of either Penn Water

or Consolidated is determined on the basis of maximum utilization and economy. These considerations more than justified the Commission's conclusion that (R. XVI, 5184):

> The regional integration and coordination of facilities, the resulting economies, and the utilization and conservation of natural resources thus achieved are precisely what was sought to be encouraged and fostered by the Federal Power Act and established as a part of the criterion of the public interest to be served by regulation thereunder (Cf. Section 202 (a)).

The residual method of payment, including the system of entitlements, was likewise within the Commission's authority. Section 206 authorizes the Commission to fix "the just and reasonable rate * * * practice, or contract to be thereafter observed." And Section 20 requires only that the rate shall be "reasonable, nondiscriminatory, and just." Far from limiting the Commission's authority to prescribing rates on what Penn Water describes as the "usual unit rate basis" *i. e.* on the basis of a fixed amount for a specified unit of service (Pet. in No. 428, pp. 15–16), these Sections permit the Commission to prescribe the rate in any form which in the circumstances of the particular case will be just and reasonable.

Because of the nature of the pooling arrangements whereby the supplying of energy is deter-

mined with the view of achieving maximum economies and optimum utilization of the available facilities, it would be difficult, if not impossible, to fix a rate on the unit basis which could be said with any assurance, to result in a specified over-all return. For there are too many uncontrollable variables to be considered in forecasting the units of service Penn Water would furnish Consolidated over a given period of time, and that figure is basic to the fixing of a rate which will yield a given return.[34] In contrast to the difficulties of formulating a unit rate, the residual method payment prescribed by the Commission assures Penn Water that it will receive the 5¼% return which the Commission found just and reasonable here—an end result which plainly satisfied the requirements of Sections 20 and 206. *F. P. C.* v. *Hope Natural Gas Co.*, 320 U. S. 591.

Not only does the method of payment prescribed meet the requirements of these Sections but the record before the Commission reveals that it is the only method of payment by which

[34] There would be, in addition, technical difficulties to fixing rates on a unit basis. As stated by George W. Spaulding, then Penn Water's vice-president and now its president (R. I, 75):

"Not only would the problem of segregation and classification of capacity and energy services be difficult, if not impossible, on the basis of metered quantities, but arbitrary assumptions in that respect would not always conform either with facts or the equities of the situation."

the full benefits of the power pool can be obtained As shown, *supra*, pp. 15–19, Penn Water's several efforts to use the unit rate in various forms in each instance prevented the achieving of the pool's full benefits, for under this type of rate, it was to the interest of each of the parties to foster the use of its own facilities or energy entitlements irrespective of whether it resulted in over-all economies. Under the unit type of rate, therefore, the self interest of the individual parties stands as a strong deterrent to maximum economy in the use of their combined facilities. The Power Commission's formula rate, by providing for payment independently of whose power is used, eliminates the barrier to such economy created by conflicting self-interests. The Commission's formula fosters maximum utilization of Penn Water's hydro power. It also permits Penn Water to enter into firm commitments for delivery of power, which Penn Water, standing by itself, could not do because of variations in its power output resulting from the extreme variations in river flow.

The Commission's requirements that the power pooling and the residual method of payment by which these results were achieved, be continued are, therefore, clearly within the authority vested in it by Congress under the Federal Power Act.

II

THE COMMISSION'S ORDER IS NOT INVALID BECAUSE OF CONFLICT WITH THE ANTITRUST LAWS OR THE ANTITRUST PROVISION OF THE FEDERAL POWER ACT

A. THE COMMISSION'S ORDER PRESCRIBING ARRANGEMENTS BETWEEN PENN WATER AND CONSOLIDATED IS NOT SUBJECT TO THE ANTITRUST LAWS

1. *Arrangements validly prescribed by the Commission constitute governmental action exempt from the antitrust laws*

The complete answer to petitioner's contention on this aspect of the case—an answer which would be dispositive of Nos. 611, 612 as well—is that the Commission's order is not subject to the antitrust laws. The Commission is not here approving or permitting private combinations, consolidations, or contracts which might otherwise contravene the Sherman Act. As to such matters the Government has consistently maintained that express statutory authority and an exercise of that authority are needed to establish an exemption from the antitrust laws. E. g., *United States* v. *Borden Co.*, 308 U. S. 188. The statutes authorizing agencies to exempt conduct from the antitrust laws[35] cited in the Appendix to Penn Water's brief are principally of this character; they authorize the granting of permission to private parties to do what might otherwise be illegal.

[35] Such as the amendment to Section 7 of the Clayton Act (15 U. S. C. (Supp. IV) 18), which exempts acquisition of assets authorized by the Power Commission.

But we are here concerned not with a private contract, combination or conspiracy, but with a governmental order binding of its own force apart from any contract. Absent any contract, the order would still stand. Violation of the order would be subject to the penalties of the Federal Power Act. Sec. 316. Conduct so ordered by a governmental agency acting within the scope of authority granted by Congress has *never* been held to violate the antitrust laws. Nor has the order itself—and it is the Commission's order which petitioners are attacking here. Since the Sherman Act does not apply to governmental action, we are not here confronted with any problem of implied repeal of the Sherman Act or as to whether the Federal Power Act is consistent with or repugnant to it. The words "restraint of trade" in that statute do not reach orders of government officials, or, of course, conduct taken in compliance therewith to avoid penalties imposed by the Government. So long as the Federal Power Commission was acting within the bounds[36] of the power granted to it by the Federal Power Act, as we have shown it was (pp. 39–48, *supra*), the antitrust laws cannot affect this case.

The reasoning and principles of *Parker* v. *Brown*, 317 U. S. 341, which involved a situa-

[36] We need not consider here whether the antitrust laws would apply to a governmental agency acting outside of its statutory authority.

tion closely analogous to the instant case require, we submit, the holding here that the Commission's order pursuant to the authority delegated to it is governmental action not subject to the antitrust laws.

Parker v. *Brown* concerned the validity under the Sherman Act of a marketing program for raisins established under the California Agricultural Prorate Act, which authorized the establishment, through action of state officials, of programs for the marketing of agricultural commodities so as to restrict competition among the growers and maintain prices in the distribution of their commodities to packers. The Prorate Act provided for an Agricultural Prorate Advisory Commission, which was to undertake the establishment of a pro rata marketing plan after holding public hearings upon a petition filed by ten producers and after making certain required economic findings.[37] A program committee of producers selected by the State Director of Agriculture then formulated a program which the Commission after holding further hearings could modify and approve. If, thereafter, the requisite percentage of producers consented, the program was put into operation by the program

[37] That the institution of a program for the proposed zone will prevent agricultural waste and conserve the agricultural wealth of the state without permitting unreasonable profits to producers.

committee with violations thereof being subject to civil and criminal penalties.

Despite the very restrictive impact of the raisin program upon competition in interstate commerce—an effect which was undoubtedly intended and which would certainly have violated the Sherman Act if not governmental—this Court in *Parker* v. *Brown* unanimously ruled that the Sherman Act did not apply to the Prorate Act. The Court held that, although the producers had a voice in the program, its promulgation and operation constituted action by the State, and that since the Sherman Act was directed at outlawing private action, rather than regulatory action by a governmental body, the Act was inapplicable.[38]

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[38] A similar decision in *Olsen* v. *Smith*, 195 U. S. 332, in which this Court rejected the contention that a Texas law making the piloting of boats into the ports of Texas a State monopoly violated the Sherman Act, stated (195 U. S. at 344–345):

"The contention that because the commissioned pilots have a monopoly of the business, and by combination, among themselves exclude all others from rendering pilotage services, is also but a denial of the authority of the State to regulate, since if the State has the power to regulate, and in so doing to appoint and commission, those who are to perform pilotage services, it must follow that no monopoly or combination in a legal sense can arise from the fact that the duly authorized agents of the State are alone allowed to perform the duties devolving upon them by law."

For State cases holding that the concept of monopoly is inapplicable to a state exercising its governmental functions, see *State* v. *Aiken*, 42 S. C. 222; *Utah Manufacturers' Association* v. *Stewart*, 82 Utah 198; *Guy* v. *Commissioners of Cumberland County*, 122 N. C. 471, and cases collected in Annotation 121 ALR 303.

This was not because the Prorate Act had superseded or impliedly repealed the Sherman Act, for California's law obviously could not have such effect, but because the restraint imposed by governmental order was not the kind of restraint which the Sherman Act reached.

Parker v. *Brown*, we submit, governs the instant case, for here, as in the *Parker* case, the action involved is that of a governmental regulatory body. Here, the Power Commission, acting pursuant to and within the delegation of authority by Congress, has prescribed certain relationships between Penn Water and Consolidated. The Commission has prescribed the rate schedule and has directed the continuance of the pooling arrangement and the residual method of payment. The companies are required to observe the prescribed order not because they have contracted to do so, but because the Commission has ordered it, irrespective of their contract. The charging of any rate or rendering of any service other than those prescribed by the Commission would constitute a violation of the Federal Power Act and would subject at least Penn Water to criminal penalties (Sec. 316 of the Power Act).

Plainly, therefore, the arrangements prescribed by the Commission "derived * * * [their] authority and * * * efficacy from the legislative command of the * * * [Commission acting under the authority delegated to it by Congress] and * * * [were] not intended to

operate or become effective without that command" (317 U. S. at 350). "It is the state, acting through the Commission which adopts [the requirements imposed by the Commission] and which enforces [them] with penal sanctions in the execution of a governmental policy" (317 U. S. at 352). "The state * * * made no contract or agreement and entered into no conspiracy in restraint of trade or to establish monopoly but, as sovereign, imposed the restraint as an act of government which the Sherman Act did not undertake to prohibit" (*ibid.*).

Indeed, the Commission's orders here are even more clearly governmental action than the raisin proration program in *Parker* v. *Brown;* for in *Parker* v. *Brown,* the producers had a voice in the program—they not only had to consent to its going in effect but a committee of producers administered it; here, on the other hand, the Commission's action is operative, irrespective of whether the consent of Penn Water or Consolidated is forthcoming.

The fact that we have federal, rather than state, action, far from making *Parker* v. *Brown* inapplicable here, as Penn Water suggests (Br. in. No. 428, pp. 39–40), makes the instant case even plainer. For it was, at least, arguable—and in fact argued in that case—that the congressional policy expressed in the Sherman Act should bar a State from eliminating competition and con-

trolling the price and supply for a product marketed throughout the Nation.[39] But this could not be said of a regulatory statute passed by Congress itself.[40] The Sherman Act's purpose and legislative history no more suggest a purpose to restrain Federal action than State action, and the Court's summary of the legislative history to the effect that the Act's "purpose was to suppress combinations to restrain competition and attempts to monopolize by individuals and corporations" (317 U. S. at 351) equally indicates its inapplicability to action by the Federal government.[41]

As *Parker* v. *Brown* points out (p. 351), this does not mean that a state can authorize private persons to enter into voluntary agreements to do what the Sherman Act prohibits. And the same is true of Federal agencies unless the statute makes such authority clear. That is all that the cases cited by petitioner (Br. in No. 428, pp. 29–32) hold. But since the Sherman Act reaches

[39] The Government's brief conceded that the Sherman Act would not, however, affect state regulation of utility rates. Brief for the United States as amicus curiae in No. 46, October Term, 1942, p. 64.

[40] Obviously, the United States itself cannot be a defendant in a Sherman Act case; it cannot even be a plaintiff in a treble damage suit, though a state may (*United States* v. *Cooper Corp.*, 312 U. S. 600; *Georgia* v. *Evans*, 316 U. S. 159).

[41] For more elaborate reviews of the Sherman Act's legislative history and the common law principles on which it is based, see, e. g., *Apex Hosiery Co.* v. *Leader*, 310 U. S. 461, 492–8 and n 15; *Standard Oil Co.* v. *United States*, 221 U. S. 1, 51–59; *United States* v. *Addyston Pipe & Steel Co.*, 85 Fed. 271 (C. A. 6), affirmed, 175 U. S. 211.

only private contracts, it does not extend either to governmental orders or to private conduct undertaken in compliance with such orders.[42]

2. *The antitrust laws do not apply to rates fixed by the Federal Power Commission*

It should not be forgotten that in this case we are dealing with a rate order. The Commission's initial order in this case merely required a reduction in rates. Its final order, prescribing the rates schedule, was likewise concerned only with rates, the method of computing rates and the services to be performed in return for payments to be paid (see pp. 70–72, *infra*). The last two items are clearly essential parts of a rate schedule, and must be considered in the rate-fixing process since the definition of a rate necessarily includes how it is to be computed and the services in return for which it must be paid.

Although private agreements with respect to rates in regulated industries are subject to the antitrust laws, it has been uniformly accepted for many years that the rates themselves are subject to the control of the regulatory agencies

[42] We do not mean to suggest that a state may by mandatory statute provide that private interests shall not compete or shall agree voluntarily about prices or follow a parallel price policy (*Schwegmann Bros.* v. *Calvert Distillers Corp.*, 341 U. S. 384, 389), although Congress could if it so desired. But a state can fix prices itself; that is what we have here, and the kind of situation which we are considering in this brief.

under the applicable statute.[43] As stated in *Keogh* v. *Chicago & N. W. Ry. Co.*, 260 U. S. 156, 162:

> What rates are legal is determined by the Act to Regulate Commerce.

See also *Georgia* v. *Penn R. Co.*, 324 U. S. 439, 453–455, and cases cited. And the same is obviously true as to the Federal Power Act. *Montana-Dakota Utilities Co.* v. *Northwestern Public Service Co.*, 341 U. S. 246, 251.

Citation is not necessary to show that in determining "just and reasonable" rates, the standard under almost every statute, the agency may weigh many factors in addition to antitrust criteria. Even though the general policy in favor of competition is one factor which must be considered (*McLean Trucking Co.* v. *United States*, 321 U. S. 67, 86, 87), in general, as the court below stated, with respect to rates the determination of "just and reasonable" is governed not "by the pressures of competition [or the lack of it] but by the adequacy of the service to the

[43] *Keogh* v. *Chicago & Northwestern Ry. Co.*, 260 U. S. 156; *United States Navigation Co.* v. *Cunard Steamship Co.*, 284 U. S. 474, 485; *Central Transfer Co.* v. *Terminal R. Assn.*, 288 U. S. 469; *Terminal Warehouse* v. *Pennsylvania R. Co.*, 297 U. S. 500, 514; *McLean Trucking Co.* v. *United States*, 321 U. S. 67, 83; *Georgia* v. *Pennsylvania R. Co.*, 324 U. S. 439; *Far Eastern Conference* v. *United States*, decided March 10, 1952. See also, *S. S. W., Inc.* v. *Air Transport Association*, 191 F. 2d 658, 661 (CADC) pending on petition for writ of certiorari, No. 568, this Term.

public, the fairness of the return allowed upon the investment in the company and the degree to which the congressional objective of efficient use of the nation's power resources is served" (R. XVIII, 5372). Cf. *Federal Power Commission* v. *Hope Natural Gas Co.*, 320 U. S. 591, 603.

The need for regulation of the rates of public utilities arises in large part because experience has demonstrated that such industries cannot be fully competitive and that competition will not adequately protect the public. Because of economic and technological facts electric utilities are in large measure natural monopolies. Prior to the enactment of the Federal Power Act in 1935, various evils had developed in the electric utility industry which could not be effectively dealt with under the laws as they then existed—which, of course included the antitrust laws—and the Power Act, together with the Public Utility Holding Company Act, was directed at these evils. See *Federal Power Commission* v. *Hope Natural Gas Co.*, 320 U. S. 591, 609. Thus, "in place of competition as a generalized and indirect regulator of prices and services", for the "field of interstate transmission of electric energy at wholesale" (R. XVIII, 5371), Congress has provided for regulation by the Federal Power Commission of certain phases of utility activities, including the fixing of rates and services, to protect the public-interest against, *inter alia*, the

very evils attending monopolistic control at which the Sherman Act is directed.

In this field of rate regulation the Commission is not precluded from prescribing arrangements which might be unlawful under the Sherman Act, if contained only in private agreements. This can be demonstrated by a simple example. Two utilities cannot legally agree upon the rates they will charge customers. But a regulatory commission can *prescribe* the same rates for each—and neither the agency nor the companies which obey this order will be in violation of the antitrust laws. So long as the order is authorized by the regulatory statute, it is valid—and there is no need for any express statutory provision stating that the antitrust laws are not an implied limitation upon the agency's statutory rate-making authority. This would seem to be the theory and philosophy underlying such cases as *Keogh, Terminal Warehouse, Georgia* and *Far Eastern Conference.*

It is true that in the cases cited the rates were sought to be challenged collaterally, whereas this case (as distinct from Nos. 611 and 612) is a direct review of the order of the regulatory agency. But the governing principle is still the same—rates which conform to the standard of the regulatory statute are not governed by the antitrust laws.

This principle is sufficient to dispose of the instant case. For, as we have shown, the Commission's order is a rate order. Inclusion within it of provisions as to the continued pooling of power resources relates to the service to be rendered in return for the rates to be fixed, is obviously necessary if the power of the Susquehanna is to be effectively utilized, and in any event is not challenged here as unlawful. This means that it was entirely proper for the Commission to require Penn Water to continue to dispose of its power by selling Consolidated the residue, as part of an arrangement whereby Consolidated transmits steam generated energy to Penn Water when the water power is insufficient to supply the firm demands of the latter's Pennsylvania customers. Once this method of providing service is accepted, it is apparent that the residual method of determining the amount Consolidated must pay Penn Water is merely a rate formula adapted to the service for which the rate is being fixed, and thus within the Commission's power to prescribe just and reasonable rates.

There can be no doubt as to the reasonableness of the residual payment formula in the present circumstances.[44] The joint operation of Penn

[44] We do not doubt that in ordinary industry an agreement between competitors whereby one both guarantees and limits the other's profits, thus depriving the latter of its incentive to compete, would violate the antitrust laws where the effect would be substantially to lessen competition in the industry

Water's hydro facilities and Consolidated's steam plants enables Penn Water to provide a substantial portion of the power needed in a large and populous territory in Maryland and Pennsylvania, whereas unless Penn Water's resources were supplemented by large steam power capacity, it could not serve as a source of firm power supply to any area of more than minuscule size. Such joint operation of the plants, as a single system in which power could flow from one to the other as required by the amount of water in the Susquehanna, would best serve the public interest in cheap power if the *sole* consideration on the part of the operators of the system were the economical production of electric energy. But if each company were required to pay for each unit of power supplied by the other, each would have an incentive to sell as much of its own power and to receive as little of the other company's as possible. The experience of these two companies prior to 1931, under just such a plan, revealed its deficiencies, and resulted in the adoption of the residual method of payment. See pp. 15–19, 47–48, *supra*.

If Penn Water were required to stand alone as an independent competitor, most of the value of

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concerned. In the particular circumstances of this case, however, where the method of payment is tied into a pooling of the product, electric energy, which is required by the physical nature of the source of the energy, the available flow of the Susquehanna River, a different result might be reached.

the water power would be lost. The public's interest in the most efficient and economical utilization of the water power of the Susquehanna would inevitably suffer if the hydro company were required to compete for revenue with the very steam plants with which its facilities were physically and economically joined.

When the reasonableness of the method of payment from the standpoint of the public interest in low power rates (pp. 11–19, *supra*) is considered in connection with the statutory authority of the Federal Power Commission over rates and charges, which includes, of course, the method of computing them (pp. 39–48, *supra*), it is clear that the payment provisions of the order fall within the area of the Commission's discretionary authority over rates, and that there is no occasion to consider whether a private arrangement of the same sort would violate the antitrust laws. The provisions of the Commission's order prescribing the service to be rendered and the method of paying for them are thus a proper exercise of the power to regulate rates and are not violative of the antitrust laws. The other provisions of the order, including those incorporated by reference from the prior contract, are merely ancillary to the regulation of rates and services. As we shall see in Point II C, *infra*, pp. 65–73, these ancillary provisions do not include the two articles of the

prior contract found by the Fourth Circuit to be unlawful under the antitrust laws.

B. THE COMMISSION'S ORDER DOES NOT VIOLATE SECTION 10 (H) OF THE POWER ACT

Petitioners also assert that the Commission's order and the contracts upon which they allege it is based are in violation of the antitrust provision contained in Section 10 (h) of the Federal Power Act. Section 10 provides that:

> All licenses issued under this Part shall be on the following conditions:
>
> * * * * *
>
> (h) That combinations, agreements, arrangements, or understandings, express or implied, to limit the output of electrical energy, to restrain trade, or to fix, maintain, or increase prices for electrical energy or service are hereby prohibited.

The court below rejected petitioners' contention on the ground that since Section 10 (h) was contained in Part I of the Power Act, it did not apply to utilities also covered by Part II, and that, if necessary, Part II should be construed as having superseded Section 10 (h) for utilities subject to that Part (R. XVIII, 5377–5379).

We do not believe that Section 10 (h) has been repealed or superseded by Part II, or that it is necessary so to hold to determine this case. Section 10 (h) is one of the conditions attached to the license of a company which operates a project

on a navigable stream or on public land, pursuant to the permission granted by Part I. For violation of any of the conditions, including that contained in paragraph (h), the license is subject to revocation through a suit instituted by the Attorney General. Section 26. The condition imposed by Section 10 (h) would seem to be binding on companies subject to Part I even if they are also subject to regulation under Part II.

But on its face Section 10 (h) has the same scope as the Sherman Act itself. When it refers to "combinations, agreements, arrangements, or understandings," it is obviously concerned only with private combinations, etc., just as is the Sherman Act (pp. 49–56, *supra*). Section 10 (h) thus clearly does not interfere with or diminish the authority of the Commission to issue rate orders, and does not make it unlawful for licensees to comply with orders which the Commission has validly prescribed. The argument in Point II A, pages 49–63, *supra*, which demonstrates that such orders and conduct taken in compliance therewith do not violate the Sherman Act, is equally applicable to Section 10 (h).

Accordingly, if it be assumed that Penn Water, as a licensee subject to regulation under Part I and a wholesaler in interstate commerce subject to regulation under Part II, is still bound by Section 10 (h), its position in this case will not

be advanced. For Section 10 (h) does not invalidate the Power Commission's order prescribing the rates and services to be performed. Since the Power Commission has not authorized the continuance of any private agreement, in restraint of trade or otherwise, but has prescribed rates of its own, it is obvious that a statutory provision prohibiting only certain types of private agreements or combinations has no application.

C. THE COMMISSION HAS NOT ORDERED THE CONTINUANCE OF ANY CONTRACTUAL PROVISION HELD UNLAWFUL BY THE FOURTH CIRCUIT OR OTHERWISE UNLAWFUL

1. *The Fourth Circuit held only Articles IV and V of the Penn Water contract, not the pooling and residual payment provisions, to be unlawful*

A basic premise in the petitioners' argument is that the Commission's order is in conflict with the decision of the Fourth Circuit because the Commission prescribed contractual provisions held by the Fourth Circuit to be unlawful. This Court is, of course, not bound by the Fourth Circuit's ruling—as petitioners themselves recognize in attributing antitrust violations to provisions of the contract which the Fourth Circuit clearly did not hold to be unlawful. See pp. 74–75, *infra*. In view of the petitioners' strong reliance upon the Fourth Circuit's decision, however, it is important to ascertain precisely what provisions of the contract that court held to be un-

lawful.[45] Such an inquiry, followed by a reference to the terms of the Commission's order, will reveal that the Commission has not prescribed anything held unlawful by the Fourth Circuit, as that court itself agrees.

The Fourth Circuit's opinions demonstrate plainly that only Articles IV and V of the agreement were held to be "illegal restrictions" in violation of the antitrust laws. These are the articles which prevent Penn Water from entering into contracts of sale or purchase and from expanding or contracting its plant without Consolidated's consent. (See p. 10, *supra;* R. XV, 4612–4613, R. XVIII, 5328.) These provisions the Fourth Circuit characterized throughout its opinions as the "illegal restrictions."

The court discusses these provisions and their effect in detail, and concludes that they violated the antitrust laws (R. XVIII, 5330–5331). But there is no suggestion in any of the Fourth Circuit's opinions that the provisions of the contract relating to power pooling and method of payment were unlawful, and this despite the fact that Penn Water urged (see Br. in first *Consolidated* case in the Fourth Circuit, p. 27), as it does here

[45] We do not mean to suggest or concede that the Fourth Circuit possessed jurisdiction to invalidate any provisions of a Commission rate order, including any which may have been effectuated by reference to a contract filed as a rate schedule. The Commission rather than the court would seem to have primary jurisdiction over attacks upon the validity of anything which the Commission has prescribed.

(Br. in No. 428, pp. 63–67), that the payment provisions also violated the antitrust laws. On the contrary, the court repeatedly described the contract in terms which demonstrate that it regarded the provisions relating to power pooling and payment, but not Articles IV and V, as entirely lawful. Thus in the Fourth Circuit's second opinion (R. XVIII, 5358) it described the Penn Water-Consolidated contract as providing that:

> Consolidated should be entitled to all of the electric capacity and energy available to Penn Water and not otherwise disposed of in the performance of existing contracts, and in consideration thereof, Consolidated agreed to pay Penn Water an amount equal to its operating expenses, a specified rate of return on existing facilities, and on the cost of new facilities less depreciation, * * * *Closely associated with these provisions were the illegal restrictions on the future activities of Penn Water which resulted in the invalidation of the whole contract.* [Italics supplied.]

Substantially the same language was employed in the court's prior reference to the Third Circuit's *Safe Harbor* decision, when after referring to the provisions for disposal of the supply of electric energy and the method of payment therefor, the court said (R. XVIII, 5343):

> The restrictive provisions of the agreement were not mentioned and their legal validity was not discussed.

That the Fourth Circuit so construed its decision in the case involving the Penn Water-Consolidated contract is confirmed by the opinion in the second *Consolidated* case, which states flatly that the contract had been held "invalid [in the first case] because Articles IV and V * * * conferred upon Consolidated the power to control" Penn Water's activities (No. 611, R. 233, slip op., pp. 3–4). The court went on to describe the contract in the instant case as providing in effect that Consolidated should be entitled to Penn Water's power in return for paying its operating costs and a specified greater rate; "and then", said the court, "followed the illegal restrictions upon the activities of Penn Water" (No. 611, R. 234–235, slip op., p. 5).[46]

These repeated statements by the Fourth Cir-

[46] Petitioners' argument (Br. No. 428, p. 63 fn.) that the Fourth Circuit held unlawful the payment provisions of the contract here involved is contrary to the entire tenor of the opinions in the first *Consolidated* case there, as well as to the passage from the second case quoted in the text. Petitioners advert, however, to the fact that at one point in its opinion in the second *Consolidated* case the Fourth Circuit seems to have included the pooling and payment provisions of the contract there involved among those which it classified as "restrictions" (No. 611, R. 235–236, slip op., pp. 6–7). But this seems inconsistent with the passage quoted in the text from the same opinion, and the opinion as a whole also indicates clearly that the court is only holding particular restrictive articles of the contract there involved to be unlawful. In any event, in the passage to which petitioners refer, the Fourth Circuit was not referring to the payment provisions in the contract in the instant case.

cuit which contrast the pooling and payment provisions with the "illegal restrictions" leave no possible doubt that the only provisions of the Penn Water-Consolidated contract which it held violative of the antitrust laws were the restrictions contained in Articles IV and V. The court went on to invalidate the entire contract, including the provisions relating to the power pooling and the method of payment, but not because it regarded the latter provisions as illegal in and of themselves; this was never suggested. The reason was that the court deemed Articles IV and V to be so inseparable from the remainder of the contract that without these Articles the latter could not be said to reflect the intention of the parties and hence could not function as an agreement between them (R. XVIII, 5358–5359). Despite this invalidation of the entire contract, there is no suggestion in the Fourth Circuit's opinion of any legal obstacle which would have prevented the parties from entering into another agreement in effect reaffirming the earlier contract minus, of course, the illegal articles. By the same token, nothing suggests that if the Commission were to prescribe the continuance of such arrangements minus the restrictive provisions there would be any violation of the antitrust laws. That is what the Commission did.

2. The Commission did not prescribe any unlawful provisions of the contract

Although, as Penn Water points out in its brief (No. 428, p. 49), the Commission referred to Articles IV and V in its opinion on rehearing (R. XVI, 5184), nothing in that opinion or the other opinions or orders entered in this case directs the continuance of those provisions.

In its original order of January 5, 1949, before Penn Water had raised the antitrust objection, the Commission did not order compliance with the terms of the contract generally, or refer to Articles IV and V at all. The Commission at that time merely ordered that the formula payment arrangement "whereby sales to Pennsylvania customers are made on a firm basis on definite rate schedules whereas Baltimore Company takes what is left and assures" Penn Water of the "recovery of all proper operating expenses * * * and a fair return" be continued at greatly lowered rates (R. XVI, 4981, 4994). It did not prescribe the provisions of any contract or rate schedule, but ordered Penn Water to file "a new schedule of rates and charges" which would effectuate the rate reduction (R. XVI, 4995). When confronted for the first time, on petitioners' first petition for rehearing, with Penn Water's claim that Articles IV and V were illegal, the Commission referred to the above quoted portion of its prior opinion, and commented (R. XVI, 5184–5185) that:

> If there are questions as to the legality of the foundation contracts which are in litigation, as Respondents' application for rehearing indicates the validity of our order is not dependent upon the decision of those questions. In our opinion and order, we took care to leave the continuation of the operation of the integrated and interconnected system in full effect, merely changing the rates * * *.

Thus, the Commission made it clear that it did not regard its own order as prescribing anything except a reduction in rates computed in substantially the same manner as provided in the contract."

Only when it concluded that Penn Water would not file a satisfactory schedule of rates and charges did the Commission itself prescribe its own rate schedule (R. XVII, 5277–5283), and also order that (R. XVII, 5283)—

> All other provisions of the aforementioned contracts, *in and of themselves lawful*

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47 The assertion that the Consolidated contract is inseparable and "is not a rational business arrangement" without Articles IV and V (No. 428, Br., p. 59, fn.) obviously has no bearing on whether the Commission prescribed such an arrangement. For the Commission's duty is to require arrangements which further the public interest without regard to whether private business concerns, acting pursuant to their individual interests, would voluntarily assume similar obligations. The "inseparability" found by the Fourth Circuit in the contract *qua contract* depended on the intention of the parties, and clearly would not extend to the Commission's order which is not dependent upon private intent.

> prescribing or defining in the power, energy and transmission services to be furnished, or any classification, practice, regulation or rule affecting such services, which several provisions are incorporated herein by reference, shall be observed and be in force.

The Commission was, at the time fully aware of the claimed illegality of these provisions (see pp. 24–25, *supra*); accordingly, it limited its prescription to provisions "in and of themselves lawful" in order to insure that its order would not be construed as having prescribed any provision which might be held unlawful in the course of Penn Water's antitrust litigation against Consolidated. In addition, and significantly, the provision in question is limited to the portions of the contract "prescribing or defining the power * * * services to be furnished," or any rule "affecting such services"; it does not order compliance with the contract as such.

Both the Fourth Circuit and the court below have so understood the Commission's opinions. In the second *Consolidated* case, the Fourth Circuit rejected the Commission's assertion that in that case, unlike the first *Consolidated* case, it had prescribed the entire contract, including the restraints, largely because it agreed that the Commission had not done so in the first case, saying (No. 611, R. 243, Slip op., p. 15):

> * * * It is obvious that the Commission did not prescribe the restrictive conditions of the contract as part of the rate order in either case * * *.

Similarly the court below has not said that the Commission has prescribed the restrictive conditions; on the contrary, it has sharply differentiated between these restrictive provisions and the arrangements prescribed by the Commission pursuant to its authority under the Federal Power Act to prescribe reasonable rates and services. Thus, on the one hand, the court described the restraints in Articles IV and V as having "been privately agreed upon by the parties and submitted to the Commission as an accomplished fact" (R. XVIII, 5375). Cf. *Georgia* v. *Pennsylvania R. Co.*, 324 U. S. 439, 461–462. On the other hand, the court below points out that the Fourth Circuit, following the lead of this Court in the *Georgia* case, properly avoided affecting any pending rate proceeding; comments that the Commission's order relates only to "services and rates, reflecting underlying operations"; and rules that as such, its validity is governed by the Federal Power Act (R. XVIII, 5375).

D. THE COMMISSION'S ORDER IS NOT BASED ON THE CONTINUANCE OF THE CONTRACT

Petitioners argue that the Commission's order is based upon continuance of the contract, that the Fourth Circuit held the entire contract in-

valid,[48] and that therefore the order must fall unless the Commission can override the Fourth Circuit's decision as to the validity of the contract under the antitrust laws. But the Commission's order did not rest on the contract as such, but on the preexisting method of operation. In ordering the continuance of that method so far as lawful, the Commission was not ordering continuance of the contract *qua* voluntary contract. The Commission's order prescribing rates, charges and services to be performed stands or falls irrespective of the contract or its validity as private arrangement—even though the order incorporated parts of the contract by reference.

Particularly insofar as the method of payment is concerned the Commission has superseded private contract provisions. In the rate schedule which it "prescribed" (R. XVII, 5277, 5279–5283) the Commission spelled out in full detail the manner in which the payments by Consolidated to Penn Water were to be computed. The Commission-prescribed order—four record pages in length (R. XVII, 5279–5283)—thus completely supplants the four-and-a-third pages of Article III of the original contract, which covers the same ground (R. XV, 4608–4612).[49] The fact that the

[48] As has been pointed out, the contract was held invalid because the court held the remainder inseparable from the restrictive provisions in Article IV and V.

[49] The original Article III was modified and slightly lengthened by the supplemental agreement of September 29, 1939 (R. XV, 4619–4621).

Commission's order followed in general the residual method for computing the payments employed in the prior contract does not mean that that portion of the contract was left in effect. The last paragraph of the Commission's "prescribed rate schedule" which incorporated by reference only "all *other* provisions of the aforementioned contracts, in and of themselves lawful" (R. XVII, 5283), makes this plain. For the preceding sentence states that:

> The foregoing provisions supersede only the rates and charges heretofore made, demanded, collected or assessed against the Baltimore Company [Consolidated] by Penn Water * * *.

"The foregoing provisions" of the Commission order were those to which we have referred, which defined the method of computing the amount to be paid, and are obviously rate-making provisions. The fact that the method prescribed is more complex than usual does not make the prescribed schedule any less one concerned entirely with the fixing of rates.

Although we think that the point requires no further reply, it seems advisable to deal separately with each of the "critical features" of the order which petitioners assert to be based upon the assumed existence and continuance of the contract.

(1) *Interstate Commerce.*—Petitioners object that the Commission's finding that the sales to

Pennsylvania utility customers were in interstate commerce ~~were~~ based on the provisions as to pooling contained in the invalidated contracts and must fall with the contracts. The Commission's jurisdiction over interstate sales, however, necessarily rests on the method of operation prior to the entry of the Commission's order and not on the contractual arrangements therefor. What else can the Commission look to as the basis for its jurisdictional finding? If the record before the Commission reveals that a power company's sales have been interstate up to that time[50]—whether by reason of private contract or not, and irrespective of whether lawful or not—the Commission is authorized to regulate them. The possibility that by reason of the lapse of a private contract or otherwise the company may wish to change its method of doing business in the future so as to affect the interstate nature of a portion of its operations does not deprive the Commission of jurisdiction to regulate what has been interstate up to that time.

For at least 20 years Penn Water's facilities have been operated in conjunction with those of Consolidated, with the result that the power has flowed from Maryland to Pennsylvania cities, as well as from the dam in Pennsylvania to Baltimore. Despite the Fourth Circuit decision, this flow is still continuing. To alter it would doubtless require some rearrangement of physical plant,

[50] That Penn Water sales were interstate is shown in Point V, *infra*, pp. 105–118.

as well as the consent of the proper regulatory authority.[51] At least until that occurs, if it ever does, the Power Commission's authority continues irrespective of the contracts.

(2) *Rate of Return.*—Penn Water bases its claim that the 5¼% return fixed by the Commission was premised on the security afforded it by its contract with Consolidated (Br. in No. 428, p. 52–3), on references by the Commission to the fact that the contract assured it of a "stabilized income" (R. XVI, 4953) and by the court below to the evidence before the Commission that Penn Water was "insulated" from any "substantial risk" by the contract (R. XVIII, 5386).

The substitution of a Commission-prescribed arrangement for a contractual one of the same sort will provide the same stability of income for as long as the Commission-prescribed rates remain in effect. Only if one of the parties seeks and obtains permission to escape from the ar-

[51] In discussing Penn Water's threat in its petition for rehearing to terminate its present services and undertake new services, the Commission has pointed out that any such change would require 30-day notice to be given by filing with the Commission new schedules of rates and charges which would afford Consolidated and the Maryland Commission an opportunity—

"to make application under Section 202 (b) for an order 'to sell * * * or exchange energy' from and after the time of the proposed change or termination of service, or a complaint under Section 207 as to the adequacy of the service to be rendered." (R. XVI, 5188; see also R. XVI, 5180–1, 5185–8.)

rangement might there be any prejudicial change, which would then be taken into account in fixing a new rate. Nothing that has occurred to date suggests that any party but Penn Water itself is seeking such escape. Even the possibility that the arrangement might be terminated before the expiration date of the contract, 1980, would not impair the stability of income which Penn Water will receive under the method of payment prescribed by the Commission. Throughout whatever period the Commission-prescribed rates are operative, be it a month, a year, or a decade, they will for that period provide the same stability of income previously afforded by the contract-provided rates.

A reading of the Commission's order will disclose that the company's financial experience under the contract was only one of a number of factors which the Commission considered in fixing the rate of return. Equally emphasized was the ready market available for Penn Water's power, and the Baltimore company's sound financial position, all of which are equally beneficial to Penn Water so long as the present arrangement continues pursuant to the Commission's order, contract or no contract (R. XVI, 4953–4). Of principal importance, of course, was the Commission's view that a 5¼% return applied to the rate base and designed to provide 3.17% for bonds, 5.21% for preferred stock (Penn Water's actual pres-

ent costs) and 8.64% for common stock and surplus was "fair" (R. XVI, 4954–6). The court below has held that there was substantial evidence to support this conclusion (R. XVIII, 5387) and we do not understand petitioners any longer to urge the contrary.

(3) *Allocation of Rate Reduction.*—(a) Petitioners attack the Commission's allocation of the excess revenues as being improperly based on Consolidated's "entitlements" under the invalidated Consolidated and Safe Harbor contracts rather than on the power actually delivered (Br. in No. 428, pp. 55–58; Br. in No. 429, pp. 32–34). But this contention ignores the distinction pointed out *supra*, pp. 73–75, between the provisions of the invalidated contracts and the Commission's order, which superimposed upon Penn Water relationships with Consolidated which have existence independent of the contract. Since the Commission's order prescribing the payments to be made by Consolidated involved a formula for computing charges similar to that provided under the contracts,[52] the Commission appropriately referred to the operation of the formula method under the contracts. The Commission, accordingly, included Consolidated's entitlements, which were to be continued under the terms of the order fixing the amount of the rate reduction to be

[52] The Commission's formula, although following the general lines of the contract formula, differed therefrom in several important respects. See *supra*, p. 23, fn. 24.

allocated to Consolidated. And inasmuch as the credits for these entitlements were common to both the Commission's formula and that of the contract, the Commission computed the actual amount of the entitlements on the basis of the companies' experience in the test year of 1946. This does not, however, mean that the credits to which the Commission ruled Consolidated entitled resulted from the contracts or because the Commission felt bound by the terms of the contracts to allow these credits. On the contrary, Consolidated received the credits because they were due it under the formula prescribed by the Commission as the "most practicable under the circumstances" to achieve the maximum over-all economy and coordination of resources and facilities. (R. XVI, 4981.)

(b) Petitioners further argue that the Commission erroneously construed the Consolidated's entitlements under the contracts. This claim was expressly overruled by the court below (R. XVIII, 5392–5393) and has not been specified as error. The argument, which in effect is that the Commission could only prescribe those entitlements provided in the contracts, with any departure therefrom being invalid, is patently inconsistent with the contention just discussed. Here, again, it is important to remember that the Commission was not prescribing the continuance of the contract provisions as such, but rather imposing its own requirements. And with this distinction in

mind, it becomes clear that it is immaterial whether the Commission in fact misconstrued the entitlements under the contract. The Commission was not bound to follow the contract formula method precisely or even generally in prescribing the method of payment, and all it intended to do was to prescribe entitlements as it understood them to exist, but as in any event it ordered they should continue.

In any case, it is demonstrable that the Commission's allocation actually did follow that provided by the contracts. Petitioners attack principally the $1,127,000 credit allowed Consolidated for the so-called economy interchange (Br. in No. 428, p. 57; Br. in No. 429, pp. 32–34). This credit arose from the fact that at those times when Consolidated's additional cost of steam generation is lower than that of a Pennsylvania utility, energy was furnished from the pool to Penn Water's Pennsylvania utility customers over and above its firm obligations to them. This energy, which was delivered by Penn Water, was obtained by diverting from Consolidated (1) the residual energy generated by Penn Water (i. e., the energy remaining after all of Penn Water's firm obligations are satisfied) to which Consolidated was entitled [53] and (2) part of Consolidated's entitle-

[53] Despite petitioners' present contention (Br. No. 428, p. 59 fn.; Br. in No. 429, p. 34), Penn Water has consistently recognized that Consolidated is entitled to all its energy remaining after its firm obligations had been met. See R. I. 50, 64, 65, 82, 489–490; II, 652; XV 4654.

ment to two-thirds of Safe Harbor total output;[54] in addition, Consolidated itself generated some of the energy used for this economy interchange. Thus, of the 191,664,000 Kwh furnished to Penn Water's customers on this basis in 1946, 65,863,000 Kwh was furnished directly by Consolidated and the remainder (125,801,000 Kwh) came out of Consolidated's residual and Safe Harbor entitlements. For the energy so furnished, Penn Water was paid a total of $1,127,699, computed at a price based on sharing the savings involved (i. e., a price halfway between Consolidated's additional cost of generating[55] and the higher cost to the

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[54] Penn Water's claim (Br. No. 428, p. 56), that the ⅓–⅔ division of Safe Harbor's output should have been applied after energy was furnished under contracts to which Safe Harbor was a party, is contrary to the construction given that contract, in the proceeding in which it was directly involved (*Safe Harbor W. P. Corp.* v. *F. P. C.*, 179 F. 2d 179, 184–185, fn. 9 (C. A. 3) certiorari denied, 339 U. S. 957). It is also contrary to the evidence in this proceeding, which shows that Safe Harbor was only a nominal party to these contracts for certain tax purposes (R. V, 2382, 2401–2) and that all the parties concerned regarded Safe Harbor's joinder in these contracts as not affecting Consolidated's right to ⅔'s of Safe Harbor's *entire* output. (See *e. g.*, R. XV, 4645–6, 4648–9, 4682–87; II, 608–10; X, 3715, 3720).

[55] To have computed the price on the basis of Safe Harbor's cost of hydro generation rather than Consolidated's cost of steam generation as suggested by Penn Water (Pet. Br. No. 428, p. 57, fn.), would have been unfair. Consolidated has to incur steam generating costs not only to furnish the economy interchange energy but to make up for the energy diverted from it. In these circumstances it is only equitable to compute the allowance on the basis of actual costs incurred, as the court below held (R. XVIII, 5392).

Pennsylvania utility if it had not generated). Inasmuch as the energy so sold belonged to Consolidated and in effect was for its account, Consolidated was clearly entitled to a credit therefor.[56] It is largely by virtue of this credit that Penn Water's excess revenues from Consolidated were increased from the $700,000 actually received from Consolidated to about $1,700,000.[57]

(4) *The order prescribed by the Commission is independent of the restrictive provisions of the contract.*—Penn Water argues that the Commission's order prescribing contractual provisions is void because the "illegalities" contained in Article IV and V permeate the entire arrangement. We do not agree, for the order stands independently of the contract, and of Articles IV and V.[58] In so far as the order is concerned,

[56] The Commission included in Penn Water's cost of serving Consolidated, the costs Penn Water incurred in furnishing the economy interchange energy to the Pennsylvania utilities.

[57] The facts, that the Commission has prescribed the entire Safe Harbor contract and that the entitlements thus prescribed are involved in determining the rate reduction allocation, do not provide any basis for attacking the present order. See Point IV, *infra*, pp. 94–105.

[58] The phrase "with Electric's [Consolidated's] approval" contained in Article II (R. XV, 4607–4608) is the only other portion of the contract which would seem to be dependent upon the restrictive articles. The Commission no more prescribed this clause than it did Articles IV and V. This provision was plainly not prescribed by the Commission because it was fixing rates for Penn Water's services "as heretofore rendered," not for altered service to Consolidated in the event Penn Water entered into new contracts with other customers in the future (R. XVII, 5279; XVI, 4981, 5185).

Penn Water need not obtain Consolidated's consent before expanding or taking on new customers. If the new arrangements should affect the service rendered by Penn Water to Consolidated, Penn Water must file a new rate schedule for the changed service. If a new contract should render the arrangement presently prescribed by the Commission unfair to either party, it may apply to the Commission for a modification of the present order.

In any event, since the antitrust laws do not apply to the Commission's order (*supra*, pp. 49–63), it is immaterial whether any provisions of the order might violate the antitrust laws if viewed as private contractual arrangements. Even more clearly, therefore, the Commission's order is not invalidated because the contract as such may have been permeated with "illegalities".

III

THE POWER COMMISSION DID NOT PRESCRIBE CONTINUANCE OF ANY CONTRACTUAL PROVISION WHICH MIGHT CONCEIVABLY VIOLATE THE LAWS OF PENNSYLVANIA, AND IF IT DID THOSE LAWS WOULD NOT INVALIDATE ITS ORDER

Petitioners contend that the Commission's order violates not only the antitrust laws but the laws of Pennsylvania. The Fourth Circuit so held with respect to the restrictive conditions in the contracts in both of the antitrust cases.

A. THE POWER COMMISSION HAS NOT PRESCRIBED ANY CONTRACTUAL PROVISIONS WHICH WOULD VIOLATE THE LAWS OF PENNSYLVANIA

Petitioners assert that Pennsylvania law is violated because the contract destroyed both Penn Water's "independent corporate character" by divesting "the board of directors of powers of management" (Br. in No. 429, pp. 20–21) and depriving it of the powers to initiate "reasonable rates and adequate services" (Br. in No. 429, p. 21; cf. Br. in No. 428, pp. 68–72).

Obviously, only the restrictive conditions in Articles IV and V can have any such effect, and these were the only provisions which the Fourth Circuit held unlawful, as we have shown (pp. 65–69, *supra*). Since, as we have also demonstrated (pp. 70–73, *supra*), the Power Commission has not prescribed the continuance of those provisions, the order does not conflict with any of the Pennsylvania statutes cited. Those statutes, which insofar as the present issue is concerned, do no more than forbid directors to abdicate their authority, do not outlaw reasonable arrangements for the coordination of hydro and steam power facilities in the public interest or a cost-plus method of payment which would lead to more efficient and economical production of electric energy. We shall point out in subsection (C) of this Point, *infra*, pp. 90–93, how far the Pennsylvania statutes are from having any bearing on the instant case.

B. A RATE ORDER VALID UNDER FEDERAL LAW CANNOT BE INVALIDATED BY THE LAW OF PENNSYLVANIA

Even if it be assumed that Pennsylvania statutes are inconsistent with the Power Commission's order, that order would stand as long as it was authorized by the Federal Power Act. In view of the Supremacy Clause of the Constitution, it is difficult to understand the argument that in case of conflict the State law controls. In this case we are concerned with the validity of a federal order. If that order requires conduct in violation of State law, which we doubt, there would be a direct conflict between federal and state law, and the former would, of course, prevail. If there is no conflict, petitioners' contention based upon Pennsylvania law disappears.

The principle of federal supremacy has been applied to the statutes administered by the Federal Power Commission. *Illinois Natural Gas Co.* v. *Central Illinois Pub. Serv. Co.*, 314 U. S. 498; *First Iowa Coop.* v. *Federal Power Commission*, 328 U. S. 152.[59]

Nor can the federal regulation be frustrated by provisions inserted by the state in its corporation law any more than by other forms of state

[59] In the *First Iowa* case, this Court rejected the contention that Section 9 (b), referred to here by Penn Water (Br. No. 428, p. 71), left in effect the requirements of Iowa law relating to the development of navigable waters which were in conflict with those of Part I of the Federal Power Act.

regulation. In *Northern Securities Co.* v. *United States*, 193 U. S. 197, where defendants urged that the stock acquisitions, which were claimed to result in an illegal combination under the Sherman Act, were permitted by the law of the state of incorporation and therefore that the Sherman Act as applied to defendants unconstitutionally trenched upon rights conferred by state law, this Court rejected this contention, saying (193 U. S. at 345–346):

> Such a view cannot be maintained without destroying the just authority of the United States. It is inconsistent with all the decisions of this court as to the powers of the National Government over matters committed to it. No State can, by merely creating a corporation, or in any other mode, project its authority into other States, and across the continent, so as to prevent Congress from exerting the power it possesses under the Constitution over interstate and international commerce, or so as to exempt its corporation engaged in interstate commerce from obedience to any rule lawfully established by Congress for such commerce. It cannot be said that any State may give a corporation, created under its laws, authority to restrain interstate or international commerce against the will of the Nation as lawfully expressed by Congress. Every corporation created by a

> State is necessarily subject to the supreme law of the land.[60]

Indeed, any other conclusion would virtually destroy any possibility of effective uniform regulation of interstate commerce on a national scale.

Petitioners argue that the Federal Power Act does not "give the Federal Power Commission authority to order or condone contractual arrangements violative of such State law" (Br. No. 428, p. 70); that congressional intent to preclude a State from exercising its traditional power must be clear and manifest (*id.* p. 73), and that here Congress intended the federal regulation to be supplementary to State regulation and not to supersede it. Petitioners rely on the purpose of the statute to fill the gap in State power left by the *Attleboro* case, and upon the provision in Section 201 (a) of the Power Act that—

> such federal regulation however, to extend only to those matters which are not subject to regulation by the States.

But neither that provision nor the general purpose of the Act meant that the power of the federal agency to establish reasonable wholesale interstate electric rates was to be subject to State

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[60] See also *Otis & Co.* v. *Securities and Exchange Commission*, 323 U. S. 624, 638; *Securities and Exchange Commission* v. *Central-Illinois Corp.*, 338 U. S. 96, 131. *Commonwealth & South, Corp.* v. *Securities and Exchange Commission*, 134 F. 2d 747, 752–753 (C. A. 3); Securities *and Exchange Commission* v. *Trans America Corp.*, 163 F. 2d 511, 518 (C. A. 3), certiorari denied, 332 U. S. 847.

control, exercised through State corporation laws or otherwise. Rather, the jurisdictional line drawn was that the Power Commission was to "exercise jurisdiction over matters in interstate and foreign commerce to the extent defined in the Act [*e. g.*, transmission or sale at wholesale in interstate commerce] and local matters would be left to the state regulatory bodies" (*Public Utilities Commission* v. *United Fuel Gas Co.*, 317 U. S. 456, 467). This Court has already held in regard to the parallel Natural Gas Act, that "as to rates to be effective in the future * * * Congress by that Act * * * preempted the regulatory powers over the transportation and sale of natural gas in interstate commerce" (*Public Utilities Commission* v. *United Fuel Gas Co.*, 317 U. S. 456, 466), with the Power Commission's jurisdiction being "exclusive". *Id.*, at 467; see also *Illinois Natural Gas Co.* v. *Central Illinois Public Serv. Co.*, *supra*; *First Iowa Coop.* v. *Federal Power Commission*, 328 U. S. 152; *Jersey Central Power & Light Co.* v. *Federal Power Commission*, 319 U. S. 61; *United States* v. *Appalachian Electric Power Co.*, 311 U. S. 377; *Northwestern Electric Co.* v. *Federal Power Commission*, 321 U. S. 119.

Certainly, in regulating interstate sales at wholesale, the Federal Power Commission would not be bound by a State corporation law or utility charter providing that a company must earn an 8% return on the reproduction cost new of its prop-

erties. The same principle applies here if it be assumed that the order of the Federal Power Commission, valid under the federal statute, is inconsistent with state law.

C. PENNSYLVANIA LAW DOES NOT PROHIBIT ANYTHING WHICH THE FEDERAL POWER COMMISSION HAS PRESCRIBED

Even if there were merit in petitioners' theories as to the supremacy of State laws *vis-a-vis* the Federal Power Act, it would avail petitioners nothing in this case. This will appear from a brief analysis of the State laws upon which petitioners rely.

None of the laws referred to contain specific provisions dealing with the present problem. The Pennsylvania utility law (Pet. Br. No. 429, App., pp. 47–49) is merely the customary statute providing that rates shall be "just and reasonable", service "adequate, efficient, safe and reasonable", and that utilities may not abandon or surrender services or rights or transfer their property without a certificate of public convenience. The provision of the State corporation law cited (*id.*, pp. 49–50) is the general section to the effect that a corporation shall be managed by its officers and directors.

If, as the Federal Power Commission found, the arrangements here involved were a reasonable means of taking full advantage, both in the public interest and in the corporation's own interest, of the water power of the Susquehanna River,

it is hard to see how a contract so providing could be characterized as an abandonment of the right of managerial control. On the contrary, the contract would seem to be a reasonable exercise of managerial discretion, since Penn Water's resources could not be efficiently developed, without some such arrangement, as its own officers testified (see pp. 16–18, *supra*). Nothing in any of the laws cited would seem to prohibit a board of directors from entering into comprehensive business arrangements, such as the Consolidated contract here involved, which foster the corporate purposes. Cf. *San Diego Water Co.* v. *San Diego Flume Co.*, 108 Cal. 549; *Venner* v. *Chicago City Ry. Co.*, 236 Ill. 349;[61] see, also, *Green Bay R.R.*

[61] In the *San Diego Water* case, the companies entered a contract whereby the Flume Company made the Water Company its sole agent for the sale of water in San Diego, with the combined properties of the companies to be controlled by certain officers as trustees. Subsequently, it was contended that the contract was *ultra vires* because the management of affairs of the corporations was transferred from the directors to the trustees. The California court, however, held that the contract "relates to the sale and distribution of water and to that extent, at least, it relates to the very purpose of the organization of each of these corporations, and is therefore presumably within their power" (108 Cal. at 558).

The *Venner* case involved a bill to set aside a municipal ordinance accepted by the street railway's Board of Directors on the ground that it involved delegating control to a board of supervisory engineers and was therefore *ultra vires*. The Illinois Supreme Court, however, held that the Board might make any contract that was necessary or proper to enable the corporation to accomplish the purposes of its creation and upheld the contract, including the delegation provision.

Co. v. *Union Steamboat Co.*, 107 U. S. 98, 100; *Hand* v. *Clearfield Coal Co.*, 143 Pa. 408. Petitioners have cited no Pennsylvania cases to the contrary.[62]

In any event abandonment of control here could be attributed only to Articles IV and V, which, as we have shown, are not prescribed by the Federal Commission. Insofar as deprivation of initiative with respect to rates and services is concerned, nothing in the Power Commission's order has that effect. Whatever may have been true under the contract prior to the Commission's order, Penn Water undoubtedly retains the right to petition the Commission to modify any of the provisions of its order, including both the provisions specifying the method of payment and Articles IV and V, if they are thought to have been prescribed by the Commission.

It is contended that the assured return provision of the contract and rate order, deprives

[62] The cases relied on by petitioners (Br. in No. 428, p. 69, first footnote) are not in point. For example, of the two Pennsylvania cases cited, one, *Dubbs* v. *Kramer*, 302 Pa. 455, involved the invalidity of a contract entered into by a director binding himself to vote a certain way at the directors' meeting. The other, *Severance* v. *Heyl & Patterson*, 123 Pa. Super. 553, involved the question whether a corporate officer has authority, without express delegation from the Board of Directors, to change a contract entered into by the Board. The other cases typically involved contracts not made by the Board of Directors which attempted to bind in advance the judgment which the Board is supposed to exercise in furthering the interests of the corporation.

Penn Water of incentive to exercise such initiative. The same could be said of any cost-plus contract, and yet such contracts are obviously not *ultra vires* for all corporations, as petitioners' arguments would imply.

Petitioners also refer to common law decisions of this and other courts[63] holding that utility companies cannot abandon their obligations under their franchises to competitors, or enter into a division of profits with competitors. None of these cases deals with circumstances such as are presented here, or remotely suggests that a corporation may not comply with the valid order of a regulatory agency prescribing utility rates. And none holds that such an order, when authorized by regulatory statute, would be invalid because of conflict with the common law.

In general, it is fair to say that the cases cited by petitioners reflect the same public policy manifested in the antitrust laws. Accordingly, they do not advance petitioners' position beyond the argument based upon the specific statutes expressing federal antitrust policy.

In short, Pennsylvania law does not prohibit anything which the Federal Power Commission has prescribed, and if it did the federal statute would prevail.

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[63] Notably, *Gibbs* v. *Baltimore Gas Co.*, 130 U. S. 396. See Pet. Br. in No. 428, p. 69n.

IV

THE COMMISSION'S ORDERS WERE NOT BASED ON ILLEGAL PROVISIONS OF THE SAFE HARBOR CONTRACT

Petitioners' attack on the Commission's orders under the federal anti-trust laws and under state corporation and public utility laws, involves, as we have indicated, not only the Fourth Circuit's decision, already discussed, invalidating the Penn Water-Consolidated contract, but also the decision invalidating the Safe Harbor contract in the case now pending on petitions for certiorari in Nos. 611, 612.[61] Thus Penn Water argues that the rate reduction "orders in numerous respects (most notably in connection with the FPC's asserted jurisdiction over Penn Water's Pennsylvania business * * *, determinations of cost of services to and determinations of revenues received from the various customers and the cost allocation under which the major share of the rate reduction is given to Consolidated * * * were predicated upon the fictitious 'entitlements' * * * provided for in the Safe Harbor contract rather than upon actual operations and power actually supplied," that contract having "been adjudged illegal *per se* (Br. No. 428, pp. 67–68; see also pp. 54–58, 68–76, and Br. No. 429, pp. 20, *et seq.*). But, as will readily appear, petitioners' contentions with respect to the *Safe Har-*

[61] No. 428, Pet., pp. 1, 3, 4, 9, 14, 15, 17, Br., pp. 1–2, 3, 4, 8–10, 11–12, 13–14, 17–18, 19, 67–68, 68–76; No. 529, Pet. pp. 29, 38, Br., pp. 2, 6, 8–9, 10–12, 13, 20–32.

bor antitrust decision are answered by some of the considerations already discussed in connection with the *Penn Water* antitrust case, and the Fourth Circuit's decision in the *Safe Harbor* antitrust case is plainly an insupportable collateral attack on a Commission-prescribed rate order.

A. INSOFAR AS ENERGY PURCHASED FROM SAFE HARBOR WAS INVOLVED IN FIXING PENN WATER'S RATES, THE COMMISSION'S ORDERS ARE FOUNDED ON THE SERVICES RENDERED BY SAFE HARBOR UNDER ITS PRIOR ORDER FIXING SAFE HARBOR'S RATES.

The Commission, in reducing Safe Harbor's rates to its two owner-customers, Penn Water and Consolidated, on November 4, 1946, prescribed a rate of the same sort as the one it later prescribed in the instant case for Penn Water's sale to Consolidated. The prescribed payment consisted of an annual amount, to be paid by the respective customers in the same 1/3-2/3 ratio in which Safe Harbor's energy was being sold to them,[65] the total amount to be com-

[65] Penn Water's contention that the service being rendered should be determined "on the basis of the power actually delivered to Consolidated" (Br. No. 428, p. 55) would mean that Safe Harbor sells none of its output to Consolidated because it is all physically delivered onto the lines of Penn Water. If Penn Water is to be understood as meaning power which it receives from Safe Harbor and delivers to Consolidated, then its reliance on physical deliveries is no more than an assertion that none of the rest of Safe Harbor's output is received by it for Consolidated's account—an assertion which is without support in the history of the development of the Safe Harbor project and the pool, in the contract terms, or in the physical operations, and is contrary to the

puted by a formula for determining the cost (including cost of invested capital) actually incurred in rendering the services. *Safe Harbor W. P. Corp.*, 5 F. P. C. 221, 266–269, 66 PUR (NS) 212, 255–256.

Except for changes in the provisions of the June 1, 1931, contract, and supplements, relating to the rate of return, the computation of the rate base to which the rate of return was to be applied, and a related change in the computation of the annual depreciation expense allowance, the Commission's order prescribed the June 1, 1931, contract, as supplemented, including the terms which the Fourth Circuit viewed as in restraint of trade.

In compliance with the Commission's order, but expressly reserving "the right to contest the validity of the Commission's order" in the United States Court of Appeals for the Third Circuit, Safe Harbor filed revisions to its Rate Schedule F. P. C. No. 1 (6 F. P. C., at p. 570). The revisions were approved and accepted by the Commission, and the rate schedule previously filed,[66] as thereby revised, was permitted to be-

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order of the Commission fixing the sale to Consolidated as ⅔ of the total output. Penn Water seeks to deny Consolidated ⅔ of Safe Harbor's output although Consolidated pays ⅔ of Safe Harbor's costs of service.

[66] The Safe Harbor contract of 1931 was first filed informally with the Commission on July 15, 1931, and again filed on December 28, 1932, in response to a letter from Chairman McNinch and the Commission's Order No. 31 requiring li-

come effective as the rate schedule prescribed by the order of November 4, 1946, being designated as Supplement No. 3 to Rate Schedule F. P. C. No. 1. 6 F. P. C. 570–571. The Commission's order was challenged on many grounds in a statu-

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censees to file their rate schedules and contracts. It was subsequently filed under Sections 205 (c) and (d) of the Federal Power Act on January 14, 1936.

The contract has been brought before the Commission repeatedly in formal proceedings, as affiliated company profits have been eliminated, interlocking directorates have been broken up, and rates reduced by the Commission, without interfering with the pool operation under that contract. It was incorporated in the record and was discussed in connection with the pool operation in the *Safe Harbor* original cost case in 1935 (1 F. P. C. 230) and in the first *Safe Harbor* rate case (2 F. P. C. 182, 34 PUR (NS) 236, reversed on other grounds, 124 F. 2d 800, certiorari denied, 316 U. S. 663). In the latter case, as in the present case (p. 94, *supra*), the testimony of Penn Water's President contrasted the benefits of the Safe Harbor contract, embodying a fixed return, with the difficulties inherent in a contract with a unit rate for demand and energy.

The pool operations came before the Commission again when it ended the system of interlocking directors and officers among Penn Water, Safe Harbor and Consolidated. *John Edward Aldred, et al.*, 2 F. P. C. 247, 35 PUR (NS) 361.

The contract came before the Commission yet again when, at the request of the Maryland Commission and others, the Commission initiated its investigation in the second *Safe Harbor* rate case (4 F. P. C. 696–697), in which it undertook to determine whether it should "fix by appropriate order or orders, just and reasonable rates, charges * * * practices or contracts" for Safe Harbor (4 F. P. C. at p. 697). In the course of the hearing Penn Water's President and Vice President both testified to the difficulties of pricing the output of the Safe Harbor project on a unit of service basis and to the virtues of the method finally developed and embodied in the Safe Harbor contract.

tory review proceeding in the Third Circuit, and sustained in all respects. *Safe Harbor W. P. Co.* v. *Federal Power Commission,* 179 F. 2d 179, certiorari denied 339 U. S. 957.

When, therefore, in the Commission's 1949 opinion-order in the Penn Water rate proceeding which is here under review (on a record closed July 16, 1947, more than seven months after the effective date of the *Safe Harbor* order) the Commission referred to receipts of Safe Harbor energy (R. XVI, 4857–4858), to the Safe Harbor power contract (R. XVI, 4859), and, in its discussion of allocation of costs of service, to "entitlements" to Safe Harbor's output (R. XVI, 4970, 4976, 4978), it necessarily was referring to the energy flows and entitlements under the contract revision prescribed by the Commission as Safe Harbor's rate schedule. For the rate provisions of the contract had by then been superseded by those which had been fixed by the Commission.

That the Commission did rely on its own previously prescribed Safe Harbor rate in fixing Penn Water's rates, is made clear in the Commission's opinion (R. XVI, 4960):

> The adjustment of the cost of power purchased from Safe Harbor, an increase of $37,063, has been made to give effect to the rate order of this Commission in the *Safe Harbor,* case, *supra.* * * *

B. SAFE HARBOR'S RATES DULY PRESCRIBED BY THE COMMISSION ARE NOT TO BE JUDICIALLY INVALIDATED IN A COLLATERAL PROCEEDING

In view of the fact that the Commission relied, as we have just shown, on its own orders in the *Safe Harbor* case and not on the Safe Harbor contract, petitioners' contention that the Commission based its orders herein in part on provisions of a contract declared illegal by the Fourth Circuit amounts in effect to the contention that the Fourth Circuit could invalidate the Commission's rate order in the *Safe Harbor* case, which had previously been upheld on direct review by the Third Circuit.

But the Fourth Circuit obviously has no such power. Under the Power Act orders of the Commission are reviewable only by way of a petition, filed within sixty days of the Commission's order, for direct review in a court of appeals. Sec. 313 (b); *Federal Power Commission* v. *Pacific F. & L. Co.*, 307 U. S. 156, 159. There can be no direct review in a district court and, even more clearly, no review by way of collateral attack in a proceeding to which the Commission is not even a party. And yet, it is upon such a proceeding, filed in the District Court for Maryland, that petitioners rely for their assertion that the Commission's order in the *Safe Harbor* case has been nullified. The fact that the Commission's order was upheld by the Third Circuit only serves to make this argument more astounding.

As long as the statute contains an adequate procedure for review of the Commission's order, that procedure must be followed, even as against the Commission itself. *Myers* v. *Bethlehem Shipbuilding Corp.*, 303 U. S. 41. And an order which is not set aside on such a direct review—and even more clearly when its legality has been judicially affirmed—cannot be challenged collaterally and must be accepted by other courts and parties as binding. With respect to rates fixed by the Federal Power Commission, this Court has recently said (*Montana-Dakota Utilities Co.* v. *Northwestern Pub. Serv. Co.*, 341 U. S. 246, 251):

> It can claim no rate as a legal right that is other than the filed rate, whether fixed or merely accepted by the Commission, and not even a court can authorize commerce in the commodity on other terms.

This does not mean that a party may not move the Commission to modify a rate schedule already entered if grounds for such a proceeding appear.[67]

[67] An application which is in substance only a petition for rehearing must be filed within 30 days. Sec. 313 (a). Moreover, under Sec. 205 (d) of the Act and Part 35 of the Commission's Rules (18 C. F. R. §§ 35.1, et seq.) such a rate could be terminated or changed only by complying with the 30 days' advance notice and the filing requirements of Sections 205 and 206, and would then be subject to complaint and investigation of the new rate under those sections, as well as subject to the right of customer companies or state commissions to seek Commission action with respect to compelling sale or interchange of energy or adequate service under Sections 202 (b) or 207 of the Act (*supra*, pp. 39–42, 77 n.).

The Commission is always open. Such a proceeding before the Commission itself is the only way in which an order already sustained may be attacked.

This principle applies to objections to a Commission order based on antitrust grounds as much as to other objections. Certainly as to private parties that has long been the law. *United States Navigation Co.* v. *Cunard S. S. Co.*, 284 U. S. 474. *Far Eastern Conference* v. *United States*, No. 15, Misc. decided March 10, 1952, reaffirms, the principle and even extends it to antitrust proceedings brought by the government. Those cases hold that even where a regulatory agency has not entered an order, resort must first be to the agency when it has jurisdiction over a problem containing both antitrust aspects and calling for the exercise of administrative discretion. *A fortiori,* must there be resort to the statutory procedure when the object is to attack an order of the agency itself.

C. THE COMMISSION'S ORDER IN THE SAFE HARBOR CASE DOES NOT VIOLATE THE ANTITRUST LAWS

As has been pointed out, the Commission's order in the *Safe Harbor* case prescribes the prior contractual arrangement as the new rate schedule. That order was governmental action, not a private

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And "until changed in the manner provided" by the Act, the provisions of the rate schedule are "obligatory alike upon carrier and shipper." *Robinson* v. *B. & O. R. R.*, 222 U. S. 506, 510.

contract or arrangement. For all of the reasons set forth in Point II–A (1) (pp. 49–56, *supra*), the antitrust laws are not applicable either to the order itself or to conduct pursuant thereto to avoid statutory penalties. In addition, the order in the *Safe Harbor* case, like the order in this case, was a *rate* order. Such orders in particular, for reasons stated in Point II–A (2) (pp. 56–63, *supra*), are subject to control by the rate-making agency and not through the antitrust laws. The Fourth Circuit decision in the *Safe Harbor* case seems to contravene both of these established principles, as well as the doctrine of primary jurisdiction.

The Fourth Circuit concluded that the Commission did not prescribe restrictive conditions in the contract as part of its rate order in the *Safe Harbor* case. But this interpretation is contrary to the words of the order itself[68] as well as to the Commission's interpretation of its own order. What the Fourth Circuit seems to have had in mind was that the Commission's action in attaching the "in and of themselves lawful" clause

[68] The order provides (5 F. P. C. 221, 269), "The Commission orders that: * * * (B) Safe Harbor shall file revised rate schedule F. P. C. 1, dated June 1, 1931, and supplements thereto, providing for a 5 percent return on a rate base computed in accordance with findings (12) to (17) above, inclusive, said revised schedule to be effective on and after January 1, 1947 * * *." "F. P. C. 1" was the Safe Harbor contract.

The subsequent paragraphs of the order detail the method whereby Safe Harbor was to compute its rate base.

to the order in the instant case shows that it would not have approved the conditions found to be unlawful by the Fourth Circuit in the *Safe Harbor* antitrust case if the antitrust contention had been presented to it. We do not know whether this assumption is valid, and whether the Commission, had the issue been raised, would have attached similar conditions in the *Safe Harbor* proceeding. The questioned portions of the *Safe Harbor* contract do not seem to have the same effect as those in the *Penn Water* case, as the petitions for certiorari in Nos. 611 and 612 point out. The Commission might also reasonably have concluded that the allegedly restrictive conditions were separable from the remainder of the contract, as the petitions for certiorari vigorously, and it seems to us reasonably, contend. If so, the Commission might have prescribed all of the contract except those conditions, or some of them, instead of throwing out the entire arrangement as did the Fourth Circuit. All of these possibilities demonstrate the wisdom, indeed the legal necessity, of requiring application to the Commission for a construction or modification of its own order instead of permitting collateral attack on a ground not raised before the Commission in a private suit to which the Commission is not even a party.

For the above reasons we do not think it necessary, or even proper, for this Court to determine for itself the validity under the antitrust

laws, or otherwise, of the particular contract provisions held unlawful by the Fourth Circuit in the *Safe Harbor* case. For the Commission itself, which has made the provisions a part of its order, is the agency to which the matter should be submitted—if the matter is not already foreclosed by the prior review proceeding in the Third Circuit. It should be noted, however, that there is an important difference between the provisions requiring one company's consent to the other's action when a part of a Commission order and not merely a private contract. For consent provisions in filed rates do not restrain the interested parties from filing an amendment to a rate schedule at any time, or from asking the Commission to amend a rate schedule, even one to eliminate the consent requirement itself. To illustrate: If any party is dissatisfied with having to obtain a consent now required by the Commission's rate order, it may file a proposed rate schedule or complaint seeking elimination of the consent requirement. The proposed change will be considered by the Commission on the basis of the current relevant facts, and acted on in the light of the governing legal principles, subject to judicial review under Section 313 (b) of the Act. A "restrictive provision" in a filed rate has thus an entirely different effect from a similar provision in an agreement not subject to statutory filing requirements and Commission regulation. A filed rate is subject to Commission alteration

in the public interest. An unregulated agreement restraining the parties from economic activity in which they would otherwise be free to engage, may be unalterable unless declared illegal by the courts under the antitrust laws.

For all of the above reasons we submit that the Safe Harbor order of the Commission was, and must be accepted as, binding and in force, and that it was entirely correct for the Commission so to assume in coming to its decision in the instant case. This leads to the conclusion that there is no basis for petitioners' contention that the order in this case should be set aside because of the "invalidity" of the Safe Harbor order. Also, it leads to the conclusion that the Fourth Circuit decision in the *Safe Harbor* antitrust case, now before this Court on petitions for certiorari in Nos. 611 and 612, was clearly erroneous.

V

PENN WATER'S SALES FOR RESALE TO ITS PENNSYLVANIA ELECTRIC UTILITY CUSTOMERS ARE IN INTERSTATE COMMERCE

The Pennsylvania Commission (but not Penn Water) contends that Penn Water's sales to its Pennsylvania electric utility customers are not in interstate commerce and hence that, although these sales are for resale, they are beyond the jurisdiction of the Power Commission to regulate. Even if it were assumed that this contention were well founded, it would not affect the rate reduction ordered in Penn Water's rates to Consoli-

dated in Maryland, which appear in a separately prescribed tariff which applies only to the interstate transmission of electric energy.[69]

In any event, the sales regulated by the Power Commission were all in interstate commerce, as both the court below in this case and the Court of Appeals for the Third Circuit in the *Safe Harbor* cases have held.[70]

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[69] The Pennsylvania Commission would not seem to be in a position to complain of this (if it is correct in its contention that the Federal Power Commission's authority does not extend to the Pennsylvania sales), even though it believes that a greater share of the reduction should be assigned to Pennsylvania. Although the Pennsylvania Commission's brief indicates dissatisfaction with the allocation (pp. 32–42), neither petitioner has brought that question here. Each refers to the allocation only as showing that the Power Commission relied on the private contract in determining the new rates.

[70] In its second *Safe Harbor* opinion (*Safe Harbor W. P. Co.* v. *F. P. C.*, 179 F. 2d 179, 184–185, certiorari denied, 339 U. S. 957, the Third Circuit stated as to Safe Harbor's sales:

"As we pointed out in our earlier opinion, 124 F. 2d at page 802, Safe Harbor's output is delivered to an integrated interstate electric system under the terms of the so-called '1931 contract,' two-thirds of the energy being sold to the Maryland Company and the remaining one-third going to the Pennsylvania Company. The Commission has correctly stated, 'The sales are sales for resale,' 5 F. P. C. at p. 235. They constitute in fact wholesale sales in interstate commerce."

Safe Harbor's energy moved into commerce through Penn Water's transmission lines and pursuant to precisely the same arrangement as power generated at Penn Water's own project.

The Federal Power Commission is authorized to regulate "the sale of electric energy at wholesale in interstate commerce." Section 201 (b). As we have seen (pp. 11–15), the pooling of hydro and steam power necessitated by the variable flow of the Susquehanna has resulted in the operation of the hydro and steam plants of Penn Water and Consolidated as an integrated system, and of the sale of their product as a single unit. When the river flow is high, the power runs from Penn Water's plant in Pennsylvania to Baltimore and to the Pennsylvania customers. In other parts of the year, power is transmitted from Penn Water's plant during the peak periods of the day or week, but from Baltimore the remainder of the time, during which the river water is impounded and reserved for the peak periods. The amount which will move to the Pennsylvania customers from either the Baltimore or Pennsylvania plants on any particular day must be determined, day by day, as affected by the flow of the river. It is true that after the event the approximate amount of power transmitted to all of Penn Water's Pennsylvania customers from each source can be determined, and that on an annual basis in 1946 83% of the energy used by those customers was generated in Pennsylvania.[n] This

[n] The 83% is nothing more than the relationship of Pennsylvania-generated energy to total energy from both states in 1946. It does not represent the percentage of Pennsylvania energy involved in the sales to any individual Penn Water customer. Such data are not available from meter

figure reflects the fact that in months of high river flow none of the power used in Pennsylvania is obtained from Consolidated's steam plants in Baltimore. But in certain parts of the day or week during the long low water periods, all or most of the power used in Pennsylvania comes from the Baltimore plants. And at some times both Maryland and Pennsylvania power will be mingled in the transmission lines.

By careful coordination which supplies power from the most economical source irrespective of

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readings, for the meters registering the amount of energy sold to the Pennsylvania customers do not identify the source of the energy involved in the sales. It is doubtful whether metering could be developed which would provide such data. To secure such data of that nature as are contained in the Record required elaborate engineering studies of the movement of electric energy on the integrated system, based on reasonable assumptions with respect to the behaviour of electric energy flows. The nature of the complex hourly computations which would be required to identify the percentages of out-of-state energy involved in the sales to the Pennsylvania customers if, for purposes of regulation and billing, segregations between out-of-State and in-State energy were necessary, is illustrated by the studies of flows of electric energy made by staff engineers for 20 days of the year 1944 (Tr. LVIII, 22350–22370) and 30 days of the year 1946 (R. XIV, 4405–4435). Those studies involved elaborate calculations consuming many months (RI. 351–375; RV. 2279–2285). They were made for the purpose of establishing the approximate magnitude of out-of-State energy involved in the sales to the Pennsylvania customers under certain river conditions. Such studies showed that individual Pennsylvania utility customers received 100% Maryland generated energy for substantial periods of time and lesser percentages for longer periods of time (RI. 362, 370, 371, 374, 375; RV. 2282–85).

State lines, the integrated system has been able to supply a much larger utility load than would result from the mere addition of the capacities of the several plants if operated independently, and has been able to do so at much less than the average of the costs of such independent operation.

The sale which the Power Commission was regulating was the sale of the product of this integrated interstate system, some generated in Maryland and some in Pennsylvania. The Pennsylvania customers who obtained the firm power necessary for such communities as York, Lancaster and Coatesville would not have purchased the power generated by Penn Water alone at its Pennsylvania facilities. If they had, the cities would have been without power, or without enough power, many times during the year. The product sold, consisting of energy and capacity assuring reliable year-around service to the Pennsylvania communities, is not a mere composite of the products of the individual plants but an interstate product whose nature and very existence are wholly dependent on the continued operation of the integrated interstate system. The product Penn Water sells to the Pennsylvania customers is a product whose availability and low cost has been made possible by the interstate pool which places Penn Water in a position to draw upon Consolidated's out-of-

state steam generators when needed. As the court below held (R. XVIII, 5384):

> * * * Because such an energy pool, drawing upon the extensive steam and hydro capacities of Penn Water, Safe Harbor and Baltimore Company now exists, both Penn Water and Baltimore Company have been able to satisfy commitments which would otherwise be outside their individual capacities, as they are now constituted. Given such interconnected and integrated interstate wholesale operations, there can be no such thing as assigning a particular sale solely to operations within Pennsylvania. Each sale is in effect a pool sale drawn from the integrated interstate system and hence interstate in nature.

The sales here regulated by the Power Commission are thus interstate sales. They included an inseparable and essential quantity of power crossing the State line. The fact that some intrastate energy is also included does not make the sale an intrastate one.

Interstate commerce, both generally and as reflected in the Federal Power Act, is not an artificial or abstract or "technical legal conception, but a practical one, drawn from the course of business" *Swift and Company* v. *United States*, 196 U. S. 375, 398. Here we are concerned with a law designed to regulate interstate rates. If some of the energy sold as a part of a

single, inseparable transaction is interstate, it is obvious that the entire sale must be treated as interstate for purposes of rate regulation. No company could operate under a system whereby a state commission would fix the rates for the energy sold in the spring months of high water and in other parts of the year from 4:00 to 7:00 p. m. on week days, and a federal commission the remainder of the time. And here the problem is not nearly that simple, inasmuch as the periods and the quantity of power coming from one source or the other vary from day to day and from hour to hour.

Since the source of the power used depends ultimately upon the quantity of rainfall in the Susquehanna watershed, it can only very roughly be estimated in advance whose energy will be used. Rates, however, must be determined in advance, for a period of some duration in the future. They cannot be fixed after the fact, when it has been determined that a certain percentage during the preceding year—or week—came from one source rather than the other.

It is thus obvious that the rates for a single integrated transaction of sale must be prescribed by a single agency. Since the arrangement whereby the river flow is used most economically requires a unitary operation including sales to Maryland and to and within Pennsylvania, that agency cannot as a practical matter be the organ of a single state. Furthermore, when the Power

Act was passed in 1935, the states lacked constitutional power over interstate wholesale rates and thus could not have regulated the interstate portion of the integrated enterprise.

The purpose of Congress was to fill the gap in which the states could not act. The Power Commission's authority to regulate rates for interstate sales thus undoubtedly was intended to cover this type of inseparable interstate and intrastate operation. As this Court said in dealing with a similar statutory problem in *United States* v. *New York Central R. Co.*, 272 U. S. 457, 464:

> Where, as here, interstate and intrastate transactions are interwoven, the regulation of the latter is so incidental to and inseparable from the regulation of the former as properly to be deemed included in the authority over interstate commerce conferred by statute. * * * An interpretation of the statute which would in practice require the segregation of all shipments in interstate commerce would make compliance with the commission's orders impossible and defeat the purpose of the Act.

The considerations underlying the familiar cases of interstate and intrastate commingling in the constitutional field (*e. g.,, Southern Railway Co.* v. *United States,* 222 U. S. 20; *Colorado* v. *United States,* 271 U. S. 153, 164; *Currin* v. *Wallace,* 306 U. S. 1) also provide a helpful analogy.

Missouri v. *Kansas Gas Co.,* 265 U. S. 298, and

Public Utilities Commission v. *Landon*, 249 U. S. 236, support this conclusion. In both cases, Kansas Natural Gas Company transported gas from Oklahoma into Kansas, mingled it with gas produced in Kansas, and sold it for resale to local distributing companies in both Kansas and Missouri. At the time of the *Landon* case, 6% of the gas sold in Kansas was produced in Kansas (249 U. S. at p. 242), while at the time of the *Missouri* case the Kansas gas comprised 34% of the mixture.[72] It was assumed without question that this did not affect the interstate nature of the wholesale sales of the entire system, including the sales in Kansas made partially from Kansas gas.

The same problem was considered explicitly in *Kentucky Natural Gas Corp.* v. *Public Service Commission*, 28 F. Supp. 509 (E. D. Ky.), affirmed, 119 F. 2d 417 (C. A. 6), the facts of which are closely analogous to those of the present case. In the *Kentucky Natural Gas* case, the company owned and operated a pipe line system located partly in Kentucky and partly in Indiana. Some of the gas transported in the system was obtained in the State of Kentucky and mixed with some obtained in Indiana. The mixed gas moved from one state to the other depending upon the needs of the system, and was

[72] *Kansas Gas Co.* v. *Kansas*, 265 U. S. 298, No. 133, Oct. Term, 1923, Tr. of R., p. 13.

used by Kentucky Natural in making wholesale sales to local distributing companies at points in both states. At times, Kentucky Natural obtained about half of the gas sold in Kentucky from that state, but this proportion varied greatly from time to time. The Kentucky Commission sought to regulate the company's sales in Kentucky, but the court of appeals held that appellee "is engaged solely in interstate commerce," and that exclusive jurisdiction had been conferred on the Federal Power Commission under the Natural Gas Act.[73]

Peoples Gas Co. v. *Public Service Commission,* 270 U. S. 550, and *Lone Star Gas Company* v.

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[73] The opinion of the district court, which the court of appeals adopted, had stated (28 F. Supp. at 512, 513):

"The record shows that the business of the complainant is a closely integrated transportation system which is fundamentally and predominantly interstate in character from beginning to end. In structure and operation, such continuity exists throughout the system that regulation at one point or control of a single activity would necessarily affect the whole structure. The sale and delivery of gas at wholesale from the interstate pipe line to local distributing companies is an integral part of the major enterprise, commerce between the states. Under such circumstances, regulation in the public interest is national rather than local, demanding a standard of uniformity unattainable except through a single paramount authority. * * *

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"The established course of business being predominantly interstate, the mere fact that some gas from the interstate stream is sold and delivered in the state of its origin affords that state no superior power to regulate or control the transaction."

Texas, 304 U. S. 224, relied upon by the Pennsylvania Commission do not conflict with the conclusion that all Penn Water sales are interstate. In the *Peoples Gas* case, the Court held that Pennsylvania could require the company to supply the needs of the City of Johnstown, Pennsylvania, with Pennsylvania gas commingled in a pipeline with West Virginia gas but in known quantities sufficient for that purpose. The Court ruled that the Pennsylvania gas, even though physically commingled, was separable from the West Virginia gas and was in intrastate commerce. Here we have no such relatively simple and stable situation. The demands of the Pennsylvania customers of Penn Water cannot be supplied from sources within Pennsylvania for substantial periods of the year. When water is being impounded, most of their power comes directly from Maryland. The constantly shifting demands of the power pool for Maryland and Pennsylvania power in varying quantities makes it impossible for purposes of rate regulation to separate the power which is both generated and consumed in Pennsylvania. It is also to be noted that at the time of the *Peoples Gas* case, there was no federal regulation, and that the alternative to control by Pennsylvania was no regulation at all. In every significant respect, therefore, the *Peoples Gas* case is distinguishable.

The *Lone Star* case is even less in point. The Court there held that for the ultimate purpose

of regulating retail rates charged by local distributing companies, Texas could determine the reasonable charge for gas delivered by affiliates to the distributing companies, even though some of the gas came from Oklahoma. Since the rate to be paid by one affiliate to another is primarily a bookkeeping transaction the substance of the case was Texas' right to determine costs as a basis for fixing the retail rates for the subsidiaries. Cf. *Western Distributing Co.* v. *Public Service Commission,* 285 U. S. 119, 124; *Dayton Power & Light Co.* v. *Public Utilities Commission,* 292 U. S. 290, 295; *American Telephone & Telegraph Co.* v. *United States,* 299 U. S. 232, 239. In view of these circumstances, which of course differ materially from those at bar, the Court found that Texas was not regulating sales and deliveries in interstate commerce. 304 U. S. 236–237. The Court did not hold that a sale of an interstate and intrastate product as a unit would in other circumstances or generally not be an interstate sale.

It follows, therefore, that the Commission has jurisdiction over these sales by virtue of the Federal Power Act. The Pennsylvania Commission's claim that these sales are nevertheless matters of local concern is meaningless in this case. Not only has this Court held to the contrary by ruling that sales for resale in interstate commerce are of national concern beyond the power of the states to regulate (*Public Utilities Commission* v. *Attle-*

boro Steam & Electric Co., 273 U. S. 83, 90), but Congress has occupied the field by vesting control over sales for resale in interstate commerce in the Power Commission. Cf. *Illinois Gas Co.* v. *Public Service Co.*, 314 U. S. 498, 506.

VI

THE CONTENTION THAT A LICENSEE SUBJECT TO REGULATION UNDER PART I OF THE POWER ACT MAY NOT ALSO BE REGULATED UNDER PART II IS IRRELEVANT HERE, SINCE PENN WATER'S RATES WERE FIXED UNDER BOTH PARTS, AND, IN ANY EVENT, IS UNSOUND

Penn Water argues that it may not be regulated under Part II of the Power Act because it is a licensee subject to regulation under Part I. Inasmuch as the Commission's order in this case was based upon Part I and Part II, it is difficult to see what difference this would make, even if true, so far as this case is concerned. Neither of petitioners is asserting that any of the jurisdictional or other requisites necessary to make the order valid under Part I are absent (apart from Pennsylvania's contention as to interstate commerce considered in the preceding point).

Part I of the Federal Power Act applies to licensees authorized to construct hydroelectric projects in navigable streams or on public lands. Section 20 provides that when the "power or any" part thereof shall enter into interstate or foreign commerce," the rates charged and the service furnished by the licensee "shall be reasonable, nondiscriminatory, and just"; and that when the

states concerned are unable to agree, the Power Commission may enforce the section with respect to rates and services which constitute interstate commerce.

The Commission's finding that the states of Maryland and Pennsylvania are unable to agree is not, and cannot well be, challenged in this case.[74] And the standard of rate regulation—reasonable, nondiscriminatory and just—is precisely the same as that contained in Part II, Sections 205 and 206.[75]

As we read Penn Water's brief, which is, of course, addressed to the opinion below, the prime relevance of the argument as to Parts I and II is that if the Commission can act only under Part I it is bound by the antitrust provision in Section 10 (h) of that Part. This, it is said, would invalidate the argument advanced by the court below (but not by the Government here) that Section 10 (h) is inapplicable here because repealed by Part II insofar as licensees subject to that Part are concerned.

We have shown in Point II B (supra, pp. 63–65) that Section 10 (h), like the Sherman Act, applies only to private business combinations, not to conduct ordered by the Government and that, accordingly, assuming its applicability to licensees

[74] See the contrary positions taken in their briefs filed in this Court.

[75] We discuss below (pp. 129–135) Penn Water's argument that a different rate base is required under Part I.

regulable under both Parts I and II, it does not advance Penn Water's position in this case. Although Penn Water's brief attempts to point out other differences between Parts I and II, at no point does it raise any question (other than with respect to Section 10 (h)) as to the possible irregularity of the Commission's order if viewed solely as authorized by Part I. In these circumstances, we think the question as to whether companies subject to Part I are also subject to Part II is academic insofar as this case is concerned.

Although further discussion of the point may be unnecessary, we do not wish to leave Penn Water's argument unanswered, for it is basically unsound. We point out preliminarily that the precise contention advanced here was discussed at length and rejected in the very thorough and well-reasoned opinion of Judge Biggs of the Third Circuit in the *Safe Harbor* case. 179 F. 2d 179, 182–189, certiorari denied, 339 U. S. 957. That court not only held that a licensee may be subject to both Parts I and II, but also that a rate order based upon both parts was valid under both.

A. LICENSEES WHICH QUALIFY AS "PUBLIC UTILITIES" ARE SUBJECT TO REGULATION UNDER PART II AS WELL AS UNDER PART I

The basic fallacy in Penn Water's position is its failure to recognize that a company may be both a licensee under Part I and a public utility under Part II and as such be subject to regulation under both Parts. The qualifications for a licensee under Part I, the ownership, operation or

maintenance of a power project on public lands or on or affecting navigable streams, are quite independent of those for a public utility under Part II, the transmission or sale at wholesale of electric energy in interstate commerce. For this reason, many electric companies that are "public utilities" under Part II are not "licensees" under Part I, and conversely many Part I "licensees" do not come within Part II's definition of "public utility."

But where a company transmits or sells at wholesale in interstate commerce electric energy which it has generated at a licensed project, it satisfies the requirements for both a licensee and a public utility, and the fact of the coincidence does not operate to exempt such a company from regulation under Part II, or for that matter, from under Part I. Although the Parts deal with different problems, and contain different provisions,[76] they are not inconsistent. There thus is no reason why a company which satisfies the definition of a "public utility" as well as a

[76] Part II provides several kinds of regulation with respect to public utilities which Part I does not provide for licensees: compulsory interconnection on application of another electric company or a state commission (Section 202 (b)); compulsory interconnection or operation in war or emergencies (Section 202 (c)); Commission regulation of sale, lease, and merger or consolidation of facilities, or acquisition of securities of another public utility (Section 203); and Commission regulation of assumption of liability (Section 204). Part III provides, with respect to "public utilities" only, a prohibition of insiders' profits and the pay-

"licensee" should not be subject to regulation under each part simultaneously.

Far from precluding regulation of a company as both a licensee and a public utility, the pertinent language of the Power Act appears to contemplate such dual regulation. Section 201 (e) provides that—

> The term "public utility" means *any* person who owns or operates facilities subject to the jurisdiction of the Commission under this Part. [Italics supplied.]

The only exemption from this sweeping language appears in Section 201 (f), which excepts governments and their instrumentalities. As the court below pointed out (R. XVIII, 5379):

> That section conspicuously makes no reference to Part I licensees. It seems unlikely that Congress would not have included so important a group as federal water-power licensees among the specific exceptions to Part II if it had actually intended to except them.

To read a new exception for a large and well-known class of utilities into the Act would not

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ment of dividends from capital (Section 305 (a)); and Commission regulation of interlocking managements (Section 305 (b)).

Likewise, Part I, in addition to regulation pertaining to the licensed project itself, provides some regulation which has no counterpart in Part II, such as Commission regulation of intrastate rates in certain instances, including customers' rates (Section 19), and interstate retail rates in some instances (Section 20).

only be contrary to the words Congress employed but also to the legislative history of Part II, which plainly reveals that Congress recognized that its definition of public utility embraced some licensees and that it intended such licensees to be regulated as public utilities as well. The House Committee on Interstate and Foreign Commerce dealt with this specific matter in recommending amendments to the prohibition in Section 305 (a) against personal profit by company officials. As Section 305 (a) passed the Senate, its prohibition was directed at officials of licensees *and* public utilities. S. 1725, 74th Cong., 1st Sess. The House Committee recommended that "licensee" be deleted from the Section and that its prohibition be directed solely against public utilities, because it understood that licensees owning or operating Part II jurisdictional facilities would be regulated as public utilities. The Committee commented:

> The Senate bill includes *licensees* within the provisions of this section, but inasmuch as *such licensees when interstate operating public-utility companies will be subject to the provisions of the section in any event, licensees have been omitted* from the bill as reported, because of the lack of public interest in those companies which are not public utilities. [Italics supplied.] [77]

[77] H. Rep. No. 1318, 74th Cong., 1st sess., p. 31. The conference report on the bill and the Act as passed incorporated the House Committee's change. H. Rep. No. 1903, 74th Cong., 1st sess., pp. 56, 75; Section 305 (a).

This definite statement by the Committee that licensees will be subject to regulation when "interstate operating public-utility companies" is flatly inconsistent with Penn Water's contention.

Dozier A. DeVane, the Solicitor of the Federal Power Commission and one of the draftsmen of Part II evidenced the same understanding. He stated at the hearings on the proposed legislation that "title II (Parts II and III of the Act) deals with operating companies" and that "among the operating companies are those companies that now have licenses from the Federal Power Commission under the Federal Water Power Act." Hearings before the Senate Committee on Interstate Commerce, 74th Cong., 1st sess., on S. 1725, pp. 233–234.[78]

In contrast to the remarks just referred to, the excerpts from the Committee Report and Hearings quoted in Penn Water's brief (pp. 86–89) do not express any view with respect to whether

[78] Mr. DeVane's statement occurred in his explanation of why there were proposals at that time to amend the Federal Water Power Act of 1920 (which as amended in 1935 became Part I of the Federal Power Act) and why these proposed amendments were contained in Title II of the Public Utility Act of 1935 (Title I being what is now the Public Utility Holding Company Act of 1935). Referring to what is now Part II of the Federal Power Act as a "second Title II" (although Part II and the amendments of the 1920 Act were included in a single Title II), he said that it was appropriate to amend the old law dealing with licensees at the same time that new legislation (*i. e.*, Part II) was enacted which affected operating companies, including licensees.

licensees are also subject to Part II. Some of them merely assert in various ways that Part II was meant to fill the gap left by the *Attleboro* case, not to encroach upon matters subject to state regulation. The statement of Commissioner Seavey that Title III contains the provisions applicable both to licensees and interstate operating companies can be accorded full meaning in relation to those companies which are only one or the other. It does not imply—and certainly does not say—that a single company, which is both a licensee and an interstate utility, cannot be regulated under both Parts.

B. SECTIONS 20 AND 201 DO NOT LEAVE THE REGULATION OF A LICENSEE'S INTERSTATE WHOLESALE RATES TO THE STATES

Penn Water contends, however, that Section 20 itself authorizes the states, at least when acting jointly, to regulate the interstate rates of licensees, that Section 201 (a) provides that the federal authority under Part II may "extend only to those matters which are not subject to regulation by the States," and that therefore Part II does not permit regulation of the interstate rates of licensees.

Penn Water is incorrect in the meaning it ascribes to both Section 20 and Section 201 (a). As the Court knows, at the time Title II of the Act was passed the states possessed constitutional power, under this Court's decisions, to regulate only retail interstate electric and gas rates, but

not wholesale rates,[79] and Title II of the Federal Power Act was passed in order to fill this gap. See H. Rep. No. 1318, 74th Cong., 1st Sess., pp. 7–8; S. Rep. No. 621, 74th Cong., 1st Sess., pp. 17, 48; *Federal Power Commission* v. *East Ohio Gas Co.*, 338 U. S. 464, 472; *Connecticut Light & Power Co.* v. *Federal Power Commission*, 324 U. S. 515, 525–527; *Jersey Central Power & Light Co.* v. *Federal Power Commission*, 219 U. S. 61. Since the gap thus revealed did not, however, affect the recognized power of the states to regulate interstate retail transactions (e. g., *Pennsylvania Gas Co.* v. *Public Serv. Comm.*, 252 U. S. 23), Section 201's exclusion of matters "subject to regulation by the states" from its grant of jurisdiction was aimed at exempting state regulation in the retail area, in which single states had power to act. There is no suggestion in any of the history of the Act of 1935 that the matters subject to state regulation included the interstate wholesale rates of licensees under Section 20. There was no thought, so far as appears, that the gap to be filled by the proposed legislation was anything less than the full scope of the constitutional impotence of the States, or that the gap had already been partially filled by Congress' previous enactment of Section 20.

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[79] *Public Utilities Comm'n.* v. *Landon*, 249 U. S. 236, 243; *Missouri* v. *Kansas Gas Co.*, 265 U. S. 298, 310; *Public Utilities Comm'n.* v. *Attleboro Co.*, 273 U. S. 83, 89; *East Ohio Gas Co.* v. *Tax Comm'n.*, 283 U. S. 465, 470–472.

Congress had good reason for not suspecting that Section 20 contained a grant to the States of power which was otherwise forbidden by the Constitution. For Section 20 itself contains no affirmative grant of power to the States. The language relating to state regulation is contained in a condition upon the exercise of federal authority. The pertinent portion of Section 20 provides merely—

> whenever any of the States directly concerned has not provided a commission or other authority to enforce the requirements of this section within such State * * * or such States are unable to agree through their properly constituted authorities on the services to be rendered or on the rates or charges of payment therefor, * * * jurisdiction is hereby conferred upon the [Federal] commission * * * to regulate and control so much of the services rendered, and of the rates and charges of payment therefor as constitute interstate or foreign commerce * * *.

The absence of any grant of power to the states is to be contrasted with the immediately following grant of regulatory authority to the Federal Commission.

When Congress has intended to permit states to regulate interstate transactions from which they would otherwise be barred it has spoken

much more explicitly.[80] Congress has also been much more specific when exercising its power to approve interstate compacts.[81]

It seems clear that under Section 20 Congress was merely leaving with the States whatever power they possessed to regulate interstate transactions—either individually or in combination—apart from the Federal Power Act. Various statements made in the course of the legislative debate so indicated.[82] There is no suggestion of an intention to expand such power.

It is probably true that in 1920, immediately after *Pennsylvania Gas Co.* v. *Public Service Commission*, 252 U. S. 23, and *Public Utilities Commission* v. *Landon*, 249 U. S. 236, and before the *Kansas Gas*[83] and *Attleboro*[84] cases in 1924 and 1927, the sponsors of the Act believed that the power of the States was not limited to interstate retail rates. But that assumption is not suf-

[80] In this connection, see *In re Rahrer*, 140 U. S. 545, 549, 562; *Clark Distilling Co.* v. *Western Maryland Ry. Co.*, 242 U. S. 311, 321, 332; *Whitfield* v. *Ohio*, 297 U. S. 431, 434, 440; *Kentucky Whip & Collar Co.* v. *I. C. R. Co.*, 299 U. S. 334, 343, 351; *Prudential Life Insurance Co.* v. *Benjamin*, 328 U. S. 408, 429–431.

[81] See, e. g., *Olin* v. *Kitzmiller*, 259 U. S. 260, 262; *Arizona* v. *California*, 283 U. S. 423, 449; cf. *United States* v. *Arizona*, 295 U. S. 174, 183; see also Section 11, Natural Gas Act, 52 Stat. 821, 827, 15 U. S. C. 717, 717j.

[82] Hearings, House Committee on Water Power, 65th Cong., 2d Sess., pp. 66, 99, 101; 58 Cong. Rec. 2239; 59 id. 6537.

[83] *Missouri* v. *Kansas Gas Co.*, 265 U. S. 298 (1924).

[84] *Public Utilities Commission* v. *Attleboro Steam and Electric Co.*, 273 U. S. 83 (1927).

ficient to convert the condition imposed upon action by the Federal Commission into an enlargement of State authority. And in 1935, when Congress in reconsidering the entire subject, made the 1920 Act as amended Part I of the new Federal Power Act, it clearly understood that the States could not regulate interstate wholesale rates.

As we have seen, it seemingly occurred to no one in 1935 that Congress had conferred any affirmative power upon the States to regulate interstate wholesale rates when it enacted Section 20 in 1920. Likewise, no indication appears that Congress deemed the States to have had any previously existing power over any interstate wholesale rate or that it intended thereby to vest such authority in the States. Although it had the opportunity to do so in the course of its extensive revision of Part I in 1935, Congress made no change in Section 20 nor indicated any intention of extending Section 20 to permit either individual or joint state regulation of wholesale rates. On the contrary, the legislative history of the 1935 Act is replete with showings that a primary purpose of Part II was to confer jurisdiction upon the Power Commission over all interstate wholesale rates which the *Attleboro* case has "placed * * * entirely beyond the reach of the States" (S. Rep. No. 621, 74th Cong., 1st Sess., p. 17).

For the above reasons Sections 20 and 201, whether read jointly or separately, do not grant

the States authority over the interstate wholesale rates of licensee. There can therefore be no doubt that such power is vested in the Federal Commission by Section 201 of Part II, and that the Commission may fix rates for interstate wholesale licensees under that Part.

C. PARTS I AND II DO NOT IMPOSE INCONSISTENT METHODS OF COMPUTING THE RATE BASE

Penn Water also contends that a licensee's rates cannot be prescribed under both Parts I and II because they impose inconsistent methods of computing the rate base. There is no such inconsistency. On the contrary, the statutory provisions are virtually identical. The rate standard prescribed in Section 20 provides:

> * * * the rates charged and the service rendered * * * shall be *reasonable, nondiscriminatory,* and *just* to the customer and all *unreasonable discriminatory and unjust* rates or services are hereby prohibited and declared to be unlawful * * *. [Italics supplied.]

Section 206 (a), which, together with Section 205 constitutes the rate fixing provisions of Part II, provides:

> Whenever the Commission * * * shall find that any rate, charge, * * * is *unjust, unreasonable, unduly discriminatory* or preferential, the Commission shall determine the *just* and *reasonable* rate, charge * * *. [Italics supplied.]

Thus, in almost identical words, both Parts prescribe the customary standard: "reasonable, nondiscriminatory and just," the very standard which this Court has construed to free regulatory commissions from adherence to any particular formula. *Federal Power Commission* v. *Hope Natural Gas Co.*, 320 U. S. 591. The rate standards of both Parts, therefore, clearly permit the use of the same formula for determining the rate base.

The basis of petitioners' claim is Section 20's incorporation by reference of the formula for recapture contained in Section 14. The latter Section refers to "net investment" which is defined in Section 3 (13),[85] and which Penn Water construes as meaning "an undepreciated rate base except where depreciation and other reserves

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[85] The claim for "net investment" as the Section 20 formula for rate regulation is arrived at *via* the limitation on the rate base in that Section to an amount not "*in excess* of the value or values prescribed in Section 14 hereof for the purposes of purchase by the United States, * * *." Section 14 (dealing with "recapture" by the United States upon expiration of the license) provides that before taking possession, the United States "shall pay the net investment of the licensee in the project or projects taken, not to exceed the fair value of the property taken * * *."

In so far as here pertinent, Section 3 (13) defines "net investment" to mean "the actual legitimate original cost thereof * * * minus the sum of the following items properly allocated thereto, if and to the extent that such items have been accumulated during the period of the license from earnings in excess of a fair return on such investment: * * * (b) aggregate credit balances of current depreciation accounts, * * *."

are accumulated from earnings in excess of a fair return" (Br. No. 428, pp. 79–80).

It is not necessary for purposes of this case to delve into the intricacies of the meaning of net investment or the depreciation clause in Section 3 (13). For Section 20 does not refer to the "net investment" provision of Section 14 as the rate base to be used, but as a maximum not to be exceeded. The critical clause provides that "no value shall be * * * allowed by the commission * * * *in excess of* the value * * * prescribed in Section 14." Thus, under Section 20, whatever rate base is used cannot exceed net investment. The sole difference as to rate base between the two Parts, therefore, is that Part I restricts the rate base to one not in excess of net investment.

This difference obviously does not prevent the Commission from prescribing rates under the two Parts simultaneously and with entire consistency. A problem could arise only if the Commission sought to apply a formula which would produce a rate base under Part II *higher* than that permissible under Part I. The petitioner is not asserting that the formula which the Commission employed here was too high.

As a matter of fact since its first annual report after the passage of the 1920 Act, the Commission has interpreted the Section 3 (13) formula as identical with the tests it now employs under

Part II. First Annual Report to Congress (1921), (H. Doc. 242, 67th Cong., 2d Sess., p. 57).

Moreover, even if net investment as defined in Section 3 (13) were considered as a formula for rate regulation under Part I, there would be no conflict of rate formulas. Under both the net investment formula and that used by the Commission under Part II, the deduction of depreciation reserve from the gross rate base is proper. There is no merit to Penn Water's claim that under Section 3 (13) its reserve for depreciation can be deducted from its rate base only to the extent, if at all, that its income remaining after deduction of operating expenses including normal depreciation expense has been in excess of a fair return. Since only depreciation charges in the operating section of the income statement are reflected in the reserve for depreciation, Penn Water's contention in effect is that it is not this normal depreciation reserve but only a special kind of a depreciation reserve accumulated out of excessive profits which is to be deducted. Under this construction a licensee could, over the entire period of its license, be entitled to rates sufficient both to recover 100% of its capital investment and to earn a return on the full investment, including the part already recovered by virtue of the deduction of depreciation as an ordinary expense.

By this contention, Penn Water seeks to take advantage of the changed point of view toward

depreciation accounting since the enactment of Section 3 (13) in 1920. While it is customary today to consider depreciation expense as part of operating expenses and to deduct it before computing net return, it was still not unusual in 1920, when the Federal Water Power Act was enacted, to determine profits without deduction for depreciation and to consider normal depreciation as coming out of "profits" instead of constituting a cost of service to be charged to operating expense. See *First Annual Report to Congress,* H. Doc. No. 242, 67th Cong., 2d Sess., p. 58; Hatfield, *Modern Accounting* (1915), pp. 290–291; May, *Twenty-Five Years of Accounting Responsibility* (1936), p. 164; Mason, *Principles of Public-Utility Depreciation* (1937), p. 104. It was in light of this practice of considering depreciation expense as coming out of profits instead of operating expenses that Section 3 (13) referred to the depreciation reserve as accumulated from "earnings in excess of a fair return." The testimony of Mr. O. C. Merrill (an engineer, not an accountant),[86] who assisted in the preparation of the bill which eventually became the Federal Water Power Act, makes it clear that, notwithstand-

[86] At the hearings Mr. Merrill represented the Secretaries of War, Agriculture, and Interior, who comprised the Commission under the Act as originally enacted (41 Stat. 1063). Hearings, House Committee on Water Power, 65th Cong., 2d Sess., pp. 4, 5. He afterwards became the Commission's first Executive Secretary. H. Doc. 242, 67th Cong., 2d Sess., pp. 10–11.

ing the language used, (1) Section 3 (13) refers to the usual, not special, depreciation charges, and (2) the provision regarding net investment was intended to assure to licensees the return of 100%, but not more, of its investment. Hearings before the House Committee on Water Power, 65th Cong., 2d Sess., pp. 34–35, 41, 42–43.

In these circumstances, both the Commission's reading of Section 3 (13) to provide for the deduction of depreciation reserve from the rate base to the extent that the company had fully earned a fair return in addition to normal depreciation expense, and its deduction of such amount of depreciation reserve here are clearly sound. There could, therefore, be no conflict in the present case between a Section 3 (13) "net investment" rate base and the rate base used by the Commission in fixing rates under Part II.[87]

[87] Neither *Alabama Power Co.* v. *Federal Power Commission*, 128 F. 2d 280, 293 (C. A. D. C.) nor *Niagara Falls Power Co.* v. *Federal Power Commission*, 137 F. 2d 787 (C. A. 2), certiorari denied, 320 U. S. 792, supports Penn Water's claim of conflict between Parts I and II in regard to rate formulas. Neither case was a rate case, involved Part II, or suggested the possibility of a conflict. Moreover, when the court in the *Alabama* case suggested that different formulas apply to licensees and nonlicensees, it was referring to Section 20 which limits licensees to rates fixed on no more than a net investment rate base, whereas at that time, "fair value" under *Smyth* v. *Ames*, 169 U. S. 466, was still applicable to nonlicensees. Not only did the court in the *Alabama* case plainly regard the Part I formula as lower, rather than higher, than Part II's (128 F. 2d at 293) but the removal of the "fair value" requirement for nonlicensees by *Federal*

This conclusion that the rate base provisions of Parts I and II were "substantially identical" was reached by the Third Circuit in the *Safe Harbor* case after a thorough consideration of the problem. 179 F. 2d at 187–188, 193–199. Clearly, there is no basis for Penn Water's argument that Part I cannot be applicable to licensees because of a difference in the statutory rate making formulas.

D. IF SECTION 20 AND PART II SHOULD BE DEEMED IN CONFLICT, THE LATTER SHOULD PREVAIL

Rejection of the foregoing reconciliation of Section 20 and Part II would not mean that because of the potential conflict between these provisions, licensees which qualify as "public utilities" should nevertheless not be regulated as such under Part II. The question then would be how to choose between repeal of Section 20 *pro*

Power Commission v. *Hope Natural Gas Co.*, 320 U. S. 591, wiped out even this difference. And in the *Niagara* case, the court in discussing the rate base under Part I, used "net investment" and legitimate cost interchangeably, with its reference to Section 20 presumably indicating that it was speaking of them in terms of a maximum (137 F. 2d at 792–793). In addition, the court in the *Niagara* case made it clear that it did not regard any differences between Parts I and II as exempting licensees from Part II; the court explicitly recognized that licensees which qualify as "public utilities" are not exempt from regulation under Part II, by speaking of "nonlicensed public utilities" and by referring to Part II as relating "*principally* to rates of public utilities engaged in interstate commerce other than licensees under Part I" (italics supplied) (137 F. 2d at 795).

tanto by implication, unfavored though that be, and an even more extensive nullification of Part II by implied exception, which is no more favored. Even express exceptions from a general policy which a law embodies should be strictly construed. *Interstate Natural Gas Co.* v. *Federal Power Commission,* 331 U. S. 682, 690–691; *Spokane & Inland R. R.* v. *United States,* 241 U. S. 344, 348, 350; cf. *Piedmont & Northern Ry.* v. *Interstate Commerce Commission,* 286 U. S. 299, 311, 312; *United States* v. *McElvain,* 272 U. S. 633, 639.

Implied repeal of Section 20, *pro tanto,* would require only that to the extent that that Section confers jurisdiction on states to regulate by agreement interstate *wholesale* rates of licensees that are also "public utilities" (which we have shown it doesn't), it shall be deemed repealed by Part II. This is in striking contrast to the breadth of effect the exemption of licensees would have in nullifying a number of important provisions of Part II as far as these licensee-public utilities are concerned. Among the provisions so nullified would be the compulsory interconnection and service provisions of Sections 202 (b) and 207; the war and other emergency compulsory interconnection and service provisions of Section 202 (c); the regulation of sales, leases, dispositions, and mergers of facilities, and acquisition of securities of other public utilities, of Section 203;

the rate schedule filing provisions for suspension of changes in rates of Section 205; the prohibition of "insiders' profits" and payment of dividends out of capital of Section 305 (a); and the regulation of interlocking directors and officers of Section 305 (b). No justification for striking down all these provisions is offered by Penn Water, and it is hardly possible that Congress intended such a result without a word in the statute or in the legislative history manifesting that intention. As the Third Circuit said in the second *Safe Harbor* case (179 F. 2d 179, at p. 186, note 10):

> * * * If the provisions of the respective [Parts] cannot be reconciled then [Part I] must be deemed to be repealed by [Part II] * * *.

Penn Water contends that Part II may not be applied to it because its license gives it contractual rights which may not be modified by subsequent changes in the statute. See Section 28. Penn Water admits that its license was issued in 1951, long after the enactment of Part II. Nor does it point to any provision of its license which is contravened by Part II. Part I spells out the conditions on which licenses are granted, and the provisions of Part I may thus be deemed to be terms of the license; but we have shown that none of these provisions is in conflict with Part II.

CONCLUSION

For the foregoing reasons, it is respectfully submitted that the judgment below be affirmed.

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IN THE

Supreme Court of the United States

OCTOBER TERM, 1951

No. 428

PENNSYLVANIA WATER & POWER COMPANY and SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND, *Petitioners,*

v.

FEDERAL POWER COMMISSION and CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE, and PUBLIC SERVICE COMMISSION OF MARYLAND, INTERVENORS, *Respondents.*

No. 429

PENNSYLVANIA PUBLIC UTILITY COMMISSION, *Petitioner,*

v.

FEDERAL POWER COMMISSION and CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE, and PUBLIC SERVICE COMMISSION OF MARYLAND, INTERVENORS, *Respondents.*

ON CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

MOTION TO POSTPONE ARGUMENT

King Bros. Inc., Printers, 208 N. Calvert St., Baltimore, Md.

IN THE

Supreme Court of the United States

OCTOBER TERM, 1951

No. 428

PENNSYLVANIA WATER & POWER COMPANY and SUSQUEHANNA TRANSMISSION COMPANY OF MARYLAND, *Petitioners,*

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FEDERAL POWER COMMISSION and CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE, and PUBLIC SERVICE COMMISSION OF MARYLAND, INTERVENORS, *Respondents.*

ON CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

MOTION TO POSTPONE ARGUMENT

Consolidated Gas Electric Light and Power Company of Baltimore, Intervenor-Respondent, respectfully moves the Court to postpone the date for argument of these cases,

now set for the week of March 31, 1952, for a period of time sufficient: (1) to enable the Court to pass upon pending Petitions for Certiorari to the United States Court of Appeals for the Fourth Circuit to review a judgment of that court entered January 3, 1952, which petitions were served and filed in this Court on February 23, 1952 and are docketed as Case No. 611, *Consolidated Gas Electric Light and Power Company of Baltimore v. Pennsylvania Water & Power Company and Pennsylvania Public Utility Commission,* and Case No. 612, *Public Service Commission of Maryland v. Pennsylvania Water & Power Company* and *Pennsylvania Public Utility Commission;* and (2), in the event said petitions for certiorari are granted, to enable those cases to be argued at the same time with the related instant case.

The basic grounds for this Motion are: (1) that certiorari has been granted in the instant case presumably for the reason, among others, that a conflict exists between the decision of the District of Columbia Circuit to be reviewed in the instant case and the decision of the Fourth Circuit in cases Nos. 611 and 612 upon the questions, (a) of the validity of a certain "Safe Harbor Agreement" under the Sherman Act and (b) of the *primary* jurisdiction of the Federal Power Commission to prescribe the Safe Harbor Agreement as a valid rate schedule of a "licensee" and "public utility" subject to its jurisdiction; and (2) that adequate review of the judgment in the instant case requires contemporaneous consideration of a basic element of that decision, namely, the validity of the Safe Harbor Agreement and the soundness of the decision of the Fourth Circuit purporting to invalidate it summarily.

Intervenor-Respondent further alleges:

1. After a plenary investigation begun in 1944 and concluded November 4, 1946, the Federal Power Commission, by formal order, modified the Safe Harbor Agreement as to the rates charged thereunder, and, as modified, approved and ordered it to be filed and observed, *in its entirety,* as

the interstate wholesale rate schedule of Safe Harbor Water Power Corporation. On review, this order of the Commission was affirmed by the Third Circuit on December 30, 1949, in *Safe Harbor Water Power Corporation v. Federal Power Commission,* 179 F. 2d 179, cert. den. 339 U. S. 957, the Third Circuit stating that the Safe Harbor Agreement was "exemplary".

2. The second of the two contracts involved in the instant case constitutes the filed interstate tariff of Pennsylvania Water & Power Company and is referred to as the "Penn Water Contract". As the result of a lengthy investigation begun in 1944 and concluded by orders of the Federal Power Commission dated January 5, 1949, February 28, 1949 and October 27, 1949, this Penn Water Contract was also modified by the Federal Power Commission as to the rates charged thereunder and, excepting any provisions thereof not "in and of themselves lawful", was approved and ordered to be filed and observed as the rate schedule of Penn Water. On review, these orders of the Commission were affirmed in the instant case by the District of Columbia Circuit on July 3, 1951 in *Pennsylvania Water & Power Company, et al. v. Federal Power Commission,* 193 F. 2d 230, cert. granted Feb. 4, 1952.

3. Nevertheless, in collateral attack proceedings instituted by Penn Water against Consolidated in the Maryland District Court (to which the Federal Power Commission was not a party), the Fourth Circuit on September 30, 1950, reversed the District Court and held that the Penn Water Contract was invalid on its face as *per se* in violation of the Sherman Act and certain laws of Pennsylvania, solely by reason of certain provisions contained in that contract (Arts. IV and V thereof). This decision of the Fourth Circuit was rendered in the case of *Pennsylvania Water & Power Company v. Consolidated Gas Electric Light and Power Company,* 184 F. 2d 552, cert. den. 340 U. S. 906 (1950).

4. In later collateral attack proceedings instituted by Penn Water against Consolidated and Safe Harbor in the Maryland District Court, the Fourth Circuit, on appeal, (refusing to permit the Federal Power Commission to intervene as a party in support of the validity of the Safe Harbor Agreement, which it had prescribed) affirmed a *summary* declaratory judgment of the District Court holding the Safe Harbor Agreement invalid on its face as *per se* in violation of the Sherman Act and certain laws of Pennsylvania, because the Safe Harbor Agreement contained certain provisions totally different in character and effect from Arts. IV and V of the Penn Water Contract criticized in the earlier case (which provisions of the Safe Harbor Agreement, we submit, were clearly separable and which have not had any practical effect), and because of the supposed "connection" (not founded in fact) between the Safe Harbor Agreement and the separate and distinct Penn Water Contract.

5. Penn Water and the Pennsylvania Public Utility Commission in their petitions for certiorari in the instant case repeatedly refer to the Safe Harbor case (Nos. 611 and 612) as a "related decision" and a "related case" (Penn Water's petition pp. 1 and 4); assert that the Safe Harbor contract was "the basis for important features of the order" of the Federal Power Commission herein assailed (P.U.C.'s. petition, p. 7) and that the determination by this Court of the validity of the Safe Harbor contract as well as of the Penn Water contract "is of vital importance to your petitioners" (P.U.C.'s. petition p. 8). In fact Penn Water, in its petition, refers some fifty times to the Safe Harbor contract and the Safe Harbor case, and both petitioners regarded that case as being so closely related to, and conflicting with, cases Nos. 428 and 429 as to have necessitated the filing with this Court of a copy of the Fourth Circuit's opinion in the Safe Harbor case with a letter of transmittal emphasizing such close relationship and conflict. A copy of

such letter of transmittal is attached as an Appendix to this Motion.

In view of these facts, Penn Water and the Pennsylvania Public Utility Commission can have no proper objection to the present Motion, which seeks to have this Court consider the situation with regard to the validity of the Safe Harbor Agreement not in piecemeal fashion but fully, comprehensively and definitively, by simultaneously reviewing the decision of the Fourth Circuit invalidating the Safe Harbor Agreement along with its review of the instant case.

6. There are important procedural questions in the instant case relating to the timeliness of Penn Water in presenting its contention to the Federal Power Commission that the Safe Harbor Agreement and the Penn Water Contract were in violation of the Sherman Act and to Penn Water's failure properly to exhaust its administrative remedies with regard to those questions. For this reason, the issues as to which conflict exists between the District of Columbia Circuit and the Fourth Circuit, namely, the legal validity of the Safe Harbor Agreement and the primary jurisdiction of the Federal Power Commission to prescribe the Safe Harbor Agreement as the rate schedule of Safe Harbor, may not be reached in the instant case. These basic and important issues, as to which clear conflict exists, are, however, directly involved in cases Nos. 611 and 612 and must be resolved if certiorari is granted.

7. Under the Rules of this Court, Respondents Penn Water and Pennsylvania Public Utility Commission must file any briefs in opposition to the Petitions for Certiorari pending in cases Nos. 611 and 612 on or before March 24, 1952. In order to avoid any undue delay in the disposition of the instant case, Consolidated represents that, if this Motion is granted, it will serve upon the Respondents, a draft of its brief in Case No. 611 within one week after

certiorari is granted therein, and it has been assured by counsel for the Public Service Commission of Maryland that a draft of that Commission's brief in Case No. 612 will be similarly served within the same period. If this is done, ample time will be provided the Respondents in those cases to prepare and file their briefs without unduly delaying the hearing and argument in these cases and in Cases Nos. 428 and 429 in which certiorari has already been granted.

For the above reasons, it its respectfully prayed that this Motion be granted.

ALFRED P. RAMSEY,

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Attorneys for Consolidated Gas Electric Light and Power Company of Baltimore.

APPENDIX

January 14, 1952.

Honorable Charles Elmore Cropley, Clerk,
Supreme Court of the United States,
Washington, D. C.

Re: No. 428, Pennsylvania Water & Power Company, et al. v. Federal Power Commission, et al
Re. No. 429, Pennsylvania Public Utility Commission v. Federal Power Commission.

Dear Sir:

In petitions for a writ of certiorari filed November 16, 1951, petitioners referred to a decision of the District Court for Maryland, Bryan, J., and the holding by that Court that the Safe Harbor contract is illegal under the Federal antitrust laws, Pennsylvania statutes, common law and public policy and that the Federal Power Commission does not have authority to validate that illegal contract.

On appeal, this decision has just been affirmed by the Court of Appeals for the Fourth Circuit in its opinion of January 3, 1952, attached hereto. The Court of Appeals for the Fourth Circuit in this opinion followed in all respects its prior decision with respect to the Penn Water contract, as to which decision certiorari was denied by this Court, 340 U. S. 906 (1950).

The Court of Appeals for the Fourth Circuit, in this current opinion, also confirms the conflict between (a) its prior decision holding that the Penn Water contract is illegal under the Federal antitrust laws, Pennsylvania statutes, common law and public policy and that the Federal Power Commission does not have authority to validate that illegal contract, as to which decision certiorari was denied by this Court as set forth above, and (b) the majority decision of the Court of Appeals for the District of Columbia Circuit, as to which certiorari is being sought by petitioners and which involves the illegal Penn Water contract and the illegal Safe Harbor contract and holds that the Federal Power Commission can perpetuate such illegal arrangements.

The Court of Appeals for the Fourth Circuit in the attached opinion expressly confirms such conflict by stating at pages 17 to 19 its disagreement with the majority decision of the District of Columbia Circuit Court and its agreement with the opinion of the dissenting minority of that Court.

Since the attached Court of Appeals opinion will not be officially reported for some time, it is submitted herewith for the convenience of the Court.

Respectfully submitted,

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Nos. 428, 429, 611, 612

In the Supreme Court of the United States

OCTOBER TERM, 1951

PENNSYLVANIA WATER & POWER COMPANY, ET AL., PETITIONERS,

v.

FEDERAL POWER COMMISSION, ET AL.

PENNSYLVANIA PUBLIC UTILITY COMMISSION, PETITIONER

v.

FEDERAL POWER COMMISSION, ET AL.

CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE, PETITIONER

v.

PENNSYLVANIA WATER AND POWER COMPANY AND PENNSYLVANIA PUBLIC UTILITY COMMISSION

PUBLIC SERVICE COMMISSION OF MARYLAND, PETITIONER

v.

PENNSYLVANIA WATER AND POWER COMPANY AND PENNSYLVANIA PUBLIC UTILITY COMMISSION

MOTION OF THE FEDERAL POWER COMMISSION TO POSTPONE ARGUMENT IN NOS. 428 AND 429 FOR THREE WEEKS AND MEMORANDUM AS AMICUS CURIAE IN SUPPORT OF PETITIONS FOR CERTIORARI IN NOS. 611 AND 612

In the Supreme Court of the United States

OCTOBER TERM, 1951

No. 428

PENNSYLVANIA WATER & POWER COMPANY, ET AL., PETITIONERS

v.

FEDERAL POWER COMMISSION, ET AL.

No. 429

PENNSYLVANIA PUBLIC UTILITY COMMISSION, PETITIONER

v.

FEDERAL POWER COMMISSION

No. 611

CONSOLIDATED GAS ELECTRIC LIGHT AND POWER COMPANY OF BALTIMORE, PETITIONER

v.

PENNSYLVANIA WATER AND POWER COMPANY AND PENNSYLVANIA PUBLIC UTILITY COMMISSION

No. 612

PUBLIC SERVICE COMMISSION OF MARYLAND, PETITIONER

v.

PENNSYLVANIA WATER AND POWER COMPANY AND PENNSYLVANIA PUBLIC UTILITY COMMISSION

MOTION OF THE FEDERAL POWER COMMISSION TO POSTPONE ARGUMENT IN NOS. 428 AND 429 FOR THREE WEEKS AND MEMORANDUM AS AMICUS CURIAE IN SUPPORT OF PETITIONS FOR CERTIORARI IN NOS. 611 AND 612

The Federal Power Commission moves that this Court postpone the argument in Nos. 428 and 429

three weeks from the week of March 31 to the week of April 21, so as to enable the Court to decide whether to grant certiorari in Nos. 611 and 612, and if certiorari is granted, to set the cases down for argument together during the week of April 21. The Government also submits that the petitions for certiorari in Nos. 611 and 612 should be granted.[1]

The conflict between the decision of the Court of Appeals for the District of Columbia in the cases presently before the Court (Nos. 428 and 429) with the decision of the District Court, now affirmed by the Fourth Circuit, in Nos. 611 and 612, was emphasized by Penn Water (Pet., No. 428, pp. 1, 3, 4, 9, 14, 15, 17; see also Pet., No. 429, pp. 29, 38) as a principal reason for granting certiorari in No. 428.[2] The Fourth Circuit's decision on affirmance was the first in the group of related cases which, by so stating explicitly, acknowledged that the two circuits were in disagreement. In addition, the issue upon which the two courts have disagreed is more likely to be reached in Nos. 611 and 612 than in Nos. 428 and 429. In

[1] The Federal Power Commission is, of course, a party in Nos. 428 and 429. It unsuccessfully sought to intervene in the Fourth Circuit in Nos. 611 and 612, but was allowed to file a brief and argue orally. It is appearing in this Court in the latter cases as amicus curiae.

[2] Penn Water's petition also relied of course, upon the conflict which the earlier decision of the Fourth Circuit in *Penn Water and Power Company* v. *Consolidated Gas, E. L. & P. Co.*, 184 F. 2d 552, certiorari denied, 340 U. S. 906, 186 F. 2d 934, which preceded the decision in the District of Columbia Court of Appeals.

the order reducing rates in Nos. 428 and 429, the Federal Power Commission prescribed certain rate schedules to supersede the previous rate and charges and ordered that all "other provisions of the * * * contracts *in and of themselves lawful* prescribing or defining the * * * services to be furnished * * * shall be observed and be in force" (No. 428, R. XVII 62, italics supplied), thereby excluding provisions which as private contracts might be authoritatively determined to be in violation of the antitrust law. The order involved in Nos. 611 and 612 (which has been upheld by the Third Circuit in *Safe Harbor W. P. Corp.* v. *Federal Power Commission,* 179 F. 2d 179, certiorari denied, 339 U. S. 957) contains no such qualification, and thus clearly requires compliance with the contract on file with the Federal Power Commission, allegedly restrictive clauses and all, unless and until the Commission modifies its own order. These factors make the controversy in Nos. 611 and 612 a more appropriate vehicle than Nos. 428 and 429 for determination of the important issue upon which the two circuits have disagreed, *i.e.*, whether the Federal Power Commission may order a power company to carry out an arrangement which, as an agreement between the parties, would otherwise violate the Sherman Act. The denial of certiorari in the first *Penn-Water* case (340 U. S. 906), in which the Federal Power Commission had only ordered compliance with arrangements "in and of themselves

lawful" and before the existence of the conflict with the District of Columbia Circuit would not, of course, justify a denial in Nos. 611 and 612 after the two Circuits had openly disagreed, and in a case in which the Commission had prescribed the arrangement found unlawful by the Fourth Circuit.

The desirability of hearing the cases together does not depend merely on the fact that they are in conflict. The companies and the State Commissions involved are the same. Penn Water and Consolidated each possess half of the voting rights in Safe Harbor, although Consolidated invested two-thirds of the capital and is entitled to two-thirds of the power. The contracts have been found by the Fourth Circuit to be indistinguishable both with respect to separability and antitrust violation. And more importantly, Penn Water and the Pennsylvania Public Utility Commission, petitioners in Nos. 428 and 429, are insisting that the contracts are interdependent, that the Penn Water Contract "was linked to a companion contract (the Safe Harbor contract)." (Pet. No. 428, pp. 3, 14-15; Pet. No. 429, pp. 37-38). Both petitions urge that the Federal Power Commission "based the critical features of the orders * * * upon the assumed existence and continuance of the illegal Baltimore and *Safe Harbor* contracts." (Pet. No. 428, p. 3; Pet. No. 429, p. 37; italics supplied).[3] The petitions also argue that the existence of the interstate power pool "depends upon the illegal contracts * * *

and upon the illegal revenue pooling provisions thereof" (Pet. No. 428, p. 14; Pet. No. 429, pp. 37-38). It is also contended (Pet. No. 428, p. 15) that the allocation of the reduction in rates as between the Baltimore company and the Pennsylvania utility customers of Penn Water rested on the basis of the alleged "'entitlements' of Consolidated under the Baltimore and Safe Harbor contracts" and that "without the illegal contracts such 'entitlements' would be nonexistent." It is thus clearly petitioners' position in Nos. 428 and 429 that the decision of the Fourth Circuit in Nos. 611 and 612 as to the validity of the contracts supersedes the orders of the Federal Power Commission and destroys a portion of the premises upon which those orders rest.

The alleged interrelationship[4] between the contracts and the Federal Power Commission orders with respect thereto makes it highly desirable that the cases be heard and decided together if this can be accomplished without undue delay. We are advised that counsel for Consolidated requested counsel for Penn Water to cooperate in Nos. 611 and 612 so as to enable all of the cases to be heard together this Term. This request, which seems

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[3] The Statements in both petitions repeatedly refer to the Safe Harbor contract as well as to the Penn Water contract (Pet. No. 428, pp. 3, 4, 6, 7, 9, 10; No. 429, pp. 12, 13).

[4] The statement herein of the contentions of the petitioners in No. 428 and 429 and respondents in Nos. 611 and 612 is not to be taken as an admission of the validity of those contentions, but merely as showing the questions which will necessarily be argued in the cases.

to us to have been entirely reasonable, was refused on the ground that the cases were not sufficiently related, a position which hardly seems consistent with Penn Water's petition for certiorari in No. 428 and its emphasis on the conflict between them. By not consenting to certiorari in the case which establishes the conflict upon which it relied, Penn Water will prevent this Court from passing on the petition until March 31, which would normally be too late for the case to be heard this Term if certiorari is granted.

The circumstances set forth above, however, in our opinion, would justify the Court in granting certiorari in Nos. 611 and 612 and in setting them down for argument during the week of April 21. What we believe to be the critical issues involved will have been briefed in Nos. 428 and 429. As to the others, we are advised that if this motion to postpone the argument of the latter cases for three weeks is granted (thus indicating a possibility that the cases might be heard together), Consolidated and the Maryland Commission will immediately commence the preparation of their briefs in Nos. 611 and 612, and drafts will be served on respondents in these cases far enough in advance of argument to enable respondents to have the two weeks allowed by the Rules to reply thereto.

The Government does not wish to delay final decision in the already prolonged litigation involved in Nos. 428 and 429, but postponing the argument for three weeks would not unduly delay

the ultimate determination. And the advantages of hearing Nos. 611 and 612 at the same time and thus speedily disposing of all aspects of an interrelated controversy lead to the conclusion that both the public interest and the orderly management of this Court's business would be better served if the cases could be heard together this Term, notwithstanding the opposition of Penn Water to that procedure.

Accordingly, it is respectfully submitted that this Court should (1) postpone the argument in Nos. 428 and 429 until the week of April 21, (2) grant certiorari in Nos. 611 and 612, and (3) order the latter cases argued during the week of April 21, immediately following Nos. 428 and 429.

PHILIP B. PERLMAN,
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General Counsel,
Federal Power Commission.

I join in this motion to postpone the argument in Nos. 428 and 429.

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MARCH, 1952.

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